The Voyages and Adventures of Captain Hatteras

By

Jules Verne

PART I.

THE ENGLISH AT THE NORTH POLE.

CHAPTER I.

THE FORWARD.

"To-morrow, at the turn of the tide, the brig Forward, K. Z., captain, Richard Shandon, mate, will clear from New Prince's Docks; destination unknown."

This announcement appeared in the Liverpool Herald of April 5, 1860.

The sailing of a brig is not a matter of great importance for the chief commercial city of England. Who would take notice of it in so great a throng of ships of all sizes and of every country, that dry-docks covering two leagues scarcely contain them?

Nevertheless, from early morning on the 6th of April, a large crowd collected on the quays of the New Prince's Docks; all the sailors of the place seemed to have assembled there. The workingmen of the neighboring wharves had abandoned their tasks, tradesmen had left their gloomy shops, and the merchants their empty warehouses. The many-colored omnibuses which pass outside of the docks were discharging, every minute, their load of sight-seers; the whole city

seemed to care for nothing except watching the departure of the Forward.

The Forward was a vessel of one hundred and seventy tons, rigged as a brig, and carrying a screw and a steam-engine of one hundred and twenty horse-power. One would have very easily confounded it with the other brigs in the harbor. But if it presented no especial difference to the eye of the public, yet those who were familiar with ships noticed certain peculiarities which could not escape a sailor's keen glance.

Thus, on the Nautilus, which was lying at anchor near her, a group of sailors were trying to make out the probable destination of the Forward.

"What do you say to her masts?" said one; "steamers don't usually carry so much sail."

"It must be," answered a red-faced quartermaster, "that she relies more on her sails than on her engine; and if her topsails are of that size, it's probably because the lower sails are to be laid back. So I'm sure the Forward is going either to the Arctic or Antarctic Ocean, where the icebergs stop the wind more than suits a solid ship."

"You must be right, Mr. Cornhill," said a third sailor. "Do you notice how straight her stem is?"

"Besides," said Mr. Cornhill, "she carries a steel ram forward, as sharp as a razor; if the Forward, going at full speed, should run into a three-decker, she would cut her in two."

"That's true," answered a Mersey pilot, "for that brig can easily run fourteen knots under steam. She was a sight to see on her trial trip. On my word, she's a swift boat."

"And she goes well, too, under sail," continued the quartermaster; "close to the wind, and she's easily steered. Now that ship is going to the polar seas, or my name is not Cornhill. And then, see there! Do you notice that large helm-port over the head of her rudder?"

"That's so," said some of the sailors; "but what does that prove?"

"That proves, my men," replied the quartermaster with a scornful smile, "that you can neither see nor think; it proves that they wanted to leave the head of the rudder free, so that it might be unshipped and shipped again easily. Don't you know that's what they have to do very often in the ice?"

"You are right," answered the sailors of the Nautilus.

"And besides," said one, "the lading of the brig goes to prove what Mr. Cornhill has said. I heard it from Clifton, who has shipped on

her. The Forward carries provisions for five or six years, and coal in proportion. Coal and provisions are all she carries, and a quantity of woollen and sealskin clothing."

"Well," said Mr. Cornhill, "there's no doubt about it. But, my friend, since you know Clifton, hasn't he told you where she's bound?"

"He couldn't tell me, for he didn't know; the whole crew was shipped in that way. Where is he going? He won't know till he gets there."

"Nor yet if they are going to Davy Jones's locker," said one scoffer, "as it seems to me they are."

"But then, their pay," continued the friend of Clifton enthusiastically,--"their pay! it's five times what a sailor usually gets. If it had not been for that, Richard Shandon would not have got a man. A strangely shaped boat, going no one knows where, and as if it never intended coming back! As for me, I should not have cared to ship in her."

"Whether you would or not," answered Mr. Cornhill, "you could never have shipped in the Forward."

"Why not?"

"Because you would not have answered the conditions. I heard that

married men were not taken. Now you belong to that class. So you need not say what you would or would not do, since it's all breath thrown away."

The sailor who was thus snubbed burst out laughing, as did his companions, showing in this way that Mr. Cornhill's remarks were true.

"There's nothing but boldness about the ship," continued Cornhill, well pleased with himself. "The Forward,--forward to what? Without saying that nobody knows who her captain is."

"O, yes, they do!" said a young sailor, evidently a green-hand.

"What! They do know?"

"Of course."

"My young friend," said Cornhill, "do you think Shandon is the captain of the Forward?"

"Why--" answered the boy.

"Shandon is only the mate, nothing else; he's a good and brave sailor, an old whaler, a good fellow, able to take command, but he's not the captain; he's no more captain than you or I. And who, under God, is going to have charge of the ship, he does not know in the least. At

the proper time the captain will come aboard, I don't know how, and I don't know where; for Richard Shandon didn't tell me, nor has he leave to tell me in what direction he was first to sail."

"Still, Mr. Cornhill," said the young sailor, "I can tell you that there's some one on board, some one who was spoken of in the letter in which Mr. Shandon was offered the place of mate."

"What!" answered Cornhill, "do you mean to tell me that the Forward has a captain on board?"

"Yes, Mr. Cornhill."

"You tell me that?"

"Certainly, for I heard it from Johnson, the boatswain."

"Boatswain Johnson?"

"Yes, he told me himself."

"Johnson told you?"

"Not only did he tell me, but he showed him to me."

"He showed him to you!" answered Cornhill in amazement.

"He showed him to me."

"And you saw him?"

"I saw him with my own eyes."

"And who is it?"

"It's a dog."

"A dog?"

"A four-footed dog?"

"Yes."

The surprise of the sailors of the Nautilus was great. Under any other circumstances they would have burst out laughing. A dog captain of a one hundred and seventy ton brig! It was certainly amusing enough. But the Forward was such an extraordinary ship, that one thought twice before laughing, and before contradicting it. Besides, Quartermaster Cornhill showed no signs of laughing.

"And Johnson showed you that new sort of captain, a dog?" he said to

the young sailor. "And you saw him?"

"As plainly as I see you, with all respect."

"Well, what do you think of that?" asked the sailors, turning to Cornhill.

"I don't think anything," he answered curtly, "except that the Forward is a ship of the Devil, or of fools fit for Bedlam."

Without saying more, the sailors continued to gaze at the Forward, which was now almost ready to depart; and there was no one of them who presumed to say that Johnson, the boatswain, had been making fun of the young sailor.

This story of the dog had already spread through the city, and in the crowd of sight-seers there were many looking for the captain-dog, who were inclined to believe that he was some supernatural animal.

Besides, for many months the Forward had been attracting the public attention; the singularity of its build, the mystery which enshrouded it, the incognito maintained by the captain, the manner in which Richard Shandon received the proposition of superintending its outfit, the careful selection of the crew, its unknown destination, scarcely conjectured by any,--all combined to give this brig a reputation of something more than strangeness.

For a thoughtful, dreamy mind, for a philosopher, there is hardly anything more touching than the departure of a ship; the imagination is ready to follow her in her struggles with the waves, her contests with the winds, in her perilous course, which does not always end in port; and if only there is something unusual about her, the ship appears like something fantastic, even to the least imaginative minds.

So it was with the Forward. And if most of the spectators were unable to make the ingenious remarks of Quartermaster Cornhill, the rumors which had been prevailing for three months were enough to keep all the tongues of Liverpool busy.

The brig had been built at Birkenhead, a suburb of the city on the left bank of the Mersey, and connected with it by numerous ferry-boats.

The builders, Scott & Co., as skilful as any in England, had received from Richard Shandon careful plans and drawings, in which the tonnage, dimensions, and model of the brig were given with the utmost exactness. They bore proof of the work of an experienced sailor. Since Shandon had ample means at his command, the work began, and, in accordance with the orders of the unknown owner, proceeded rapidly.

Every care was taken to have the brig made exceedingly strong; it was evidently intended to withstand enormous pressure, for its ribs of

teak, an East Indian wood remarkable for its solidity, were further strengthened by thick iron braces. The sailors used to ask why the hull of a ship, which was intended to be so strong, was not made of iron like other steamers. But they were told that the mysterious designer had his own reasons for having it built in that way.

Gradually the shape of the brig on the stocks could be clearly made out, and the strength and beauty of her model were clear to the eye of all competent judges. As the sailors of the Nautilus had said, her stem formed a right angle with the keel, and she carried, not a ram, but a steel cutter from the foundry of R. Hawthorn, of Newcastle. This metallic prow, glistening in the sun, gave a singular appearance to the brig, although there was nothing warlike about it. However, a sixteen-pound gun was placed on her forecastle; its carriage was so arranged that it could be pointed in any direction. The same thing can be said of the cannon as of her bows, neither were positively warlike.

On the 5th of February, 1860, this strange vessel was successfully launched in the sight of an immense number of spectators.

But if the brig was not a man-of-war, nor a merchant-vessel, nor a pleasure-yacht, for no one takes a pleasure trip with provisions for six years in the hold, what could she be?

A ship intended for the search of the Erebus and the Terror, and

of Sir John Franklin? No; for in 1859, the previous year, Captain MacClintock had returned from the Arctic Ocean, with convincing proof of the loss of that ill-fated expedition.

Did the Forward want to try again the famous Northwest Passage? What for? Captain MacClure had discovered it in 1853, and his lieutenant, Cresswell, had the honor of first skirting the American continent from Behring Strait to Davis Strait.

It was nevertheless absolutely certain to all competent observers that the Forward was preparing for a voyage to icy regions. Was it going to push towards the South Pole, farther than the whaler Wedell, farther than Captain James Ross? But what was the use, and with what intention?

It is easy to see that, although the field for conjecture was very limited, the imagination could easily lose itself.

The day after the launching of the brig her machinery arrived from the foundry of R. Hawthorn at Newcastle.

The engine, of one hundred and twenty horse-power, with oscillating cylinders, took up but little space; its force was large for a vessel of one hundred and seventy tons, which carried a great deal of sail, and was, besides, remarkably swift. Of her speed the trial trips left no doubt, and even the boatswain, Johnson, had seen fit to express his

opinion to the friend of Clifton in these terms,--

"When the Forward is under both steam and sail, she gets the most speed from her sails."

Clifton's friend had not understood this proposition, but he considered anything possible in a ship commanded by a dog.

After the engines had been placed on board, the stowage of provisions began; and that was no light task, for she carried enough for six years. They consisted of salted and dried meats, smoked fish, biscuit, and flour; mountains of coffee and tea were deposited in the store-room. Richard Shandon superintended the arrangement of this precious cargo with the air of a man who perfectly understood his business; everything was put in its place, labelled, and numbered with perfect precision; at the same time there was stowed away a large quantity of pemmican, an Indian preparation, which contains a great deal of nutriment in a small compass.

This sort of supply left no doubt as to the length of the cruise; but an experienced observer would have known at once that the Forward was to sail in polar waters, from the barrels of lime-juice, of lime lozenges, of bundles of mustard, sorrel, and of cochlearia,--in a word, from the abundance of powerful antiscorbutics, which are so necessary in journeys in the regions of the far north and south. Shandon had doubtless received word to take particular care about this

part of the cargo, for he gave to it especial attention, as well as to the ship's medicine-chest.

If the armament of the vessel was small enough to calm the timid souls, on the other hand, the magazine was filled with enough powder to inspire some uneasiness. The single gun on the forecastle could not pretend to require so large a supply. This excited curiosity. There were, besides, enormous saws and strong machinery, such as levers, masses of lead, hand-saws, huge axes, etc., without counting a respectable number of blasting-cylinders, which might have blown up the Liverpool custom-house. All this was strange, if not alarming, not to mention the rockets, signals, lights, and lanterns of every sort.

Then, too, the numerous spectators on the quays of the New Prince's Docks gazed with admiration at a long mahogany whale-boat, a tin canoe covered with gutta-percha, and a number of halkett-boats, which are a sort of india-rubber cloaks, which can be inflated and thereby turned into canoes. Every one felt more and more puzzled, and even excited, for with the turn of the tide the Forward was to set sail for its unknown destination.

CHAPTER II.

AN UNEXPECTED LETTER.

This is a copy of the letter received by Richard Shandon eight months previously:--

ABERDEEN, August 2, 1859.

MR. RICHARD SHANDON, Liverpool.

SIR,--This letter is to advise you of a remittance of £16,000, deposited with Messrs. Marcuart & Co., bankers, at Liverpool. Enclosed you will find a series of drafts, signed by me, which will enable you to draw upon Messrs. Marcuart & Co. to the amount mentioned above.

You do not know me. No matter; I know you, and that is enough. I offer you the position of mate on board of the brig Forward, for a voyage which may be long and perilous.

If you decline, well and good. If you accept, five hundred pounds will be assigned you as salary, and at the end of each year of the voyage your pay will be increased one tenth.

The brig Forward does not exist. You will be obliged to have it built so that it will be possible to set to sea in the beginning of April, 1860, at the latest. Enclosed is a drawing with estimates. You will follow them exactly. The ship will be built in the stocks of Scott & Co., who will arrange everything with you.

I beg of you to be specially cautious in selecting the crew of the Forward; it will consist of a captain (myself), a mate (you), a second mate, a boatswain, two engineers, an ice-master, eight sailors, two stokers, in all eighteen men, including Dr. Clawbonny of this city, who will join you at the proper time.

Those who are shipped on board of the Forward must be Englishmen, independent, with no family ties, single and temperate; for the use of spirits, and even of beer, will be strictly forbidden on shipboard: the men must be ready to undertake and endure everything.

In your selection you will prefer those of a sanguine temperament, and so inclined to maintain a higher degree of animal heat.

You will offer the crew five times their usual pay, to be increased one tenth at the end of each year. At the end of the voyage each one shall receive five hundred pounds, and you yourself two thousand. The requisite sum shall be deposited with the above-named Messrs. Marcuart & Co.

The voyage will be long and difficult, but one sure to bring renown. You need not hesitate, then, Mr. Shandon.

Send your answer to the initials K. Z., at Gottenburg, Sweden, poste restante.

P. S. On the 15th of February next you will receive a large Danish dog, with hanging lips, of a dark tawny color, with black stripes running crosswise. You will find place for him on board, and you will feed him on barley bread mixed with a broth of lard. You will acknowledge the receipt of this dog by a letter to the same initials at Leghorn, Italy.

The captain of the Forward will appear and make himself known at the proper time. As you are about setting sail you will receive new instructions.

K. Z.,
Captain of the Forward.

CHAPTER III.

DR. CLAWBONNY.

Richard Shandon was a good sailor; for a long time he had commanded whalers in the Arctic seas, with a well-deserved reputation throughout all Lancaster. Such a letter was well calculated to astonish him; he was astonished, it is true, but with the calmness of a man who is accustomed to surprises.

He suited all the required conditions; no wife, child, nor relatives. He was as independent as man could be. There being no one whose opinion he needed to consult, he betook himself to Messrs. Marcuart & Co.

"If the money is there," he said to himself, "the rest is all right."

At the banking-house he was received with the respect due to a man who has sixteen thousand pounds deposited to his credit; having made that point sure, Shandon asked for a sheet of white paper, and in his large sailor's handwriting he sent his acceptance of the plan to the address given above.

That very day he made the necessary arrangements with the builders at Birkenhead, and within twenty-four hours the keel of the Forward was laid on the stocks.

Richard Shandon was a man about forty years old, strong, energetic, and fearless, three qualities most necessary for a sailor, for they give him confidence, vigor, and coolness. He was known to be severe and very hard to please; hence he was more feared than loved by his men. But this reputation was not calculated to interfere with his selection of a crew, for he was known to be skilful in avoiding trouble.

Shandon feared that the mysterious nature of the expedition might stand in his way.

"In that case," he said, "it's best not to say anything about it; there will always be plenty of men who will want to know the why and the wherefore of the whole matter, and, since I don't know anything about it myself, I should find it hard to answer them. This K. Z. is certainly an odd stick; but, after all, he knows me, he depends on me, and that is enough. As for his ship, it will be a good one, and if it's not going to the Arctic Ocean, my name is not Richard Shandon. But I shall keep that fact for myself and my officers."

Thereupon Shandon began to choose his crew, bearing in mind the captain's wishes about the independence and health of the men.

He knew a very capital fellow, and a good sailor, James Wall by name. Wall might have been about thirty years old, and had already made some

voyages in the northern seas. Shandon offered him the place of second mate, and Wall accepted it at once; all he cared for was to be at sea. Shandon confided all the details of the affair to him and to a certain Johnson, whom he took as boatswain.

"All right," answered James Wall, "that's as good as anything. Even if it's to seek the Northwest Passage, some have come back from that."

"Not all," said Johnson, "but that's no reason that we should not try it."

"Besides, if our guesses are right," said Shandon, "it must be said that we start with a fair chance of success. The Forward will be a stanch ship and she will carry good engines. She can go a great distance. We want a crew of only eighteen men."

"Eighteen men," answered Johnson; "that's the number the American, Kane, took with him on his famous voyage towards the North Pole."

"It's strange," said Wall, "that a private person should try to make his way from Davis Strait to Behring Strait. The expeditions in search of Sir John Franklin have already cost England more than seven hundred and sixty thousand pounds, without producing any practical good. Who in the world wants to throw away his money for such a purpose?"

"In the first place, James," answered Shandon, "we are in the dark about it all. I don't know whether we are going to the northern or the southern seas. Perhaps there's some new discovery to be tried. At any rate, some day or other a Dr. Clawbonny is to come aboard who will probably know more about it and will be able to tell us. We shall see."

"Let us wait, then," said Johnson; "as for me, I'm going to look after some good men, and I'll answer now for their animal heat, as the captain calls it. You can depend on me."

Johnson was an invaluable man; he was familiar with high latitudes. He had been quartermaster aboard of the Phoenix, which belonged to one of the expeditions sent out in 1853 in search of Franklin; he had been an eye-witness of the death of the French lieutenant Bellot, whom he had accompanied in his expedition across the ice. Johnson knew all the sailors in Liverpool, and immediately set about engaging a crew.

Shandon, Wall, and he succeeded in filling the number by the middle of December, but they met with considerable difficulty; many who were attracted by the high pay were alarmed by the danger, and more than one who had boldly enlisted came later to say that he had changed his mind on account of the dissuasion of his friends. They all tried to pierce the mystery, and pursued Shandon with their questions. He used to refer them to Johnson.

"What can I say, my man?" the boatswain used to answer; "I don't know any more about it than you do. At any rate you will be in good company, with men who won't shirk their work; that's something! So don't be thinking about it all day: take it or leave it!" And the greater number took it.

"You understand," added Johnson, sometimes, "my only trouble is in making my choice. High pay, such as no sailor ever had before, with the certainty of finding a round sum when we get back. That's very tempting."

"The fact is," answered the sailors, "that it is hard to refuse. It will support a man all the rest of his life."

"I won't hide from you," continued Johnson, "that the voyage will be long, difficult, and dangerous; that's all stated in our instructions; it's well to know beforehand what one undertakes to do; probably it's to try all that men can possibly do, and perhaps even more. So, if you haven't got a bold heart and a strong body, if you can't say you have more than twenty chances to one of staying there, if, in short, you are particular about leaving your body in one place more than another, here rather than there, get away from here and let some bolder man have your place!"

"But, at least," said the confused sailor,--"at least, you know the captain?"

"The captain is Richard Shandon, my friend, until we receive another."

Now it must be said that was what the commander thought; he allowed himself to think that at the last moment he would receive definite instructions as to the object of the voyage, and that he would remain in command of the Forward. He was fond of spreading this opinion about, either in conversation with his officers or in superintending the building of the brig, of which the timbers were now rising in the Birkenhead ship-yard like the sides of a huge whale.

Shandon and Johnson conformed strictly with the recommendation about the health of the crew; they all looked hardy and possessed enough animal heat to run the engines of the Forward; their elastic limbs, their clear and ruddy skin, showed that they were fit to encounter intense cold. They were bold, determined men, energetic and stoutly built; they were not all equally vigorous. Shandon had even hesitated about accepting some of them; for instance, the sailors Gripper and Garry, and the harpooner Simpson, who seemed to him too thin; but, on the other hand, they were well built, they were earnest about it, and they were shipped.

All the crew were members of the same church; in their long voyage their prayers and the reading of the Bible would call them together and console them in the hours of depression; so that it was advisable that there should be no diversity on this score. Shandon knew from

experience the usefulness of this practice and its good influence on the men, so valuable that it is never neglected on board of ships which winter in the polar seas.

When all the crew had been engaged, Shandon and his two officers busied themselves with the provisions; they followed closely the captain's instructions, which were definite, precise, and detailed, in which the quality and quantity of the smallest articles were clearly set down. Thanks to the drafts placed at the commander's order, every article was paid for, cash down, with a discount of eight per cent, which Richard carefully placed to the credit of K. Z.

Crew, provisions, and outfit were all ready in January, 1860; the Forward was approaching completion. Shandon never let a day pass without visiting Birkenhead.

On the morning of the 23d of January he was, as usual, on one of the double-ended ferry-boats which ply between the two shores of the Mersey; everything was enveloped in one of the ordinary fogs of that region, which compel the pilot to steer by compass, although the trip is one of but ten minutes.

However, the thickness of the fog could not prevent Shandon from noticing a short, rather stout man, with a refined, agreeable face and pleasant expression, who came towards him, seized both his hands, and

pressed them with a warmth and familiarity which a Frenchman would have said was "very southern."

But if this stranger was not from the South, he had escaped it narrowly; he spoke and gesticulated freely; his thoughts seemed determined to find expression, even if they had to burst out. His eyes, small like the eyes of witty men, his large and mobile mouth, were safety-valves which enabled him to rid himself of too strong a pressure on his feelings; he talked; and he talked so much and joyously, that, it must be said, Shandon could not make out what he was saying.

Still the mate of the Forward was not slow in recognizing this short man whom he had never seen; it flashed into his mind, and the moment that the other stopped to take breath, Shandon uttered these words,--

"Dr. Clawbonny?"

"The same, in person, Commander! For nearly a quarter of an hour I have been looking after you, asking for you of every one and everywhere. Imagine my impatience. Five minutes more and I should have lost my head! So this is you, officer Shandon? You really exist? You are not a myth? Your hand, your hand! Let me press it again in mine! Yes, that is indeed the hand of Richard Shandon. Now, if there is a commander Richard, there is a brig Forward which he commands; and if

he commands it, it will sail; and if it sails, it will take Dr. Clawbonny on board."

"Well, yes, Doctor, I am Richard Shandon, there is a brig Forward, and it will sail."

"There's logic," answered the doctor, taking a long breath,--"there's logic. So I am delighted, enchanted! For a long time I've been waiting for something of this sort to turn up, and I've been wanting to try a voyage of this sort. Now, with you--"

"Excuse me--" said Shandon.

"With you," continued Clawbonny, paying him no attention, "we are sure of going far without turning round."

"But--" began Shandon.

"For you have shown what stuff you are made of, and I know all you've done. Ah, you are a good sailor!"

"If you please--"

"No, I sha'n't let your courage and skill be doubted for a moment, even by yourself. The captain who chose you for mate is a man who knew what he was about; I can tell you that."

"But that is not the question," said Shandon, impatiently.

"What is it, then? Don't keep me anxious any longer."

"But you won't let me say a word. Tell me, Doctor, if you please, how you came to join this expedition of the Forward?"

"By a letter, a capital letter; here it is,--the letter of a brave captain, very short, but very full."

With these words he handed Shandon a letter running as follows:--

INVERNESS, January 22, 1860.

To DR. CLAWBONNY, Liverpool.

If Dr. Clawbonny wishes to sail on the Forward for a long voyage, he can present himself to the mate, Richard Shandon, who has been advised concerning him.

K. Z.,
Captain of the Forward.

"The letter reached me this morning, and I'm now ready to go on board of the Forward."

"But," continued Shandon, "I suppose you know whither we are bound."

"Not the least idea in the world; but what difference does it make, provided I go somewhere? They say I'm a learned man; they are wrong; I don't know anything, and if I have published some books which have had a good sale, I was wrong; it was very kind of the public to buy them! I don't know anything, I tell you, except that I am very ignorant. Now I have a chance offered me to complete, or, rather, to make over my knowledge of medicine, surgery, history, geography, botany, mineralogy, conchology, geodesy, chemistry, physics, mechanics, hydrography; well, I accept it, and I assure you, I didn't have to be asked twice."

"Then," said Shandon in a tone of disappointment, "you don't know where the Forward is going."

"O, but I do, commander; it's going where there is something to be learned, discovered; where one can instruct himself, make comparisons, see other customs, other countries, study the ways of other people; in a word, it's going where I have never been."

"But more precisely?" cried Shandon.

"More precisely," answered the doctor, "I have understood that it was bound for the Northern Ocean. Well, good for the North!"

"At any rate," said Shandon, "you know the captain?"

"Not at all! But he's a good fellow, you may depend on it."

The mate and the doctor stepped ashore at Birkenhead; Shandon gave his companion all the information he had, and the mystery which lay about it all excited highly the doctor's imagination. The sight of the Forward enchanted him. From that time he was always with Shandon, and he came every morning to inspect the hull of the Forward.

In addition he was specially intrusted with the providing of the ship's medicine-chest.

For Clawbonny was a physician, and a good one, although he had never practised much. At twenty-five he was an ordinary young doctor, at forty he was a learned man; being known throughout the whole city, he became a leading member of the Literary and Philosophical Society of Liverpool. His moderate fortune allowed him to give some advice which was no less valuable for being without charge; loved as a thoroughly kind-hearted man must be, he did no harm to any one else nor to himself; quick and garrulous, if you please, but with his heart in his hand, and his hand in that of all the world.

When the news of his intended journey on board the Forward became known in the city, all his friends endeavored to dissuade him, but they only made him cling more obstinately to his intention; and when the doctor had absolutely determined on anything, he was a skilful man who could make him change.

From that day the rumors, conjectures, and apprehensions steadily increased; but that did not interfere with the launching of the Forward on the 5th of February, 1860. Two months later she was ready for sea.

On the 15th of March, as the captain's letter had said, a Danish dog was sent by rail from Edinburgh to Liverpool, to the address of Richard Shandon. He seemed morose, timid, and almost wicked; his expression was very strange. The name of the Forward was engraved on his collar.

The commander gave him quarters on board, and sent a letter, with the news of his arrival, to Leghorn.

Hence, with the exception of the captain, the crew of the Forward was complete. It was composed as follows:--

1. K. Z., captain; 2. Richard Shandon, first mate, in command; 3. James Wall, second mate; 4. Dr. Clawbonny; 5. Johnson, boatswain; 6.

Simpson, harpooner; 7. Bell, carpenter; 8. Brunton, first engineer; 9. Plover, second engineer; 10. Strong (negro), cook; 11. Foker, ice-master; 12. Wolston, gunner; 13. Bolton, sailor; 14. Garry, sailor; 15. Clifton, sailor; 16. Gripper, sailor; 17. Pen, sailor; 18. Warren, stoker.

CHAPTER IV.

THE DOG-CAPTAIN.

The 5th of April, the day of departure, came. The fact that the doctor had joined the expedition gave some comfort to those on board. Wherever he could go they could follow. Still, most of the sailors were very uneasy, and Shandon, fearing that their number might be diminished by desertion, was very anxious to get to sea. The land once out of sight, the men would soon be resigned.

Dr. Clawbonny's cabin was situated on the poop, occupying the extreme after-part of the ship. The cabins of the captain and mate opened on the deck. That of the captain was kept tightly closed, after it had been provided with various instruments, furniture, clothing, books, and utensils, all of which had been set down in detail in a letter. As he had asked, the key was sent to the captain at Lübeck; so he alone had admission into the cabin.

This fact annoyed Shandon, and diminished his chances of having chief command. As for his own cabin, he had arranged it suitably for the presumed voyage, for he knew very well what was necessary for a polar expedition.

The second mate's cabin was on the lower deck, where the sailors were domiciled; the crew had very comfortable quarters; they would hardly

have had such accommodations in any other ship. They were treated as if they were a valuable cargo; a huge stove stood in the middle of their sleeping-room.

Dr. Clawbonny was very enthusiastic about it; he took possession of his cabin on the 6th of February, the day after the ship was launched.

"The happiest animal in the world," he used to say, "would be a snail who could make himself just such a shell as he wanted; I shall try to be an intelligent snail."

And, in fact, for a shell which he was not going to leave for some time, his cabin presented a very comfortable appearance; the doctor took a scientific or childlike pleasure in arranging his scientific paraphernalia. His books, his specimens, his cases, his instruments, his physical apparatus, his thermometers, barometers, field-glasses, compasses, sextants, charts, drawings, phials, powder, and medicine-bottles, all were classified in a way which would have done honor to the British Museum. This space of six feet square contained incalculable wealth; the doctor needed only to stretch out his hand without rising, to become at once a physician, a mathematician, an astronomer, a geographer, a botanist, or a conchologist.

To tell the truth, he was proud of his arrangements, and very contented in his floating sanctum, which three of his thinnest friends

would have completely filled. They used to crowd there in great numbers, so that even so good-natured a man as the doctor was occasionally put out; and, like Socrates, he came at last to say,--

"My house is small, but may Heaven grant that it never be filled with friends!"

To complete our account of the Forward, it is only necessary to add that a kennel for the huge Danish dog was built just beneath the window of the closed cabin; but he preferred to keep himself between decks and in the hold; it seemed impossible to tame him; no one ever conquered his shyness; he could be heard, at night especially, howling dismally in the ship's hold.

Was it because he missed his master? Had he an instinctive dread of the dangers of the voyage? Had he a presentiment of the coming perils? The sailors were sure that he had, and more than one said the same in jest, who in his heart regarded the dog as a sort of diabolic animal.

Pen, a very brutal man, one day, while trying to kick him, slipped, and fell on the corner of the capstan in such a way that he cut his head badly. It is easy to see how the sailors put all the blame upon the dog.

Clifton, who was the most superstitious man in the crew, made, one

day, the strange observation that the dog, when on the poop, would always walk on the windward side; and afterwards, when the brig was at sea and under sail, this singular animal would shift his position to the other side after every tack, so as to be windward, as the captain of the Forward would have done.

Dr. Clawbonny, who by his gentleness and caresses would have almost tamed the heart of a tiger, tried in vain to make friends with the dog; he met with no success.

The dog, too, did not answer to any of the usual names of his kind. So the men used to call him "Captain," for he seemed perfectly familiar with all the ways on shipboard. He had evidently been to sea before.

It is hence easy to understand the boatswain's answer to Clifton's friend, and how this idea found but few sceptics; more than one would repeat it jestingly, who was fully prepared to see the dog, some fine day, take human shape, and with a loud voice assume command.

If Richard Shandon did not share such apprehensions, he was far from being undisturbed, and on the eve of departing, on the night of April 5th, he was talking on this subject with the doctor, Wall, and Johnson, in the mess-room.

These four persons were sipping their tenth grog, which was probably their last, too; for, in accordance with the letter from Aberdeen, all

the crew, from the captain to the stoker, were teetotalers, never touching beer, wine, nor spirits, except in case of sickness, and by the advice of the doctor.

For an hour past they had been talking about their departure. If the captain's instructions were to be completely carried out, Shandon would the next day receive a letter containing his last orders.

"If that letter," said the mate, "doesn't tell me the captain's name, it must at least tell us whither we are bound. If not, in what direction shall we sail?"

"Upon my word," answered the impatient doctor, "if I were in your place, Shandon, I should set sail even without getting a letter; one will come after us, you may be sure."

"You have a great deal of faith, Doctor. But, if you please, to what part of the world would you sail?"

"Towards the North Pole, of course; there can be no doubt about that."

"No doubt indeed!" said Wall. "Why not towards the South Pole?"

"The South Pole! Never!" cried the doctor. "Would the captain ever have thought of sending a brig across the whole Atlantic Ocean? Just think for a moment, my dear Wall."

"The doctor has an answer for everything," was his only reply.

"Granted it's northward," resumed Shandon. "But tell me, Doctor, is it to Spitzbergen, Greenland, or Labrador that we have to sail, or to Hudson's Bay? If all these routes come to the same end at last,--the impassable ice,--there is still a great number of them, and I should find it very hard to choose between them. Have any definite answer to that, Doctor?"

"No," answered the doctor, annoyed that he had nothing to say; "but if you get no letter, what shall you do?"

"I shall do nothing; I shall wait."

"You won't set sail!" cried Clawbonny, twirling his glass in his despair.

"No, certainly not."

"That's the best course," said Johnson, mildly; while the doctor walked around the table, being unable to sit quiet any longer. "Yes, that's the best course; and still, too long a delay might have very disastrous consequences. In the first place, the season is a good one, and if it's north we are going, we ought to take advantage of the mild weather to get through Davis Straits; besides, the crew will get more

and more impatient; the friends and companions of the men are urging them to leave the Forward, and they might succeed in playing us a very bad turn."

"And then, too," said James Wall, "if any panic should arise among the men, every one would desert us; and I don't know, Commander, how you could get together another crew."

"But what is to be done?" cried Shandon.

"What you said," answered the doctor: "wait; but wait till to-morrow before you despair. The captain's promises have all been fulfilled so far with such regularity that we may have the best hopes for the future; there's no reason to think that we shall not be told of our destination at the proper time. As for me, I don't doubt in the least that to-morrow we shall be sailing in the Irish Sea. So, my friends, I propose one last drink to a happy voyage; it begins in a mysterious way, but, with such sailors as you, there are a thousand chances of its ending well."

And they all touched their glasses for the last time.

"Now, Commander," resumed Johnson, "I have one piece of advice to give you, and that is, to make everything ready for sailing. Let the crew think you are certain of what you are about. To-morrow, whether a

letter comes or not, set sail; don't start your fires; the wind promises to hold; nothing will be easier than to get off; take a pilot on board; at the ebb of the tide leave the docks; then anchor beyond Birkenhead Point; the crew will have no more communication with the land; and if this devilish letter does come at last, it can find us there as well as anywhere."

"Well said, Johnson!" exclaimed the doctor, reaching out his hand to the old sailor.

"That's what we shall do," answered Shandon.

Each one then withdrew to his cabin, and took what sleep he could get till morning.

The next day the first distribution of letters took place in the city, but there was none for Commander Richard Shandon.

Nevertheless he made his preparations for departure; the news spread immediately throughout the city, and, as we have seen, a great concourse of spectators thronged the piers of the New Prince's Docks.

A great many people came on board the brig,--some to bid a friend good by, or to urge him to leave the ship, or to gaze at this strange vessel; others to ascertain the object of the voyage; and there were many murmurs at the unusual silence of the commander.

For that he had his reasons.

Ten o'clock struck. Eleven. The tide was to turn at half past twelve. Shandon, from the upper deck, gazed with anxious eyes at the crowd, trying in vain to read on some one's face the secret of his fate. But in vain. The sailors of the Forward obeyed his orders in silence, keeping their eyes fixed upon him, ever awaiting some information which he did not give.

Johnson was finishing the preparations for setting sail. The day was overcast, and the sea, outside of the docks, rather high; a stiff southwest breeze was blowing, but they could easily leave the Mersey.

At twelve o'clock still nothing. Dr. Clawbonny walked up and down uneasily, looking about, gesticulating, and "impatient for the sea," as he said. In spite of all he could do, he felt excited. Shandon bit his lips till the blood came.

At this moment Johnson came up to him and said,--

"Commander, if we are going to take this tide, we must lose no time; it will be a good hour before we can get off from the docks."

Shandon cast one last glance about him, and looked at his watch. It was after the time of the midday distribution of letters.

"Cast off!" he said to his boatswain.

"All ashore who are going!" cried the latter, ordering the spectators to leave the deck of the Forward.

Thereupon the crowd, began to move toward the gangway and make its way on to the quay, while the crew began to cast off the last moorings.

At once the inevitable confusion of the crowd, which was pushed about without much ceremony by the sailors, was increased by the barking of the dog. He suddenly sprang from the forecastle right through the mass of visitors, barking sullenly.

All made way for him. He sprang on the poop-deck, and, incredible as it may seem, yet, as a thousand witnesses can testify, this dog-captain carried a letter in his mouth.

"A letter!" cried Shandon; "but is he on board?"

"He was, without doubt, but he's not now," answered Johnson, showing the deck cleared of the crowd.

"Here, Captain! Captain!" shouted the doctor, trying to take the letter from the dog, who kept springing away from him. He seemed to want to give the letter to Shandon himself.

"Here, Captain!" he said.

The dog went up to him; Shandon took the letter without difficulty, and then Captain barked sharply three times, amid the profound silence which prevailed on board the ship and along the quay.

Shandon held the letter in his hand, without opening it.

"Read it, read it!" cried the doctor. Shandon looked at it. The address, without date or place, ran simply,--"Commander Richard Shandon, on board the brig Forward."

Shandon opened the letter and read:--

You will sail towards Cape Farewell. You will reach it April 20. If the captain does not appear on board, you will pass through Davis Strait and go up Baffin's Bay as far as Melville Sound.

K. Z.,
Captain of the Forward.

Shandon folded carefully this brief letter, put it in his pocket, and gave the order to cast off. His voice, which arose alone above the

roaring of the wind, sounded very solemn.

Soon the Forward had left the docks, and under the care of a pilot, whose boat followed at a distance, put out into the stream. The crowd hastened to the outer quay by the Victoria Docks to get a last look at the strange vessel. The two topsails, the foresail, and staysail were soon set, and under this canvas the Forward, which well deserved its name, after rounding Birkenhead Point, sailed away into the Irish Sea.

CHAPTER V.

AT SEA.

The wind, which was uncertain, although in general favorable, was blowing in genuine April squalls. The Forward sailed rapidly, and its screw, as yet unused, did not delay its progress. Towards three o'clock they met the steamer which plies between Liverpool and the Isle of Man, and which carries the three legs of Sicily on its paddle-boxes. Her captain hailed them, and this was the last good-by to the crew of the Forward.

At five o'clock the pilot resigned the charge of the ship to Richard Shandon, and sailed away in his boat, which soon disappeared from sight in the southwest.

Towards evening the brig doubled the Calf of Man, at the southern extremity of the island of that name. During the night the sea was very high; the Forward rode the waves very well, however, and leaving the Point of Ayr on the northwest, she ran towards the North Channel.

Johnson was right; once at sea the sailors readily adapted themselves instinctively to the situation. They saw the excellence of their vessel and forgot the strangeness of their situation. The ship's routine was soon regularly established.

The doctor inhaled with pleasure the sea-air; he paced up and down the deck in spite of the fresh wind, and showed that for a student he had very good sea-legs.

"The sea is a fine thing," he said to Johnson, as he went upon the bridge after breakfast; "I am a little late in making its acquaintance, but I shall make up for my delay."

"You are right, Dr. Clawbonny; I would give all the land in the world for a bit of ocean. People say that sailors soon get tired of their business; but I've been sailing for forty years, and I like it as well as I did the first day."

"What a pleasure it is to feel a stanch ship under one's feet! and, if I'm not mistaken, the Forward is a capital sea-boat."

"You are right, Doctor," answered Shandon, who had joined the two speakers; "she's a good ship, and I must say that there was never a ship so well equipped for a voyage in the polar regions. That reminds me that, thirty years ago, Captain James Ross, going to seek the Northwest Passage--"

"Commanded the Victory," said the doctor, quickly, "a brig of about the tonnage of this one, and also carrying machinery."

"What! did you know that?"

"Say for yourself," retorted the doctor. "Steamers were then new inventions, and the machinery of the Victory was continually delaying him. Captain Ross, after in vain trying to patch up every piece, at last took it all out and left it at the first place he wintered at."

"The deuce!" said Shandon. "You know all about it, I see."

"More or less," answered the doctor. "In my reading I have come across the works of Parry, Ross, Franklin; the reports of MacClure, Kennedy, Kane, MacClintock; and some of it has stuck in my memory. I might add that MacClintock, on board of the Fox, a propeller like ours, succeeded in making his way more easily and more directly than all his successors."

"That's perfectly true," answered Shandon; "that MacClintock is a good sailor; I have seen him at sea. You might also say that we shall be, like him, in Davis Strait in the month of April; and if we can get through the ice our voyage will be very much advanced."

"Unless," said the doctor, "we should be as unlucky as the Fox in 1857, and should be caught the first year by the ice in the north of Baffin's Bay, and we should have to winter among the icebergs."

"We must hope to be luckier, Mr. Shandon," said Johnson; "and if, with a ship like the Forward, we can't go where we please, the attempt must be given up forever."

"Besides," continued the doctor, "if the captain is on board he will know better than we what is to be done, and so much the better because we are perfectly ignorant; for his singularly brief letter gives us no clew to the probable aim of the voyage."

"It's a great deal," answered Shandon, with some warmth, "to know what route we have to take; and now for a good month, I fancy, we shall be able to get along without his supernatural intervention and orders. Besides, you know what I think about him."

"Ha, ha!" laughed the doctor; "I used to think as you did, that he was going to leave the command of the ship in your hands, and that he would never come on board; but--"

"But what?" asked Shandon, with some ill-humor.

"But since the arrival of the second letter, I have altered my views somewhat."

"And why so, doctor?"

"Because, although this letter does tell you in which direction to go,

it still does not inform you of the final aim of the voyage; and we have yet to know whither we are to go. I ask you how can a third letter reach us now that we are on the open sea. The postal service on the shore of Greenland is very defective. You see, Shandon, I fancy that he is waiting for us at some Danish settlement up there,--at Holsteinborg or Upernavik. We shall find that he has been completing the supply of seal-skins, buying sledges and dogs,--in a word, providing all the equipment for a journey in the arctic seas. So I shall not be in the least surprised to see him coming out of his cabin some fine morning and taking command in the least supernatural way in the world."

"Possibly," answered Shandon, dryly; "but meanwhile the wind's freshening, and there's no use risking our topsails in such weather."

Shandon left the doctor, and ordered the topsails furled.

"He still clings to that idea," said the doctor to the boatswain.

"Yes," was the answer, "and it's a pity; for you may very well be right, Dr. Clawbonny."

Towards the evening of Saturday the Forward rounded the Mull of Galloway, on which the light could be seen in the northeast. During the night they left the Mull of Cantire to the north, and on the east Fair Head, on the Irish coast. Towards three o'clock in the morning,

the brig, passing Rathlin Island on its starboard quarter, came out from the North Channel into the ocean.

That was Sunday, April 8. The English, and especially sailors, are very observant of that day; hence the reading of the Bible, of which the doctor gladly took charge, occupied a good part of the morning.

The wind rose to a gale, and threatened to drive the ship back upon the Irish coast. The waves ran very high; the vessel rolled a great deal. If the doctor was not sea-sick, it was because he was determined not to be, for nothing would have been easier. At midday Malin Head disappeared from their view in the south; it was the last sight these bold sailors were to have of Europe, and more than one gazed at it for a long time who was doubtless fated never to set eyes on it again.

By observation the latitude then was 55° 57', and the longitude, according to the chronometer, 7° 40'.[1]

[Footnote 1: Meridian of Greenwich.]

The gale abated towards nine o'clock of the evening; the Forward, a good sailer, kept on its route to the northwest. That day gave them all a good opportunity to judge of her sea-going qualities; as good judges had already said at Liverpool, she was well adapted for carrying sail.

During the following days, the Forward made very good progress; the wind veered to the south, and the sea ran high. The brig set every sail. A few petrels and puffins flew about the poop-deck; the doctor succeeded in shooting one of the latter, which fortunately fell on board.

Simpson, the harpooner, seized it and carried it to the doctor.

"It's an ugly bird, Dr. Clawbonny," he said.

"But then it will make a good meal, my friend."

"What, are you going to eat it?"

"And you shall have a taste of it," said the doctor, laughing.

"Never!" answered Simpson; "it's strong and oily, like all sea-birds."

"True," said the doctor; "but I have a way of dressing such game, and if you recognize it to be a sea-bird, I'll promise never to kill another in all my life."

"So you are a cook, too, Dr. Clawbonny?" asked Johnson.

"A learned man ought to know a little of everything."

"Then take care, Simpson," said the boatswain; "the doctor is a clever man, and he'll make us take this puffin for a delicious grouse."

In fact, the doctor was in the right about this bird; he removed skilfully the fat which lies beneath the whole surface of the skin, principally on its thighs, and with it disappeared all the rancid, fishy odor with which this bird can be justly charged. Thus prepared, the bird was called delicious, even by Simpson.

During the recent storm, Richard Shandon had made up his mind about the qualities of his crew; he had tested his men one by one, as every officer should do who wishes to be prepared for future dangers; he knew on whom he could rely.

James Wall, who was warmly attached to Richard, was intelligent and efficient, but he had very little originality; as second officer he was exactly in his place.

Johnson, who was accustomed to the dangers of the sea, and an old sailor in arctic regions, lacked neither coolness nor courage.

Simpson, the harpooner, and Bell, the carpenter, were steady men, obedient and well disciplined. The ice-master, Foker, an experienced sailor, who had sailed in northern waters, promised to be of the greatest service.

Of the other men, Garry and Bolton seemed to be the best; Bolton was a jolly fellow, always laughing and joking; Garry, a man about thirty-five years old, had an energetic, but rather pale and sad face.

The three sailors, Clifton, Gripper, and Pen, seemed to be the least enthusiastic and determined; they were inclined to grumbling. Gripper had even wished to break his engagement when the time came for sailing, and only a feeling of shame prevented him. If things went well, if they encountered no excessive dangers, and their toil was not too severe, these three men could be counted on; but they were hard to please with their food, for they were inclined to gluttony. In spite of their having been forewarned, they were by no means pleased with being teetotalers, and at their meals they used to miss their brandy or gin; but they made up for it with the tea and coffee which were distributed with a lavish hand.

As for the two engineers, Brunton and Plover, and the stoker, Warren, they had been so far well satisfied with having nothing to do.

Shandon knew therefore what to expect from each man.

On the 14th of April, the Forward crossed the Gulf Stream, which, after following the eastern coast of America as far as Newfoundland, turns to the northeast and moves towards the shore of Norway. They were then in latitude 51° 37', and longitude 22° 37', two hundred

miles from the end of Greenland. The weather grew colder; the thermometer fell to 32°, the freezing-point.

The doctor, without yet putting on his arctic winter dress, was wearing a suit of sea-clothes, like all the officers and sailors; he was an amusing sight in his high boots, in which he could not bend his legs, his huge tarpaulin hat, his trousers and coat of the same material; in heavy rain, or when the brig was shipping seas, the doctor used to look like a sort of sea-monster, a comparison which always flattered him.

For two days the sea was very rough; the wind veered to the northwest, and delayed the Forward. From the 14th to the 16th of April there was still a high sea running; but on Monday there fell a heavy shower which almost immediately had the effect of calming the sea. Shandon called the doctor's attention to it.

"Well," said the doctor, "that confirms the curious observations of the whaler Scoresby, who was a member of the Royal Society of Edinburgh, of which I have the honor to be a corresponding member. You see that while the rain is falling the waves are hardly to be noticed, even when the wind is strong. On the other hand, in dry weather the sea would be rougher even with a gentler wind."

"But what is the explanation of it, Doctor?"

"It's very simple; there is no explanation."

At that moment the ice-master, who was on watch in the topmast cross-trees, cried out that there was a floating mass on the starboard quarter, about fifteen miles to windward.

"An iceberg in these latitudes!" cried the doctor.

Shandon turned his glass in that direction, and corroborated the lookout's words.

"That's strange," said the doctor.

"Are you surprised?" asked the commander, laughing. "What! are we lucky enough to find anything that will surprise you?"

"I am surprised without being surprised," answered the doctor, smiling, "since the brig Ann Poole, of Greenspond, was caught in the ice in the year 1813, in the forty-fourth degree of north latitude, and Dayement, her captain, saw hundreds of icebergs."

"Good," said Shandon; "you can still teach us a great deal about them."

"O, not so very much!" answered Clawbonny, modestly, "except that ice has been seen in very much lower latitudes."

"That I know, my dear Doctor, for when I was a cabin-boy on the sloop-of-war, Fly--"

"In 1818," continued the doctor, "at the end of March, or it might have been the beginning of April, you passed between two large fields of floating ice, in latitude forty-two."

"That is too much!" exclaimed Shandon.

"But it's true; so I have no need to be surprised, now that we are two degrees farther north, at our sighting an iceberg."

"You are bottled full of information, Doctor," answered the commander; "one needs only draw the cork."

"Very well, I shall be exhausted sooner than you think; and now, Shandon, if we can get a nearer view of this phenomenon, I should be the gladdest of doctors."

"Exactly, Johnson," said Shandon, summoning the boatswain; "I think the wind is freshening."

"Yes, Commander," answered Johnson, "we are making very little headway, and soon we shall feel the currents from Davis Strait."

"You are right, Johnson, and if we mean to make Cape Farewell by the 20th of April, we must go under steam, or we shall be cast on the coast of Labrador.--Mr. Wall, give the order to light the fires."

The mate's orders were obeyed; an hour later the engines were in motion; the sails were furled; and the screw, turning through the waves, was driving the Forward rapidly in the teeth of the northwest wind.

CHAPTER VI.

THE GREAT POLAR CURRENT.

Soon more numerous flocks of birds, petrels, puffins, and others which inhabit those barren shores, gave token of their approach to Greenland. The Forward was moving rapidly northward, leaving behind her a long line of dark smoke.

Tuesday, the 17th of April, the ice-master caught the first sight of the blink[1] of the ice. It was visible at least twenty miles off to the north-northwest. In spite of some tolerably thick clouds it lighted up brilliantly all the air near the horizon. No one of those on board who had ever seen this phenomenon before could fail to recognize it, and they felt assured from its whiteness that this blink was due to a vast field of ice lying about thirty miles farther than they could see, and that it came from the reflection of its luminous rays.

[Footnote 1: A peculiar and brilliant color of the air above a large expanse of ice.]

Towards evening the wind shifted to the south, and became favorable; Shandon was able to carry sail, and as a measure of economy they extinguished the furnace fires. The Forward under her topsails, jib, and foresail, sailed on towards Cape Farewell.

At three o'clock on the 18th they made out an ice-stream, which, like a narrow but brilliant band, divided the lines of the water and sky. It was evidently descending rather from the coast of Greenland than from Davis Strait, for the ice tended to keep on the western side of Baffin's Bay. An hour later, and the Forward was passing through the detached fragments of the ice-stream, and in the thickest part the pieces of ice, although closely welded together, were rising and falling with the waves.

At daybreak the next morning the watch saw a sail; it was the Valkyria, a Danish corvette, sailing towards the Forward, bound to Newfoundland. The current from the strait became perceptible, and Shandon had to set more sail to overcome it.

At that moment the commander, the doctor, James Wall, and Johnson were all together on the poop-deck, observing the force and direction of the current. The doctor asked if it were proved that this current was felt throughout Baffin's Bay.

"There's no doubt of it," answered Shandon; "and sailing-vessels have hard work in making headway against it."

"And it's so much the harder," added James Wall, "because it's met on the eastern coast of America, as well as on the western coast of Greenland."

"Well," said the doctor, "that serves to confirm those who seek a Northwest Passage. The current moves at the rate of about five miles an hour, and it is hard to imagine that it rises at the bottom of a gulf."

"That is very likely, Doctor," answered Shandon, "because, while this current flows from north to south, there is a contrary current in Behring Strait, which flows from south to north, and which must be the cause of this one."

"Hence," said the doctor, "you must admit that America is completely separated from the polar regions, and that the water from the Pacific skirts its whole northern coast, until it reaches the Atlantic. Besides, the greater elevation of the water of the Pacific is another reason for its flowing towards the European seas."

"But," said Shandon, "there must be some facts which support this theory; and if there are," he added with gentle irony, "our learned friend must be familiar with them."

"Well," answered the latter, complacently, "if it interests you at all I can tell you that whales, wounded in Davis Strait, have been found afterwards on the coast of Tartary, still carrying a European harpoon in their side."

"And unless they doubled Cape Horn, or the Cape of Good Hope," answered Shandon, "they must have gone around the northern coast of America. There can be no doubt of that, Doctor."

"And if you were not convinced, my dear Shandon," said the doctor, smiling, "I could produce still other evidence, such as the floating wood with which Davis Strait is filled, larch, aspen, and other southern kinds. Now we know that the Gulf Stream could not carry them into the strait; and if they come out from it they must have got in through Behring Strait."

"I am perfectly convinced, Doctor, and I must say it would be hard to maintain the other side against you."

"See there," said Johnson, "there's something that will throw light on this discussion. It's a large piece of wood floating on the water; if the commander will give us leave, we can put a rope about it, hoist it on board, and ask it the name of its country."

"That's the way!" said the doctor; "after the rule we have the example."

Shandon gave the necessary orders; the brig was turned towards the piece of wood, and soon the crew were hoisting it aboard, although not without considerable trouble.

It was the trunk of a mahogany-tree, eaten to its centre by worms, which fact alone made it light enough to float.

"This is a real triumph," exclaimed the doctor, enthusiastically, "for, since the Atlantic currents could not have brought it into Davis Strait, since it could not have reached the polar waters from the rivers of North America, as the tree grows under the equator, it is evident that it must have come direct from Behring Strait. And besides, see those sea-worms which have eaten it; they belong to warm latitudes."

"It certainly gives the lie to those who deny the existence of a Northwest Passage."

"It fairly kills them," answered the doctor. "See here, I'll give you the route of this mahogany-tree: it was carried to the Pacific Ocean by some river of the Isthmus of Panama or of Guatemala; thence the current carried it along the coast of America as far as Behring Strait, and so it was forced into the polar waters; it is neither so old nor so completely water-logged that we cannot set its departure at some recent date; it escaped all the obstacles of the many straits coming into Baffin's Bay, and being quickly seized by the arctic current it came through Davis Strait to be hoisted on board the Forward for the great joy of Dr. Clawbonny, who asks the commander's permission to keep a piece as a memorial."

"Of course," answered Shandon; "but let me tell you in my turn that you will not be the only possessor of such a waif. The Danish governor of the island of Disco--"

"On the coast of Greenland," continued the doctor, "has a mahogany table, made from a tree found in the same way; I know it, my dear Shandon. Very well; I don't grudge him his table, for if there were room enough on board, I could easily make a sleeping-room out of this."

On the night of Wednesday the wind blew with extreme violence; drift-wood was frequently seen; the approach to the coast became more dangerous at a time when icebergs are numerous; hence the commander ordered sail to be shortened, and the Forward went on under merely her foresail and forestay-sail.

The thermometer fell below the freezing-point. Shandon distributed among the crew suitable clothing, woollen trousers and jackets, flannel shirts, and thick woollen stockings, such as are worn by Norwegian peasants. Every man received in addition a pair of water-proof boots.

As for Captain, he seemed contented with his fur; he appeared indifferent to the changes of temperature, as if he were thoroughly accustomed to such a life; and besides, a Danish dog was unlikely to be very tender. The men seldom laid eyes on him, for he generally kept

himself concealed in the darkest parts of the vessel.

Towards evening, through a rift in the fog, the coast of Greenland could be seen in longitude 37° 2' 7". Through his glass the doctor was able to distinguish mountains separated by huge glaciers; but the fog soon cut out this view, like the curtain of a theatre falling at the most interesting part of a play.

On the morning of the 20th of April, the Forward found itself in sight of an iceberg one hundred and fifty feet high, aground in this place from time immemorial; the thaws have had no effect upon it, and leave its strange shape unaltered. Snow saw it; in 1829 James Ross took an exact drawing of it; and in 1851 the French lieutenant, Bellot, on board of the Prince Albert, observed it. Naturally the doctor wanted to preserve a memorial of the famous mountain, and he made a very successful sketch of it.

It is not strange that such masses should run aground, and in consequence become immovably fixed to the spot; as for every foot above the surface of the water they have nearly two beneath, which would give to this one a total height of about four hundred feet.

At last with a temperature at noon as low as 12°, under a snowy, misty sky, they sighted Cape Farewell. The Forward arrived at the appointed day; the unknown captain, if he cared to assume his place in such gloomy weather, would have no need to complain.

"Then," said the doctor to himself, "there is this famous cape, with its appropriate name! Many have passed it, as we do, who were destined never to see it again! Is it an eternal farewell to one's friends in Europe? You have all passed it, Frobisher, Knight, Barlow, Vaughan, Scroggs, Barentz, Hudson, Blosseville, Franklin, Crozier, Bellot, destined never to return home; and for you this cape was well named Cape Farewell!"

It was towards the year 970 that voyagers, setting out from Iceland, discovered Greenland. Sebastian Cabot, in 1498, went as high as latitude 56°; Gaspard and Michel Cotréal, from 1500 to 1502, reached latitude 60°; and in 1576 Martin Frobisher reached the inlet which bears his name.

To John Davis belongs the honor of having discovered the strait, in 1585; and two years later in a third voyage this hardy sailor, this great whaler, reached the sixty-third parallel, twenty-seven degrees from the Pole.

Barentz in 1596, Weymouth in 1602, James Hall in 1605 and 1607, Hudson, whose name was given to the large bay which runs so far back into the continent of America, James Poole in 1611, went more or less far into the straits, seeking the Northwest Passage, the discovery of which would have greatly shortened the route between the two worlds.

Baffin, in 1616, found in the bay of that name Lancaster Sound; he was followed in 1619 by James Monk, and in 1719 by Knight, Barlow, Vaughan, and Scroggs, who were never heard of again.

In 1776, Lieutenant Pickersgill, sent to meet Captain Cook, who tried to make his way through Behring Strait, reached latitude 68°; the next year, Young, on the same errand, went as far as Woman's Island.

Then came James Ross, who in 1818 sailed all around the shores of Baffin's Bay, and corrected the errors on the charts of his predecessors.

Finally, in 1819 and 1820, the famous Parry made his way into Lancaster Sound. In spite of numberless difficulties he reached Melville Island, and won the prize of five thousand pounds offered by act of Parliament to the English sailors who should cross the meridian at a latitude higher than the seventy-seventh parallel.

In 1826, Beechey touched at Chamisso Island; James Ross wintered, from 1829 to 1833, in Prince Regent's Inlet, and, among other important services, discovered the magnetic pole.

During this time Franklin, by a land-journey, defined the northern coast of America, from Mackenzie River to Turnagain Point; Captain Back followed the same route from 1823 to 1835; and these explorations were completed in 1839 by Dease, Simpson, and Dr. Rae.

At last, Sir John Franklin, anxious to discover the Northwest Passage, left England in 1845, with the Erebus and the Terror; he entered Baffin's Bay, and since his leaving Disco Island there has been no news of his expedition.

His disappearance started numerous search-expeditions, which have effected the discovery of the passage, and given the world definite information about the rugged coasts of the polar lands. The boldest sailors of England, France, and the United States hastened to these terrible latitudes; and, thanks to their exertions, the tortuous, complicated map of these regions has at last been placed in the archives of the Royal Geographical Society of London.

The strange history of these lands crowded on the imagination of the doctor, as he stood leaning on the rail, and gazing on the long track of the brig. The names of those bold sailors thronged into his memory, and it seemed to him that beneath the frozen arches of the ice he could see the pale ghosts of those who never returned.

CHAPTER VII.

THE ENTRANCE OF DAVIS STRAIT.

During that day the Forward made easy progress through the loose ice; the breeze was in a good quarter, but the temperature was very low; the wind coming across the ice-fields was thoroughly chilled.

At night the strictest care was necessary; the icebergs crowded together in this narrow passage; often they could be counted by the hundred on the horizon; they had been loosened from the lofty coasts by the incessant beating of the waves and the warmth of the spring month, and they were floating down to melt away in the depths of the ocean. Often, too, they came across large masses of floating wood, which they were obliged to avoid, so that the crow's-nest was placed in position on the top of the foremast; it consisted of a sort of tub, in which the ice-master, partly sheltered from the wind, scanned the sea, giving notice of the ice in sight, and even, if necessary, directing the ship's course.

The nights were short; since the 31st of January the sun had reappeared in refraction, and was every day rising higher and higher above the horizon. But it was hid by the snow, which, if it did not produce utter darkness, rendered navigation difficult.

April 21st, Cape Desolation appeared through the mist; hard work was wearying the crew; since the brig had entered the ice, the sailors had had no rest; it was now necessary to have recourse to steam to force a way through the accumulated masses.

The doctor and Johnson were talking together on the after-deck, while Shandon was snatching a few hours of sleep in his cabin. Clawbonny was very fond of talking with the old sailor, whose numerous voyages had given him a valuable education. The two had made great friends of one another.

"You see, Dr. Clawbonny," said Johnson, "this country is not like any other; its name is Greenland, but there are very few weeks of the year in which it deserves this name."

"But, Johnson," answered the doctor, "who can say whether in the tenth century this name did not suit it? More than one change of this sort has taken place on the globe, and I should astonish you much more by saying that, according to Icelandic chroniclers, two hundred villages flourished on this continent eight or nine hundred years ago."

"You astonish me so much, Dr. Clawbonny, that I can't believe you; for it's a sterile country."

"Well, sterile as it is, it supports a good many inhabitants, and among them are some civilized Europeans."

"Without doubt; at Disco and at Upernavik we shall find men who are willing to live in such a climate; but I always supposed they stayed there from necessity, and not because they liked it."

"I think you are right; still, men get accustomed to everything, and these Greenlanders appear to me better off than the workingmen of our large cities; they may be unfortunate, but they are not miserable. I say unfortunate, but that is not exactly what I mean; in fact, if they are not quite as comfortable as those who live in temperate regions, they, nevertheless, are accustomed to the severity of the climate, and find in it an enjoyment which we should never imagine."

"We have to think so, Dr. Clawbonny, because Heaven is just; but I have often visited these coasts, and I am always saddened at the sight of its gloomy loneliness; the capes, promontories, and bays ought to have more attractive names, for Cape Farewell and Cape Desolation are not of a sort to cheer sailors."

"I have often made the same remark," answered the doctor; "but these names have a geographical value which is not to be forgotten; they describe the adventures of those who gave them; along with the names of Davis, Baffin, Hudson, Ross, Parry, Franklin, Bellot, if I find Cape Desolation, I also find soon Mercy Bay; Cape Providence makes up for Port Anxiety, Repulse Bay brings me to Cape Eden, and after leaving Point Turnagain I rest in Refuge Bay; in that way I have under

my eyes the whole succession of dangers, checks, obstacles, successes, despairs, and victories connected with the great names of my country; and, like a series of antique medals, this nomenclature gives me the whole history of these seas."

"Well reasoned, Doctor; and may we find more bays of Success in our journey than capes of Despair!"

"I hope so, Johnson; but, tell me, have the crew got over their fears?"

"Somewhat, sir; and yet, to tell the truth, since we entered these straits, they have begun to be very uneasy about the unknown captain; more than one expected to see him appear at the end of Greenland; and so far no news of him. Between ourselves, Doctor, don't you think that is a little strange!"

"Yes, Johnson, I do."

"Do you believe the captain exists?"

"Without any doubt."

"But what reason can he have had for acting in this way?"

"To speak frankly, Johnson, I imagine that he wants to get the crew so

far away that it will be impossible for them to turn back. Now, if he had appeared on board when we set sail, and every one had known where we were going, he might have been embarrassed."

"How so?"

"Why, if he wants to try any superhuman enterprise, if he wants to go where so many have failed, do you think he would have succeeded in shipping a crew? But, once on the way, it is easy to go so far that to go farther becomes an absolute necessity."

"Possibly, Doctor; I have known more than one bold explorer, whose name alone would have frightened every one, and who would have found no one to accompany him on his perilous expeditions--"

"Except me," said the doctor.

"And me," continued Johnson. "I tell you our captain is probably one of those men. At any rate, we shall know sooner or later; I suppose that at Upernavik or Melville Bay he will come quietly on board, and let us know whither he intends to take the ship."

"Very likely, Johnson; but the difficulty will be to get to Melville Bay; see how thick the ice is about us! The Forward can hardly make her way through it. See there, that huge expanse!"

"We whalers call that an ice-field, that is to say, an unbroken surface of ice, the limits of which cannot be seen."

"And what do you call this broken field of long pieces more or less closely connected?"

"That is a pack; if it's round we call it a patch, and a stream if it is long."

"And that floating ice?"

"That is drift-ice; if a little higher it would be icebergs; they are very dangerous to ships, and they have to be carefully avoided. See, down there on the ice-field, that protuberance caused by the pressure of the ice; we call that a hummock; if the base were under water, we should call it a cake; we have to give names to them all to distinguish them."

"Ah, it is a strange sight," exclaimed the doctor, as he gazed at the wonders of the northern seas; "one's imagination is touched by all these different shapes!"

"True," answered Johnson, "the ice takes sometimes such curious shapes; and we men never fail to explain them in our own way."

"See there, Johnson; see that singular collection of blocks of ice!

Would one not say it was a foreign city, an Eastern city, with minarets and mosques in the moonlight? Farther off is a long row of Gothic arches, which remind us of the chapel of Henry VII., or the Houses of Parliament."

"Everything can be found there; but those cities or churches are very dangerous, and we must not go too near them. Some of those minarets are tottering, and the smallest of them would crush a ship like the Forward."

"And yet men have dared to come into these seas under sail alone! How could a ship be trusted in such perils without the aid of steam?"

"Still it has been done; when the wind is unfavorable, and I have known that happen more than once, it is usual to anchor to one of these blocks of ice; we should float more or less around with them, but we would wait for a fair wind; it is true that, travelling in that way, months would be sometimes wasted where we shall need only a few days."

"It seems to me," said the doctor, "that the temperature is falling."

"That would be a pity," answered Johnson, "for there will have to be a thaw before these masses separate, and float away into the Atlantic; besides, they are more numerous in Davis Strait, because the two stretches of land approach one another between Cape Walsingham and

Holsteinborg; but above latitude 67° we shall find in May and June more navigable seas."

"Yes; but we must get through this first."

"We must get through, Doctor; in June and July we should have found the passage free, as do the whalers; but our orders were strict; we had to be here in April. If I'm not very much mistaken, our captain is a sound fellow with an idea firm in his head; his only reason for leaving so early was to go far. Whoever survives will see."

The doctor was right about the falling of the temperature; at noon the thermometer stood at 6°, and a breeze was blowing from the northwest, which, while it cleared the sky, aided the current in accumulating the floating ice in the path of the Forward. It did not all follow the same course; often some pieces, and very high ones, too, floated in the opposite direction under the influence of a submarine current.

The difficulties of this navigation may be readily understood; the engineers had no repose; the engines were controlled from the bridge by means of levers, which started, stopped, and reversed them instantly, at the orders of the officer in command. Sometimes it was necessary to hasten forward to enter an opening in the ice, again to race with a mass of ice which threatened to block up their only egress, or some piece, suddenly upsetting, obliged the brig to back quickly, in order to escape destruction. This mass of ice, carried and

accumulated by the great polar current, was hurried through the strait, and if the frost should unite it, it would present an impassable barrier to the Forward.

In these latitudes numberless birds were to be found; petrels and contremaitres were flying here and there, with deafening cries; there were also many gulls, with their large heads, short necks, and small beaks, which were extending their long wings and braving the snow which the storm was whirling about. This profusion of winged beings enlivened the scene.

Numerous pieces of wood were drifting along, clashing continually into one another; a few whales with large heads approached the ship; but they could not think of chasing them, although Simpson, the harpooner, earnestly desired it. Towards evening several seals were seen, which, with their noses just above the water, were swimming among the great pieces of ice.

On the 22d the temperature was still falling; the Forward carried a great deal of steam to reach an easier sailing-place; the wind blew steadily from the northwest; the sails were furled.

During Sunday the sailors had little to do. After divine service, which was read by Shandon, the crew betook themselves to chasing wild birds, of which they caught a great many. These birds, prepared

according to Dr. Clawbonny's method, were an agreeable addition to the messes of the officers and crew.

At three o'clock in the afternoon, the Forward sighted the Kin of Sael, which lay east one quarter northeast, and the Mount Sukkertop, southeast one quarter east half-east; the sea was very high; from time to time a dense fog descended suddenly from the gray sky. Notwithstanding, at noon they were able to take an observation. The ship was found to be in latitude 65° 20' and longitude 54° 22'. They would have to go two degrees farther north before they would find clearer sailing.

During the three following days, the 24th, 25th, and 26th of April, they had uninterruptedly to fight with the ice; the management of the engines became very tedious; every minute steam was shut off or reversed, and escaped from the safety-valve.

In the dense mist their approach to the icebergs could be known only by the dull roar of the avalanches; then the vessel would shift its course at once; then there was the danger of running into the masses of frozen fresh water, which were as clear as crystal and as hard as stone. Richard Shandon used to take aboard a quantity of this ice every day to supply the ship with fresh water.

The doctor could not accustom himself to the optical illusions produced by refraction; indeed, an iceberg ten or twelve miles distant

used to seem to him to be a small piece of ice close by; he tried to get used to this strange phenomenon, in order to be able by and by to overcome the mistakes of his eyesight.

At last, both by towing the brig along the fields of ice and by pushing off threatening blocks with poles, the crew was thoroughly exhausted; and yet, on the 27th of April, the Forward was still detained on the impassable Polar Circle.

CHAPTER VIII.

THE TALK OF THE CREW.

Nevertheless, by taking advantages of such openings as there were, the Forward succeeded in getting a few minutes farther north; but, instead of escaping the enemy, it would soon be necessary to attack it; ice-fields of many miles in extent were drawing together, and as these moving masses often represent a pressure of ten millions of tons, they were obliged to take every precaution against being crushed by them. Ice-saws were placed outside the vessel, where they could be used without delay.

Some of the crew endured their hard toil without a murmur, but others complained or even refused to obey orders. While they were putting the saws in place, Garry, Bolton, Pen, and Gripper exchanged their diverse opinions as follows.

"Deuce take it," said Bolton, cheerfully; "I don't know why it just occurs to me that in Water Street there's a comfortable tavern, where one might be very well off between a glass of gin and a bottle of porter. Can you see it from here, Gripper?"

"To tell the truth," answered the sailor who had been addressed, and who generally pretended to be very sullen, "I must say I can't see it from here."

"That's merely your way of talking, Gripper; it is evident that, in those snow towns which Dr. Clawbonny is always admiring, there's no tavern where a poor sailor can moisten his throat with a drink or two of brandy."

"You may be sure of that, Bolton; and you might add that on board of this ship there's no way of getting properly refreshed. A strange idea, sending people into the northern seas, and giving them nothing to drink!"

"Well," answered Garry, "have you forgotten, Gripper, what the doctor said? One must go without spirits if he expects to escape the scurvy, remain in good health, and sail far."

"I don't care to sail far, Garry; and I think it's enough to have come as far as this, and to try to get through here where the Devil doesn't mean to let us through."

"Well, we sha'n't get through," retorted Pen. "O, when I think I have already forgotten how gin tastes!"

"But," said Bolton, "remember what the doctor said."

"O," answered Pen, with his rough voice, "that's all very well to say! I fancy that they are economizing it under the pretext of saving our

health."

"Perhaps that devil Pen is right," said Gripper.

"Come, come!" replied Bolton, "his nose is too red for that; and if a little abstinence should make it a trifle paler, Pen won't need to be pitied."

"Don't trouble yourself about my nose," was the answer, for Pen was rather vexed. "My nose doesn't need your advice; it doesn't ask for it; you'd better mind your own business."

"Come, don't be angry, Pen; I didn't think your nose was so tender. I should be as glad as any one else to have a glass of whiskey, especially on such a cold day; but if in the long run it does more harm than good, why, I'm very willing to get along without it."

"You may get along without it," said Warren, the stoker, who had joined them, "but it's not everybody on board who gets along without it."

"What do you mean, Warren?" asked Garry, looking at him intently.

"I mean that for one purpose or another there is liquor aboard, and I fancy that aft they don't get on without it."

"What do you know about it?" asked Garry.

Warren could not answer; he spoke for the sake of speaking.

"You see, Garry," continued Bolton, "that Warren knows nothing about it."

"Well," said Pen, "we'll ask the commander for a ration of gin; we deserve it, and we'll see what he'll say."

"I advise you not to," said Garry.

"Why not?" cried Pen and Gripper.

"Because the commander will refuse it. You knew what the conditions were when you shipped; you ought to think of that now."

"Besides," said Bolton, who was not averse to taking Garry's side, for he liked him, "Richard Shandon is not master; he's under orders like the rest of us."

"Whose orders?" asked Pen.

"The captain's."

"Ah, that ridiculous captain's!" cried Pen. "Don't you know there's no

more captain than there is tavern on the ice? That's a mean way of refusing politely what we ask for."

"But there is a captain," persisted Bolton; "and I'll wager two months' pay that we shall see him before long."

"All right!" said Pen; "I should like to give him a piece of my mind."

"Who's talking about the captain?" said a new speaker.

It was Clifton, who was inclined to be superstitious and envious at the same time.

"Is there any news about the captain?" he asked.

"No," a single voice answered.

"Well, I expect to find him settled in his cabin some fine morning, and without any one's knowing how or whence he came aboard."

"Nonsense!" answered Bolton; "you imagine, Clifton, that he's an imp, a hobgoblin such as are seen in the Scotch Highlands."

"Laugh if you want to, Bolton; that won't alter my opinion. Every day as I pass the cabin I peep in through the keyhole, and one of these days I'll tell you what he looks like, and how he's made."

"O, the devil!" said Pen; "he'll look like everybody else. And if he wants to lead us where we don't want to go, we'll let him know what we think about it."

"All right," said Bolton; "Pen doesn't know him, and wants to quarrel with him already."

"Who doesn't know all about him?" asked Clifton, with the air of a man who has the whole story at his tongue's end; "I should like to know who doesn't."

"What do you mean?" asked Gripper.

"I know very well what I mean."

"But we don't."

"Well, Pen has already had trouble with him."

"With the captain?"

"Yes, the dog-captain; for it's the same thing precisely."

The sailors gazed at one another, incapable of replying.

"Dog or man," muttered Pen, between his teeth, "I'll bet he'll get his account settled one of these days."

"Why, Clifton," asked Bolton, seriously, "do you imagine, as Johnson said in joke, that that dog is the real captain?"

"Certainly, I do," answered Clifton, with some warmth; "and if you had watched him as carefully as I have, you'd have noticed his strange ways."

"What ways? Tell us."

"Haven't you noticed the way he walks up and down the poop-deck as if he commanded the ship, keeping his eye on the sails as if he were on watch?"

"That's so," said Gripper; "and one evening I found him with his paws on the wheel."

"Impossible!" said Bolton.

"And then," continued Clifton, "doesn't he run out at night on the ice-fields without caring for the bears or the cold?"

"That's true," said Bolton.

"Did you ever see him making up to the men like an honest dog, or hanging around the kitchen, and following the cook when he's carrying a savory dish to the officers? Haven't you all heard him at night, when he's run two or three miles away from the vessel, howling so that he makes your blood run cold, and that's not easy in weather like this? Did you ever seen him eat anything? He never takes a morsel from any one; he never touches the food that's given him, and, unless some one on board feeds him secretly, I can say he lives without eating. Now, if that's not strange, I'm no better than a beast myself."

"Upon my word," answered Bell, the carpenter, who had heard all of Clifton's speech, "it may be so."

But all the other sailors were silent.

"Well, as for me," continued Clifton, "I can say that if you don't believe, there are wiser people on board who don't seem so sure."

"Do you mean the mate?" asked Bolton.

"Yes, the mate and the doctor."

"Do you think they fancy the same thing?"

"I have heard them talking about it, and they could make no more out of it than we can; they imagined a thousand things which did not

satisfy them in the least."

"Did they say the same things about the dog that you did, Clifton?" asked the carpenter.

"If they were not talking about the dog," answered Clifton, who was fairly cornered, "they were talking about the captain; it's exactly the same thing, and they confessed it was all very strange."

"Well, my friends," said Bell, "do you want to hear my opinion?"

"What is it!" they all cried.

"It is that there is not, and there will not be, any other captain than Richard Shandon."

"And the letter?" said Clifton.

"The letter was genuine," answered Bell; "it is perfectly true that some unknown person has equipped the Forward for an expedition in the ice; but the ship once off, no one will come on board."

"Well," asked Bolton, "where is the ship going to?"

"I don't know; at the right time, Richard Shandon will get the rest of the instructions."

"But from whom?"

"From whom?"

"Yes, in what way?" asked Bolton, who was becoming persistent.

"Come, Bell, an answer," said the other sailors.

"From whom? in what way? O, I'm sure I don't know!"

"Well, from the dog!" cried Clifton. "He has already written once, and he can again. O, if I only knew half as much as he does, I might be First Lord of the Admiralty!"

"So," added Bolton, in conclusion, "you persist in saying that dog is the captain?"

"Yes, I do."

"Well," said Pen, gruffly, "if that beast doesn't want to die in a dog's skin, he'd better hurry and turn into a man; for, on my word, I'll finish him."

"Why so?" asked Garry.

"Because I want to," answered Pen, brutally; "and I don't care what any one says."

"You have been talking long enough, men," shouted the boatswain, advancing at the moment when the conversation threatened to become dangerous; "to work, and have the saws put in quicker! We must get through the ice."

"Good! on Friday too," answered Clifton, shrugging his shoulders. "You won't find it so easy to cross the Polar Circle."

Whatever the reason may have been, the exertions of the crew on that day were nearly fruitless. The Forward, plunging, under a full head of steam, against the floes, could not separate them; they were obliged to lie at anchor that night.

On Saturday, the temperature fell still lower under the influence of an east-wind; the sky cleared up, and they all had a wide view over the white expense, which shone brilliantly beneath the bright rays of the sun. At seven o'clock in the morning, the thermometer stood at 8° above zero.

The doctor was tempted to remain quietly in his cabin, or read over the accounts of arctic journeys; but he asked himself, following his usual habit, what would be the most disagreeable thing he could do at that moment. He thought that to go on deck on such a cold day and help

the men would not be attractive. So, faithful to his line of conduct, he left his well-warmed cabin, and went out to help tow the ship. He looked strange with his green glasses, which he wore to protect his eyes against the brilliancy of the sun, and after that he always took good care to wear snow-spectacles as a security against the inflammation of the eyes, which is so common in these latitudes.

By evening the Forward had got several miles farther north, thanks to the energy of the men and the intelligence of Shandon, who was quick at utilizing every favorable circumstance; at midnight they crossed the sixty-sixth parallel, and the lead announcing a depth of twenty-three fathoms, Shandon knew that he was in the neighborhood of the shoal on which her Majesty's ship Victory grounded. Land lay thirty miles to the east.

But then the mass of ice, which had hitherto been stationary, separated, and began to move; icebergs seemed to rise in all points of the horizon; the brig was caught in a number of whirlpools of irresistible force; controlling her became so hard, that Garry, the best steersman, took the helm; the masses began to close behind the brig, hence it was necessary to cut through the ice; both prudence and duty commanded them to go forward. The difficulties were enhanced by the impossibility of Shandon's fixing the direction of the brig among all the changing points, which were continually shifting and presenting no definite point to be aimed at.

The crew were divided into two forces, and one stationed on the starboard, the other on the larboard side; every man was given a long iron-headed pole, with which to ward off threatening pieces of ice. Soon the Forward entered such a narrow passage between two lofty pieces, that the ends of the yards touched its solid walls; gradually it penetrated farther into a winding valley filled with a whirlwind of snow, while the floating ice was crashing ominously all about.

But soon it was evident that there was no outlet to this gorge; a huge block, caught in the channel, was floating swiftly down to the Forward; it seemed impossible to escape it, and equally impossible to return through an already closed path.

Shandon and Johnson, standing on the forward deck, were viewing their position. Shandon with his right hand signalled to the man at the wheel what direction he was to take, and with his left hand he indicated to James Wall the orders for the engines.

"What will be the end of this?" asked the doctor of Johnson.

"What pleases God," answered the boatswain.

The block of ice, eight hundred feet high, was hardly more than a cable's length from the Forward, and threatened to crush it.

Pen broke out with a fearful oath.

"Silence!" cried a voice which it was impossible to recognize in the roar of the hurricane.

The mass appeared to be falling upon the brig, and there was an indefinable moment of terror; the men, dropping their poles, ran aft in spite of Shandon's orders.

Suddenly, a terrible noise was heard; a real water-spout fell on the deck of the brig, which was lifted in the air by a huge wave. The crew uttered a cry of terror, while Garry, still firm at the wheel, kept the course of the Forward steady, in spite of the fearful lurch.

And when they looked for the mountain of ice, it had disappeared; the passage was free, and beyond, a long channel, lit up by the sun, allowed the brig to continue her advance.

"Well, Dr. Clawbonny," said Johnson, "can you explain that?"

"It's very simple, my friend," answered the doctor. "It happens very often; when these floating masses get detached in a thaw, they float away in perfect equilibrium; but as they get towards the south, where the water is relatively warmer, their base, eaten away by running into other pieces, begins to melt, and be undermined; then comes a moment when the centre of gravity is displaced, and they turn upside down. Only, if this had happened two minutes later, it would have fallen on

the brig and crushed us beneath it."

CHAPTER IX.

ANOTHER LETTER.

The Polar Circle was crossed at last; on the 30th of April, at midday, the Forward passed by Holsteinborg; picturesque mountains arose in the east. The sea appeared almost free of ice, or, more exactly, the ice could be avoided. The wind was from the southeast, and the brig, under foresail, staysail, and topsails, sailed up Baffin's Bay.

That day was exceptionally calm and the crew was able to get some rest; numerous birds were swimming and flying about the ship; among others, the doctor noticed some wild birds which were very like teal, with black neck, wings, and back, and a white breast; they were continually diving, and often remained more than forty seconds under water.

This day would not have been marked by any new incident, if the following extraordinary fact had not taken place.

At six o'clock in the morning, on returning to his cabin after his watch was over, Richard Shandon found on his table a letter, addressed as follows:--

To COMMANDER RICHARD SHANDON,

On board the Forward,

BAFFIN'S BAY.

Shandon could not believe his eyes; but before reading it, he summoned the doctor, James Wall, and the boatswain, and showed them the letter.

"It's getting interesting," said Johnson.

"It's delightful," thought the doctor.

"Well," cried Shandon, "at last we shall know his secret."

He tore open the envelope rapidly, and read the following:--

COMMANDER: The captain of the Forward is satisfied with the coolness, skill, and courage which the crew, officers, and you, yourself, have shown of late; he begs of you to express his thanks to the crew.

Be good enough to sail due north towards Melville Bay, and thence try to penetrate into Smith's Sound.

K. Z.,
Captain of the Forward.

Monday, April 30, OFF CAPE WALSINGHAM.

"And is that all?" cried the doctor.

"That's all," answered Shandon.

The letter fell from his hands.

"Well," said Wall, "this imaginary captain says nothing about coming on board. I don't believe he ever will."

"But how did this letter get here?" asked Johnson.

Shandon was silent.

"Mr. Wall is right," answered the doctor, who had picked up the letter, and who was turning it over with hands as well as in his mind. "The captain won't come on board, and for an excellent reason."

"What is it?" asked Shandon, quickly.

"Because he's on board now," answered the doctor, simply.

"Now!" exclaimed Shandon, "what do you mean?"

"How else can you explain the arrival of this letter?"

Johnson nodded approvingly.

"Impossible!" said Shandon, warmly. "I know all the men in the crew; can he have smuggled himself into their number since we left? It's impossible, I tell you. For more than two years I've seen every one of them more than a hundred times in Liverpool; so your conjecture, Doctor, is untenable."

"Well, what do you admit, Shandon?"

"Everything, except that. I admit that the captain or some tool of his, for all I know, may have taken advantage of the darkness, the mist, or whatever you please, to slip on board; we are not far from shore; there are the kayaks of the Esquimaux which could get through the ice without our seeing them; so some one may have come on board the ship, left the letter,--the fog was thick enough to make this possible."

"And to prevent them from seeing the brig," answered the doctor; "if we didn't see the intruder slip aboard the Forward, how could he see the Forward in the fog?"

"That's true," said Johnson.

"So I return to my explanation," said the doctor; "what do you think

of it, Shandon?"

"Whatever you please," answered Shandon, hotly, "except that the man is on board."

"Perhaps," added Wall, "there is some man in the crew who is acting under his instructions."

"Perhaps," said the doctor.

"But who can it be?" asked Shandon. "I've known all my men for a long time."

"At any rate," resumed Johnson, "if this captain presents himself, whether as man or devil, we shall receive him; but there's something else to be drawn from this letter."

"What is that?" asked Shandon.

"It is that we must go not only into Melville Bay, but also into Smith's Sound."

"You are right," said the doctor.

"Smith's Sound," repeated Shandon, mechanically.

"So it's very plain," continued Johnson, "that the Forward is not intended to seek the Northwest Passage, since we leave to the left, the only way towards it, that is to say, Lancaster Sound. This would seem to promise a difficult journey in unknown seas."

"Yes, Smith's Sound," replied Shandon; "that's the route Kane, the American, took in 1853, and it was full of dangers. For a long time he was given up for lost. Well, if we must go, we'll go. But how far? To the Pole?"

"And why not?" cried the doctor.

The mention of such a foolhardy attempt made the boatswain shrug his shoulders.

"Well," said James Wall, "to come back to the captain, if he exists. I don't see that there are any places on the coast of Greenland except Disco and Upernavik, where he can be waiting for us; in a few days that question will be settled."

"But," asked the doctor of Shandon, "are you not going to tell the crew about this letter?"

"With the commander's permission," answered Johnson, "I should not do so."

"And why not?" asked Shandon.

"Because everything mysterious and extraordinary tends to discourage the men; they are already very much troubled, as it is, about the nature of the journey. Now, if any supernatural circumstances should become known, it might be harmful, and perhaps at a critical moment we should not be able to count on them. What do you think, Commander?"

"And what do you think, Doctor?" asked Shandon.

"Boatswain Johnson seems to me to reason well," answered the doctor.

"And you, James?"

"Having no better opinion, I agree with these gentlemen."

Shandon reflected for a few minutes; he reread the letter attentively.

"Gentlemen," said he, "your opinion is certainly worthy of respect, but I cannot adopt it."

"Why not, Shandon?" asked the doctor.

"Because the instructions in this letter are formal; it tells me to give the captain's thanks to the crew; now, hitherto I have strictly obeyed his orders, in whatever way they have been given to me, and I

cannot--"

"Still--" interposed Johnson, who had a warrantable dread of the effect of such communications on the men's spirits.

"My dear Johnson," said Shandon, "I understand your objection; your reasons are very good, but read that:--

"He begs of you to express his thanks to the crew."

"Do as he bids," replied Johnson, who was always a strict disciplinarian. "Shall I assemble the crew on deck?"

"Yes," answered Shandon.

The news of a message from the captain was immediately whispered throughout the ship. The sailors took their station without delay, and the commander read aloud the mysterious letter.

It was received with dead silence; the crew separated under the influence of a thousand suppositions; Clifton had plenty of material for any superstitious vagaries; a great deal was ascribed by him to the dog-captain, and he never failed to salute him every time he met him.

"Didn't I tell you," he used to say to the sailors, "that he knew how

to write?"

No one made any answer, and even Bell, the carpenter, would have found it hard to reply.

Nevertheless, it was plain to every one, that if the captain was not on board, his shade or spirit was watching them; henceforth, the wisest kept their opinions to themselves.

At midday of May 1st, their observation showed them that they were in latitude 68° and longitude 56° 32'. The temperature had risen, the thermometer standing at 25° above zero.

The doctor amused himself with watching the gambols of a she-bear and two cubs on some pack-ice near the shore. Accompanied by Wall and Simpson, he tried to chase them in a canoe; but she was in a very peaceful mood, and ran away with her young, so that the doctor had to give up his attempt.

During the night a favorable breeze carried them well to the north, and soon the lofty mountains of Disco were peering above the horizon; Godharn Bay, where the governor of the Danish settlements lived, was left on the right. Shandon did not consider it necessary to land, and he soon passed by the canoes of the Esquimaux, who had put out to meet him.

The island of Disco is also called Whale Island; it is from here that, on the 12th of July, 1845, Sir John Franklin wrote to the Admiralty for the last time, and it was also here that Captain MacClintock stopped on his way back, bringing too sure proofs of the loss of that expedition.

This coincidence was not unknown to the doctor; the place was one of sad memories, but soon the heights of Disco were lost to view.

There were many icebergs on its shores, which no thaws ever melt away; this gives the island a singular appearance from the sea.

The next day, at about three o'clock, Sanderson's Hope appeared in the northeast; land lay about fifteen miles to starboard; the mountains appeared of a dusky red hue. During the evening many fin-backs were seen playing in the ice, and occasionally blowing.

It was in the night of May 3d, that the doctor for the first time saw the sun touch the horizon without setting; since January 31st its orbit had been getting longer every day, and now there was unbroken daylight.

For those who were unaccustomed to it, this continuance of the day is a cause of perpetual surprise, and even of weariness; it is difficult to believe how necessary the darkness of the night is for the eyes; the doctor actually suffered from the continual brilliancy, which was

increased by the reflection from the ice.

May 5th the Forward passed the sixty-second parallel. Two months later they would have met numerous whalers in these latitudes; but the straits were not yet free enough to allow easy ingress into Baffin's Bay.

The next day, the brig, after passing Woman's Island, came in sight of Upernavik, the northernmost station of Denmark in these lands.

CHAPTER X.

DANGEROUS SAILING.

Shandon, Dr. Clawbonny, Johnson, Foker, and Strong, the cook, got into one of the boats and made their way to shore.

The Governor, his wife and five children, all Esquimaux, received their visitors kindly. The doctor, who was the philologist of the party, knew enough Danish to establish friendly relations; moreover, Foker, the interpreter of the party as well as ice-master, knew a dozen or two words of the language of the Greenlanders, and with that number of words one can express a great deal, if he is not too ambitious.

The Governor was born on the island of Disco, and he has never left the place; he did the honors of his capital, which consisted of three wooden houses, for himself and the Lutheran minister, of a school, and shops which were supplied by what was cast upon the shore from wrecked ships. The rest of the town consisted of snow huts, into which the Esquimaux crawl through a single opening.

A great part of the population came out to meet the Forward, and more than one of them went as far as the middle of the bay in his kayak, fifteen feet long and two broad at the widest part.

The doctor knew that the word Esquimaux meant "eater of raw fish"; but he knew too that this name is considered an insult in this country, so he forbore giving it to the inhabitants of Greenland.

And yet, from the oily sealskin clothes and boots, from their squat, fat figures, which make it hard to distinguish the men from the women, it was easy to declare the nature of their food; besides, like all fish-eating people, they were somewhat troubled by leprosy, but their general health was not impaired by it.

The Lutheran minister and his wife, with whom the doctor had promised himself an interesting talk, happened to be away on the shore of Proven, south of Upernavik; hence he was compelled to seek the company of the Governor. The chief magistrate did not appear to be very well informed: a little less, he would have been a fool; a little more, and he would have known how to read.

In spite of that, the doctor questioned him about the commerce, habits, and manners of the Esquimaux; and he learned, by means of gestures, that the seals were worth about forty pounds when delivered at Copenhagen; a bear-skin brought forty Danish dollars, the skin of a blue fox four, and of a white fox two or three dollars.

In order to make his knowledge complete, the doctor wanted to visit an Esquimaux hut; a man who seeks information is capable of enduring anything; fortunately the opening of these huts was too small, and the

enthusiastic doctor could not get through. It was fortunate for him, for there is nothing more repulsive than the sight of that crowd of living and dead objects, of seal's bodies and Esquimaux-flesh, decayed fish and unclean clothing, which fill a Greenland hut; there is no window to renew that suffocating air; there is only a hole at the top of the cabin which lets the smoke out, but gives no relief to the stench.

Foker gave all these details to the doctor, but he none the less bewailed his portliness. He wanted to judge for himself these emanations sui generis.

"I am sure," said he, "that one could get used to it in time." In time shows clearly the doctor's character.

During these ethnographic studies on his part, Shandon was busying himself, according to his instructions, with procuring means of travel on the ice; he was obliged to pay four pounds for a sledge and six dogs, and the natives were reluctant to sell even at this price.

Shandon would have liked to engage Hans Christian, the skilful driver of the dogs, who accompanied Captain MacClintock, but Hans was then in Southern Greenland.

Then came up the great question of the day; was there at Upernavik a European awaiting the arrival of the Forward? Did the Governor know

of any stranger, probably an Englishman, who had come into these latitudes? How recently had they seen any whalers or other ships?

To these questions the Governor answered that no stranger had landed on that part of the coast for more than ten months.

Shandon asked the names of the whalers which had last arrived; he recognized none. He was in despair.

"You must confess, Doctor, that it passes all comprehension," he said to his companion. "Nothing at Cape Farewell! nothing at Disco! nothing at Upernavik!"

"Tell me in a few days from now, nothing at Melville Bay, my dear Shandon, and I will salute you as sole captain of the Forward."

The boat returned to the brig towards evening, bringing back the visitors to the shore; Strong had bought several dozen eider-duck's eggs, which were twice as large as hen's eggs, and of a greenish color. It was not much, but it was very refreshing for a crew accustomed to little but salt meat.

The next day the wind was fair, but yet Shandon did not set sail; he wanted to wait another day, and, to satisfy his conscience, to give time for any member of the human race to rejoin the Forward; he even fired off, every hour, the ship's gun, which re-echoed among the

icebergs; but he only succeeded in frightening the flocks of molly-mokes[1] and rotches.[1] During the night many rockets were set off; but in vain. He had to give the order to set sail.

[Footnote 1: Sea-birds common in these latitudes.]

The 8th of May, at six o'clock in the morning, the Forward, under her topsails, foresail, and main-top-gallant-sail, soon lost sight of the station of Upernavik, and hideous long poles on which were hanging along the shore the seals' entrails and deers' stomachs.

The wind was southeast, the thermometer stood at 32°. The sun pierced through the fog and the ice melted a little.

The reflection, however, injured the sight of many of the crew. Wolston, the armorer, Gripper, Clifton, and Bell were attacked by snow-blindness, which is very common in the spring, and which totally blinds many of the Esquimaux. The doctor advised all, the unharmed as well as the suffering, to cover their faces with a green veil, and he was the first to follow his own recommendation.

The dogs bought by Shandon at Upernavik were rather wild; but they soon got used to their new quarters, and Captain showed no dislike of his new companions; he seemed to know their ways. Clifton was not the last to remark that Captain seemed to be familiar with the dogs of Greenland. And they, always half starved on shore, only thought of

making up for it when at sea.

The 9th of May the Forward passed within a few cable-lengths of the westernmost of the Baffin Islands. The doctor noticed many rocks between the islands and the mainland which were what are called crimson cliffs; they were covered with snow as red as carmine, which Dr. Kane says is of purely vegetable origin; Clawbonny wanted to examine this singular phenomenon, but the ice forbade their approaching them; although the temperature was rising, it was easy to see that the icebergs and ice-streams were accumulating toward the north of Baffin's Bay.

After leaving Upernavik the land presented a different appearance, and huge glaciers were sharply defined against the gray horizon. On the 10th the Forward left on its right Kingston Bay, near the seventy-fourth degree of latitude; Lancaster Sound opened into the sea many hundred miles to the west.

But then this vast expanse of water was hidden beneath enormous fields of ice, in which arose the hummocks, uniform as a homogeneous crystallization. Shandon had the furnace-fires lighted, and until the 11th of May the Forward advanced by a tortuous course, tracing with her smoke against the sky the path she was following through the water.

But new obstacles soon presented themselves; the passages were closing

in consequence of the incessant crowding of the floating masses; every moment threatened to close up the clear water before the Forward, and if she were nipped, it would be hard to get her out. Every one knew it and was thinking about it.

Hence, on board of this ship without any definite aim, any known destination, which was blindly pushing on northward, some symptoms of hesitation began to appear; among these men accustomed to dangers, many, forgetting the advantages which were promised them, regretted having ventured so far. A certain demoralization became common, which was further increased by the fears of Clifton and the talk of two or three ringleaders, such as Pen, Gripper, Warren, and Wolston.

Exhausting fatigue was added to the moral disquiet of the crew, for, on the 12th of May, the brig was caught fast; the steam was of no avail. A path had to be cut through the ice. It was no easy task to manage the saws in the floes which were six or seven feet thick; when two parallel grooves had divided the ice for a hundred feet, it was necessary to break the part that lay between with axes and bars; next they had to fasten anchors in a hole made by a huge auger; then the crew would turn the capstan and haul the ship along by the force of their arms; the greatest difficulty consisted in driving the detached pieces beneath the floes, so as to give space for the vessel, and they had to be pushed under by means of long iron-headed poles.

Moreover, this continued toil with saws, capstan, and poles, all of which was persistent, compulsory, and dangerous, amid the dense fog or snow, while the air was so cold, and their eyes so exposed, their doubt so great, did much to weaken the crew of the Forward and to act on their imagination.

When sailors have to deal with a man who is energetic, bold, and determined, who knows what he wants, whither he is going, what aim he has in view, confidence animates them all in spite of themselves; they are firmly united to their leader, strong with his force and calm with his calmness. But on board of the brig they were aware of the commander's uncertainty, they knew that he hesitated before the unknown aim and destination. In spite of the energy of his character, his uncertainty was clearly to be seen by his uncertain orders, incomplete manoeuvres, his sudden outbursts, and a thousand petty details which could not escape the sharp eyes of the crew.

And then, Shandon was not the captain of the ship, the master under God, which was enough to encourage the discussion of his orders; and from discussion to disobedience is but a short step.

The malcontents soon brought over to their number the first engineer, who, hitherto, had been a slave to his duty.

The 16th of May, six days after the Forward had reached the ice, Shandon had not made two miles to northward. They were threatened with

being detained in the ice until the next season. Matters had a serious look.

Towards eight o'clock of the evening, Shandon and the doctor, accompanied by Garry, went out to reconnoitre the vast plains; they took care not to go too far from the ship, for it was hard to find any fixed points in this white solitude, which was ever changing in appearance. Refraction kept producing strange effects, much to the doctor's astonishment; at one place, where he thought he had but an easy jump before him, he had to leap some five or six feet; or else the contrary happened, and in either case the result was a tumble, which if not dangerous was at any rate painful, for the ice was as hard and slippery as glass.

Shandon and his two companions went out to seek a possible passage; three miles from the ship, they succeeded with some difficulty in ascending an iceberg about three hundred feet high. From that point nothing met their eyes but a confused mass, like the ruins of a vast city, with shattered monuments, overthrown towers, and prostrate palaces,--a real chaos. The sun was just peering above the jagged horizon, and sent forth long, oblique rays of light, but not of heat, as if something impassable for heat lay between it and this wild country.

The sea appeared perfectly covered as far as eye could reach.

"How shall we get through?" asked the doctor.

"I don't know," answered Shandon; "but we shall get through, if we have to blow our way through with powder. I certainly sha'n't stay in the ice till next spring."

"But that happened to the Fox, and not far from here. Bah!" said the doctor; "we shall get through with a little philosophy. You will see that is worth all the machinery in the world."

"I must say," answered Shandon, "this year does not begin very well."

"True, Shandon, and I notice also that Baffin's Bay seems to be returning to the state it was in before 1817."

"Don't you think, Doctor, it has always been as it is now?"

"No, my dear Shandon, from time to time there have been great breakings of the ice which no one can explain; so, up to 1817 this sea was continually full, when an enormous sort of inundation took place, which cast the icebergs into the ocean, most of which reached the banks of Newfoundland. From that day Baffin's Bay was nearly free, and was visited by whalers."

"So," asked Shandon, "from that time voyages to the North became easier?"

"Incomparably; but for some years it has been noticed that the bay seems to be resuming its old ways and threatens to become closed, possibly for a long time, to sailors. An additional reason, by the way, for pushing on as far as possible. And yet it must be said, we look like people who are pushing on in unknown ways, with the doors forever closing behind us."

"Would you advise me to go back?" asked Shandon, trying to read into the depths of the doctor's eyes.

"I! I have never retreated yet, and, even if we should never get back, I say go on. Still, I want to make it clear that if we act imprudently, we do it with our eyes open."

"And you, Garry, what do you think about it?" asked Shandon of the sailor.

"I, Commander, should go straight on; I agree with Dr. Clawbonny; but do as you please; command, we shall obey."

"They don't all talk as you do, Garry," resumed Shandon; "they are not all ready to obey. And if they refuse to obey my orders?"

"I have given you my opinion, Commander," answered Garry, coldly, "because you asked for it; but you are not obliged to follow it."

Shandon did not answer; he scanned the horizon closely, and then descended with his companions to the ice-fields.

CHAPTER XI.

THE DEVIL'S THUMB.

During the commander's absence the men had been variously busied in attempts to relieve the ship from the pressure of the ice. Pen, Clifton, Bolton, Gripper, and Simpson had this in charge; the fireman and the two engineers came to the aid of their comrades, for, as soon as the engines did not require their attention, they became sailors, and as such could be employed in all that was going on aboard the ship.

But there was a great deal of discontent among them.

"I declare I've had enough," said Pen; "and if we are not free in three days, I swear I sha'n't stir a finger to get the ship out."

"Not stir a finger!" answered Plover; "you'd better use them in getting back. Do you think we want to stay here till next year?"

"It certainly would be a hard winter," said Pen, "for we are exposed on all sides."

"And who knows," said Brunton, "whether next spring the sea will be any freer than it is now?"

"Never mind about next spring," answered Pen; "to-day is Thursday; if the way is not clear Sunday morning, we shall turn back to the south."

"Good!" cried Clifton.

"Don't you agree with me?" asked Pen.

"We do," cried his companions.

"That's so," said Warren; "for if we have to work in this way and haul the ship along with our own arms, I think it would be as well to haul her backwards."

"We shall do that on Sunday," said Wolston.

"Only give me the order," resumed Brunton, "and my fires shall be lighted."

"Well," remarked Clifton, "we shall light them ourselves."

"If any officer," said Pen, "is anxious to spend the winter here, he can; we can leave him here contentedly; he'll find it easy to build a hut like the Esquimaux."

"Not at all, Pen," retorted Brunton, quickly; "we sha'n't abandon any one here; do you understand that, all of you? I think it won't be hard

to persuade the commander; he seems to me to be very much discouraged, and if we propose it to him gently--"

"But," interrupted Plover, "Richard Shandon is often very obstinate; we shall have to sound him cautiously."

"When I think," said Bolton, with a sigh of longing, "that in a month we might be back in Liverpool! We can easily pass the line of ice at the south! Davis Strait will be open by the beginning of June, and then we shall have nothing but the free Atlantic before us."

"Besides," said the cautious Clifton, "if we take the commander back with us, and act under his commands, we shall have earned our pay; but if we go back without him, it's not so sure."

"True," said Plover; "Clifton talks sense. Let's try not to get into any trouble with the Admiralty, that's safer, and don't let us leave any one behind."

"But if they refuse to come with us?" continued Pen, who wished to compel his companions to stand by him.

They found it hard to answer the question thus squarely put them.

"We shall see about that when the time comes," replied Bolton; "it will be enough to bring Richard Shandon over to our side, and I fancy

that won't be hard."

"There's one I shall leave here," exclaimed Pen with fierce oaths, "even if he should bite my arm off."

"O, the dog!" said Plover.

"Yes, that dog! I shall soon settle accounts with him."

"So much the better," retorted Clifton, returning to his favorite theory; "he is the cause of all our troubles."

"He has thrown an evil spell upon us," said Plover.

"He led us into the ice," remarked Gripper.

"He brought more ice in our way," said Wolston, "than was ever seen at this season."

"He made my eyes sore," said Brunton.

"He shut off the gin and brandy," cried Pen.

"He's the cause of everything," they all exclaimed excitedly.

"And then," added Clifton, "he's the captain."

"Well, you unlucky Captain," cried Pen, whose unreasonable fury grew with the sound of his own words, "you wanted to come here, and here you shall stay!"

"But how shall we get hold of him?" said Plover.

"Well, now is a good time," answered Clifton. "The commander is away; the second mate is asleep in his cabin; the fog is so thick that Johnson can't see us--"

"But the dog?" said Pen.

"He's asleep in the coal," answered Clifton, "and if any one wants--"

"I'll see to it," replied Pen, angrily.

"Take care, Pen; his teeth would go through a bar of iron."

"If he stirs, I'll rip him open," answered Pen, drawing his knife.

And he ran down between decks, followed by Warren, who was anxious to help him.

Soon they both returned, carrying the dog in their arms; his mouth and paws were securely tied; they had caught him asleep, and the poor dog

could not escape them.

"Hurrah for Pen!" cried Plover.

"And what are you going to do with him now?" asked Clifton.

"Drown him, and if he ever comes back--" answered Pen with a smile of satisfaction.

Two hundred feet from the vessel there was a hole in the ice, a sort of circular crevasse, made by the seals with their teeth, and always dug out from the inside to the outside; it was there that the seals used to come to breathe on the surface of the ice; but they were compelled to take care to prevent the aperture from closing, for the shape of their jaws did not permit them to make the hole from the outside, and in any danger they would not be able to escape from their enemies.

Pen and Warren hastened to this crevasse, and then, in spite of his obstinate struggles, the dog was pitilessly cast into the sea; a huge cake of ice they then rolled over the aperture, closing all means of escape for the poor dog, thus locked in a watery prison.

"A pleasant journey, Captain!" cried the brutal sailor.

Soon they returned on board; Johnson had seen nothing of it all; the

fog was growing thick about the ship, and the snow was beginning to fall with violence.

An hour later, Richard Shandon, the doctor, and Garry regained the Forward.

Shandon had observed in the northeast a passage, which he determined to try. He gave his orders to that effect; the crew obeyed with a certain activity; they wanted to convince Shandon of the impossibility of a farther advance, and besides, they had before them three days of obedience.

During a part of the following night and day the sawing and towing went on busily; the Forward made about two miles of progress. On the 18th they were in sight of land, five or six cable-lengths from a strange peak, to which its singular shape had given the name of the Devil's Thumb.

At this very place the Prince Albert, in 1851, the Advance, with Kane, in 1853, had been caught in the ice for many weeks.

The odd shape of the Devil's Thumb, the barren and desolate surroundings, which consisted of huge icebergs often more than three hundred feet high, the cracking of the ice, repeated indefinitely by the echo, made the position of the Forward a very gloomy one. Shandon saw that it was necessary to get away from there; within

twenty-four hours, he calculated he would be able to get two miles from the spot. But that was not enough. Shandon felt himself embarrassed by fear, and the false position in which he was placed benumbed his energy; to obey his instructions in order to advance, he had brought his ship into a dangerous position; the towing wore out his men; more than three hours were necessary to cut a canal twenty feet in length through ice which was generally four or five feet thick; the health of the crew gave signs of failing. Shandon was astonished at the silence of the men, and their unaccustomed obedience; but he feared it was only the calm that foreboded a storm.

We can, then, easily judge of the painful surprise, disappointment, and even despair which seized upon him, when he noticed that by means of an imperceptible movement in the ice, the Forward lost in the night of the 18th all that had been gained by such toilsome efforts; on Saturday morning he was opposite the Devil's Thumb, in a still more critical position; the icebergs increased in number and passed by in the mist like phantoms.

Shandon was thoroughly demoralized; it must be said that fear seized both this bold man and all his crew. Shandon had heard of the disappearance of the dog; but he did not dare to punish the guilty persons; he feared exciting a mutiny.

The weather during that day was horrible; the snow, caught up in dense whirls, covered the brig with an impenetrable veil; at times, under

the influence of the hurricane, the fog would rise, and their terror-stricken eyes beheld the Devil's Thumb rising on the shore like a spectre.

The Forward was anchored to a large piece of ice; there was nothing to be done, nothing to be tried; darkness was spreading about them, and the man at the helm could not see James Wall, who was on watch forward.

Shandon withdrew to his cabin, a prey to perpetual disquiet; the doctor was arranging his notes of the expedition; some of the crew were on the deck, others in the common room.

At a moment when the violence of the storm was redoubling, the Devil's Thumb seemed to rise immoderately from the mist.

"Great God!" exclaimed Simpson, recoiling with terror.

"What's the matter?" asked Foker.

Soon shouts were heard on all sides.

"It's going to crush us!"

"We are lost!"

"Mr. Wall, Mr. Wall!"

"It's all over!"

"Commander, Commander!"

All these cries were uttered by the men on watch.

Wall hastened to the after-deck; Shandon, followed by the doctor, flew to the deck and looked out.

Through a rift in the mist, the Devil's Thumb appeared to have suddenly come near the brig; it seemed to have grown enormously in size; on its summit was balanced a second cone, upside down, and revolving on its point; it threatened to crush the ship with its enormous mass; it wavered, ready to fall down. It was an alarming sight. Every one drew back instinctively, and many of the men, jumping upon the ice, abandoned the ship.

"Let no one move!" cried the commander with a loud voice; "every one to his place!"

"My friends, don't be frightened," said the doctor, "there is no danger! See, Commander, see, Mr. Wall, that's the mirage and nothing else."

"You are right, Dr. Clawbonny," replied Johnson; "they've all been frightened by a shadow."

When they had heard what the doctor said, most of the sailors drew near him, and from terror they turned to admiration of this wonderful phenomenon, which soon passed from their view.

"They call that a mirage," said Clifton; "the Devil's at the bottom of it, I'm sure."

"That's true," growled Gripper.

But the break in the fog had given the commander a glimpse of a broad passage which he had not expected to find; it promised to lead him away from the shore; he resolved to make use of it at once; men were sent out on each side of the canal; hawsers were given them, and they began to tow the ship northward.

During long hours this work was prosecuted busily but silently; Shandon had the furnace-fires lighted to help him through this passage so providentially discovered.

"That's great luck," he said to Johnson, "and if we can only get on a few miles, we may be free. Make a hot fire, Mr. Brunton, and let me know as soon as you get steam on. Meanwhile, men, the farther on we get, the more gained! You want to get away from the Devil's Thumb;

well, now is your chance!"

Suddenly the brig stopped. "What's the matter?" shouted Shandon. "Wall, have the tow-ropes broken?"

"No," answered Wall, leaning over the railing. "See, there are the men running back; they are climbing on board; they seem very much frightened."

"What's happened?" cried Shandon, running forward.

"On board, on board!" cried the sailors, evidently exceedingly terrified.

Shandon looked towards the north, and shuddered in spite of himself.

A strange animal, with alarming motions, whose steaming tongue hung from huge jaws, was bounding along within a cable's length from the ship; it seemed more than twenty feet high; its hair stood on end; it was chasing the sailors as if about to seize them, while its tail, which was at least ten feet long, lashed the snow and tossed it about in dense gusts. The sight of the monster froze the blood in the veins of the boldest.

"It's an enormous bear," said one.

"It's the beast of Gévaudan!"

"It's the lion of the Apocalypse!"

Shandon ran to his cabin to get a gun which he kept always loaded; the doctor seized his arms, and made ready to fire at the beast, which by its size, recalled antediluvian monsters.

It drew near with long leaps; Shandon and the doctor fired at the same time, and suddenly the report of the pieces agitated the air and produced an unlooked-for effect.

The doctor gazed attentively, and could not help bursting out laughing. "It's refraction!" said he.

"Refraction!" cried Shandon.

But a terrible cry from the crew interrupted them.

"The dog!" shouted Clifton.

"The dog-captain!" repeated his companions.

"It's he!" cried Pen.

In fact, it was the dog who had burst his bonds and had made his way

to the surface of the ice through another hole. At that moment the refraction, by a phenomenon common in these latitudes, exaggerated his size, and this had only been broken by the report of the guns; but, notwithstanding, a disastrous impression had been produced upon the minds of the sailors, who were not very much inclined to admit any explanation of the fact from physical causes. The adventure of the Devil's Thumb, the reappearance of the dog under such peculiar circumstances, completely upset them, and murmurs arose on all sides.

CHAPTER XII.

CAPTAIN HATTERAS.

The Forward was advancing rapidly under steam between the ice-fields and the mountains of ice. Johnson was at the helm. Shandon was examining the horizon with his snow-spectacles; but his joy was brief, for he soon saw that the passage was blocked up by a circle of mountains.

Nevertheless, he preferred to take his chances with pushing on, to returning.

The dog followed the brig on the ice, but he kept at a respectful distance. Only, if he lagged too far, there was to be heard a singular whistle which at once brought him on.

The first time that this whistle was heard, the sailors looked around; they were alone on the deck, talking together; there was no unknown person there; and yet this whistle was often repeated.

Clifton was the first to take alarm.

"Do you hear that?" he said; "and do you see how the dog starts as soon as he hears it?"

"It's past belief," said Gripper.

"Very well!" cried Pen; "I'm not going any farther."

"Pen is right," said Brunton; "it's tempting Providence."

"Tempting the Devil," answered Clifton. "I should rather give up all my share of the pay than go on."

"We shall never get back," said Bolton, dejectedly.

The crew was exceedingly demoralized.

"Not a foot farther!" cried Wolston; "is that your opinion?"

"Yes, yes!" answered the sailors.

"Well," said Bolton, "let's go find the commander; I'll undertake to tell him."

The sailors in a dense group made their way to the quarter-deck.

The Forward was then advancing into a large arena, which had a diameter of about eight hundred feet; it was completely closed, with the exception of one place through which the ship entered.

Shandon saw that he was locking himself in. But what was to be done? How could he retreat? He felt all the responsibility, and his hand nervously grasped his glass.

The doctor looked on in silence, with folded arms; he gazed at the walls of ice, the average height of which was about three hundred feet. A cloud of fog lay like a dome above the gulf.

Then it was that Bolton spoke to the commander.

"Commander," said he in a broken voice, "we can't go any farther."

"What's that you are saying?" said Shandon, who felt enraged at the slight given to his authority.

"We have come to say, Commander," resumed Bolton, "that we have done enough for this invisible captain, and that we have made up our minds not to go on any farther."

"Made up your minds?" cried Shandon. "Is that the way you talk to me, Bolton? Take care."

"You need not threaten," retorted Pen, brutally, "we are not going any farther."

Shandon stepped towards the mutinous sailors, when the boatswain said

to him in a low voice,--

"Commander, if we want to get out of this place, we have not a moment to lose. There's an iceberg crowding towards the entrance; it may prevent our getting out and imprison us here."

Shandon returned to look at the state of affairs.

"You will account for this afterwards," he said to the mutineers. "Now, go about!"

The sailors hastened to their places. The Forward went about rapidly; coal was heaped on the fires; it was necessary to beat the iceberg. There was a race between them; the brig stood towards the south, the berg was drifting northward, threatening to bar the way.

"Put on all the steam, Brunton, do you hear?" said Shandon.

The Forward glided like a bird through the broken ice, which her prow cut through easily; the ship shook with the motion of the screw, and the gauge indicated a full pressure of steam, the deafening roar of which resounded above everything.

"Load the safety-valve!" cried Shandon.

The engineer obeyed at the risk of bursting the boilers.

But these desperate efforts were vain; the iceberg, driven by a submarine current, moved rapidly towards the exit; the brig was still three cable-lengths distant, when the mountain, entering the vacant space like a wedge, joined itself to its companions, and closed the means of escape.

"We are lost!" cried Shandon, who was unable to restrain that unwise speech.

"Lost!" repeated the crew.

"Lower the boats!" cried many.

"To the steward's pantry!" cried Pen and some of his set; "if we must drown, let us drown in gin!"

The wildest confusion raged among these half-wild men. Shandon felt unable to assert his authority; he wanted to give some orders; he hesitated, he stammered; his thoughts could find no words. The doctor walked up and down nervously. Johnson folded his arms stoically, and said not a word.

Suddenly a strong, energetic, commanding voice was heard above the din, uttering these words:--

"Every man to his place! Prepare to go about!"

Johnson shuddered, and, without knowing what he did, turned the wheel rapidly.

It was time; the brig, going under full steam, was about crashing against the walls of its prison.

But while Johnson instinctively obeyed, Shandon, Clawbonny, the crew, all, even down to Warren the fireman, who had abandoned his fires, and Strong the cook, who had fled from his galley, were collected on the deck, and all saw issuing from the cabin, the key of which he alone possessed, a man.

This man was the sailor Garry.

"Sir!" cried Shandon, turning pale, "Garry--by what right do you give orders here?"

"Duke!" said Garry, repeating the whistle which had so surprised the crew.

The dog, on hearing his real name, sprang on the quarter-deck, and lay down quietly at his master's feet.

The crew did not utter a word. The key which the captain alone should

possess, the dog which he had sent and which had identified him, so to speak, the tone of command which it was impossible to mistake,--all this had a strong influence on the minds of the sailors, and was enough to establish firmly Garry's authority.

Besides, Garry was hardly to be recognized; he had removed the thick whiskers which had surrounded his face, thereby giving it a more impassible, energetic, and commanding expression; he stood before them clothed in a captain's uniform, which he had had placed in his cabin.

So the crew of the Forward, animated in spite of themselves, shouted,--

"Hurrah, hurrah, hurrah for the captain!"

"Shandon," he said to his first officer, "have the crew put in line; I want to inspect them."

Shandon obeyed, and gave the requisite orders with an agitated voice.

The captain walked in front of the officers and men, saying a word to each, and treating him according to his past conduct.

When he had finished his inspection, he went back to the quarter-deck, and calmly uttered these words:--

"Officers and sailors, I am an Englishman like you all, and my motto is that of Lord Nelson,--'England expects every man to do his duty.'

"As Englishmen, I am unwilling, we are unwilling, that others should go where we have not been. As Englishmen, I shall not endure, we shall not endure, that others should have the glory of going farther north than we. If human foot is ever to reach the Pole, it must be the foot of an Englishman! Here is the flag of our country. I have equipped this ship, I have devoted my fortune to this undertaking, I shall devote to it my life and yours, but this flag shall float over the North Pole. Fear not. You shall receive a thousand pounds sterling for every degree that we get farther north after this day. Now we are at the seventy-second, and there are ninety in all. Figure it out. My name will be proof enough. It means energy and patriotism. I am Captain Hatteras."

"Captain Hatteras!" cried Shandon. And this name, familiar to them all, soon spread among all the crew.

"Now," resumed Hatteras, "let us anchor the brig to the ice; let the fires be put out, and every one return to his usual occupation. Shandon, I want to speak with you about the ship. You will join me in my cabin with the doctor, Wall, and the boatswain. Johnson, dismiss the men."

Hatteras, calm and cold, quietly left the poop-deck, while Shandon had

the brig made fast to the ice.

Who was this Hatteras, and why did his name make so deep an impression upon the crew?

John Hatteras, the only son of a London brewer, who died in 1852, worth six million pounds, took to the sea at an early age, unmindful of the large fortune which was to come to him. Not that he had any commercial designs, but a longing for geographical discovery possessed him; he was continually dreaming of setting foot on some spot untrodden of man.

When twenty years old, he had the vigorous constitution of thin, sanguine men; an energetic face, with well-marked lines, a high forehead, rising straight from the eyes, which were handsome but cold, thin lips, indicating a mouth chary of words, medium height, well-knit muscular limbs, indicated a man ready for any experience. Any one who saw him would have called him bold, and any one who heard him would have called him coldly passionate; he was a man who would never retreat, and who would risk the lives of others as coldly as his own. One would hence think twice before following him in his expeditions.

John Hatteras had a great deal of English pride, and it was he who once made this haughty reply to a Frenchman.

The Frenchman said with what he considered politeness, and even

kindness,--

"If I were not a Frenchman, I should like to be an Englishman."

"If I were not an Englishman, I should like to be an Englishman!"

That retort points the nature of the man.

He would have liked to reserve for his fellow-countrymen the monopoly of geographical discovery; but much to his chagrin, during previous centuries, they had done but little in the way of discovery.

America was discovered by the Genoese, Christopher Columbus; the East Indies by the Portuguese, Vasco de Gama; China by the Portuguese, Fernao d'Andrada; Terra del Fuego by the Portuguese, Magellan; Canada by the Frenchman, Jacques Cartier; the islands of Sumatra, Java, etc., Labrador, Brazil, the Cape of Good Hope, the Azores, Madeira, Newfoundland, Guinea, Congo, Mexico, White Cape, Greenland, Iceland, the South Pacific Ocean, California, Japan, Cambodia, Peru, Kamschatka, the Philippine Islands, Spitzbergen, Cape Horn, Behring Strait, New Zealand, Van Diemen's Land, New Britain, New Holland, the Louisiana, Island of Jan-Mayen, by Icelanders, Scandinavians, Frenchmen, Russians, Portuguese, Danes, Spaniards, Genoese, and Dutchmen; but no Englishmen figured among them, and it was a constant source of grief to Hatteras to see his fellow-countrymen excluded from the glorious band of sailors who made the great discoveries of the

fifteenth and sixteenth centuries.

Hatteras consoled himself somewhat when he considered modern times: the English took their revenge with Stuart, McDougall Stuart, Burke, Wells, King, Gray, in Australia; with Palliser in America; with Havnoan in Syria; with Cyril Graham, Waddington, Cunningham, in India; and with Barth, Burton, Speke, Grant, and Livingstone in Africa.

But this was not enough; for Hatteras these men were rather finishers than discoverers; something better was to be done, so he invented a country in order to have the honor of discovering it.

Now he had noticed that if the English were in a minority with regard to the early discoveries, that if it was necessary to go back to Cook to make sure of New Caledonia in 1774, and of the Sandwich Islands where he was killed in 1778, there was nevertheless one corner of the globe on which they had centred all their efforts.

This was the northern seas and lands of North America.

In fact, the list of polar discoveries runs as follows:--

Nova Zembla, discovered by Willoughby in 1553.
Island of Wiegehts, discovered by Barrow in 1556.
West Coast of Greenland, discovered by Davis in 1585.
Davis Strait, discovered by Davis in 1587.

Spitzbergen, discovered by Willoughby in 1596.

Hudson's Bay, discovered by Hudson in 1610.

Baffin's Bay, discovered by Baffin in 1616.

During recent years Hearne, Mackenzie, John Ross, Parry, Franklin, Richardson, Beechey, James Ross, Back, Dease, Simpson, Rae, Inglefield, Belcher, Austin, Kellet, Moore, MacClure, Kennedy, MacClintock, were incessantly exploring these unknown regions.

The northern coast of America had been accurately made out, the Northwest Passage nearly discovered, but that was not enough; there was something greater to be done, and this John Hatteras had twice tried, fitting out ships at his own expense; he wanted to reach the Pole itself, and thus to crown the list of English discoveries by a glorious success.

To reach the Pole itself was the aim of his life.

After many successful voyages in the southern seas, Hatteras tried for the first time in 1846 to reach the North through Baffin's Bay, but he could get no farther than latitude 74°; he sailed in the sloop Halifax; his crew suffered terribly, and John Hatteras carried his temerity so far that henceforth sailors were averse to undertaking a similar expedition under such a leader.

Notwithstanding, in 1850, Hatteras succeeded in obtaining for the

schooner Farewell about twenty determined men, but who were persuaded especially by the high pay offered their boldness. It was then that Dr. Clawbonny began to correspond with John Hatteras, whom he did not know, about accompanying him; but the post of surgeon was filled, fortunately for the doctor.

The Farewell, following the route taken by the Neptune of Aberdeen in 1817, went to the north of Spitzbergen, as far as latitude 76°. There they were obliged to winter; but their sufferings were such, and the cold so intense, that of all on board, Hatteras alone returned to England. He was picked up by a Danish whaler after he had walked more than two hundred miles across the ice.

The excitement produced by the return of this man alone was intense; who, after this, would accompany Hatteras in his bold attempts? Still he did not abandon the hope of trying again. His father, the brewer, died, and he came into possession of an enormous fortune.

Meanwhile something had happened which cut John Hatteras to the heart.

A brig, the Advance, carrying seventeen men, equipped by Mr. Grinnell, a merchant, commanded by Dr. Kane, and sent out in search of Franklin, went as far north, through Baffin's Bay and Smith's Sound, as latitude 82°, nearer to the Pole than any of his predecessors had gone.

Now this was an American ship. Grinnell was an American, Kane was an American!

It is easy to understand how the customary disdain of the Englishman for the Yankee turned to hatred in the heart of Hatteras; he made up his mind, at any price, to beat his bold rival, and to reach the Pole itself.

For two years he lived at Liverpool incognito. He was taken for a sailor. He saw in Richard Shandon the man he wanted; he presented his plans by an anonymous letter to him and to Dr. Clawbonny. The Forward was built and equipped. Hatteras kept his name a secret; otherwise no one would have gone with him. He resolved only to take command of the brig at some critical juncture, and when his crew had gone too far to be able to retreat; he kept in reserve, as we have seen, the power of making generous offers to the men, so that they would follow him to the end of the world.

In fact, it was to the end of the world that he wanted to go.

Now matters looked very serious, and John Hatteras made himself known.

His dog, the faithful Duke, the companion of his expeditions, was the first to recognize him, and fortunately for the bold, and unfortunately for the timid, it was firmly established that the captain of the Forward was John Hatteras.

CHAPTER XIII.

THE CAPTAIN'S PLANS.

The appearance of this famous person was variously received by the different members of the crew: some allied themselves strongly with him, moved both by boldness and by avarice; others took renewed interest in the expedition, but they reserved to themselves the right of protesting later; besides, at that time, it was hard to make any resistance to such a man. Hence every man went back to his place. The 20th of May was Sunday, and consequently a day of rest for the crew.

The officers took counsel together in the doctor's cabin; there were present Hatteras, Shandon, Wall, Johnson, and the doctor.

"Gentlemen," said the captain, with his peculiarly gentle but impressive voice, "you know my project of going to the Pole; I want to get your opinion of the undertaking. What do you think about it, Shandon?"

"I have not to think, Captain," answered Shandon, coldly; "I have only to obey."

Hatteras was not surprised at this answer.

"Richard Shandon," he resumed with equal coldness, "I ask your opinion

about our probable chance of success."

"Well, Captain," answered Shandon, "facts must answer for me; all attempts hitherto have failed; I hope we may be more fortunate."

"We shall be. And, gentlemen, what do you think?"

"As for me," replied the doctor, "I consider your design practicable, Captain; and since there is no doubt but that at some time or other explorers will reach the Pole, I don't see why we should not do it."

"There are very good reasons why we should," answered Hatteras, "for we have taken measures to make it possible, and we shall profit by the experience of others. And, Shandon, you must accept my thanks for the care you have given to the equipment of the brig; there are some ill-disposed men in the crew, whom I shall soon bring to reason; but on the whole, I can give nothing but praise."

Shandon bowed coldly. His position on the Forward, of which he had thought himself commander, was a false one. Hatteras understood this, and said nothing more about it.

"As for you, gentlemen," he resumed, addressing Wall and Johnson, "I could not myself have chosen officers more skilled and intrepid."

"On my word, Captain, I am your man," answered Johnson; "and although

I think your plan a very bold one, you can count on me to the end."

"And on me too," said Wall.

"As for you, Doctor, I know your worth--"

"Well, you know then a great deal more than I do," answered the doctor, quickly.

"Now, gentlemen," said Hatteras, "it is well that you should know on what good grounds I have made up my mind about the accessibility of the Pole. In 1817 the Neptune, of Aberdeen, went to the north of Spitzbergen, as far as latitude 82°. In 1826 the celebrated Parry, after his third voyage in polar seas, started also from the extremity of Spitzbergen, and on sledges went one hundred and fifty miles farther north. In 1852, Captain Inglefield reached, through Smith's Sound, latitude 78° 35'. All these were English ships, and were commanded by Englishmen, our fellow-countrymen."

Here Hatteras paused.

"I ought to add," he resumed with some formality, and as if he could hardly bring himself to utter the words,--"I ought to add that in 1854 the American, Captain Kane, in the brig Advance, went still farther north, and that his lieutenant, Morton, journeying over the ice, hoisted the United States flag beyond the eighty-second degree. Having

once said this, I shall not return to it. Now the main point is that
the captains of the Neptune, the Enterprise, the Isabella, and
the Advance agree in the statement that beyond these high latitudes
there is an open polar sea, entirely free from ice."

"Free from ice!" cried Shandon, interrupting the captain, "it's
impossible!"

"You will notice, Shandon," observed Hatteras, quietly, while his eye
lighted up for an instant, "that I quote both facts and authorities. I
must add that in 1851, when Penny was stationed by the side of
Wellington Channel, his lieutenant, Stewart, found himself in the
presence of an open sea, and that his report was confirmed when, in
1853, Sir Edward Belcher wintered in Northumberland Bay, in latitude
76° 52', and longitude 99° 20'; these reports are indisputable, and
one must be very incredulous not to admit them."

"Still, Captain," persisted Shandon, "facts are as contradictory--"

"You're wrong, Shandon, you're wrong!" cried Dr. Clawbonny; "facts
never contradict a scientific statement; the captain will, I trust,
excuse me."

"Go on, Doctor!" said Hatteras.

"Well, listen to this, Shandon; it results very clearly from

geographical facts, and from the study of isothermal lines, that the coldest spot on the globe is not on the Pole itself; like the magnetic pole, it lies a few degrees distant. So the calculations of Brewster, Berghaus, and other physicists prove that in our hemisphere there are two poles of extreme cold: one in Asia in latitude 79° 30' N., and longitude 120° E.; the other is in America, in latitude 78° N., and longitude 97° W. This last alone concerns us, and you see, Shandon, that it is more than twelve degrees below the Pole. Well, I ask you why, then, the sea should not be as free from ice as it often is in summer in latitude 66°, that is to say, at the southern end of Baffin's Bay?"

"Well put," answered Johnson; "Dr. Clawbonny talks of those things like a man who understands them."

"It seems possible," said James Wall.

"Mere conjectures! nothing but hypotheses!" answered Shandon, obstinately.

"Well, Shandon," said Hatteras, "let us consider the two cases; either the sea is free from ice, or it is not, and in neither case will it be impossible to reach the Pole. If it is free, the Forward will take us there without difficulty; if it is frozen, we must try to reach it over the ice by our sledges. You will confess that it is not impracticable; having once come with our brig to latitude 83°, we

shall have only about six hundred miles between us and the Pole."

"And what are six hundred miles," said the doctor, briskly, "when it is proved that a Cossack, Alexis Markoff, went along the frozen sea, north of Russia, on sledges drawn by dogs, for a distance of eight hundred miles, in twenty-four days?"

"You hear him, Shandon," answered Hatteras, "and will you say that an Englishman cannot do as much as a Cossack?"

"Never!" cried the enthusiastic doctor.

"Never!" repeated the boatswain.

"Well, Shandon?" asked the captain.

"Captain," answered Shandon, coldly, "I can only repeat what I have said,--I shall obey you."

"Well. Now," continued Hatteras, "let us consider our present situation; we are caught in the ice, and it seems to me impossible for us to reach Smith's Sound this year. This is what we must do."

Hatteras unfolded on the table one of the excellent charts published in 1859 by the order of the Admiralty.

"Be good enough to look here. If Smith's Sound is closed, Lancaster Sound is not, to the west of Baffin's Bay; in my opinion, we ought to go up this sound as far as Barrow Strait, and thence to Beechey Island. This has been done a hundred times by sailing-vessels; we shall have no difficulty, going under steam. Once at Beechey Island, we shall follow Wellington Sound as far northward as possible, to where it meets the channel, connecting it with Queen's Sound, at the place where the open sea was seen. It is now only the 20th of May; if nothing happens, we shall be there in a month, and from there we shall start for the Pole. What do you say to that, gentlemen?"

"Evidently," said Johnson, "it's the only way open to us."

"Well, we shall take it, and to-morrow. Let Sunday be a day of rest; you will see, Shandon, that the Bible is read as usual; the religious exercises do the men good, and a sailor more than any one ought to put his trust in God."

"Very well, Captain," answered Shandon, who went away with the second officer and the boatswain.

"Doctor," said Hatteras, pointing at Shandon, "there's an offended man, whose pride has ruined him; I can no longer depend upon him."

Early the next day the captain had the launch lowered; he went to reconnoitre the icebergs about the basin, of which the diameter was

hardly more than two hundred yards. He noticed that by the gradual pressure of the ice, this space threatened to grow smaller; hence it became necessary to make a breach somewhere, to save the ship from being crushed; by the means he employed, it was easy to see that John Hatteras was an energetic man.

In the first place he had steps cut, by which he climbed to the top of an iceberg; from that point he saw it would be easy to open a path to the southwest; by his orders an opening was made in the middle of an iceberg, a task which was completed by Monday evening.

Hatteras could not depend on his blasting-cylinders of eight or ten pounds of powder, whose action would have been insignificant against such large masses; they were only of use to break the field-ice; hence he placed in the opening a thousand pounds of powder, carefully laying it where it should be of the utmost service. This chamber, to which ran a long fuse, surrounded by gutta-percha, opened on the outside. The gallery, leading thereto, was filled with snow and lumps of ice, to which the cold of the next night gave the consistency of granite. In fact, the temperature, under the influence of the east-wind, fell to 12°.

The next day at seven o'clock the Forward was under steam, ready to seize any chance of escape. Johnson was charged with lighting the mine; the fuse was calculated to burn half an hour before exploding the powder. Hence Johnson had plenty of time to get back to the ship;

indeed, within ten minutes he was at his post.

The crew were all on deck; the day was dry and tolerably clear; the snow was no longer falling; Hatteras, standing on the deck with Shandon and the doctor, counted the minutes on his watch.

At thirty-five minutes after eight a dull explosion was heard, much less deafening than had been anticipated. The outline of the mountains was suddenly changed, as by an earthquake; a dense white smoke rose high in the air, and long cracks appeared in the side of the iceberg, of which the upper part was hurled to a great distance, and fell in fragments about the Forward.

But the way was by no means free yet; huge lumps of ice were suspended upon the neighboring icebergs, and their fall threatened to close the exit.

Hatteras saw their situation in a flash of the eye.

"Wolston!" he shouted.

The gunner hastened to him.

"Captain!" he said.

"Put a triple charge in the forward gun, and ram it in as hard as

possible!"

"Are we going to batter the iceberg down with cannon-balls?" asked the doctor.

"No," answered Hatteras. "That would do no good. No balls, Wolston, but a triple charge of powder. Be quick!"

In a few moments the gun was loaded.

"What is he going to do without a ball?" muttered Shandon between his teeth.

"We'll soon see," answered the doctor.

"We are all ready, Captain," cried Wolston.

"Well," answered Hatteras. "Brunton!" he shouted to the engineer, "make ready! Forward a little!"

Brunton opened the valves, and the screw began to move; the Forward drew near the blown-up iceberg.

"Aim carefully at the passage!" cried the captain to the gunner.

He obeyed; when the brig was only half a cable-length distant,

Hatteras gave the order,--

"Fire!"

A loud report followed, and the fragments of ice, detached by the commotion of the air, fell suddenly into the sea. The simple concussion had been enough.

"Put on full steam, Brunton!" shouted Hatteras. "Straight for the passage, Johnson!"

Johnson was at the helm; the brig, driven by the screw, which tossed the water freely, entered easily the open passage. It was time. The Forward had hardly passed through the opening, before it closed behind it.

It was an exciting moment, and the only calm and collected man on board was the captain. So the crew, amazed at the success of this device, could not help shouting,--

"Hurrah for John Hatteras!"

CHAPTER XIV.

THE EXPEDITIONS IN SEARCH OF FRANKLIN.

Wednesday, the 21st of May, the Forward resumed her perilous voyage, making her way dexterously through the packs and icebergs, thanks to steam, which is seldom used by explorers in polar seas; she seemed to sport among the moving masses; one would have said she felt the hand of a skilled master, and that, like a horse under a skilful rider, she obeyed the thought of her captain.

The weather grew warmer. At six o'clock in the morning the thermometer stood at 26°, at six in the evening at 29°, and at midnight at 25°; the wind was light from the southeast.

Thursday, at about three o'clock in the morning, the Forward arrived in sight of Possession Bay, on the American shore, at the entrance of Lancaster Sound; soon Cape Burney came into sight. A few Esquimaux came out to the ship; but Hatteras could not stop to speak with them.

The peaks of Byam Martin, which rise above Cape Liverpool, were passed on the left, and they soon disappeared in the evening mist; this hid from them Cape Hay, which has a very slight elevation, and so is frequently confounded with ice about the shore, a circumstance which very often renders the determination of the coast-line in polar regions very difficult.

Puffins, ducks, and white gulls appeared in great numbers. By observation the latitude was 74° 1', and the longitude, according to the chronometer, 77° 15'.

The two mountains, Catherine and Elizabeth, raised their snowy heads above the clouds.

At ten o'clock on Friday Cape Warrender was passed on the right side of the sound, and on the left Admiralty Inlet, a bay which has never been fully explored by navigators, who are always hastening westward. The sea ran rather high, and the waves often broke over the bows, covering the deck with small fragments of ice. The land on the north coast presented a strange appearance with its high, flat table-lands sparkling beneath the sun's rays.

Hatteras would have liked to skirt these northern lands, in order to reach the sooner Beechey Island and the entrance of Wellington Channel; but, much to his chagrin, the bank-ice obliged him to take only the passes to the south.

Hence, on the 26th of May, in the midst of a fog and a snow-storm, the Forward found herself off Cape York; a lofty, steep mountain was soon recognized; the weather got a little clearer, and at midday the sun appeared long enough to permit an observation to be taken: latitude 74° 4', and longitude 84° 23'. The Forward was at the end

of Lancaster Sound.

Hatteras showed the doctor on the chart the route he had taken and that which he was to follow. At that time the position of the brig was interesting.

"I should have liked to be farther north," he said, "but it was impossible; see, here is our exact position."

The captain pointed to a spot near Cape York.

"We are in the middle of this open space, exposed to every wind; into it open Lancaster Sound, Barrow Strait, Wellington Channel, and Regent's Inlet; here, of necessity, come all northern explorers."

"Well," answered the doctor, "so much the worse for them; it is indeed an open space, where four roads meet, and I don't see any sign-post to point out the right way! What did Parry, Ross, and Franklin do?"

"They didn't do anything in particular; they let themselves be governed by circumstances; they had no choice, I can assure you; at one time Barrow Strait would be closed against one, and the next year it would be open for another; again the ship would be irresistibly driven towards Regent's Inlet. In this way we have at last been able to learn the geography of these confused seas."

"What a strange region!" said the doctor, gazing at the chart. "How everything is divided and cut up, without order or reason! It seems as if all the land near the Pole were divided in this way in order to make the approach harder, while in the other hemisphere it ends in smooth, regular points, like Cape Horn or the Cape of Good Hope, and the Indian peninsula! Is it the greater rapidity at the equator which has thus modified things, while the land lying at the extremity, which was fluid at the beginning of the world, could not condense and unite as elsewhere, on account of slower rotation?"

"That may be, for there is a reason for everything, and nothing happens without a cause, which God sometimes lets students find out; so, Doctor, find it out if you can."

"I shall not waste too much time over it, Captain. But what is this fierce wind?" added the doctor, wrapping himself up well.

"The north-wind is the common one, and delays our progress."

"Still it ought to blow the ice toward the south, and leave our way free."

"It ought to, Doctor, but the wind doesn't always do what it ought to. See, that ice looks impenetrable. We shall try to reach Griffith Island, then to get around Cornwallis Island to reach Queen's Channel, without going through Wellington Channel. And yet I am anxious to

touch at Beechey Island to get some more coal."

"How will you do that?" asked the astonished doctor.

"Easily; by order of the Admiralty, a great amount has been placed on this island, to supply future expeditions, and although Captain MacClintock took some in 1859, I can assure you there is still some left for us."

"In fact, these regions have been explored for fifteen years, and until certain proof of Franklin's death was received, the Admiralty always kept five or six ships cruising in these waters. If I'm not mistaken, Griffith Island, which I see in the middle of the open space, has become a general rendezvous for explorers."

"True, Doctor, and Franklin's ill-fated expedition has been the means of our learning so much about these parts."

"Exactly; for there have been a great many expeditions since 1845. It was not till 1848 that there was any alarm about the continued non-appearance of the Erebus and the Terror, Franklin's two ships. Then the admiral's old friend, Dr. Richardson, seventy years of age, went through Canada, and descended Coppermine River to the Polar Sea; on the other side, James Ross, in command of the Enterprise and the Investigator, sailed from Upernavik in 1848, and reached Cape York, where we are now. Every day he threw overboard a cask containing

papers telling where he was; during fogs he fired cannon; at night he burned signal-fires and sent off rockets, carrying always but little sail; finally, he wintered at Leopold's Harbor in 1848-49; there he caught a large number of white foxes; he had put on their necks copper collars on which was engraved a statement of the position of the ship and where supplies had been left, and he drove them away in every direction; then, in the spring, he explored the coast of North Somerset on sledges, amid dangers and privations which disabled nearly all his men. He built cairns, enclosing copper cylinders with instructions to the absent expedition; during his absence, Lieutenant MacClure explored fruitlessly the northern coast of Barrow Strait. It is noteworthy, Captain, that James Ross had among his officers two men who afterwards became celebrated,--MacClure, who found the Northwest Passage, and MacClintock, who found the last remains of the Franklin expedition."

"Two good and brave captains, two brave Englishmen; go on, Doctor, with this account which you know so well; there is always something to be learned from the account of bold adventurers."

"Well, to conclude with James Ross, I have only to add that he tried to go farther west from Melville Island; but he nearly lost his ships, and being caught in the ice he was carried, against his will, to Baffin's Bay."

"Carried," said Hatteras, frowning,--"carried against his will!"

"He had discovered nothing," resumed the doctor; "it was only after 1850 that English ships were always exploring there, when a reward of twenty thousand pounds was offered to any one who should discover the crews of the Erebus and Terror. Already, in 1848, Captains Kellet and Moore, in command of the Herald and the Plover, tried to make their way through by Behring Strait. I ought to say that the winter of 1850-51, Captain Austin passed at Cornwallis Island; Captain Penny, with the Assistance and Resolute, explored Wellington Channel; old John Ross, who discovered the magnetic pole, started in his yacht, the Felix, in search of his friend; the brig Prince Albert made her first voyage at the expense of Lady Franklin; and, finally, two American ships, sent out by Grinnell, under Captain Haven, carried beyond Wellington Channel, were cast into Lancaster Sound. It was during this year that MacClintock, Austin's lieutenant, pushed on to Melville Island and to Cape Dundas, the extreme points reached by Parry in 1819, and on Beechey Island were found traces of Franklin's wintering there in 1845."

"Yes," answered Hatteras, "three of his sailors were buried there, three fortunate men!"

"From 1851 to 1852," continued the doctor, with a gesture of agreement, "we find the Prince Albert making a second attempt with the French lieutenant, Bellot; he winters at Batty Bay in Prince Regent's Sound, explores the southwest of Somerset, and reconnoitres

the coast as far as Cape Walker. Meanwhile, the Enterprise and Investigator, having returned to England, came under the command of Collinson and MacClure, and they rejoined Kellet and Moore at Behring Strait; while Collinson returned to winter at Hong-Kong, MacClure went on, and after three winters, 1850-51, 1851-52, and 1852-53, he discovered the Northwest Passage without finding any traces of Franklin. From 1852 to 1853, a new expedition, consisting of three sailing-vessels, the Assistance, the Resolute, the North Star, and two steam-vessels, the Pioneer and the Intrepid, started out under the orders of Sir Edward Belcher, with Captain Kellet second in command; Sir Edward visited Wellington Channel, wintered in Northumberland Bay, and explored the coast, while Kellet, pushing on as far as Brideport on Melville Island, explored that region without success. But then it was rumored in England that two ships, abandoned in the ice, had been seen not far from New Caledonia. At once Lady Franklin fitted out the little screw-steamer Isabella, and Captain Inglefield, after ascending Baffin's Bay to Victoria Point, at the eightieth parallel, returned to Beechey Island with equal unsuccess. At the beginning of 1855 the American Grinnell defrays the expense of a new expedition, and Dr. Kane, trying to reach the Pole--"

"But he did not succeed," cried Hatteras with violence, "and thank God he did not! What he did not do, we shall!"

"I know it, Captain," answered the doctor, "and I only speak of it on account of its connection with the search for Franklin. Besides, it

accomplished nothing. I nearly forgot to say that the Admiralty, regarding Beechey Island as a general rendezvous, ordered the steamer Phoenix, Captain Inglefield, in 1853, to carry provisions there; he sailed with Lieutenant Bellot, who for the second, and last, time offered his services to England; we can get full details about the catastrophe, for Johnson, our boatswain, was eye-witness of this sad affair."

"Lieutenant Bellot was a brave Frenchman," said Hatteras, "and his memory is honored in England."

"Then," resumed the doctor, "the ships of Belcher's squadron began to return one by one; not all, for Sir Edward had to abandon the Assistance in 1854, as McClure had the Investigator in 1853. Meanwhile Dr. Rae, in a letter dated July 29, 1854, written from Repulse Bay, gave information that the Esquimaux of King William's Land had in their possession different objects belonging to the Erebus and Terror; then there was no doubt possible about the fate of the expedition; the Phoenix, the North Star, and the ship of Collinson returned to England; there was then no English ship in these waters. But if the government seemed to have lost all hope, Lady Franklin did not despair, and with what was left of her fortune she fitted out the Fox, commanded by MacClintock; he set sail in 1857, wintered about where you made yourself known to us, Captain; he came to Beechey Island, August 11, 1858; the next winter he passed at Bellot Sound; in February, 1859, he began his explorations anew; on

the 6th of May he found the document which left no further doubt as to the fate of the Erebus and Terror, and returned to England at the end of the same year. That is a complete account of all that has been done in these regions during the last fifteen years; and since the return of the Fox, no ship has ventured among these dangerous waters!"

"Well, we shall try it!" said Hatteras.

CHAPTER XV.

THE FORWARD DRIVEN SOUTHWARD.

Towards evening the weather cleared up, and land was clearly to be seen between Cape Sepping and Cape Clarence, which juts out to the east, then to the south, and is connected to the mainland on the west by a low tongue of land. There was no ice at the entrance of Regent's Sound; but it was densely massed beyond Leopold Harbor, as if to form an impassable barrier to the northward progress of the Forward.

Hatteras, who, although he carefully concealed his feelings, was exceedingly annoyed, had to blow out a way with powder in order to enter Leopold Harbor; he reached it at midday, on Sunday, May 27th; the brig was securely anchored to the large icebergs, which were as firm, solid, and hard as rock.

At once the captain, followed by the doctor, Johnson, and his dog Duke, leaped out upon the ice and soon reached the land. Duke leaped about with joy; besides, since the captain had made himself known, he had become very sociable and very gentle, preserving his ill-temper for some of the crew, whom his master disliked as much as he did.

The harbor was free from the ice which is generally forced there by the east-wind; the sharp peaks, covered with snow, looked like a number of white waves. The house and lantern, built by James Ross,

were still in a tolerable state of preservation; but the provisions appeared to have been eaten by foxes, and even by bears, of which fresh traces were to be seen; part of the devastation was probably due to the hand of man, for some ruins of Esquimaux huts were to be seen on the shores of the bay.

The six tombs, enclosing six sailors of the Enterprise and the Investigator, were recognizable by little mounds of earth; they had been respected by all, by both men and beasts.

On first setting his foot on this northern earth, the doctor was really agitated; it would not be easy to describe the emotions one feels at the sight of these ruined houses, tents, huts, supplies, which nature preserves so perfectly in cold countries.

"There," said he to his companions,--"there is the spot which James Ross himself named Camp Refuge! If Franklin's expedition had reached this spot, it would have been saved. Here is the engine which was taken out and left here, and the furnace which warmed the crew of the Prince Albert in 1851; everything remains as it was left, and one might fancy that Kennedy, her captain, had sailed away from here yesterday. This is the launch that sheltered them for some days, for Kennedy was separated from his ship, and only saved by Lieutenant Bellot, who braved the cold of October to join him."

"A brave and excellent officer he was," said Johnson. "I knew him."

While the doctor eagerly sought for traces of previous winterings there, Hatteras busied himself with collecting the scanty fragments of fuel and provisions which lay there. The next day was devoted to carrying them on board ship. The doctor explored the whole neighborhood, never going too far from the brig, and sketched the most remarkable views. The weather gradually grew milder; the snow-drifts began to melt. The doctor made a tolerably large collection of northern birds, such as gulls, divers, molly-nochtes, and eider-ducks, which resemble ordinary ducks, with a white back and breast, a blue belly, the top of the head blue, the rest of the plumage white, shaded with different tints of green; many of them had already plucked from their bellies the eider-down, which both the male and the female devote to lining their nests. The doctor also saw great seals breathing at the surface of the water, but he was unable to draw one.

In his wanderings he discovered the stone on which is engraved the following inscription:--

[E I]
1849,

which marks the passage of the Enterprise and Investigator; he pushed on to Cape Clarence, to the spot where, in 1833, John and James Ross waited so impatiently for the ice to thaw. The earth was covered with the skulls and bones of animals, and traces of the dwellings of

Esquimaux were to be seen.

The doctor thought of erecting a cairn at Leopold Harbor, and of leaving a letter there to indicate the passage of the Forward and the aim of the expedition. But Hatteras formally objected; he did not wish to leave behind him any traces which might be of use to a rival. In spite of all he could say, the doctor was obliged to yield to the captain's will. Shandon was ready enough to blame this obstinacy, for, in case of accident, no ship could have put out to the aid of the Forward.

Hatteras refused to comply. Having completed his preparations on Monday, he tried once more to go to the north through the ice, but, after dangerous efforts, he was obliged to descend again Regent's Channel; he was utterly averse to remaining at Leopold's Harbor, which is open one day and closed the next by the unheralded motion of the ice,--a frequent phenomenon in these seas, and one against which navigators have to be ever on their guard.

If Hatteras kept his anxiety from the others, he was at heart very anxious; he wanted to go northward, and he was obliged to retreat to the south! Where would that bring him? Was he going as far back as Victoria Harbor in the Gulf of Boothia, where Sir John Ross wintered in 1833? Should he find Bellot Sound free at this time, and, by going around North Somerset, could he ascend through Peel Sound? Or should he, like his predecessors, be caught for many winters, and be obliged

to consume all his supplies and provisions?

These fears tormented him; but he had to decide; he put about and started for the south.

Prince Regent's Channel is of nearly uniform width from Leopold's Harbor to Adelaide Bay. The Forward went rapidly through the ice, with better fortune than many other ships, most of which required a month to descend the channel, even in a better season; it is true that none of these ships, except the Fox, had steam at their command, and were obliged to do their best against frequent unfavorable winds.

The crew seemed overjoyed at leaving the northern regions; they had but a slight desire to reach the Pole; they were alarmed at Hatteras's plans, for his reputation as a fearless man inspired them with but little confidence. Hatteras tried to make use of every opportunity to go forward, whatever the consequences might be. And yet in these parts, to advance is all very well, but one must also maintain his position and not run the risk of losing it.

The Forward went on under full steam; the black smoke whirled in spirals about the sparkling summits of the icebergs; the weather was changeable, turning from a dry cold to a snowstorm with inconceivable rapidity. Since the brig drew but little water, Hatteras hugged the west shore; he did not want to miss the entrance of Bellot Sound, for the Gulf of Boothia has no other entrance towards the south than the

slightly known sound of the Fury and the Hecla; hence the gulf would be impassable, if Bellot Sound were missed or found impracticable.

By evening the Forward was in sight of Elwin Bay, which was recognized by its high, steep cliffs; Tuesday morning Batty Bay was seen, where, on the 10th of September, 1851, the Prince Albert anchored for the winter. The doctor examined the coast with interest through his glass. From this point started the expeditions which determined the shape of North Somerset. The weather was clear enough for them to see the deep ravines surrounding the bay.

The doctor and Johnson were probably the only ones who took any interest in these deserted countries. Hatteras, always studying his charts, talked little; his silence increased as the ship drew southward; he often went upon the quarter-deck, and there he would remain for hours, with folded arms, gazing absently at the horizon. His orders, when he gave any, were short and quick. Shandon maintained a cold silence, and drawing more and more into himself, he had nothing more to do with Hatteras than was officially required; James Wall remained devoted to Shandon, and modelled his conduct after that of his friend. The rest of the crew waited for whatever might turn up, ready to make the best use of it for their own profit. On board there was none of the unanimity which is so necessary for the accomplishment of great things. Hatteras knew this well.

During the day two whalers were seen making toward the south; a white bear, too, was saluted with a few rifle-shots, but apparently without success. The captain knew the worth of an hour at that time, and refused permission to chase the animal.

Wednesday morning the end of Regent Channel was passed; the angle of the west coast was followed by a deep curve in the land. On examining his chart, the doctor recognized Somerset-House Point, or Point Fury.

"There," he said to his usual companion,--"there is where the first English ship was lost that was sent to these seas in 1815, in Parry's third voyage; the Fury was so much injured by the ice in her second winter, that the crew were obliged to abandon her and to return to England in her companion, the Hecla."

"A good reason for having another ship," answered Johnson; "that is a precaution which polar explorers should not neglect; but Captain Hatteras was not the man to burden himself with a companion!"

"Do you consider him rash, Johnson?" asked the doctor.

"I? O, I don't say anything of the sort, Dr. Clawbonny! But see those piles there, with fragments of a tent hanging to them."

"Yes, Johnson, it is there Parry unloaded all his ship's supplies, and, if my memory serves me right, the roof of the hut he built was

made out of a mainsail covered by the running-rigging of the Fury."

"That must have changed a good deal since 1825."

"Not so very much. In 1829, John Ross kept his crew safe and sound in this light building. In 1851, when Prince Albert sent out an expedition, this hut was still standing; Captain Kennedy repaired it nine years ago. It would be interesting to visit it, but Hatteras is unwilling to stop."

"And he is probably right, Dr. Clawbonny; if in England time is money, here it is safety, and for the delay of a day, of an hour even, the whole voyage might be rendered useless. We must let him do as he pleases."

On Thursday, June 1st, the Forward sailed diagonally across Creswell Bay; from Point Fury the coast rises in steep rocks three hundred feet high; towards the south, it is lower; a few snowy summits are to be seen, of a regular shape, while others, more fantastic, were hidden in the clouds.

During that day the weather grew milder, but cloudier; they lost sight of land; the thermometer rose to 32°; a few water-quail were to be seen, and flocks of wild geese flew toward the north; the crew laid aside some of their thick clothes; they began to be aware of the approach of summer in the arctic regions.

Toward evening the Forward doubled Cape Garry, a quarter of a mile from the shore. The lead marked ten to twelve fathoms, and they bore along the shore to Brentford Bay. In this latitude they were to find Bellot Sound, a sound which entirely escaped the notice of Sir John Ross in his expedition of 1828; his charts indicated an unbroken coast-line, with the least irregularities indicated with the utmost care; hence it is to be supposed that when he passed by the entrance of the sound, it was completely closed with ice and so could not be distinguished from the land.

This sound was really discovered by Captain Kennedy in an excursion made in April, 1852; he named it after Lieutenant Bellot, as "a just tribute," as he said, "to the important services rendered to our expedition by the French officer."

CHAPTER XVI.

THE MAGNETIC POLE.

As Hatteras drew near this sound he felt his anxiety redoubling; in fact, the success of his expedition was at stake; so far he had done nothing more than his predecessors, the most successful of whom, MacClintock, had consumed fifteen months in reaching this spot; but that was little, indeed nothing, if he could not make Bellot Sound; being unable to return, he would be kept a prisoner until the next year.

Hence he took upon himself the care of examining the coast; he went up to the lookout, and on Saturday passed many hours there.

The crew were all acquainted with the situation of the ship; an unbroken silence reigned on board; the engine was slackened; the Forward ran as near shore as possible; the coast was lined with ice which the warmest summers could not melt; a practised eye was needed to make out an entrance through them.

Hatteras was comparing his charts with the coast-line. The sun having appeared for a moment at noon, Shandon and Wall took an observation, the result of which was at once told him.

There was half a day of anxiety for all. But suddenly, at about two

o'clock, these words were shouted from aloft,--

"Head to the west, and put on all steam."

The brig obeyed at once, turning to the point directed; the screw churned the water, and the Forward plunged under a full head of steam between two swiftly running ice-streams.

The path was found; Hatteras came down to the quarter-deck, and the ice-master went aloft.

"Well, Captain," said the doctor, "we have entered this famous sound at last!"

"Yes," answered Hatteras; "but entering is not all, we have got to get out of it too."

And with these words he went to his cabin.

"He is right," thought the doctor; "we are in a sort of trap, without much space to turn about in, and if we had to winter here!--well, we shouldn't be the first to do it, and where others lived through it, there is no reason why we should not!"

The doctor was right. It was at this very place, in a little sheltered harbor called Port Kennedy by MacClintock himself, that the Fox

wintered in 1858. At that moment it was easy to recognize the lofty granite chains, and the steep beaches on each side.

Bellot Sound, a mile broad and seventeen long, with a current running six or seven knots, is enclosed by mountains of an estimated height of sixteen hundred feet; it separates North Somerset from Boothia; it is easy to see that there is not too much sailing room there. The Forward advanced carefully, but still she advanced; tempests are frequent in this narrow pass, and the brig did not escape their usual violence; by Hatteras's orders, all the topsail-yards were lowered, and the topmasts also; in spite of everything the ship labored fearfully; the heavy seas kept the deck continually deluged with water; the smoke flew eastward with inconceivable rapidity; they went on almost at haphazard through the floating ice; the barometer fell to 29°; it was hard to stay on deck, so most of the men were kept below to spare them unnecessary exposure.

Hatteras, Johnson, and Shandon remained on the quarter-deck, in spite of the whirlwinds of snow and rain; and the doctor, who had just asked himself what was the most disagreeable thing to be done at that time, soon joined them there; they could not hear, and hardly could they see, one another; so he kept his thoughts to himself.

Hatteras tried to pierce the dense cloud of mist, for, according to his calculation, they should be through the strait at six o'clock of the evening. At that time exit seemed closed, and Hatteras was obliged

to stop and anchor to an iceberg; but steam was kept up all night.

The weather was terrible. Every moment the Forward threatened to snap her cables; there was danger, too, lest the mountain should be driven by the wind and crush the brig. The officers kept on the alert, owing to their extreme anxiety; besides the snow, large lumps of frozen spray were blown about by the hurricane like sharp arrows.

The temperature arose strangely in that terrible night; the thermometer marked 57°; and the doctor, to his great surprise, thought he noticed some flashes of lightning followed by distant thunder. This seemed to corroborate the testimony of Scoresby, who noticed the same phenomenon above latitude 65°. Captain Parry also observed it in 1821.

Towards five o'clock in the morning the weather changed with singular rapidity; the temperature fell to the freezing-point; the wind shifted to the north and grew quiet. The western opening of the strait could be seen, but it was entirely closed. Hatteras gazed anxiously at the coast, asking himself if there really were any exit.

Nevertheless, the brig put out slowly into the ice-streams, while the ice crushed noisily against her bows; the packs at this time were six or seven feet thick; it was necessary carefully to avoid them, for if the ship should try to withstand them, it ran the risk of being lifted half out of the water and cast on her beam-ends.

At noon, for the first time, a magnificent solar phenomenon could be observed, a halo with two parhelions; the doctor observed it, and took its exact dimensions; the exterior arc was only visible for about thirty degrees each side of the horizontal diameter; the two images of the sun were remarkably clear; the colors within the luminous area were, going toward the outside, red, yellow, green, faint blue, and last of all white, gently fading away, without any sharp line of termination.

The doctor remembered Thomas Young's ingenious theory about these meteors; he supposed that certain clouds composed of prisms of ice are hanging in the air; the sun's rays falling on these prisms are refracted at angles of sixty and ninety degrees. The halos can only be formed in a clear sky. The doctor thought this an ingenious explanation.

Sailors, who are familiar with northern seas, consider this phenomenon a forerunner of heavy snow. If this should be the case, the position of the Forward was very critical. Hence Hatteras resolved to push on; during the rest of that day and the next night he took no rest, but examined the horizon through his glass, entering every inlet, and losing no opportunity to get out of the strait.

But in the morning he was compelled to stop before the impenetrable ice. The doctor joined him on the quarter-deck. Hatteras led him clear aft where they could talk without fear of being overheard.

"We are caught," said Hatteras. "It's impossible to go on."

"Impossible?" said the doctor.

"Impossible! All the powder on board the Forward would not open a quarter of a mile to us."

"What are we to do?" asked the doctor.

"I don't know. Curse this unlucky year!"

"Well, Captain, if we must go into winter-quarters, we'll do it. As well here as anywhere else!"

"Of course," said Hatteras in a low voice, "but we ought not to be going into winter-quarters, especially in the month of June. It is demoralizing, and bad for the health. The spirits of the crew are soon cast down during this long rest among real sufferings. So I had made up my mind to winter at a latitude nearer the Pole."

"Yes, but, unluckily, Baffin's Bay was closed."

"Any one else would have found it open," cried Hatteras; "that American, that--"

"Come, Hatteras," said the doctor, purposely interrupting him, "it's now only the 5th of June; we should not despair; a path may open before us suddenly; you know the ice often breaks into separate pieces, even when the weather is calm, as if it were driven apart by some force of repulsion; at any moment we may find the sea free."

"Well, if that happens, we shall take advantage of it. It is not impossible that beyond Bellot Strait we might get northward through Peel Sound or MacClintock Channel, and then--"

"Captain," said James Wall, approaching, "the ice threatens to tear away the rudder."

"Well," answered Hatteras, "never mind; I sha'n't unship it; I want to be ready at any hour, day or night. Take every precaution, Mr. Wall, and keep the ice off; but don't unship it, you understand."

"But--" began Wall.

"I don't care to hear any remarks, sir," said Hatteras, severely. "Go!"

Wall returned to his post.

"Ah!" said Hatteras, angrily, "I would give five years of my life to be farther north! I don't know any more dangerous place; and besides,

we are so near the magnetic pole that the compass is of no use; the needle is inactive, or always shifting its direction."

"I confess," said the doctor, "that it is not plain sailing; but still, those who undertook it were prepared for such dangers, and there is no need to be surprised."

"Ah, Doctor! the crew has changed very much, and you have seen that the officers have begun to make remarks. The high pay offered the sailors induced them to ship; but they have their bad side, for as soon as they are off they are anxious to get back. Doctor, I have no encouragement in my undertaking, and if I fail, it won't be the fault of such or such a sailor, but of the ill-will of certain officers. Ah, they'll pay dearly for it!"

"You are exaggerating, Hatteras."

"Not at all! Do you fancy the crew are sorry for the obstacles we are meeting? On the contrary, they hope I shall be compelled to abandon my plans. So they do not murmur, and when the Forward is headed for the south, it will be the same thing. Fools! They imagine they are returning to England! But when I'm turned towards the north, you will see a difference! I swear solemnly that no living being shall make me swerve from my course! Give me a passage, an opening through which my brig can go, and I shall take it, if I have to leave half her sheathing behind!"

The desires of the captain were destined to be satisfied in a measure. As the doctor had foretold, there was a sudden change in the evening; under some influence of the wind, the ice-fields separated; the Forward pushed on boldly, breaking the ice with her steel prow; all the night they advanced, and towards six o'clock they were clear of Bellot Strait.

But great was Hatteras's anger at finding the way to the north closed! He was able to hide his despair; and as if the only open path were the one of his choice, he turned the Forward towards Franklin Sound. Being unable to go up Peel Sound, he determined to go around Prince of Wales Land, to reach MacClintock Channel. But he knew that Shandon and Wall could not be deceived, and were conscious of the failure of his hopes.

Nothing especial happened on the 6th of June; snow fell, and the prophecy of the halo came true.

For thirty-six hours the Forward followed the sinuosities of the coast of Boothia, without reaching Prince of Wales Land. Hatteras put on all steam, burning his coal extravagantly; he still intended to get further supplies on Beechey Island; on Thursday he arrived at Franklin Sound, and he still found the way northward impassable.

His position was a desperate one; he could not return; the ice pushed

him onward, and he saw his path forever closing behind him, as if there were no open sea where he had passed but an hour before.

Hence, not only was the Forward unable to go toward the north, but she could not stop for a moment lest she should be imprisoned, and she fled before the ice like a ship before a storm.

Friday, June 7th, she arrived near the coast of Boothia, at the entrance of James Ross Sound, which had to be avoided because its only exit is to the west, close to the shore of America.

The observations taken at noon showed them to be in latitude 70° 5' 17", and longitude 96° 46' 45"; when the doctor heard this he examined his chart, and found that they were at the magnetic pole, at the very point where James Ross, the nephew of Sir John, came to determine its situation.

The land was low near the coast, and it rose only about sixty feet at the distance of a mile from the sea.

The boiler of the Forward needed cleaning; the captain anchored his ship to a field of ice, and gave the doctor leave to go ashore with the boatswain. For himself, being indifferent to everything outside of his own plans, he shut himself up in his cabin, and studied the chart of the Pole.

The doctor and his companion easily reached land; the first-named carried a compass for his experiments; he wanted to test the work of James Ross; he easily made out the mound of stones erected by him; he ran towards it; an opening in the cairn let him see a tin box in which James Ross had placed an account of his discovery. No living being had visited this lonely spot for thirty years.

At this place a needle suspended as delicately as possible assumed a nearly vertical position under the magnetic influence; hence the centre of attraction was near, if not immediately beneath, the needle.

The doctor made the experiment with all care. But if James Ross, owing to the imperfection of his instruments, found a declination of only 89° 50', the real magnetic point is found within a minute of this spot. Dr. Clawbonny was more fortunate, and at a little distance from there he found a declination of 90°.

"This is exactly the magnetic pole of the earth!" he cried, stamping on the ground.

"Just here?" asked Johnson.

"Precisely here, my friend!"

"Well, then," resumed the boatswain, "we must give up all the stories of a magnetic mountain or large mass."

"Yes, Johnson," answered the doctor, laughing, "those are empty hypotheses! As you see, there is no mountain capable of attracting ships, of drawing their iron from them anchor after anchor, bolt after bolt! and your shoes here are as light as anywhere in the world."

"But how do you explain--"

"There is no explanation, Johnson; we are not wise enough for that. But what is mathematically certain is that the magnetic pole is at this very spot!"

"Ah, Dr. Clawbonny, how glad the captain would be to say as much of the North Pole!"

"He'll say it, Johnson; he'll say it!"

"God grant it!" was the answer.

The doctor and his companion raised a cairn at the spot where they tried their experiment, and the signal for their return being made, they returned to the ship at five o'clock of the evening.

CHAPTER XVII.

THE FATE OF SIR JOHN FRANKLIN.

The Forward succeeded, though not without difficulty, in getting by James Ross Sound, by frequent use of the ice-saws and gunpowder; the crew was very much fatigued. Fortunately the temperature was agreeable, and even thirty degrees above what James Ross found at the same time of year. The thermometer marked 34°.

Saturday they doubled Cape Felix at the northern end of King William's Land, one of the smaller islands of northern seas.

At that time the crew became very much depressed; they gazed wistfully and sadly at its far-stretching shores.

In fact, they were gazing at King William's Land, the scene of one of the saddest tragedies of modern times! Only a few miles to the west the Erebus and Terror were lost.

The sailors of the Forward were familiar with the attempts made to find Franklin, and the result they had obtained, but they did not know all the sad details. Now, while the doctor was following on his chart the course of the ship, many of them, Bell, Bolton, and Simpson, drew near him and began to talk with him. Soon the others followed to satisfy their curiosity; meanwhile the brig was advancing rapidly, and

the bays, capes, and promontories of the coast passed before their gaze like a gigantic panorama.

Hatteras was pacing nervously to and fro on the quarter-deck; the doctor found himself on the bridge, surrounded by the men of the crew; he readily understood the interest of the situation, and the impression that would be made by an account given under those circumstances, hence he resumed the talk he had begun with Johnson.

"You know, my friends, how Franklin began: like Cook and Nelson, he was first a cabin-boy; after spending his youth in long sea-voyages, he made up his mind, in 1845, to seek the Northwest Passage; he commanded the Erebus and the Terror, two stanch vessels, which had visited the antarctic seas in 1840, under the command of James Ross. The Erebus, in which Franklin sailed, carried a crew of seventy men, all told, with Fitz-James as captain; Gore and Le Vesconte, lieutenants; Des Voeux, Sargent, and Couch, boatswains; and Stanley, surgeon. The Terror carried sixty-eight men. Crozier was the captain; the lieutenants were Little, Hodgson, and Irving; boatswains, Horesby and Thomas; the surgeon, Peddie. In the names of the bays, capes, straits, promontories, channels, and islands of these latitudes you find memorials of most of these unlucky men, of whom not one has ever again seen his home! In all one hundred and thirty-eight men! We know that the last of Franklin's letters were written from Disco Island, and dated July 12, 1845. He said, 'I hope to set sail to-night for Lancaster Sound.' What followed his departure from Disco Bay? The

captains of the whalers, the Prince of Wales and the Enterprise, saw these two ships for the last time in Melville Bay, and nothing more was heard of them. Still we can follow Franklin in his course westward; he went through Lancaster and Barrow Sounds and reached Beechey Island, where he passed the winter of 1845-46."

"But how is this known?" asked Bell, the carpenter.

"By three tombs which the Austin expedition found there in 1850. Three of Franklin's sailors had been buried there; and, moreover, by a paper found by Lieutenant Hobson of the Fox, dated April 25, 1848. We know also that, after leaving winter-quarters, the Erebus and Terror ascended Wellington Channel as far as latitude 77°; but instead of pushing to the north, which they doubtless found impossible, they returned towards the south--"

"And that was a fatal mistake!" uttered a grave voice. "Safety lay to the north."

Every one turned round. It was Hatteras, who, leaning on the rail of the quarter-deck, had just made that solemn remark.

"Without doubt," resumed the doctor, "Franklin intended to make his way to the American shore; but tempests beset him, and September 12, 1846, the two ships were caught in the ice, a few miles from here, to the northwest of Cape Felix; they were carried to the north-northwest

of Point Victory; there," said the doctor, pointing out to the sea.
"Now," he added, "the ships were not abandoned till April 22, 1848.
What happened during these nineteen months? What did these poor men
do? Doubtless they explored the surrounding lands, made every effort
to escape, for the admiral was an energetic man; and if he did not
succeed--"

"It's because his men betrayed him," said Hatteras in a deep voice.

The sailors did not dare to lift their eyes; these words made them
feel abashed.

"To be brief, this paper, of which I spoke, tells us, besides, that
Sir John Franklin died, worn out by his sufferings, June 11, 1847. All
honor to his memory!" said the doctor, removing his hat.

The men did the same in silence.

"What became of these poor men, deprived of their leader, during the
next ten months? They remained on board of their ships, and it was not
till April, 1848, that they made up their mind to abandon them; one
hundred and five men survived out of the hundred and thirty-eight.
Thirty-three had died! Then Captains Crozier and Fitz-James erected a
cairn at Point Victory, and left their last paper there. See, my
friends, we are passing by that point. You can see traces of the
cairn, placed, so to speak, at the farthest point reached by John Ross

in 1831! There is Cape Jane Franklin! There Point Franklin! There Point Le Vesconte! There Erebus Bay, where the launch, made of pieces of one of the ships, was found on a sledge! There were found silver spoons, plenty of food, chocolate, tea, and religious books. The hundred and five survivors, under the command of Captain Crozier, set out for Great Fish River. How far did they get? Did they reach Hudson's Bay? Have any survived? What became of them after that?--"

"I will tell you what became of them," said John Hatteras in an energetic voice. "Yes, they tried to reach Hudson's Bay, and separated into several parties. They took the road to the south. In 1854 a letter from Dr. Rae states that in 1850 the Esquimaux had met in King William's Land a detachment of forty men, chasing sea-cows, travelling on the ice, dragging a boat along with them, thin, pale, and worn out with suffering and fatigue. Later, they discovered thirty corpses on the mainland and five on a neighboring island, some half buried, others left without burial; some lying beneath an overturned boat, others under the ruins of a tent; here lay an officer with his glass swung around his shoulder, and his loaded gun near him; farther on were kettles with the remains of a horrible meal. At this news, the Admiralty urged the Hudson's Bay Company to send its most skilful agents to this place. They descended Black River to its mouth. They visited Montreal and Maconochie Islands, and Point Ogle. In vain! All these poor fellows had died of misery, suffering, and starvation, after trying to prolong their lives by having recourse to cannibalism. That is what became of them along their way towards the south, which

was lined with their mutilated bodies. Well, do you want to follow their path?"

Hatteras's ringing voice, passionate gestures, and glowing face produced an indescribable effect. The crew, moved by the sight of these ill-omened lands, cried with one voice,--

"To the north! to the north!"

"Well, to the north! Safety and glory await us there at the north! Heaven is declaring for us! The wind is changing! The passage is free! Prepare to go about!"

The sailors hastened to their places; the ice-streams grew slowly free; the Forward went about rapidly, and ran under full steam towards MacClintock's Channel.

Hatteras was justified in counting on a freer sea; on his way he retraced the probable path of Franklin; he went along the eastern side of Prince of Wales Land, which is clearly defined, while the other shore is still unknown. Evidently the clearing away of the ice towards the south took place through the eastern strait, for it appeared perfectly clear; so the Forward was able to make up for lost time; she was put under full steam, so that the 14th they passed Osborne Bay, and the farthest points reached by the expeditions of 1851. There was still a great deal of ice about them, but there was every

indication that the Forward would have clear sailing-way before her.

CHAPTER XVIII.

THE WAY NORTHWARD.

The crew seemed to have returned to their habits of discipline and obedience. Their duties were slight and infrequent, so that they had plenty of leisure. The temperature never fell below the freezing-point, and the thaw removed the greatest obstacles from their path.

Duke had made friends with Dr. Clawbonny. They got on admirably together. But as in friendship one friend is always sacrificed to the other, it must be said that the doctor was not the other. Duke did with him whatever he pleased. The doctor obeyed him as a dog obeys his master. Moreover, Duke conducted himself very amicably with most of the officers and sailors; only, instinctively doubtless, he avoided Shandon; he had, too, a grudge against Pen and Foker; his hatred for them manifested itself in low growls when they came near him. They, for their part, did not dare attack the captain's dog, "his familiar spirit," as Clifton called him.

In a word, the crew had taken courage again.

"It seems to me," said James Wall one day to Richard Shandon, "that the men took the captain's words for earnest; they seem to be sure of success."

"They are mistaken," answered Shandon; "if they would only reflect, and consider our condition, they would see we are simply going from one imprudence to another."

"Still," resumed Wall, "we are in a more open sea; we are going along a well-known route; don't you exaggerate somewhat, Shandon?"

"Not a bit, Wall; the hate and jealousy, if you please, with which Hatteras inspires me, don't blind my eyes. Say, have you seen the coal-bunkers lately?"

"No," answered Wall.

"Well! go below, and you'll see how near we are to the end of our supply. By right, we ought to be going under sail, and only starting our engine to make headway against currents or contrary winds; our fuel ought to be burned only with the strictest economy, for who can say where and for how long we may be detained? But Hatteras is pushed by this mania of going forward, of reaching the inaccessible Pole, and he doesn't care for such a detail. Whether the wind is fair or foul, he goes on under steam; and if he goes on we run a risk of being very much embarrassed, if not lost."

"Is that so, Shandon? That is serious!"

"You are right, Wall, it is; not only would the engine be of no use to us if we got into a tight place, but what are we to do in the winter? We ought to take some precautions against the cold in a country where the mercury often freezes in the thermometer."

"But if I'm not mistaken, Shandon, the captain intends getting a new supply at Beechey Island; they say there is a great quantity there."

"Can any one choose where he'll go in these seas, Wall? Can one count on finding such or such a channel free of ice? And if he misses Beechey Island, or can't reach it, what is to become of us?"

"You are right, Shandon; Hatteras seems to me unwise; but why don't you say something of this sort to him?"

"No, Wall," answered Shandon, with ill-disguised bitterness, "I have made up my mind not to say a word; I am not responsible any longer for the ship; I shall await events; if I receive any commands, I obey, and I don't proclaim my opinions."

"Let me tell you you are wrong, Shandon; for the well-being of all is at stake, and the captain's imprudence may cost us all dear."

"And if I were to speak, Wall, would he listen to me?"

Wall did not dare say he would.

"But," he added, "he would perhaps listen to remonstrances of the crew."

"The crew," said Shandon, shrugging his shoulders; "but, my dear Wall, haven't you noticed that they care for everything else more than for their safety? They know they're getting near latitude 72°, and that a thousand pounds is paid for every degree of latitude beyond which is reached."

"You are right, Shandon," answered Wall, "and the captain has taken the surest means of securing his men."

"Without doubt," answered Shandon; "for the present, at least."

"What do you mean?"

"I mean that all will go very well in the absence of all dangers and fatigues, in an open sea; Hatteras has caught them by his money; but what is done for pay is ill done. But once let hardships, dangers, discomfort, sickness, melancholy, and fierce cold stare them in the face,--and we are flying towards them now,--and you will see whether they remember the pay they are to get."

"So, in your opinion, Shandon, Hatteras will fail?"

"Exactly; he will fail. In such an enterprise, there should be an identity of interests among the leaders, a sympathy which is lacking here. Besides, Hatteras is mad; his whole past proves it! But we shall see! Circumstances may arise in which the command of the ship will have to be given to a less foolhardy captain--"

"Still," said Wall, shaking his head doubtfully, "Hatteras will always have on his side--"

"He will have," interrupted Shandon,--"he will have that Dr. Clawbonny, who only cares to study; Johnson, who is a slave to discipline, and who never takes the trouble to reason; perhaps one or two besides, like Bell, the carpenter,--four at the most, and there are eighteen on board! No, Wall, Hatteras has not the confidence of the crew; he knows it well, and he tries to make up for it by bribery; he made a good use of the account of Franklin's catastrophe to create a different feeling in their excited minds; but that won't last, I tell you; and if he don't reach Beechey Island, he is lost!"

"If the crew suspected--"

"I beg of you," said Shandon, quickly, "not to say a word about this to the crew; they'll find it out for themselves. Now, at any rate, it is well to go on towards the north. But who can say whether what Hatteras takes for a step towards the Pole may not be really retracing our steps? At the end of MacClintock Channel is Melville Bay, and

thence open the straits which lead back to Baffin's Bay. Hatteras had better take care! The way west is easier than the way north."

From these words Shandon's state of mind may be judged, and how justified the captain was in suspecting a treacherous disposition in him.

Shandon, moreover, was right when he ascribed the present satisfaction of the crew to the prospect they had of passing latitude 72°. This greed of gold seized the least audacious. Clifton had made out every one's share with great exactness. Leaving out the captain and the doctor, who could not be admitted to the division, there were sixteen men on board the Forward. The amount was a thousand pounds, that was £72 10s. for each man, for every degree. If they should ever reach the Pole the eighteen degrees to be crossed would give each one a sum of £1,125, a fair fortune. This whim would cost the captain £18,000; but he was rich enough to pay for such a costly trip to the Pole.

These calculations aroused wonderfully the avarice of the crew, as can be readily believed, and more than one longed to pass latitude 72°, who, a fortnight before, rejoiced to be sailing southward.

The Forward sailed by Cape Alworth June 16th. Mount Rawlinson raised its white peaks towards the sky; the snow and mist exaggerated its size so that it appeared colossal; the temperature remained a few degrees above the freezing-point; cascades and cataracts appeared on

the sides of the mountain; avalanches kept falling with a roar like that of artillery. The long stretches of glaciers made a loud echo. The contrast between this wintry scene and the thaw made a wonderful sight. The brig sailed along very near the coast; they were able to see on some sheltered rocks a few bushes bearing modest little roses, some reddish moss, and a budding dwarf willow barely rising above the ground.

At last, June 19th, in latitude 72°, they doubled Point Minto, which forms one of the extremities of Ommanney Bay; the brig entered Melville Bay, called "the Sea of Money" by Bolton; this good-natured fellow used to be always jesting on this subject, much to Clawbonny's amusement.

The obstacles to their course were but few, for June 23d, in the teeth of a strong northeasterly breeze, they passed latitude 74°. This was at the middle of Melville Bay, one of the largest seas of this region. It was first crossed by Captain Parry, in his great expedition of 1819, and there it was that his crew won the £5,000 promised by act of Parliament.

Clifton contented himself with remarking that there were two degrees between latitude 72° and latitude 74°: that was £125 to his credit. But they told him that a fortune did not amount to much up there, and that a man could be called rich only when he could have a chance to drink to his wealth; it seemed better to wait for the moment when they

could meet at some tavern in Liverpool before rejoicing and rubbing their hands.

CHAPTER XIX.

A WHALE IN SIGHT.

Melville Bay, although perfectly navigable, was not wholly free of ice; immense ice-fields could be seen stretching to the horizon; here and there appeared a few icebergs, but they stood motionless as if anchored in the ice. The Forward went under full steam through broad passes where she had plenty of sailing-room. The wind shifted frequently from one point of the compass to another.

The variability of the wind in the arctic seas is a remarkable fact, and very often only a few minutes intervene between a calm and a frightful tempest. This was Hatteras's experience on the 23d of June, in the middle of this huge bay.

The steadiest winds blow generally from the ice to the open sea, and are very cold. On that day the thermometer fell several degrees; the wind shifted to the southward, and the heavy gusts, having passed over the ice, discharged themselves of their dampness under the form of a thick snow. Hatteras immediately ordered the sails which were aiding the engine to be reefed; but before this could be done his main-topsail was carried away.

Hatteras gave his orders with the utmost coolness, and did not leave the deck during the storm; he was obliged to run before the gale. The

wind raised very heavy waves which hurled about pieces of ice of every shape, torn from the neighboring ice-fields; the brig was tossed about like a child's toy, and ice was dashed against its hull; at one moment it rose perpendicularly to the top of a mountain of water; its steel prow shone like molten metal; then it sank into an abyss, sending forth great whirls of smoke, while the screw revolved out the water with a fearful clatter. Rain and snow fell in torrents.

The doctor could not miss such a chance to get wet to the skin; he remained on deck, gazing at the storm with all the admiration such a spectacle cannot fail to draw forth. One standing next to him could not have heard his voice; so he said nothing, but looked, and soon he saw a singular phenomenon, one peculiar to the northern seas.

The tempest was confined to a small space of about three or four miles; in fact, the wind loses much of its force in passing over the ice, and cannot carry its violence very far; every now and then the doctor would see, through some rift in the storm, a clear sky and a quiet sea beyond the ice-fields; hence the Forward had only to make her way through the passes to find smooth sailing; but she ran a risk of being dashed against the moving masses which obeyed the motion of the waves. Notwithstanding, Hatteras succeeded in a few hours in carrying his vessel into smooth water, while the violence of the storm, now at its worst at the horizon, was dying away within a few cable-lengths from the Forward.

Melville Bay then looked very different; by the influence of the winds and waves a large number of icebergs had been detached from the shores and were now floating northward, continually crashing against one another. They could be counted by hundreds; but the bay is very broad, and the brig avoided them without difficulty. The sight of these floating masses, which seemed to be racing together, was indeed magnificent.

The doctor was wild with enthusiasm about it, when Simpson, the harpooner, came up to him and asked him to notice the changing tints of the sea, which varied from deep blue to olive green; long bands ran from north to south with edges so sharply cut that the line of division could be seen as far as the horizon. Sometimes a transparent sheet would stretch out from an opaque one.

"Well, Dr. Clawbonny, what do you think of that?" said Simpson.

"I agree, my friend, with what Scoresby said about these differently colored waters," answered the doctor, "namely, that the blue water does not contain the millions of animalcules and medusæ which the green water contains; he made a great many experiments to test it, and I am ready to agree with him."

"O, but there's something else it shows!"

"What is that?"

"Well, if the Forward were only a whaler, I believe we should have some sport."

"But," answered the doctor, "I don't see any whales."

"We shall very soon, though, I promise you. It's great luck for a whaler to see those green patches in these latitudes."

"Why so?" asked the doctor, whose curiosity was aroused by these remarks of a man who had had experience in what he was talking about.

"Because," answered Simpson, "it is in that green water that most of the whales are caught."

"What is the reason, Simpson?"

"Because they get more food there."

"You are sure of that?"

"O, I have seen it a hundred times in Baffin's Bay! I don't see why the same shouldn't be the case in Melville Bay."

"You must be right, Simpson."

"And see," Simpson continued as he leaned over the rail,--"see there, Doctor."

"One would say it was the track of a ship."

"Well," said Simpson, "it's an oily substance that the whale leaves behind it. Really, the whale itself can't be far off."

In fact, the atmosphere was filled with a strong fishy smell. The doctor began to examine the surface of the sea, and the harpooner's prediction was soon verified. Foker was heard shouting from aloft,--

"A whale to leeward!"

All turned their eyes in that direction; a low spout was seen rising from the sea about a mile from the brig.

"There she spouts!" shouted Simpson, whose experienced eye soon detected it.

"It's gone," said the doctor.

"We could soon find it again, if it were necessary," said Simpson, regretfully.

But to his great surprise, although no one had dared to ask it,

Hatteras gave the order to lower and man the whale-boat; he was glad to give the men some distraction, and also to get a few barrels of oil. They heard the order with great satisfaction.

Four sailors took their places in the whale-boat; Johnson took the helm; Simpson stood in the bow, harpoon in hand. The doctor insisted on joining the party. The sea was quite smooth. The whale-boat went very fast, and in about ten minutes she was a mile from the brig.

The whale, having taken another breath, had dived again; but soon it came up and projected fifteen feet into the air that combination of gases and mucous fluid which escapes from its vent-holes.

"There, there!" cried Simpson, pointing to a place about eight hundred yards from the boat.

They approached it rapidly; and the brig, having also seen it, drew near slowly.

The huge monster kept appearing above the waves, showing its black back, which resembled a great rock in the sea; a whale never swims rapidly unless pursued, and this one was letting itself be rocked by the waves.

The hunters approached in silence, choosing the green water, which was so opaque as to prevent the whale from seeing them. It is always

exciting to watch a frail boat attacking one of these monsters; this one was about one hundred and thirty feet long, and often between latitude 72° and 80° whales are found more than one hundred and twenty-four feet long; ancient writers have often spoken of some longer than seven hundred feet, but they are imaginary animals.

Soon the boat was very near the whale. Simpson made a sign, the men stopped rowing, and, brandishing his harpoon, he hurled it skilfully; this, with sharp barbs, sank into the thick layers of fat. The wounded whale dived rapidly. At once the four oars were unshipped; the rope which was attached to the harpoon ran out rapidly, and the boat was dragged along while Johnson steered it skilfully.

The whale swam away from the brig and hastened towards the moving icebergs; for half an hour it went on in this way; the cord had to be kept wet to prevent its taking fire from friction. When the animal seemed to go more slowly, the rope was dragged back and carefully coiled; the whale rose again to the surface, lashing violently with its tail; huge spouts of water were dashed up by it and fell in torrents on the boat, which now approached rapidly; Simpson had taken a long lance and was prepared to meet the whale face to face.

But it plunged rapidly into a pass between two icebergs. Further pursuit seemed dangerous.

"The devil!" said Johnson.

"Forward, forward, my friends," shouted Simpson, eager for the chase; "the whale is ours."

"But we can't follow it among the icebergs," answered Johnson, turning the boat away.

"Yes, yes!" cried Simpson.

"No, no!" said some of the sailors.

"Yes!" cried others.

During this discussion the whale had got between two icebergs which the wind and waves were driving together.

The whale-boat was in danger of being dragged into this dangerous pass, when Johnson sprang forward, axe in hand, and cut the line.

It was time; the two icebergs met with irresistible force, crushing the whale between them.

"Lost!" cried Simpson.

"Saved!" said Johnson.

"Upon my word," said the doctor, who had not flinched, "that was well worth seeing!"

The crushing power of these mountains is enormous. The whale was the victim of an accident that is very frequent in these waters. Scoresby tells us that in the course of a single summer thirty whalers have been lost in this way in Baffin's Bay; he saw a three-master crushed in one minute between two walls of ice, which drew together with fearful rapidity and sank the ship with all on board. Two other ships he himself saw cut through, as if by a long lance, by huge pieces of ice more than a hundred feet long.

A few moments later the whale-boat returned to the brig, and was hauled up to its usual place on deck.

"That's a lesson," said Shandon, aloud, "for those who are foolhardy enough to venture into the passes!"

CHAPTER XX.

BEECHEY ISLAND.

June 25th the Forward sighted Cape Dundas, at the northwest extremity of Prince of Wales Land. There they found more serious difficulties amid thicker ice. The channel here grows narrower, and the line of Crozier, Young, Day, and Lowther Islands ranged in a line, like forts in a harbor, drive the ice-streams nearer together. What would otherwise have taken the brig a day now detained her from June 25th to the end of the month; she was continually obliged to stop, to retreat, and to wait for a favorable chance to reach Beechey Island. Meanwhile a great deal of coal was consumed; though during the frequent halts only small fires were kept burning, sufficient to keep steam up day and night.

Hatteras knew as well as Shandon the reduced state of their supply; but feeling sure that he would find fuel at Beechey Island, he did not wish to lose a minute for the sake of economy; he had been very much delayed by running south; and, although he had taken the precaution of leaving England in April, he now found himself no farther advanced than previous expeditions had been at that time of year.

The 30th they passed Cape Walker at the northeast extremity of Prince of Wales Land; this is the farthest point seen by Kennedy and Bellot, May 3d, 1852, after an expedition across North Somerset. In 1851,

Captain Ommaney of the Austin expedition had been fortunate enough to get fresh supplies there for his detachment.

This cape, which is very lofty, is remarkable for its reddish-brown color; in clear weather one can see as far as the entrance of Wellington Channel. Towards evening they saw Cape Bellot, separated from Cape Walker by MacLeon's Bay. Cape Bellot was so named in presence of that young French officer to whom the English expedition gave three cheers. At this place the coast consists of a yellowish limestone, very rough in appearance; it is protected by huge masses of ice which the north-wind collects there in the most imposing way. It was soon no longer to be seen from the Forward's deck, as she was making her way amid the loose ice towards Beechey Island through Barrow Strait.

Hatteras, having resolved to go on in a straight line, in order not to be carried past the island, hardly left the deck during the subsequent days; he would go aloft to the cross-trees in order to pick out the most favorable path for the brig. All that skill, coolness, boldness, and even maritime genius could do, was done by him while sailing through the strait. It is true that fortune did not favor him, for at that season he ought to have found the sea nearly open. But by dint of sparing neither steam, his men, nor himself, he succeeded in his aim.

July 3d, at eleven o'clock in the morning, the ice-master saw land to the north; Hatteras soon made it out as Beechey Island, the general

rendezvous for arctic explorers. Almost all the ships which sail in these latitudes touch here. Here Franklin passed his first winter before advancing into Wellington Channel. Here Creswell, MacClure's lieutenant, after a march of four hundred and sixty miles on the ice, rejoined the Phoenix and returned to England. The last ship which anchored at Beechey Island before the Forward was the Fox; MacClintock took in supplies there, August 11, 1855, and repaired the dwellings and storehouses; that was but a short time previous. Hatteras knew all these details.

The boatswain's heart beat strongly at the sight of this island; when he had last seen it he had been quartermaster on the Phoenix; Hatteras asked him about the coast, the place for anchoring, the possible change of the bottom. The weather was perfect; the thermometer marked 57°.

"Well, Johnson," said the captain, "do you recognize this place?"

"Yes, Captain, it's Beechey Island! Only we ought to bear a little farther north; the coast is more easily approached there."

"But the buildings, the stores?" said Hatteras.

"O, you can't see them till you get ashore; they are hidden behind those hillocks you see there!"

"And did you carry large supplies there?"

"Yes, they were large. The Admiralty sent us here in 1853, under the command of Captain Inglefield, with the steamer Phoenix and a transport, the Breadalbane, loaded with supplies; we carried enough to revictual a whole expedition."

"But did not the commander of the Fox take a great deal away in 1855?" said Hatteras.

"O, don't be anxious, Captain!" answered Johnson; "there will be enough left for you; the cold keeps everything wonderfully, and we shall find everything as fresh and in as good condition as on the first day."

"I'm not so anxious about the provisions," answered Hatteras; "I have enough for several years; what I stand in need of is coal."

"Well, Captain, we left more than a thousand tons there; so you can feel easy about that."

"Let us stand nearer," resumed Hatteras, who, glass in hand, kept examining the shore.

"You see that point," said Johnson; "when we've doubled it, we shall be near our anchorage. Yes, it's from there we started for England

with Lieutenant Creswell and twelve sick men of the Investigator.
But if we were fortunate enough to be of service to Captain MacClure's lieutenant, Bellot, the officer who accompanied us on the Phoenix, never saw his home again! Ah, that's a sad memory! But, Captain, I think it's here we ought to anchor."

"Very well," answered Hatteras.

And he gave the proper orders. The Forward lay in a little harbor sheltered from the north, east, and south winds, about a cable-length from the shore.

"Mr. Wall," said Hatteras, "you will lower the launch and send six men to bring coal aboard."

"Yes, sir," answered Wall.

"I am going ashore in the gig with the doctor and the boatswain; Mr. Shandon, will you go with us?"

"At your orders," answered Shandon.

A few minutes later the doctor, with gun and baskets for any specimens he might find, took his place in the gig with his companions; ten minutes later they stepped out on a low, rocky shore.

"Lead the way, Johnson," said Hatteras; "do you remember it?"

"Perfectly, Captain; only here is a monument which I did not expect to find here."

"That," shouted the doctor, "I know what it is; let's go look at it; it will tell us of itself why it was put here."

The four men went up to it, and the doctor, baring his head, said,--

"This, my friends, is a monument raised to the memory of Franklin and his companions."

In fact, Lady Franklin having, in 1855, sent a tablet of black marble to Dr. Kane, gave another in 1858 to MacClintock to be placed on Beechey Island. MacClintock discharged his duty, and placed this tablet near a funeral pile raised to the memory of Bellot by Sir John Barrow.

This tablet bore the following inscription:--

TO THE MEMORY OF

FRANKLIN, CROZIER, FITZ-JAMES,

AND ALL THEIR GALLANT BROTHER OFFICERS AND FAITHFUL COMPANIONS

Who have suffered and perished

in the cause of science and the service of their country.

THIS TABLET

Is erected near the spot where they passed their first arctic

Winter,

and whence they issued forth to conquer difficulties or

TO DIE.

It commemorates the grief of their Admiring Countrymen and Friends,

and the anguish, subdued by Faith,

of her who has lost, in the heroic Leader of the Expedition, the

Most Devoted

and Affectionate of Husbands.

"And so he bringeth them unto the Haven where they would be."

1855.

This stone, on a lonely shore of these remote regions, touched every one's heart; the doctor felt the tears rising in his eyes. On the very spot whence Franklin and his men sailed, full of hope and strength, there was now merely a slab of marble to commemorate them; and in spite of this solemn warning of fate, the Forward was about to follow the path of the Erebus and Terror.

Hatteras was the first to rouse himself; he ascended quickly a rather high hillock, which was almost entirely bare of snow.

"Captain," said Johnson, following him, "from there we ought to see the stores."

Shandon and the doctor joined them just as they reached the top of the hill.

But their eyes saw nothing but large plains with no trace of a building.

"This is very strange," said the boatswain.

"Well, these stores?" said Hatteras, quickly.

"I don't know,--I don't see--" stammered Johnson.

"You must have mistaken the path," said the doctor.

"Still it seems to me," resumed Johnson after a moment's reflection, "that at this very spot--"

"Well," said Hatteras, impatiently, "where shall we go?"

"Let's go down again," said the boatswain, "for it's possible I've lost my way! In seven years I may have forgotten the place."

"Especially," said the doctor, "when the country is so monotonous."

"And yet--" muttered Johnson.

Shandon said not a word. After walking a few minutes, Johnson stopped.

"No," he said, "I'm not mistaken."

"Well," said Hatteras, looking around.

"What makes you say so, Johnson?" asked the doctor.

"Do you see this little rise in the earth?" asked the boatswain, pointing downwards to a mound in which three elevations could be clearly seen.

"What does that mean?" asked the doctor.

"There," answered Johnson, "are the three tombs of Franklin's sailors. I'm sure of it! I'm not mistaken, and the stores must be within a hundred paces of us, and if they're not there,--it's because--"

He durst not finish his sentence; Hatteras ran forward, and terrible despair seized him. There ought to stand those much-needed storehouses, with supplies of all sorts on which he had been counting; but ruin, pillage, and destruction had passed over that place where civilized hands had accumulated resources for battered sailors. Who

had committed these depredations? Wild animals, wolves, foxes, bears? No, for they would have destroyed only the provisions; and there was left no shred of a tent, not a piece of wood, not a scrap of iron, no bit of any metal, nor--what was more serious for the men of the Forward--a single lump of coal.

Evidently the Esquimaux, who have often had much to do with European ships, had finally learned the value of these objects; since the visit of the Fox they had come frequently to this great storehouse, and had pillaged incessantly, with the intention of leaving no trace of what had been there; and now a long drift of half-melted snow covered the ground.

Hatteras was baffled. The doctor gazed and shook his head. Shandon said nothing, but an attentive observer would have noticed a wicked smile about his lips.

At this moment the men sent by Wall arrived. They took it all in at a glance. Shandon went up to the captain and said,--

"Mr. Hatteras, we need not despair; fortunately we are near the entrance to Barrow Strait, which will carry us back to Baffin's Bay."

"Mr. Shandon," answered Hatteras, "we are fortunately near the entrance of Wellington Channel, and it will lead us to the north."

"And how shall we go, Captain?"

"Under sail, sir. We have two months' fuel left, and that is more than we shall need for next winter."

"Permit me to say," began Shandon.

"I permit you to follow me to the ship, sir," was Hatteras's answer.

And turning his back on his first officer, he returned to the brig and locked himself in his cabin.

For two days the wind was unfavorable; the captain did not come on deck. The doctor profited by this forced delay to examine Beechey Island; he collected a few plants which a comparatively high temperature let grow here and there on some rocks which projected from the snow, such as heather, a few lichens, a sort of yellow ranunculus, a plant like sorrel with leaves a trifle larger, and some sturdy saxifrages.

The fauna of this country was much richer; the doctor saw large flocks of geese and cranes flying northward; partridges, eider-ducks, northern divers, numerous ptarmigans, which are delicious eating, noisy flocks of kittiwakes, and great white-bellied loons represented the winged tribe. The doctor was lucky enough to kill some gray hares, which had not yet put on their white winter coat of fur, and a blue

fox, which Duke skilfully caught. A few bears, evidently accustomed to fear men, could not be approached, and the seals were very timid, probably for the same reason. The harbor was full of a very good tasting shellfish. The genus articulata, order diptera, family culicides, division nemocera, was represented by a simple mosquito, a single one, which the doctor, though much bitten, had the pleasure of catching. As a conchologist, he was less fortunate, and he was obliged to content himself with a sort of mussel and some bivalves.

CHAPTER XXI.

THE DEATH OF BELLOT.

The temperature remained at 57° during July 3d and 4th; this was the highest temperature observed. But on Thursday, the 5th, the wind shifted to the southeast, with violent snow-squalls. The thermometer fell twenty-three degrees in the preceding night. Hatteras, indifferent to the hostility of the crew, gave the order to set sail. For thirteen days, ever since passing Cape Dundas, the Forward had not gone a single degree farther north; hence the party represented by Clifton was dissatisfied; their wishes, it is true, coincided with those of the captain, namely, that they should make their way through Wellington Channel, and they were all glad to be off once more.

It was with difficulty that sail was set; but having in the course of the night run up the mainsail and topsails, Hatteras plunged boldly into the ice, which the current was driving towards the south. The crew became very tired of this tortuous navigation, which kept them very busy with the sails.

Wellington Channel is not very broad; it lies between North Devon on the east and Cornwallis Island on the west; for a long time this island was considered a peninsula. It was Sir John Franklin who circumnavigated it, in 1846, from the western side, going about its northern coast.

The exploration of Wellington Channel was made in 1851, by Captain Penny, in the whale-ships Lady Franklin and Sophia; one of his lieutenants, Stewart, who reached Cape Beechey, latitude 76° 20', discovered the open sea. The open sea! It was for that Hatteras longed.

"What Stewart found, I shall find," he said to the doctor; "and I shall be able to get to the Pole under sail."

"But," answered the doctor, "don't you fear lest the crew--"

"The crew!" said Hatteras, coldly.

Then in a lower tone he murmured,--

"Poor men!" much to the doctor's surprise.

It was the first sentiment of this sort which he had ever noticed in the captain.

"No," he went on warmly, "they must follow me, and they shall."

Still, if the Forward need not fear collision with the ice-streams, she made but little way northward, being much delayed by contrary winds. With some difficulty they got by Capes Spencer and Innis, and

Tuesday, the 10th, latitude 75° was at last reached, much to Clifton's joy.

The Forward was now at the very spot where the American ships, the Rescue and the Advance, commanded by Captain Haven, ran such terrible dangers. Dr. Kane accompanied this expedition; towards the end of September, 1850, these ships were caught in the ice, and carried with irresistible force into Lancaster Sound.

Shandon told James Wall about it in the presence of some of the men.

"The Advance and the Rescue," he said, "were so tossed about by ice, that they could keep no fires on board; and yet the thermometer stood at 18° below zero. During the whole winter the crews were kept imprisoned, ready to abandon their ships, and for three weeks they did not take off their clothes! It was a terrible situation; after drifting a thousand miles, they were driven to the middle of Baffin's Bay!"

One may easily judge of the effect of such a narration on a crew already discontented.

While this conversation was going on, Johnson was talking with the doctor about an event which had taken place here; the doctor, at his request, told him the exact moment when the brig reached latitude 75° 30'.

"There it is! there it is!" said Johnson, "there is that unlucky land!"

And so speaking, tears came into the boatswain's eyes.

"You mean Lieutenant Bellot's death," said the doctor.

"Yes, sir, of that brave, good man!"

"And it was here, you say, that it took place?"

"Just here, on this part of the coast of North Devon. It was very great ill-luck, and this would not have happened if Captain Pullen had come on board sooner."

"What do you mean, Johnson?"

"Listen, Doctor, and you will see by how slight a thread life is held. You know that Lieutenant Bellot had already made an expedition in search of Franklin, in 1850?"

"Yes; in the Prince Albert."

"Well, in 1853, having returned to France, he got permission to sail in the Phoenix, in which I was a sailor, under Captain Inglefield.

We came with the Breadalbane to carry supplies to Beechey Island."

"Those which we did not find!"

"Exactly, Doctor. We arrived at Beechey Island at the beginning of August; the 10th of that month, Captain Inglefield left the Phoenix to rejoin Captain Pullen, who had been away for a month from his ship, the North Star. He intended on his return to send the Admiralty despatches to Sir Edward Belcher, who was wintering in Wellington Channel. Now, shortly after our captain's departure, Captain Pullen reached his ship. If he had only come back before Captain Inglefield had left! Lieutenant Bellot, fearing that our captain's absence might be a long one, and knowing that the Admiralty despatches were important, offered to carry them himself. He left the two ships under Captain Pullen's charge, and left August 12, with a sledge and an india-rubber canoe. He took with him Harvey, quartermaster of the North Star, and three sailors, Madden, David Hook, and me. We thought that Sir Edward Belcher would be somewhere near Cape Beecher, at the northern part of the channel; hence we made for that part in our sledge, keeping on the east bank. The first day we encamped three miles from Cape Innis; the next day we stopped on the ice nearly three miles from Cape Bowden. During the night, which was as bright as day, land being only three miles distant, Lieutenant Bellot determined to go and camp there; he tried to reach it in the canoe; a violent southeast breeze drove him back twice; Harvey and Madden tried in their turn, and with success; they carried a rope, and with it they

established communication with the shore; three objects were carried across by it; but at the fourth attempt, we felt the ice moving away from us; Mr. Bellot shouted to his companions to loosen the rope, and we (the lieutenant, David Hook, and I) were carried to a great distance from the shore. Then a strong southeaster was blowing, and snow was falling. But we were not in any great danger, and he might have been saved, since the rest of us were saved."

Johnson stopped for a moment, and gazed at the ill-fated shore, then he went on:--

"After losing sight of our companions, we tried at first to shelter ourselves under the cover of our sledge, but in vain; then with our knives we began to cut a house in the ice. Mr. Bellot sat down for half an hour, and talked with us about the danger of our situation; I told him I was not afraid. 'With God's protection,' he said, 'not a hair of our heads shall be hurt.' I then asked him what time it was. He answered, 'About quarter past six.' It was quarter past six in the morning of Thursday, August 18th. Then Mr. Bellot bound on his books, and said he wanted to go and see how the ice was moving; he was gone only four minutes, when I went to seek him behind the floe which sheltered us; but I did not find him, and, returning to our retreat, I saw his stick on the opposite side of a crevasse about three fathoms wide, where the ice was all broken. I shouted, but there was no answer. At that time the wind was blowing very hard. I searched all around, but I could find no trace of the poor lieutenant."

"And what do you suppose became of him?" asked the doctor, who was much moved by this account.

"I suppose that when he left the shelter, the wind drove him into the crevasse, and that, being thickly clad, he could not swim to the surface. O Dr. Clawbonny, I never felt worse in my life! I could not believe it! That brave officer fell a victim to his sense of duty! For you know that it was in order to obey Captain Pullen's instructions that he was trying to reach the land before the ice began to break! He was a brave man, liked by every one, faithful, courageous! All England mourned him, and even the Esquimaux, when they heard of his death from Captain Inglefield, when he returned from Pound Bay, did nothing but weep and repeat, 'Poor Bellot! Poor Bellot!'"

"But you and your companions, Johnson," asked the doctor, much moved by this touching account,--"how did you manage to get to shore?"

"O, it was very simple! We remained twenty-four hours on the ice without food or fire, but finally we reached a firmly fastened ice-field; we sprang upon it, and with an oar we got near a floe capable of supporting us, and being controlled like a boat. In that way we reached the shore, but alone, without our brave officer."

At the end of this account the Forward had passed by this fatal shore, and Johnson soon lost sight of the scene of this terrible

catastrophe. The next day they left Griffin's Bay on the starboard, and two days later, Capes Grinnell and Helpman; finally, July 14th, they doubled Osborne Point, and the 15th the brig anchored in Baring Bay at the end of the channel. The navigation had not been very difficult; Hatteras found a sea nearly as free as that by which Belcher profited to go and winter with the Pioneer and Assistance in latitude 77°. That was his first winter, 1852-53, for the next he spent in Baring Bay, where the Forward now lay at anchor.

It was in consequence of the most terrible dangers and trials that he was obliged to abandon the Assistance in the midst of the eternal ice.

Shandon gave a full account of this catastrophe to the demoralized sailors. Was Hatteras aware of the treachery of his first officer? It is impossible to say, but, at any rate, he said nothing about it.

At the end of Baring Bay is a narrow canal uniting Wellington Channel with Queen's Strait. There the ice had accumulated very closely. Hatteras made vain efforts to get through the passages to the north of Hamilton Island; the wind was unfavorable; hence it was necessary to go between Hamilton and Cornwallis Islands; five precious days were lost in vain attempts. The air grew colder, and, July 19th, fell as low as 26°; the next day was warmer, but this harbinger of the arctic winter warned Hatteras not to linger longer. The wind seemed to blow steadily from the west and delayed his progress. And yet he was in

haste to reach the point whence Stewart saw an open sea. The 19th he resolved to enter the channel at any price; the wind blew dead against the brig, which, with her screw, could have made headway against the violent snow-squalls, but Hatteras had before all to be economical with the fuel; on the other hand, the channel was too broad to permit of the brig being towed. Hatteras, without taking into account the fatigue of his crew, made use of a device which whalers often employ under similar circumstances. He lowered the small boats to the surface of the water, not letting them free from their tackle; then they were made fast, fore and aft; oars were put out, to starboard on one side and to port on the other; the men sat on the thwarts and rowed vigorously, so as to propel the brig against the wind.

The Forward made slight headway; this method of working was very fatiguing; the men began to murmur. For four days they advanced in that way, until July 23d, when they reached Baring Island, in Queen's Channel.

The wind was still unfavorable. The crew could go no farther. The doctor found the strength of the crew much pulled down, and he thought he detected the first symptoms of scurvy; he used every precaution against this terrible disease, having abundant supplies of lime-juice and chalk-pastilles.

Hatteras soon saw there was nothing more to be got from his crew; kindness and persuasion were fruitless; he resolved to employ

severity, and, if need be, to be pitiless; he distrusted especially Richard Shandon, and even James Wall, who, however, never dared to speak too loud. Hatteras had on his side the doctor, Johnson, Bell, and Simpson; these were all devoted to him body and soul. Among the uncertain were Foker, Bolton, Wolston, the gunner, Brunton, the first engineer, who might at any moment declare against him. As to the others, Pen, Gripper, Clifton, and Warren, they openly meditated mutiny; they wanted to bring their companions over and compel the Forward to return to England.

Hatteras soon saw that he could get no more work from his dispirited crew, who now were worn out with fatigue from their hard work. For twenty-four hours they remained in sight of Baring Island without getting a foot forward. Still the weather grew colder, and in these high latitudes even July felt the influence of the approaching winter. The 24th, the thermometer fell to 22°. The young ice formed during the night to a depth of about half an inch; if snow should fall on it, it would soon be strong enough to bear the weight of a man. The sea soon acquired the turbid tint which indicates the formation of the first crystals.

Hatteras read aright these alarming signs; if the passes should close, he would be obliged to winter here, far from the aim of his voyage, and without even having seen that open sea which he must have got very near, according to the accounts of his predecessors. Hence he resolved to get on at any price a few degrees farther north; seeing that he

could neither try rowing with his crew exhausted, nor going under sail with the wind always unfavorable, he ordered the fires to be lighted.

CHAPTER XXII.

THE FIRST SIGNS OF MUTINY.

At this unexpected command, the surprise on board of the Forward was very great.

"Light the fires!" said some.

"With what?" said others.

"When we have only two months' supply in the hold!" cried Pen.

"And how are we to keep warm in the winter?" asked Clifton.

"We shall have to burn the ship down to the water-line, I suppose," said Gripper.

"And cram all the masts into the stove," answered Warren, "from the foretopmast to the jib-boom."

Shandon gazed intently at Wall. The surprised engineers hesitated to go down into the engine-room.

"Did you hear what I said?" shouted the captain, angrily.

Brunton walked toward the hatchway; but he stopped before going down.

"Don't go, Brunton," some one said.

"Who spoke then?" shouted Hatteras.

"I did," said Pen, approaching the captain.

"And what is it you're saying?" asked the captain.

"I say--I say," answered Pen with many oaths,--"I say that we have had enough of this, that we are not going any farther, that we don't want to wear ourselves out with fatigue and cold during the winter, and that the fires shall not be lighted."

"Mr. Shandon," answered Hatteras, coldly, "have this man put in irons."

"But, Captain," said Shandon, "what this man said--"

"If you repeat what this man said," retorted Hatteras, "I shall order you to your cabin and confine you there. Seize that man! Do you hear?"

Johnson, Bell, and Simpson stepped towards the sailor, who was beside himself with wrath.

"The first man who lays a finger on me--" he cried, seizing a handspike, which he flourished about his head.

Hatteras walked towards him.

"Pen," he said very quietly, "if you move hand or foot, I shall blow your brains out!"

With these words he drew a revolver and aimed it at the sailor.

A murmur arose from the crew.

"Not a word from any of you," said Hatteras, "or he's a dead man."

At that moment Johnson and Bell disarmed Pen, who no longer resisted, and suffered himself to be led to the bottom of the hold.

"Now go below, Brunton," said Hatteras.

The engineer, followed by Plover and Warren, went below. Hatteras returned to the quarter-deck.

"That Pen is a worthless fellow," the doctor said to him.

"No man was ever nearer death," answered the captain, simply.

Soon there was enough steam on; the anchors of the Forward were raised; and the brig started eastward, heading for Point Beecher, and cutting through the newly formed ice.

A great number of islands lie between Baring Island and Point Beecher, scattered in the midst of the ice-fields; the ice-streams crowd in great numbers in the little straits into which they divide the sea; when the weather is cold they have a tendency to accumulate; here and there hummocks were forming, and it was easy to see that the floes, already harder and more crowded, would, under the influence of the first frosts, soon form an impenetrable mass.

It was with great difficulty that the Forward made her way through the whirling snow. Still, with the variability which is a peculiarity of these regions, the sun would appear from time to time; the air grew much milder; the ice melted as if by enchantment, and a clear expanse of water, a most welcome sight to the eyes of the crew, spread out before them where a few moments before the ice had blocked their progress. All over the horizon there spread magnificent orange tints, which rested their eyes, weary with gazing at the eternal snow.

Thursday, July 26th, the Forward coasted along Dundas Island, and then stood more northward; but there she found herself face to face with a thick mass of ice, eight or nine feet high, consisting of little icebergs washed away from the shore; they had to prolong the curve they were making to the west. The continual cracking of the ice,

joining with the creaking of the rolling ship, sounded like a gloomy lamentation. At last the brig found a passage and advanced through it slowly; often a huge floe delayed her for hours; the fog embarrassed the steersman; at one moment he could see a mile ahead, and it was easy to avoid all obstacles; but again the snow-squalls would hide everything from their sight at the distance of a cable's length. The sea ran very high.

Sometimes the smooth clouds assumed a strange appearance, as if they were reflecting the ice-banks; there were days when the sun could not pierce the dense mist.

The birds were still very numerous, and their cries were deafening; the seals, lying lazily on the drifting ice, raised their heads without being frightened, and turned their long necks to watch the ship go by. Often, too, the brig would leave bits of sheathing on the ice against which she grazed.

Finally, after six days of this slow sailing, August 1st, Point Beecher was made, sighted in the north; Hatteras passed the last hours in the lookout; the open sea, which Stewart had seen May 30, 1851, towards latitude 76° 20', could not be far off, and yet, as far as Hatteras could see, he could make out no sign of an open polar sea. He came down without saying a word.

"Do you believe in an open sea?" asked Shandon of the second mate.

"I'm beginning to have my doubts," answered James Wall.

"Wasn't I right in considering this pretended discovery as a mere hypothesis? No one agreed with me, and you too, Wall,--you sided against me."

"They'll believe you next time, Shandon."

"Yes," he answered, "when it's too late."

And he returned to his cabin, where he had kept himself almost exclusively since his discussion with the captain.

Towards evening the wind shifted to the south. Hatteras then set his sails and had the fires put out; for many days the crew were kept hard at work; every few minutes they had to tack or bear away, or to shorten sail quickly to stop the course of the brig; the braces could not run easily through the choked-up pulleys, and added to the fatigue of the crew; more than a week was required for them to reach Point Barrow. The Forward had not made thirty miles in ten days.

Then the wind flew around to the north, and the engine was started once more. Hatteras still hoped to find an open sea beyond latitude 77°, such as Edward Belcher had seen.

And yet, if he believed in Penny's account, the part of the sea which he was now crossing ought to have been open; for Penny, having reached the limit of the ice, saw in a canoe the shores of Queen's Channel at latitude 77°.

Must he regard their reports as apochryphal, or had an unusually early winter fallen upon these regions?

August 15th, Mount Percy reared into the mist its peaks covered with eternal snow; a violent wind was hurling in their teeth a fierce shower of hail. The next day the sun set for the first time, terminating at last the long series of days twenty-four hours long. The men had finally accustomed themselves to this perpetual daylight; but the animals minded it very little; the Greenland dogs used to go to sleep at the usual hour, and even Duke lay down at the same hour every evening, as if the night were dark.

Still, during the nights following August 16th the darkness was never very marked; the sun, although it had set, still gave light enough by refraction.

August 19th, after taking a satisfactory observation, Cape Franklin was seen on the eastern side, and opposite it Cape Lady Franklin; at what was probably the farthest point reached by this bold explorer, his fellow-countrymen wanted the name of his devoted wife should be remembered along with his own, as an emblem of the sympathy which

always united them. The doctor was much moved by this sight in this distant country.

In accordance with Johnson's advice, he began to accustom himself to enduring low temperature; he kept almost all the time on deck, braving the cold, wind, and snow. Although he had grown a little thinner, he did not suffer from the severity of the climate. Besides, he expected other dangers, and he rejoiced, almost, as he saw the winter approaching.

"See," said he one day to Johnson,--"see those flocks of birds flying south! How they fly and cry adieu!"

"Yes, Dr. Clawbonny," answered Johnson, "something has told them it was time to go, and they are off."

"More than one of our men, Johnson, would be glad to imitate them, I fancy."

"They are timid fellows, Doctor; what a bird can't do, a man ought to try! Those birds have no supply of food, as we have, and they must support themselves elsewhere. But sailors, with a good deck under the feet, ought to go to the end of the world."

"You hope, then, that Hatteras will succeed in his projects?"

"He will succeed, Doctor."

"I agree with you, Johnson, even if only one faithful man accompanies him--"

"There will be two of us!"

"Yes, Johnson," the doctor answered, pressing the brave sailor's hand.

Prince Albert's Land, along which the Forward was now coasting, is also called Grinnell's Land; and although Hatteras, from his dislike to Americans, never was willing to give it this name, nevertheless, it is the one by which it is generally known. This is the reason of this double title: at the same time that the Englishman Penny gave it the name of Prince Albert, the captain of the Rescue, Lieutenant DeHaven, named it Grinnell's Land, in honor of the American merchant who had fitted out the expedition in New York.

As the brig followed the coast it met with serious difficulties, going sometimes under sail, sometimes under steam. August 18th, Mount Britannia was sighted through the mist, and the next day the Forward cast anchor in Northumberland Bay. The ship was completely protected.

CHAPTER XXIII.

ATTACKED BY THE ICE.

Hatteras, after seeing to the anchorage of the ship, returned to his cabin, took out his chart, and marked his position on it very carefully; he found himself in latitude 76° 57', and longitude 99° 20', that is to say, only three minutes from latitude 77°. It was here that Sir Edward Belcher passed his first winter with the Pioneer and Assistance. It was from here that he organized his sledge and canoe expeditions; he discovered Table Island, North Cornwall, Victoria Archipelago, and Belcher Channel. Having gone beyond latitude 78°, he saw the coast inclining towards the southeast. It seemed as if it ought to connect with Jones's Strait, which opens into Baffin's Bay. But, says the report, an open sea, in the northwest, "stretched as far as the eye could reach."

Hatteras gazed with emotion at that portion of the charts where a large white space marked unknown regions, and his eyes always returned to the open polar sea.

"After so many statements," he said to himself,--"after the accounts of Stewart, Penny, and Belcher, doubt is impossible! These bold sailors saw, and with their own eyes! Can I doubt their word? No! But yet if this sea is closed by an early winter-- But no, these discoveries have been made at intervals of several years; this sea

exists, and I shall find it! I shall see it!"

Hatteras went upon the quarter-deck. A dense mist enveloped the Forward; from the deck one could hardly see the top of the mast. Nevertheless, Hatteras ordered the ice-master below, and took his place; he wanted to make use of the first break in the fog to look at the horizon in the northwest.

Shandon took occasion to say to the second mate,--

"Well, Wall, and the open sea?"

"You were right, Shandon," answered Wall, "and we have only six weeks' coal in the bunkers."

"The doctor will invent some scientific way," continued Shandon, "of heating us without fuel. I've heard of making ice with fire; perhaps he will make fire with ice."

Shandon returned to his cabin, shrugging his shoulders.

The next day, August 20th, the fog lifted for a few minutes. From the deck they saw Hatteras in his lofty perch gazing intently towards the horizon; then he came down without saying a word and ordered them to set sail; but it was easy to see that his hopes had been once more deceived.

The Forward heaved anchor and resumed her uncertain path northward. So wearisome was it that the main-topsail and fore-topsail yards were lowered with all their rigging; the masts were also lowered, and it was no longer possible to place any reliance on the varying wind, which, moreover, the winding nature of the passes made almost useless; large white masses were gathering here and there in the sea, like spots of oil; they indicated an approaching thaw; as soon as the wind began to slacken, the sea began to freeze again, but when the wind arose this young ice would break and disperse. Towards evening the thermometer fell to 17°.

When the brig arrived at the end of a closed pass, it rushed on at full steam against the opposing obstacle. Sometimes they thought her fairly stopped; but some unexpected motion of the ice-streams would open a new passage into which she would plunge boldly; during these stoppages the steam would escape from the safety-valves and fall on the deck in the form of snow. There was another obstacle to the progress of the brig; the ice would get caught in the screw, and it was so hard that the engine could not break it; it was then necessary to reverse the engines, turn the brig back, and send some men to free the snow with axes and levers; hence arose many difficulties, fatigues, and delays.

It went on in this way for thirteen days; the Forward advanced slowly through Penny Strait. The crew murmured, but obeyed; they knew

that retreat was now impossible. The advance towards the north was less perilous than a return to the south; it was time to think of going into winter-quarters.

The sailors talked together about their condition, and one day they even began to talk with Shandon, who, they knew, was on their side. He so far forgot his duty as an officer as to allow them to discuss in his presence the authority of his captain.

"So you say, Mr. Shandon," asked Gripper, "that we can't go back now?"

"No, it's too late," answered Shandon.

"Then," said another sailor, "we need only look forward to going into winter-quarters?"

"It's our only resource! No one would believe me--"

"The next time," said Pen, who had returned to duty, "they will believe you."

"Since I sha'n't be in command--" answered Shandon.

"Who can tell?" remarked Pen. "John Hatteras is free to go as far as he chooses, but no one is obliged to follow him."

"Just remember," resumed Gripper, "his first voyage to Baffin's Bay and what came of it!"

"And the voyage of the Farewell," said Clifton, "which was lost in the Spitzenberg seas under his command."

"And from which he came back alone," added Gripper.

"Alone, but with his dog," said Clifton.

"We don't care to sacrifice ourselves for the whims of that man," continued Pen.

"Nor to lose all the wages we've earned so hard."

They all recognized Clifton by those words.

"When we pass latitude 78°," he added, "and we are not far from it, that will make just three hundred and seventy-five pounds for each man, six times eight degrees."

"But," asked Gripper, "sha'n't we lose them if we go back without the captain?"

"No," answered Clifton, "if we can prove that it was absolutely necessary to return."

"But the captain--still--"

"Don't be uneasy, Gripper," answered Pen; "we shall have a captain, and a good one, whom Mr. Shandon knows. When a captain goes mad, he is dismissed and another appointed. Isn't that so, Mr. Shandon?"

"My friends," answered Shandon, evasively, "you will always find me devoted to you. But let us wait and see what turns up."

The storm, as may be seen, was gathering over Hatteras's head; but he pushed on boldly, firm, energetic, and confident. In fact, if he had not always managed the brig as he wanted to, and carried her where he was anxious to go, he had still been very successful; the distance passed over in five months was as great as what it had taken other explorers two or three years to make. Hatteras was now obliged to go into winter-quarters, but this would not alarm men of courage, experience, and confidence. Had not Sir John Ross and MacClure spent three successive winters in the arctic regions? Could not he do what they had done?

"Yes, of course," Hatteras used to say, "and more too, if need be. Ah!" he said regretfully to the doctor, "why was I unable to get through Smith's Sound, at the north of Baffin's Bay? I should be at the Pole now!"

"Well," the doctor used invariably to answer,--if necessary he could have invented confidence,--"we shall get there, Captain, but, it is true, at the ninety-ninth meridian instead of the seventy-fifth; but what difference does that make? If every road leads to Rome, it is even surer that every meridian leads to the Pole."

August 31st, the thermometer fell to 13°. The end of the summer was evidently near; the Forward left Exmouth Island to starboard, and three days afterward she passed Table Island, lying in the middle of Belcher Channel. Earlier in the season it would have been possible to reach Baffin's Bay through this channel, but at this time it was impossible to think of it. This arm of the sea was completely filled with ice, and would not have offered a drop of open water to the prow of the Forward; for the next eight months their eyes would see nothing but boundless, motionless ice-fields.

Fortunately, they could still get a few minutes farther north, but only by breaking the new ice with huge beams, or by blowing it up with charges of powder. They especially had cause to fear calm weather while the temperature was so low, for the passes closed quickly, and they rejoiced even at contrary winds. A calm night, and everything was frozen!

Now the Forward could not winter where she was, exposed to the wind, icebergs, and the drift of the channel; a safe protection was the first thing to be found; Hatteras hoped to gain the coast of New

Cornwall, and to find, beyond Point Albert, a bay sufficiently sheltered. Hence he persisted in crowding northward.

But, September 8, an impenetrable, continuous mass of ice lay between him and the north; the temperature fell to 10°. Hatteras, with an anxious heart, in vain sought for a passage, risking his ship a hundred times and escaping from his perils with wonderful skill. He might have been accused of imprudence, recklessness, folly, blindness, but he was one of the best of sailors.

The situation of the Forward became really dangerous; in fact, the sea was closing behind her, and in a few hours the ice grew so hard that men could run upon it and tow the brig in perfect safety.

Hatteras, not being able to get around this obstacle, determined to attack it boldly in front. He made use of his strongest blasting cylinders, containing eight or ten pounds of powder. The men would dig a hole in the broadest part of the ice, close the orifice with snow, after having placed the cylinder in a horizontal position, so that a greater extent of ice might be exposed to the explosion; then a fuse was lighted, which was protected by a gutta-percha tube.

In this way they tried to break the ice; it was impossible to saw it, for the fissures would close immediately. Still, Hatteras was hoping to get through the next day.

But during the night the wind blew a gale; the sea raised the crust of ice, and the terrified pilot was heard shouting,--

"Look out there aft, look out there aft!"

Hatteras turned his eyes in that direction, and what he saw in the dim light was indeed alarming.

A great mass of ice, drifting northward with the tide, was rushing towards the brig with the speed of an avalanche.

"All hands on deck!" shouted the captain.

This floating mountain was hardly half a mile away; the ice was all in confusion and crashing together like huge grains of sand before a violent tempest; the air was filled with a terrible noise.

"That, Doctor," said Johnson, "is one of the greatest perils we have yet met with."

"Yes," answered the doctor, quietly; "it is terrible enough."

"A real attack which we must repel," resumed the boatswain.

"In fact, one might well think it was an immense crowd of antediluvian animals, such as might have lived near the Pole. How they hurry on, as

if they were racing!"

"Besides," added Johnson, "some carry sharp lances, of which you had better take care, Doctor."

"It's a real siege," shouted the doctor. "Well, let us run to the ramparts!"

He ran aft where the crew, provided with beams and bars, were standing ready to repel this formidable assault.

The avalanche came on, growing larger at every moment as it caught up the floating ice in its eddy; by Hatteras's orders the cannon was loaded with ball to break the threatening line. But it came on and ran towards the brig; a crash was heard, and as it came against the starboard-quarter, part of the rail had given way.

"Let no one stir!" shouted Hatteras. "Look out for the ice!"

They swarmed on board the ship with an irresistible force; lumps of ice, weighing many hundredweight, scaled the sides of the ship; the smallest, hurled as high as the yards, fell back in sharp arrows, breaking the shrouds and cutting the rigging. The men were overcome by numberless enemies, who were heavy enough to crush a hundred ships like the Forward. Every one tried to drive away these lumps, and more than one sailor was wounded by their sharp ends; among others,

Bolton, who had his left shoulder badly torn. The noise increased immensely. Duke barked angrily at these new enemies. The darkness of the night added to the horrors of the situation, without hiding the ice which glowed in the last light of the evening.

Hatteras's orders sounded above all this strange, impossible, supernatural conflict of the men with the ice. The ship, yielding to this enormous pressure, inclined to larboard, and the end of the main-yard was already touching the ice, at the risk of breaking the mast.

Hatteras saw the danger; it was a terrible moment; the brig seemed about to be overturned, and the masts might be easily carried away.

A large block, as large as the ship, appeared to be passing along the keel; it arose with irresistible power; it came on past the quarter-deck; if it fell on the Forward, all was over; soon it rose even above the topmasts, and began to totter.

A cry of terror escaped from every one's lips. Every one ran back to starboard.

But at that moment the ship was relieved. They felt her lifted up, and for an instant she hung in the air, then she leaned over and fell back on the ice, and then she rolled so heavily that her planks cracked. What had happened?

Raised by this rising tide, driven by the ice which attacked her aft, she was getting across this impenetrable ice. After a minute of this strange sailing, which seemed as long as a century, she fell back on the other side of the obstacle on a field of ice; she broke it with her weight, and fell back into her natural element.

"We have got by the thick ice!" shouted Johnson, who had run forward.

"Thank God!" said Hatteras.

In fact, the brig lay in the centre of a basin of ice, which entirely surrounded her, and although her keel lay under water she could not stir; but if she were motionless, the field was drifting along.

"We are drifting, Captain!" shouted Johnson.

"All right," answered Hatteras.

Indeed, how was it possible to resist it?

Day broke, and it was evident that under the influence of a submarine current the bank of ice was floating northward with great rapidity. This floating mass carried the Forward with it, in the midst of the ice-field, the edge of which could not be seen; to provide for any accident that might happen, Hatteras had a large supply of provisions

carried on deck, as well as materials for camping, clothing, and cover; as MacClure had done under similar circumstances, he surrounded the ship with hammocks filled with air to protect her from damage. Soon it was so cold (7°), that the ship was surrounded by a wall from which only the masts issued.

For seven days they sailed in this way; Point Albert, which forms the western extremity of New Cornwall, was seen September 10th, and soon disappeared; the ice-field was seen to be drifting eastward from that time. Where was it going? Where would it stop? Who could say?

The crew waited with folded arms. At last, September 15th, towards three o'clock in the afternoon, the ice-field, having probably run against another one, stopped suddenly; the ship was jarred violently; Hatteras, who had kept his reckoning all along, looked at his chart; he found himself in the north, with no land in sight, in longitude 95° 35', and latitude 78° 15', in the centre of the region of the unknown sea, which geographers have considered the place of greatest cold.

CHAPTER XXIV.

PREPARATIONS FOR WINTERING.

The same latitude is colder in the southern than in the northern hemisphere; but the temperature of the New World is fifteen degrees beneath that of the other parts of the world; and in America these countries, known under the name of the region of greatest cold, are the most inclement.

The mean temperature for the whole year is two degrees below zero. Physicists have explained this fact in the following way, and Dr. Clawbonny shared their opinion.

According to them, the most constant winds in the northern regions of America are from the southwest; they come from the Pacific Ocean, with an equal and agreeable temperature; but before they reach the arctic seas they are obliged to cross the great American continent, which is covered with snow; the contact chills them, and communicates to these regions their intense cold.

Hatteras found himself at the pole of cold, beyond the countries seen by his predecessors; he consequently expected a terrible winter, on a ship lost amid the ice, with a turbulent crew. He resolved to meet these dangers with his usual energy. He faced what awaited him without flinching.

He began, with Johnson's aid and experience, to take all the measures necessary for going into winter-quarters. According to his calculation the Forward had been carried two hundred and fifty miles from any known land, that is to say, from North Cornwall; she was firmly fixed in a field of ice, as in a bed of granite, and no human power could extricate her.

There was not a drop of open water in these vast seas chained by the fierce arctic winter. The ice-fields stretched away out of sight, but without presenting a smooth surface. Far from it. Numerous icebergs stood up in the icy plain, and the Forward was sheltered by the highest of them on three points of the compass; the southeast wind alone reached them. Let one imagine rock instead of ice, verdure instead of snow, and the sea again liquid, and the brig would have quietly cast anchor in a pretty bay, sheltered from the fiercest blasts. But what desolation here! What a gloomy prospect! What a melancholy view!

The brig, although motionless, nevertheless had to be fastened securely by means of anchors; this was a necessary precaution against possible thaws and submarine upheavals. Johnson, on hearing that the Forward was at the pole of cold, took even greater precautions for securing warmth.

"We shall have it severe enough," he had said to the doctor; "that's

just the captain's luck, to go and get caught at the most disagreeable spot on the globe! Bah! you will see that we shall get out of it."

As to the doctor, at the bottom of his heart he was simply delighted. He would not have changed it for any other. Winter at the pole of cold! What good luck!

At first, work on the outside occupied the crew; the sails were kept furled on the yards instead of being placed at the bottom of the hold, as the earlier explorers did; they were merely bound up in a case, and soon the frost covered them with a dense envelope; the topmasts were not unshipped, and the crow's-nest remained in its place. It was a natural observatory; the running-rigging alone was taken down.

It became necessary to cut away the ice from the ship to relieve the pressure. That which had accumulated outside was quite heavy, and the ship did not lie as deep as usual. This was a long and laborious task. At the end of some days the ship's bottom was freed, and could be inspected; it had not suffered, thanks to its solidity; only its copper sheathing was nearly torn away. The ship, having grown lighter, drew about nine inches less than she did earlier; the ice was cut away in a slope, following the make of the hull; in this way the ice formed beneath the brig's keel and so resisted all pressure.

The doctor took part in this work; he managed the ice-cutter well; he encouraged the sailors by his good-humor. He instructed them and

himself. He approved of this arrangement of the ice beneath the ship.

"That is a good precaution," he said.

"Without that, Dr. Clawbonny," answered Johnson, "resistance would be impossible. Now we can boldly raise a wall of snow as high as the gunwale; and, if we want to, we can make it ten feet thick, for there is no lack of material."

"A capital idea," resumed the doctor; "the snow is a bad conductor of heat; it reflects instead of absorbing, and the inside temperature cannot escape."

"True," answered Johnson; "we are building a fortification against the cold, and also against the animals, if they care to visit us; when that is finished, it will look well, you may be sure; in this snow we shall cut two staircases, one fore, the other aft; when the steps are cut in the snow, we shall pour water on them; this will freeze as hard as stone, and we shall have a royal staircase."

"Precisely," answered the doctor; "and it must be said it is fortunate that cold produces both snow and ice, by which to protect one's self against it. Without that, one would be very much embarrassed."

In fact, the ship was destined to disappear beneath a thick casing of ice, which was needed to preserve its inside temperature; a roof made

of thick tarred canvas and covered with snow was built above the deck over its whole length; the canvas was low enough to cover the sides of the ship. The deck, being protected from all outside impressions, became their walk; it was covered with two and a half feet of snow; this snow was crowded and beaten down so as to become very hard; so it resisted the radiation of the internal heat; above it was placed a layer of sand, which as it solidified became a sort of macadamized cover of great hardness.

"A little more," said the doctor, "and with a few trees I might imagine myself at Hyde Park, or even in the hanging-gardens at Babylon."

A trench was dug tolerably near the brig; this was a circular space in the ice, a real pit, which had to be kept always open. Every morning the ice formed overnight was broken; this was to secure water in case of fire or for the baths which were ordered the crew by the doctor; in order to spare the fuel, the water was drawn from some distance below the ice, where it was less cold. This was done by means of an instrument devised by a French physicist (François Arago); this apparatus, lowered for some distance into the water, brought it up to the surface through a cylinder.

Generally in winter everything which encumbers the ship is removed, and stored on land. But what was practicable near land is impossible for a ship anchored on the ice.

Every preparation was made to fight the two great enemies of this latitude, cold and dampness; the first produces the second, which is far more dangerous. The cold may be resisted by one who succumbs to dampness; hence it was necessary to guard against it.

The Forward, being destined to a journey in arctic seas, contained the best arrangements for winter-quarters: the large room for the crew was well provided for; the corners, where dampness first forms, were shut off; in fact, when the temperature is very low, a film of ice forms on the walls, especially in the corners, and when it melts it keeps up a perpetual dampness. If it had been round, the room would have been more convenient; but, being heated by a large stove, and properly ventilated, it was very comfortable; the walls were lined with deerskins, not with wool, for wool absorbs the condensed moisture and keeps the air full of dampness.

Farther aft the walls of the quarter were taken down, and the officers had a larger common-room, better ventilated, and heated by a stove. This room, like that of the crew, had a sort of antechamber, which cut off all communication with the outside. In this way, the heat could not be lost, and one passed gradually from one temperature to the other. In the anterooms were left the snow-covered clothes; the shoes were cleansed on the scrapers, so as to prevent the introduction of any unwholesomeness with one into the room.

Canvas hose served to introduce air for the draught of the stoves; other pieces of hose permitted the steam to escape. In addition two condensers were placed in the two rooms, and collected this vapor instead of letting it form into water; twice a week they were emptied, and often they contained several bushels of ice. It was so much taken from the enemy.

The fire was perfectly and easily controlled, by means of the canvas hose; by use of merely a small quantity of coal it was easy to keep the temperature of 50°. Still, Hatteras, having examined the bunkers, soon saw that the greatest economy was necessary, for there was not two months' fuel on board.

A drying-room was set apart for the clothes which were to be washed; they could not be dried in the open air, for they would freeze and tear.

The delicate pieces of the machinery were carefully taken down, and the room which contained them was hermetically closed.

The life on board became the object of serious meditation; Hatteras regulated it with the utmost caution, and the order of the day was posted up in the common-room. The men arose at six o'clock in the morning; three times a week the hammocks were aired; every morning the floors were scoured with hot sand; tea was served at every meal, and the bill of fare varied as much as possible for every day of the week;

it consisted of bread, farina, suet and raisins for puddings, sugar, cocoa, tea, rice, lemon-juice, potted meats, salt beef and pork, cabbages, and vegetables in vinegar; the kitchen lay outside of the living-rooms; its heat was consequently lost; but cooking is a perpetual source of evaporation and dampness.

The health of the men depends a great deal on the sort of food they get; in high latitudes, the greatest amount of animal food ought to be eaten. The doctor had supervised the sort of food to be given.

"We ought to follow the Esquimaux," he used to say; "they have received their lessons from nature, and are our masters in that; if the Arabs and Africans can content themselves with a few dates and a handful of rice, here it is important to eat, and to eat a good deal. The Esquimaux take from ten to fifteen pounds of oil a day. If that fare does not please you, we must try food rich in sugar and fat. In a word, we need carbon, so let us manufacture carbon! It is well to put coal in the stove, but don't let us forget to fill that precious stove we carry about with us."

With this bill of fare, strict cleanliness was enforced; every other day each man was obliged to bathe in the half-frozen water which the iron pump brought up, and this was an excellent way of preserving their health. The doctor set the example; he did it at first as a thing which ought to be very disagreeable; but this pretext was quickly forgotten, for he soon took real pleasure in this healthy

bath.

When work or hunting or distant expeditions took the men off in the severe cold, they had to take special care not to be frost-bitten; if they were, rubbing with snow would restore the circulation. Moreover, the men, who all wore woollen clothes, put on coats of deerskin and trousers of sealskin, which perfectly resist the wind.

The different arrangements of the ship, the getting-to-rights on board, took about three weeks, and they reached October 10th without any special incident.

CHAPTER XXV.

ONE OF JAMES ROSS'S FOXES.

On that day the thermometer fell to three degrees below zero. The day was calm; the cold was very endurable in the absence of wind. Hatteras took advantage of the clearness of the air to reconnoitre the surrounding plains; he ascended one of the highest icebergs to the north, but even with his glass he could make out nothing but a series of ice-mountains and ice-fields. There was no land in sight, nothing but gloomy confusion. He returned, and tried to calculate the probable length of their imprisonment.

The hunters, and among them the doctor, James Wall, Simpson, Johnson, and Bell, kept them supplied with fresh meat. The birds had disappeared, seeking a milder climate in the south. The ptarmigans alone, a sort of rock-partridge peculiar to this latitude, did not flee the winter; it was easy to kill them, and there were enough to promise a perpetual supply of game.

Hares, foxes, wolves, ermines, and bears were plentiful; a French, English, or Norwegian hunter would have had no right to complain; but they were so shy that it was hard to approach them; besides, it was hard to distinguish them on the white plain, they being white themselves, for in winter they acquire that colored fur. In opposition to the opinions of some naturalists, the doctor held that this change

was not due to the lowering of the temperature, since it took place before October; hence it was not due to any physical cause, but rather providential foresight, to secure these animals against the severity of an arctic winter.

Often, too, they saw sea-cows and sea-dogs, animals included under the name of seals; all the hunters were specially recommended to shoot them, as much for their skins as for their fat, which was very good fuel. Besides, their liver made a very good article of food; they could be counted by hundreds, and two or three miles north of the ship the ice was continually perforated by these huge animals; only they avoided the hunter with remarkable instinct, and many were wounded who easily escaped by diving under the ice.

Still, on the 19th, Simpson succeeded in getting one four hundred yards distant from the ship; he had taken the precaution to close its hole in the ice, so that it could not escape from its pursuers. He fought for a long time, and died only after receiving many bullets. He was nine feet long; his bull-dog head, the sixteen teeth in his jaw, his large pectoral fins shaped like little wings, his little tail with another pair of fins, made him an excellent specimen. The doctor wished to preserve his head for his collection of natural history, and his skin for future contingences, hence he prepared both by a rapid and economical process. He plunged the body in the hole, and thousands of little prawns removed the flesh in small pieces; at the end of half a day the work was half finished, and the most skilful of the

honorable corporation of tanners at Liverpool could not have done better.

When the sun had passed the autumn equinox, that is to say, September 23d, the winter fairly begins in the arctic regions. The sun, having gradually sunk to the horizon, disappeared at last, October 23d, lighting up merely the tops of the mountains with its oblique rays. The doctor gave it his last farewell. He could not see it again till the month of February.

Still the darkness was not complete during this long absence of the sun; the moon did its best to replace it; the stars were exceedingly brilliant, the auroras were very frequent, and the refractions peculiar to the snowy horizons; besides, the sun at the time of its greatest southern declension, December 21st, approaches within thirteen degrees of the polar horizon; hence, every day there was a certain twilight for a few hours. Only the mist and snow-storms often plunged these regions in the deepest obscurity.

Still, up to this time the weather was very favorable; the partridges and hares alone had reason to complain, for the hunters gave them no rest; a great many traps were set for foxes, but these crafty animals could not be caught; very often they scraped the snow away beneath the trap and took the bait without running any risk; the doctor cursed them, being very averse to making them such a present.

October 25th, the thermometer fell as low as -4°. A violent hurricane raged; the air was filled with thick snow, which permitted no ray of light to reach the Forward. For several hours there was some anxiety about the fate of Bell and Simpson, who had gone some distance away hunting; they did not reach the ship till the next day, having rested for a whole day wrapped up in their furs, while the hurricane swept over them and buried them under five feet of snow. They were nearly frozen, and the doctor found it very hard to restore their circulation.

The tempest lasted eight days without interruption. No one could set foot outside. In a single day there were variations in the temperature of fifteen or twenty degrees.

During this enforced leisure every one kept to himself, some sleeping, others smoking, others again talking in a low tone and stopping at the approach of Johnson or the doctor; there was no moral tie between the men of the crew; they only met at evening prayers and at Sunday services.

Clifton knew perfectly well that when the seventy-eighth parallel was passed, his share of the pay would amount to three hundred and seventy-five pounds; he thought it a good round sum, and his ambition did not go any further. His opinion was generally shared, and all looked forward to the day when they should enjoy this hardly-earned fortune.

Hatteras kept almost entirely out of sight. He never took part in the hunts or the walks from the ship. He took no interest in the meteorological phenomena which kept the doctor in a constant state of admiration. He lived with but a single idea; it consisted of three words,--The North Pole. He only thought of when the Forward, free at last, should resume her bold course.

In fact, the general feeling on board was one of gloom. Nothing was so sad as the sight of this captive vessel, no longer resting in its natural element, but with its shape hidden beneath thick layers of ice; it looks like nothing; it cannot stir, though made for motion; it is turned into a wooden storehouse, a sedentary dwelling, this ship which knows how to breast the wind and the storms. This anomaly, this false situation, filled their hearts with an indefinable feeling of disquiet and regret.

During these idle hours the doctor arranged the notes he had taken, from which this book is made up; he was never out of spirits, and never lost his cheerfulness. Yet he was glad to see the end of the storm, and prepared to resume his hunting.

November 3d, at six o'clock in the morning, with a temperature of -5°, he set off in company with Johnson and Bell; the expanse of ice was unbroken; all the snow which had fallen so abundantly during the preceding days was hardened by the frost, and made good walking; the

air was keen and piercing; the moon shone with incomparable purity, glistening on the least roughness in the ice; their footprints glowed like an illuminated trail, and their long shadows stood out almost black against the brilliant ice.

The doctor had taken Duke with him; he preferred him to the Greenland dogs to hunt game, and he was right; for they are of very little use under such circumstances, and they did not appear to possess the sacred fire of the race of the temperate zone. Duke ran along with his nose on the ground, and he often stopped on the recent marks of bears. Still, in spite of his skill, the hunters did not find even a hare in two hours' walking.

"Has all the game felt it necessary to go south?" said the doctor, stopping at the foot of a hummock.

"I should fancy it must be so, Doctor," answered the carpenter.

"I don't think so," said Johnson; "the hares, foxes, and bears are accustomed to this climate; I think this last storm must have driven them away; but they will come back with the south-winds. Ah, if you were to talk about reindeer and musk-deer, that might be different!"

"And yet at Melville Island numberless animals of this sort are found," resumed the doctor; "it lies farther south, it is true, and during the winters he spent there Parry always had plenty of this

magnificent game."

"We have much poorer luck," answered Bell; "if we could only get enough bear's meat, we would do very well."

"The difficulty is," said the doctor, "the bears seem to me very rare and very wild; they are not civilized enough to come within gun-shot."

"Bell is talking about the flesh of the bear," said Johnson, "but his grease is more useful than his flesh or his fur."

"You are right, Johnson," answered Bell; "you are always thinking of the fuel."

"How can I help it? Even with the strictest economy, we have only enough for three weeks!"

"Yes," resumed the doctor, "that is the real danger, for we are now only at the beginning of November, and February is the coldest month in the frigid zone; still, if we can't get bear's grease, there's no lack of seal's grease."

"But not for a very long time, Doctor," answered Johnson; "they will soon leave us; whether from cold or fright, soon they won't come upon the ice any more."

"Then," continued the doctor, "we shall have to fall back on the bear, and I confess the bear is the most useful animal to be found in these countries, for he furnishes food, clothing, light, and fuel to men. Do you hear, Duke?" he said, patting the dog's head, "we want some bears, my friend, bears! bears!"

Duke, who was sniffing at the ice at that time, aroused by the voices, and caresses of the doctor, started off suddenly with the speed of an arrow. He barked violently and, far off as he was, his loud barks reached the hunters' ears.

The extreme distance to which sound is carried when the temperature is low is an astonishing fact; it is only equalled by the brilliancy of the constellations in the northern skies; the waves of light and sound are transmitted to great distances, especially in the dry cold of the nights.

The hunters, guided by his distant barking, hastened after him; they had to run a mile, and they got there all out of breath, which happens very soon in such an atmosphere. Duke stood pointing about fifty feet from an enormous mass which was rolling about on the top of a small iceberg.

"Just what we wanted!" shouted the doctor, cocking his gun.

"A fine bear!" said Bell, following the doctor's example.

"A curious bear!" said Johnson, who intended to fire after his companions.

Duke barked furiously. Bell advanced about twenty feet, and fired; but the animal seemed untouched, for he continued rolling his head slowly.

Johnson came forward, and, after taking careful aim, he pulled the trigger.

"Good!" said the doctor; "nothing yet! Ah, this cursed refraction! We are too far off; we shall never get used to it! That bear is more than a mile away."

"Come on!" answered Bell.

The three companions hastened toward the animal, which had not been alarmed by the firing; he seemed to be very large, but, without weighing the danger, they gave themselves up already to the joy of victory. Having got within a reasonable distance, they fired; the bear leaped into the air and fell, mortally wounded, on the level ice below.

Duke rushed towards him.

"That's a bear," said the doctor, "which was easily conquered."

"Only three shots," said Bell with some scorn, "and he's down!"

"That's odd," remarked Johnson.

"Unless we got here just as he was going to die of old age," continued the doctor, laughing.

"Well, young or old," added Bell, "he's a good capture."

Talking in this way they reached the small iceberg, and, to their great surprise, they found Duke growling over the body of a white fox.

"Upon my word," said Bell, "that's too much!"

"Well," said the doctor, "we've fired at a bear, and killed a fox!"

Johnson did not know what to say.

"Well," said the doctor with a burst of laughter in which there was a trace of disappointment, "that refraction again! It's always deceiving us."

"What do you mean, Doctor?" asked the carpenter.

"Yes, my friend; it deceived us with respect to its size as well as

the distance! It made us see a bear in a fox's skin! Such a mistake is not uncommon under similar circumstances! Well, our imagination alone was wrong!"

"At any rate," answered Johnson, "bear or fox, he's good eating. Let's carry him off."

But as the boatswain was lifting him to his shoulders:--

"That's odd," he said.

"What is it?" asked the doctor.

"See there, Doctor, he's got a collar around his neck."

"A collar?" asked the doctor again, examining the fox.

In fact, a half-worn-out copper collar appeared under his white fur; the doctor thought he saw letters engraved upon it; he unfastened it from the animal's neck, about which it seemed to have been for a long time.

"What does that mean?" asked Johnson.

"That means," said the doctor, "that we have just killed a fox more than twelve years old,--a fox who was caught by James Ross in 1848."

"Is it possible?" said Bell.

"There's no doubt about it. I'm sorry we killed him! While he was in winter-quarters, James Ross thought of trapping a large number of white foxes; he fastened on their necks copper collars on which was engraved the position of his ships, the Enterprise and Investigator, as well as where the supplies were left. These animals run over immense distances in search of food, and James Ross hoped that one of them might fall into the hands of one of the men of the Franklin expedition. That's the simple explanation; and this poor beast, who might have saved the life of two crews, has fallen uselessly beneath our guns."

"Well, we won't eat it," said Johnson, "especially if it's twelve years old. But we shall keep the skin as a memento."

Johnson raised it to his shoulders. The hunters made their way to the ship, guiding themselves by the stars; their expedition was not wholly without result; they were able to bring back several ptarmigans.

An hour before reaching the Forward, there was a singular phenomenon which greatly interested the doctor. It was a real shower of shooting-stars; they could be counted by thousands, flying over the heavens like rockets; they dimmed the light of the moon. For hours they could have stood gazing at this beautiful sight. A similar

phenomenon was observed in Greenland in 1799, by the Moravians. It looked like an exhibition of fireworks. The doctor after his return to the ship spent the whole night gazing at the sight, which lasted till seven o'clock in the morning, while the air was perfectly silent.

CHAPTER XXVI.

THE LAST PIECE OF COAL.

The bears, it seemed, could not be caught; a few seals were killed on the 4th, 5th, and 6th of November, and the wind shifted and the weather grew much milder; but the snow-drifts began again with incomparable severity. It became impossible to leave the ship, and it was hard to subdue the dampness. At the end of the week the condensers contained several bushels of ice.

The weather changed again November 15th, and the thermometer, under the influence of certain atmospheric conditions, sank to -24°. That was the lowest temperature they had yet observed. This cold would have been endurable in calm weather; but the wind was blowing at that time, and it seemed as if the air was filled with sharp needles.

The doctor regretted his captivity, for the snow was hardened by the wind, so as to make good walking, and he might have gone very far from the ship.

Still, it should be said that the slightest exercise in so low a temperature is very exhausting. A man can perform hardly more than a quarter of his usual work; iron utensils cannot be touched; if the hand seizes them, it feels as if it were burned, and shreds of skin cleave to the object which had been incautiously seized.

The crew, being confined to the ship, were obliged to walk on the covered deck for two hours a day, where they had leave to smoke, which was forbidden in the common-room.

There, when the fire got low, the ice used to cover the walls and the intervals between the planks; every nail and bolt and piece of metal was immediately covered with a film of ice.

The celerity of its formation astonished the doctor. The breath of the men condensed in the air, and, changing from a fluid to a solid form, it fell about them in the form of snow. A few feet from the stove it was very cold, and the men stood grouped around the fire.

Still, the doctor advised them to harden themselves, and to accustom themselves to the cold, which was not so severe as what yet awaited them; he advised them to expose their skin gradually to this intense temperature, and he himself set the example; but idleness or numbness nailed most of them to their place; they refused to stir, and preferred sleeping in that unhealthy heat.

Yet, according to the doctor, there was no danger in exposing one's self to great cold after leaving a heated room; these sudden changes only inconvenience those who are in a perspiration; the doctor quoted examples in support of his opinion, but his lessons were for the most part thrown away.

As for John Hatteras, he did not seem to mind the inclement cold. He walked to and fro silently, never faster or slower. Did not the cold affect his powerful frame? Did he possess to a very great degree the principle of natural heat which he wanted his men to possess? Was he so bound up in his meditations that he was indifferent to outside impressions? His men saw him with great astonishment braving a temperature of -24°; he would leave the ship for hours, and come back without appearing to suffer from the cold.

"He's a singular man," said the doctor to Johnson; "he astonishes me! He carries a glowing furnace within him! He is one of the strongest natures I ever saw!"

"The fact is," answered Johnson, "he goes and comes and circulates in the open air, without dressing any more thickly than in the month of June."

"O, it doesn't make much difference what one wears!" answered the doctor; "what is the use of dressing warmly if one can't produce heat within himself? It's like trying to heat ice by wrapping it up in wool! But Hatteras doesn't need it; he's built that way, and I should not be surprised if his side was as warm as the neighborhood of a glowing coal."

Johnson, who was charged with clearing away the water-hole every

morning, noticed that the ice was ten feet thick.

Almost every night the doctor could observe the magnificent auroras; from four o'clock till eight of the evening, the sky in the north was slightly lighted up; then this took a regular shape, with a rim of light yellow, the ends of which seemed to touch the field of ice. Gradually the brilliancy arose in the heavens, following the magnetic meridian, and appeared striped with black bands; jets of luminosity shot with varying brightness here and there; when it reached the zenith it was often composed of several arcs bathed in waves of red, yellow, or green light. It was a dazzling sight. Soon the different curves met in a single point, and formed crowns of celestial richness. Finally the arcs all crowded together, the splendid aurora grew dim, the intense colors faded away into pale, vague, uncertain tints, and this wonderful phenomenon vanished gradually, insensibly, in the dark clouds of the south.

It is difficult to realize the wonderful, magical beauty of such a spectacle in high latitudes, less than eight degrees from the pole; the auroras which are seen in the temperate zone give no idea of it; it seems as if Providence wished to reserve the greatest wonders for these regions.

Numerous mock-moons appeared also while the moon was shining, and a great many would appear in the sky, adding to the general brilliancy; often, too, simple lunar halos surrounded the moon with a circle of

splendid lustre.

November 26th the tide rose very high, and the water came through the hole with great violence; the thick crust of ice seemed pushed up by the force of the sea, and the frequent cracking of the ice proclaimed the conflict that was going on beneath; fortunately the ship remained firm in her bed, but her chains worked noisily; it was as a precaution against just such an event, that Hatteras had made the brig fast.

The following days were still colder; a dense fog hid the sky; the wind tossed the snow about; it was hard to determine whether it came from the clouds or from the ice-fields; everything was in confusion.

The crew kept busy with various interior occupations, the principal one being the preparation of the grease and oil from the seal; it was frozen into blocks of ice, which had to be cut with a hatchet; it was broken into small fragments, which were as hard as marble; ten barrels full were collected. As may be seen, every vessel became nearly useless, besides the risk of its breaking when the contents froze.

The 28th the thermometer fell to -32°; there was only ten days' coal on board, and every one awaited with horror the moment when it should come to an end.

Hatteras, for the sake of economy, had the fire in the stove in the after-room put out; and from that time Shandon, the doctor, and he

were compelled to betake themselves to the common-room of the crew. Hatteras was hence brought into constant communication with his men, who gazed at him with surly, dejected glances. He heard their fault-finding, their reproaches, even their threats, without being able to punish them. However, he seemed deaf to every remark. He never went near the fire. He remained in a corner, with folded arms, without saying a word.

In spite of the doctor's recommendations, Pen and his friends refused to take the slightest exercise; they passed whole days crouching about the stove or under their bedclothes; hence their health began to suffer; they could not react against the rigor of the climate, and scurvy soon made its appearance on board.

The doctor had long since begun to distribute, every morning, lemon-juice and lime pastilles; but these precautions, which were generally so efficacious, did very little good to the sick; and the disease, following its usual course, soon showed its most horrible symptoms.

Terrible indeed it was to see those wretches with their nerves and muscles contracted with pain! Their legs were fearfully swollen, and were covered with large bluish-black patches; their bleeding gums, their swollen lips, permitted them to utter only inarticulate sounds; their blood was poisoned, deprived of fibrine, and no longer carried life to the extremities.

Clifton was the first to be attacked by this cruel malady; soon Gripper, Brunton, and Strong had to keep to their hammocks. Those whom the illness spared could not avoid the sight of the sufferings of their friends; the common-room was the only place where they could stay; so it was soon transformed into a hospital, for of the eighteen sailors of the Forward, thirteen were soon down with scurvy. It seemed as if Pen would escape the contagion; his strong constitution preserved him; Shandon felt the first symptoms, but it went no further with him, and plenty of exercise soon restored him to good health.

The doctor tended his patients with the greatest devotion, and his heart would bleed at the sight of the sufferings he could not assuage. Still, he inspired as much cheerfulness as he could in the lonely crew; his words, his consolations, his philosophical reflections, his fortunate inventions, broke the monotony of those long days of suffering; he would read aloud to them; his wonderful memory kept him supplied with amusing anecdotes, while the men who were well stood pressing closely around the stove; but the groans of the sick, their complaints, and their cries of despair would continually interrupt him, and, breaking off in the middle of a story, he would become the devoted and attentive physician.

Besides, his health remained good; he did not grow thin; his corpulence stood him in better stead than the thickest raiment, and he used to say he was as well clad as a seal or a whale, who, thanks to

their thick layers of fat, easily support the rigors of the winter.

Hatteras did not suffer physically or morally. The sufferings of the crew did not seem to depress him. Perhaps he would not let his emotions appear on his face, while an acute observer would have detected the heart of a man beneath this mask of iron.

The doctor analyzed him, studied him, and could not classify this strange organization, this unnatural temperament.

The thermometer fell still lower; the deck was entirely deserted; the Esquimaux dogs alone walked up and down it, barking dismally.

There was always a man on guard near the stove, who superintended putting on the coal; it was important not to let it go out; when the fire got low the cold crept into the room, formed on the walls, and the moisture suddenly condensed and fell in the form of snow on the unfortunate occupants of the brig.

It was among these terrible sufferings that they reached December 8th; that morning the doctor went as usual to look at the thermometer. He found the mercury entirely frozen in the bulb.

"Forty-four degrees below zero!" he said with terror.

And on that day the last piece of coal on board was thrown into the

stove.

CHAPTER XXVII.

THE GREAT COLD AT CHRISTMAS.

For a moment he had a feeling of despair. The thought of death, and death by cold, appeared in all its horror; this last piece of coal burned with an ominous splutter; the fire seemed about to go out, and the temperature of the room fell noticeably. But Johnson went to get some of the new fuel which the marine animals had furnished to them, and with it he filled the stove; he added to it some tow filled with frozen oil, and soon obtained sufficient heat. The odor was almost unendurable; but how get rid of it? They had to get used to it. Johnson agreed that his plan was defective, and that it would not be considered a success in Liverpool.

"And yet," he added, "this unpleasant smell will, perhaps, produce good results."

"What are they?" asked the carpenter.

"It will doubtless attract the bears this way, for they are fond of the smell."

"Well," continued Bell, "what is the need of having bears?"

"Bell," replied Johnson, "we can't count on seals any longer; they're

gone away, and for a long time; if bears don't come in their place to supply us with their share of fuel, I don't know what is to become of us."

"True, Johnson, our fate is very uncertain; our position is a most alarming one. And if this sort of fuel gives out, I don't see how--"

"There might be another--"

"Another?" asked Bell.

"Yes, Bell! in despair on account of--but the captain would never--but yet we shall perhaps have to come to it."

And Johnson shook his head sadly, and fell to thinking gloomily. Bell did not interrupt him. He knew that the supply of fat, which it had been so hard to acquire, would only last a week, even with the strictest economy.

The boatswain was right. A great many bears, attracted by the scent, were seen to leeward of the Forward; the healthy men gave chase; but these animals are very swift of foot, and crafty enough to escape most stratagems; it was impossible to get near them, and the most skilful gunners could not hit them.

The crew of the brig was in great danger of dying from the cold; it

could not withstand, for forty-eight hours, such a temperature as would exist in the common-room. Every one looked forward with terror to getting to the end of the fuel.

Now this happened December 20th, at three o'clock in the afternoon; the fire went out; the sailors, grouped about the empty stove, gazed at one another with haggard eyes. Hatteras remained without moving in his corner; the doctor, as usual, paced up and down excitedly; he did not know what was to be done.

The temperature in the room fell at once to -7°.

But if the doctor was baffled and did not know what they should turn their hands to, others knew very well. So Shandon, cold and resolute, Pen, with wrath in his eyes, and two or three of his companions, such as he could induce to accompany him, walked towards Hatteras.

"Captain!" said Shandon.

Hatteras, absorbed in his thoughts, did not hear him.

"Captain!" repeated Shandon, touching him with his hand.

Hatteras arose.

"Sir," he said.

"Captain, the fire is out."

"Well?" continued Hatteras.

"If you intend that we shall freeze to death," Shandon went on with grim irony, "we should be glad if you would tell us."

"My intention," answered Hatteras with a deep voice, "is that every man shall do his duty to the end."

"There's something superior to duty, Captain," answered his first officer, "and that is the right of self-preservation. I repeat it, we have no fire; and if this goes on, in two days not one of us will be alive."

"I have no wood," answered Hatteras, gloomily.

"Well," shouted Pen, violently, "when the wood gives out, we must go cut it where it grows!"

Hatteras grew pale with anger.

"Where is that?" he asked.

"On board," answered the sailor, insolently.

"On board!" repeated the captain, with clinched fists and sparkling eyes.

"Of course," answered Pen, "when the ship can't carry the crew, the ship ought to be burned."

At the beginning of this sentence Hatteras had grasped an axe; at its end, this axe was raised above Pen's head.

"Wretch!" he cried.

The doctor sprang in front of Pen, and thrust him back; the axe fell on the floor, making a deep gash. Johnson, Bell, and Simpson gathered around Hatteras, and seemed determined to support him. But plaintive, grievous cries arose from the berths, transformed into death-beds.

"Fire, fire!" they cried, shivering beneath their now insufficient covering.

Hatteras by a violent effort controlled himself, and after a few moments of silence, he said calmly,--

"If we destroy the ship, how shall we get back to England?"

"Sir," answered Johnson, "perhaps we can without doing any material

damage burn the less important parts, the bulwarks, the nettings--"

"The small boats will be left," said Shandon; "and besides, why might we not make a smaller vessel out of what is left of the old one?"

"Never!" answered Hatteras.

"But--" interposed many of the men, shouting together.

"We have a large quantity of spirits of wine," suggested Hatteras; "burn all of that."

"All right; we'll take the spirits of wine!" answered Johnson, assuming an air of confidence which he was far from feeling.

And with the aid of long wicks, dipped into this liquid of which the pale flame licked the walls of the stove, he was able to raise the temperature of the room a few degrees.

In the following days the wind came from the south again and the thermometer rose; the snow, however, kept falling. Some of the men were able to leave the ship for the driest hours of the day; but ophthalmia and scurvy kept most of them on board; besides, neither hunting nor fishing was possible.

But this was only a respite in the fearful severity of the cold, and

on the 25th, after a sudden change of wind, the frozen mercury disappeared again in the bulb of the instrument; then they had to consult the spirit-thermometer, which does not freeze even in the most intense colds.

The doctor, to his great surprise, found it marking -66°. Seldom has man been called upon to endure so low a temperature.

The ice stretched in long, dark lines upon the floor; a dense mist filled the room; the dampness fell in the form of thick snow; the men could not see one another; their extremities grew cold and blue; their heads felt as if they wore an iron band; and their thoughts grew confused and dull, as if they were half delirious. A terrible symptom was that their tongues refused to articulate a sound.

From the day the men threatened to burn the ship, Hatteras would walk for hours upon the deck, keeping watch. This wood was flesh and blood to him. Cutting a piece from it would have been like cutting off a limb. He was armed, and he kept constant guard, without minding the cold, the snow, or the ice, which stiffened his clothing as if it covered it with a granite cuirass. Duke understood him, and followed him, barking and howling.

Nevertheless, December 25th he went down into the common-room. The doctor, with all the energy he had left, went up to him and said,--

"Hatteras, we are going to die from want of fire!"

"Never!" said Hatteras, knowing very well what request he was refusing.

"We must," continued the doctor, mildly.

"Never!" repeated Hatteras more firmly; "I shall never give my consent! Whoever wishes, may disobey me."

Thus was permission given them. Johnson and Bell hastened to the deck. Hatteras heard the wood of the brig crashing under the axe, and wept.

That was Christmas Day, the great family festival in England, one specially devoted to the amusement of the children. What a painful recollection was that of the happy children gathered about the green Christmas tree! Every one recalled the huge pieces of roast meat, cut from the fattened ox, and the tarts, the mince-pies, and other luxuries so dear to the English heart! But here was nothing but suffering, despair, and wretchedness, and for the Christmas log, these pieces of a ship lost in the middle of the frigid zone!

Nevertheless, under the genial influence of the fire, the spirits and strength of the men returned; the hot tea and coffee brought great and immediate consolation, and hope is so firm a friend of man, that they even began to hope for some luckier fate. It was thus that the year

1860 passed away, the early winter of which had so interfered with Hatteras's plans.

Now it happened that this very New Year's Day was marked by an unexpected discovery. It was a little milder than the previous days had been; the doctor had resumed his studies; he was reading Sir Edward Belcher's account of his expedition in the polar regions. Suddenly, a passage which he had never noticed before filled him with astonishment; he read it over again; doubt was no longer possible.

Sir Edward Belcher states that, having come to the end of Queen's Channel, he found there many traces of the presence of men. He says:--

"There are remains of dwellings far superior to what can be attributed to the savage habits of the wandering tribes of Esquimaux. The walls are firmly placed on deep-dug foundations; the inside, covered with a thick layer of gravel, has been paved. Skeletons of moose, reindeer, and seals abound. We found coal there."

At these last words an idea occurred to the doctor; he took his book and ran to tell Hatteras.

"Coal!" shouted the captain.

"Yes, Hatteras, coal; that is to say, our preservation!"

"Coal, on this lonely shore!" continued Hatteras; "no, that's impossible!"

"How can you doubt it, Hatteras? Belcher would not have mentioned it if he had not been sure, without having seen it with his own eyes."

"Well, what then, Doctor?"

"We are not a hundred miles from the place where Belcher saw this coal! What is a journey of a hundred miles? Nothing. Longer expeditions have often been made on the ice, and with the cold as intense. Let us go after it, Captain!"

"We'll go!" said Hatteras, who had made up his mind quickly; and with his active imagination he saw the chance of safety.

Johnson was informed of the plan, of which he approved highly; he told his companions; some rejoiced, others heard of it with indifference.

"Coal on these shores!" said Wall from his sick-bed.

"We'll let them go," answered Shandon, mysteriously.

But before they had begun to make preparations for the trip, Hatteras wanted to fix the position of the Forward with the utmost exactitude. The importance of this calculation it is easy to see. Once

away from the ship, it could not be found again without knowing its position precisely.

So Hatteras went up on deck; he took observations at different moments of several lunar distances, and the altitude of the principal stars. He found, however, much difficulty in doing this, for when the temperature was so low, the glass and the mirrors of the instrument were covered with a crust of ice from Hatteras's breath; more than once his eyelids were burned by touching the copper eye-pieces. Still, he was able to get very exact bases for his calculations, and he returned to the common-room to work them out. When he had finished, he raised his head with stupefaction, took his chart, marked it, and looked at the doctor.

"Well?" asked the latter.

"What was our latitude when we went into winter-quarters?"

"Our latitude was 78° 15', and the longitude 95° 35', exactly the pole of cold."

"Well," added Hatteras in a low voice, "our ice-field is drifting! We are two degrees farther north and farther west,--at least three hundred miles from your coal-supply!"

"And these poor men who know nothing about it!" cried the doctor.

"Not a word!" said Hatteras, raising his finger to his lips.

CHAPTER XXVIII.

PREPARATIONS FOR DEPARTURE.

Hatteras did not wish to let his crew know about this new condition of affairs. He was right. If they had known that they were being driven towards the north with irresistible force, they would have given way to despair. The doctor knew this, and approved of the captain's silence.

Hatteras had kept to himself the impressions which this discovery had caused within him. It was his first moment of joy during these long months of struggle with the hostile elements. He was one hundred and fifty miles farther north; hardly eight degrees from the Pole! But he hid his joy so well that the doctor did not even suspect it; he asked himself why Hatteras's eye shone with so unusual a lustre; but that was all, and the natural reply to this question did not enter his head.

The Forward, as it approached the Pole, had drifted away from the coal which had been seen by Sir Edward Belcher; instead of a hundred miles, it would have to be sought two hundred and fifty miles farther south. Still, after a short discussion between Hatteras and Clawbonny, they determined to make the attempt.

If Belcher was right, and his accuracy could not be doubted, they

would find everything just at he had left it. Since 1853, no new expedition had visited these remote continents. Few, if any, Esquimaux are found in this latitude. The disaster which had befallen at Beechey Island could not be repeated on the shores of North Cornwall. Everything seemed to favor an excursion across the ice.

They estimated that they would be gone forty days at the outside, and preparations were made by Johnson for that time of absence.

In the first place, he saw about the sledge; it was of the shape of those used in Greenland, thirty-five inches broad and twenty-four feet long. The Esquimaux sometimes make them fifty feet long. It was built of long planks, bent at each end, and kept in position by two strong cords. This shape adapted it to resist violent shocks. The sledge ran easily upon the ice; but before the snow had hardened, it was necessary to place two vertical frames near together, and being raised in this way, it could run on without cutting too much into the snow. Besides, by rubbing it with a mixture of sulphur and snow in the Esquimaux fashion, it ran very easily.

It was drawn by six dogs; they were strong in spite of their thinness, and did not appear to be injured by the severity of the winter; the harnesses of deerskin were in good condition; perfect reliance could be placed on the equipment, which the Greenlanders at Upernavik had sold in conscience. These six animals alone could draw a weight of two thousand pounds without inordinate fatigue.

They carried with them a tent, in case it should be impossible to build a snow-house; a large sheet of mackintosh to spread over the snow, so that it should not melt at contact with their bodies; and, last of all, many coverings of wool and buffalo-skin. In addition, they carried the Halkett-boat.

Their provisions consisted of five chests of pemmican, weighing four hundred and fifty pounds; a pound of pemmican was allotted for each man and dog; of the latter there were seven, including Duke; there were to be four men. They carried, besides, twelve gallons of spirits of wine, weighing nearly a hundred and fifty pounds; tea and biscuit, in proper amounts; a little portable kitchen, with a great many wicks; and much tow, ammunition, and four double-barrelled guns. The men of the party made use of Captain Parry's invention, and wore girdles of india-rubber in which the heat of the body and the motion in walking could keep tea, coffee, and water in a liquid state.

Johnson took special care of the preparation of snow-shoes, with their wooden frames and leathern straps; they served as skates; on thoroughly frozen spots deerskin moccasins could be worn with comfort; every man carried two pairs of each.

These preparations, which were so important because the omission of a single detail might have caused the ruin of the whole expedition, required four whole days. Every day at noon Hatteras took an

observation of the ship's position; it was no longer drifting, and this had to be perfectly sure in order to secure their return.

Hatteras undertook to choose the four men who were to accompany him. It was not an easy decision to take; some it was not advisable to take, but then the question of leaving them on board had also to be considered. Still, the common safety demanded the success of this trip, and the captain deemed it right to choose sure and experienced men.

Hence Shandon was left out, but not much to his regret. James Wall was too ill to go. The sick grew no worse; their treatment consisted of repeated rubbing and strong doses of lemon-juice; this was easily seen to without the presence of the doctor being essential. Hence he enrolled himself among those who should go, and no voice was raised against it. Johnson would have gladly gone with the captain in his dangerous expedition; but Hatteras drew him to one side and said to him in an affectionate, almost weeping voice,--

"Johnson, you are the only man I can trust. You are the only officer with whom I can leave the ship. I must know that you are here to keep an eye on Shandon and the others. They are kept to the ship by the winter; but who can say what plans they are not capable of forming? You shall receive my formal instructions, which shall place the command in your hands. You shall take my place. We shall be absent four or five weeks at the most, and I shall be at ease having you here

where I cannot be. You need wood, Johnson. I know it! But, as much as possible, spare my ship. Do you understand, Johnson?"

"I understand, Captain," answered the old sailor, "and I will remain if you prefer it."

"Thanks!" said Hatteras, pressing the boatswain's hand; and he added, "In case we don't come back, Johnson, wait till the next thaw, and try to push on to the Pole. If the rest refuse, don't think of us, but take the Forward back to England."

"That is your wish, Captain?"

"It is," answered Hatteras.

"Your orders shall be obeyed," said Johnson, quietly.

The doctor regretted that his friend was not going to accompany him, but he was obliged to recognize the wisdom of Hatteras's plan.

His two other companions were Bell the carpenter, and Simpson. The first, who was sturdy, brave, and devoted, would be of great service in their camping in the snow; the other, although less resolute, nevertheless determined to take part in this expedition in which he might be of use as hunter and fisher.

So this detachment consisted of Hatteras, Clawbonny, Bell, Simpson, and the faithful Duke, making in all four men and seven dogs to be fed. A suitable amount of provisions was made ready.

During the early days of January the mean temperature was -33°. Hatteras waited impatiently for milder weather; he frequently consulted the barometer, but no confidence could be placed in this instrument, which in these high latitudes seems to lose some of its customary accuracy; in these regions there are many exceptions to the general laws of nature: for instance, a clear sky was not always accompanied by cold, nor did a fall of snow raise the temperature; the barometer was uncertain, as many explorers in these seas have noticed; it used to fall when the wind was from the north or east; when low it foretold fine weather; when high, rain or snow. Hence its indications could hardly be relied on.

Finally, January 5th an easterly breeze brought with it a rise in the thermometer of fifteen degrees, so that it stood at -18°. Hatteras resolved to start the next day; he could no longer endure seeing his ship torn to pieces before his eyes; the whole quarter-deck had been burned up.

So, January 6th, amid squalls of snow, the order to depart was given; the doctor gave his last words of advice to the sick; Bell and Simpson shook hands silently with their companions. Hatteras wanted to make a farewell speech to the men, but he saw nothing but angry faces around

him. He fancied he saw an ironical smile playing about Shandon's lips. He held his peace. Perhaps he had a momentary pang at parting as he gazed at the Forward.

But it was too late for him to change his mind; the sledge, loaded and harnessed, was waiting on the ice; Bell was the first to move; the others followed. Johnson accompanied the travellers for a quarter of a mile; then Hatteras asked him to return, which he did after a long leave-taking. At that moment, Hatteras, turning for the last time towards the brig, saw the tops of her masts disappearing in the dark snow-clouds.

CHAPTER XXIX.

ACROSS THE ICE-FIELDS.

The little band made their way towards the southeast. Simpson drove the sledge. Duke aided him much, without being disturbed at the occupation of his mates. Hatteras and the doctor followed behind on foot, while Bell, who was charged with making a road, went on in advance, testing the ice with the iron point of his stick.

The rise in the thermometer foretold a fall of snow, and soon it came, beginning in large flakes. This added to the hardships of their journey; they kept straying from a straight line; they could not go quickly; nevertheless, they averaged three miles an hour.

The ice-field, under the pressure of the frost, presented an unequal surface; the sledge was often nearly turned over, but they succeeded in saving it.

Hatteras and his companions wrapped themselves up in their fur clothes cut in the Greenland fashion; they were not cut with extraordinary neatness, but they suited the needs of the climate; their faces were enclosed in a narrow hood which could not be penetrated by the snow or wind; their mouths, noses, and eyes were alone exposed to the air, and they did not need to be protected against it; nothing is so inconvenient as scarfs and nose-protectors, which soon are stiff with

ice; at night they have to be cut away, which, even in the arctic seas, is a poor way of undressing. It was necessary to leave free passage for the breath, which would freeze at once on anything it met.

The boundless plain stretched out with tiresome monotony; everywhere there appeared heaped-up ice-hills, hummocks, blocks, and icebergs, separated by winding valleys; they walked staff in hand, saying but little. In this cold atmosphere, to open the mouth was painful; sharp crystals of ice suddenly formed between the lips, and the heat of the breath could not melt them. Their progress was silent, and every one beat the ice with his staff. Bell's footsteps were visible in the fresh snow; they followed them mechanically, and where he had passed, the others could go safely.

Numerous tracks of bears and foxes crossed one another everywhere; but during this first day not one could be seen; to chase them would have been dangerous and useless: they would only have overloaded the already heavy sledge.

Generally, in excursions of this sort, travellers take the precaution of leaving supplies along their path; they hide them from the animals, in the snow, thus lightening themselves for their trip, and on their return they take the supplies which they did not have the trouble of carrying with them.

Hatteras could not employ this device on an ice-field which perhaps

was moving; on firm land it would have been possible; and the uncertainty of their route made it doubtful whether they would return by the same path.

At noon, Hatteras halted his little troop in the shelter of an ice-wall; they dined off pemmican and hot tea; the strengthening qualities of this beverage produced general comfort, and the travellers drank a large quantity. After an hour's rest they started on again; in the first day they walked about twenty miles; that evening men and dogs were tired out.

Still, in spite of their fatigue, they had to build a snow-house in which to pass the night; the tent would not have been enough. This took them an hour and a half. Bell was very skilful; the blocks of ice, which were cut with a knife, were placed on top of one another with astonishing rapidity, and they took the shape of a dome, and a last piece, the keystone of the arch, established the solidity of the building; the soft snow served as mortar in the interstices; it soon hardened and made the whole building of a single piece.

Access was had into this improvised grotto by means of a narrow opening, through which it was necessary to crawl on one's hands and knees; the doctor found some difficulty in entering, and the others followed. Supper was soon prepared on the alcohol cooking-stove. The temperature inside was very comfortable; the wind, which was raging without, could not get in.

"Sit down!" soon shouted the doctor in his most genial manner.

And this meal, though the same as the dinner, was shared by all. When it was finished their only thought was sleep; the mackintoshes, spread out upon the snow, protected them from the dampness. At the flame of the portable stove they dried their clothes; then three of them, wrapped up in their woollen coverings, fell asleep, while one was left on watch; he had to keep a lookout on the safety of all, and to prevent the opening from being closed, otherwise they ran a risk of being buried alive.

Duke shared their quarters; the other dogs remained without, and after they had eaten their supper they lay down and were soon hidden by the snow.

Their fatigue soon brought sound sleep. The doctor took the watch until three of the morning. In the night the hurricane raged furiously. Strange was the situation of these lonely men lost in the snow, enclosed in this vault with its walls rapidly thickening under the snow-fall.

The next morning at six o'clock their monotonous march was resumed; there were ever before them the same valleys and icebergs, a uniformity which made the choice of a path difficult. Still, a fall of several degrees in the temperature made their way easier by hardening

the snow. Often they came across little elevations, which looked like cairns or storing-places of the Esquimaux; the doctor had one destroyed to satisfy his curiosity, but he found nothing except a cake of ice.

"What do you expect to find, Clawbonny?" asked Hatteras; "are we not the first men to penetrate into this part of the globe?"

"Probably," answered the doctor, "but who knows?"

"Don't let us waste our time in useless searching," resumed the captain; "I am in a hurry to rejoin the ship, even if this long-wanted fuel should not be found."

"I have great hopes of finding it," said the doctor.

"Doctor," Hatteras used to say frequently, "I did wrong to leave the Forward; it was a mistake! The captain's place is on board, and nowhere else."

"Johnson is there."

"Yes! but--let us hurry on!"

They advanced rapidly; Simpson's voice could be heard urging on the dogs; they ran along on a brilliant surface, all aglow with a

phosphorescent light, and the runners of the sledge seemed to toss up a shower of sparks. The doctor ran on ahead to examine this snow, when suddenly, as he was trying to jump upon a hummock, he disappeared from sight. Bell, who was near him, ran at once towards the place.

"Well, Doctor," he cried anxiously, while Hatteras and Simpson joined him, "where are you?"

"Doctor!" shouted the captain.

"Down here, at the bottom of a hole," was the quiet answer. "Throw me a piece of rope, and I'll come up to the surface of the globe."

They threw a rope down to the doctor, who was at the bottom of a pit about ten feet deep; he fastened it about his waist, and his three companions drew him up with some difficulty.

"Are you hurt?" asked Hatteras.

"No, there's no harm done," answered the doctor, wiping the snow from his smiling face.

"But how did it happen?"

"O, it was in consequence of the refraction," he answered, laughing; "I thought I had about a foot to step over, and I fell into this deep

hole! These optical illusions are the only ones left me, my friends, and it's hard to escape from them! Let that be a lesson to us all never to take a step forward without first testing the ice with a staff, for our senses cannot be depended on. Here our ears hear wrong, and our eyes deceive us! It's a curious country!"

"Can you go on?" asked the captain.

"Go on, Hatteras, go on! This little fall has done me more good than harm."

They resumed their march to the southeast, and at evening they halted, after walking about twenty-five miles; they were all tired, but still the doctor had energy enough to ascend an ice-mountain while the snow-hut was building.

The moon, which was nearly at its full, shone with extraordinary brilliancy in a clear sky; the stars were wonderfully brilliant; from the top of the iceberg a boundless plain could be seen, which was covered with strangely formed hillocks of ice; in the moonlight they looked like fallen columns or overthrown tombstones; the scene reminded the doctor of a huge, silent graveyard barren of trees, in which twenty generations of human beings might be lying in their long sleep.

In spite of the cold and fatigue, Clawbonny remained for a long time

in a revery, from which it was no easy task for his companions to arouse him; but they had to think of resting; the snow-hut was completed; the four travellers crawled in like moles, and soon were all asleep.

The following days went on without any particular incident; at times they went on slowly, at times quickly, with varying ease, according to the changes in the weather; they wore moccasins or snow-shoes, as the nature of the ice demanded.

In this way they went on till January 15th; the moon, now in its last quarter, was hardly visible; the sun, although always beneath the horizon, gave a sort of twilight for six hours every day, but not enough to light up the route, which had to be directed by the compass. Then Bell went on ahead; Hatteras followed next; Simpson and the doctor sought also to keep in a straight line behind, with their eyes on Hatteras alone; and yet, in spite of all their efforts, they often got thirty or forty degrees from the right way, much to their annoyance.

Sunday, January 15th, Hatteras judged that they had come about one hundred miles to the south; this morning was set aside to mending their clothes and materials; the reading of divine service was not forgotten.

At noon they started again; the temperature was very low; the

thermometer marked only -22°; the air was very clear.

Suddenly, without warning, a frozen vapor arose into the air from the ice, to a height of about ninety feet, and hung motionless; no one could see a foot before him; this vapor formed in long, sharp crystals upon their clothing.

The travellers, surprised by this phenomenon, which is called frost-rime, only thought of getting together; so immediately various shouts were heard:--

"O Simpson!"

"Bell, this way!"

"Dr. Clawbonny!"

"Doctor!"

"Captain, where are you?"

They began to look for one another with outstretched arms, wandering through the fog which their eyes could not pierce. But to their disappointment they could hear no answer; the vapor seemed incapable of carrying sound.

Each one then thought of firing his gun as a signal to the others. But if their voices were too feeble, the reports of the fire-arms were too loud; for the echoes, repeated in every direction, made but a confused roar, in which no particular direction could be perceived.

Then they began to act, each one as he thought best. Hatteras stood still and folded his arms. Simpson contented himself with stopping the sledge. Bell retraced his steps, feeling them with his hand. The doctor, stumbling over the blocks of ice, wandered here and there, getting more and more bewildered.

At the end of five minutes he said to himself,--

"This can't last long! Singular climate! This is too much! There is nothing to help us, without speaking of these sharp crystals which cut my face. Halloo, Captain!" he shouted again.

But he heard no answer; he fired his gun, but in spite of his thick gloves the iron burned his hands. Meanwhile he thought he saw a confused mass moving near him.

"There's some one," he said. "Hatteras! Bell! Simpson! Is that you? Come, answer!"

A dull roar was alone heard.

"Ah!" thought the doctor, "what is that?"

The object approached; it lost its first size and appeared in more definite shape. A terrible thought flashed into the doctor's mind.

"A bear!" he said to himself.

In fact, it was a huge bear; lost in the fog, it came and went with great danger to the men, whose presence it certainly did not suspect.

"Matters are growing complicated!" thought the doctor, standing still.

Sometimes he felt the animal's breath, which was soon lost in the frost-rime; again he would see the monster's huge paws beating the air so near him that his clothes were occasionally torn by its sharp claws; he jumped back, and the animal disappeared like a phantasmagoric spectre.

But as he sprang back he found an elevation beneath his feet; he climbed up first one block of ice, then another, feeling his way with his staff.

"An iceberg!" he said to himself; "if I can get to the top I am safe."

With these words he climbed up an elevation of about ninety feet with surprising agility; he arose above the frozen mist, the top of which

was sharply defined.

"Good!" he said to himself; and looking about him he saw his three companions emerging from the vapor.

"Hatteras!"

"Dr. Clawbonny!"

"Bell!"

"Simpson!"

These names were shouted out almost at the same time; the sky, lit up by a magnificent halo, sent forth pale rays which colored the frost-rime as if it were a cloud, and the top of the icebergs seemed to rise from a mass of molten silver. The travellers found themselves within a circle of less than a hundred feet in diameter. Thanks to the purity of the air in this upper layer in this low temperature, their words could be easily heard, and they were able to talk on the top of this iceberg. After the first shots, each one, hearing no answer, had only thought of climbing above the mist.

"The sledge!" shouted the captain.

"It's eighty feet beneath us," answered Simpson.

"Is it all right?"

"All right."

"And the bear?" asked the doctor.

"What bear?" said Bell.

"A bear!" said Hatteras; "let's go down."

"No!" said the doctor; "we shall lose our way, and have to begin it all over again."

"And if he eats our dogs--" said Hatteras.

At that moment Duke was heard barking, the sound rising through the mist.

"That's Duke!" shouted Hatteras; "there's something wrong. I'm going down."

All sorts of howling arose to their ears; Duke and the dogs were barking furiously. The noise sounded like a dull murmur, like the roar of a crowded, noisy room. They knew that some invisible struggle was going on below, and the mist was occasionally agitated like the sea

when marine monsters are fighting.

"Duke, Duke!" shouted the captain, as he made ready to enter again into the frost-rime.

"Wait a moment, Hatteras,--wait a moment! It seems to me that the fog is lifting."

It was not lifting, but sinking, like water in a pool; it appeared to be descending into the ground from which it had risen; the summits of the icebergs grew larger; others, which had been hidden, arose like new islands; by an optical illusion, which may be easily imagined, the travellers, clinging to these ice-cones, seemed to be rising in the air, while the top of the mist sank beneath them.

Soon the top of the sledge appeared, then the harnessed dogs, and then about thirty other animals, then great objects moving confusedly, and Duke leaping about with his head alternately rising and sinking in the frozen mist.

"Foxes!" shouted Bell.

"Bears!" said the doctor; "one, two, three."

"Our dogs, our provisions!" cried Simpson.

A troop of foxes and bears, having come across the sledge, were ravaging the provisions. Their instinct of pillaging united them in perfect harmony; the dogs were barking furiously, but the animals paid no heed, but went on in their work of destruction.

"Fire!" shouted the captain, discharging his piece.

His companions did the same. But at the combined report the bears, raising their heads and uttering a singular roar, gave the signal to depart; they fell into a little trot which a galloping horse could not have kept up with, and, followed by the foxes, they soon disappeared amid the ice to the north.

CHAPTER XXX.

THE CAIRN.

This phenomenon, which is peculiar to the polar regions, had lasted three quarters of an hour; the bears and foxes had had plenty of time; these provisions arrived opportunely for these animals, who were nearly starved during the inclement weather; the canvas cover of the sledge was torn by their strong claws, the casks of pemmican were opened and emptied; the biscuit-sacks pillaged, the tea spilled over the snow, a barrel of alcohol torn open and its contents lost, their camping materials scattered and damaged, bore witness to the ferocity of these wild beasts, and their greediness.

"This is a misfortune," said Bell, gazing at this scene of ruin.

"Which is probably irreparable," said Simpson.

"Let us first estimate the loss," interrupted the doctor, "and we'll talk about it afterwards."

Hatteras, without saying a word, began to gather the scattered boxes and sacks; they collected the pemmican and biscuits which could be eaten; the loss of part of their alcohol was much to be regretted; for if that was gone there would be nothing warm to drink; no tea, no coffee. In making an inventory of the supplies left, the doctor found

two hundred pounds of pemmican gone, and a hundred and fifty pounds of biscuit; if their journey continued they would have to subsist on half-rations.

They then began to discuss what should be done, whether they should return to the ship and start out again. But how could they make up their minds to lose the hundred and fifty miles they had already made? To return without fuel would have a depressing effect upon the spirits of the crew. Could men be found again to resume their march across the ice?

Evidently it was better to push on, even at the risk of severe privations.

The doctor, Hatteras, and Bell were of this opinion; Simpson wanted to go back; the fatigue of the journey had worn upon his health; he was visibly weaker; but finding himself alone of this opinion, he resumed his place at the head of the sledge, and the little caravan continued its journey to the south.

During the three next days, from the 15th to the 17th of January, all the monotonous incidents of the voyage were repeated; they advanced more slowly, and with much fatigue; their legs grew tired; the dogs dragged the sledge with difficulty; their diminished supply of food could not comfort men or beasts. The weather was very variable, changing from intense, dry cold to damp, penetrating mists.

January 18th the aspect of the ice-fields changed suddenly; a great number of peaks, like sharp-pointed pyramids, and very high, appeared at the horizon; the ground in certain places came through the snow; it seemed formed of gneiss, schist, and quartz, with some appearance of limestone. The travellers at last touched earth again, and this land they judged to be that called North Cornwall.

The doctor could not help striking the earth with joy; they had now only a hundred miles to go before reaching Cape Belcher, but their fatigue increased strangely on this soil, covered with sharp rocks, and interspersed with dangerous points, crevasses, and precipices; they had to go down into the depths of these abysses, climb steep ascents, and cross narrow gorges, in which the snow was drifted to the depth of thirty or forty feet.

The travellers soon regretted the almost easy journey over the ice-fields, which so well suited the sledge; now it had to be dragged by main force; the weary dogs were insufficient; the men, compelled to take their place alongside of them, wore themselves out with hauling; often they had to take off the whole load to get over some steep hills; a place only ten feet wide often kept them busy for hours; so in this first day they made only five miles in North Cornwall, which is certainly well named, for it exhibits all the roughness, the sharp points, the steep gorges, the confused rockiness, of the southwest coast of England.

The next day the sledge reached the top of the hills near the shore; the exhausted travellers, being unable to make a snow-hut, were obliged to pass the night under the tent, wrapped up in buffalo-skins, and drying their wet stockings by placing them about their bodies. The inevitable consequences of such conduct are easily comprehended; that night the thermometer fell below -44°, and the mercury froze.

Simpson's health caused great anxiety; a persistent cough, violent rheumatism, and intolerable pain obliged him to lie on the sledge which he could no longer guide. Bell took his place; he too was suffering, but not so much as to be incapacitated. The doctor also felt the consequences of this trip in this terrible weather; but he uttered no complaint; he walked on, resting on his staff; he made out the way and helped every one. Hatteras, impassible, and as strong as on the first day, followed the sledge in silence.

January 20th the weather was so severe that the slightest effort produced complete prostration. Still, the difficulties of the way were so great, that Hatteras, the doctor, and Bell harnessed themselves with the dogs; sudden shocks had broken the front of the sledge, and they had to stop to repair it. Such delays were frequent every day.

The travellers followed a deep ravine, up to their waists in snow, and perspiring violently in spite of the intense cold. They did not say a word. Suddenly Bell, who was near the doctor, looked at him with some

alarm; then, without uttering a word, he picked up a handful of snow and began rubbing his companion's face violently.

"Well, Bell!" said the doctor, resisting.

But Bell continued rubbing.

"Come, Bell," began the doctor again, his mouth, nose, and eyes full of snow, "are you mad? What's the matter?"

"If you have a nose left," answered Bell, "you ought to be grateful to me."

"A nose!" answered the doctor, quickly, clapping his hand to his face.

"Yes, Doctor, you were frost-bitten; your nose was white when I looked at you, and if I had not done as I did, you would have lost that ornament which is in the way on a journey, but agreeable to one's existence."

In fact, the doctor's nose was almost frozen; the circulation of the blood was restored in time, and, thanks to Bell, all danger was gone.

"Thanks, Bell!" said the doctor; "I'll be even with you yet."

"I hope so, Doctor," the carpenter answered; "and may Heaven protect

us from worse misfortunes!"

"Alas, Bell," continued the doctor, "you mean Simpson! The poor fellow is suffering terribly."

"Do you fear for his life?" asked Hatteras, quickly.

"Yes, Captain," answered the doctor.

"And why?"

"He has a violent attack of scurvy; his legs have begun to swell, and his gums too; the poor fellow lies half frozen on the sledge, and every movement redoubles his suffering. I pity him, Hatteras, and I can't do anything to relieve him."

"Poor Simpson!" murmured Bell.

"Perhaps we shall have to halt for a day or two," resumed the doctor.

"Halt!" shouted Hatteras, "when the lives of eighteen men are hanging on our return!"

"Still--" said the doctor.

"Clawbonny, Bell, listen to me," said Hatteras; "we have food for only

twenty days! Judge for yourselves whether we can stop for a moment!"

Neither the doctor nor Bell made any reply, and the sledge resumed its progress, which had been delayed for a moment. That evening they stopped beneath a hillock of ice, in which Bell at once cut a cavern; the travellers entered it; the doctor passed the night attending to Simpson; the scurvy had already made fearful ravages, and his sufferings caused perpetual laments to issue from his swollen lips.

"Ah, Dr. Clawbonny!"

"Courage, my dear fellow!" said the doctor.

"I shall never get well! I feel it! I'd rather die!"

The doctor answered these despairing words by incessant cares; although worn out by the fatigue of the day, he spent the night in composing a soothing potion for his patient; but the lime-juice was ineffectual, and continual friction could not keep down the progress of the scurvy.

The next day he had to be placed again upon the sledge, although he besought them to leave him behind to die in peace; then they resumed their dreary and difficult march.

The frozen mists penetrated the three men to the bone; the snow and

sleet dashed against them; they were working like draught-horses, and with a scanty supply of food.

Duke, like his master, kept coming and going, enduring every fatigue, always alert, finding out by himself the best path; they had perfect confidence in his wonderful instinct.

During the morning of January 23d, amid almost total darkness, for the moon was new, Duke had run on ahead; for many hours he was not seen; Hatteras became uneasy, especially because there were many traces of bears to be seen; he was uncertain what to do, when suddenly a loud barking was heard.

Hatteras urged on the sledge, and soon he found the faithful animal at the bottom of a ravine. Duke stood as motionless as if turned to stone, barking before a sort of cairn made of pieces of limestone, covered with a cement of ice.

"This time," said the doctor, detaching his harness, "it's a cairn, there's no doubt of that."

"What's that to us?" asked Hatteras.

"Hatteras, if it is a cairn, it may contain some document of value for us; perhaps some provisions, and it would be worth while to see."

"What European could have come as far as this?" asked Hatteras, shrugging his shoulders.

"But in lack of Europeans," answered the doctor, "cannot Esquimaux have made it here to contain what they have fished or shot? It's their habit, I think."

"Well, go and look at it," continued Hatteras; "but I'm afraid it will be hardly worth your while."

Clawbonny and Bell walked to the cairn with picks in their hands. Duke continued barking furiously. The limestones were firmly fastened together by the ice; but a few blows scattered them on the ground.

"There's something there, evidently," said the doctor.

"I think so," answered Bell.

They rapidly destroyed the cairn. Soon they found a bundle and in it a damp paper. The doctor took it with a beating heart. Hatteras ran forward, seized the paper, and read:--

"Altam..., Porpoise, December 13, 1860, longitude 12..°, latitude 8..° 35'."

"The Porpoise?" said the doctor.

"The Porpoise!" replied Hatteras. "I never heard of a ship of this name in these seas."

"It is clear," resumed the doctor, "that travellers, perhaps shipwrecked sailors, have been here within two months."

"That is sure," said Bell.

"What are we going to do?" asked the doctor.

"Push on," answered Hatteras, coldly. "I don't know anything about any ship called the Porpoise, but I know that the brig Forward is waiting for our return."

CHAPTER XXXI.

THE DEATH OF SIMPSON.

They resumed their journey; the mind of every one was filled with new and unexpected ideas, for to meet any one in these regions is about the most remarkable event that can happen. Hatteras frowned uneasily.

"The Porpoise!" he kept saying to himself; "what ship is that? And what is it doing so near the Pole?"

At the thought, he shuddered. The doctor and Bell only thought of the two results which might follow the discovery of this document, that they might be of service in saving some one, or, possibly, that they might be saved by them. But the difficulties, obstacles, and dangers soon returned, and they could only think of their perilous position.

Simpson's condition grew worse; the doctor could not be mistaken about the symptoms of a speedy death. He could do nothing; he was himself suffering from a painful ophthalmia, which might be accompanied by deafness if he did not take care. The twilight at that time gave light enough, and this light, reflected by the snow, was bad for the eyes; it was hard to protect them from the reflection, for glasses would be soon covered with a layer of ice which rendered them useless. Hence they had to guard carefully against accident by the way, and they had to run the risk of ophthalmia; still, the doctor and Bell covered

their eyes and took turns in guiding the sledge. It ran far from smoothly on its worn runners; it became harder and harder to drag it; their path grew more difficult; the land was of volcanic origin, and all cut up with craters; the travellers had been compelled gradually to ascend fifteen hundred feet to reach the top of the mountains. The temperature was lower, the storms were more violent, and it was a sorry sight to see these poor men on these lonely peaks.

They were also made sick by the whiteness of everything; the uniform brilliancy tired them; it made them giddy; the earth seemed to wave beneath their feet with no fixed point on the immense white surface; they felt as one does on shipboard when the deck seems to be giving way beneath the foot; they could not get over the impression, and the persistence of the feeling wearied their heads. Their limbs grew torpid, their minds grew dull, and often they walked like men half asleep; then a slip or a sudden fall would rouse them for a few moments from their sluggishness.

January 25th they began to descend the steep slopes, which was even more fatiguing; a false step, which it was by no means easy to avoid, might hurl them down into deep ravines where they would certainly have perished. Towards evening a violent tempest raged about the snowy summit; it was impossible to withstand the force of the hurricane; they had to lie down on the ground, but so low was the temperature that they ran a risk of being frozen to death at once.

Bell, with Hatteras's aid, built with much difficulty a snow-house, in which the poor men sought shelter; there they partook of a few fragments of pemmican and a little hot tea; only four gallons of alcohol were left; and they had to use this to allay their thirst, for snow cannot be absorbed if taken in its natural state; it has to be melted first. In the temperate zone, where the cold hardly ever sinks much below the freezing-point, it can do no harm; but beyond the Polar Circle it is different; it reaches so low a temperature that the bare hand can no more touch it than it can iron at a white heat, and this, although it is a very poor conductor of heat; so great is the difference of temperature between it and the stomach that its absorption produces real suffocation. The Esquimaux prefer severe thirst to quenching it with this snow, which does not replace water, and only augments the thirst instead of appeasing it. The only way the travellers could make use of it was by melting it over the spirit-lamp.

At three in the morning, when the tempest was at its height, the doctor took his turn at the watch; he was lying in a corner of the hut when a groan of distress from Simpson attracted his attention; he arose to see to him, but in rising he hit his head sharply against the icy roof; without paying any attention to that, he bent over Simpson and began to rub his swollen, discolored legs; after doing this for a quarter of an hour he started to rise, and bumped his head again, although he was on his knees.

"That's odd," he said to himself.

He raised his hand above his head; the roof was perceptibly sinking.

"Great God!" he cried; "wake up, my friends!"

At his shouts Hatteras and Bell arose quickly, striking their heads against the roof; they were in total darkness.

"We shall be crushed!" said the doctor; "let's get out!"

And all three, dragging Simpson after them, abandoned their dangerous quarters; and it was high time, for the blocks of ice, ill put together, fell with a loud crash.

The poor men found themselves then without shelter against the hurricane. Hatteras attempted to raise the tent, but it was impossible, so severe was the wind, and they had to shelter themselves beneath the canvas, which was soon covered with a thick layer of snow; but this snow prevented the radiation of their warmth and kept them from being frozen to death.

The storm lasted all night; Bell, when he was harnessing the half-starved dogs, noticed that three of them had begun to eat the leather straps; two were very sick and seemed unable to go on. Still, they set out as well as they could; they had sixty miles between them

and the point they wished to reach.

On the 26th, Bell, who was ahead, shouted suddenly to his companions. They ran towards him, and he pointed with astonishment to a gun resting on a piece of ice.

"A gun!" cried the doctor.

Hatteras took it; it was in good condition, and loaded.

"The men of the Porpoise can't be far off."

Hatteras, as he was examining the gun, noticed that it was of American make; his hands clinched nervously its barrel.

"Forward!" he said calmly.

They continued to descend the mountains. Simpson seemed deprived of all feeling; he had not even strength left to moan.

The tempest continued to rage; the sledge went on more and more slowly; they made but a few miles in twenty-four hours, and, in spite of the strictest economy, their supplies threatened to give out; but so long as enough was left to carry them back, Hatteras pushed on.

On the 27th they found, partly buried beneath the snow, a sextant and

then a flask, which contained brandy, or rather a piece of ice, in the middle of which all the spirit of the liquor had collected in the form of snow; it was of no use.

Evidently, without meaning it, Hatteras was following in the wake of some great disaster; he went on by the only possible route, collecting the traces of some terrible shipwreck. The doctor kept a sharp lookout for other cairns, but in vain.

Sad thoughts beset him: in fact, if he should discover these wretches, of what service could he be to them? He and his companions were beginning to lack everything; their clothing was torn, their supplies were scanty. If the survivors were many, they would all starve to death. Hatteras seemed inclined to flee from them! Was he not justified, since the safety of the crew depended upon him? Ought he to endanger the safety of all by bringing strangers on board?

But then strangers were men, perhaps their countrymen! Slight as was their chance of safety, ought they to be deprived of it? The doctor wanted to get Bell's opinion; but Bell refused to answer. His own sufferings had hardened his heart. Clawbonny did not dare ask Hatteras: so he sought aid from Providence.

Towards the evening of that day, Simpson appeared to be failing fast; his cold, stiff limbs, his impeded breathing, which formed a mist about his head, his convulsive movements, announced that his last hour

had come. His expression was terrible to behold; it was despairing, with a look of impotent rage at the captain. It contained a whole accusation, mute reproaches which were full of meaning, and perhaps deserved.

Hatteras did not go near the dying man. He avoided him, more silent, more shut into himself than ever!

The following night was a terrible one; the violence of the tempest was doubled; three times the tent was thrown over, and snow was blown over the suffering men, blinding them, and wounding them with the pieces torn from the neighboring masses. The dogs barked incessantly. Simpson was exposed to all the inclemency of the weather. Bell succeeded in again raising the canvas, which, if it did not protect them from the cold, at least kept off the snow. But a sudden squall blew it down for the fourth time and carried it away with a fierce blast.

"Ah, that is too much!" shouted Bell.

"Courage, courage!" answered the doctor, stooping down to escape being blown away.

Simpson was gasping for breath. Suddenly, with a last effort, he half rose, stretched his clinched fist at Hatteras, who was gazing steadily at him, uttered a heart-rending cry, and fell back dead in the midst

of his unfinished threat.

"Dead!" said the doctor.

"Dead!" repeated Bell.

Hatteras, who was approaching the corpse, drew back before the violence of the wind.

He was the first of the crew who succumbed to the murderous climate, the first to offer up his life, after incalculable sufferings, to the captain's persistent obstinacy. This man had considered him an assassin, but Hatteras did not quail before the accusation. But a tear, falling from his eyes, froze on his pale cheek.

The doctor and Bell looked at him in terror. Supported by his long staff, he seemed like the genius of these regions, straight in the midst of the fierce blast, and terrible in his stern severity.

He remained standing, without stirring, till the first rays of the twilight appeared, bold and unconquerable, and seeming to defy the tempest which was roaring about him.

CHAPTER XXXII.

THE RETURN TO THE FORWARD.

Toward six o'clock in the morning the wind fell, and, shifting suddenly to the north, it cleared the clouds from the sky; the thermometer stood at -33°. The first rays of the twilight appeared on the horizon above which it would soon peer.

Hatteras approached his two dejected companions and said to them, sadly and gently,--

"My friends, we are more than sixty miles from the point mentioned by Sir Edward Belcher. We have only just enough food left to take us back to the ship. To go farther would only expose us to certain death, without our being of service to any one. We must return."

"That is a wise decision, Hatteras," answered the doctor; "I should have followed you anywhere, but we are all growing weaker every day; we can hardly set one foot before the other; I approve of returning."

"Is that your opinion, Bell?" asked Hatteras.

"Yes, Captain," answered the carpenter.

"Well," continued Hatteras, "we will take two days for rest. That's

not too much. The sledge needs a great many repairs. I think, too, we ought to build a snow-house in which we can repose."

This being decided, the three men set to work energetically. Bell took the necessary precautions to insure the solidity of the building, and soon a satisfactory retreat arose at the bottom of the ravine where they had last halted.

It was doubtless after a hard struggle that Hatteras had decided to discontinue his journey. So much effort and fatigue thrown away! A useless trip, entailing the death of one of his men! To return without a scrap of coal: what would the crew say? What might it not do under the lead of Shandon? But Hatteras could not continue the struggle any longer.

He gave all his attention to their preparations for returning; the sledge was repaired; its load, too, had become much lighter, and only weighed two hundred pounds. They mended their worn-out, torn clothes, all soaked through and through by the snow; new moccasins and snow-shoes replaced those which were no longer serviceable. This kept them busy the whole of the 29th and the morning of the 30th; then they all sought what rest they could get, and prepared for what was before them.

During the thirty-six hours spent in or near the snow-house, the doctor had been noticing Duke, whose singular behavior did not seem to

him to be natural; the dog kept going in circles which seemed to have a common centre; there was a sort of elevation in the soil, produced by accumulated layers of ice; Duke, as he ran around this place, kept barking gently and wagging his tail impatiently, looking at his master as if asking something.

The doctor, after reflecting a moment, ascribed this uneasiness to the presence of Simpson's corpse, which his companions had not yet had time to bury. Hence he resolved to proceed to this sad ceremony on that very day; the next morning they were to start. Bell and the doctor, picks in hand, went to the bottom of the ravine; the elevation which Duke had noticed offered a suitable place for the grave, which would have to be dug deep to escape the bears.

The doctor and Bell began by removing the soft snow, then they attacked the solid ice; at the third blow of his pick the doctor struck against some hard body; he picked up the pieces and found them the fragments of a glass bottle. Bell brought to light a stiffened bag, in which were a few crumbs of fresh biscuit.

"What's this?" said the doctor.

"What can it be?" asked Bell, stopping his work.

The doctor called to Hatteras, who came at once.

Duke barked violently, and with his paws tried to tear up the ice.

"Have we by any possibility come across a supply of provisions?" said the doctor.

"It looks like it," answered Bell.

"Go on!" said Hatteras.

A few bits of food were found and a box quarter full of pemmican.

"If we have," said Hatteras, "the bears have visited it before we did. See, these provisions have been touched already."

"It is to be feared," answered the doctor, "for--"

He did not finish his sentence; a cry from Bell interrupted him; he had turned over a tolerably large piece of ice and showed a stiff, frozen human leg in the ice.

"A corpse!" cried the doctor.

"It's a grave," said Hatteras.

It was the body of a sailor about thirty years old, in a perfect state of preservation; he wore the usual dress of Arctic sailors; the doctor

could not say how long he had been dead.

After this, Bell found another corpse, that of a man of fifty, exhibiting traces of the sufferings that had killed him.

"They were never buried," cried the doctor; "these poor men were surprised by death as we find them."

"You are right, Doctor," said Bell.

"Go on, go on!" said Hatteras.

Bell hardly dared. Who could say how many corpses lay hidden here?

"They were the victims of just such an accident as we nearly perished by," said the doctor; "their snow-house fell in. Let us see if one may not be breathing yet!"

The place was rapidly cleared away, and Bell brought up a third body, that of a man of forty; he looked less like a corpse than the others; the doctor bent over him and thought he saw some signs of life.

"He's alive!" he shouted.

Bell and he carried this body into the snow-house, while Hatteras stood in silence, gazing at the sunken dwelling.

The doctor stripped the body; it bore no signs of injury; with Bell's aid he rubbed it vigorously with tow dipped in alcohol, and he saw life gradually reviving within it; but the man was in a state of complete prostration, and unable to speak; his tongue clove to his palate as if it were frozen.

The doctor examined his patient's pockets; they were empty. No paper. He let Bell continue rubbing, and went out to Hatteras.

He found him in the ruined snow-house, clearing away the floor; soon he came out, bearing a half-burned piece of an envelope. A few words could be deciphered:--

....tamont

....orpoise

....w York.

"Altamont!" shouted the doctor, "of the Porpoise! of New York!"

"An American!" said Hatteras.

"I shall save him," said the doctor; "I'll answer for it, and we shall find out the explanation of this puzzle."

He returned to Altamont, while Hatteras remained pensive. The doctor

succeeded in recalling the unfortunate man to life, but not to consciousness; he neither saw, heard, nor spoke, but at any rate he was alive!

The next morning Hatteras said to the doctor,--

"We must start."

"All right, Hatteras! The sledge is not loaded; we shall carry this poor fellow back to the ship with us.

"Very well," said Hatteras. "But first let us bury these corpses."

The two unknown sailors were placed beneath the ruins of the snow-house; Simpson's body took the place of Altamont's.

The three travellers uttered a short prayer over their companion, and at seven o'clock in the morning they set off again for the ship.

Two of the dogs were dead. Duke volunteered to drag the sledge, and he worked as resolutely as a Greenland dog.

For twenty days, from January 31st to February 19th, the return was very much like the first part of the journey. Save that it was in the month of February, the coldest of the whole year, and the ice was harder; the travellers suffered terribly from the cold, but not from

the wind or snow-storm.

The sun reappeared for the first time January 31st; every day it rose higher above the horizon. Bell and the doctor were at the end of their strength, almost blind and quite lame; the carpenter could not walk without crutches. Altamont was alive, but continued insensible; sometimes his life was despaired of, but unremitting care kept him alive! And yet the doctor needed to take the greatest care of himself, for his health was beginning to suffer.

Hatteras thought of the Forward! In what condition was he going to find it? What had happened on board? Had Johnson been able to withstand Shandon and his allies? The cold had been terrible! Had they burned the ship? Had they spared her masts and keel?

While thinking of this, Hatteras walked on as if he had wished to get an early view of the Forward.

February 24th, in the morning, he stopped suddenly. Three hundred paces before him appeared a reddish glow, above which rose an immense column of black smoke, which was lost in the gray clouds of the sky.

"See that smoke!" he shouted.

His heart beat as if it would burst.

"See that smoke!" he said to his companions. "My ship is on fire!"

"But we are more than three miles from it," said Bell. "It can't be the Forward!"

"Yes, but it is," answered the doctor; "the mirage makes it seem nearer."

"Let us run!" cried Hatteras.

They left the sledge in charge of Duke, and hastened after the captain. An hour later they came in sight of the ship. A terrible sight! The brig was burning in the midst of the ice, which was melting about her; the flames were lapping her hull, and the southerly breeze brought to Hatteras's ears unaccustomed sounds.

Five hundred feet from the ship stood a man raising his hands in despair; he stood there, powerless, facing the fire which was destroying the Forward.

The man was alone; it was Johnson.

Hatteras ran towards him.

"My ship! my ship!" he cried.

"You! Captain!" answered Johnson; "you! stop! not a step farther!"

"Well?" asked Hatteras with a terrible air.

"The wretches!" answered Johnson, "they've been gone forty-eight hours, after firing the ship!"

"Curse them!" groaned Hatteras.

Then a terrible explosion was heard; the earth trembled; the icebergs fell; a column of smoke rose to the clouds, and the Forward disappeared in an abyss of fire.

At that moment the doctor and Bell came up to Hatteras. He roused himself suddenly from his despair.

"My friends," he said energetically, "the cowards have taken flight! The brave will succeed! Johnson, Bell, you are bold; Doctor, you are wise; as for me, I have faith! There is the North Pole! Come, to work!"

Hatteras's companions felt their hearts glow at these brave words.

And yet the situation was terrible for these four men and the dying man, abandoned without supplies, alone at the eighty-fourth degree of latitude, in the very heart of the polar regions.

END OF PART I.