

PART II.

THE DESERT OF ICE.

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CHAPTER I.

THE DOCTOR'S INVENTORY.

The design which Captain Hatteras had formed of exploring the North, and of giving England the honor of discovering the Pole, was certainly a bold one. This hardy sailor had just done all that human skill could do. After struggling for nine months against contrary winds and seas, after destroying icebergs and ice-fields, after enduring the severity of an unprecedentedly cold winter, after going over all that his predecessors had done, after carrying the *Forward* beyond the seas which were already known, in short, after completing half his task, he saw his grand plans completely overthrown. The treachery, or rather the demoralization of his wearied crew, the criminal folly of some of the ringleaders, left him in a terrible situation; of the eighteen men

who had sailed in the brig, four were left, abandoned without supplies, without a boat, more than twenty-five hundred miles from home!

The explosion of the Forward, which had just blown up before their eyes, took from them their last means of subsistence. Still, Hatteras's courage did not abandon him at this terrible crisis. The men who were left were the best of the crew; they were genuine heroes. He made an appeal to the energy and wisdom of Dr. Clawbonny, to the devotion of Johnson and Bell, to his own faith in the enterprise; even in these desperate straits he ventured to speak of hope; his brave companions listened to him, and their courage in the past warranted confidence in their promises for the future.

The doctor, after listening to the captain's words, wanted to get an exact idea of their situation; and, leaving the others about five hundred feet from the ship, he made his way to the scene of the catastrophe.

Of the Forward, which had been built with so much care, nothing was left; pieces of ice, shapeless fragments all blackened and charred, twisted pieces of iron, ends of ropes still burning like fuse, and scattered here and there on the ice-field, testified to the force of the explosion. The cannon had been hurled to some distance, and was lying on a piece of ice that looked like a gun-carriage. The surface of the ice, for a circle of six hundred feet in diameter, was covered

with fragments of all sorts; the brig's keel lay under a mass of ice; the icebergs, which had been partly melted by the fire, had already recovered their rock-like hardness.

The doctor then began to think of his ruined cabin, of his lost collections, of his precious instruments destroyed, his books torn, burned to ashes. So much that was valuable gone! He gazed with tearful eyes at this vast disaster, thinking not of the future, but of the irreparable misfortune which dealt him so severe a blow. He was immediately joined by Johnson; the old sailor's face bore signs of his recent sufferings; he had been obliged to struggle against his revolted companions, defending the ship which had been intrusted to his care. The doctor sadly pressed the boatswain's hand.

"Well, my friend, what is going to become of us?" asked the doctor.

"Who can say?" answered Johnson.

"At any rate," continued the doctor, "don't let us give way to despair; let us be men!"

"Yes, Doctor," answered the old sailor, "you are right; it's when matters look worst that we most need courage; we are in a bad way; we must see how we can best get out of it."

"Poor ship!" said the doctor, sighing; "I had become attached to it; I

had got to look on it as on my own home, and there's not left a piece that can be recognized!"

"Who would think, Doctor, that this mass of dust and ashes could be so dear to our heart?"

"And the launch," continued the doctor, gazing around, "was it destroyed too?"

"No, Doctor; Shandon and the others, who left, took it with them."

"And the gig?"

"Was broken into a thousand pieces. See, those sheets of tin are all that's left of her."

"Then we have nothing but the Halkett-boat?"[1]

[Footnote 1: Made of india-rubber, and capable of being inflated at pleasure.]

"That is all, and it is because you insisted on our taking it, that we have that."

"It's not of much use," said the doctor.

"They were a pack of miserable, cowardly traitors who ran away!" said Johnson. "May they be punished as they deserve!"

"Johnson," answered the doctor, mildly, "we must remember that their suffering had worn upon them very much. Only exceptional natures remain staunch in adversity, which completely overthrows the weak. Let us rather pity than curse them!"

After these words the doctor remained silent for a few minutes, and gazed around uneasily.

"What is become of the sledge?" asked Johnson.

"We left it a mile back."

"In care of Simpson?"

"No, my friend; poor Simpson sank under the toil of the trip."

"Dead!" cried the boatswain.

"Dead!" answered the doctor.

"Poor fellow!" said Johnson; "but who knows whether we may not soon be reduced to envying his fate?"

"But we have brought back a dying man in place of the one we lost," answered the doctor.

"A dying man?"

"Yes, Captain Altamont."

The doctor gave the boatswain in a few words an account of their finding him.

"An American!" said Johnson, thoughtfully.

"Yes; everything seems to point that way. But what was this Porpoise which had evidently been shipwrecked, and what was he doing in these waters?"

"He came in order to be lost," answered Johnson; "he brought his crew to death, like all those whose foolhardiness leads them here. But, Doctor, did the expedition accomplish what it set out for?"

"Finding the coal?"

"Yes," answered Johnson.

The doctor shook his head sadly.

"None at all?" asked the old sailor.

"None; our supplies gave out, fatigue nearly conquered us. We did not even reach the spot mentioned by Edward Belcher."

"So," continued Johnson, "you have no fuel?"

"No."

"Nor food?"

"No."

"And no boat with which to reach England?"

They were both silent; they needed all their courage to meet this terrible situation.

"Well," resumed the boatswain, "there can be no doubts about our condition! We know what we have to expect! But the first thing to do, when the weather is so cold, is to build a snow-house."

"Yes," answered the doctor, "with Bell's aid that will be easy; then we'll go after the sledge, we'll bring the American here, and then we'll take counsel with Hatteras."

"Poor captain!" said Johnson, forgetting his own griefs; "he must suffer terribly."

With these words they returned to their companions. Hatteras was standing with folded arms, as usual, gazing silently into space. His face wore its usual expression of firmness. Of what was this remarkable man thinking? Of his desperate condition and shattered hopes? Was he planning to return, since both men and the elements had combined against his attempt?

No one could have read his thoughts, which his face in no way expressed. His faithful Duke was with him, braving a temperature of -32°.

Bell lay motionless on the ice; his insensibility might cost him his life; he was in danger of being frozen to death. Johnson shook him violently, rubbed him with snow, and with some difficulty aroused him from his torpor.

"Come, Bell, take courage!" he said; "don't lose heart; get up; we have to talk matters over, and we need a shelter. Have you forgotten how to make a snow-house? Come, help me, Bell! There's an iceberg we can cut into! Come, to work! That will give us what we need, courage!"

Bell, aroused by these words, obeyed the old sailor.

"Meanwhile," Johnson went on, "the doctor will be good enough to go to the sledge and bring it back with the dogs."

"I am ready," answered the doctor; "in an hour I shall be back."

"Shall you go too, Captain?" added Johnson, turning to Hatteras.

Although he was deep in thought, the captain heard the boatswain's question, for he answered gently,--

"No, my friend, if the doctor is willing to go alone. We must form some plan of action, and I want to be alone to think matters over. Go. Do what you think right for the present. I will be thinking of the future."

Johnson turned to the doctor.

"It's singular," he said; "the captain seems to have forgotten his anger; his voice never was so gentle before."

"Well!" answered the doctor; "he has recovered his presence of mind. Mark my words, Johnson, that man will be able to save us!"

Thereupon the doctor wrapped himself up as well as he could, and, staff in hand, walked away towards the sledge in the midst of a fog which the moonlight made almost bright. Johnson and Bell set to work

immediately; the old sailor encouraged the carpenter, who wrought on in silence; they did not need to build, but to dig into the solid ice; to be sure it was frozen very hard, and so rendered the task difficult, but it was thereby additionally secure; soon Johnson and Bell could work comfortably in the orifice, throwing outside all that they took from the solid mass.

From time to time Hatteras would walk fitfully, stopping suddenly every now and then; evidently he did not wish to reach the spot where his brig had been. As he had promised, the doctor was soon back; he brought with him Altamont, lying on the sledge beneath all the coverings; the Greenland dogs, thin, tired, and half starved, could hardly drag the sledge, and were gnawing at their harness; it was high time that men and beasts should take some rest.

While they were digging the house, the doctor happened to stumble upon a small stove which had not been injured by the explosion, and with a piece of chimney that could be easily repaired: the doctor carried it away in triumph. At the end of three hours the house was inhabitable; the stove was set in and filled with pieces of wood; it was soon roaring and giving out a comfortable warmth.

The American was brought in and covered up carefully; the four Englishmen sat about the fire. The last supplies of the sledge, a little biscuit and some hot tea, gave them some comfort. Hatteras did not speak; every one respected his silence. When the meal was finished

the doctor made a sign for Johnson to follow him outside.

"Now," he said, "we are going to make an inventory of what is left. We must know exactly what things we have; they are scattered all about; we must pick them up; it may snow at any moment, and then it would be impossible to find a scrap."

"Don't let us lose any time, then," answered Johnson; "food and wood is what we need at once."

"Well, let us each take a side," answered the doctor, "so as to cover the whole ground; let us begin at the centre and go out to the circumference."

They went at once to the bed of ice where the Forward had lain; each examined with care all the fragments of the ship beneath the dim light of the moon. It was a genuine hunt; the doctor entered into this occupation with all the zest, not to say the pleasure, of a sportsman, and his heart beat high when he discovered a chest almost intact; but most were empty, and their fragments were scattered everywhere.

The violence of the explosion had been considerable; many things were but dust and ashes; the large pieces of the engine lay here and there, twisted out of shape; the broken flanges of the screw were hurled twenty fathoms from the ship and buried deeply in the hardened snow; the bent cylinders had been torn from their pivots; the chimney, torn

nearly in two, and with chains still hanging to it, lay half hid under a large cake of ice; the bolts, bars, the iron-work of the helm, the sheathing, all the metal-work of the ship, lay about as if it had been fired from a gun.

But this iron, which would have made the fortune of a tribe of Esquimaux, was of no use under the circumstances; before anything else food had to be found, and the doctor did not discover a great deal.

"That's bad," he said to himself; "it is evident that the store-room, which was near the magazine, was entirely destroyed by the explosion; what wasn't burned was shattered to dust. It's serious; and if Johnson is not luckier than I am, I don't see what's going to become of us."

Still, as he enlarged his circles, the doctor managed to collect a few fragments of pemmican, about fifteen pounds, and four stone bottles, which had been thrown out upon the snow and so had escaped destruction; they held five or six pints of brandy.

Farther on he picked up two packets of grains of cochlearia, which would well make up for the loss of their lime-juice, which is so useful against the scurvy.

Two hours later the doctor and Johnson met. They told one another of their discoveries; unfortunately they had found but little to eat: some few pieces of salt pork, fifty pounds of pemmican, three sacks of

biscuit, a little chocolate, some brandy, and about two pounds of coffee, picked up berry by berry on the ice.

No coverings, no hammocks, no clothing, were found; evidently the fire had destroyed all. In short, the doctor and boatswain had found supplies for three weeks at the outside, and with the strictest economy; that was not much for them in their state of exhaustion. So, in consequence of these disasters, Hatteras found himself not only without any coal, but also short of provisions.

As to the fuel supplied by the fragments of the ship, the pieces of the masts and the keel, they might hold out about three weeks; but then the doctor, before using it to heat their new dwelling, asked Johnson whether out of it they might not build a new ship, or at least a launch.

"No, Doctor," answered the boatswain, "it's impossible; there's not a piece of wood large enough; it's good for nothing except to keep us warm for a few days and then--"

"Then?" asked the doctor.

"God alone knows," answered the sailor.

Having made out their list, the doctor and Johnson went after the sledge; they harnessed the tired dogs, returned to the scene of the

explosion, packed up the few precious objects they had found, and carried them to their new house; then, half frozen, they took their place near their companions in misfortune.

CHAPTER II.

ALTAMONT'S FIRST WORDS.

Towards eight o'clock in the evening the snow-clouds cleared away for a few minutes; the constellations shone brilliantly in the clear air.

Hatteras made use of this change to get the altitude of some stars; he went out without saying a word, carrying his instruments with him. He wished to ascertain his position and see if the ice-field had not been drifting again. After an absence of half an hour he came back, lay down in a corner, and remained perfectly still, although not asleep.

The next day snow began to fall heavily; the doctor could not help being glad that he had made his examination the day before, for a white curtain soon covered the whole expanse, and every trace of the explosion was hidden under three feet of snow.

On that day they could not set foot outside; fortunately their quarters were comfortable, or at least seemed so to the exhausted travellers. The little stove worked well, except occasionally when violent gusts drove the smoke into the room; with its heat they could make coffee and tea, which are both so serviceable beverages when the temperature is low.

The castaways, for they deserve the name, found themselves more comfortable than they had been for a long time; hence they only

thought of the present, of the agreeable warmth, of the brief rest, forgetting, or even indifferent to the future, which threatened with speedy death.

The American suffered less, and gradually returned to life; he opened his eyes, but he did not say anything; his lips bore traces of the scurvy, and could not utter a sound; he could hear, and was told where he was and how he got there. He moved his head as a sign of gratitude; he saw that he had been saved from burial beneath the snow; the doctor forbore telling him how very short a time his death had been delayed, for, in a fortnight or three weeks at the most, their supply of food would be exhausted.

Towards midday Hatteras arose and went up to the doctor, Johnson, and Bell.

"My friends," he said to them, "we are going to take a final resolution as to the course we must follow. In the first place, I must ask Johnson to tell me under what circumstances this act of treachery came to pass."

"Why should we know?" said the doctor; "the fact is certain, we need give it no more thought."

"I am thinking of it, all the same," answered Hatteras. "But after I've heard what Johnson has to say, I shall not think of it again."

"This is the way it happened," went on the boatswain; "I did all I could to prevent the crime--"

"I am sure of that, Johnson, and I will add that the leaders had been plotting it for some time."

"So I thought," said the doctor.

"And I too," continued Johnson; "for very soon after your departure, Captain, on the very next day, Shandon, who was angry with you and was egged on by the others, took command of the ship; I tried to resist, but in vain. After that, every one acted as he saw fit; Shandon did not try to control them; he wanted to let the crew see that the time of suffering and privation had gone by. Hence there was no economy; a huge fire was lighted in the stove; they began to burn the brig. The men had the provisions given them freely, and the spirits too, and you can easily imagine the abuse they made of them after their long abstinence. Things went on in this way from the 7th to the 15th of January."

"So," said Hatteras, in a grave voice, "it was Shandon who incited the men to revolt?"

"Yes, Captain."

"Say nothing more about him. Go on, Johnson."

"It was towards January 24th or 25th, that the plan of leaving the ship was formed. They determined to reach the western coast of Baffin's Bay; from there, in the launch, they could meet whalers, or, perhaps, the settlements on the eastern side. Their supplies were abundant; the sick grew better with the hope of reaching home. So they made their plans for leaving; they built a sledge for the transport of their food, fuel, and the launch; the men were to drag it themselves. This occupied them until February 15th. I kept anxiously awaiting your return, Captain, and yet I feared having you present; you would have had no influence over the crew, who would rather have killed you than have remained on board. They were wild with the hope of escape. I took all my companions aside and spoke to them, I besought them to stay; I pointed out all the dangers of such a journey, as well as the cowardliness of abandoning you. I could get nothing, even from the best. They chose February 22d for leaving. Shandon was impatient. They heaped upon the sledge all the food and liquor it could hold; they took a great deal of wood; the whole larboard side had been cut away to the water-line. The last day they passed carousing; they ravaged and stole everything, and it was during this drunkenness that Pen and two or three others set fire to the ship. I resisted, and struggled against them; they threw me down and struck me; at last, these villains, with Shandon at their head, fled to the east, and disappeared from my sight. I remained alone; what could I do against this fire which was seizing the whole ship? The water-hole was frozen

over; I hadn't a drop of water. For two days the Forward was wrapped in flames, and you know the rest."

Having finished this account, a long silence prevailed in this ice-house; the gloomy tale of the burning of the ship, the loss of their precious brig, appeared so vividly before the minds of the castaways; they found themselves before an impossibility, and that was a return to England. They did not dare to look at one another, for fear of seeing on each other's faces blank despair. There was nothing to be heard save the hasty breathing of the American.

At last Hatteras spoke.

"Johnson," said he, "I thank you; you have done all you could to save my ship. But you could not do anything alone. Again I thank you, and now don't let us speak again of this misfortune. Let us unite our efforts for the common safety. There are four of us here, four friends, and the life of one is of no more worth than the life of another. Let each one give his opinion on what should be done."

"Ask us, Hatteras," answered the doctor; "we are all devoted to you, our answers shall be sincere. And, in the first place, have you any plan?"

"I can't have any alone," said Hatteras, sadly. "My opinion might seem interested; I want to hear your opinion first."

"Captain," said Johnson, "before speaking on such weighty matters, I have an important question to ask you."

"What is it?"

"You ascertained our position yesterday; well, has the ice-field drifted any more, or are we in just the same place?"

"It has not stirred," answered Hatteras. "The latitude before we left was 80° 15', and longitude 97° 35'."

"And," said Johnson, "how far are we from the nearest sea to the west?"

"About six hundred miles," answered Hatteras.

"And this water is--"

"Smith's Sound."

"The same which we could not cross last April?"

"The same."

"Well, Captain, now we know where we are, and we can make up our minds

accordingly."

"Speak, then," said Hatteras, letting his head sink into his hands.

In that way he could hear his friends without looking at them.

"Well, Bell," said the doctor, "what do you think is the best course to follow?"

"It isn't necessary to reflect a long time," answered the carpenter; "we ought to return, without wasting a day or an hour, either to the south or the west, and reach the nearest coast, even if it took us two months!"

"We have supplies for only three weeks," answered Hatteras, without raising his head.

"Well," continued Johnson, "we must make that distance in three weeks, since it's our only chance of safety; if we have to crawl on our knees at the end, we must leave, and arrive in twenty-five days."

"This part of the northern continent is not known," answered Hatteras. "We may meet obstacles, such as mountains and glaciers, which will completely bar our progress."

"I don't consider that," answered the doctor, "a sufficient reason for

not attempting the journey; evidently, we shall suffer a great deal; we ought to reduce our daily supply to the minimum, unless luck in hunting--"

"There's only half a pound of powder left," answered Hatteras.

"Come, Hatteras," resumed the doctor, "I know the weight of all your objections, and I don't nourish any vain hopes. But I think I can read your thoughts; have you any practicable plan?"

"No," answered the captain, after a few moments' hesitation.

"You do not doubt our courage," continued the doctor; "we are willing to follow you to the last, you know very well; but should we not now abandon all hope of reaching the Pole? Mutiny has overthrown your plans; you fought successfully against natural obstacles, but not against the weakness and perfidy of men; you have done all that was humanly possible, and I am sure you would have succeeded; but, in the present condition of affairs, are you not compelled to give up your project, and in order to take it up again, should you not try to reach England without delay?"

"Well, Captain?" asked Johnson, when Hatteras had remained a long time silent.

At last the captain raised his head, and said in a constrained tone,--

"Do you think you are sure of reaching the shore of the sound, tired as you are, and almost without food?"

"No," answered the doctor; "but it's sure the shore won't come to us; we must go to it. Perhaps we shall find to the south tribes of Esquimaux who may aid us."

"Besides," added Johnson, "may we not find in the sound some ship that has been forced to winter there."

"And if need be," continued the doctor, "when we've reached the sound, may we not cross it, and reach the west coast of Greenland, and then, either by Prudhoe's Land, or Cape York, get to some Danish settlement? Nothing of that sort is to be found on the ice-field. The way to England is down there to the south, and not here to the north!"

"Yes," said Bell, "Dr. Clawbonny is right; we must go, and go at once. Hitherto we have forgotten home too much, and those who are dear to us."

"Do you agree, Johnson?" Hatteras asked again.

"Yes, Captain."

"And you, Doctor?"

"Yes, Hatteras."

Hatteras still remained silent; in spite of all he could do, his face expressed his agitation. His whole life depended on the decision he should take; if he should return, it was all over with his bold plans; he could not hope to make the attempt a fourth time.

The doctor, seeing the captain was silent, again spoke.

"I ought to add, Hatteras," he said, "that we ought not to lose an instant; we ought to load the sledge with all our provisions, and take as much wood as possible. A journey of six hundred miles under such circumstances is long, I confess, but not insuperable; we can, or rather we ought, to make twenty miles a day, which would bring us to the coast in a month, that is to say, towards March 26th."

"But," said Hatteras, "can't we wait a few days?"

"What do you hope for?" answered Johnson.

"I don't know. Who can foretell the future? Only a few days yet! It's hardly enough to rest your wearied bodies. We couldn't go two stages without dropping from weariness, without any snow-house to shelter us!"

"But a terrible death certainly awaits us here!" cried Bell.

"My friends," continued Hatteras in a tone almost of entreaty, "you are despairing too soon! I should propose to seek safety to the north, were it not that you would refuse to follow me. And yet are there not Esquimaux near the Pole, as well as at Smith's Sound? That open sea, of which the existence is uncertain, ought to surround a continent. Nature is logical in everything it does. Well, we ought to believe that vegetation appears when the greatest cold ceases. Is there not a promised land awaiting us at the north, and which you want to fly from without hope of return?"

Hatteras warmed as he spoke; his heated imagination called up enchanting visions of these countries, whose existence was still so problematical.

"One more day," he repeated, "a single hour!"

Dr. Clawbonny, with his adventurous character and his glowing imagination, felt himself gradually aroused; he was about to yield; but Johnson, wiser and colder, recalled him to reason and duty.

"Come, Bell," he said, "to the sledge!"

"Come along!" answered Bell.

The two sailors turned towards the door of the snow-house.

"O Johnson! you! you!" shouted Hatteras. "Well, go! I shall stay!"

"Captain!" said Johnson, stopping in spite of himself.

"I shall stay, I say! Go! leave me like the rest! Go!--Come, Duke, we two shall stay!"

The brave dog joined his master, barking. Johnson looked at the doctor. He did not know what to do; the best plan was to calm Hatteras, and to sacrifice a day to his fancies. The doctor was about making up his mind to this effect, when he felt some one touch his arm.

He turned round. The American had just left the place where he had been lying; he was crawling on the floor; at last he rose to his knees, and from his swollen lips a few inarticulate sounds issued.

The doctor, astonished, almost frightened, gazed at him silently. Hatteras approached the American, and examined him closely. He tried to make out the words which the poor fellow could not pronounce. At last, after trying for five minutes, he managed to utter this word:--

"Porpoise."

"The Porpoise?" asked the captain.

The American bowed affirmatively.

"In these seas?" asked Hatteras with beating heart.

The same sign from the sick man.

"To the north?"

"Yes."

"And you know where it lies?"

"Yes."

"Exactly?"

There was a moment's silence. The bystanders were all excited.

"Now, listen carefully," said Hatteras to the sick man; "we must know where this ship lies. I am going to count the degrees aloud; you will stop me by a sign."

The American bowed his head to show that he understood.

"Come," said Hatteras, "we'll begin with the longitude. One hundred and five? No.--Hundred and six? Hundred and seven? Hundred and eight? Far to the west?"

"Yes," said the American.

"Let us go on. Hundred and nine? Ten? Eleven? Twelve? Fourteen? Sixteen? Eighteen? Nineteen? Twenty?"

"Yes," answered Altamont.

"Longitude one hundred and twenty?" said Hatteras. "And how many minutes? I shall count."

Hatteras began at number one. At fifteen Altamont made a sign for him to stop.

"All right!" said Hatteras. "Now for the latitude. You understand? Eighty? Eighty-one? Eighty-two? Eighty-three?"

The American stopped him with a gesture.

"Well! And the minutes? Five? Ten? Fifteen? Twenty? Twenty-five? Thirty? Thirty-five?"

Another sign from Altamont, who smiled slightly.

"So," continued Hatteras, in a deep voice, "the Porpoise lies in longitude 120° 15', and 83° 35' latitude?"

"Yes!" said the American, as he fell fainting into the doctor's arms. This exertion had exhausted him.

"My friends," cried Hatteras, "you see that safety lies to the north, always to the north! We shall be saved!"

But after these first words of joy, Hatteras seemed suddenly struck by a terrible thought. His expression changed, and he felt himself stung by the serpent of jealousy.

Some one else, an American, had got three degrees nearer the Pole! And for what purpose?

CHAPTER III.

SEVENTEEN DAYS OF LAND JOURNEY.

This new incident, these first words which Altamont uttered, had completely altered the situation of the castaways; but just now they had been far from any possible aid, without a reasonable chance of reaching Baffin's Bay, threatened with starvation on a journey too long for their wearied bodies, and now, within four hundred miles from their snow-house, there was a ship which offered them bounteous supplies, and perhaps the means of continuing their bold course to the Pole. Hatteras, the doctor, Johnson, and Bell, all began to take heart after having been so near despair; they were nearly wild with joy.

But Altamont's account was still incomplete, and, after a few moments' repose, the doctor resumed his talk with him; he framed his questions in such a way that a simple sign of the head or a motion of the eyes would suffice for an answer.

Soon he made out that the Porpoise was an American bark from New York, that it had been caught in the ice with a large supply of food and fuel; and, although she lay on her beam-ends, she must have withstood the ice, and it would be possible to save her cargo.

Two months before, Altamont and the crew had abandoned her, carrying the launch upon a sledge; they wanted to get to Smith's Sound, find a

whaling-vessel, and be carried in her to America; but gradually fatigue and disease had fallen upon them, and they fell aside on the way. At last only the captain and two sailors were left of a crew of thirty men, and Altamont's life was the result of what was really a miracle.

Hatteras wanted to find out from the American what he was doing in these high latitudes.

Altamont managed to make him understand that he had been caught in the ice and carried by it without possibility of resisting it.

Hatteras asked him anxiously for what purpose he was sailing.

Altamont gave them to understand that he had been trying the Northwest Passage.

Hatteras did not persist, and asked no other question of the sort.

The doctor then began to speak.

"Now," he said, "all our efforts should be directed to finding the Porpoise; instead of struggling to Baffin's Bay, we may, by means of a journey only two thirds as long, reach a ship which will offer us all the resources necessary for wintering."

"There's nothing more to be done," said Bell.

"I should add," said the boatswain, "that we should not lose a moment; we should calculate the length of our journey by the amount of our supplies, instead of the other and usual way, and be off as soon as possible."

"You are right, Johnson," said the doctor; "if we leave to-morrow, Tuesday, February 26th, we ought to reach the Porpoise March 15th, at the risk of starving to death. What do you think of that, Hatteras?"

"Let us make our preparations at once," said the captain, "and be off. Perhaps we shall find the way longer than we suppose."

"Why so?" asked the doctor. "This man seemed certain of the situation of his ship."

"But," answered Hatteras, "supposing the Porpoise has been drifting as the Forward did?"

"True," said the doctor, "that's not unlikely."

Johnson and Bell had nothing to urge against the possibility of a drift of which they had themselves been victims.

But Altamont, who was listening to the conversation, gave the doctor to understand that he wished to speak. After an effort of about a quarter of an hour, Clawbonny made out that the Porpoise was lying on a bed of rocks, and so could not have drifted away. This information calmed the anxiety of the Englishmen; still it deprived them of their hope of returning to Europe, unless Bell should be able to build a small boat out of the timbers of the Porpoise. However that might be, it was now of the utmost importance that they should reach the wreck.

The doctor put one more question to the American, namely, whether he had found an open sea at latitude 83°.

"No," answered Altamont.

There the conversation stopped. They began at once to prepare for departure; Bell and Johnson first began to see about the sledge, which needed complete repairing. Since they had plenty of wood, they made the uprights stronger, availing themselves of the experience of their southern trip. They had learned the dangers of this mode of transport, and since they expected to find plenty of deep snow, the runners were made higher.

On the inside Bell made a sort of bed, covered with the canvas of the tent, for the American; the provisions, which were unfortunately scanty, would not materially augment the weight of the sledge, but

still they made up for that by loading it with all the wood it could carry.

The doctor, as he packed all the provisions, made out a very careful list of their amount; he calculated that each man could have three quarters of a ration for a journey of three weeks. A whole ration was set aside for the four dogs which should draw it. If Duke aided them, he was to have a whole ration.

These preparations were interrupted by the need of sleep and rest, which they felt at seven o'clock in the evening; but before going to bed they gathered around the stove, which was well filled with fuel, and these poor men luxuriated in more warmth than they had enjoyed for a long time; some pemmican, a few biscuits, and several cups of coffee soon put them in good-humor, especially when their hopes had been so unexpectedly lighted up. At seven in the morning they resumed work, and finished it at three in the afternoon. It was already growing dark. Since January 31st the sun had appeared above the horizon, but it gave only a pale and brief light; fortunately the moon would rise at half past six, and with this clear sky it would make their path plain. The temperature, which had been growing lower for several days, fell at last to -33° .

The time for leaving came. Altamont received the order with joy, although the jolting of the sledge would increase his sufferings; he told the doctor that medicine against the scurvy would be found on

board of the Porpoise. He was carried to the sledge and placed there as comfortably as possible; the dogs, including Duke, were harnessed in; the travellers cast one last glance at the spot where the Forward had lain. A glow of rage passed over Hatteras's face, but he controlled it at once, and the little band set out with the air very dry at first, although soon a mist came over them.

Each one took his accustomed place, Bell ahead pointing out the way, the doctor and Johnson by the sides of the sledge, watching and lending their aid when it was necessary, and Hatteras behind, correcting the line of march.

They went along tolerably quickly; now that the temperature was so low, the ice was hard and smooth for travel; the five dogs easily drew the sledge, which weighed hardly more than nine hundred pounds. Still, men and beasts panted heavily, and often they had to stop to take breath.

Towards seven o'clock in the evening, the moon peered through mist on the horizon. Its rays threw out a light which was reflected from the ice; towards the northwest the ice-field looked like a perfectly smooth plain; not a hummock was to be seen. This part of the sea seemed to have frozen smooth like a lake.

It was an immense, monotonous desert.

Such was the impression that this spectacle made on the doctor's mind, and he spoke of it to his companion.

"You are right, Doctor," answered Johnson; "it is a desert, but we need not fear dying of thirst."

"A decided advantage," continued the doctor; "still, this immensity proves one thing to me, and that is that we are far distant from any land; in general, the proximity of land is indicated by a number of icebergs, and not one is to be seen near us."

"We can't see very far for the fog," said Johnson.

"Without doubt; but since we started we have crossed a smooth field of which we cannot see the end."

"Do you know, Doctor, it's a dangerous walk we are taking! We get used to it and don't think of it, but we are walking over fathomless depths."

"You are right, my friend, but we need not fear being swallowed; with such cold as this the ice is very strong. Besides, it has a constant tendency to get thicker, for snow falls nine days out of ten, even in April, May, and June, and I fancy it must be something like thirty or forty feet thick."

"That is a comfort," said Johnson.

"In fact, we are very much better off than those who skate on the Serpentine, and who are in constant dread of falling through; we have no such fear."

"Has the resistance of ice been calculated?" asked the old sailor, who was always seeking information from the doctor.

"Yes," the latter answered: "everything almost that can be measured is now known, except human ambition! and is it not that which is carrying us towards the North Pole? But to return to your question, my answer is this. Ice two inches thick will bear a man; three and a half inches thick, a horse and rider; five inches thick, an eight-pound cannon; eight inches, a fully harnessed artillery-piece; and ten inches, an army, any number of men! Where we are now, the Liverpool Custom House or the Halls of Parliament in London could be built."

"One can hardly imagine such strength," said Johnson; "but just now, Doctor, you spoke of snow falling nine days out of ten; that is true, but where does all the snow come from? The sea is all frozen, and I don't see how the vapor can rise to form the clouds."

"A very keen observation, Johnson; but, in my opinion, the greatest part of the snow or rain which we receive in the polar regions is formed from the water of the seas in the temperate zones. One flake

arose into the air under the form of vapor from some river in Europe, it helped make a cloud, and finally came here to be condensed; it is not impossible that we who drink it may be quenching our thirst at the rivers of our own country."

"That is true," answered Johnson.

At that moment Hatteras's voice was heard directing their steps and interrupting their conversation. The fog was growing thicker, and making a straight line hard to follow.

Finally the little band halted at about eight o'clock in the evening, after walking nearly fifteen miles; the weather was dry; the tent was raised, the fire lighted, supper cooked, and all rested peacefully.

Hatteras and his companions were really favored by the weather. The following days brought no new difficulties, although the cold became extremely severe and the mercury remained frozen in the thermometer. If the wind had risen, no one could have withstood the temperature. The doctor was able to corroborate Parry's observations, which he made during his journey to Melville Island; he said that a man comfortably dressed could walk safely in the open air exposed to great cold, if the air were only calm; but as soon as the slightest wind arose, a sharp pain was felt in the face, and an extreme headache which is soon followed by death. The doctor was very anxious, for a slight wind would have frozen the marrow in their bones.

March 5th he observed a phenomenon peculiar to these latitudes: the sky was clear and thick with stars, and thick snow began to fall without any cloud being visible; the constellations shone through the flakes which fell regularly on the ice-field. This went on for about two hours, and stopped before the doctor had found a satisfactory explanation of its fall.

The last quarter of the moon had then disappeared; total darkness reigned for seventeen hours out of the twenty-four; the travellers had to tie themselves together by a long cord, to avoid being separated; it was almost impossible for them to go in a straight line.

Still, these bold men, although animated by an iron will, began to grow weary; their halts were more frequent, and yet they ought not to lose an hour, for their supplies were rapidly diminishing. Hatteras would often ascertain their position by observation of the moon and stars. As he saw the days pass by and the destination appear as remote as before, he would ask himself sometimes if the Porpoise really existed, whether the American's brain might not have been deranged by his sufferings, or whether, through hate of the English, and seeing himself without resources, he did not wish to drag them with him to certain death.

He expressed his fears to the doctor, who discouraged them greatly, but he readily understood the lamentable rivalry which existed between

the American and English captains.

"They are two men whom it will be hard to make agree," he said to himself.

March 14th, after journeying for sixteen days, they had only reached latitude 82°; their strength was exhausted, and they were still a hundred miles from the ship; to add to their sufferings, they had to bring the men down to a quarter-ration, in order to give the dogs their full supply.

They could not depend on their shooting for food, for they had left only seven charges of powder and six balls; they had in vain fired at some white hares and foxes, which besides were very rare. None had been hit.

Nevertheless, on the 18th, the doctor was fortunate enough to find a seal lying on the ice; he wounded him with several balls; the animal, not being able to escape through his hole in the ice, was soon slain. He was of very good size. Johnson cut him up skilfully, but he was so very thin that he was of but little use to the men, who could not make up their minds to drink his oil, like the Esquimaux. Still the doctor boldly tried to drink the slimy fluid, but he could not do it. He preserved the skin of the animal, for no special reason, by a sort of hunter's instinct, and placed it on the sledge.

The next day, the 16th, they saw a few icebergs on the horizon. Was it a sign of a neighboring shore, or simply a disturbance of the ice? It was hard to say.

When they had reached one of these hummocks, they dug in it with a snow-knife a more comfortable retreat than that afforded by the tent, and after three hours of exertion they were able to rest about their glowing stove.

CHAPTER IV.

THE LAST CHARGE OF POWDER.

Johnson had admitted the tired dogs into the snow-house; when the snow is falling heavily it serves as a covering to the animals, preserving their natural heat. But in the open air, with a temperature of -40° , they would soon have frozen to death.

Johnson, who made an excellent dog-driver, tried feeding the dogs with the dark flesh of the seals which the travellers could not swallow, and to his great surprise they made a rich feast out of it; the old sailor in his delight told the doctor. He, however, was not in the least surprised; he knew that in the north of America the horses make fish their main article of food, and what a herbivorous horse could content himself with would certainly satisfy an omnivorous dog.

Before going to rest, although sleep became an imperious necessity for men who had walked fifteen miles on the ice, the doctor wished to have a few serious words with his companions about the dangers of their situation.

"We are only at latitude 82° ," he said, "and our supplies are already running short."

"A reason for losing no time," answered Hatteras; "we must push on;

the strong can draw the feeble."

"Shall we find a ship when we get there?" asked Bell, who was much depressed by the fatigue of the journey.

"Why doubt it?" said Johnson; "the American's safety depends on ours."

To make sure, the doctor was anxious to question Altamont again. He could speak easily, although his voice was weak; he confirmed all the statements he had already made; he repeated that the ship was aground on some granite rocks, where it could not stir, and that it lay in longitude 120° 15', and latitude 83° 35'.

"We can't doubt this statement," resumed the doctor; "the difficulty is not whether the Porpoise is there, but the way of getting to her."

"How much food have we left?" asked Hatteras.

"Enough for three days at the outside," answered the doctor.

"Well, we must get to her in three days," said the captain, firmly.

"We must indeed," continued the doctor, "and if we succeed we shall have no need to complain, for we shall have been favored by faultless weather; the snow has given us a fortnight's respite, and the sledge

has glided easily on the hardened ice! Ah, if it only carried two hundred pounds of food! Our dogs could have managed it easily enough. But still we can't help it!"

"With luck and skill," said Johnson, "we might put to some use the few charges of powder which are left us. If we should kill a bear we should be supplied for all the rest of the journey."

"Without doubt," answered the doctor, "but these animals are rare and shy; and then, when one thinks of the importance of a shot, his hand will shake and his aim be lost."

"But you are a good shot," answered Bell.

"Yes, when four men's dinners do not depend on my hitting; still, I will do my best if I get a chance. Meanwhile let us try to satisfy ourselves with this thin soup of scraps of pemmican, then go to sleep, and to-morrow early we'll start forth again."

A few moments later excessive fatigue outweighed every other feeling, and they all sank into a heavy sleep. Early on Saturday Johnson awoke his companions; the dogs were harnessed to the sledge, and they took up again their journey northward.

The heavens were magnificent, the air was very clear, the temperature very low; when the sun appeared above the horizon it appeared like an

elongated ellipse; its horizontal diameter appeared, in consequence of refraction, to be double its vertical diameter. It sent forth its clear, cold rays over the vast icy plain. This return to light, if not to heat, rejoiced them all.

The doctor, gun in hand, walked off for a mile or two, braving the cold and solitude; before going he measured the supply carefully; only four charges of powder were left, and three balls; that was a small supply when one remembers that a strong animal like the polar bear often falls only after receiving ten or twelve shots. Hence the doctor did not go in search of so fierce game; a few hares or two or three foxes would have satisfied him and given him plenty of provisions. But during that day, if he saw one, or could not approach one, or if he were deceived by refraction, he would lose his shot; and this day, as it was, cost him a charge of powder and a ball. His companions, who trembled with hope at the report of his gun, saw him returning with downcast looks; they did not say anything; that evening they went to sleep as usual, after putting aside two quarter-rations reserved for the two following days. The next day their journey seemed more laborious; they hardly walked, they rather dragged along; the dogs had eaten even the entrails of the seal, and they were beginning to gnaw their harness.

A few foxes passed at some distance from the sledge, and the doctor, having missed another shot as he chased them, did not dare to risk his last ball and his last charge save one of powder.

That evening they halted early, unable to set one foot before the other, and, although their way was lighted by a brilliant aurora, they could not go on. This last meal, eaten Sunday evening under their icy tent, was very melancholy. If Heaven did not come to their aid, they were lost. Hatteras did not speak, Bell did not even think, Johnson reflected in silence, but the doctor did not yet despair.

Johnson thought of setting some traps that night; but since he had no bait, he had very little hope of success, and in the morning he found, as he expected, that, although a great many foxes had left their marks around, yet not one had been caught. He was returning much disappointed, when he saw an enormous bear sniffing the air at about thirty yards from the sledge. The old sailor thought Providence had sent this animal to him to be slain; without awakening his companions he seized the doctor's gun and made his way towards the bear.

Having got quite near he took aim, but just as he was about to pull the trigger he felt his arm trembling; his large fur gloves were in his way; he took them off quickly, and seized his gun with a firmer hand. Suddenly, a cry of pain escaped him; the skin of his fingers, burned by the cold of the gun-barrel, remained clinging to it, while the gun fell to the ground, and went off from the shock, sending the last ball off into space. At the sound of the report the doctor ran; he understood everything at a glance; he saw the animal trot quickly away; Johnson was in despair, and thought no more of the pain.

"I'm as tender as a baby," he cried, "not to be able to endure that pain! And an old man like me!"

"Come back, Johnson," the doctor said to him, "you'll get frozen; see, your hands are white already; come back, come!"

"I don't deserve your attentions, Doctor," answered the boatswain; "leave me!"

"Come along, you obstinate fellow! Come along! It will soon be too late!"

And the doctor, dragging the old sailor under the tent, made him plunge his hands into a bowl of water, which the heat of the stove had kept liquid, although it was not much above the freezing-point; but Johnson's hands had no sooner touched it than it froze at once.

"You see," said the doctor, "it was time to come back, otherwise I should have had to amputate your hands."

Thanks to his cares, all danger was gone in an hour; but it was no easy task, and constant friction was necessary to recall the circulation into the old sailor's fingers. The doctor urged him to keep his hands away from the stove, the heat of which might produce serious results.

That morning they had to go without breakfast; of the pemmican and the salt meat nothing was left. There was not a crumb of biscuit, and only half a pound of coffee. They had to content themselves with drinking this hot, and then they set out.

"There's nothing more!" said Bell to Johnson, in a despairing accent.

"Let us trust in God," said the old sailor; "he is able to preserve us!"

"This Captain Hatteras!" continued Bell; "he was able to return from his first expeditions, but he'll never get back from this one, and we shall never see home again!"

"Courage, Bell! I confess that the captain is almost foolhardy, but there is with him a very ingenious man."

"Dr. Clawbonny?" said Bell.

"Yes," answered Johnson.

"What can he do in such circumstances?" retorted Bell, shrugging his shoulders. "Can he change these pieces of ice into pieces of meat? Is he a god, who can work by miracles?"

"Who can say?" the boatswain answered his companion's doubts; "I trust in him."

Bell shook his head, and fell into a silent apathy, in which he even ceased to think.

That day they made hardly three miles; at evening they had nothing to eat; the dogs threatened to devour one another; the men suffered extremely from hunger. Not a single animal was to be seen. If there had been one, of what use would it have been? They could not go hunting with a knife. Only Johnson thought he recognized a mile to leeward the large bear, who was following the ill-fated little party.

"It is spying us!" he said to himself; "it sees a certain prey in us!"

But Johnson said no word to his companions; that evening they made their accustomed halt, and their supper consisted only of coffee. They felt their eyes growing haggard, their brain growing confused, and, tortured by hunger, they could not get an hour's sleep; strange and painful dreams took possession of their minds.

At a latitude in which the body imperiously demands refreshment, these poor men had not eaten solid food for thirty-six hours, when Tuesday morning came. Nevertheless, inspired by superhuman energy, they resumed their journey, pushing on the sledge which the dogs were unable to draw. At the end of two hours they fell, exhausted. Hatteras

wanted to push on. He, still strong, besought his companions to rise, but they were absolutely unable. Then, with Johnson's assistance, he built a resting-place in an iceberg. It seemed as if they were digging their own graves.

"I am willing to die of hunger," said Hatteras, "but not of cold."

After much weariness the house was ready, and they all entered it.

So that day passed. In that evening, while his companions lay inert, Johnson had a sort of hallucination; he dreamed of an immense bear. That word, which he kept repeating, attracted the doctor's attention, so that he shook himself free from his stupor, and asked the old sailor why he kept talking about a bear, and what bear he meant.

"The bear which is following us," answered Johnson.

"The bear which is following us?" repeated the doctor.

"Yes, the last two days."

"The last two days! Have you seen him?"

"Yes, he's a mile to leeward."

"And you didn't tell us, Johnson?"

"What was the use?"

"True," said the doctor; "we have no ball to fire at him."

"Not a slug, a bit of iron, nor a bolt!" said the old sailor.

The doctor was silent, and began to think intently. Soon he said to the boatswain,--

"You are sure the bear is following us?"

"Yes, Doctor, he's lying in wait to eat us. He knows we can't escape him!"

"Johnson!" said the doctor, touched by the despairing accent of his companion.

"His food is sure," continued the poor man, who was beginning to be delirious; "he must be half famished, and I don't see why we need keep him waiting any longer!"

"Be quiet, Johnson!"

"No, Doctor; if we've got to come to it, why should we prolong the animal's sufferings? He's hungry as we are; he has no seal to eat!

Heaven sends him us men; well, so much the better for him!"

Thereupon Johnson went out of his mind; he wanted to leave the snow-house. The doctor had hard work to prevent him, and he only succeeded by saying, as if he meant it,--

"To-morrow I shall kill that bear!"

"To-morrow!" said Johnson, as if he had awakened from a bad dream.

"Yes, to-morrow."

"You have no ball!"

"I shall make one."

"You have no lead!"

"No, but I have some quicksilver."

Thereupon the doctor took the thermometer; it marked +50°. He went outside, placed the instrument on the ice, and soon returned. The outside temperature was -50°. Then he said to the old sailor,--

"Now go to sleep, and wait till to-morrow."

That night they endured the horrors of hunger; only the doctor and the boatswain were able to temper them with a little hope. The next morning, at dawn, the doctor rushed out, followed by Johnson, and ran to the thermometer; all the mercury had sunk into the bulb, in the form of a compact cylinder. The doctor broke the instrument, and seized in his gloved fingers a piece of very hard metal. It was a real bullet.

"Ah, Doctor," shouted the old sailor, "that's a real miracle! You are a wonderful man!"

"No, my friend," answered the doctor, "I am only a man with a good memory, who has read a good deal."

"Why, what do you mean?"

"I happened to remember something Captain Ross related in the account of his voyage: he said he shot through an inch plank with a bullet of frozen mercury; if I had any oil it would amount to nearly the same thing, for he speaks of a ball of sweet almond, which was fired against a post and fell back to the ground unbroken."

"That is hardly credible!"

"But it is true, Johnson; this piece of metal may save our lives; let us leave it here in the air before we take it, and go and see whether

the bear is still following us."

At that moment Hatteras came out of the hut; the doctor showed him the bullet, and told him what he thought of doing; the captain pressed his hand, and the three went off to inspect. The air was very clear.

Hatteras, who was ahead of his companions, discovered the bear about a half-mile off. The animal, seated on his hind quarters, was busily moving his head about, sniffing towards these new arrivals.

"There he is!" shouted the captain.

"Silence!" said the doctor.

But the huge beast did not stir when he saw the hunters. He gazed at them without fear or anger. Still, it would be found hard to approach him.

"My friends," said Hatteras, "we have not come out for sport, but to save our lives. Let us act cautiously."

"Yes," answered the doctor; "we can only have one shot, and we must not miss; if he were to run away, he would be lost, for he can run faster than a hare."

"Well, we must go straight for him," said Johnson; "it is dangerous, but what does it matter? I am willing to risk my life."

"No, let me go!" cried the doctor.

"No, I shall go," answered Hatteras, quietly.

"But," said Johnson, "are not you of more use to the others than I should be?"

"No, Johnson," answered the captain, "let me go; I shall run no needless risk; perhaps, too, I shall call on you to help me."

"Hatteras," asked the doctor, "are you going to walk straight towards the bear?"

"If I were sure of hitting him, I would do so, even at the risk of having my head torn open, but he would flee at my approach. He is very crafty; we must try to be even craftier."

"What do you intend to do?"

"To get within ten feet of him without his suspecting it."

"How are you going to do it?"

"By a simple but dangerous method. You kept, did you not, the skin of the seal you shot?"

"Yes, it is on the sledge."

"Well, let us go back to the snow-house, while Johnson stays here on watch."

The boatswain crept behind a hummock which hid him entirely from the sight of the bear, who stayed in the same place, continually sniffing the air.

CHAPTER V.

THE SEAL AND THE BEAR.

Hatteras and the doctor went back to the house.

"You know," said the captain, "that the polar bears chase seals, which are their principal food. They watch for days at their breathing-holes, and seize them the moment they come upon the ice. So a bear will not be afraid of a seal; far from it."

"I understand your plan," said the doctor, "but it's dangerous."

"But there is a chance of success," answered the captain, "and we must try it. I am going to put on the sealskin and crawl over the ice. Let us lose no time. Load the gun and give it to me."

The doctor had nothing to say; he would himself have done what his companion was about to try; he left the house, carrying two axes, one for Johnson, the other for himself; then, accompanied by Hatteras, he went to the sledge.

There Hatteras put on the sealskin, which very nearly covered him. Meanwhile, Hatteras loaded the gun with the last charge of powder, and dropped in it the quicksilver bullet, which was as hard as steel and as heavy as lead. Then he handed Hatteras the gun, which he hid

beneath the sealskin. Then he said to the doctor,--

"You go and join Johnson; I shall wait a few moments to puzzle the enemy."

"Courage, Hatteras!" said the doctor.

"Don't be uneasy, and above all don't show yourselves before you hear my gun."

The doctor soon reached the hummock which concealed Johnson.

"Well?" the latter asked.

"Well, we must wait. Hatteras is doing all this to save us."

The doctor was agitated; he looked at the bear, which had grown excited, as if he had become conscious of the danger which threatened him. A quarter of an hour later the seal was crawling over the ice; he made a circuit of a quarter of a mile to baffle the bear; then he found himself within three hundred feet of him. The bear then saw him, and settled down as if he were trying to hide. Hatteras imitated skilfully the movements of a seal, and if he had not known, the doctor would certainly have taken him for one.

"That's true!" whispered Johnson.

The seal, as he approached the bear, did not appear to see him; he seemed to be seeking some hole through which to reach the water. The bear advanced towards him over the ice with the utmost caution; his eager eyes betrayed his excitement; for one or perhaps two months he had been fasting, and fortune was now throwing a sure prey before him. The seal had come within ten feet of his enemy; the bear hastened towards him, made a long leap, and stood stupefied three paces from Hatteras, who, casting aside the sealskin, with one knee resting on the ground, was aiming at the bear's heart.

The report was sounded, and the bear rolled over on the ice.

"Forward!" shouted the doctor. And, followed by Johnson, he hastened to the scene of combat. The huge beast rose, and beat the air with one paw while with the other he tore up a handful of snow to stanch the wound. Hatteras did not stir, but waited, knife in hand. But his aim had been accurate, and his bullet had hit its mark; before the arrival of his friends he had plunged his knife into the beast's throat, and it fell, never to rise.

"Victory!" shouted Johnson.

"Hurrah! hurrah! hurrah!" cried the doctor.

Hatteras, with folded arms, was gazing calmly at the corpse of his

foe.

"It's now my turn," said Johnson; "it's very well to have killed it, but there is no need of waiting till it's frozen as hard as a stone, when teeth and knife will be useless for attacking it."

Johnson began by skinning the bear, which was nearly as large as an ox; it was nine feet long and six feet in circumference; two huge tusks, three inches long, issued from his mouth. On opening him, nothing was found in his stomach but water; the bear had evidently eaten nothing for a long time; nevertheless, he was very fat, and he weighed more than fifteen hundred pounds; he was divided into four quarters, each one of which gave two hundred pounds of meat, and the hunters carried this flesh back to the snow-house, without forgetting the animal's heart, which went on beating for three hours.

The others wanted to eat the meat raw, but the doctor bade them wait until it should be roasted. On entering the house he was struck by the great cold within it; he went up to the stove and found the fire out; the occupations as well as the excitement of the morning had made Johnson forget his customary duty. The doctor tried to rekindle the fire, but there was not even a spark lingering amid the cold ashes.

"Well, we must have patience!" he said to himself. He then went to the sledge to get some tinder, and asked Johnson for his steel, telling him that the fire had gone out. Johnson answered that it was his

fault, and he put his hand in his pocket, where he usually kept it; he was surprised not to find it there. He felt in his other pockets with the same success; he went into the snow-house and examined carefully the covering under which he had slept in the previous night, but he could not find it.

"Well?" shouted the doctor.

Johnson came back, and stared at his companions.

"And haven't you got the steel, Dr. Clawbonny?" he asked.

"No, Johnson."

"Nor you, Captain?"

"No," answered Hatteras.

"You have always carried it," said the doctor.

"Well, I haven't got it now--" murmured the old sailor, growing pale.

"Not got it!" shouted the doctor, who could not help trembling. There was no other steel, and the loss of this might bring with it terrible consequences.

"Hunt again!" said the doctor.

Johnson ran to the piece of ice behind which he had watched the bear, then to the place of combat, where he had cut him up; but he could not find anything. He returned in despair. Hatteras looked at him without a word of reproach.

"This is serious," he said to the doctor.

"Yes," the latter answered.

"We have not even an instrument, a glass from which we might take the lens to get fire by means of it!"

"I know it," answered the doctor; "and that is a great pity, because the rays of the sun are strong enough to kindle tinder."

"Well," answered Hatteras, "we must satisfy our hunger with this raw meat; then we shall resume our march and we shall try to reach the ship."

"Yes," said the doctor, buried in reflection; "yes, we could do that if we had to. Why not? We might try--"

"What are you thinking of?" asked Hatteras.

"An idea which has just occurred to me--"

"An idea," said Johnson; "one of your ideas! Then we are saved!"

"It's a question," answered the doctor, "whether it will succeed."

"What is your plan?" said Hatteras.

"We have no lens; well, we will make one."

"How?" asked Johnson.

"With a piece of ice which we shall cut out."

"Why, do you think--"

"Why not? We want to make the sun's rays converge to a common focus, and ice will do as much good as crystal."

"Is it possible?" asked Johnson.

"Yes, only I should prefer fresh to salt water; it is more transparent, and harder."

"But, if I am not mistaken," said Johnson, pointing to a hummock a hundred paces distant, "that dark green block shows--"

"You are right; come, my friends; bring your hatchet, Johnson."

The three men went towards the block which, as they supposed, was formed of fresh water.

The doctor had a piece, a foot in diameter, cut through, and he began to smooth it with the hatchet; then he equalized the surface still further with his knife; then he polished it with his hand, and he obtained soon a lens as transparent as if it had been made of the most magnificent crystal. Then he returned to the snow-house, where he took a piece of tinder and began his experiment. The sun was shining brightly; the doctor held the lens so that the rays should be focused on the tinder, which took fire in a few seconds.

"Hurrah! hurrah!" cried Johnson, who could hardly trust his eyes. "O Doctor, Doctor!"

The old sailor could not restrain his joy; he was coming and going like a madman. The doctor had returned to the house; a few minutes later the stove was roaring, and soon a delicious odor of cooking aroused Bell from his torpor. It may be easily imagined how the feast was enjoyed; still the doctor advised his friends to partake in moderation; he set an example, and while eating he again began to talk.

"To-day is a lucky day," he said; "we have food enough for our journey. But we mustn't fall asleep in the delights of Capua, and we'd better start out again."

"We can't be more than forty-eight hours from the Porpoise," said Altamont, who could now begin to speak once more.

"I hope," said the doctor, smiling, "that we shall find material for a fire there."

"Yes," said the American.

"For, if my ice lens is good," continued the doctor, "there would still be something desired on cloudy days, and there are many of them less than four degrees from the Pole."

"True!" said Altamont with a sigh, "less than four degrees! My ship has gone nearer than any yet has been!"

"Forward!" said Hatteras, quickly.

"Forward!" repeated the doctor, gazing uneasily at the two captains.

The strength of the travellers soon returned; the dogs had eaten freely of the bear's flesh, and they continued their journey northward. During their walk the doctor tried to draw from Altamont

the object of his expedition, but the American gave only evasive answers.

"There are two men to be watched," he whispered to the boatswain.

"Yes," answered Johnson.

"Hatteras never says a word to the American, and the American seems to show very little gratitude. Fortunately I am here."

"Dr. Clawbonny," answered Johnson, "since this Yankee has returned to life, I don't like his face much."

"Either I'm mistaken," answered the doctor, "or he suspects Hatteras's plans."

"Do you think that the stranger has the same plans?"

"Who can tell? The Americans are bold; an American may well try what an Englishman tries!"

"You think that Altamont--"

"I don't think anything about it," answered the doctor; "but the situation of this ship on the way to the Pole gives one material for thought."

"But Altamont said he had drifted there."

"He said so! Yes, but he was smiling in a very strange way."

"The devil, Dr. Clawbonny; it would be unfortunate if there should be any rivalry between two such men."

"Heaven grant that I may be mistaken, Johnson, for this misfortune might produce serious complications, if not some catastrophe."

"I hope Altamont will not forget that we saved his life."

"But isn't he going to save us? I confess that without us he would not be alive; but what would become of us without him, without his ship, without its resources?"

"Well, Doctor, you are here, and I hope with your aid all will go well."

"I hope so, Johnson."

The voyage went on without incident; there was no lack of bear's flesh, and they made copious meals of it; there was a certain good-humor in the little band, thanks to the jests of the doctor and his pleasant philosophy; this worthy man always had some scrap of

information to give to his companions. His health continued good; he had not grown very thin, in spite of his fatigues and privations; his friends at Liverpool would have recognized him without difficulty; especially would they have recognized his unaltered good-humor.

During the morning of Saturday the appearance of the plain of ice changed materially; the perturbed fragments, the frequent packs, the hummocks, showed that the ice-field was enduring some severe pressure; evidently some unknown continent, some new island, might have caused this by narrowing the passes. Blocks of fresh water, more frequent and larger, indicated the coast to be near. Hence, there was near them a new land, and the doctor yearned with a desire to add to the charts of the northern regions. Great is the pleasure of ascertaining the line of these unknown coasts, and of tracing it with a pencil; that was the doctor's aim, while that of Hatteras was merely to place his foot upon the Pole, and he took pleasure in advance in thinking of the names he was going to give to the seas, straits, bays, and slightest promontories in these new continents; certainly he would not forget the names of his companions, his friends, nor her Gracious Majesty, nor the royal family; and he foresaw a certain "Cape Clawbonny" with great satisfaction.

These thoughts kept him busy all day; that evening they encamped as usual, and each one took his turn at watching near these unknown lands. The next day, Sunday, after a heavy breakfast of bear's paws, which were very good, the travellers pushed on to the north, inclining

a little to the west; the road grew difficult, but yet they advanced rapidly. Altamont, from the top of the sledge, scanned the horizon with feverish attention; his companions were the victims of involuntary uneasiness. The last solar observations gave them latitude $83^{\circ} 35'$, and longitude $120^{\circ} 15'$; that was the place where the American ship was said to be lying; the question of life and death was to be solved that day. At last, at about half past two in the afternoon, Altamont stood straight, stopped the little band by a loud cry, and, pointing with his hand to a white mass, which all the rest had taken for an iceberg, he cried with a loud voice,--

"The Porpoise!"

CHAPTER VI.

THE PORPOISE.

March 24th was Palm Sunday,--that day when the streets of the towns and villages of Europe are filled with flowers and leaves; bells are ringing, and the air is filled with rich perfumes. But here, in this desolate country, what sadness and silence! The wind was keen and bitter; not a leaf of foliage was to be seen! But still, this Sunday was a day of rejoicing for our travellers, for at last they were about to find supplies which would save them from certain death. They hastened their steps; the dogs drew the sledge briskly, Duke barked joyously, and they all soon reached the American ship. The Porpoise was wholly buried beneath the snow; there was no sign of mast, yard, or rigging; all had been lost at the time of the shipwreck; the ship lay on a bed of rocks now completely hidden. The Porpoise was careened to one side by the violence of the shock, her bottom was torn open, so that the ship seemed uninhabitable. This was soon seen by the captain, the doctor, and Johnson, after they had entered the vessel; they had to cut away fifteen feet of ice to get to the hatchway; but to their great joy they saw that the animals, many traces of which were to be seen, had spared the supplies.

"If we have here," said Johnson, "plenty of food and fuel, this hull does not seem inhabitable."

"Well, we must build a snow-house," answered Hatteras, "and make ourselves as comfortable as possible on the mainland."

"Without doubt," continued the doctor; "but don't let us hurry; let us do things carefully; if need be we can fit out some quarters in the ship; meanwhile we can build a strong house, capable of protecting us against the cold and wild beasts. I am willing to be the architect, and you'll see what I can do."

"I don't doubt your skill, Doctor," answered Johnson; "we'll make ourselves as comfortable as possible here, and we'll make an inventory of all that the ship contains; unfortunately, I don't see any launch, or boat, and these ruins are in too bad a state to permit of our making a small boat."

"Who can say?" answered the doctor. "With time and thought a great deal can be done; now we have not to trouble ourselves about navigation, but about a house to live in; I propose not to form any other plans, and to let everything have its turn."

"That is wise," answered Hatteras; "let us begin with the beginning."

The three companions left the ship, returned to the sledge, and announced their determination to Bell and the American; Bell said he was ready to work; the American shook his head, on learning that nothing could be done with his ship; but since all discussion would

have been idle, they determined at first to take refuge in the Porpoise, and to build a large building on the shore.

At four o'clock in the afternoon the five travellers were installed as comfortably as possible between decks; by means of spars and fragments of masts, Bell had made a nearly level floor; there they placed coverings stiffened by the frost, which the heat of the stove soon brought back to their natural state; Altamont, leaning on the doctor, was able to make his way to the corner which had been set aside for him; on setting foot on his ship, he had sighed with a feeling of relief, which did not encourage the boatswain.

"He feels at home," the old sailor thought, "and one would say that he had invited us here."

The rest of the day was devoted to repose; the weather threatened to change under the influence of the westerly winds; the thermometer outside stood at -26° . In fact, the Porpoise lay beyond the pole of cold, at a latitude relatively less severe, though farther to the north. On that day they finished the bear, with some biscuits they found on the ship, and a few cups of tea; then fatigue overcame them, and each one sank into a sound sleep.

The next morning they all awoke rather late; they soon recalled the difference in their situation; they were no longer perplexed with uncertainty about the morrow; they only thought of establishing

themselves comfortably. These castaways looked at themselves as colonists who had reached their destination, and, forgetting the sufferings of their long march, they had no other thought than that of securing a comfortable future.

"Well," said the doctor, stretching his arms, "it's something not to have to wonder where one will sleep to-night and what one will have to eat to-morrow."

"Let us first make an inventory of the ship," answered Johnson.

The Porpoise had been carefully equipped for a long voyage.

The inventory, when complete, indicated the following supplies:--

6,150 lbs. of flour, fat and raisins for puddings;

2,000 " " beef and salt pork;

1,500 " " pemmican;

700 " " sugar;

700 " " chocolate;

500 " " rice;

1½ chests of tea, weighing 87 lbs;

many barrels of canned fruits and vegetables, lime-juice in abundance, cochlearia, sorrel and water-cresses, and three hundred gallons of rum and brandy; in the hold there was a large supply of ammunition; there was plenty of coal and wood. The doctor collected carefully the

nautical instruments, and he also found a Bunsen's Pile, which had been carried for electrical tests and experiments. In short, they had supplies enough to keep five men on whole rations for two years; all fear of starving or freezing to death was hence wholly removed.

"Our means of living are certain," said the doctor to the captain, "and there is nothing to prevent our reaching the Pole."

"The Pole!" answered Hatteras, trembling with excitement.

"Certainly," continued the doctor; "what's to prevent our pushing on during the summer across the land?"

"Across the land! true! But how about the sea?"

"Can't we build a small boat out of the timber of the Porpoise?"

"An American boat, you mean," answered Hatteras, scornfully, "and commanded by this American!"

The doctor understood the captain's repugnance, and judged it best to change the conversation.

"Now that we know what our supplies are," he went on, "we must build some safe place for them, and a house for ourselves. We have plenty of material, and we can settle ourselves very comfortably. I hope, Bell,"

he added, turning to the carpenter, "that you are going to distinguish yourself; I may be able to help you too, I trust."

"I'm ready, Doctor," answered Bell; "if it were necessary I could easily build a whole city with houses and streets out of these blocks of ice--"

"We sha'n't need as much as that; let us follow the example of the agents of the Hudson's Bay Company; they build forts which protect them from the wild beasts and the Indians; that is all we need; let us make it no larger than necessary; on one side the dwelling, on the other the stores, with a sort of curtain, and two bastions. I'll try to rub up what I know about fortification."

"Upon my word, Doctor," said Johnson, "I don't doubt that we shall make something very fine under your direction."

"Well, my friends, we must first choose a site; a good engineer should first study the lay of the land. Will you come with me, Hatteras?"

"I shall trust to you, Doctor," answered the captain. "You see about that, while I explore the coast."

Altamont, who was still too feeble to get to work, was left on board of his ship, and the two Englishmen set foot on the mainland. The weather was thick and stormy; at noon the thermometer stood at -11° ,

but, there being no wind, that temperature was comfortable. Judging from the outline of the shore, a large sea, at that time wholly frozen, stretched out farther than eye could reach in the west; on the east it was limited by a rounded coast, cut into by numerous estuaries, and rising suddenly about two hundred yards from the shore; it formed a large bay, full of dangerous rocks, on which the Porpoise had been wrecked; far off on the land rose a mountain, which the doctor conjectured to be about three thousand feet high. Towards the north a promontory ran into the sea, after hiding a part of the bay. An island of moderate size rose from the field of ice, three miles from the mainland, so that it offered a safe anchorage to any ship that could enter the bay. In a hollow cut of the shore was a little inlet, easily reached by ships, if this part of the arctic seas was ever open. Yet, according to the accounts of Beecher and Penny, this whole sea was open in the summer months.

In the middle of the coast the doctor noticed a sort of plateau about two hundred feet in diameter; on three sides it was open to the bay; the fourth was enclosed by an elevation about a hundred and twenty feet high; this could be ascended only by steps cut in the ice. This seemed a proper place for a solid building, and it could be easily fortified; nature had adapted it for the purpose; it was only necessary to make use of the place. The doctor, Bell, and Johnson reached this place by means of steps cut in the ice. As soon as the doctor saw the excellence of the place, he determined to dig away the ten feet of hardened snow which covered it; the buildings had to be

built on a solid foundation.

During Monday, Tuesday, and Wednesday, work went on without relaxation; at last the ground appeared; it consisted of a hard, dense granite, with the angles as sharp as glass; it contained, moreover, garnets and large crystals of feldspar, against which the pickaxe struck fire.

The doctor then gave them the dimensions and plan of the snow-house; it was to be forty feet long, twenty broad, and ten deep; it was divided into three rooms, a sitting-room, a bedroom, and a kitchen; more was not needed. To the left was the kitchen, to the right the bedroom, in the middle the sitting-room. For five days they worked busily. There was no lack of material; the ice walls were thick enough to resist thawing, for they could not risk being wholly without protection, even in summer. In proportion as the house rose, it became agreeable to see; there were four front windows, two in the sitting-room, one in the kitchen, another in the bedroom; for panes of glass they substituted large sheets of ice, in the Esquimaux fashion, which served as well as unpolished glass for the passage of light. In front of the sitting-room, between two windows, there ran a long entry like a tunnel, which gave admission to the house; a solid door, brought from the Porpoise, closed it hermetically. When the house was finished, the doctor was delighted with his handiwork; it would have been impossible to say to what school of architecture the building belonged, although the architect would have avowed his

preferences for the Saxon Gothic, so common in England; but the main point was, that it should be solid; therefore the doctor placed on the front short uprights; on top a sloping roof rested against the granite wall. This served to support the stove-pipes, which carried the smoke away. When the task was completed, they began to arrange the interior. They carried into the bedroom the sleeping-accommodations from the Porpoise; they were arranged in a circle about a large stove. Benches, chairs, sofas, tables, wardrobes, were arranged in the sitting-room, which was also used as a dining-room; the kitchen received the cooking-stoves of the ship, and the various utensils. Sails, stretched on the floor, formed the carpet, and also served as hangings to the inner doors, which had no other way of closing. The walls of the house averaged five feet in thickness, and the recesses for the windows looked like embrasures in a fort. It was all built with great solidity; what more was to be desired? Ah, if they had listened to the doctor, there is no knowing what they would not have made of this ice and snow, which can be so easily manipulated! He all day long would ponder over plans which he never hoped to bring about, but he thereby lightened the dull work of all by the ingenuity of his suggestions. Besides, he had come across, in his wide reading, a rather rare book by one Kraft, entitled "Detailed Description of the Snow-Palace built at St. Petersburg, in January, 1740, and of all the Objects it contained." The recollection of this book impressed him. One evening he gave his companions a full account of the wonders of that snow-palace.

"Why couldn't we do here," he asked, "what they did at St. Petersburg? What do we need? Nothing, not even imagination!"

"So it was very handsome?" said Johnson.

"It was fairy-like, my friend. The house, built by order of the Empress Anna, and in which she had celebrated the marriage of one of her buffoons in 1740, was nearly as large as ours; but in front stood six cannons of ice; they were often fired without bursting; there were also mortars to hold sixty-pound shells; so we could have some formidable artillery; the bronze is handy, and falls even from heaven. But the triumph of taste and art was on the front of the palace, which was adorned with handsome statues; the steps were garnished with vases of flowers of the same material; on the right stood an enormous elephant, who played water through his trunk by day, and burning naphtha by night. What a menagerie we might have if we only wanted to!"

"As for animals," answered Johnson, "we sha'n't lack them, I fancy, and they won't be any the less interesting for not being made of ice."

"Well," said the doctor, "we shall be able to defend ourselves against their attacks; but to return to the palace, I should add that inside there were mirrors, candelabra, beds, mattresses, pillows, curtains, clocks, chairs, playing-cards, wardrobes well furnished, and all cut out of ice; in fact, nothing was lacking."

"It was then a true palace?" said Bell.

"A splendid palace, worthy of a sovereign! Ice! It was kind of Providence to invent it, since it lends itself to so many miracles and accommodates so readily to the needs of castaways!"

It took them until March 31st to get the house ready; this was Easter Sunday, and the day was set aside for rest; the whole day was spent in the sitting-room, where divine service was read, and each was able to judge of the excellent arrangements of the snow-house.

The next morning they set about building stores and a magazine; this took them about a week, including the time employed for emptying the Porpoise, which was not done without difficulty, for the low temperature did not permit them to work very long. At last, April 8th, provisions, food, and supplies were safely sheltered on land; the stores were placed to the north, and the powder-house to the south, about sixty feet from the end of the house; a sort of dog-kennel was built near the stores; it was destined for the Greenland dogs, and the doctor honored it with the title of "Dog-Palace." Duke partook of the common quarters.

Then the doctor passed to the means of defence of the place. Under his direction the plateau was surrounded by a real fortification of ice which secured it against every invasion; its height made a natural

protection, and as there was no salient, it was equally strong on all sides. The doctor's system of defence recalled strongly the method of Sterne's Uncle Toby, whose gentleness and good-humor he also shared. He was a pleasant sight when he was calculating the inclination of the platform and the breadth of the causeway; but this task was so easy with the snow, that he enjoyed it, and he was able to make the wall seven feet thick; besides the plateau overlooking the bay, he had to build neither counterscarp nor glacis; the parapet of snow, after following the outlines of the plateau, joined the rock on the other side. The work of fortification was finished April 15th. The fort was completed, and the doctor seemed very proud of his work.

In truth, this fortified enclosure could have withstood for a long time against a tribe of Esquimaux, if such enemies were met under that latitude; but there was no trace of human beings there; Hatteras, in making out the outline of the bay, did not see any ruins of the huts which are so commonly found in the places resorted to by Greenland tribes; the castaways of the Forward and the Porpoise appeared to be the first ever to set foot on this unknown shore. But if they need not fear men, animals were to be dreaded, and the fort, thus defended, would have to protect the little garrison against their attacks.

CHAPTER VII.

A DISCUSSION ABOUT CHARTS.

During these preparations for going into winter-quarters, Altamont had entirely recovered his health and strength; he was even able to aid in unloading the ship. His vigorous constitution at last carried the day, and his pallor soon gave way before the vigor of his blood.

They saw in him a sanguine, robust citizen of the United States, an intelligent, energetic man with a resolute character, a bold, hardy American ready for everything; he was originally from New York, and had been a sailor from infancy, as he told his companions; his ship, the Porpoise, had been equipped and sent out by a society of wealthy American merchants, at the head of whom was the famous Mr. Grinnell.

There was a certain similarity between his disposition and that of Hatteras, but their sympathies were different. This similarity did not incline them to become friends; indeed, it had the opposite effect. A close observer would have detected serious discordances between them; and this, although they were very frank with one another. Altamont was less so, however, than Hatteras; with greater ease of manner, he was less loyal; his open character did not inspire as much confidence as did the captain's gloomy temperament. Hatteras would say what he had to say, and then he held his peace. The other would talk a great deal, but say very little. Such was the doctor's reading of the American's

character, and he was right in his presentiment of a future disagreement, if not hatred, between the captains of the Porpoise and the Forward.

And yet only one could command. To be sure, Hatteras had all the right of commanding, by virtue of anterior right and superior force. But if one was at the head of his own men, the other was on board of his own ship. And that was generally felt. Either from policy or instinctively, Altamont was at first attracted towards the doctor; it was to him he owed his life, but it was sympathy rather than gratitude which moved him. This was the invariable effect of Clawbonny's nature; friends grew about him like wheat under the summer sun. Every one has heard of people who rise at five o'clock in the morning to make enemies; the doctor could have got up at four without doing it. Nevertheless, he resolved to profit by Altamont's friendship to the extent of learning the real reason of his presence in the polar seas. But with all his wordiness the American answered without answering, and kept repeating what he had to say about the Northwest Passage. The doctor suspected that there was some other motive for the expedition, the same, namely, that Hatteras suspected. Hence he resolved not to let the two adversaries discuss the subject; but he did not always succeed. The simplest conversations threatened to wander to that point, and any word might kindle a blaze of controversy. It happened soon. When the house was finished, the doctor resolved to celebrate the fact by a splendid feast; this was a good idea of Clawbonny's, who wanted to introduce in this continent the habits and pleasures of

European life. Bell had just shot some ptarmigans and a white rabbit, the first harbinger of spring. This feast took place April 14, Low Sunday, on a very pleasant day; the cold could not enter the house, and if it had, the roaring stoves would have soon conquered it. The dinner was good; the fresh meat made an agreeable variety after the pemmican and salt meat; a wonderful pudding, made by the doctor's own hand, was much admired; every one asked for another supply; the head cook himself, with an apron about his waist and a knife hanging by his side, would not have disgraced the kitchen of the Lord High Chancellor of England. At dessert, liquors appeared; the American was not a teetotaler; hence there was no reason for his depriving himself of a glass of gin or brandy; the other guests, who were never in any way intemperate, could permit themselves this infraction of their rule; so, by the doctor's command, each one was able to drain a glass at the end of the merry meal. When a toast was drunk to the United States, Hatteras was simply silent. It was then that the doctor brought forward an interesting subject.

"My friends," he said, "it is not enough that we have crossed the waters and ice and have come so far; there is one thing left for us to do. Hence I propose that we should give names to this hospitable land where we have found safety and rest; that is the course pursued by all navigators, and there is not one who has neglected it; therefore we ought to carry back with us not only a map of the shores, but also the names of the capes, bays, points, and promontories which we find. That is absolutely necessary."

"Good!" cried Johnson; "besides, when one can give all these lands their own names, it looks like genuine work, and we can't consider ourselves as cast away on an unknown shore."

"Besides," added Bell, "that simplifies instructions and facilitates the execution of orders; we may be compelled to separate during some expedition or in hunting, and the best way for finding our way back is to know the names of the places."

"Well," said the doctor, "since we are all agreed, let us try to settle on some names without forgetting our country and friends."

"You are right, Doctor," answered the American, "and you give what you say additional value by your warmth."

"Well," continued the doctor, "let us go on in order."

Hatteras had not taken part in the conversation; he was thinking. Still the eyes of his companions were fastened on him; he rose and said,--

"If you are all willing, and I don't think any one will dissent,"--at those words Hatteras looked at Altamont,--"it seems to me proper to name this house after its skilful architect, and to call it 'Doctor's House.'"

"That's true," said Bell.

"Good!" shouted Johnson; "Doctor's House!"

"Couldn't be better," added Altamont. "Hurrah for Dr. Clawbonny!"

Three cheers were then given, to which Duke added an approving bark.

"So," resumed Hatteras, "let this house bear that name until some new land is discovered to bear the name of our friend."

"Ah!" said Johnson, "if the earthly Paradise were to be named over again, the name of Clawbonny would suit it to a miracle!"

The doctor, much moved, wanted to defend himself by modesty, but he was unable. It was then formally agreed that the feast had been eaten in the grand dining-hall of Doctor's House, after being cooked in the kitchen of Doctor's House, and that they would go comfortably to bed in the chamber of Doctor's House.

"Now," said the doctor, "let us take the more important points of our discoveries."

"There is," said Hatteras, "this immense sea which surrounds us, and in which no ship has ever floated."

"No ship!" interrupted Altamont; "it seems to me the Porpoise should not be forgotten, unless indeed it came by land," he added jestingly.

"One might think it had," retorted Hatteras, "to see the rocks on which it is now resting."

"Indeed, Hatteras," answered Altamont with some vexation; "but, on the whole, isn't even that better than blowing up as the Forward did!"

Hatteras was about to make some angry reply, when the doctor interrupted him.

"My friends," he said, "we are not talking about ships, but about the new sea--"

"It is not new," interrupted Altamont. "It already bears a name on all the charts of the Pole. It is the Arctic Ocean, and I don't see any reason for changing its name; if we should find out in the future that it is only a sound or gulf, we can see what is to be done."

"Very well," said Hatteras.

"Agreed," said the doctor, regretting that he had aroused a discussion between rival nationalities.

"Let us come to the land which we are now in," resumed Hatteras. "I am not aware that it bears any name on the most recent maps."

At these words he turned to Altamont, who did not lower his eyes, but answered,--

"You may be mistaken again, Hatteras."

"Mistaken! this unknown land, this new country--"

"Has a name already," answered the American, quietly.

Hatteras was silent. His lips trembled.

"And what is its name?" asked the doctor, a little surprised at the American's statement.

"My dear Clawbonny," answered Altamont, "it is the custom, not to say the habit, of every explorer to give a name to the continent which he has discovered. It seems to me that on this occasion it was in my power and that it was my duty to use this indisputable right--"

"Still--" said Johnson, whom Altamont's coolness annoyed.

"It seems to me hard to pretend," the American resumed, "that the Porpoise did not discover this coast, and even on the supposition

that it came by land," he added, glancing at Hatteras, "there can't be any question."

"That is a claim I can't admit," answered Hatteras, gravely, forcibly restraining himself. "To give a name, one should be the discoverer, and that I fancy you were not. Without us, besides, where would you be, sir, you who presume to impose conditions upon us? Twenty feet under the snow!"

"And without me, sir," replied the American, "without my ship, where would you be at this moment? Dead of cold and hunger?"

"My friends," said the doctor, intervening for the best, "come, a little calm, it can all settle itself. Listen to me!"

"That gentleman," continued Altamont, pointing to the captain, "can give a name to all the lands he discovers, if he discovers any; but this continent belongs to me! I cannot admit of its bearing two names, like Grinnell Land and Prince Albert's Land, because an Englishman and American happened to find it at the same time. Here it's different. My rights of precedence are beyond dispute! No ship has ever touched this shore before mine. No human being before me has ever set foot upon it; now, I have given it its name, and it shall keep it."

"And what is its name?" asked the doctor.

"New America," answered Altamont.

Hatteras clinched his fists on the table. But with a violent effort he controlled himself.

"Can you prove to me," Altamont went on, "that any Englishman has ever set foot on this soil before me?"

Johnson and Bell were silent, although they were no less angry than the captain at the haughty coolness of their opponent. But there was nothing to be said. The doctor began again after a few moments of painful silence.

"My friends," he said, "the first law of humanity is justice; it embraces all the rest. Let us then be just, and not give way to evil feelings. Altamont's priority appears to me incontestable. There is no question about it; we shall have our revenge later, and England will have a good share in future discoveries. Let us leave to this land, then, the name of New America. But Altamont, in giving it this name, has not, I imagine, disposed of the bays, capes, points, and promontories which it encloses, and I don't see anything to prevent our calling it Victoria Bay."

"None at all," answered Altamont, "provided that the cape jutting into the sea over there is named Cape Washington."

"You might have chosen, sir," cried Hatteras, beside himself, "a name less offensive to an English ear."

"But none dearer to an American ear," answered Altamont, with much pride.

"Come, come," continued the doctor, who found it hard to keep the peace in this little world, "no discussion about that! Let an American be proud of his great men! Let us honor genius wherever it is found, and since Altamont has made his choice, let us now speak for ourselves and our friends. Let our captain--"

"Doctor," answered Hatteras, "since this is an American land, I don't care to have my name figure here."

"Is that opinion unchangeable?" asked the doctor.

"It is," answered Hatteras.

The doctor did not insist any further.

"Well, then, it's our turn," he said, addressing the old sailor and the carpenter; "let us leave a trace of our passage here. I propose that we call that island about three miles from here Johnson Island, in honor of our boatswain."

"O," said the latter, a little embarrassed, "O doctor!"

"As to the mountain which we have seen in the west, we shall call it Bell Mountain, if our carpenter is willing."

"It's too much honor for me," answered Bell.

"It's only fair," said the doctor.

"Nothing better," said Altamont.

"Then we have only to name our fort," resumed the doctor; "there need be no discussion about that; it's neither to Her Royal Highness Queen Victoria nor to Washington that we owe our protection in it at this moment, but to God, who brought us together and saved us all. Let it be called Fort Providence!"

"A capital plan!" answered Altamont.

"Fort Providence," added Johnson, "that sounds well! So, then, in returning from our excursions in the north, we shall start from Cape Washington to reach Victoria Bay, and from there to Fort Providence, where we shall find rest and plenty in Doctor's House."

"Then that's settled," answered the doctor; "later, as we make discoveries, we shall have other names to give, which I hope will not

give rise to discussion; for, my friends, we ought to stand by one another and love one another; we represent humanity on this distant shore; let us not give ourselves up to the detestable passions which infest society; let us rather remain unattackable by adversity. Who can say what dangers Heaven has in store for us, what sufferings we may not have to support before we return to our own country? Let us five be like one man, and leave on one side the rivalry which is wrong anywhere, and especially here. You understand me, Altamont? And you, Hatteras?"

The two men made no reply, but the doctor did not seem to notice their silence. Then they talked about other things; about hunting, so as to get a supply of fresh meat; with the spring, hares, partridges, even foxes, would return, as well as bears; they resolved accordingly not to let a favorable day pass without exploring the land of New America.

CHAPTER VIII.

EXCURSION TO THE NORTH OF VICTORIA BAY.

The next morning, as soon as the sun appeared, Clawbonny ascended the wall of rock which rose above Doctor's House; it terminated suddenly in a sort of truncated cone; the doctor reached the summit with some little difficulty, and from there his eye beheld a vast expanse of territory which looked as if it were the result of some volcanic convulsion; a huge white canopy covered land and sea, rendering them undistinguishable the one from the other. The doctor, when he saw that this rock overlooked all the surrounding plain, had an idea,--a fact which will not astonish those who are acquainted with him. This idea he turned over, pondered, and made himself master of by the time he returned to the house, and then he communicated it to his companions.

"It has occurred to me," he said to them, "to build a lighthouse at the top of the cone up there."

"A lighthouse?" they cried.

"Yes, a lighthouse; it will be of use to show us our way back at night when we are returning from distant excursions, and to light up the neighborhood in the eight months of winter."

"Certainly," answered Altamont, "such an apparatus would be useful;

but how will you build it?"

"With one of the Porpoise's lanterns."

"Very good; but with what will you feed the lamp? With seal-oil?"

"No; it doesn't give a bright enough light; it could hardly pierce the fog."

"Do you think you can get hydrogen from our coal and make illuminating gas?"

"Well, that light would not be bright enough, and it would be wrong to use up any of our fuel."

"Then," said Altamont, "I don't see--"

"As for me," answered Johnson, "since the bullet of mercury, the ice lens, the building of Fort Providence, I believe Dr. Clawbonny is capable of anything."

"Well," resumed Altamont, "will you tell us what sort of a light you are going to have?"

"It's very simple," answered the doctor; "an electric light."

"An electric light!"

"Certainly; didn't you have on board of the Porpoise a Bunsen's pile in an uninjured state?"

"Yes," answered the American.

"Evidently, when you took it, you intended to make some experiments, for it is complete. You have the necessary acid, and the wires isolated, hence it would be easy for us to get an electric light. It will be more brilliant, and will cost nothing."

"That is perfect," answered the boatswain, "and the less time we lose--"

"Well, the materials are there," answered the doctor, "and in an hour we shall have a column ten feet high, which will be enough."

The doctor went out; his companions followed him to the top of the cone; the column was promptly built and was soon surmounted by one of the Porpoise's lanterns. Then the doctor arranged the conducting wires which were connected with the pile; this was placed in the parlor of the ice-house, and was preserved from the frost by the heat of the stoves. From there the wires ran to the lantern. All this was quickly done, and they waited till sunset to judge of the effect. At night the two charcoal points, kept at a proper distance apart in the

lantern, were brought together, and flashes of brilliant light, which the wind could neither make flicker nor extinguish, issued from the lighthouse. It was a noteworthy sight, these sparkling rays, rivalling the brilliancy of the plains, and defining sharply the outlines of the surrounding objects. Johnson could not help clapping his hands.

"Dr. Clawbonny," he said, "has made another sun!"

"One ought to do a little of everything," answered the doctor, modestly.

The cold put an end to the general admiration, and each man hastened back to his coverings.

After this time life was regularly organized. During the following days, from the 15th to the 20th of April, the weather was very uncertain; the temperature fell suddenly twenty degrees, and the atmosphere experienced severe changes, at times being full of snow and squally, at other times cold and dry, so that no one could set foot outside without precautions. However, on Saturday, the wind began to fall; this circumstance made an expedition possible; they resolved accordingly to devote a day to hunting, in order to renew their provisions. In the morning, Altamont, the doctor, Bell, each one taking a double-barrelled gun, a proper amount of food, a hatchet, a snow-knife in case they should have to dig a shelter, set out under a cloudy sky. During their absence Hatteras was to explore the coast and

take their bearings. The doctor took care to start the light; its rays were very bright; in fact, the electric light, being equal to that of three thousand candles or three hundred gas-jets, is the only one which at all approximates to the solar light.

The cold was sharp, dry, and still. The hunters set out towards Cape Washington, finding their way made easier over the hardened snow. In about half an hour they had made the three miles which separated the cape from Fort Providence. Duke was springing about them. The coast inclined to the east, and the lofty summits of Victoria Bay tended to grow lower toward the north. This made them believe that New America was perhaps only an island; but they did not have then to concern themselves with its shape. The hunters took the route by the sea and went forward rapidly. There was no sign of life, no trace of any building; they were walking over a virgin soil. They thus made about fifteen miles in the first three hours, eating without stopping to rest; but they seemed likely to find no sport. They saw very few traces of hare, fox, or wolf. Still, a few snow-birds flew here and there, announcing the return of spring and the arctic animals. The three companions had been compelled to go inland to get around some deep ravines and some pointed rocks which ran down from Bell Mountain; but after a few delays they succeeded in regaining the shore; the ice had not yet separated. Far from it. The sea remained fast; still a few traces of seals announced the beginning of their visit, and that they were already come to breathe at the surface of the ice-field. It was evident from the large marks, the fresh breaking of the ice, that many

had very recently been on the land. These animals are very anxious for the rays of the sun, and they like to bask on the shore in the sun's heat. The doctor called his companions' attention to these facts.

"Let us notice this place," he said. "It is very possible that in summer we shall find hundreds of seals here; they can be approached and caught without difficulty, if they are unfamiliar with men. But we must take care not to frighten them, or they will disappear as if by magic and never return; in that way, careless hunters, instead of killing them one by one, have often attacked them in a crowd, with noisy cries, and have thereby driven them away."

"Are they only killed for their skin and oil?" asked Bell.

"By Europeans, yes, but the Esquimaux eat them; they live on them, and pieces of seal's flesh, which they mix with blood and fat, are not at all unappetizing. After all, it depends on the way it's treated, and I shall give you some delicate cutlets if you don't mind their dark color."

"We shall see you at work," answered Bell; "I'll gladly eat it, Doctor."

"My good Bell, as much as you please. But, however much you eat, you will never equal a Greenlander, who eats ten or fifteen pounds of it a day."

"Fifteen pounds!" said Bell. "What stomachs!"

"Real polar stomachs," answered the doctor; "prodigious stomachs which can be dilated at will, and, I ought to add, can be contracted in the same way, so that they support starving as well as gorging. At the beginning of his dinner, the Esquimaux is thin; at the end, he is fat, and not to be recognized! It is true that his dinner often lasts a whole day."

"Evidently," said Altamont, "this voracity is peculiar to the inhabitants of cold countries!"

"I think so," answered the doctor; "in the arctic regions one has to eat a great deal; it is a condition not only of strength, but of existence. Hence the Hudson's Bay Company gives each man eight pounds of meat a day, or twelve pounds of fish, or two pounds of pemmican."

"That's a generous supply," said the carpenter.

"But not so much as you imagine, my friend; and an Indian crammed in that way does no better work than an Englishman with his pound of beef and his pint of beer a day."

"Then, Doctor, all is for the best."

"True, but still an Esquimaux meal may well astonish us. While wintering at Boothia Land, Sir John Ross was always surprised at the voracity of his guides; he says somewhere that two men--two, you understand--ate in one morning a whole quarter of a musk-ox; they tear the meat into long shreds, which they place in their mouths; then each one, cutting off at his lips what his mouth cannot hold, passes it over to his companion; or else the gluttons, letting the shreds hang down to the ground, swallow them gradually, as a boa-constrictor swallows an animal, and like it stretched out at full length on the ground."

"Ugh!" said Bell, "the disgusting brutes!"

"Every one eats in his own way," answered the American, philosophically.

"Fortunately!" replied the doctor.

"Well," said Altamont, "since the need of food is so great in these latitudes, I'm no longer surprised that in accounts of arctic voyages there is always so much space given to describing the meals."

"You are right," answered the doctor; "and it is a remark which I have often made myself; it is not only that plenty of food is needed, but also because it is often hard to get it. So one is always thinking of it and consequently always talking of it!"

"Still," said Altamont, "if my memory serves me right, in Norway, in the coldest countries, the peasants need no such enormous supply: a little milk, eggs, birch-bark bread, sometimes salmon, never any meat; and yet they are hardy men."

"It's a matter of organization," answered the doctor, "and one which I can't explain. Still, I fancy that the second or third generation of Norwegians, carried to Greenland, would end by feeding themselves in the Greenland way. And we too, my friends, if we were to remain in this lovely country, would get to live like the Esquimaux, not to say like gluttons."

"Dr. Clawbonny," said Bell, "it makes me hungry to talk in this way."

"It doesn't make me," answered Altamont; "it disgusts me rather, and makes me dislike seal's flesh. But I fancy we shall have an opportunity to try the experiment. If I'm not mistaken, I see some living body down there on the ice."

"It's a walrus," shouted the doctor; "forward silently!"

Indeed, the animal was within two hundred feet of the hunters; he was stretching and rolling at his ease in the pale rays of the sun. The three men separated so as to surround him and cut off his retreat; and they approached within a few fathoms' lengths of him, hiding behind

the hummocks, and then fired. The walrus rolled over, still full of strength; he crushed the ice in his attempts to get away; but Altamont attacked him with his hatchet, and succeeded in cutting his dorsal fins. The walrus made a desperate resistance; new shots finished him, and he remained stretched lifeless on the ice-field stained with his blood. He was a good-sized animal, being nearly fifteen feet long from his muzzle to the end of his tail, and he would certainly furnish many barrels of oil. The doctor cut out the most savory parts of the flesh, and he left the corpse to the mercies of a few crows, which, at this season of the year, were floating through the air. The night began to fall. They thought of returning to Fort Providence; the sky had become perfectly clear, and while waiting for the moon to rise, the splendor of the stars was magnificent.

"Come, push on," said the doctor, "it's growing late; to be sure, we've had poor luck; but as long as we have enough for supper, there's no need of complaining. Only let's take the shortest way and try not to get lost; the stars will help us."

But yet in countries where the North Star shines directly above the traveller's head, it is hard to walk by it; in fact, when the north is directly in the zenith, it is hard to determine the other cardinal points; fortunately the moon and great constellations aided the doctor in determining the route. In order to shorten their way, he resolved to avoid the sinuosities of the coast, and to go directly across the land; it was more direct, but less certain; so, after walking for a

few hours, the little band had completely lost its way. They thought of spending the night in an ice-house and waiting till the next day to find out where they were, even if they should have to return along the shore; but the doctor, fearing that Hatteras and Johnson might be anxious, insisted on their going on.

"Duke is showing us the way," he said, "and he can't be wrong; he has an instinct which is surer than needle or star. Let us follow him."

Duke went forward, and they all followed confidently. And they were justified in so doing. Soon a distant light appeared on the horizon; it was not to be confounded with a star in the low clouds.

"There's our light!" cried the doctor.

"Do you think so, Doctor!" asked the carpenter.

"I'm sure of it. Let us push on."

As they approached the light grew brighter, and soon they enjoyed its full brilliancy; they advanced in full illumination, and their sharply cut shadows ran out behind them over the snow. They hastened their gait, and in about half an hour they were climbing up the steps of Fort Providence.

CHAPTER IX.

COLD AND HEAT.

Hatteras and Johnson had waited for the three hunters with some uneasiness. When they returned they were delighted to find a warm and comfortable shelter. That evening the temperature had decidedly fallen, and the thermometer outside stood at -31° . The three were very much fatigued and almost frozen, so that they could hardly drag one foot after the other; fortunately the stoves were drawing well; the doctor became cook, and roasted a few walrus cutlets. At nine o'clock they all five sat down before a nourishing supper.

"On my word," said Bell, "at the risk of passing for an Esquimaux, I will say that food is an important thing in wintering; one ought to take what one can get."

Each of them having his mouth full, it was impossible for any one to answer the carpenter at once; but the doctor made a sign that he was right. The walrus cutlets were declared excellent; or, if they made no declarations about it, they ate it all up, which is much more to the purpose. At dessert the doctor made the coffee, as was his custom; he intrusted this task to no one else; he made it at the table, in an alcohol machine, and served it boiling hot. He wanted it hot enough to scald his throat, or else he did not think it worth drinking. That evening he drank it so hot that his companions could not imitate him.

"But you'll burn yourself, Doctor," said Altamont.

"O no!" was the answer.

"Is your throat lined with copper?" asked Johnson.

"No, my friends; I advise you to take counsel from me. There are some persons, and I am of the number, who drink coffee at a temperature of 131°."

"One hundred and thirty-one degrees!" cried Altamont; "but the hand can't support that heat!"

"Evidently, Altamont, since the hand can't endure more than 122° in the water; but the palate and tongue are not so tender as the hand; they can endure much more."

"You surprise me," said Altamont.

"Well, I'm going to convince you."

And the doctor, bringing the thermometer from the parlor, plunged the bulb into his cup of boiling coffee; he waited until it stood at a 131°, and then he drank it with evident joy. Bell tried to do the same thing, but he burned himself and shouted aloud.

"You are not used to it," said the doctor.

"Clawbonny," asked Altamont, "can you tell me the highest temperature the human body can support?"

"Easily," answered the doctor; "various experiments have been made and curious facts have been found out. I remember one or two, and they serve to show that one can get accustomed to anything, even to not cooking where a beefsteak would cook. So, the story goes that some girls employed at the public bakery of the city of La Rochefoucauld, in France, could remain ten minutes in the oven in a temperature of 300°, that is to say, 89° hotter than boiling water, while potatoes and meat were cooking around them."

"What girls!" said Altamont.

"Here is another indisputable example. Nine of our fellow-countrymen in 1778, Fordyce, Banks, Solander, Blagden, Home, North, Lord Seaforth, and Captain Phillips, endured a temperature of 295°, while eggs and roast beef were cooking near them."

"And they were Englishmen!" said Bell, with an accent of pride.

"Yes, Bell," answered the doctor.

"O, Americans could have done better!" said Altamont.

"They would have roasted," said the doctor, laughing.

"And why not?" answered the American.

"At any rate, they have not tried; still, I stand up for my countrymen. There's one thing I must not forget; it is incredible if one can doubt of the accuracy of the witnesses. The Duke of Ragusa and Dr. Jung, a Frenchman and an Austrian, saw a Turk dive into a bath which stood at 170°."

"But it seems to me," said Johnson, "that that is not equal to other people you mentioned."

"I beg your pardon," answered the doctor; "there is a great difference between entering warm air and entering warm water; warm air induces perspiration, and that protects the skin, while in such hot water there is no perspiration and the skin is burned. Hence a bath is seldom hotter than 107°. This Turk must have been an extraordinary man to have been able to endure so great heat."

"Dr. Clawbonny," asked Johnson, "what is the usual temperature of living beings?"

"It varies very much," answered the doctor; "birds are the warmest

blooded, and of these the duck and hen are the most remarkable; their temperature is above 110°, while that of the owl is not more than 104°; then come the mammalia, men; the temperature of Englishmen is generally 101°."

"I'm sure Mr. Altamont is going to claim something more for the Americans," said Johnson.

"Well," said Altamont, "there are some very warm; but as I've never placed a thermometer into their thorax or under their tongue, I can't be sure about it."

"The difference of temperature," resumed the doctor, "between men of different races is quite imperceptible when they are placed in the same circumstances, whatever be the nature of their bringing-up; I should add, that the temperature varies but little between men at the equator and at the pole."

"So," said Altamont, "our temperature is about the same here as in England?"

"About the same," answered the doctor; "as to the other mammalia, their temperature is a trifle higher than that of man. The horse is about the same, as well as the hare, the elephant, the porpoise, the tiger; but the cat, the squirrel, the rat, panther, sheep, ox, dog, monkey, goat, reach 103°; and the warmest of all, the pig, goes above

104°."

"That is humiliating for us," said Altamont.

"Then come amphibious animals and fish, whose temperature varies very much according to that of the water. The serpent does not go above 86°, the frog 70°, and the shark the same in a medium a degree and a half cooler; insects appear to have the temperature of the water and the air."

"That is all very well," said Hatteras, who had not yet spoken, "and I'm much obliged to the doctor for his information; but we are talking as if we had to endure torrid heats. Would it not be wiser to talk about the cold, to know to what we are exposed, and what is the lowest temperature that has ever been observed?"

"True," added Johnson.

"There's nothing easier," continued the doctor, "and I may be able to give you some information."

"I dare say," said Johnson; "you know everything."

"My friends, I only know what others have taught me, and when I've finished you'll know exactly as much. This is what I know about cold and the lowest temperatures observed in Europe. A great many

noteworthy winters have been known, and it seems as if the severest has a periodic return about every forty-one years,--a period which nearly corresponds with the greater appearance of spots on the sun. I can mention the winter of 1364, when the Rhone was frozen as far as Arles; that of 1408, when the Danube was frozen its whole length, and when wolves ran over to Jutland without wetting their feet; that of 1509, during which the Mediterranean at Cette and Marseilles and the Adriatic at Venice were frozen, and the Baltic as late as April 10; that of 1608, which killed all the cattle in England; that of 1789, when the Thames was frozen--as far as Gravesend, six leagues--below London; that of 1813, of which the French retain such a terrible memory; and that of 1829, the earliest and longest winter of this century. So much for Europe."

"But what temperature has been reached above the Arctic Circle?" asked Altamont.

"Really," said the doctor, "I believe we have experienced the greatest cold that has ever been observed, since our spirit thermometer indicated one day -72° ; and if I remember aright, the lowest temperatures ever observed before were only -61° at Melville Island, -65° at Port Felix, and -70° at Fort Reliance."

"Yes," said Hatteras; "we were delayed, and unfortunately too, by a very severe winter!"

"You were delayed?" exclaimed Altamont, staring at the captain.

"In our journey westward," interposed the doctor, hastily.

"So," said Altamont, continuing the conversation, "the maximum and minimum temperatures endured by men vary about two hundred degrees?"

"Yes," answered the doctor; "a thermometer exposed to the open air and sheltered from reflection has never risen above 135°, and in the greatest colds it never falls below -72°. So, my friends, you see we can take our ease."

"But still," said Johnson, "if the sun were to be extinguished suddenly, would not the earth endure greater cold?"

"The sun won't be extinguished," answered the doctor; "but even if it should be, the temperature would not fall any lower, probably, than what I have mentioned."

"That's strange."

"O, I know it used to be said that in the space outside of the atmosphere the temperature was thousands of degrees below zero! but since the experiments of the Frenchman Fourier, this has been disproved; he has shown that if the earth were placed in a medium void of all heat, that the temperature at the pole would be much greater,

and that there would be very great differences between night and day; so, my friends, it is no colder a few millions of miles from the earth than it is here."

"Tell me, Doctor," said Altamont, "is not the temperature of America lower than that of other countries of the world?"

"Without doubt; but don't be proud of it," answered the doctor with a laugh.

"And what is the reason?"

"No very satisfactory explanation has ever been given; so it occurred to Hadley that a comet had come into collision with the earth and had altered the position of its axis of rotation, that is to say, of its poles; according to him, the North Pole, which used to be situated at Hudson's Bay, found itself carried farther east, and the land at the old Pole preserved a greater cold, which long centuries of the sun have not yet heated."

"And you do not admit this hypothesis?"

"Not for a moment; for what is true of the eastern coast of America is not true of the western coast, which has a higher temperature. No! we can prove that the isothermal lines differ from the terrestrial parallels, and that is all."

"Do you know, Doctor," said Johnson, "that it is pleasant to talk about cold in our present circumstances?"

"Exactly, Johnson; we can call practice to the aid of theory. These countries are a vast laboratory where curious experiments on low temperatures can be made. Only, be always careful; if any part of your body is frozen, rub it at once with snow to restore the circulation of the blood; and if you come near the fire, be careful, for you may burn your hands or feet without noticing it; then amputation would be necessary, and we should try to leave nothing of ourselves in these lands. And now I think it would be well for us to seek a few hours of sleep."

"Willingly," answered the doctor's companions.

"Who keeps watch over the stove?"

"I do," answered Bell.

"Well, my friend, take care the fire does not fall out, for it's most abominably cold this evening."

"Don't be uneasy, Doctor; it's very sharp, but see, the sky is all ablaze!"

"Yes," answered the doctor, going up to the window, "it's a magnificent aurora. What a glorious sight! I should never get tired of looking at it!"

In fact, the doctor admired all these cosmic phenomena, to which his companions paid but little attention; he had noticed, besides, that their appearance always preceded disturbances of the magnetic needle, and he was preparing some observations on the subject which he intended for Admiral Fitz-Roy's "Weather Book."

Soon, while Bell was on watch near the stove, all the rest, stretched on their beds, slept quietly.

CHAPTER X.

THE PLEASURES OF WINTER-QUARTERS.

There is a gloomy monotony about life at the Pole. Man is wholly the sport of the changes of the weather, which alternates between intense cold and severe storms with savage relentlessness. The greater part of the time it is impossible to set foot out of doors; one is imprisoned in the hut of ice. Long months pass in this way, so that men lead the life of moles.

The next day the thermometer was several degrees lower, and the air was full of clouds of snow, which absorbed all the light of day. The doctor saw himself kept within doors, and he folded his arms; there was nothing to be done, except every hour to clear away the entrance-hall and to repolish the ice-walls which the heat within made damp; but the snow-house was very finely built, and the snow added to its resistance by augmenting the thickness of its walls.

The stores were equally secure. All the objects taken from the ship had been arranged in order in these "Docks of Merchandise," as the doctor called them. Now, although these stores were at a distance of only sixty feet from the house, it was yet on some days almost impossible to get to them; hence a certain quantity of provisions had always to be kept in the kitchen for daily needs.

They had been wise in unloading the Porpoise. The ship was exposed to a gentle, but persistent pressure, which was gradually crushing it; it was evident that nothing could be done with its fragments; still the doctor kept hoping to be able to build a launch out of them to return to England in, but the time for building it had not yet come.

So for the most part the five men remained in complete idleness. Hatteras was pensive and always lying on the bed; Altamont was drinking or sleeping, and the doctor took good care not to rouse him from his slumbers, for he was always afraid of some distressing quarrel. These two men seldom spoke to one another.

So during meal-time the prudent Clawbonny always took care to guide the conversation and to direct it in such a way as not to offend the susceptibilities of either; but he had a great deal to do. He did his best to instruct, distract, and interest his companions; when he was not arranging his notes about the expedition, he read aloud some history, geography, or work on meteorology, which had reference to their condition; he presented things pleasantly and philosophically, deriving wholesome instruction from the slightest incidents; his inexhaustible memory never played him false; he applied his doctrines to the persons who were with him, reminding them of such or such a thing which happened under such or such circumstances; and he filled out his theories by the force of personal arguments.

This worthy man may be called the soul of this little world, a soul

glowing with frankness and justice. His companions had perfect confidence in him; he even improved Captain Hatteras, who, besides, was very fond of him; he made his words, manners, and custom so agreeable, that the life of these five men within six degrees of the Pole seemed perfectly natural; when he was speaking, any one would have imagined he was in his office in Liverpool. And yet this situation was unlike that of castaways on the islands of the Pacific Ocean, those Robinsons whose touching history always aroused the envy of their readers. There, the natural richness offers a thousand different resources; a little imagination and effort suffice to secure material happiness; nature aids man; hunting and fishing supply all his wants; the trees grow to aid him, caverns shelter him, brooks slake his thirst, dense thickets hide him from the sun, and severe cold never comes upon him in the winter; a grain tossed into the earth brings forth a bounteous return a few months later. There, outside of society, everything is found to make man happy. And then these happy isles lie in the path of ships; the castaway can hope to be picked up, and he can wait in patience.

But here on the coast of New America how great is the difference! This comparison would continually occur to the doctor, but he never mentioned it to the others, and he struggled against the enforced idleness.

He yearned ardently for the spring, in order to resume his excursions; and yet he was anxious about it, for he foresaw difficulties between

Hatteras and Altamont. If they pushed on to the Pole, there would necessarily be rivalry between the two men. Hence he had to prepare for the worst, and still, as far as he could, to try to pacify these rivals; but to reconcile an American and an Englishman, two men hostile to one another from their birth, one endowed with real insular prejudice, the other with the adventurous, irreverent spirit of his country, was no easy task. When the doctor thought of their eager rivalry, which in fact was one of nationalities, he could not help, not shrugging his shoulders, but lamenting human weakness. He would often talk to Johnson on this subject; he and the old sailor agreed in the matter; they were uncertain what view to take, and they foresaw complications in the future.

Still, the bad weather continued; they could not leave Fort Providence even for an hour. Night and day they had to remain in the snow-house. They all found it tedious, except the doctor, who found diversion for himself.

"Isn't there any way we can amuse ourselves?" said Altamont one evening. "This isn't really living, lying here like sluggish reptiles all winter."

"It's a pity," said the doctor, "that we are too few to organize any system of distractions."

"Do you mean it would be easier for us to combat idleness if there

were more of us?" asked the American.

"Yes; when whole crews have wintered in boreal regions, they have found out the way to avoid idleness."

"To tell the truth," said Altamont, "I should like to know how they did; they must have been very ingenious to get any fun out of these surroundings. They didn't ask one another riddles, I suppose?"

"No," answered the doctor, "but they introduced into these lands two great means of amusement, the press and the theatre."

"What! did they have a newspaper?" asked the American.

"Did they act plays?" asked Bell.

"Yes, and with much amusement. While he was wintering at Melville Island, Captain Parry offered his crews these two entertainments, and they enjoyed them very much."

"Well," said Johnson, "I should have liked to be there; it must have been funny enough."

"Funny indeed; Lieutenant Beecher was manager of the theatre, and Captain Sabine editor of the 'Winter Chronicle, or Gazette of North Georgia.'"

"Good names," said Altamont.

"The paper appeared every Monday morning, from November 1, 1819, to March 20, 1820. It contained an account of everything that happened, the hunts, accidents, incidents, and of the weather; there were stories written for it; to be sure, it lacked the humor of Sterne, and the delightful articles of the 'Daily Telegraph'; but they got amusement from it; its readers were not over-critical, and I fancy no journalists ever enjoyed their occupation more."

"Well," said Altamont, "I should like to hear some extracts from this paper, my dear Doctor; its articles must all have been frozen solid."

"No, no," answered the doctor; "at any rate, what would have seemed simple enough to the Liverpool Philosophical Society, or the London Literary Institution, was perfectly satisfactory to the crews beneath the snow. Do you want a sample?"

"What! Do you remember--"

"No, but you had 'Parry's Voyages' on board the Porpoise, and I can read you his own account."

"Do!" shouted the doctor's companions.

"There's nothing easier."

The doctor got the book from the shelves, and soon found the passage.

"See here," he said, "here are some extracts from the newspaper. It is a letter addressed to the editor:--

"It is with genuine satisfaction that your plan for the establishment of a newspaper has been received. I am convinced that under your charge it will furnish us with a great deal of amusement, and will serve to lighten materially the gloom of our hundred days of darkness.

"The interest which I, for my part, take in it has caused me to examine the effect of your announcement upon the members of our society, and I can assure you, to use the consecrated phrase of the London press, that it has produced a profound impression upon the public.

"The day after the appearance of your prospectus, there was on board an unusual and unprecedented demand for ink. The green cloth of our tables was suddenly covered with a deluge of quill-pens, to the great injury of one of our servants, who, in trying to remove them, got one under his nail.

"Finally, I know that Sergeant Martin has had no less than nine pocket-knives to sharpen.

"Our tables are groaning beneath the unaccustomed weight of inkstands, which had not seen the light for two months; and it is even whispered that the depths of the hold have been often opened to secure many reams of paper, which did not expect to issue so soon from their place of repose.

"I shall not forget to say to you that I have some suspicions that an effort will be made to slip into your box some articles, which, lacking complete originality, and not being wholly unpublished, may not suit your plan. I can affirm that no later than last evening an author was seen bending over his desk, holding in one hand an open volume of the "Spectator," while with the other he was thawing his ink by the flame of the lamp. It is useless to recommend you to keep a lookout against such devices; we must not see reappearing in the "Winter Chronicle" what our ancestors used to read at breakfast more than a century ago."

"Well, well," said Altamont, when the doctor had finished reading, "there is really good humor in that, and the writer must have been a bright fellow."

"Bright is the word," answered the doctor. "Stop a moment, here is an amusing advertisement:--

"Wanted. A middle-aged, respectable woman to help dress the ladies of

the troupe of the "Theatre Royal of North Georgia." Suitable salary given, tea and beer free. Address the Committee of the theatre.--N. B. A widow preferred."

"They were not disgusted, at any rate," said Johnson.

"And did they get the widow?" asked Bell.

"Probably," answered the doctor, "for here is an answer addressed to the committee:--

"Gentlemen: I am a widow, twenty-six years old, and I can produce warm testimonials as to my morals and talents. But before taking charge of the dresses of the actresses of your theatre, I am anxious to know if they intend to keep their trousers on, and whether I can have the aid of some strong sailors to lace their corsets properly. This being arranged, gentlemen, you may count upon your servant.

"A. B.

"P. S. Can you not substitute brandy for beer?"

"Bravo!" shouted Altamont. "I suppose they had ladies'-maids to lace you by the capstan. Well, they were jolly fellows!"

"Like all who do what they set out to do," remarked Hatteras.

Hatteras uttered these words, and then he relapsed into his usual silence. The doctor, unwilling to dwell on that subject, hastened to resume his reading.

"See here," he said, "here is a picture of arctic sufferings; it may be varied infinitely; but a few of the observations are wise enough; for instance:--

"To go out in the morning to take the air, and on setting foot off the ship, to take a cold bath in the cook's trough.

"To go on a hunting-party, get near a fine reindeer, take aim, try to fire, and miss the shot on account of a damp cap.

"To start out with a piece of fresh bread in the pocket, and when one gets hungry to find it frozen hard enough to break one's teeth.

"To leave the table suddenly on hearing a wolf is in sight of the ship, and to come back and find one's dinner eaten by the cat.

"To return from a walk rapt in thought, and to be awakened suddenly by the embrace of a bear.'

"You see, my friends," said the doctor, "we should not find it hard to imagine other polar troubles; but from the moment it becomes necessary to endure these miseries, it would be a pleasure to narrate them."

"Upon my word," said Altamont, "that's an amusing paper, and it's a pity we can't subscribe to it."

"Suppose we should start one," suggested Johnson.

"We five!" answered Clawbonny; "we should all be editors, and there would be no readers."

"Nor audience either, if we should act a play," said Altamont.

"Tell us, Doctor," said Johnson, "something about Captain Parry's theatre; did they act new plays there?"

"Of course; at first they made use of two volumes which were put on board of the Hector, and they had plays every fortnight; but soon they had acted all; then they resorted to original authors, and Parry himself wrote a suitable play for the Christmas holidays; it was very successful, and was called 'The Northwest Passage, or the End of the Voyage.'"

"A capital title," answered Altamont; "but I confess, if I had to write on that subject, I should be puzzled about the end."

"You are right," said Bell; "who can say how it will end?"

"True," answered the doctor; "but why bother about the end, since the beginning is so favorable? Let us trust in Providence, my friends; let us act our part well, and since the end depends on the Author of all things, let us have confidence in him; he will know what to do with us."

"Let us sleep on it," answered Johnson; "it is late, and since bedtime has come, let us turn in."

"You are in a great hurry, my old friend," said the doctor.

"Naturally enough, Doctor, I am so comfortable in bed! And then my dreams are pleasant. I dream of warm countries; or that, to tell the truth, half of my life is spent at the equator and half at the Pole!"

"The deuce," said Altamont, "you have a happy temperament."

"True," answered the boatswain.

"Well, it would be cruel to detain Johnson any longer. His tropical sun is waiting for him. Let us go to bed."

CHAPTER XI.

DISQUIETING TRACES.

In the night of April 26-27, the weather changed; the thermometer fell many degrees, and the inhabitants of Doctor's House perceived it from the cold which made its way beneath their coverings; Altamont, who was watching the stove, took care not to let the fire get low, and he was kept busy putting on enough coal to keep the temperature at 50°. This cold weather announced the end of the storm, and the doctor was glad of it, for now they could resume their usual occupations, their hunting, excursions, and explorations; this would put an end to the apathy of their loneliness, which in time sours even the finest characters.

The next morning the doctor rose early, and made his way over the drifts to the lighthouse. The wind was from the north; the air was clear, the snow was hard under his feet. Soon his five companions had left Doctor's House; their first care was to dig away the drifted snow, which now disguised the plateau; it would have been impossible to discover any traces of life upon it, for the tempest had buried all inequalities beneath fifteen feet of snow.

After the snow was cleared away from the house, it was necessary to restore its architectural outline. This was very easy, and after the ice was removed a few blows with the snow-knife gave it its normal

thickness. After two hours' work the granite appeared, and access to the stores and the powder-house was free. But since, in these uncertain climates, such things can happen every day, a new supply of food was carried to the kitchen. They were all wearied of salt food and yearned for fresh meat, and so the hunters were charged with changing the bill of fare, and they prepared to set out.

Still the end of April did not bring with it the polar spring, which was yet six weeks off; the sun's rays were still too feeble to melt the snow or to nourish the few plants of these regions. They feared lest animals should be scarce, both birds and quadrupeds. But a hare, a few ptarmigans, even a young fox, would have been welcome to the table of Doctor's House, and the hunters resolved to shoot whatever should come within range.

The doctor, Altamont, and Bell determined to explore the country. Altamont, they felt sure from his habits, was a bold and skilful hunter, and, with all his bragging, a capital shot. So he went with the hunters, as did Duke, who was equally skilful and less prone to boasting.

The three companions ascended the east cone and set out towards the large white plains; but they had gone no farther than two or three miles before they saw numerous tracks; from that point, they ran down to the shore of Victoria Bay, and appeared to surround Fort Providence with a series of concentric circles.

After they had followed these footprints for a short time, the doctor said,--

"Well, that is clear enough."

"Too clear," said Bell; "they are bear tracks."

"Good game," continued Altamont, "and there is only one fault in it to-day."

"What's that?" asked the doctor.

"The abundance," answered the American.

"What do you mean?" asked Bell.

"I mean that there are distinct tracks of five bears; and five bears are a good many for five men."

"Are you sure of what you say?" asked the doctor.

"Judge for yourself; this mark is different from any other; the claws on this one are farther apart than those. Here is the print of a smaller bear. If you compare them together, you'll find traces of five animals."

"You are right," said Bell, after a careful examination.

"Then," said the doctor, "there is no need of useless bravado, but rather of caution; these animals are famished at the end of a severe winter, and they may be very dangerous; and since there is no doubt of their number--"

"Nor of their intentions," interrupted the American.

"Do you suppose," he asked, "that they have discovered our presence here?"

"Without a doubt, unless we've fallen on a whole band of bears; but in that case, why do their prints go about in a circle, instead of running out of sight? See, they came from the southwest and stopped here, and began to explore the country."

"You are right," said the doctor, "and it's certain they came last night."

"And the other nights too," answered Altamont; "only the snow has covered their tracks."

"No," said the doctor; "it's more likely that they waited for the end of the storm; they went to the bay to catch some seals, and then they

scented us."

"True," said Altamont; "so it is easy to know whether they will return to-night."

"How so?" asked Bell.

"By rubbing out some of their tracks; and if we find new ones to-morrow, we can be sure that they are trying to get into Fort Providence."

"Well," said the doctor, "we shall at least know what to expect."

The three then set to work, and soon effaced all the tracks over a space of about six hundred feet.

"It's strange, however," said Bell, "that they could scent us at so great a distance; we didn't burn anything greasy which could attract them."

"O," answered the doctor, "they have very fine sight, and delicate sense of smell! Besides, they are very intelligent, perhaps the most intelligent of animals, and they have found out something strange here."

"Perhaps," continued Bell, "during the storm, they came up as far as

the plateau."

"Then," said the American, "why should they have stopped there?"

"True, there is no answer to that," answered the doctor; "and we ought to believe that they are shortening the circle about Fort Providence."

"We shall see," answered Altamont.

"Now, let us go on," said the doctor; "but we'll keep our eyes open."

They kept careful watch, through fear lest some bear should be hidden behind the masses of ice; often they took the blocks for animals, from their shape and whiteness, but soon they discovered their mistake.

They returned at last to the shore beneath the cone, and from there their eyes swept in vain from Cape Washington to Johnson Island. They saw nothing; everything was white and motionless; not a sound was to be heard. They entered the snow-house.

Hatteras and Johnson were informed of the condition of affairs, and they resolved to keep a strict watch. Night came; nothing occurred to alarm them, or to mar its beauty. At dawn the next morning, Hatteras and his companions, fully armed, went out to examine the condition of the snow; they found the same tracks as on the previous day, only nearer. Evidently the enemy was preparing to lay siege to Fort

Providence.

"They have opened their second parallel," said the doctor.

"They have made a point in advance," answered Altamont; "see those footprints coming nearer the plateau; they are those of some strong animal."

"Yes, they are gaining ground gradually," said Johnson; "it is evident that they are going to attack us."

"There's no doubt of that," said the doctor; "let us avoid showing ourselves. We are not strong enough to fight successfully."

"But where do these devilish bears come from?" asked Bell.

"From behind those pieces of ice to the east, where they are spying us; don't let us get too near them."

"And our hunt?" asked Altamont.

"Let us put it off for a few days," answered the doctor; "let us again rub out these nearest marks, and to-morrow we shall see if they are renewed. In this way we can see the manoeuvres of our enemies."

The doctor's advice was taken, and they returned to the fort; the

presence of these terrible beasts forbade any excursion. Strict watch was kept over the neighborhood of Victoria Bay. The lighthouse was dismantled; it was of no real use, and might attract the attention of the animals; the lantern and the electric threads were carried to the house; then they took turns in watching the upper plateau.

Again they had to endure the monotony of loneliness, but what else was to be done? They dared not risk a contest at so fearful odds; no one's life could be risked imprudently. Perhaps the bears, if they caught sight of nothing, might be thrown off the track; or, if they were met singly, they might be attacked successfully. However, this inaction was relieved by a new interest; they had to keep watch, and no one regretted it.

April 28th passed by without any sign of the existence of the enemy. The next morning their curiosity as to the existence of new tracks was succeeded by astonishment. Not a trace was to be seen; the snow was intact.

"Good," shouted Altamont, "the bears are thrown off the track! They have no perseverance! They are tired of waiting, and have gone! Good by, and now off to the hunt!"

"Eh!" answered the doctor, "who can say? For greater safety, my friends, I beg one more day of watching; it is certain the enemy did not approach last night, at least from this side--"

"Let us make a circuit of the plateau," said Altamont, "and then we shall make sure."

"Willingly," said the doctor.

But with all their care in exploration, not the slightest trace could be found.

"Well, shall we start on our hunt?" asked Altamont, impatiently.

"Let us wait till to-morrow," urged the doctor.

"All right," answered Altamont, who had some reluctance, however, about conceding.

They returned to the fort. Each one had to watch for an hour, as on the previous evening. When Altamont's turn came, he went to relieve Bell. As soon as he was gone, Hatteras called his companions together. The doctor left his notes, and Johnson his furnaces. It might have been supposed that Hatteras was going to discuss the dangers of the situation; he did not even think of them.

"My friends," he said, "let us take advantage of the absence of this American, to talk over our affairs; some things don't concern him at all, and I don't care to have him meddling with them."

The others looked at one another, uncertain of his meaning.

"I want to speak with you," he said, "about our future plans."

"Well," answered the doctor, "let us talk now we are alone."

"In a month, or six weeks at the latest," Hatteras began, "we shall be able to make distant excursions. Had you thought of what might be done in the summer?"

"Had you, Captain?" asked Johnson.

"I? I can say that not an hour passes without my mind's recurring to my plan. I suppose no one of you has any thought of returning--"

There was no immediate answer to this insinuation.

"As for me," continued Hatteras, "if I have to go alone, I shall go to the North Pole; we are only three hundred and sixty miles from it at the outside. No men have ever been so near it, and I shall not let such a chance go by without the attempt, even if it be impossible. What are your views in the matter?"

"Your own," answered the doctor.

"And yours, Johnson?"

"The same as the doctor's," answered the boatswain.

"It is your turn to speak, Bell," said Hatteras.

"Captain," answered the carpenter, "it is true we have no family awaiting us in England, but our country is our country: don't you think of going back?"

"We shall go back easily as soon as we shall have discovered the Pole. In fact, more easily. The difficulties will not increase, for, on our way thither, we leave behind us the coldest spots on the globe. We have supplies of all sorts for a long time. There is nothing to hinder us, and we should be to blame if we did not push on to the end."

"Well," answered Bell, "we are all of your opinion, Captain."

"Good!" replied Hatteras. "I have never doubted of you. We shall succeed, my friends, and England shall have all the glory of our success."

"But there is an American with us," said Johnson.

Hatteras could not restrain a wrathful gesture at this remark.

"I know it," he said in a deep voice.

"We can't leave him here," continued the doctor.

"No, we cannot," answered Hatteras, coldly.

"And he will certainly come."

"Yes, he will come, but who will command?"

"You, Captain."

"And if you obey me, will this Yankee refuse to obey?"

"I don't think so," answered Johnson; "but if he is unwilling to obey your orders--"

"It would have to be settled between him and me."

The three Englishmen looked at Hatteras without a word. The doctor broke the silence.

"How shall we travel?" he asked.

"By keeping along the coast as much as possible," answered Hatteras.

"But if we find the sea open, as is likely?"

"Well, we shall cross it."

"How? We have no boat."

Hatteras did not answer; he was evidently embarrassed.

"Perhaps," suggested Bell, "we might build a launch out of the timbers of the Porpoise."

"Never!" shouted Hatteras, warmly.

"Never?" exclaimed Johnson.

The doctor shook his head; he understood the captain's unwillingness.

"Never!" the latter answered. "A launch made out of the wood of an American ship would be an American launch--"

"But, Captain--" interposed Johnson.

The doctor made a sign to the old boatswain to keep silent. A more suitable time was required for that question. The doctor, although he understood Hatteras's repugnance, did not sympathize with it, and he determined to make his friend abandon this hasty decision. Hence he

spoke of something else, of the possibility of going along the coast to the north, and that unknown point, the North Pole. In a word, he avoided all dangerous subjects of conversation up to the moment when it was suddenly ended by the entrance of Altamont. He had nothing new to report. The day ended in this way, and the night was quiet. The bears had evidently disappeared.

CHAPTER XII.

THE ICE PRISON.

The next day they determined to arrange the hunt, in which Hatteras, Altamont, and the carpenter were to take part; no more tracks were to be seen; the bears had decidedly given up their plan of attack, either from fear of their unknown enemies, or because there had been no sign of living beings beneath the mass of snow. During the absence of the three hunters, the doctor was to push on to Johnson Island to examine the condition of the ice, and to make some hydrographic investigations. The cold was sharp, but they supported it well, having become accustomed to it by this time. The boatswain was to remain at Doctor's House; in a word, to guard the house.

The three hunters made their preparations; each one took a double-barrelled rifled gun, with conical balls; they carried a small quantity of pemmican, in case night should fall before their return; they also were provided with the snow-knife, which is so indispensable in these regions, and a hatchet which they wore in their belts. Thus armed and equipped they could go far; and since they were both skilled and bold, they could count on bringing back a good supply.

At eight in the morning they set out. Duke sprang about ahead of them; they ascended the hill to the east, went about the lighthouse, and disappeared in the plains to the south, which were bounded by Mount

Bell. The doctor, having agreed on a danger-signal with Johnson, descended towards the shore so as to reach the ice in Victoria Bay.

The boatswain remained at Fort Providence alone, but not idle. He first set free the Greenland dogs, which were playing about the Dog Palace; they in their joy rolled about in the snow. Johnson then gave his attentions to the cares of housekeeping. He had to renew the fuel and provisions, to set the stores in order, to mend many broken utensils, to patch the coverings, to work over the shoes for the long excursions of the summer. There was no lack of things to do, but the boatswain worked with the ease of a sailor, who has generally a smattering of all trades. While thus employed he began to think of the talk of the evening before; he thought of the captain, and especially of his obstinacy, which, after all, had something very heroic and very honorable about it, in his unwillingness that any American man or boat should reach the Pole before him, or even with him.

"Still, it seems to me," he said to himself, "no easy task to cross the ocean without a boat; and if we have the open sea before us, we should need one. The strongest Englishman in the world couldn't swim three hundred miles. Patriotism has its limits. Well, we shall see. We have still time before us; Dr. Clawbonny has not yet said his last word in the matter; he is wise, and he may persuade the captain to change his mind. I'll bet that in going towards the island he'll glance at the fragments of the Porpoise, and will know exactly what can be made out of them."

Johnson had reached this point in his reflections, and the hunters had been gone an hour, when a loud report was heard two or three miles to windward.

"Good!" said the sailor; "they have come across something, and without going very far, for I heard them distinctly. After all, the air is so clear."

A second and then a third report was heard.

"Hulloa!" continued Johnson, "they've got into a good place."

Three other reports, in quicker succession, were heard.

"Six shots!" said Johnson; "now they've fired off everything. It was a hot time! Is it possible--"

At the thought, Johnson grew pale; he quickly left the snow-house, and in a few moments he had run up to the top of the cone. He saw a sight that made him tremble.

"The bears!" he shouted.

The three hunters, followed by Duke, were running rapidly, followed by five enormous animals; their six bullets had not disabled them; the

bears were gaining on them; Hatteras, behind the others, could only keep his distance from the animals by throwing away his cap, hatchet, and even his gun. The bears stopped, according to their habit, to sniff at the different objects, and lost a little on this ground on which they would have outstripped the swiftest horse. It was thus that Hatteras, Altamont, and Bell, all out of breath, came up to Johnson, and they all slid down the slope to the snow-house. The five bears were close behind, and the captain was obliged to ward off the blow of a paw with his knife. In a moment Hatteras and his companions were locked in the house. The animals stopped on the upper plateau of the truncated cone.

"Well," said Hatteras, "we can now defend ourselves better, five to five!"

"Four to five!" shouted Johnson in a terrified voice.

"What?" asked Hatteras.

"The doctor!" answered Johnson, pointing to the empty room.

"Well?"

"He is on the shore of the island!"

"Poor man!" cried Bell.

"We can't abandon him in this way," said Altamont.

"Let us run!" said Hatteras.

He opened the door quickly, but he had hardly time to shut it; a bear nearly crushed his skull with his claw.

"They are there," he cried.

"All?" asked Bell.

"All!" answered Hatteras.

Altamont hastened to the windows, heaping up the bays with pieces of ice torn from the walls of the house. His companions did the same without speaking. Duke's dull snarls alone broke the silence.

But it must be said these men had only a single thought; they forgot their own danger, and only considered the doctor. Poor Clawbonny! so kind, so devoted! the soul of the little colony! for the first time he was missing; extreme peril, a terrible death, awaited him; for when his excursion was over he would return quietly to Fort Providence, and would find these ferocious animals. And there was no way of warning him.

"If I'm not mistaken, he will be on his guard; your shots must have warned him, and he must know something has happened."

"But if he were far off," answered Altamont, "and did not understand? There are eight chances out of ten that he'll come back without suspicion of danger! The bears are hiding behind the scarp of the fort, and he can't see them."

"We shall have to get rid of these dangerous beasts before his return," answered Hatteras.

"But how?" asked Bell.

To answer this question was not easy. A sortie seemed impossible. They took the precaution to barricade the entrance, but the bears could easily have overcome the obstacles if the idea had occurred to them; they knew the number and strength of their adversaries, and they could easily have reached them. The prisoners were posted in each one of the chambers of Doctor's House to watch for every attempt at entrance; when they listened, they heard the bears coming and going, growling, and tearing at the walls with their huge paws. But some action was necessary; time was pressing. Altamont resolved to make a loop-hole to shoot the assailants; in a few minutes he had made a little hole in the ice-wall; he pushed his gun through it; but it had scarcely reached the other side before it was torn from his hands with irresistible force before he could fire.

"The devil!" he cried, "we are too weak."

And he hastened to close the loop-hole. Thus matters went for an hour, without any end appearing probable. The chances of a sortie were discussed; they seemed slight, for the bears could not be fought singly. Nevertheless, Hatteras and his companions, being anxious to finish it, and, it must be said, very much confused at being thus imprisoned by the beasts, were about to try a direct attack, when the captain thought of a new means of defence.

He took the poker and plunged it into the stove; then he made an opening in the wall, but so as to keep a thin coating of ice outside. His companions watched him. When the poker was white hot, Hatteras said,--

"This bar will drive away the bears, for they won't be able to seize it, and through the loop-hole we will be able to fire at them, without their taking our guns away from us."

"A good idea!" cried Bell, going towards Altamont.

Then Hatteras, withdrawing the poker from the stove, pushed it through the wall. The snow, steaming at its touch, hissed sharply. Two bears ran to seize the bar, but they roared fearfully when four shots were fired at once.

"Hit!" shouted the American.

"Hit!" repeated Bell.

"Let us try again," said Hatteras, closing the opening for a moment.

The poker was put again into the fire; in a few minutes it was red hot.

Altamont and Bell returned to their place after loading their guns; Hatteras again pushed the poker through the loop-hole. But this time an impenetrable substance stopped it.

"Curse it!" cried the American.

"What's the matter?" asked Johnson.

"The matter! These cursed animals are heaping up the ice and snow so as to bury us alive!"

"Impossible!"

"See, the poker can't go through! Really, this is absurd!"

It was more than absurd, it was alarming. Matters looked worse. The

bears, which are very intelligent beasts, employed this method of suffocating their prey. They heaped the ice in such a way as to render flight impossible.

"This is hard," said Johnson, with a very mortified air. "It's well enough to have men treat you in this way, but bears!"

After this reflection two hours passed by without any material change in their situation; a sortie became impossible; the thickened walls deadened all sound without. Altamont walked to and fro like a bold man in face of a danger greater than his courage. Hatteras thought anxiously of the doctor, and of the great danger awaiting him when he should return.

"Ah," shouted Johnson, "if Dr. Clawbonny were only here!"

"Well, what would he do?" asked Altamont.

"O, he would be able to help us!"

"How?" asked the American, with some asperity.

"If I knew," answered Johnson, "I shouldn't want him here. Still, I can think of a piece of advice he would give us at this moment."

"What is that?"

"To take some food. It can't hurt us. What do you think, Mr. Altamont?"

"Let us eat if you care to," was the answer; "although our condition is stupid, not to say disgraceful."

"I'll bet," said Johnson, "that we'll find some way of driving them off after dinner."

They made no reply, but sat down to dinner. Johnson, as a pupil of the doctor, tried to be a philosopher in the face of danger, but he succeeded ill; his jokes stuck in his throat. Besides, they began to feel uncomfortable; the air was growing bad in this hermetically sealed prison; the stove-pipe drew insufficiently, and it was easy to see that in a short time the fire would go out; the oxygen, consumed by their lungs and the fire, would be replaced by carbonic acid, which would be fatal to them, as they all knew. Hatteras was the first to detect this new danger; he was unwilling to hide it from the others.

"So, at any risk we must get out!" said Altamont.

"Yes," answered Hatteras; "but let us wait till night; we will make a hole in the snow that we may get fresh air; then one shall take his place here and fire at the bears."

"It's the only thing we can do," said the American.

Having agreed on this, they waited for the time of action; and during the following hours, Altamont did not spare imprecations against a state of things in which, as he put it, "there being men and bears concerned, the men were getting the worst of it."

CHAPTER XIII.

THE MINE.

Night came, and the lamp began to burn dimly in the close air of the room. At eight o'clock they made their final preparations. The guns were carefully loaded, and an opening was begun in the roof of the snow-house. Bell worked cleverly at this for a few minutes, when Johnson, who had left the bedroom, where he was on guard, for a few minutes, returned rapidly to his companions. He seemed disturbed.

"What is the matter?" the captain asked.

"The matter? nothing!" answered the old sailor, hesitatingly, "yet--"

"What is it?" asked Altamont.

"Hush! Don't you hear a strange sound?"

"On which side?"

"There! There is something happening to the wall of that room."

Bell stopped his work; each one listened. A distant noise could be heard, apparently in the side wall; some one was evidently making a passage-way through the ice.

"It's a tearing sound!" said Johnson.

"Without a doubt," answered Altamont.

"The bears?" asked Bell.

"Yes, the bears," said Altamont.

"They have changed their plan," continued the sailor; "they've given up trying to suffocate us."

"Or else they think they've done it," added the American, who was getting very angry.

"We shall be attacked," said Bell.

"Well," remarked Hatteras, "we shall fight against them."

"Confound it!" shouted Altamont; "I prefer that decidedly! I've had enough working in the dark! Now we shall see one another and fight!"

"Yes," answered Johnson; "but with our guns it is impossible in so small a space."

"Well, with a hatchet or a knife!"

The noise increased; the scratching of claws could be heard; the bears had attacked the wall at the angle where it joined the snow fastened to the rock."

"Evidently," said Johnson, "the animal is within six feet of us."

"You are right, Johnson," answered the American, "but we have time to prepare ourselves to receive it!"

The American took the axe in one hand, his knife in the other; resting on his right foot, his body thrown back, he stood ready to attack. Hatteras and Bell did the same. Johnson prepared his gun in case fire-arms should be necessary. The noise grew louder and louder; the ice kept cracking beneath the repeated blows. At last only a thin crust separated the adversaries; suddenly this crust tore asunder like paper through which a clown leaps, and an enormous black body appeared in the gloom of the room. Altamont raised his hand to strike it.

"Stop! for heaven's sake, stop!" said a well-known voice.

"The doctor, the doctor!" shouted Johnson.

It was indeed the doctor, who, carried by the impetus, rolled into the room.

"Good evening, my friends," he said, springing to his feet.

His companions remained stupefied; but joy succeeded their stupefaction; each one wished to embrace the worthy man; Hatteras, who was much moved, clasped him for a long time to his breast. The doctor answered by a warm clasp of the hand.

"What! you, Dr. Clawbonny!" said the boatswain.

"Why, Johnson, I was much more anxious about your fate than you about mine."

"But how did you know that we were attacked by bears?" asked Altamont; "our greatest fear was to see you returning quietly to Fort Providence without thought of danger."

"O, I saw everything!" answered the doctor; "your shots warned me; I happened to be near the fragments of the Porpoise; I climbed up a hummock; I saw five bears chasing you; ah, I feared the worst for you! But the way you slid down the hill, and the hesitation of the animals, reassured me for a time; I knew you'd had time to lock yourselves in. Then I approached gradually, climbing and creeping between cakes of ice; I arrived near the fort, and I saw the huge beasts working like beavers; they were tossing the snow about, heaping up the ice so as to bury you alive. Fortunately, they did not think of hurling the blocks down from the top of the cone, for you would have been crushed without

mercy."

"But," said Bell, "you were not safe, Doctor; couldn't they leave their place and attack you?"

"They didn't think of it; the Greenland dogs which Johnson let loose would sniff around at a little distance, but they didn't think of attacking them; no, they were sure of better game."

"Thanks for the compliment," said Altamont, smiling.

"O, you needn't be vain of it! When I saw the tactics of the bears, I resolved to join you; to be prudent, I waited till night; so at twilight I slipped noiselessly towards the slope, on the side of the magazine; I had my own idea in choosing this point; I wanted to make a gallery; so I set to work; I began with my snow-knife, and a capital tool it is! For three hours I dug and dug, and here I am, hungry and tired, but here at last--"

"To share our fate?" asked Altamont.

"To save all of us; but give me a piece of biscuit and some meat; I'm half starved."

Soon the doctor was burying his white teeth in a large slice of salt beef. Although he was eating, he appeared willing to answer the

questions they put to him.

"To save us?" Bell began.

"Certainly," answered the doctor, "and to rid us of the malicious pests who will end by finding our stores and devouring them."

"We must stay here," said Hatteras.

"Certainly," answered the doctor, "and yet rid ourselves of these animals."

"There is then a means?" asked Bell.

"A sure means," answered the doctor.

"I said so," cried Johnson, rubbing his hands; "with Dr. Clawbonny, we need not despair; he always has some invention handy."

"Not always handy; but after thinking for a while--"

"Doctor," interrupted Altamont, "can't the bears get through the passage-way you cut?"

"No, I took the precaution of closing it behind me; and now we can go from here to the powder-magazine without their suspecting it."

"Good! Will you tell us what means you intend to employ to rid us of these unpleasant visitors?"

"Something very simple, and which is already half done."

"How so?"

"You'll see. But I forgot I didn't come alone."

"What do you mean?" asked Johnson.

"I have a companion to introduce to you."

And with these words he pulled in from the gallery the newly killed body of a fox.

"A fox!" cried Bell.

"My morning's game," answered the doctor, modestly, "and you'll see no fox was ever wanted more than this one."

"But what is your plan, after all?" asked Altamont.

"I intend to blow the bears up with a hundred pounds of powder."

They all gazed at the doctor with amazement.

"But the powder?" they asked.

"It is in the magazine."

"And the magazine?"

"This passage-way leads to it. I had my own reason for digging this passage sixty feet long; I might have attacked the parapet nearer to the house, but I had my own idea."

"Well, where are you going to put the mine?" asked the American.

"On the slope, as far as possible from the house, the magazine, and the stores."

"But how shall you get all the bears together?"

"I'll take charge of that," answered the doctor; "but we've talked enough, now to work; we have a hundred feet to dig out to-night; it's tiresome work, but we five can do it in relays. Bell shall begin, and meanwhile we can take some rest."

"Really," said Johnson, "the more I think of it, the more I admire Dr. Clawbonny's plan."

"It's sure," answered the doctor.

"O, from the moment you opened your mouth they are dead bears, and I already feel their fur about my shoulders!"

"To work, then!"

The doctor entered the dark gallery, followed by Bell; where the doctor had gone through, his companions were sure to find no difficulty; two reached the magazine and entered among the barrels, which were all arranged in good order. The doctor gave Bell the necessary instructions; the carpenter began work on the wall towards the slope, and his companion returned to the house.

Bell worked for an hour, and dug a passage about ten feet long, through which one might crawl. Then Altamont took his place, and did about as much; the snow which was taken from the gallery was carried into the kitchen, where the doctor melted it at the fire, that it might take up less room. The captain followed the American; then came Johnson. In ten hours, that is to say, at about eight o'clock in the morning, the gallery was finished. At daybreak the doctor peeped at the bears through a loop-hole in the wall of the powder-magazine.

The patient animals had not left their place; there they were, coming and going, growling, but in general patrolling patiently; they kept

going around the house, which was gradually disappearing beneath the snow. But at length they seemed to lose patience, for the doctor saw them begin to tear away the ice and snow they had heaped up.

"Good!" he said to the captain, who was standing near him.

"What are they doing?" he asked.

"They seem to be trying to destroy what they have done and to get to us! But they'll be destroyed first! At any rate, there is no time to lose."

The doctor made his way to the place where the mine was to be laid; then he enlarged the chamber all the height and breadth of the slope; a layer of ice, only a foot thick at the outside, remained; it had to be supported lest it should fall in. A stake resting on the granite soil served as a post; the fox's body was fastened to the top, and a long knotted cord ran the whole length of the gallery to the magazine. The doctor's companions followed his orders without clearly understanding his intention.

"This is the bait," he said, pointing to the fox.

At the foot of the post he placed a cask holding about a hundred pounds of powder.

"And here is the charge," he added.

"But," asked Hatteras, "sha'n't we blow ourselves up at the same time?"

"No, we are far enough off from the explosion; besides, our house is solid; and if it is hurt a little we can easily repair it."

"Well," continued Altamont; "but how are you going to set it off?"

"This way. By pulling this cord we pull over the post which holds up the ice above the powder; the fox's body will suddenly be seen on the slope, and you must confess that the starving animals will rush upon this unexpected prey."

"Certainly."

"Well, at that moment I shall explode the mine, and blow up guest and dinner."

"Well, well!" exclaimed Johnson, who was listening eagerly.

Hatteras had perfect confidence in his friend, and asked no question. He waited. But Altamont wanted it made perfectly clear.

"Doctor," he began, "how can you calculate the length of the fuse so

exactly that the explosion will take place at the right moment?"

"It's very simple," answered the doctor; "I don't make any calculation."

"But you have a fuse a hundred feet long?"

"No."

"Shall you set a train of powder simply?"

"No! that might fail."

"Will some one have to volunteer and light the powder?"

"If you want any one," said Johnson, eagerly, "I'm your man."

"It's not necessary, my friend," answered the doctor, grasping the boatswain's hand; "our five lives are precious, and they will be spared, thank God!"

"Then," said the American, "I can't guess."

"Well," answered the doctor, smiling, "if we couldn't get out of this little affair, what would be the use of physics?"

"Ah!" said Johnson, brightening up, "physics!"

"Yes! Haven't we here an electric pile and wires long enough,--those, you know, which connected with the lighthouse?"

"Well?"

"Well, we shall explode the powder when we please, instantly, and without danger."

"Hurrah!" shouted Johnson.

"Hurrah!" repeated his companions, not caring whether the enemy heard them or not. Soon the electric wires were run through the gallery from the house to the chamber of the mine. One of the extremities remained at the pile, the other was plunged into the centre of the cask, the two ends being placed at but a little distance from one another. At nine of the morning all was finished, and it was time; the bears were tearing the snow away furiously. The doctor thought the proper time had come. Johnson was sent to the magazine and charged with pulling the cord fastened to the post. He took his place.

"Now," said the doctor to his companions, "load your guns in case they should not be all killed at once, and take your place near Johnson; as soon as you hear the explosion, run out."

"All right!" said the American.

"And now we have done all that men can do! We have helped ourselves; may God help us!"

Hatteras, Altamont, and Bell went to the magazine. The doctor remained alone at the pile. Soon he heard Johnson's voice crying,--

"Ready?"

"All right!" he answered.

Johnson gave a strong pull at the rope; it pulled over the stake; then he ran to the loop-hole and looked out. The surface of the slope had sunk in. The fox's body was visible upon the shattered ice. The bears, at first surprised, crowded about this new prey.

"Fire!" shouted Johnson.

The doctor at once established the electric current between the threads; a loud explosion followed; the house shook as if in an earthquake; the walls fell in. Hatteras, Altamont, and Bell hastened out of the magazine, ready to fire. But their guns were not needed; four of the five bears fell about them in fragments, while the fifth, badly burned, ran away as fast as he could.

"Hurrah! hurrah! hurrah!" shouted the doctor's companions, while they crowded about him and embraced him.

CHAPTER XIV.

THE POLAR SPRING.

The prisoners were set free; they expressed their joy by the warmth of their thanks to the doctor. Johnson regretted somewhat the skins, which were burned and useless; but his regret did not sour his temper. They spent the day in repairing the house, which was somewhat injured by the explosion. They took away the blocks heaped up by the animals, and the walls were made secure. They worked briskly, encouraged by the cheery songs of the boatswain.

The next day the weather was much milder; the wind changed suddenly, and the thermometer rose to $+15^{\circ}$. So great a difference was soon felt by both man and nature. The southerly wind brought with it the first signs of the polar spring. This comparative warmth lasted for many days; the thermometer, sheltered from the wind, even rose as high as $+31^{\circ}$, and there were signs of a thaw. The ice began to crack; a few spirts of salt-water arose here and there, like jets in an English park; a few days later it rained hard.

A dense vapor arose from the snow; this was a good sign, and the melting of the immense masses appeared to be near at hand. The pale disk of the sun grew brighter and drew longer spirals above the horizon; the night lasted scarcely three hours. Another similar symptom was the reappearance of some ptarmigans, arctic geese, plover,

and flocks of quail; the air was soon filled with the deafening cries which they remembered from the previous summer. A few hares, which they were able to shoot, appeared on the shores of the bay, as well as the arctic mice, the burrows of which were like a honeycomb. The doctor called the attention of his friends to the fact that these animals began to lose their white winter plumage, or hair, to put on their summer dress; they were evidently getting ready for summer, while their sustenance appeared in the form of moss, poppy, saxifrage, and thin grass. A new life was peering through the melting snows. But with the harmless animals returned the famished foes; foxes and wolves arrived in search of their prey; mournful howling sounded during the brief darkness of the nights.

The wolf of these countries is near of kin to the dog; like him, it barks, and often in such a way as to deceive the sharpest ears, those of the dogs themselves, for instance; it is even said that they employ this device to attract dogs, and then eat them. This has been observed on the shores of Hudson's Bay, and the doctor could confirm it at New America; Johnson took care not to let loose the dogs of the sledge, who might have been destroyed in that way. As for Duke, he had seen too many of them, and he was too wise to be caught in any such way.

During a fortnight they hunted a great deal; fresh food was abundant; they shot partridges, ptarmigans, and snow-birds, which were delicious eating. The hunters did not go far from Fort Providence. In fact, small game could almost be killed with a stick; and it gave much

animation to the silent shores of Victoria Bay,--an unaccustomed sight which delighted their eyes.

The fortnight succeeding the great defeat of the bears was taken up with different occupations. The thaw advanced steadily; the thermometer rose to 32°, and torrents began to roar in the ravines, and thousands of cataracts fell down the declivities. The doctor cleared an acre of ground and sowed in it cresses, sorrel, and cochlearia, which are excellent remedies for the scurvy; the little greenish leaves were peeping above the ground when, with incredible rapidity, the cold again seized everything.

In a single night, with a violent north-wind, the thermometer fell forty degrees, to -8°. Everything was frozen; birds, quadrupeds, and seals disappeared as if by magic; the holes for the seals were closed, the crevasses disappeared, the ice became as hard as granite, and the waterfalls hung like long crystal pendants.

It was a total change to the eye; it took place in the night of May 11-12. And when Bell the next morning put his nose out of doors into this sharp frost, he nearly left it there.

"O, this polar climate!" cried the doctor, a little disappointed; "that's the way it goes! Well, I shall have to begin sowing again."

Hatteras took things less philosophically, so eager was he to renew

his explorations. But he had to resign himself.

"Will this cold weather last long?" asked Johnson.

"No, my friend, no," answered Clawbonny; "it's the last touch of winter we shall have! You know it's at home here, and we can't drive it away against its will."

"It defends itself well," said Bell, rubbing his face.

"Yes, but I ought to have expected it," said the doctor; "and I should not have thrown the seed away so stupidly, especially since I might have started them near the kitchen stove."

"What!" asked Altamont, "could you have foreseen this change of weather?"

"Certainly, and without resorting to magic. I ought to have put the seed under the protection of Saints Mamert, Panera, and Servais, whose days are the 11th, 12th, and 13th of this month."

"Well, Doctor," said Altamont, "will you tell me what influence these three saints have on the weather?"

"A very great influence, to believe gardeners, who call them the three saints of ice."

"And why so, pray?"

"Because generally there is a periodic frost in the month of May, and the greatest fall of temperature takes place from the 11th to the 13th of this month. It is a fact, that is all."

"It is curious, but what is the explanation?" asked the American.

"There are two: either by the interposition of a greater number of asteroids between the earth and the sun at this season, or simply by the melting of the snow, which thereby absorbs a great quantity of heat. Both explanations are plausible; must they be received? I don't know; but if I'm uncertain of the truth of the explanation, I ought not to have been of the fact, and so lose my crop."

The doctor was right; for one reason or another the cold was very intense during the rest of the month of May; their hunting was interrupted, not so much by the severity of the weather as by the absence of game; fortunately, the supply of fresh meat was not yet quite exhausted. They found themselves accordingly condemned to new inactivity; for a fortnight, from the 11th to the 25th of May, only one incident broke the monotony of their lives; a serious illness, diphtheria, suddenly seized the carpenter; from the swollen tonsils and the false membrane in the throat, the doctor could not be ignorant of the nature of the disease; but he was in his element, and he soon

drove it away, for evidently it had not counted on meeting him; his treatment was very simple, and the medicines were not hard to get; the doctor simply prescribed pieces of ice to be held in the mouth; in a few hours the swelling went down and the false membrane disappeared; twenty-four hours later Bell was up again.

When the others wondered at the doctor's prescriptions: "This is the land of these complaints," he answered; "the cure must be near the disease."

"The cure, and especially the doctor," added Johnson, in whose mind the doctor was assuming colossal proportions.

During this new leisure the latter resolved to have a serious talk with the captain; he wanted to induce Hatteras to give up his intention of going northward without carrying some sort of a boat; a piece of wood, something with which he could cross an arm of the sea, if they should meet one. The captain, who was fixed in his views, had formally vowed not to use a boat made of the fragments of the American ship. The doctor was uncertain how to broach the subject, and yet a speedy decision was important, for the month of June would be the time for distant excursions. At last, after long reflection, he took Hatteras aside one day, and with his usual air of kindness said to him,--

"Hatteras, you know I am your friend?"

"Certainly," answered the captain, warmly, "my best friend; indeed, my only one."

"If I give you a piece of advice," resumed the doctor, "advice which you don't ask for, would you consider it disinterested?"

"Yes, for I know that selfish interest has never been your guide; but what do you want to say?"

"One moment, Hatteras; I have something else to ask of you: Do you consider me a true Englishman like yourself, and eager for the glory of my country?"

Hatteras looked at the doctor with surprise.

"Yes," he answered, with his face expressing surprise at the question.

"You want to reach the North Pole," resumed the doctor; "I understand your ambition, I share it, but to reach this end we need the means."

"Well, haven't I so far sacrificed everything in order to succeed?"

"No, Hatteras, you have not sacrificed your personal prejudices, and at this moment I see that you are ready to refuse the indispensable means of reaching the Pole."

"Ah!" answered Hatteras, "you mean the launch; this man--"

"Come, Hatteras, let us argue coolly, without passion, and look at all sides of the question. The line of the coast on which we have wintered may be broken; there is no proof that it runs six degrees to the north; if the information which has brought you so far is right, we ought to find a vast extent of open sea during the summer months. Now, with the Arctic Ocean before us, free of ice and favorable for navigation, what shall we do if we lack the means of crossing it?"

Hatteras made no answer.

"Do you want to be within a few miles of the Pole without being able to reach it?"

Hatteras's head sank into his hands.

"And now," continued the doctor, "let us look at the question from a moral point of view. I can understand that an Englishman should give up his life and his fortune for the honor of his country. But because a boat made of a few planks torn from a wrecked American ship first touches the coast or crosses the unknown ocean, can that diminish the honor of the discovery? If you found on this shore the hull of an abandoned ship, should you hesitate to make use of it? Doesn't the glory of success belong to the head of the expedition? And I ask you

if this launch built by four Englishmen, manned by four Englishmen, would not be English from keel to gunwale?"

Hatteras was still silent.

"No," said Clawbonny, "let us talk frankly; it's not the boat you mind, it's the man."

"Yes, Doctor, yes," answered the captain, "that American; I hate him with real English hate, that man thrown in my way by chance--"

"To save you!"

"To ruin me! He seems to defy me, to act as master, to imagine he holds my fate in his hands, and to have guessed my plans. Didn't he show his character when we were giving names to the new lands? Has he ever said what he was doing here? You can't free me of the idea which is killing me, that this man is the head of an expedition sent out by the government of the United States."

"And if he is, Hatteras, what is there to show that he is in search of the Pole? Can't America try to discover the Northwest Passage as well as England? At any rate, Altamont is perfectly ignorant of your plans; for neither Johnson nor Bell nor you nor I has said a single word about them in his presence."

"Well, I hope he'll never know them!"

"He will know them finally, of course, for we can't leave him alone here."

"Why not?" asked the captain, with some violence; "can't he remain at Fort Providence?"

"He would never give his consent, Hatteras; and then to leave him here, uncertain of finding him again, would be more than imprudent, it would be inhuman. Altamont will come with us; he must come! But since there is no need of suggesting new ideas to him, let us say nothing, and build a launch apparently for reconnoitring these new shores."

Hatteras could not make up his mind to accede to the demands of his friend, who waited for an answer which did not come.

"And if he refused to let us tear his ship to pieces!" said the captain, finally.

"In that case, you would have the right on your side; you could build the boat in spite of him, and he could do nothing about it."

"I hope he will refuse," exclaimed Hatteras.

"Before he refuses," answered the doctor, "he must be asked. I will

undertake to do it."

In fact, that evening, before supper, Clawbonny turned the conversation to certain proposed expeditions in the summer months for hydrographic observations.

"I suppose, Altamont," he said, "that you will join us?"

"Certainly," was the reply; "we must know how large New America is."

Hatteras gazed earnestly at his rival while he made his answer.

"And for that," continued Altamont, "we must make the best use we can of the fragments of the Porpoise; let us make a strong boat which can carry us far."

"You hear, Bell," said the doctor, quickly; "to-morrow we shall set to work."

CHAPTER XV.

THE NORTHWEST PASSAGE.

The next day Bell, Altamont, and the doctor went to the Porpoise; they found no lack of wood; the old three-masted launch, though injured by being wrecked, could still supply abundant material for the new one. The carpenter set to work at once; they needed a seaworthy boat, which should yet be light enough to carry on a sledge. Towards the end of May the weather grew warmer; the thermometer rose above the freezing-point; the spring came in earnest this time, and the men were able to lay aside their winter clothing. Much rain fell, and soon the snow began to slide and melt away. Hatteras could not hide his joy at seeing the first signs of thaw in the ice-fields. The open sea meant liberty for him.

Whether or not his predecessors had been wrong on this great question of an open polar sea, he hoped soon to know. All chance of success in his undertaking depended on this. One evening, after a warm day in which the ice had given unmistakable signs of breaking up, he turned the conversation to the question of an open sea. He took up the familiar arguments, and found the doctor, as ever, a warm advocate of his doctrine. Besides, his conclusions were evidently accurate.

"It is plain," he said, "that if the ocean before Victoria Bay gets clear of ice, its southern part will also be clear as far as New

Cornwall and Queen's Channel. Penny and Belcher saw it in that state, and they certainly saw clearly."

"I agree with you, Hatteras," answered the doctor, "and I have no reason for doubting the word of these sailors; a vain attempt has been made to explain their discovery as an effect of mirage; but they were so certain, it was impossible that they could have made such a mistake."

"I always thought so," said Altamont; "the polar basin extends to the east as well as to the west."

"We can suppose so, at any rate," answered Hatteras.

"We ought to suppose so," continued the American, "for this open sea which Captains Penny and Belcher saw near the coast of Grinnell Land was seen by Morton, Kane's lieutenant, in the straits which are named after that bold explorer."

"We are not in Kane's sea," answered Hatteras, coldly, "and consequently we cannot verify the fact."

"It is supposable, at least," said Altamont.

"Certainly," replied the doctor, who wished to avoid useless discussion. "What Altamont thinks ought to be the truth; unless there

is a peculiar disposition of the surrounding land, the same effects appear at the same latitudes. Hence I believe the sea is open in the east as well as in the west."

"At any rate, it makes very little difference to us," said Hatteras.

"I don't agree with you, Hatteras," resumed the American, who was beginning to be annoyed by the affected unconcern of the captain; "it may make considerable difference to us."

"And when, if I may ask?"

"When we think of returning."

"Returning!" cried Hatteras, "and who's thinking of that?"

"No one," answered Altamont; "but we shall stop somewhere, I suppose."

"And where?" asked Hatteras.

For the first time the question was fairly put to Altamont. The doctor would have given one of his arms to have put a stop to the discussion. Since Altamont made no answer, the captain repeated his question.

"And where?"

"Where we are going," answered the American, quietly.

"And who knows where that is?" said the peace-loving doctor.

"I say, then," Altamont went on, "that if we want to make use of the polar basin in returning, we can try to gain Kane's sea; it will lead us more directly to Baffin's Bay."

"So that is your idea?" asked the captain, ironically.

"Yes, that is my idea, as it is that if these seas ever become practicable, they will be reached by the straightest way. O, that was a great discovery of Captain Kane's!"

"Indeed!" said Hatteras, biting his lips till they bled.

"Yes," said the doctor, "that cannot be denied; every one should have the praise he deserves."

"Without considering," went on the obstinate American, "that no one had ever before gone so far to the north."

"I like to think," said Hatteras, "that now the English have got ahead of him."

"And the Americans!" said Altamont.

"Americans!" repeated Hatteras.

"What am I, then?" asked Altamont, proudly.

"You are," answered Hatteras, who could hardly control his voice,--"you are a man who presumes to accord equal glory to science and to chance! Your American captain went far to the north, but as chance alone--"

"Chance!" shouted Altamont; "do you dare to say that this great discovery is not due to Kane's energy and knowledge?"

"I say," answered Hatteras, "that Kane's name is not fit to be pronounced in a country made famous by Parry, Franklin, Ross, Belcher, and Penny in these seas which opened the Northwest Passage to MacClure--"

"MacClure!" interrupted the American; "you mention that man, and yet you complain of the work of chance? Wasn't it chance alone that favored him?"

"No," answered Hatteras, warmly,--"no! It was his courage, his perseverance in spending four winters in the ice--"

"I should think so!" retorted the American; "he got caught in the ice

and couldn't get out, and he had to abandon the Investigator at last to go back to England."

"My friends--" said the doctor.

"Besides," Altamont went on, "let us consider the result. You speak of the Northwest Passage; well, it has yet to be discovered!"

Hatteras started at these words; no more vexatious question could have arisen between two rival nationalities. The doctor again tried to intervene.

"You are mistaken, Altamont," he said.

"No, I persist in my opinions," he said obstinately; "the Northwest Passage is yet to be found, to be sailed through, if you like that any better! MacClure never penetrated it, and to this day no ship that has sailed from Behring Strait has reached Baffin's Bay!"

That was true, speaking exactly. What answer could be made?

Nevertheless, Hatteras rose to his feet and said,--

"I shall not permit the good name of an English captain to be attacked any further in my presence."

"You will not permit it?" answered the American, who also rose to his feet; "but these are the facts, and it is beyond your power to destroy them."

"Sir!" said Hatteras, pale with anger.

"My friends," said the doctor, "don't get excited! We are discussing a scientific subject."

Clawbonny looked with horror at a scientific discussion into which the hate of an American and an Englishman could enter.

"I am going to give you the facts," began Hatteras, threateningly.

"But I'm speaking now!" retorted the American.

Johnson and Bell became very uneasy.

"Gentlemen," said the doctor, severely, "let me say a word! I insist upon it, I know the facts as well, better than you do, and I can speak of them impartially."

"Yes, yes," said Bell and Johnson, who were distressed at the turn the discussion had taken, and who formed a majority favorable to the doctor.

"Go on, Doctor," said Johnson, "these gentlemen will listen, and you cannot fail to give us some information."

"Go on, Doctor," said the American.

Hatteras resumed his place with a sign of acquiescence, and folded his arms.

"I will tell the simple truth about the facts," said the doctor, "and you must correct me if I omit or alter any detail."

"We know you, Doctor," said Bell, "and you can speak without fear of interruption."

"Here is the chart of the Polar Seas," resumed the doctor, who had brought it to the table; "it will be easy to trace MacClure's course, and you will be able to make up your minds for yourselves."

Thereupon he unrolled one of the excellent maps published by order of the Admiralty, containing the latest discoveries in arctic regions; then he went on:--

"You know, in 1848, two ships, the Herald, Captain Kellet, and the Plover, Commander Moore, were sent to Behring Strait in search of traces of Franklin; their search was vain; in 1850 they were joined by MacClure, who commanded the Investigator, a ship in which he had

sailed, in 1849, under James Ross's orders. He was followed by Captain Collinson, his chief, who sailed in the *Enterprise*; but he arrived before him. At Behring Strait he declared he would wait no longer, and that he would go alone, on his own responsibility, and--you hear me, Altamont--that he would find either Franklin or the passage."

Altamont showed neither approbation nor the contrary.

"August 5, 1850," continued the doctor, "after a final communication with the *Plover*, MacClure sailed eastward by an almost unknown route; see how little land is marked upon the chart. August 30th he rounded Cape Bathurst; September 6th he discovered Baring Land, which he afterwards discovered to form part of Banks Land, then Prince Albert's Land. Then he resolved to enter the long straits between these two large islands, and he called it Prince of Wales Strait. You can follow his plan. He hoped to come out in Melville Sound, which we have just crossed, and with reason; but the ice at the end of the strait formed an impassable barrier. There MacClure wintered in 1850-51, and meanwhile he pushed on over the ice, to make sure that the strait connected with the sound."

"Yes," said Altamont, "but he didn't succeed."

"One moment," said the doctor. "While wintering there, MacClure's officers explored all the neighboring coasts: Creswell, Baring's Land; Haswell, Prince Albert's Land, to the south; and Wynniat, Cape Walker,

to the north. In July, at the beginning of the thaw, MacClure tried a second time to carry the Investigator to Melville Sound; he got within twenty miles of it, twenty miles only, but the winds carried him with irresistible force to the south, before he could get through the obstacle. Then he determined to go back through Prince of Wales Strait, and go around Banks Land, to try at the west what he could not do in the east; he put about; the 18th he rounded Cape Kellet; the 19th, Cape Prince Alfred, two degrees higher; then, after a hard struggle with the icebergs, he was caught in Banks Strait, in the series of straits leading to Baffin's Bay."

"But he couldn't get through them," said Altamont.

"Wait a moment, and be as patient as MacClure was. September 26th, he took his station for the winter in Mercy Bay, and stayed there till 1852. April came; MacClure had supplies for only eighteen months. Nevertheless, he was unwilling to return; he started, crossing Banks Strait by sledge, and reached Melville Island. Let us follow him. He hoped to find here Commander Austin's ships, which were sent to meet him by Baffin's Bay and Lancaster Sound; April 28th he arrived at Winter Harbor, at the place where Parry had wintered thirty-three years previously, but no trace of the ships; only he found in a cairn a paper, telling him that MacClintock, Austin's lieutenant, had been there the year before, and gone away. Any one else would have been in despair, but MacClure was not. He put in the cairn another paper, in which he announced his intention of returning to England by the

Northwest Passage, which he had discovered by reaching Baffin's Bay and Lancaster Sound. If he is not heard from again, it will be because he will have been to the north or west of Melville Island; then he returned, not discouraged, to Mercy Bay for the third winter, 1852-53."

"I have never doubted his courage," said Altamont, "but his success."

"Let us follow him again," resumed the doctor. "In the month of March, being on two-thirds rations, at the end of a very severe winter, when no game was to be had, MacClure determined to send back half of his crew to England, either by Baffin's Bay, or by Mackenzie River and Hudson's Bay; the other half was to bring the Investigator back. He chose the weakest men, who could not stand a fourth winter; everything was ready, and their departure settled for April 15th, when on the 6th, MacClure, who was walking on the ice with his lieutenant, Creswell, saw a man running northward and gesticulating; it was Lieutenant Pim of the Herald, lieutenant of the same Captain Kellet whom two years before he had left at Behring Strait, as I said when I began. Kellet, having reached Winter Harbor, found the paper left there by MacClure; having heard in that way of his position in Mercy Bay, he sent Lieutenant Pim to meet the captain. He was followed by a detachment of the men of the Herald, among whom was a midshipman of a French ship, M. de Bray, who was a volunteer aid of Captain Kellet. You don't doubt this meeting?"

"Not at all," answered Altamont.

"Well, see what followed, and whether the Northwest Passage was really made. If you join Parry's discoveries to those of MacClure, you will see the northern coast of America was rounded."

"But not by a single ship," said Altamont.

"No, but by a single man. Let us go on. MacClure went to see Captain Kellet at Melville Island; in twelve days he made the one hundred and seventy miles between Winter Harbor and the island; he agreed with the commander of the Herald to send him his sick, and returned; many others would have thought, had they been in MacClure's place, that they had done enough, but this bold young man determined to try his fortune again. Then, and please observe this, Lieutenant Creswell, with the sick and disabled men of the Investigator, left Mercy Bay, reached Winter Harbor, and from there, after a journey of four hundred and seventy miles on the ice, reached Beechey Island, June 2d, and a few days later, with twelve of his men, he took passage on board of the Phoenix."

"In which I was at the time," said Johnson, "with Captain Inglefield, and we returned to England."

"And October 7, 1853," continued the doctor, "Creswell arrived at London, after having crossed over the whole distance between Behring

Strait and Cape Farewell."

"Well," said Hatteras, "to enter at one end and go out by the other, isn't that going through?"

"Yes," answered Altamont, "but by going four hundred and seventy miles over the ice."

"Well, what difference does that make?"

"The whole," answered the American. "Did MacClure's ship make the passage?"

"No," answered the doctor, "for after a fourth winter, MacClure was obliged to leave it in the ice."

"Well, in a sea-voyage it's important to have the ship reach her destination. If the Northwest Passage ever becomes practicable, it must be for ships and not for sledges. The ship must accomplish the voyage, or if not the ship, the launch."

"The launch!" shouted Hatteras, who detected the hidden meaning in the American's words.

"Altamont," said the doctor, hurriedly, "you make a puerile distinction, and we all consider you wrong."

"That is easy, gentlemen," answered the American; "you are four to one. But that won't keep me from holding my own opinion."

"Keep it," said Hatteras, "and so closely that we need hear nothing about it."

"And what right have you to speak to me in that way?" asked the American in a rage.

"My right as captain," answered Hatteras.

"Am I under your commands?" retorted Altamont.

"Without doubt, and look out for yourself, if--"

The doctor, Johnson, and Bell intervened. It was time; the two enemies were gazing at one another. The doctor was very anxious. Still, after a few gentler words, Altamont went off to bed whistling "Yankee Doodle," and, whether he slept or not, he did not speak. Hatteras went out and paced up and down for an hour, and then he turned in without saying a word.

CHAPTER XVI.

NORTHERN ARCADIA.

On May 29th, for the first time, the sun did not set; it merely touched the horizon and then rose at once; the day was twenty-four hours long. The next day it was surrounded by a magnificent halo, a bright circle with all the colors of the prism; this apparition, which was by no means rare, always attracted the doctor's attention; he never failed to note the date and appearance of the phenomenon; the one he saw on that day was of an elliptic shape, which he had seldom seen before.

Soon the noisy flocks of birds appeared; bustards and wild geese came from Florida or Arkansas, flying northward with inconceivable rapidity and bringing the spring with them. The doctor shot a few, as well as three or four cranes and a single stork. However, the snow was melting everywhere beneath the sun; the salt-water, which overran the ice-field through the crevasses and the seal-holes, hastened the melting; the ice which was mingled with salt-water formed a soft slush. Large pools appeared on the land near the bay, and the exposed soil seemed to be a production of the arctic spring.

The doctor then resumed his planting; he had plenty of seed; besides, he was surprised to see a sort of sorrel growing naturally between the dried rocks, and he wondered at the force of nature which demanded so

little in order to manifest itself. He sowed some cresses, of which the young sprouts, three weeks later, were already an inch long.

The heath began to show timidly its little pale, rosy flowers. In fact, the flora of New America is very defective; still, this rare vegetation was agreeable to their eyes; it was all the feeble rays of the sun could nourish, a trace of the Providence which had not completely forgotten these distant countries. At last it became really warm; June 15th the thermometer stood at 57°; the doctor could hardly believe his eyes; the country changed its appearance; numerous noisy cascades fell from the sunny summits of the hills; the ice loosened, and the great question of an open sea would soon be decided. The air was full of the noise of avalanches falling from the hills to the bottom of the ravines, and the cracking of the ice-field produced a deafening sound.

A trip was made to Johnson Island; it was merely an unimportant, arid, barren island; but the old boatswain was no less proud of giving his name to a few desolate rocks. He even wanted to carve it on a high peak. During this excursion, Hatteras had carefully explored these lands, even beyond Cape Washington; the melting of the snow sensibly changed the country; ravines and hillocks appeared here and there, where the snow indicated nothing but monotonous stretches. The house and magazines threatened to melt away, and they had frequently to be repaired; fortunately, a temperature of 57° is rare in these latitudes, and the mean is hardly above the freezing-point.

By the middle of June the launch was far advanced and getting into shape. While Bell and Johnson were working at it, the others had a few successful hunts. Reindeer were shot, although they are hard to approach; but Altamont put in practice a device employed by the Indians of his own country; he crept over the ground with his gun and arms outstretched like the horns of one of these shy animals, and having thus come within easy gunshot, he could not fail.

But the best game, the musk-ox, of which Parry found plenty at Melville Island, appeared not to frequent the shores of Victoria Bay. A distant hunt was determined on, as much to get these valuable animals as to reconnoitre the eastern lands. Hatteras did not propose to reach the Pole by this part of the continent, but the doctor was not sorry to get a general idea of the country. Hence they decided to start to the east of Fort Providence. Altamont intended to hunt; Duke naturally was of the party.

So, Monday, June 17th, a pleasant day, with the thermometer at 41°, and the air quiet and clear, the three hunters, each carrying a double-barrelled gun, a hatchet, a snow-knife, and followed by Duke, left Doctor's House at six o'clock in the morning. They were fitted out for a trip of two or three days, with the requisite amount of provisions. By eight o'clock Hatteras and his two companions had gone eight miles. Not a living thing had tempted a shot, and their hunt threatened to be merely a trip.

This new country exhibited vast plains running out of sight; new streams divided them everywhere, and large, unruffled pools reflected the sun. The layers of melting ice bared the ground to their feet; it belonged to the great division of sedimentary earth, and the result of the action of the water, which is so common on the surface of the globe. Still a few erratic blocks were seen of a singular nature, foreign to the soil where they were found, and whose presence it was hard to explain. Schists and different productions of limestone were found in abundance, as was also a sort of strange, transparent, colorless crystal, which has a refraction peculiar to Iceland spar.

But, although he was not hunting, the doctor had not time to geologize; he had to walk too quickly, in order to keep up with his friends. Still, he observed the land and talked as much as possible, for had he not there would have been total silence in the little band; neither Altamont nor the captain had any desire to talk to one another.

By ten o'clock the hunters had got a dozen miles to the east; the sea was hidden beneath the horizon; the doctor proposed a halt for breakfast. They swallowed it rapidly, and in half an hour they were off again. The ground was sloping gently; a few patches of snow, preserved either by their position or the slope of the rocks, gave it a woolly appearance, like waves in a high wind. The country was still barren, and looking as if no living being had ever set foot in it.

"We have no luck," said Altamont to the doctor; "to be sure, the country doesn't offer much food to animals, but the game here ought not to be over-particular, and ought to show itself."

"Don't let us despair," said the doctor; "the summer has hardly begun; and if Parry met so many animals at Melville Island, we may be as lucky here."

"Still, we are farther north," said Hatteras.

"Certainly, but that is unimportant; it is the pole of cold we ought to consider; that is to say, that icy wilderness in the middle of which we wintered with the *Forward*; now the farther north we go, the farther we are from the coldest part of the globe; we ought to find, beyond, what Parry, Ross, and others found on the other side."

"Well," said Altamont, with a regretful sigh, "so far we've been travellers rather than hunters."

"Be patient," answered the doctor; "the country is changing gradually, and I should be astonished if we don't find game enough in the ravines where vegetation has had a chance to sprout."

"It must be said," continued Altamont, "that we are going through an uninhabited and uninhabitable country."

"O, uninhabitable is a strong word!" answered the doctor; "I can't believe any land uninhabitable; man, by many sacrifices, and for generations using all the resources of science, might finally fertilize such a country."

"Do you think so?" asked Altamont.

"Without doubt! If you were to go to the celebrated countries of the world, to Thebes, Nineveh, or Babylon, in the fertile valleys of our ancestors, it would seem impossible that men should ever have lived there; the air itself has grown bad since the disappearance of human beings. It is the general law of nature which makes those countries in which we do not live unhealthy and sterile, like those out of which life has died. In fact, man himself makes his own country by his presence, his habits, his industry, and, I might add, by his breath; he gradually modifies the exhalations of the soil and the atmospheric conditions, and he makes the air he breathes wholesome. So there are uninhabited lands, I grant, but none uninhabitable."

Talking in this way, the hunters, who had become naturalists, pushed on and reached a sort of valley, fully exposed, at the bottom of which a river, nearly free of ice, was flowing; its southern exposure had brought forth a certain amount of vegetation. The earth showed a strong desire to grow fertile; with a few inches of rich soil it would have produced a good deal. The doctor called their attention to these

indications.

"See," he said, "a few hardy colonists might settle in this ravine. With industry and perseverance they could do a great deal; not as much as is seen in the temperate zones, but a respectable show. If I am not mistaken, there are some four-footed animals! They know the good spots."

"They are Arctic hares," shouted Altamont, cocking his gun.

"Wait a moment," cried the doctor,--"wait a moment, you hasty fellow. They don't think of running away! See, they'll come to us!"

And, in fact, three or four young hares, springing about in the heath and young moss, ran boldly towards the three men; they were so cunning that even Altamont was softened.

Soon they were between the doctor's legs; he caressed them with his hand, saying,--

"Why shoot these little animals which come to be petted? We need not kill them."

"You are right, Doctor," answered Hatteras; "we'll let them live."

"And these ptarmigan, too, which are flying towards us!" cried

Altamont; "and these long-legged water-fowl!"

A whole flock of birds passed over the hunters, not suspecting the peril from which the doctor's presence saved them. Even Duke was compelled to admire them.

They were a curious and touching sight, flying about without fear, resting on Clawbonny's shoulders, lying at his feet, offering themselves to his caresses, seeming to do their best to welcome their new guests; they called one another joyously, flying from the most distant points; the doctor seemed to be a real bird-charmer. The hunters continued their march up the moist banks of the brook, followed by the familiar band, and turning from the valley they perceived a troop of eight or ten reindeer browsing on a few lichens half buried beneath the snow; they were graceful, quiet animals, with their branching antlers, which the female carried as well as the male; their wool-like fur was already losing its winter whiteness in favor of the summer brown and gray; they seemed no more timid than the hares and birds of the country. Such were the relations of the first men to the first animals in the early ages of the world.

The hunters reached the middle of the band without any one flying; this time the doctor found it hard to restrain the instincts of Altamont, who could not calmly look on this game without a thirst for blood rising in his brain. Hatteras looked mildly at these gentle beasts, who rubbed their noses against the doctor's clothes; he was

the friend of all the animals.

"But," said Altamont, "didn't we come here to shoot?"

"To shoot musk-ox," answered Clawbonny, "and nothing else! We should have no need of this game; we have food enough, so let us enjoy the sight of man walking thus among these animals, without alarming them."

"That proves they have never seen one before," said Hatteras.

"Evidently," answered the doctor; "and so we can be sure that these animals are not of American origin."

"And why so?" said Altamont.

"If they were born on the continent of North America, they would know what to think of men, and they would have fled at the sight of us. No; they probably came from the north, from those unknown lands where our kind has never set foot, and they have crossed the continents near the Pole. So, Altamont, you can't claim them as your fellow-countrymen."

"O," answered Altamont, "a hunter does not scrutinize so closely, and the game belongs to the land where it was shot!"

"Well, calm yourself, my Nimrod! As for me, I would rather never fire a gun in my life than alarm this timid population. See, even Duke

fraternizes with the charming beasts! Come, we'll be kind when we can!
Kindness is a force!"

"Well, well," answered Altamont, who sympathized but slightly with this sensitiveness; "but I should be amused to see you armed with this kindness alone among a flock of bears or wolves!"

"O, I don't pretend to charm wild beasts!" answered the doctor; "I have little faith in the enchantment of Orpheus; besides, bears and wolves wouldn't come up to us like the hares, partridges, and reindeer."

"Why not," answered Altamont, "if they have never seen men?"

"Because they are naturally ferocious, and ferocity, like maliciousness, begets suspicion; a remark which is true of man as well as of animals. A wicked man is distrustful, and fear is commonly found in those who are able to inspire it."

This little lesson in natural philosophy ended the conversation.

The whole day was passed in this Northern Arcadia, as the doctor named the valley, with the consent of his companions; and that evening, after a supper which had not cost the life of a single inhabitant of the country, the three hunters went to sleep in a cleft of a rock which was admirably adapted for a shelter.

CHAPTER XVII.

ALTAMONT'S REVENGE.

The next day the doctor and his two companions woke up after a perfectly quiet night. The cold, although not keen, increased towards daybreak, but they were well covered, and slept soundly under the watch of the peaceful animals.

The weather being pleasant, they resolved to consecrate the day to a reconnaissance of the country, and the search of musk-oxen. Altamont insisted on shooting something, and they decided that, even if these oxen should be the gentlest animals in the world, they should be shot. Besides, their flesh, although strongly flavored with musk, was pleasant eating, and they all hoped to carry back to Fort Providence a good supply of it.

During the early morning hours nothing noteworthy took place; the land grew different in the northeast; a few elevations, the beginning of a mountainous district, indicated a change. If this New America were not a continent, it was at any rate an important island; but then they did not have to trouble themselves about its geography.

Duke ran ahead, and soon came across some traces of a herd of musk-oxen; he then advanced rapidly, and soon disappeared from the

eyes of the hunters. They followed his clear barking, which soon grew so hasty that they knew he had discovered the object of their search. They pushed on, and in an hour and a half they came up to two of these animals; they were large, and formidable in appearance. They appeared much surprised at Duke's attacks, but not alarmed; they were feeding off a sort of reddish moss which grew on the thin soil. The doctor recognized them at once from their moderate height, their horns, which were broad at the base, the absence of muzzle, their sheep-like forehead, and short tail; their shape has earned for them from naturalists the name of "ovibos," a compound, and which expresses the two sorts of animals whose characteristics they share. Thick, long hair and a sort of delicate brown silk formed their fur.

They ran away when they saw the two hunters, who came running up after them. It was hard to reach them for men who were out of breath after running half an hour. Hatteras and his companions stopped.

"The Devil!" said Altamont.

"That's just the word," said the doctor, as soon as he could take breath. "I'll grant they are Americans, and they can't have a very good idea of your countrymen."

"That proves we are good hunters," answered Altamont.

Still, the musk-oxen, seeing they were not pursued, stopped in a

posture of surprise. It became evident that they could never be run down; they would have to be surrounded; the plateau on which they were aided this manoeuvre. The hunters, leaving Duke to harass them, descended through the neighboring ravines, so as to get around the plateau. Altamont and the doctor hid behind a rock at one end, while Hatteras, suddenly advancing from the other end, should drive the oxen towards them. In half an hour each had gained his post.

"You don't object any longer to our shooting?" asked Altamont.

"No, it's fair fighting," answered the doctor, who, in spite of gentleness, was a real sportsman.

They were talking in this way, when they saw the oxen running, and Duke at their heels; farther on Hatteras was driving them, with loud cries, towards the American and the doctor, who ran to meet this magnificent prey.

At once the oxen stopped, and, less fearful of a single enemy, they turned upon Hatteras. He awaited them calmly, aimed at the nearest, and fired; but the bullet struck the animal in the middle of his forehead, without penetrating the skull. Hatteras's second shot produced no other effect than to make the beasts furious; they ran to the disarmed hunter, and threw him down at once.

"He is lost," cried the doctor.

At the moment Clawbonny pronounced these words with an accent of despair, Altamont made a step forward to run to Hatteras's aid; then he stopped, struggling against himself and his prejudices.

"No," he cried, "that would be cowardice."

He hastened with Clawbonny to the scene of combat. His hesitation had not lasted half a second. But if the doctor saw what was taking place in the American's heart, Hatteras understood it, who would rather have died than have implored his rival's interference. Still, he had hardly time to perceive it, for Altamont appeared before him. Hatteras, lying on the ground, was trying to ward off the horns and hoofs of the two animals. But he could not long continue so unequal a struggle. He was about to be torn in pieces, when two shots were heard. Hatteras heard the bullets whistling by his head.

"Don't be frightened!" shouted Altamont, hurling his gun to one side, and rushing upon the angry animals.

One of the oxen fell, shot through the heart; the other, wild with rage, was just going to gore the captain, when Altamont faced him, and plunged into his mouth his hand, armed with a snow-knife; with the other he gave him a terrible blow with a hatchet on the head. This was done with marvellous rapidity, and a flash of lightning would have lit up the whole scene.

The second ox fell back dead.

"Hurrah! hurrah!" cried Clawbonny.

Hatteras was saved. He owed his life to the man whom he detested most in the world. What was going on in his mind at this time? What emotion was there which he could not master? That is one of the secrets of the heart which defy all analysis.

However that may be, Hatteras advanced to his rival without hesitation, and said to him seriously,--

"You have saved my life, Altamont."

"You saved mine," answered the American. There was a moment's silence. Then Altamont added, "We are now quits, Hatteras!"

"No, Altamont," answered the captain; "when the doctor took you from your icy tomb, I did not know who you were, and you have saved me at the risk of your own life, knowing who I was."

"You are a fellow-being," answered Altamont; "and whatever else he may be, an American is not a coward."

"No, he is not," said the doctor; "he is a man! a man like you,

Hatteras!"

"And like me he shall share the glory which is awaiting us!"

"The glory of going to the North Pole?" said Altamont.

"Yes," said the captain, haughtily.

"I had guessed it!" exclaimed the American. "So you dared conceive of this bold design! You dared try to reach that inaccessible point! Ah, that is great! It is sublime!"

"But you," asked Hatteras, hurriedly, "were you not on your way to the Pole?"

Altamont seemed to hesitate about replying.

"Well?" said the doctor.

"Well, no," answered the American,--"no; tell the truth, and shame the Devil! No, I did not have this great idea, which has brought you here. I was trying simply to sail through the Northwest Passage, that is all."

"Altamont," said Hatteras, holding out his hand to the American, "share our glory, and go with us to the North Pole!"

The two men then shook hands warmly.

When they turned towards the doctor, they saw his eyes full of tears.

"Ah, my friends," he murmured, as he dried his eyes, "how can my heart hold the joy with which you fill it? My dear companions, you have sacrificed a miserable question of nationality in order to unite in your common success! You know that England and America have nothing to do with all this; that mutual sympathy ought to bind you together against the dangers of the journey! If the North Pole is discovered, what difference does it make who does it? Why stand bickering about English or American, when we can be proud of being men?"

The doctor embraced the reconciled foes; he could not restrain his joy. The two new friends felt themselves drawn closer together by the friendship this worthy man had for them both. Clawbonny spoke freely of the vanity of competition, of the madness of rivalry, and of the need of agreement between men so far from home. His words, his tears and caresses, came from the bottom of his heart.

Still, he grew calm after embracing Hatteras and Altamont for the twentieth time.

"And now," he said, "to work, to work! Since I was no use as a hunter, let me try in another capacity!"

Thereupon he started to cut up the ox, which he called the "ox of reconciliation," but he did it as skilfully as if he were a surgeon conducting a delicate autopsy. His two companions gazed at him in amusement. In a few minutes he had cut from the body a hundred pounds of flesh; he gave each one a third of it, and they again took up their march to Fort Providence. At ten o'clock in the evening, after walking in the oblique rays of the sun, they reached Doctor's House, where Johnson and Bell had a good supper awaiting them.

But before they sat down to table, the doctor said in a voice of triumph, as he pointed to his two companions,--

"Johnson, I carried away with me an Englishman and an American, did I not?"

"Yes, Dr. Clawbonny," answered the boatswain.

"Well, I've brought back two brothers."

The two sailors gladly shook Altamont's hand; the doctor told them what the American captain had done for the English captain, and that night the snow-house held five perfectly happy men.

CHAPTER XVIII.

THE LAST PREPARATIONS.

The next day the weather changed; there was a return of cold; the snow and rain gust raged for many days.

Bell had finished the launch; it was perfectly satisfactory for the purpose it was intended for; partly decked, and partly open, it could sail in heavy weather under mainsail and jib, while it was so light as not to be too heavy a load on the sledge for the dogs.

Then, too, a change of great importance was taking place in the state of the polar basin. The ice in the middle of the bay was beginning to give way; the tallest pieces, forever weakened by the collision of the rest, only needed a sufficiently heavy tempest to be torn away and to become icebergs. Still, Hatteras was unwilling to wait so long before starting. Since it was to be a land journey, he cared very little whether the sea was open or not. He determined to start June 25th; meanwhile all the preparations could be completed. Johnson and Bell put the sledge into perfect repair; the frame was strengthened and the runners renewed. The travellers intended to devote to their journey the few weeks of good weather which nature allows to these northern regions. Their sufferings would be less severe, the obstacles easier to overcome.

A few days before their departure, June 20th, the ice had so many free passages, that they were able to make a trial trip on board of the new launch as far as Cape Washington. The sea was not perfectly free, far from it; but its surface was not solid, and it would have been impossible to make a trip on foot over the ice-fields. This half-day's sail showed the good sailing qualities of the launch. During the return they beheld a curious incident. It was a monstrous bear chasing a seal. Fortunately the former was so busily occupied, that he did not see the launch, otherwise he would certainly have pursued it; he kept on watch near a crevasse in the ice-field, into which the seal had evidently plunged. He was awaiting his reappearance with all the patience of a hunter, or rather of a fisherman, for he was really fishing. He was silent, motionless, without any sign of life. Suddenly the surface of the water was agitated; the seal had come up to breathe. The bear crouched low upon the ice, and rounded his two paws about the crevasse. The next moment the seal appeared, with his head above water; but he had not time to withdraw it. The bear's paws, as if driven by a spring, were clashed together, strangling the animal with irresistible force and dragging it out of the water.

It was but a brief struggle; the seal struggled for a few seconds, and was then suffocated on the breast of his adversary, who, dragging him away easily, in spite of his size, and springing lightly from one piece of ice to another, reached land and disappeared with his prey.

"A pleasant journey!" shouted Johnson; "that bear has got rather too many paws!"

The launch soon reached the little anchorage Bell had made for her in the ice.

Only four days were there before the time fixed for their departure.

Hatteras hurried on the last preparations; he was in a hurry to leave New America, a land which was not his, and which he had not named; he did not feel at home.

June 22d they began to carry to the sledge their camp-material, tent, and food. They carried only two hundred pounds of salt meat, three chests of preserved meat and vegetables, fifty pounds of pickles and lime-juice, five quarters of flour, packets of cresses and cochlearia from the doctor's garden; with the addition of two hundred pounds of powder, the instruments, arms, and personal baggage, the launch, Halkett-boat, and the weight of the sledge itself, the whole weighed fifteen hundred pounds,--a heavy load for four dogs, especially since, unlike the Esquimaux, who never travel more than four days in succession, they had none to replace them, and would have to work them every day. But the travellers determined to aid them when it was necessary, and they intended to proceed by easy stages; the distance from Victoria Bay to the Pole was three hundred and fifty-five miles at the outside, and going twelve miles a day they could make the journey in a month. Besides, when the land came to an end, the launch

would enable them to finish the journey without fatigue for dogs or men.

The latter were well, and in excellent condition. The winter, although severe, ended favorably enough. Each one had followed the doctor's advice, and escaped from the diseases common in these severe climates. In fact, they had grown a trifle thinner, which gave a great deal of pleasure to Clawbonny; but their bodies were inured to the rigors of that life, and these men were able to face the severest attacks of cold and hunger without succumbing. And then, too, they were going to the end of their journey, to the inaccessible Pole, after which their only thought would be of returning. The sympathy which bound together the five members of the expedition would aid their success in this bold trip, and no one doubted of their success.

As a precaution, the doctor had urged his companions to prepare themselves for some time beforehand, and to "train" with much care.

"My friends," he used to say, "I don't ask you to imitate the English racers, who lose eighteen pounds after two days' training, and twenty-five after five days, but we ought to do something to get into the best possible condition for a long journey. Now the first principle of training is to get rid of the fat on both horse and jockey, and this is done by means of purging, sweating, and violent exercise. These gentlemen know they will lose so much by medicine, and they arrive at their results with incredible accuracy; such a one who

before training could not run a mile without being winded, can run twenty-five easily after it. There was a certain Townsend who ran a hundred miles in twelve hours without stopping."

"A good result," answered Johnson; "and although we are not very fat, if we must get thinner yet--"

"There is no need of it, Johnson; but without exaggerating, it can't be denied that training produces good effects; it strengthens the bones, makes the muscles more elastic, improves the hearing and the sight; so let us not forget it."

In short, whether in training or not, the travellers were ready June 23d; it was Sunday, and the day was devoted to absolute rest.

The time for departure drew near, and the inhabitants of Fort Providence could not see it approach without a certain emotion. It grieved them to leave this snow-hut which had served so well to protect them; Victoria Bay, this hospitable shore where they had spent the last days of the winter. Would they find these buildings standing when they returned? Would not the rays of the sun melt away its fragile walls?

In a word, they had passed pleasant hours there. The doctor, at the evening meal, called up to his companions' memory touching reminiscences, and he did not forget to thank Heaven for its evident

protection.

At last the hour of sleeping came. Each one went to bed early, so as to be up betimes. Thus passed their last night at Fort Providence.

CHAPTER XIX.

THE JOURNEY NORTHWARD.

At dawn the next day Hatteras gave the signal for departure. The dogs were harnessed to the sledge; since they were well fed and had thoroughly rested, after a comfortable winter there was no reason for their not being of great service during the summer. Hence they were not averse to being put into harness.

After all, these Greenland dogs are kind beasts. Their wildness was partly gone; they had lost their likeness to the wolf, and had become more like Duke, the finished model of the canine race,--in a word, they were becoming civilized. Duke could certainly claim a share in their education; he had given them lessons and an example in good manners. In his quality of Englishman, and so punctilious in the matter of cant, he was a long time in making the acquaintance of the other dogs, who had not been introduced to him, and in fact he never used to speak to them; but after sharing the same dangers and privations, they gradually grew used to one another. Duke, who had a kind heart, made the first advances, and soon all the dogs were friends. The doctor used to pet the Greenland dogs, and Duke saw him do it without jealousy. The men were in equally good condition; if the dogs could draw well, the men could walk well.

They left at six o'clock in the morning; it was a very pleasant day.

After they had followed the line of the bay and passed Cape Washington, Hatteras gave the order to turn northward; by seven the travellers lost sight of the lighthouse and of Fort Providence in the south.

The journey promised well, much better than the expedition begun in the dead of winter in search of coal. Hatteras then left behind him, on board of the ship, mutiny and despair, without being certain of the object of his journey; he left a crew half dead with cold, he started with companions who were weakened by the miseries of an arctic winter; he, too, eager for the north, had to return to the south! Now, on the other hand, surrounded by vigorous, healthy friends, encouraged and aided in many ways, he was starting for the Pole, the object of his whole life! No man had ever been nearer acquiring this glory for himself and his country.

Was he thinking of all this, which was so naturally inspired by his present position? The doctor liked to think so, and could hardly doubt it when he saw him so eager. Clawbonny rejoiced in what so pleased his friend; and since the reconciliation of the two captains, the two friends, he was the happiest of men; for hatred, envy, and rivalry were passions he had never felt. What would be the issue of this voyage he did not know; but, at any rate, it began well, and that was a good deal.

The western shore of New America stretched out in a series of bays

beyond Cape Washington; the travellers, to avoid this long curve, after crossing the first spurs of Mount Bell, turned northward over the upper plateaus. This was a great saving of time; Hatteras was anxious, unless prevented by seas or mountains, to make a straight line of three hundred and fifty miles to the Pole from Fort Providence.

Their journey was easy; these lofty plains were covered with deep snow, over which the sledge passed easily, and the men in their snow-shoes walked easily and rapidly.

The thermometer stood at 37°. The weather was not absolutely settled; at one moment it was clear, the next cloudy: but neither cold nor showers could have stopped the eager party. They could be followed easily by the compass; the needle was more active as they receded from the magnetic pole; it is true that it turned to the opposite direction and pointed to the south, while they were walking northward; but this did not in any way embarrass them. Besides, the doctor devised a simple method of staking out the way and thereby avoiding perpetual reference to the compass; when once they had got their bearings by some object two or three miles to the north, they walked till they reached it, when they chose another, and so on. In this way they had a straight road.

In the first two days they made twenty miles in twelve hours; the rest of the time was devoted to meals and rest. The tent was ample

protection against the cold when they were sleeping. The temperature gradually rose. The snow melted away in some places, according to the shape of the ground, while in others it lay in large patches. Broad pools appeared here and there, often almost as large as lakes. They would walk in up to their waists very often; but they only laughed at it, and the doctor more than any.

"Water has no right to wet us in this country," he used to say; "it ought to appear only as a solid, or a gas; as to its being liquid, it's absurd! Ice or vapor will do, but water won't!"

They did not forget their shooting, for thereby they got fresh meat. So Altamont and Bell, without going very far away, scoured the neighboring ravines; they brought back ptarmigan, geese, and a few gray rabbits. Gradually these animals became very shy and hard to approach. Without Duke they would often have found it hard to get any game. Hatteras advised them not to go off farther than a mile, for not a day nor an hour was to be lost, and he could not count on more than three months of good weather.

Besides, each one had to be at his post by the sledge whenever a hard spot, a narrow gorge, or steep inclines lay in the path; then each one helped pull or push. More than once everything had to be taken off; and this even did not fully protect against shocks and damage, which Bell repaired as well as he could.

The third day, Wednesday, June 26th, they came across a vast lake, still frozen by reason of its being sheltered from the sun; the ice was even strong enough to bear both men and sledge. It was a solid mirror which no arctic summers had melted, as was shown by the fact that its borders were surrounded by a dry snow, of which the lower layers evidently belonged to previous years.

From this moment the land grew lower, whence the doctor concluded that it did not extend very far to the north. Besides, it was very likely that New America was merely an island, and did not extend to the Pole. The ground grew more level; in the west a few low hills could be seen in the distance, covered with a bluish mist.

So far they had experienced no hardships; they had suffered from nothing except the reflection of the sun's rays upon the snow, which could easily give them snow-blindness. At any other time they would have travelled by night to avoid this inconvenience, but then there was no night. The snow was fortunately melting away, and it was much less brilliant when it was about turning into water.

June 28th the temperature arose to 45°; this was accompanied with heavy rain, which the travellers endured stoically, even with pleasure, for it hastened the disappearance of the snow. They had to put on their deer-skin moccasins, and change the runners of the sledge. Their journey was delayed, but still they were advancing without any serious obstacles. At times the doctor would pick up

rounded or flat stones like pebbles worn smooth by the waves, and then he thought he was near the Polar Sea; but yet the plain stretched on out of sight. There was no trace of man, no hut, no cairn nor Esquimaux snow-house; they were evidently the first to set foot in this new land. The Greenlanders never had gone so far, and yet this country offered plenty of game for the support of that half-starved people. Sometimes bears appeared in the distance, but they showed no signs of attacking; afar off were herds of musk-oxen and reindeer. The doctor would have liked to catch some of the latter to harness to the sledge; but they were timid, and not to be caught alive.

The 29th, Bell shot a fox, and Altamont was lucky enough to bring down a medium-sized musk-ox, after giving his companions a high idea of his bravery and skill; he was indeed a remarkable hunter, and so much admired by the doctor. The ox was cut out, and gave plenty of excellent meat. These lucky supplies were always well received; the least greedy could not restrain their joy at the sight of the meat. The doctor laughed at himself when he caught himself admiring these huge joints.

"Let us not be afraid to eat it," he used to say; "a good dinner is a good thing in these expeditions."

"Especially," said Johnson, "when it depends on a better or worse shot."

"You are right, Johnson," replied the doctor; "one thinks less of one's food when one gets a regular supply from the kitchen."

The 30th, the country became unexpectedly rugged, as if it had been upheaved by some volcanic commotion; the cones and peaks increased indefinitely in number, and were very high. A southeast breeze began to blow with violence, and soon became a real hurricane. It rushed across the snow-covered rocks, among the ice-mountains, which, although on the firm land, took the form of hummocks and icebergs; their presence on these lofty plateaus could not be explained even by the doctor, who had an explanation for almost everything. Warm, damp weather succeeded the tempest; it was a genuine thaw; on all sides resounded the cracking of the ice amid the roar of the avalanches.

The travellers carefully avoided the base of these hills; they even took care not to talk aloud, for the sound of the voice could shake the air and cause accident. They were witnesses of frequent and terrible avalanches which they could not have foreseen. In fact, the main peculiarity of polar avalanches is their terrible swiftness; therein they differ from those of Switzerland and Norway, where they form a ball, of small size at first, and then, by adding to themselves the snow and rocks in its passage, it falls with increasing swiftness, destroys forests and villages, but taking an appreciable time in its course. Now, it is otherwise in the countries where arctic cold rages; the fall of the block of ice is unexpected and startling; its fall is almost instantaneous, and any one who saw it from beneath would be

certainly crushed by it; the cannon-ball is not swifter, nor lightning quicker; it starts, falls, and crashes down in a single moment with the dreadful roar of thunder, and with dull echoes.

So the amazed spectators see wonderful changes in the appearance of the country; the mountain becomes a plain under the action of a sudden thaw; when the rain has filtered into the fissures of the great blocks and freezes in a single night, it breaks everything by its irresistible expansion, which is more powerful in forming ice than in forming vapor: the phenomenon takes place with terrible swiftness.

No catastrophe, fortunately, threatened the sledge and its drivers; the proper precautions were taken, and every danger avoided. Besides, this rugged, icy country was not of great extent, and three days later, July 3d, the travellers were on smoother ground. But their eyes were surprised by a new phenomenon, which has for a long time claimed the attention of the scientific men of the two worlds. It was this: the party followed a line of hills not more than fifty feet high, which appeared to run on several miles, and their eastern side was covered with red snow.

The surprise and even the sort of alarm which the sight of this crimson curtain gave them may be easily imagined. The doctor hastened, if not to reassure, at least to instruct, his companions; he was familiar with this red snow and the chemical analysis made of it by Wollaston, Candolle, Bäuer. He told them this red snow was not found

in the arctic regions alone, but in Switzerland in the middle of the Alps; De Saussure collected a large quantity on the Breven in 1760; and since then Captains Ross, Sabine, and others had brought some back from their arctic journeys.

Altamont asked the doctor about the nature of this extraordinary substance. He was told that its color came simply from the presence of organic corpuscles. For a long time it was a question whether these corpuscles were animal or vegetable; but it was soon ascertained that they belonged to the family of microscopic mushrooms, of the genus *Uredo*, which B auer proposed naming *Uredo vivalis*.

Then the doctor, prying into the snow with his cane, showed his companions that the scarlet layer was only nine feet deep, and he bade them calculate how many of these mushrooms there might be on a space of many miles, when scientific men estimated forty-three thousand in a square centimetre.

This coloring probably ran back to a remote period, for the mushrooms were not decomposed by either evaporation or the melting of the snow, nor was their color altered.

The phenomenon, although explained, was no less strange. Red is a rare color in nature; the reflection of the sun's rays on this crimson surface produced strange effects; it gave the surrounding objects, men and animals, a brilliant appearance, as if they were lighted by an

inward flame; and when the snow was melting, streams of blood seemed to be flowing beneath the travellers' feet.

The doctor, who had not been able to examine this substance when he saw it on crimson cliffs from Baffin's Bay, here examined it at his ease, and gathered several bottlefuls of it.

This red ground, the "Field of Blood," as he called it, took three hours' walk to pass over, and then the country resumed its habitual appearance.

CHAPTER XX.

FOOTPRINTS ON THE SNOW.

July 4th a dense fog prevailed. They were only able with the greatest difficulty to keep a straight path; they had to consult the compass every moment. Fortunately there was no accident in the darkness, except that Bell lost his snow-shoes, which were broken against a projecting rock.

"Well, really," said Johnson, "I thought, after seeing the Mersey and the Thames, that I knew all about fogs, but I see I was mistaken."

"We ought," answered Bell, "to light torches as is done at London and Liverpool."

"Why not?" asked the doctor; "that's a good idea; it wouldn't light up the road much, but we could see the guide, and follow him more easily."

"But what shall we do for torches?"

"By lighting tow dipped in alcohol, and fastening to the end of walking-sticks."

"Good!" said Johnson; "and we shall soon have it ready."

A quarter of an hour later the little band was walking along with torches faintly lighting up the general gloom.

But if they went straighter, they did not go quicker, and the fog lasted till July 6th; the earth being cold then, a blast of north-wind carried away all the mist as if it had been rags. Soon the doctor took an observation, and ascertained that meanwhile they had not made eight miles a day.

The 6th, they made an effort to make up for lost time, and they set out early. Altamont and Bell were ahead, choosing the way and looking out for game. Duke was with them. The weather, with its surprising fickleness, had become very clear and dry; and although the guides were two miles from the sledge, the doctor did not miss one of their movements. He was consequently very much startled to see them stop suddenly, and remain in a position of surprise; they seemed to be gazing into the distance, as if scanning the horizon. Then they bent down to the ground and seemed to be examining it closely, and they arose in evident amazement. Bell seemed to wish to push on, but Altamont held him back.

"What can they be doing?" asked the doctor of Johnson.

"I know no more than you, Doctor; I don't understand their gestures."

"They have found the track of some animals," answered Hatteras.

"That's not it," said the doctor.

"Why not?"

"Because Duke would bark."

"Still, they've seen marks of some sort."

"Let us go on," said Hatteras; "we shall soon know."

Johnson urged on the dogs, who quickened their pace.

In twenty minutes the five were together, and Hatteras, the doctor, and Johnson were as much surprised as Bell and Altamont.

There were in the snow indubitable traces of men, as fresh as if they had just been made.

"They are Esquimaux," said Hatteras.

"Yes," said the doctor, "there is no doubt of that!"

"You think so?" said Altamont.

"Without any doubt."

"Well, and this mark?" continued Altamont, pointing to another print, which was often repeated.

"That one?"

"Do you think it was made by an Esquimau?"

The doctor examined it carefully, and was stupefied. The print of a European shoe, with nails, sole, and heel, was clearly stamped in the snow. There could be no further doubt; a man, a stranger, had been there.

"Europeans here!" cried Hatteras.

"Evidently," said Johnson.

"And still," said the doctor, "it is so unlikely, that we ought to look twice before being sure."

Thereupon he looked twice, three times, at the print, and he was obliged to acknowledge its extraordinary origin.

De Foe's hero was not more amazed when he saw the footprint on the sand of his island; but if he was afraid, Hatteras was simply angry. A

European so near the Pole!

They pushed on to examine the footprints; for a quarter of a mile they were continually repeated, mingled with marks of moccasins; then they turned to the west. When they had reached this point they consulted as to whether they should follow them any farther.

"No," said Hatteras. "Let us go on--"

He was interrupted by an exclamation of the doctor, who had just picked up on the snow an object even more convincing, and of the origin of which there could be no doubt. It was the object-glass of a pocket telescope.

"Now," he said, "we can't doubt that there is a stranger here--"

"Forward!" cried Hatteras.

He uttered this word so sharply that each one obeyed, and the sledge resumed its monotonous progress.

They all scanned the horizon attentively, except Hatteras, who was filled with wrath and did not care to see anything. Still, since they ran the risk of coming across a band of travellers, they had to take precautions; it was very disappointing to see any one ahead of them on the route. The doctor, although not as angry as Hatteras, was somewhat

vexed, in spite of his usual philosophy. Altamont seemed equally annoyed; Johnson and Bell muttered threatening words between their teeth.

"Come," said the doctor, "let us take heart against our bad fortune."

"We must confess," said Johnson, without being heard by Altamont, "that if we find the place taken, it would disgust us with journeying to the Pole."

"And yet," answered Bell, "there is no possibility of doubting--"

"No," retorted the doctor; "I turn it all over in vain, and say it is improbable, impossible; I have to give it up. This shoe was not pressed into the snow without being at the end of a leg, and without the leg being attached to a human body. I could forgive Esquimaux, but a European!"

"The fact is," answered Johnson, "that if we are going to find all the rooms taken in the hotel of the end of the world, it would be annoying."

"Very annoying," said Altamont.

"Well, we shall see," said the doctor.

And they pushed on. The day ended without any new fact to indicate the presence of strangers in this part of New America, and they at last encamped for the evening.

A rather strong wind from the south had sprung up, and obliged them to seek a secure shelter for their tent in the bottom of a ravine. The sky was threatening; long clouds passed rapidly through the air; they passed near the ground, and so quickly that the eye could hardly follow them. At times some of the mist touched the ground, and the tent resisted with difficulty the violence of the hurricane.

"It's going to be a nasty night," said Johnson, after supper.

"It won't be cold, but stormy," answered the doctor; "let us take precautions, and make the tent firm with large stones."

"You are right, Doctor; if the wind should carry away the canvas, Heaven alone knows where we should find it again."

Hence they took every precaution against such a danger, and the wearied travellers lay down to sleep. But they found it impossible. The tempest was loose, and hastened northward with incomparable violence; the clouds were whirling about like steam which has just escaped from a boiler; the last avalanches, under the force of the hurricane, fell into the ravines, and their dull echoes were distinctly heard; the air seemed to be struggling with the water, and

fire alone was absent from this contest of the elements.

Amid the general tumult their ears distinguished separate sounds, not the crash of heavy falling bodies, but the distinct cracking of bodies breaking; a clear snap was frequently heard, like breaking steel, amid the roar of the tempest. These last sounds were evidently avalanches torn off by the gusts, but the doctor could not explain the others. In the few moments of anxious silence, when the hurricane seemed to be taking breath in order to blow with greater violence, the travellers exchanged their suppositions.

"There is a sound of crashing," said the doctor, "as if icebergs and ice-fields were being blown against one another."

"Yes," answered Altamont; "one would say the whole crust of the globe was falling in. Say, did you hear that?"

"If we were near the sea," the doctor went on, "I should think it was ice breaking."

"In fact," said Johnson, "there is no other explanation possible."

"Can we have reached the coast?" asked Hatteras.

"It's not impossible," answered the doctor. "Hold on," he said, after a very distinct sound; "shouldn't you say that was the crashing of

ice? We may be very near the ocean."

"If it is," continued Hatteras, "I should not be afraid to go across the ice-fields."

"O," said the doctor, "they must be broken by such a tempest! We shall see to-morrow. However that may be, if any men have to travel in such a night as this, I pity them."

The hurricane raged ten hours without cessation, and no one of those in the tent had a moment's sleep; the night passed in profound uneasiness. In fact, under such circumstances, every new incident, a tempest, an avalanche, might bring serious consequences. The doctor would gladly have gone out to reconnoitre, but how could he with such a wind raging?

Fortunately the hurricane grew less violent early the next day; they could leave the tent which had resisted so sturdily. The doctor, Hatteras, and Johnson went to a hill about three hundred feet high, which they ascended without difficulty. Their eyes beheld an entirely altered country, composed of bare rocks, sharp ridges entirely clear of ice. It was summer succeeding winter, which had been driven away by the tempest; the snow had been blown away by the wind before it could melt, and the barren soil reappeared.

But Hatteras's glances were all turned towards the north, where the

horizon appeared to be hidden by dark mist.

"That may be the effect of the ocean," said the doctor.

"You are right," said Hatteras; "the sea must be there."

"That's what we call the blink of the water," said Johnson.

"Exactly," said the doctor.

"Well, let us start," said Hatteras, "and push on to this new ocean."

"That rejoices my heart," said Clawbonny to the captain.

"Certainly," was the enthusiastic answer. "Soon we shall have reached the Pole! and doesn't the prospect delight you, too, Doctor?"

"It does. I am always happy, and especially about the happiness of others!"

The three Englishmen returned to the ravine; the sledge was made ready, and they left the camp and resumed their march. Each one dreaded finding new tracks, but all the rest of the way they saw no trace of any human being. Three hours later they reached the coast.

"The sea! the sea!" they all shouted.

"And the open sea!" cried the captain.

It was ten o'clock in the morning.

In fact, the hurricane had cleared up the polar basin; the shattered ice was floating away in every direction; the largest pieces, forming icebergs, had just weighed anchor and were sailing on the open sea. The wind had made a harsh attack upon the field. Fragments of ice covered the surrounding rocks. The little which was left of the ice-field seemed very soft; on the rocks were large pieces of sea-weed. The ocean stretched beyond the line of vision, with no island or new land peering above the horizon.

In the east and west were two capes gently sloping to the water; at their end the sea was breaking, and the wind was carrying a slight foam. The land of New America thus died away in the Polar Ocean, quietly and gently. It rounded into an open bay, with roadstead enclosed by the two promontories. In the middle a rock made a little natural harbor, sheltered against three points of the compass; it ran back into the land in the broad bed of a stream, through which ran down the melted snows of winter, now forming a perfect torrent.

Hatteras, after noticing the outline of the coast, resolved to make the preparations for departure that very day, to launch the boat, to put the unloaded sledge on board for future excursions. That took all

day; then the tent was raised, and after a comfortable meal work began. Meanwhile the doctor took out his instruments to take an observation and determine the position of a part of the bay. Hatteras hurried on the work; he was anxious to start; he wanted to leave the land, and to be in advance in case any others should reach the sea.

At five o'clock in the evening Johnson and Bell had nothing to do but to fold their arms. The launch was rocking gently in her little harbor, with her mast set, her jib lowered, and her foresail in the brails; the provisions and most of the things on the sledge had been put on board; only the tent and a little of the camping material remained to be put on board the next day. The doctor found all these preparations complete on his return. When he saw the launch quietly sheltered from the wind, it occurred to him to give a name to the little harbor, and he proposed that of Altamont. This proposition was unanimously agreed to. So it was named Altamont Harbor.

According to the doctor's calculations, it lay in latitude $87^{\circ} 5'$, and longitude $118^{\circ} 35'$ E. of Greenwich; that is to say, less than three degrees from the Pole. The band had gone more than two hundred miles from Victoria Bay to Altamont Harbor.

CHAPTER XXI.

THE OPEN SEA.

The next morning Johnson and Bell set about carrying on board the camping material. At eight o'clock all the preparations for departure were complete. At the moment of starting the doctor's thoughts returned to the footprints they had seen. Were these men trying to gain the North? Had they any means of crossing the Polar Sea! Should they meet them again? For three days they had come across no trace of the travellers, and certainly, whoever they were, they could not have reached Altamont Harbor. That was a place which they were the first to set foot in. But the doctor, who was harassed by his thoughts, wanted to take a last view of the country, and he ascended a little hill about a hundred feet high, whence he had a distant view to the south.

When he had reached the top, he put his glass to his eyes. Great was his surprise when he found he could not see anything, either at a distance on the plains, or within a few feet of him. This seemed very odd; he made another examination, and at last he looked at the glass,--the object-glass was missing.

"The object-glass!" he cried.

The sudden revelation may be imagined; he uttered a cry so loud as to be heard by his companions, and they were much astonished at seeing

him running down the hill.

"Well, what's the matter now?" asked Johnson.

The doctor was out of breath, and unable to speak. At length he managed to bring out,--

"The footprints!--the expedition!--"

"Well, what?" said Hatteras; "are they here?"

"No, no!" resumed the doctor,--"the object-glass, mine!"

And he showed his own glass.

"O, ho!" cried the American, "so you lost--"

"Yes!"

"But then the footprints--"

"Our own!" cried the doctor. "We lost our way in the fog! We went around in a circle, and came across our own footprints!"

"But the print of the shoes?" asked Hatteras.

"Bell's, you know, who walked all day in the snow after breaking his snow-shoes."

"That's true," said Bell.

Their mistake was so clear, that they all, except Hatteras, burst out laughing, and he was none the less pleased at the discovery.

"We were stupid enough," said the doctor, when they had stopped laughing. What good guesses we made! Strangers up here! Really, we ought to think before speaking. Well, since we are easy on this point, we can't do better than start."

"Forward!" said Hatteras.

A quarter of an hour later each one had taken his place on board of the launch, which sailed out of Altamont Harbor under mainsail and jib. This voyage began Wednesday, July 10th; they were then very near the Pole, exactly one hundred and seventy-five miles from it. However small the land might be at that point of the globe, the voyage would certainly be a short one. The wind was light, but fair. The thermometer stood at 50°; it was really warm.

The launch had not been injured by the journey on the sledge; it was in perfect order, and sailed easily. Johnson was at the helm; the doctor, Bell, and Altamont were lying as best they might among the

load, partly on deck, partly below.

Hatteras stood forward, with his eyes turned to the mysterious point, which attracted him with an irresistible power, as the magnetic pole attracts the needle. If there should be any land, he wanted to be the first to see it. This honor really belonged to him. He noticed, besides, that the surface of the Polar Sea was covered with short waves, like those of land locked seas. This he considered a proof of the nearness of the opposite shore, and the doctor shared his opinion.

Hatteras's desire to find land at the North Pole is perfectly comprehensible. His disappointment would have been great if the uncertain sea covered the place where he wanted to find a piece of land, no matter how small! In fact, how could he give a special name to an uncertain portion of the sea? How plant the flag of his country among the waves? How take possession, in the name of her Gracious Majesty, of the liquid element?

So Hatteras, compass in hand, gazed steadily at the north. There was nothing that he could see between him and the horizon, where the line of the blue water met the blue sky. A few floating icebergs seemed to be leaving the way free for these bold sailors. The appearance of this region was singularly strange. Was this impression simply the result of the nervous excitement of the travellers? It is hard to say. Still, the doctor in his journal has described the singular appearance of the ocean; he spoke of it as Penny did, according to whom these countries

present an appearance "offering the most striking contrast of a sea filled with millions of living creatures."

The sea, with its various colors, appeared strangely transparent, and endowed with a wonderful dispersive quality, as if it had been made with carburet of sulphur. This clearness let them see down into immeasurable depths; it seemed as if the sea were lit up like a large aquarium; probably some electric phenomenon at the bottom of the sea lit it up. So the launch seemed hung in a bottomless abyss.

On the surface of the water the birds were flying in large flocks, like thick clouds big with a storm. Aquatic birds of all sorts were there, from the albatross which is common to the south, to the penguin of the arctic seas, but of enormous size. Their cries were deafening. In considering them the doctor found his knowledge of natural history too scanty; many of the names escaped him, and he found himself bowing his head when their wings beat the air.

Some of these large birds measured twenty feet from tip to tip; they covered the whole launch with their expanded wings; and there were legions of these birds, of which the names had never appeared in the London "Index Ornithologus." The doctor was dejected and stupefied at finding his science so faulty. Then, when his glance fell from the wonders of the air to the calm surface of the ocean, he saw no less astonishing productions of the animal kingdom, among others, medusæ thirty feet broad; they served as food for the other fish, and they

floated like islands amid the sea-weed. What a difference from the microscopic medusæ observed in the seas of Greenland by Scoresby, and of which that explorer estimated the number at twenty-three trillions eight hundred and ninety-eight billions of millions in a space of two square miles!

Then the eye glancing down into the transparent water, the sight was equally strange, so full was it of fishes; sometimes the animals were swimming about below, and the eye saw them gradually disappearing, and fading away like spectres; then they would leave the lower layers and rise to the surface. The monsters seemed in no way alarmed at the presence of the launch; they even passed near it, rubbing their fins against it; this, which would have alarmed whalers, did not disturb these men, and yet the sea-monsters were very large.

Young sea-calves played about them; the sword-fish, with its long, narrow, conical sword, with which it cleaves the ice, was chasing the more timid cetacea; numberless spouting whales were clearly to be heard. The sword-caper, with its delicate tail and large caudal fins, swam with incomprehensible quickness, feeding on smaller animals, such as the cod, as swift as itself; while the white whale, which is more inactive, swallowed peacefully the tranquil, lazy mollusks.

Farther down were Greenland anamaks, long and dark; huge sperm-whales, swimming in the midst of ambergris, in which took place thomeric battles that reddened the ocean for many miles around; the great

Labrador tegusik. Sharp-backed dolphins, the whole family of seals and walruses, sea-dogs, horses and bears, lions and elephants, seemed to be feeding on the rich pastures; and the doctor admired the numberless animals, as he would have done the crustacea in the crystal basins of the zoölogical garden.

What beauty, variety, and power in nature! How strange and wonderful everything seemed in the polar regions!

The air acquired an unnatural purity; one would have said it was full of oxygen; the explorers breathed with delight this air, which filled them with fresher life; without taking account of the result, they were, so to speak, exposed to a real consuming fire, of which one can give no idea, not even a feeble one. Their emotions, their breathing and digestion, were endowed with superhuman energy; their ideas became more excited; they lived a whole day in an hour.

Through all these wonders the launch pushed on before a moderate breeze, occasionally feeling the air moved by the albatrosses' wings.

Towards evening, the coast of New America disappeared beneath the horizon. In the temperate zones, as well as at the equator, night falls; but here the sun simply described a circle parallel to the line of the horizon. The launch, bathed in its oblique rays, could not lose sight of it.

The animate beings of these regions seemed to know the approach of evening as truly as if the sun had set; birds, fish, cetacea, all disappeared. Whither? To the depths of the ocean? Who could say? But soon total silence succeeded to their cries, and the sound of their passage through the water; the sea grew calmer and calmer, and night retained its gentle peace even beneath the glowing sun.

Since leaving Altamont Harbor the launch had made one degree to the north; the next day nothing appeared on the horizon, neither projecting peaks nor those vague signs by which sailors detect their nearness to land.

The wind was good, but not strong, the sea not high; the birds and fish came as thick as the day before; the doctor, leaning over the gunwale, could see the cetacea rising slowly to the surface; a few icebergs and scattered pieces of ice alone broke the monotony of the ocean.

But the ice grew rarer, and was not enough to interfere with the boat. It is to be remembered that the launch was then ten degrees above the pole of cold; and as to the parallels of temperature, they might as well have been ten degrees to the other side. There was nothing surprising in the sea being open at this epoch, as it must have been at Disco Island in Baffin's Bay. So a sailing vessel would have plenty of sailing room in the summer months.

This observation had a great practical importance; in fact, if whalers can ever get to the polar basin, either by the seas of North America or those of the north of Asia, they are sure of getting full cargoes, for this part of the ocean seems to be the universal fishing-pond, the general reservoir of whales, seals, and all marine animals. At noon the line of the horizon was still unbroken; the doctor began to doubt of the existence of a continent in so high latitudes.

Still, as he reflected, he was compelled to believe in the existence of an arctic continent; in fact, at the creation of the world, after the cooling of the terrestrial crust, the waters formed by the condensation of the atmospheric vapor were compelled to obey the centrifugal force, to fly to the equator and leave the motionless extremities of the globe. Hence the necessary emersion of the countries near the Pole. The doctor considered this reasoning very just. And so it seemed to Hatteras.

Hence the captain still tried to pierce the mists of the horizon. His glass never left his eyes. In the color of the water, the shape of the waves, the direction of the wind, he tried to find traces of neighboring land. His head was bent forward, and even one who did not know his thoughts would have admired, so full was his attitude of energetic desire and anxious interrogation.

CHAPTER XXII.

THE APPROACH TO THE POLE.

The time flew by in this uncertainty. Nothing appeared on the sharply defined circle of the sea; nothing was to be seen save sky and sea,--not one of those floating land-plants which rejoiced the heart of Christopher Columbus as he was about to discover America. Hatteras was still gazing. At length, at about six o'clock in the evening, a shapeless vapor appeared at a little height above the level of the sea; it looked like a puff of smoke; the sky was perfectly cold, so this vapor was no cloud; it would keep appearing and disappearing, as if it were in commotion. Hatteras was the first to detect this phenomenon; he examined it with his glass for a whole hour.

Suddenly, some sure sign apparently occurred to him, for he stretched out his arms to the horizon and cried in a loud voice,--

"Land, ho!"

At these words each one sprang to his feet as if moved by electricity.

A sort of smoke was clearly rising above the sea.

"I see it," cried the doctor.

"Yes! certainly!--yes!" said Johnson.

"It's a cloud," said Altamont.

"It's land!" answered Hatteras, as if perfectly convinced.

But, as often happens with objects that are indistinct in the distance, the point they had been looking at seemed to have disappeared. At length they found it again, and the doctor even fancied that he could see a swift light twenty or twenty-five miles to the north.

"It's a volcano!" he cried.

"A volcano?" said Altamont.

"Without doubt."

"At this high latitude?"

"And why not?" continued the doctor; "isn't Iceland a volcanic land, so to speak, made of volcanoes?"

"Yes, Iceland," said the American, "but so near the Pole!"

"Well, didn't Commodore James Ross find in the Southern Continent two active volcanoes, Erebus and Terror by name, in longitude 170° and

latitude 78°? Why then shouldn't there be volcanoes at the North Pole?"

"It may be so, after all," answered Altamont.

"Ah," cried the doctor, "I see it clearly! It is a volcano."

"Well," said Hatteras, "let us sail straight towards it."

"The wind is changing," said Johnson.

"Haul on the fore-sheet, and bring her nearer the wind."

But this manoeuvre only turned the launch away from the point they had been gazing at, and even with their closest examination they could not find it again. Still, they could not doubt that they were nearing land. They had seen, if they had not reached, the object of their voyage, and within twenty-four hours they would set foot on this unknown shore. Providence, after letting them get so near, would not drive them back at the last moment.

Still, no one manifested the joy which might have been expected under the circumstances; each one wondered in silence what this polar land might be. The animals seemed to shun it; at evening the birds, instead of seeking refuge there, flew with all speed to the south. Could not a single gull or ptarmigan find a resting-place there? Even the fish,

the large cetacea, avoided that coast. Whence came this repugnance, which was shared by all the animals they saw, unless from terror?

The sailors experienced the same feeling; they gave way to the feelings inspired by the situation, and gradually each one felt his eyelids grow heavy. It was Hatteras's watch. He took the tiller; the doctor, Altamont, Johnson, and Bell fell asleep, stretched on the benches, and soon were dreaming soundly. Hatteras struggled against his sleepiness; he wished to lose not a moment; but the gentle motion of the launch rocked him, in spite of himself, into a gentle sleep.

The boat made hardly any headway; the wind did not keep her sails full. Far off in the west a few icebergs were reflecting the sun's rays, and glowing brightly in the midst of the ocean.

Hatteras began to dream. He recalled his whole life, with the incalculable speed of dreams; he went through the winter again, the scenes at Victoria Bay, Fort Providence, Doctor's House, the finding the American beneath the snow. Here remoter incidents came up before him; he dreamed of the burning of the *Forward*, of his treacherous companions who had abandoned him. What had become of them? He thought of Shandon, Wall, and the brutal Pen. Where were they now? Had they succeeded in reaching Baffin's Bay across the ice? Then he went further back, to his departure from England, to his previous voyages, his failures and misfortunes. Then he forgot his present situation, his success so near at hand, his hopes half realized. His dreams

carried him from joy to agony. So it went on for two hours; then his thoughts changed; he began to think of the Pole, and he saw himself at last setting foot on this English continent, and unfolding the flag of the United Kingdom. While he was dozing in this way a huge, dark cloud was climbing across the sky, throwing a deep shadow over the sea.

It is difficult to imagine the great speed with which hurricanes arise in the arctic seas. The vapors which rise under the equator are condensed above the great glaciers of the North, and large masses of air are needed to take their place. This can explain the severity of arctic storms.

At the first shock of the wind the captain and his friends awoke from their sleep, ready to manage the launch. The waves were high and steep. The launch tossed helplessly about, now plunged into deep abysses, now oscillated on the pointed crest of a wave, inclining often at an angle of more than forty-five degrees. Hatteras took firm hold of the tiller, which was noisily sliding from one side to the other. Every now and then some strong wave would strike it and nearly throw him over. Johnson and Bell were busily occupied in bailing out the water which the launch would occasionally ship.

"This is a storm we hardly expected," said Altamont, holding fast to his bench.

"We ought to expect anything here," answered the doctor.

These remarks were made amid the roar of the tempest and the hissing of the waves, which the violence of the wind reduced to a fine spray. It was nearly impossible for one to hear his neighbor. It was hard to keep the boat's head to the north; the clouds hid everything a few fathoms from the boat, and they had no mark to sail by. This sudden tempest, just as they were about attaining their object, seemed full of warning; to their excited minds it came like an order to go no farther. Did Nature forbid approach to the Pole? Was this point of the globe surrounded by hurricanes and tempests which rendered access impossible? But any one who had caught sight of those men could have seen that they did not flinch before wind or wave, and that they would push on to the end. So they struggled on all day, braving death at every instant, and making no progress northward, but also losing no ground; they were wet through by the rain and waves; above the din of the storm they could hear the hoarse cries of the birds.

But at six o'clock in the evening, while the waves were rising, there came a sudden calm. The wind stopped as if by a miracle. The sea was smooth, as if it had not felt a puff of wind for twelve hours. The hurricane seemed to have respected this part of the Polar Ocean. What was the reason? It was an extraordinary phenomenon, which Captain Sabine had witnessed in his voyages in Greenland seas. The fog, without lifting, was very bright. The launch drifted along in a zone of electric light, an immense St. Elmo fire, brilliant but without heat. The mast, sail, and rigging stood out black against the

phosphorescent air; the men seemed to have plunged into a bath of transparent rays, and their faces were all lit up. The sudden calm of this portion of the ocean came, without doubt, from the ascending motion of the columns of air, while the tempest, which was a cyclone, turned rapidly about this peaceful centre. But this atmosphere on fire suggested a thought to Hatteras.

"The volcano!" he cried.

"Is it possible?" asked Bell.

"No, no!" answered the doctor; "we should be smothered if the flames were to reach us."

"Perhaps it is its reflection in the fog," said Altamont.

"No. We should have to admit that we were near land, and in that case we should hear the eruption."

"But then?" asked the captain.

"It is a phenomenon," said the doctor, "which has been seldom observed hitherto. If we go on we cannot help leaving this luminous sphere and re-entering storm and darkness."

"Whatever it is, push on!" said Hatteras.

"Forward!" cried his companions, who did not wish to delay even for breathing-time in this quiet spot. The bright sail hung down the glistening mast; the oars dipped into the glowing waves, and appeared to drip with sparks. Hatteras, compass in hand, turned the boat's head to the north; gradually the mist lost its brightness and transparency; the wind could be heard roaring a short distance off; and soon the launch, lying over before a strong gust, re-entered the zone of storms. Fortunately, the hurricane had shifted a point towards the south, and the launch was able to run before the wind, straight for the Pole, running the risk of foundering, but sailing very fast; a rock, reef, or piece of ice might at any moment rise before them, and crush them to atoms. Still, no one of these men raised a single objection, nor suggested prudence. They were seized with the madness of danger. Thirst for the unknown took possession of them. They were going along, not blinded, but blindly, finding their speed only too slow for their impatience. Hatteras held the tiller firm amid the waves lashed into foam by the tempest. Still the proximity of land became evident. Strange signs filled the air. Suddenly the mist parted like a curtain torn by the wind, and for a moment, brief as a flash of lightning, a great burst of flame could be seen rising towards the sky.

"The volcano! the volcano!" was the cry which escaped from the lips of all; but the strange vision disappeared at once; the wind shifted to the southeast, took the launch on her quarter, and drove her from this

unapproachable land.

"Malediction!" said Hatteras, shifting her sail; "we were not three miles from land!"

Hatteras could not resist the force of the tempest; but without yielding to it, he brought the boat about in the wind, which was blowing with fearful violence. Every now and then the launch leaned to one side, so that almost her whole keel was exposed; still she obeyed her rudder, and rose like a stumbling horse which his rider brings up by spur and reins. Hatteras, with his hair flying and his hand on the tiller, seemed to be part of the boat, like horse and man at the time of the centaurs. Suddenly a terrible sight presented itself to their eyes. Within less than ten fathoms a floe was balancing on the waves; it fell and rose like the launch, threatening in its fall to crush it to atoms. But to this danger of being plunged into the abyss was added another no less terrible; for this drifting floe was covered with white bears, crowded together and wild with terror.

"Bears! bears!" cried Bell, in terror.

And each one gazed with terror. The floe pitched fearfully, sometimes at such an angle that the bears were all rolled together. Then their roars were almost as loud as the tempest; a formidable din arose from the floating menagerie.

If the floe had upset, the bears would have swum to the boat and clambered aboard.

For a quarter of an hour, which was as long as a century, the launch and floe drifted along in consort, twenty fathoms from one another at one moment and nearly running together the next, and at times they were so near to one another, the bears need only have dropped to have got on board. The Greenland dogs trembled from terror; Duke remained motionless. Hatteras and his companions were silent; it did not occur to them to put the helm down and sail away, and they went straight on. A vague feeling, of astonishment rather than terror, took possession of them; they admired this spectacle which completed the struggle of the elements. Finally the floe drifted away, borne by the wind, which the launch was able to withstand, as she lay with her head to the wind, and it disappeared in the mist, its presence being known merely by the distant roaring of the bears.

At that moment the fury of the tempest redoubled; there was an endless unchaining of atmospheric waves; the boat, borne by the waves, was tossed about giddily; her sail flew away like a huge white bird; a whirlpool, a new Maelstrom, formed among the waves; the boat was carried so fast that it seemed to the men as if the rapidly revolving water were motionless. They were gradually sinking down. There was an irresistible power dragging them down and engulfing them alive. All five arose. They looked at one another with terror. They grew dizzy. They felt an undefinable dread of the abyss! But suddenly the launch

arose perpendicularly. Her prow was higher than the whirling waves; the speed with which she was moving hurled her beyond the centre of attraction, and escaping by the tangent of this circumference which was making more than a thousand turns a second, she was hurled away with the rapidity of a cannon-ball.

Altamont, the doctor, Johnson, and Bell were thrown down among the seats. When they rose, Hatteras had disappeared. It was two o'clock in the morning.

CHAPTER XXIII.

THE ENGLISH FLAG.

One cry, bursting from the lips of the other four, succeeded their first stupefaction.

"Hatteras!" cried the doctor.

"Gone!" said Johnson and Bell.

"Lost!"

They looked about, but nothing was to be seen on the storm-tossed sea. Duke barked despairingly; he tried to spring into the water, but Bell managed to hold him.

"Take a place at the helm, Altamont," said the doctor; "let us try everything to save the captain."

Johnson and Bell took their seats. Altamont took the helm, and the launch came into wind again. Johnson and Bell began to row vigorously; for an hour they remained at the scene of the accident. They sought earnestly, but in vain. The unfortunate Hatteras was lost in the storm! Lost, so near the Pole, so near the end, of which he had had but a glimpse!

The doctor called aloud, and fired the guns; Duke added his howling, but there was no answer. Then profound grief seized Clawbonny; his head sank into his hands, and his companions saw that he was weeping. In fact, at this distance from land, with a scrap of wood to hold him up, Hatteras could not reach the shore alive; and if anything did come ashore, it would be his disfigured corpse. After hunting for an hour, they decided to turn to the north, and struggle against the last furies of the tempest.

At five o'clock in the morning of July 11th the wind went down; the sea grew quieter; the sky regained its polar clearness, and within three miles of them appeared the land. This continent was but an island, or rather a volcano, peering up like a lighthouse at the North Pole. The mountain, in full eruption, was hurling forth a mass of burning stones and melting rocks. It seemed to be rising and falling beneath the successive blasts as if it were breathing; the things which were cast out reached a great height in the air; amid the jets of flame, torrents of lava were flowing down the side of the mountain; here creeping between steaming rocks, there falling in cascades amid the purple vapor: and lower down a thousand streams united in one large river, which ran boiling into the sea.

The volcano seemed to have but a single crater, whence arose a column of fire, lighted by transverse rays; one would have said that part of the magnificence of the phenomenon was due to electricity. Above the

flames floated an immense cloud of smoke, red below, black above. It rose with great majesty, and unrolled into huge layers.

The sky at a considerable height had an ashy hue; the darkness, which was so marked during the tempest, and of which the doctor could give no satisfactory explanation, evidently came from the ashes, which completely hid the sun. He remembered a similar fact that took place in 1812, at the Barbadoes, which at noon was plunged into total darkness by the mass of cinders thrown from the crater of Isle St. Vincent.

This enormous volcano, jutting up in mid-ocean, was about six thousand feet high, very nearly the altitude of Hecla. A line from the summit to the base would form with the horizon an angle of about eleven degrees. It seemed to rise from the bosom of the waves as the launch approached it. There was no trace of vegetation. There was no shore; it ran down steep to the sea.

"Shall we be able to land?" said the doctor.

"The wind is carrying us there," answered Altamont.

"But I can't see any beach on which we could set foot."

"So it seems from here," answered Johnson; "but we shall find some place for our boat; that is all we need."

"Let us go on, then!" answered Clawbonny, sadly.

The doctor had no eyes for the strange continent which was rising before him. The land of the Pole was there, but not the man who had discovered it. Five hundred feet from the rocks the sea was boiling under the action of subterranean fires. The island was from eight to ten miles in circumference, no more; and, according to their calculation, it was very near the Pole, if indeed the axis of the world did not pass exactly through it. As they drew near they noticed a little fiord large enough to shelter their boat; they sailed towards it, filled with the fear of finding the captain's body cast ashore by the tempest.

Still, it seemed unlikely that any corpse should rest there; there was no beach, and the sea beat against the steep rocks; thick ashes, on which no human foot had ever stepped, covered the ground beyond the reach of the waves. At last the launch slipped between the breakers, and there she was perfectly sheltered against the surf. Then Duke's lamentable howling redoubled; the poor animal called for the captain with his sad wails among the rocks. His barking was vain; and the doctor caressed him, without being able to calm him, when the faithful dog, as if he wanted to replace his master, made a prodigious leap, and was the first to get ashore amid the dust and ashes which flew about him.

"Duke! Duke!" said the doctor.

Duke did not hear him, but disappeared. The men then went ashore, and made the launch fast. Altamont was preparing to climb up a large pile of rocks, when Duke's distant barking was heard; it expressed pain, not wrath.

"Listen!" said the doctor.

"Has he got on the track of some animal?" asked the boatswain.

"No," answered the doctor, quivering with emotion; "he's mourning, crying! Hatteras's body is there!"

At these words the four men started after Duke, in the midst of blinding cinders; they reached the end of the fiord, a little place ten feet broad, where the waves were gently breaking. There Duke was barking near a body wrapped up in the English flag.

"Hatteras, Hatteras!" cried the doctor, rushing to the body of his friend.

But at once he uttered an explanation which it is impossible to render. This bleeding and apparently lifeless body had just given signs of life.

"Alive, alive!" he cried.

"Yes," said a feeble voice, "living on the land of the Pole, where the tempest cast me up! Living on Queen Island!"

"Hurrah for England!" cried the five together.

"And for America!" added the doctor, holding out one hand to Hatteras and the other to Altamont. Duke, too, hurrahed in his own way, which was as good as any other.

At first these kind-hearted men were wholly given up to the pleasure of seeing their captain again; they felt the tears welling up into their eyes. The doctor examined Hatteras's condition. He was not seriously injured. The wind had carried him to the shore, where it was hard to land; the bold sailor, often beaten back, at last succeeded in clambering upon a rock above the reach of the waves. Then he lost consciousness, after wrapping himself up in his flag, and he only came to himself under Duke's caresses and barking. After receiving a few attentions, Hatteras was able to rise, and, leaning on the doctor's arm, to go to the launch.

"The Pole, the North Pole!" he repeated as he walked along.

"You are happy!" the doctor said to him.

"Yes, happy! And you, my friend, don't you feel happy at being here? This land is the land of the Pole! This sea we have crossed is the sea of the Pole! This air we breathe is the air of the Pole! O, the North Pole, the North Pole!"

As he spoke, Hatteras was the victim of a violent excitement, a sort of fever, and the doctor in vain tried to calm him. His eyes were strangely bright, and his thoughts were boiling within him. Clawbonny ascribed this condition to the terrible perils he had gone through. Hatteras evidently needed rest, and they set about seeking a place to camp. Altamont soon found a grotto in the rocks, which had fallen in such a way as to form a cavern. Johnson and Bell brought provisions there, and let loose the dogs. Towards eleven o'clock everything was prepared for a meal; the canvas of the tent served as a cloth; the breakfast, consisting of pemmican, salt meat, tea and coffee, was set and soon devoured. But first, Hatteras demanded that an observation should be made; he wanted to know its position exactly. The doctor and Altamont then took their instruments, and after taking an observation they found the precise position of the grotto to be latitude $89^{\circ} 59' 15''$. The longitude at this height was of no importance, for all the meridians run together within a few hundred feet higher. So in reality the island was situated at the North Pole, and the ninetieth degree of latitude was only forty-five seconds from there, exactly three quarters of a mile, that is to say, towards the top of the volcano. When Hatteras knew this result, he asked that it should be stated in two documents, one to be placed in a cairn on the shore. So at once

the doctor took his pen and wrote the following document, one copy of which is now in the archives of the Royal Geographical Society in London:--

"July 11, 1861, in north latitude 89° 59' 15", 'Queen Island' was discovered at the North Pole by Captain Hatteras, commanding the brig Forward of Liverpool, who has set his name hereto, with his companions. Whoever shall find this document is entreated to forward it to the Admiralty.

(Signed) JOHN HATTERAS, Captain of the Forward.

DR. CLAWBONNY.

ALTAMONT, Captain of the Porpoise.

JOHNSON, Boatswain.

BELL, Carpenter."

"And now, my friends, to table!" said the doctor, gayly.

CHAPTER XXIV.

POLAR COSMOGRAPHY.

Of course, to eat at table, they were obliged to sit on the ground.

"But," said Clawbonny, "who wouldn't give all the tables and dining-rooms in the world, to dine in north latitude $89^{\circ} 59' 15''$?"

The thoughts of each one were about their situation. They had no other idea than the North Pole. The dangers they had undergone to reach it, those to overcome before returning, were forgotten in their unprecedented success. What neither Europeans, Americans, nor Asiatics had been able to do, they had accomplished. Hence they were all ready to listen to the doctor when he told them all that his inexhaustible memory could recall about their position. It was with real enthusiasm that he first proposed their captain's health.

"To John Hatteras!" he said.

"To John Hatteras!" repeated the others.

"To the North Pole!" answered the captain, with a warmth that was unusual in this man who was usually so self-restrained, but who now was in a state of great nervous excitement. They touched glasses, and the toasts were followed by earnest hand-shakings.

"It is," said the doctor, "the most important geographical fact of our day! Who would have thought that this discovery would precede that of the centre of Africa or Australia? Really, Hatteras, you are greater than Livingstone, Burton, and Barth! All honor to you!"

"You are right, Doctor," said Altamont; "it would seem, from the difficulty of the undertaking, that the Pole would be the last place discovered. Whenever the government was absolutely determined to know the middle of Africa, it would have succeeded at the cost of so many men and so much money; but here nothing is less certain than success, and there might be obstacles really insuperable."

"Insuperable!" cried Hatteras with warmth; "there are no insuperable obstacles; there are more or less determined minds, that is all!"

"Well," said Johnson, "we are here, and it is well. But, Doctor, will you tell me, once for all, what there is so remarkable about the Pole?"

"It is this, Johnson, that it is the only motionless part of the globe, while all the rest is turning with extreme rapidity."

"But I don't see that we are more motionless here than at Liverpool."

"No more than you perceive the motion at Liverpool; and that is

because in both cases you participate in the movement or the repose. But the fact is no less certain. The earth rotates in twenty-four hours, and this motion is on an axis with its extremities at the two poles. Well, we are at one of the extremities of the axis, which is necessarily motionless."

"So," said Bell, "when our countrymen are turning rapidly, we are perfectly still?"

"Very nearly, for we are not exactly at the Pole."

"You are right, Doctor," said Hatteras seriously, and shaking his head; "we are still forty-five seconds from the precise spot."

"That is not far," answered Altamont, "and we can consider ourselves motionless."

"Yes," continued the doctor, "while those living at the equator move at the rate of three hundred and ninety-six leagues an hour."

"And without getting tired!" said Bell.

"Exactly!" answered the doctor.

"But," continued Johnson, "besides this movement of rotation, doesn't the earth also move about the sun?"

"Yes, and this takes a year."

"Is it swifter than the other?"

"Infinitely so; and I ought to say that, although we are at the Pole, it takes us with it as well as all the people in the world. So our pretended immobility is a chimera: we are motionless with regard to the other points of the globe, but not so with regard to the sun."

"Good!" said Bell, with an accent of comic regret; "so I, who thought I was still, was mistaken! This illusion has to be given up! One can't have a moment's peace in this world."

"You are right, Bell," answered Johnson; "and will you tell us, Doctor, how fast this motion is?"

"It is very fast," answered the doctor; "the earth moves around the sun seventy-six times faster than a twenty-four-pound cannon-ball flies, which goes one hundred and ninety-five fathoms a second. It moves, then, seven leagues and six tenths per second; you see it is very different from the diurnal movement of the equator."

"The deuce!" said Bell; "that is incredible, Doctor! More than seven leagues a second, and that when it would have been so easy to be motionless, if God had wished it!"

"Good!" said Altamont; "do you think so, Bell? In that case no more night, nor spring, nor autumn, nor winter!"

"Without considering a still more terrible result," continued the doctor.

"What is that?" asked Johnson.

"We should all fall into the sun!"

"Fall into the sun!" repeated Bell with surprise.

"Yes. If this motion were to stop, the earth would fall into the sun in sixty-four days and a half."

"A fall of sixty-four days!" said Johnson.

"No more nor less," answered the doctor; "for it would have to fall a distance of thirty-eight millions of leagues."

"What is the weight of the earth?" asked Altamont.

"It is five thousand eight hundred and ninety-one quadrillions of tons."

"Good!" said Johnson; "those numbers have no meaning."

"For that reason, Johnson, I was going to give you two comparisons which you could remember. Don't forget that it would take seventy-five moons to make the sun, and three hundred and fifty thousand earths to make up the weight of the sun."

"That is tremendous!" said Altamont.

"Tremendous is the word," answered the doctor; "but, to return to the Pole, no lesson on cosmography on this part of the globe could be more opportune, if it doesn't weary you."

"Go on, Doctor, go on!"

"I told you," resumed the doctor, who took as much pleasure in giving as the others did in receiving instruction,--"I told you that the Pole was motionless in comparison with the rest of the globe. Well, that is not quite true!"

"What!" said Bell, "has that got to be taken back?"

"Yes, Bell, the Pole is not always exactly in the same place; formerly the North Star was farther from the celestial pole than it is now. So our Pole has a certain motion; it describes a circle in about twenty-six years. That comes from the precession of the equinoxes, of

which I shall speak soon."

"But," asked Altamont, "might it not happen that some day the Pole should get farther from its place?"

"Ah, my dear Altamont," answered the doctor, "you bring up there a great question, which scientific men investigated for a long time in consequence of a singular discovery."

"What was that?"

"This is it. In 1771 the body of a rhinoceros was found on the shore of the Arctic Sea, and in 1799 that of an elephant on the coast of Siberia. How did the animals of warm countries happen to be found in these latitudes? Thereupon there was much commotion among geologists, who were not so wise as a Frenchman, M. Elie de Beaumont, has been since. He showed that these animals used to live in rather high latitudes, and that the streams and rivers simply carried their bodies to the places where they were found. But do you know the explanation which scientific men gave before this one?"

"Scientific men are capable of anything," said Altamont.

"Yes, in explanation of a fact; well, they imagined that the Pole used to be at the equator and the equator at the Pole."

"Bah!"

"It was exactly what I tell you. Now, if it had been so, since the earth is flattened more than five leagues at the pole, the seas, carried to the equator by centrifugal force, would have covered mountains twice as high as the Himalayas; all the countries near the polar circle, Sweden, Norway, Russia, Siberia, Greenland, and New Britain, would have been buried in five leagues of water, while the regions at the equator, having become the pole, would have formed plateaus fifteen leagues high!"

"What a change!" said Johnson.

"O, that made no difference to scientific men!"

"And how did they explain the alteration?" asked Altamont.

"They said it was due to the shock of collision with a comet. The comet is the deus ex machina; whenever one comes to a difficult question in cosmography, a comet is lugged in. It is the most obliging of the heavenly bodies, and at the least sign from a scientific man it disarranges itself to arrange everything."

"Then," said Johnson, "according to you, Doctor, this change is impossible?"

"Impossible!"

"And if it should take place?"

"If it did, the equator would be frozen in twenty-four hours!"

"Good! if it were to take place now," said Bell, "people would as likely as not say we had never gone to the Pole."

"Calm yourself, Bell. To return to the immobility of the terrestrial axis, the following is the result: if we were to spend a winter here, we should see the stars describing a circle about us. As for the sun, the day of the vernal equinox, March 23d, it would appear to us (I take no account of refraction) exactly cut in two by the horizon, and would rise gradually in longer and longer curves; but here it is remarkable that when it has once risen it sets no more; it is visible for six months. Then its disk touches the horizon again at the autumnal equinox, September 22d, and as soon as it is set, it is seen no more again all winter."

"You were speaking just now of the flattening of the earth at the poles," said Johnson; "be good enough to explain that, Doctor."

"I will. Since the earth was fluid when first created, you understand that its rotary movement would try to drive part of the mobile mass to the equator, where the centrifugal force was greater. If the earth had

been motionless, it would have remained a perfect sphere; but in consequence of the phenomenon I have just described, it has an ellipsoidal form, and points at the pole are nearer the centre of the earth than points at the equator by about five leagues."

"So," said Johnson, "if our captain wanted to take us to the centre of the earth, we should have five leagues less to go?"

"Exactly, my friend."

"Well, Captain, it's so much gained! We ought to avail ourselves of it."

But Hatteras did not answer. Evidently he had lost all interest in the conversation, or perhaps he was listening without hearing.

"Well," answered the doctor, "according to certain scientific men, it would be worth while to try this expedition."

"What! really?" exclaimed Johnson.

"But let me finish," answered the doctor. "I will tell you. I must first tell you this flattening of the poles is the cause of the precession of the equinoxes; that is to say, why every year the vernal equinox comes a day sooner than it would if the earth were perfectly round. This comes from the attraction of the sun operating in a

different way on the heaped-up land of the equator, which then experiences a retrograde movement. Subsequently it displaces this Pole a little, as I just said. But, independently of this effect, this flattening ought to have a more curious and more personal effect, which we should perceive if we had mathematical sensibility."

"What do you mean?" asked Bell.

"I mean that we are heavier here than at Liverpool."

"Heavier?"

"Yes; ourselves, the dogs, our guns, and instruments!"

"Is it possible?"

"Certainly, and for two reasons: the first is, that we are nearer the centre of the globe, which consequently attracts us more strongly, and this force of gravitation is nothing but weight; the second is, the rotary force, which is nothing at the pole, is very marked at the equator, and objects there have a tendency to fly from the earth: they are less heavy."

"What!" exclaimed Johnson, seriously; "have we not the same weight everywhere?"

"No, Johnson; according to Newton's law, bodies attract one another directly as their masses, and inversely to the square of their distances. Here I weigh more, because I am nearer the centre of attraction; and on another planet I should weigh more or less according to the mass of the planet."

"What!" said Bell, "in the moon--"

"In the moon my weight, which is two hundred pounds at Liverpool, would be only thirty-two pounds."

"And in the sun?"

"O, in the sun I should weigh more than five thousand pounds!"

"Heavens!" said Bell; "you'd need a derrick to move your legs."

"Probably," answered the doctor, laughing at Bell's amazement; "but here the difference is imperceptible, and by an equal effort of the muscles Bell would leap as high as on the docks at Liverpool."

"Yes, but in the sun?" urged Bell.

"My friend," answered the doctor, "the upshot of it all is that we are well off where we are, and need not want to go elsewhere."

"You said just now," resumed Altamont, "that perhaps it would be worth while to make a journey to the centre of the world; has such an undertaking ever been thought of?"

"Yes, and this is all I'm going to say about the Pole. There is no point in the world which has given rise to more chimeras and hypotheses. The ancients, in their ignorance, placed the garden of the Hesperides there. In the Middle Ages it was supposed that the earth was upheld on axles placed at the poles, on which it revolved; but when comets were seen moving freely, that idea had to be given up. Later, there was a French astronomer, Bailly, who said that the lost people mentioned by Plato, the Atlantides, lived here. Finally, it has been asserted in our own time that there was an immense opening at the poles, from which came the Northern Lights, and through which one could reach the inside of the earth; since in the hollow sphere two planets, Pluto and Proserpine, were said to move, and the air was luminous in consequence of the strong pressure it felt."

"That has been maintained?" asked Altamont.

"Yes, it has been written about seriously. Captain Symmes, a countryman of ours, proposed to Sir Humphry Davy, Humboldt, and Arago, to undertake the voyage! But they declined."

"And they did well."

"I think so. Whatever it may be, you see, my friends, that the imagination has busied itself about the Pole, and that sooner or later we must come to the reality."

"At any rate, we shall see for ourselves," said Johnson, who clung to his idea.

"Then, to-morrow we'll start," said the doctor, smiling at seeing the old sailor but half convinced; "and if there is any opening to the centre of the earth, we shall go there together."

CHAPTER XXV.

MOUNT HATTERAS.

After this solid conversation every one made himself as comfortable as possible in the cavern, and soon fell asleep. Every one, that is, except Hatteras. Why did not this strange man sleep?

Was not the object of his life attained? Had he not accomplished the bold projects which lay so near his heart? Why did not calmness succeed the agitation in his ardent mind? Would not one suppose that, when he had accomplished this end, Hatteras would fall into a sort of dejection, and that his over-stretched nerves would seek repose? After succeeding, it would seem natural that he should be seized with the feeling of sadness, which always follows satisfied desires.

But no. He was only more excited. It was not, however, the thought of returning which agitated him so. Did he wish to go farther? Was there no limit to his ambition, and did he find the world too small, because he had been around it? However this may have been, he could not sleep. And yet this first night spent at the pole of the world was pleasant and quiet. The island was absolutely uninhabited. There was not a bird in its fire-impregnated atmosphere, not an animal on the soil of cinders, not a fish in its boiling waters. Only afar off the dull murmur of the mountain, from the summit of which arose puffs of hot smoke.

When Bell, Johnson, Altamont, and the doctor awoke, Hatteras was not to be seen near them. Being anxious, they left the cave, and saw the captain standing on a rock. His eyes were fixed on the top of the volcano. He held his instruments in his hands, having evidently been calculating the exact height of the mountain. The doctor went up to him and spoke to him several times before he could rouse him from his reverie. At last the captain seemed to understand him.

"Forward!" said the doctor, who was examining him attentively,--"forward! let us explore our island; we are all ready for our last excursion."

"Our last," said Hatteras, with the intonation of people who are dreaming aloud; "yes, the last, indeed. But also," he continued with great animation, "the most wonderful!"

He spoke in this way, rubbing his hands over his brow as if to allay its throbbing. At that moment, Altamont, Johnson, and Bell joined him; Hatteras appeared to awaken from his reverie.

"My friends," he said with emotion, "thanks for your courage, thanks for your perseverance, thanks for your superhuman efforts, which have allowed us to set foot on this land!"

"Captain!" said Johnson, "we have only obeyed; all the honor is due to

you alone!"

"No, no!" resumed Hatteras with emotion; "to you as much as to me! to Altamont as well as to all of us! as to the doctor himself-- O, let my heart well over in your hands! It can no longer restrain its joy and gratitude!"

Hatteras clasped the hands of his companions. He walked to and fro, no longer master of himself.

"We have only done our duty as Englishmen," said Bell.

"Our duty as friends," continued the doctor.

"Yes," said Hatteras, "but all have not performed this duty. Some have given way! Still, they must be pardoned, both who were treacherous, and those who were led away to it! Poor men! I forgive them. You understand me, Doctor?"

"Yes," answered the doctor, who was very uneasy at Hatteras's excitement.

"So," went on the captain, "I don't want them to lose the money they came so far to seek. No, I shall not alter my plan; they shall be rich,--if they ever see England again!"

Few could have withstood the tenderness with which Hatteras spoke these last words.

"But, Captain," said Johnson, with an effort at pleasantry, "one would say you were making your will."

"Perhaps I am," answered Hatteras, seriously.

"Still you have before you a long and glorious life," continued the old sailor.

"Who can say?" said Hatteras.

A long silence followed these words. The doctor did not dare to try to interpret the last remark. But Hatteras soon expressed his meaning, for in a hasty, hardly restrained voice, he went on:--

"My friends, listen to me. We have done a good deal so far, and yet there is a good deal to do."

His companions gazed at him in astonishment.

"Yes, we are on the land of the Pole, but we are not on the Pole itself!"

"How so?" asked Altamont.

"You don't mean it!" cried the doctor, anxiously.

"Yes!" resumed Hatteras, earnestly, "I said that an Englishman should set foot on the Pole; I said it, and an Englishman shall do it."

"What!" ejaculated the doctor.

"We are now forty-five seconds from the unknown point," Hatteras went on, with increasing animation; "where it is, I am going!"

"But that is the top of the volcano!" said the doctor.

"I'm going!"

"It's an inaccessible spot!"

"I'm going!"

"It's a fiery crater!"

"I'm going!"

The firmness with which Hatteras uttered these words cannot be given.

His friends were stupefied; they gazed with horror at the volcano tipped with flame. Then the doctor began; he urged and besought

Hatteras to give up his design; he said everything he could imagine, from entreaty to well-meant threats; but he obtained no concession from the nervous captain, who was possessed with a sort of madness which may be called polar madness. Only violent means could stop him, rushing to his ruin. But seeing that thereby they would produce serious results, the doctor wished to keep them for a last resource. He hoped, too, that some physical impossibility, some unsurmountable difficulty, would compel him to give up his plan.

"Since it is so," he said, "we shall follow you."

"Yes," answered the captain, "half-way up the mountain! No farther! Haven't you got to carry back to England the copy of the document which proves our discovery, in case--"

"Still--"

"It is settled," said Hatteras, in a tone of command; "and since my entreaties as a friend are not enough, I order it as captain."

The doctor was unwilling to urge him any further, and a few moments later the little band, equipped for a hard climb, and preceded by Duke, set out. The sky was perfectly clear. The thermometer stood at 52°. The air had all the brilliancy which is so marked at this high latitude. It was eight o'clock in the morning. Hatteras went ahead with his dog, the others followed close behind.

"I'm anxious," said Johnson.

"No, no, there's nothing to fear," answered the doctor; "we are here."

It was a strange island, in appearance so new and singular! The volcano did not seem old, and geologists would have ascribed a recent date to its formation.

The rocks were heaped upon one another, and only kept in place by almost miraculous balancing. The mountain, in fact, was composed of nothing but stones that had fallen from above. There was no soil, no moss, no lichen, no trace of vegetation. The carbonic acid from the crater had not yet had time to unite with the hydrogen of the water; nor the ammonia of the clouds, to form under the action of the light, organized matter. This island had arisen from successive volcanic eruptions, like many other mountains; what they have hurled forth has built them up. For instance, Etna has poured forth a volume of lava larger than itself; and the Monte Nuovo, near Naples, was formed by ashes in the short space of forty-eight hours. The heap of rocks composing Queen's Island had evidently come from the bowels of the earth. Formerly the sea covered it all; it had been formed long since by the condensation of the vapor on the cooling globe; but in proportion as the volcanoes of the Old and New World disappeared, they were replaced by new craters.

In fact, the earth can be compared to a vast spheroidal boiler. Under the influence of the central fire an immense quantity of vapor is generated, which is exposed to a pressure of thousands of atmospheres, and which would blow up the globe, were it not for the safety-valves opening on the outside.

These safety-valves are the volcanoes; when one closes, another opens; and at the poles, where, doubtless in consequence of the flattening of the earth's surface, the crust is thinner, it is not strange that a volcano should be suddenly formed by the upheaval of the bottom of the waves. The doctor noticed all this as he followed Hatteras; his foot sank into a volcanic tufa, and the deposits of ashes, volcanic stones, etc., like the syenite and granite of Iceland. But he attributed a comparatively recent origin to the island, on account of the fact that no sedimentary soil had yet formed upon it. Water, too, was lacking. If Queen's Island had existed for several years, there would have been springs upon it, as there are in the neighborhood of volcanoes. Now, not only was there no drop of water there, but the vapors which arose from the stream of lava seemed absolutely anhydrous.

This island, then, was of recent formation; and since it appeared in one day, it might disappear in another and sink beneath the ocean.

The ascent grew more difficult the higher they went; the sides of the mountain became nearly perpendicular, and they had to be very careful to avoid accident. Often columns of cinders were blown about them and

threatened to choke them, or torrents of lava barred their path. On some such places these streams were hard on top, but the molten stream flowed beneath. Each one had to test it first to escape sinking into the glowing mass. From time to time the crater vomited forth huge red-hot rocks amid burning gases; some of these bodies burst in the air like shells, and the fragments were hurled far off in all directions. The innumerable dangers of this ascent may be readily perceived, as well as the foolhardiness of the attempt.

Still, Hatteras climbed with wonderful agility, and while spurning the use of his iron-tipped staff, he ascended the steepest slopes. He soon reached a circular rock, which formed a sort of plateau about ten feet broad; a glowing stream surrounded it, which was divided at the corner by a higher rock, and left only a narrow passage through which Hatteras slipped boldly. There he stopped, and his companions were able to join him. Then he seemed to estimate the distance yet remaining; horizontally there were only about six hundred feet of the crater remaining, that is to say, from the mathematical point of the Pole; but vertically they had fifteen hundred feet yet to climb. The ascent had already taken three hours; Hatteras did not seem tired; his companions were exhausted.

The top of the volcano seemed inaccessible. The doctor wished at any risk to keep Hatteras from going higher. At first he tried gentle means, but the captain's excitement amounted to delirium; on the way he had exhibited all the signs of growing madness, and whoever has

known him in the different scenes of his life cannot be surprised. In proportion as Hatteras rose above the ocean his excitement increased; he lived no longer with men; he thought he was growing larger with the mountain itself.

"Hatteras," said the doctor, "this is far enough! we can't go any farther!"

"Stay where you are, then," answered the captain in a strange voice; "I shall go higher!"

"No! that's useless! you are at the Pole here!"

"No, no, higher!"

"My friend, it's I who am speaking to you, Dr. Clawbonny! Don't you know me?"

"Higher! higher!" repeated the madman.

"Well, no, we sha'n't let--"

The doctor had not finished the sentence before Hatteras, by a violent effort, sprang over the stream of lava and was out of their reach.

They uttered a cry, thinking Hatteras was lost in the fiery abyss; but he had reached the other side, followed by Duke, who was unwilling to

abandon him.

He disappeared behind a puff of smoke, and his voice was heard growing fainter and fainter in the distance.

"To the north!" he was shouting, "to the top of Mount Hatteras! Do you remember Mount Hatteras?"

They could not think of getting up to him; there were twenty chances to one against their being able to cross the stream he had leaped over with the skill and luck of madmen. Nor could they get around it.

Altamont in vain tried to pass; he was nearly lost in trying to cross the stream of lava; his companions were obliged to hold him by force.

"Hatteras, Hatteras!" shouted the doctor.

But the captain did not answer; Duke's barking alone was heard upon the mountain.

Still, Hatteras could be seen at intervals through the column of smoke and the showers of cinders. Sometimes his arm or head would emerge from the whirlwind. Then he would disappear and be seen again higher up in the rocks. His height diminished with the fantastic swiftness of objects rising in the air. Half an hour later he seemed but a fraction of his usual size.

The air was filled with the dull noises of the volcano; the mountain was roaring like a boiler, its sides were quivering. Hatteras kept on, and Duke followed. From time to time some enormous rock would give way beneath them and go crashing down to the sea. But Hatteras did not look back. He had made use of his staff as a pole on which to fasten the English flag. His companions observed every one of his movements. His dimensions became gradually smaller, and Duke seemed no larger than a rat. One moment the wind seemed to drive down upon them a great wave of flame. The doctor uttered a cry of anguish, but Hatteras reappeared, standing and brandishing the flag.

This sight lasted for more than an hour,--an hour of struggle with the trembling rocks, with the beds of ashes into which this madman would sink up to the waist. Now he would be climbing on his knees and making use of every inequality in the mountain, and now he would hang by his hands at some sharp corner, swinging in the wind like a dry leaf.

At last he reached the top, the yawning mouth of the crater. The doctor then hoped that the wretched man, having attained his object, would perhaps return and have only those dangers before him.

He gave a last shout.

"Hatteras, Hatteras!"

The doctor's cry moved the American's heart so that he cried out,--

"I will save him!"

Then with one leap crossing the fiery torrent at the risk of falling in, he disappeared among the rocks. Clawbonny did not have time to stop him. Still, Hatteras, having reached the top, was climbing on top of a rock which overhung the abyss. The stones were raining about him. Duke was still following him. The poor beast seemed already dizzy at the sight beneath him. Hatteras was whirling about his head the flag, which was lighted with the brilliant reflection, and the red bunting could be seen above the crater. With one hand Hatteras was holding it; with the other he was pointing to the zenith, the celestial pole. Still he seemed to hesitate. He was seeking the mathematical point where all the meridians meet, and on which in his sublime obstinacy he wanted to set his foot.

Suddenly the rock gave way beneath him. He disappeared. A terrible cry from his companions rose even to the summit of the mountain. A second--a century--passed! Clawbonny considered his friend lost and buried forever in the depths of the volcano. But Altamont was there, and Duke too. The man and the dog had seized him just when he was disappearing in the abyss. Hatteras was saved, saved in spite of himself, and half an hour later the captain of the *Forward* lay unconscious in the arms of his despairing friends.

When he came to himself, the doctor gave him a questioning glance in

mute agony. But his vague look, like that of a blind man, made no reply.

"Heavens!" said Johnson, "he is blind!"

"No," answered Clawbonny,--"no! My poor friends, we have saved Hatteras's body! His mind is at the top of the volcano! He has lost his reason!"

"Mad?" cried Johnson and Altamont in deep distress.

"Mad!" answered the doctor.

And he wept bitterly.

CHAPTER XXVI.

RETURN TO THE SOUTH.

Three hours after this sad conclusion to the adventures of Captain Hatteras, Clawbonny, Altamont, and the two sailors were assembled in the cavern at the foot of the volcano. Then Clawbonny was asked to give his opinion on what was to be done.

"My friends," he said, "we cannot prolong our stay at Queen's Island; the sea is open before us; our provisions are sufficient; we must set out and reach Fort Providence as soon as possible, and we can go into winter-quarters till next summer."

"That is my opinion," said Altamont; "the wind is fair, and to-morrow we shall set sail."

The day passed in great gloom. The captain's madness was a sad foreboding, and when Johnson, Bell, and Altamont thought of their return, they were afraid of their loneliness and remoteness. They felt the need of Hatteras's bold soul. Still, like energetic men they made ready for a new struggle with the elements, and with themselves, in case they should feel themselves growing faint-hearted.

The next day, Saturday, July 13th, the camping materials were put on the boat, and soon everything was ready for their departure. But

before leaving this rock forever, the doctor, following Hatteras's intentions, put up a cairn at the place where the captain reached the island; this cairn was built of large rocks laid on one another, so as to form a perfectly visible landmark, if it were not destroyed by the eruption.

On one of the lateral stones Bell carved with a chisel this simple inscription:--

JOHN HATTERAS

1861.

A copy of the document was placed inside of the cairn in an hermetically sealed tin cylinder, and the proof of this great discovery was left here on these lonely rocks.

Then the four men and the captain,--a poor body without a mind,--and his faithful Duke, sad and melancholy, got into the boat for the return voyage. It was ten o'clock in the morning. A new sail was set up with the canvas of the tent. The launch, sailing before the wind, left Queen's Island, and that evening the doctor, standing on his bench, waved a last farewell to Mount Hatteras, which was lighting up the horizon.

Their voyage was very quick; the sea, which was always open, was easy sailing, and it seemed really easier to go away from the Pole than to

approach it. But Hatteras was in no state to understand what was going on about him; he lay at full length in the launch, his mouth closed, his expression dull, and his arms folded. Duke lay at his feet. It was in vain that the doctor questioned him. Hatteras did not hear him.

For forty-eight hours the breeze was fair and the sea smooth. Clawbonny and his companions rejoiced in the north-wind. July 15th, they made Altamont Harbor in the south; but since the Polar Ocean was open all along the coast, instead of crossing New America by sledge, they resolved to sail around it, and reach Victoria Bay by sea. This voyage was quicker and easier. In fact, the space which had taken them a fortnight on sledges took them hardly a week by sail; and after following the rugged outline of the coast, which was fringed with numerous fiords, and determining its shape, they reached Victoria Bay, Monday evening, July 23d.

The launch was firmly anchored to the shore, and each one ran to Fort Providence. The Doctor's House, the stores, the magazine, the fortifications, all had melted in the sun, and the supplies had been devoured by hungry beasts.

It was a sad sight.

They were nearly at the end of their supplies, and they had intended to renew them at Fort Providence. The impossibility of passing the winter there was evident. Like people accustomed to decide rapidly,

they determined to reach Baffin's Bay as soon as possible.

"We have nothing else to do," said the doctor; "Baffin's Bay is not six hundred miles from here; we might sail as far as our launch would carry us, reach Jones's Sound, and from there the Danish settlements."

"Yes," answered Altamont; "let us collect all the provisions we can, and leave."

By strict search they found a few chests of pemmican here and there, and two barrels of preserved meat, which had escaped destruction. In short, they had a supply for six weeks, and powder enough. This was promptly collected. The day was devoted to calking the launch, repairing it, and the next day, July 24th, they put out to sea again.

The continent towards latitude 83° inclined towards the east. It was possible that it joined the countries known under the name of Grinnell Land, Ellesmere, and North Lincoln, which form the coast-line of Baffin's Bay. They could then hold it for certain that Jones's Sound opened in the inner seas, like Lancaster Sound. The launch then sailed without much difficulty, easily avoiding the floating ice. The doctor, by way of precaution against possible delay, put them all on half-rations; but this did not trouble them much, and their health was unimpaired.

Besides, they were able to shoot occasionally; they killed ducks,

geese, and other game, which gave them fresh and wholesome food. As for their drink, they had a full supply from the floating ice, which they met on the way, for they took care not to go far from the coast, the launch being too small for the open sea.

At this period of the year the thermometer was already, for the greater part of time, beneath the freezing-point; after a certain amount of rainy weather snow began to fall, with other signs of the end of summer; the sun sank nearer the horizon, and more and more of its disk sank beneath it every day. July 30th they saw it disappear for the first time, that is to say, they had a few minutes of night.

Still, the launch sailed well, sometimes making from sixty to seventy-five miles a day; they did not stop a moment; they knew what fatigues to endure, what obstacles to surmount; the way by land was before them, if they had to take it, and these confined seas must soon be closed; indeed, the young ice was already forming here and there. Winter suddenly succeeds summer in these latitudes; there are no intermediate seasons; no spring, no autumn. So they had to hurry. July 31st, the sky being clear at sunset, the first stars were seen in the constellations overhead. From this day on there was perpetual mist, which interfered very much with their sailing. The doctor, when he saw all the signs of winter's approach, became very uneasy; he knew the difficulties Sir John Ross had found in getting to Baffin's Bay, after leaving his ship; and indeed, having once tried to pass the ice, he was obliged to return to his ship, and go into winter-quarters for the

fourth year; but he had at least a shelter against the weather, food, and fuel. If such a misfortune were to befall the survivors of the Forward, if they had to stop or put back, they were lost; the doctor did not express his uneasiness to his companions; but he urged them to get as far eastward as possible.

Finally, August 15th, after thirty days of rather good sailing, after struggling for forty-eight hours against the ice, which was accumulating, after having imperilled their little launch a hundred times, they saw themselves absolutely stopped, unable to go farther; the sea was all frozen, and the thermometer marked on an average $+15^{\circ}$. Moreover, in all the north and east it was easy to detect the nearness of land, by the presence of pebbles; frozen fresh water was found more frequently. Altamont made an observation with great exactness, and found they were in latitude $77^{\circ} 15'$, and longitude $85^{\circ} 2'$.

"So, then," said the doctor, "this is our exact position; we have reached North Lincoln, exactly at Cape Eden; we are entering Jones's Sound; if we had been a little luckier, we should have found the sea open to Baffin's Bay. But we need not complain. If my poor Hatteras had at first found so open a sea, he would have soon reached the Pole, his companions would not have deserted him, and he would not have lost his reason under his terrible sufferings!"

"Then," said Altamont, "we have only one course to follow; to abandon the launch, and get to the east coast of Lincoln by sledge."

"Abandon the launch and take the sledge? Well," answered the doctor; "but instead of crossing Lincoln, I propose going through Jones's Sound on the ice, and reaching North Devon."

"And why?" asked Altamont.

"Because we should get nearer to Lancaster Sound, and have more chance of meeting whalers."

"You are right, Doctor, but I am afraid the ice is not yet hard enough."

"We can try," said Clawbonny.

The launch was unloaded; Bell and Johnson put the sledge together; all its parts were in good condition. The next day the dogs were harnessed in, and they went along the coast to reach the ice-field.

Then they began again the journey which has been so often described; it was tiresome and slow; Altamont was right in doubting the strength of the ice; they could not go through Jones's Sound, and they had to follow the coast of Lincoln.

August 21st they turned to one side and reached the entrance of Glacier Sound; then they ventured upon the ice-field, and the next day

they reached Cobourg Island, which they crossed in less than two days amid snow-squalls. They could advance more easily on the ice-fields, and at last, August 24th, they set foot on North Devon.

"Now," said the doctor, "we have only to cross this, and reach Cape Warender, at the entrance of Lancaster Sound."

But the weather became very cold and unpleasant; the snow-squalls became as violent as in winter; they all found themselves nearly exhausted. Their provisions were giving out, and each man had but a third of a ration, in order to allow to the dogs enough food in proportion to their work.

The nature of the ground added much to the fatigue of the journey; North Devon was far from level; they had to cross the Trauter Mountains by almost impassable ravines, struggling against all the fury of the elements. The sledge, men, and dogs had to rest, and more than once despair seized the little band, hardened as it was to the fatigues of a polar journey. But, without their noticing it, these poor men were nearly worn out, physically and morally; they could not support such incessant fatigue for eighteen months with impunity, nor such a succession of hopes and despairs. Besides, it should be borne in mind that they went forward with enthusiasm and conviction, which they lacked when returning. So they with difficulty dragged on; they walked almost from habit, with the animal energy left almost independent of their will.

It was not until August 30th that they at last left the chaos of mountains, of which one can form no idea from the mountains of lower zones, but they left it half dead. The doctor could no longer cheer up his companions, and he felt himself breaking down. The Trauter Mountains ended in a sort of rugged plain, heaped up at the time of the formation of the mountains. There they were compelled to take a few days of rest; the men could not set one foot before another; two of the dogs had died of exhaustion. They sheltered themselves behind a piece of ice, at a temperature of -2° ; no one dared put up the tent. Their food had become very scanty, and, in spite of their extreme economy with their rations, they had a supply for but a week more; game became rarer, having left for a milder climate. Starvation threatened these exhausted men.

Altamont, who all along had shown great devotion and unselfishness, took advantage of the strength he had left, and resolved to procure by hunting some food for his companions. He took his gun, called Duke, and strode off for the plains to the north; the doctor, Johnson, and Bell saw him go away without much interest. For an hour they did not once hear his gun, and they saw him returning without firing a single shot; but he was running as if in great alarm.

"What is the matter?" asked the doctor.

"There! under the snow!" answered Altamont in great alarm, indicating

a point in the horizon.

"What?"

"A whole band of men--"

"Alive?"

"Dead,--frozen,--and even--"

The American durst not finish his sentence, but his face expressed clearly his horror. The doctor, Johnson, Bell, aroused by this incident, were able to rise, and drag themselves along in Altamont's footprints to the part of the plain to which he had pointed. They soon reached a narrow space, at the bottom of a deep ravine, and there a terrible sight met their eyes.

Bodies were lying half buried beneath the snow; here an arm, there a leg, or clinched hands, and faces still preserving an expression of despair.

The doctor drew near; then he stepped back, pale and agitated, while Duke barked mournfully.

"Horror!" he said.

"Well?" asked the boatswain.

"Didn't you recognize them?" said the doctor in a strange voice.

"What do you mean?"

"Look!"

This ravine had been the scene of the last struggle between the men and the climate, despair, and hunger, for from some horrible signs it was easy to see that they had been obliged to eat human flesh. Among them the doctor had recognized Shandon, Pen, and the wretched crew of the Forward; their strength and food had failed them; their launch had probably been crushed by an avalanche, or carried into some ravine, and they could not take to the open sea; probably they were lost among these unknown continents. Besides, men who had left in mutiny could not long be united with the closeness which is necessary for the accomplishment of great things. A ringleader of a revolt has never more than a doubtful authority in his hands. And, without doubt, Shandon was promptly deposed.

However that may have been, the crew had evidently undergone a thousand tortures, a thousand despairs, to end with this terrible catastrophe; but the secret of their sufferings is forever buried beneath the arctic snows.

"Let us flee!" cried the doctor.

And he dragged his companions far from the scene of the disaster.

Horror lent them momentary strength. They set out again.

CHAPTER XXVII.

CONCLUSION.

Why linger over the perpetual sufferings of the survivors? They themselves could never recall to their memory a clear vision of what had happened in the week after their horrible discovery of the remains of the crew. However, September 9th, by a miracle of energy, they reached Cape Horsburgh, at the end of North Devon.

They were dying of hunger; they had not eaten for forty-eight hours, and their last meal had been the flesh of their last Esquimaux dog. Bell could go no farther, and old Johnson felt ready to die. They were on the shore of Baffin's Bay, on the way to Europe. Three miles from land the waves were breaking on the edges of the ice-field. They had to await the uncertain passage of a whaler, and how many days yet?

But Heaven took pity on them, for the next day Altamont clearly saw a sail. The anguish which follows such an appearance of a sail, the tortures of disappointment, are well known. The ship seemed to approach and then to recede. Terrible are the alternations of hope and despair, and too often at the moment the castaways consider themselves saved the sail sinks beneath the horizon.

The doctor and his companions went through all these emotions; they had reached the western limit of the ice-field, and yet they saw the

ship disappear, taking no note of their presence. They shouted, but in vain.

Then the doctor had a last inspiration of that busy mind which had served him in such good stead.

A floe had drifted against the ice-field.

"That floe!" he said, pointing to it.

They did not catch his meaning.

"Let us get on it!" he cried.

They saw his plan at once.

"Ah, Clawbonny, Dr. Clawbonny!" cried Johnson, kissing the doctor's hands.

Bell, with Altamont's aid, ran to the sledge; he brought one of the uprights, stood it up on the floe for a mast, making it fast with ropes; the tent was torn up for a sail. The wind was fair; the poor castaways put out to sea on this frail raft.

Two hours later, after unheard-of efforts, the last men of the Forward were taken aboard the Danish whaler Hans Christian, which

was sailing to Davis Strait. The captain received kindly these spectres who had lost their semblance to human beings; when he saw their sufferings he understood their history; he gave them every attention, and managed to save their lives. Ten days later, Clawbonny, Johnson, Bell, Altamont, and Captain Hatteras landed at Korsoeur, in Zeeland, in Denmark; a steamboat carried them to Kiel; thence, via Altona and Hamburg, they reached London the 13th of the same month, hardly recovered from their long sufferings.

The first thought of the doctor was to ask permission of the Royal Geographical Society of London to lay a communication before it; he was admitted to the meeting of July 15th. The astonishment of the learned assembly, and its enthusiastic cheers after reading Hatteras's document, may be imagined.

This journey, the only one of its kind, went over all the discoveries that had been made in the regions about the Pole; it brought together the expeditions of Parry, Ross, Franklin, MacClure; it completed the chart between the one hundredth and one hundred and fifteenth meridians; and, finally, it ended with the point of the globe hitherto inaccessible, with the Pole itself.

Never had news so unexpected burst upon astonished England.

The English take great interest in geographical facts; they are proud of them, lord and cockney, from the merchant prince to the workman in

the docks.

The news of this great discovery was telegraphed over the United Kingdom with great rapidity; the papers printed the name of Hatteras at the head of their columns as that of a martyr, and England glowed with pride.

The doctor and his companions were feasted everywhere; they were formally presented to her Majesty by the Lord High Chancellor.

The government confirmed the name of Queen's Island for the rock at the North Pole, of Mount Hatteras for the mountain itself, and of Altamont Harbor for the port in New America.

Altamont did not part from those whose misery and glory he had shared, and who were now his friends. He followed the doctor, Johnson, and Bell to Liverpool, where they were warmly received, after they had been thought to be long dead, and buried in the eternal ice.

But Dr. Clawbonny always gave the glory to the man who most deserved it. In his account of the journey entitled "The English at the North Pole," published the next year by the Royal Geographical Society, he made John Hatteras equal to the greatest explorers, the rival of those bold men who sacrifice everything to science.

But the sad victim of a lofty passion lived peacefully at the asylum

of Starr Cottage near Liverpool, where the doctor had placed him. His madness was of a gentle kind, but he never spoke, he understood nothing, his power of speech seemed to have gone with his reason. A single feeling seemed to unite him to the outer world, his love for Duke, who was not separated from him.

This disease, this "polar madness," pursued its course quietly, presenting no particular symptom, when Dr. Clawbonny, who often visited his poor patient, was struck by his singular manner.

For some time Captain Hatteras, followed by his faithful dog, that used to gaze at him sadly, would walk for hours every day; but he always walked in one way, in the direction of a certain path. When he had reached the end, he would return, walking backwards. If any one stopped him, he would point his finger at a portion of the sky. If any one tried to make him turn round, he grew angry, and Duke would show his anger and bark furiously.

The doctor observed carefully this odd mania; he understood the motive of this strange obstinacy; he guessed the reason of this walk always in the same direction, and, so to speak, under the influence of a magnetic force.

Captain John Hatteras was always walking towards the north.

FINIS.