

WITH NANSEN IN THE NORTH:

A RECORD OF THE *FRAM* EXPEDITION.

BY LIEUTENANT HJALMAR JOHANSEN.

CHAPTER I.

*The equipment of the Expedition—Its start—
The voyage along the coast—Farewell to
Norway.*



It was in the spring of 1893 that we who were to share through good and ill the fortunes of the *Fram* began to assemble in Christiania. We came from different parts of Norway, and as we were strangers to one another, we scanned each other's faces with not a little curiosity. We were all, of course, absolutely confident as to the success of the expedition, and were most cordial in our greetings, wishing each other a successful journey to the Pole. With regard, however, to the time which the journey would take, opinions were divided. Those of us who had never been to the Arctic regions before naturally listened eagerly to the talk of the more experienced about pack-ice and ice-floes.

The expedition consisted of the following members:—

	Born.
Dr. Fridtjof Nansen, chief of the expedition	1861
Otto Sverdrup, commander	1855
Sigurd Scott-Hansen, lieutenant in the Norwegian Navy, who undertook the meteorological, astronomical, and magnetic observations	1868
Henrik G. Blessing, doctor and botanist	1866
Theodore C. Jacobsen, mate	1855
Anton Amundsen, chief engineer	1853
Adolf Juell, steward and cook	1860
Lars Petterson, second engineer	1860
Peder Hendriksen, harpooner	1859
Bernhard Nordahl, electrician	1862
Ivar Mogstad, general hand	1856
Bernt Bentsen, general hand, who joined the expedition at Tromsø	1860

The thirteenth member of the expedition was myself; I engaged to go as stoker, as no other post could be found for me when I applied. My duties as stoker lasted only two

months—until we entered the ice. After that I acted as meteorological assistant.

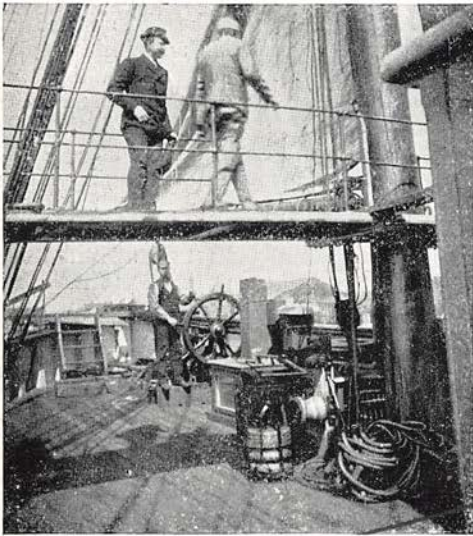
For two months before our departure we had a busy time, and the nearer the day approached the greater was the activity which we displayed. Men from the Akers Engineering Works were to be seen all over the ship. There were mechanics, joiners, carpenters, riggers, and stevedores. Juell and I were busy on the little island of Tjuvholmen, examining and making lists of the provisions. These were afterwards stowed away with the greatest care and order in the main-hold, the fore-hold, and the holds on both sides aft the cabin. In the bows, between the beams and the knees, lay Peder Hendriksen stowing dog-biscuits until the sweat ran down his cheeks. A whole shipload of dog-biscuits had arrived from London when the ship was almost full, and I remember Dr. Nansen telling me what a start it gave him when, on coming on board one morning, he saw the whole deck covered with cases of dog-biscuits, for which, of course, room also would have to be found. However, a place was found for everything. It was really wonderful what that ship held; and she was not empty, either, when we got home. Indeed, we could very well have gone off on a new expedition with all that remained.

We prepared a kind of plan of the various rows of boxes, so that we should easily be able to find the sort of provisions that might be wanted from time to time after we had got among the ice. The coal was stowed in the lower hold and in the bunkers on either side of the engine-room, while the paraffin oil was kept in large iron tanks in the lower hold, in the tween decks, and on the upper deck. A large quantity of the oil was kerosene. This was to be used as firing for the boilers, being sprinkled over the burning coals in the form of a spray by means of a steam-jet apparatus.

Most of the provisions were stowed away in the main-hold, every corner of which was utilised. If the boxes could not be got in between the knees, the space was filled up with firewood, which would always come in

useful. Of good food there was plenty on board the *Fram*—preserved meats from Norway, Denmark, America, and Australia, such as pork cutlets, forced meat balls, roast and corned beef, roast and corned mutton, rabbits, breakfast bacon, which we called "hymn books," various kinds of pemmican, cod roe, minced fish, mackerel, dried and grated fish, fish meal, dried and tinned vegetables, jams and marmalades, rice, chocolate, cocoa, oatmeal, Indian meal, white and rye bread, flour, sugar, coffee, lime juice, Knorr's soups, etc., etc. Everything was of the best quality that could be procured.

Dr. Nansen had the entire control of the vessel's equipment. He superintended everything and personally assured himself



NANSEN AND SVERDRUP ON THE BRIDGE.

that all, both as regards the *Fram* and her provisioning, was exactly as he wanted it to be and satisfactory in every respect. Our chief knew the importance of a thorough equipment and had spent many years in mastering every detail relating to such expeditions. Captain Sverdrup assisted him faithfully throughout in all his work. This man went about the ship, silent and quiet, noting everything, and speaking but little, but getting all the more work done on that account.

At last the day arrived when we were ready to weigh anchor. It was the 24th of June, 1893. The day was dull and grey, but we did not feel at all depressed. We were in high spirits at having at length reached the point at which our journey was

to begin. A large number of people had assembled to see us depart, but it took some little time before we could actually start. There was always something wanting at the last moment. I remember, for instance, that we waited in vain for the supply of ice for the steward, and had at last to go without it. "We shall have plenty of it later on," said the cook. Just before we weighed anchor, Nansen arrived alongside in the petroleum launch from his house at Lysaker, and soon afterwards the *Fram* glided quietly and majestically down the fjord, accompanied by a swarm of steamers and sailing craft, which sent us on our way with music and cheering. We could hardly feel that we deserved all this cheering, for we had as yet done nothing—we were only just going to begin.

We knew that we should have each and all to do our best if the confidence of those jubilant people in us was not to be disappointed. There were those among them, no doubt, who believed that we should never come back again.

At Horten, we took on board powder and signalling guns, and at Rekvik—where the wharf of Mr. Colin Archer, the builder of the *Fram*, is situated—we shipped our long-boats. Mr. Archer and his family came on board and remained with us while the *Fram* proceeded up the bay towards Laurvik and made a tour round the harbour, the people cheering and flags flying all the time. When Mr. Archer left the ship we fired our first salute, this time in honour of the builder of the *Fram*. As he stepped into the boat he said he was sure he would see the *Fram* again. That man knew what the ship was worth.

Later in the day the sea became somewhat rough and the ship began to roll. This soon produced the first symptoms of sea-sickness in several of us. The engine worked admirably, and we were making about 22 miles in the watch. This was not much, but then we were deeply lalen. Things were very lively on board. We were all in excellent spirits. We joked and chaffed each other early and late, but especially at meal-times, when most of us were together. Then the conversation usually turned upon what we were going to do when we reached the Pole. Nansen gave us a little music, and the cook was in a bad temper because we had such enormous appetites. "The coffee," he declared, "won't last beyond Troms." In the meantime we were advancing slowly but surely towards our goal.

On the night of the 28th of June we experienced very bad weather. The sea was not very high, but the round build of the *Fram* caused her to roll heavily. The waves washed constantly over her fore-deck; and on passing Lindesnæs, the most southerly promontory of Norway, we were obliged to throw overboard a number of empty paraffin-barrels and other deck cargo. The davits in which the long-boats hung creaked loudly.

I was in the engine-room with Petterson. It was not the most pleasant of places, being very close and confined, and it was not an easy task to act as stoker in the midst of such rolling. It would have been more agreeable if I had not been upset by seasickness at the same time.

On the evening of the 28th we anchored at Egersund, on the south-western coast of Norway. Next day we steamed past the Jæderen in smooth water, and, with the aid of sails, we made good progress.

On the 30th of June we began using the "Primus" (a Swedish heating apparatus), instead of making a fire in the galley, which place the cook described as being only fit for Old Nick.

At Bergen we were magnificently fêted. Here we received our supply of Tørfisk (dried codfish), which is an excellent article of food for men as well as for the dogs.

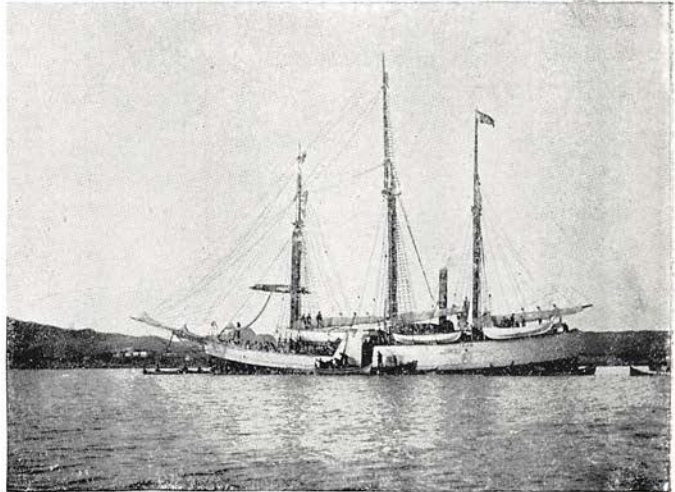
On the afternoon of the 2nd of July the fog obliged us to anchor in the neighbourhood of Stadt, the well-known promontory on the west coast of Norway. Here we had our first opportunity on our voyage of obtaining some shooting. This time it was wild ducks.

On the 5th of July Sverdrup came on board at Bejan on the Thronhjelm Fjord. A younger brother of his left the ship here. Scott-Hansen had hitherto acted as the *Fram's* captain.

On the 7th we anchored at Rørvik, on the island of Vigten, and were busily employed in re-stowing our coals and provisions. During the trip along the coast I lived mostly in the "Grand," as we called it. We had both a "Gravesen" * and a "Grand" *

on board. They consisted of the two long-boats, which, with the help of reindeer skins and sleeping bags, we had fitted up as pleasant sleeping berths for the light summer nights.

Wherever we arrived we found that the people took the greatest interest in the expedition. We used to ask ourselves where all the people came from. We could see nothing but bare mountains, here and there covered with green patches, along the shore; yet we had no sooner stopped than we had a crowd of boats filled with people round about us. At one point, however, we passed a fisherman who was evidently a little behind the times. He hailed us and asked—



THE "FRAM" AT ANCHOR.

"Where are you from?"

"Christiania," we answered.

"What's your cargo?"

"Provisions and coal."

"Where are you bound for?"

"The Polar ice—the North Pole!" was our answer. He evidently thought we were not in our right minds.

On the 12th of July we arrived in Tromsø. It snowed and hailed as if it had been the middle of winter. Here we were joined by Bernt Bentsen, who was to go with us as far as Khabarova as an extra hand, but on our arrival there he was engaged for the rest of the voyage.

At Tromsø Amundsen was severely injured through some coals falling upon him while he was at work in one of the bunkers. He received a big gaping wound in his head, but he did not seem to mind it much. He had

* Two well-known restaurants in Christiania.

his hair cut and washed, and the wound was then dressed and sewn up. He went about his work with his head enveloped in bandages the whole time, until we got fixed in the ice.

A coasting vessel laden with coals for the *Fram* had preceded us, and was to meet us at Khabarova. At Vardö the ship's bottom was examined by divers and cleared of mussels and weeds. At this our last place of call before leaving Norway, the inhabitants gave evidence of their great interest in our expedition by entertaining us to a sumptuous banquet.

On the 20th of July, at four o'clock in the morning, we steered out of the harbour and bade Norway farewell. I went up into the

We had to keep off the coast while steering our course along it under sail and steam.

Kvik, Nansen's dog, which we had brought with us from Christiania, was, of course, a general favourite on board. It was a cross between a Newfoundland and Eskimo dog, and was very fond of anything made of leather. It devoured almost everything it got hold of—sailmakers' gloves, old shoes, clothes, paper, waterproofs, etc. It was not quite so bad, however, as the dog the American North Pole expedition had on board the *Polaris*. That dog used to eat door-handles!

It was on the 27th of July that we made our first acquaintance with the ice. We soon had it on both sides of us, but with much bumping against the ice-floes we forced our way through them in the direction of the Yugor Strait. The engine-room was not now so warm as before. One day we had some trouble down there; a pipe burst and the pump was not in order; but things were soon put right again and no stoppage of the vessel took place.

It was a fortunate thing that we were well provisioned, for we boys on board the *Fram* had mighty good appetites. Each meal was a small *fête* in its way, and was seasoned with many a merry jest. Bentsen, in particular, had an inexhaustible fund of stories. He had always something fresh to tell us and was never at a loss for some amusing

tale. But it was only during the long polar night that he was really appreciated as he deserved to be.

It was a beautiful sight to see the mid-night sun on the horizon looming blood-red over the surface of the water strewn with innumerable ice-floes, while the sky shone blue in the far distance. The *Fram* wended her way onward, readily answering her helm, but advancing slowly and heavily whenever it was necessary to ram through the ice; but with her we could ram without fear. She was now in her element, but under such conditions the man at the helm had a difficult task before him. Here the drift-ice did not always consist of nice, flat, decent floes, but assumed all kinds of shapes and forms. Jagged and cracked, grey, white, and dark, they came drifting past us. Some were even covered with soil, others with fresh water, and all were heavy, slow, and deep in the water.



VISITORS TO THE "FRAM."

crow's nest to have a last look at the land. It was hard to say when we should see it again.

CHAPTER II.

The first ice—Arrival at Khabarova—Meeting with Trondheim—Arrival of the dogs—Life among the Samoyedes—Christofersen leaves us—Excursion on Yalmal—The last human beings we saw.

On the 24th of July we celebrated the first birthday on board. It was Scott-Hansen's, and was kept up with great festivity. We had marmalade for breakfast and special dishes for dinner, followed by speeches.

Next day we sighted Goose Land, on Novaya Zemlya. We expected to reach it in the course of the day, but we were overtaken by fog and every trace of land disappeared.

On the 29th of July, at half-past six in the evening, we anchored off Khabarova. Here the person who had been commissioned to buy up dogs for the expedition in Siberia came on board. His name was Trontheim. His father was a Norwegian and his mother a Russian from Riga, where he was born. He could speak German, and acted as our interpreter with the Samoyedes. We learnt from him that the Kara Sea had been ice-free since the 4th of July, so that we might just as well have been here a little earlier. As soon as we had anchored we were boarded by the Samoyedes. They were dressed in clothes made of reindeer skins; most of them were ugly specimens of humanity, and all were dirty and ill-favoured. But the Russian traders who live here are fine-looking fellows, dressed in their long coats of reindeer skin and with their peculiar caps of reindeer skin. In the summer they stop at Khabarova, bartering their goods with the Samoyedes for various kinds of skins and furs. The Samoyede is very fond of spirits and tobacco, and when he knows they are to be got will often travel long distances with his reindeer or dogs. The traders have learned to turn this to advantage, and by the end of the summer, when they return home to dispose of their skins, they have generally done a most profitable business. The following summer they again return. The Samoyedes came on board to see Dr. Blessing and to benefit by his "healing wisdom." Some were troubled with festered hands, others with deafness. It is not at all unlikely that while these people were on board in the doctor's cabin, and their fur coats were left lying on the cabin floor, they were kind enough to present us with a good supply of vermin for the expedition; for soon after leaving Khabarova we noticed that we had companions of this sort on board, companions with whom we had no particular desire to travel.

There were ten Russians and thirty-five Samoyedes at Khabarova. They had no less than two churches there, one old and one new. On the 1st of August they celebrated a religious festival. Scott-Hansen, Mogstad, and I went ashore in the evening when the ceremony was over. There had been a service in both churches during the day. It appeared that there is a new and an old sect; but as the old sect had no priest just then, it had to pay two roubles to the priest of the new sect for a short service in the old church. As long as this lasted they crossed themselves and were most devout. But in the evening

their religious zeal seemed to have disappeared entirely. Every man and woman was quite drunk. Several Samoyedes from the plains had arrived to take part in the celebration. We saw two of them who were driving like madmen with five reindeer among the tents. Outside one of the tents we saw a number of young foxes tied to small stakes driven into the ground. The two Samoyedes drove right amongst these foxes, whereupon a woman came screaming out of the tent, picked up the foxes, and carried them inside. We could not ascertain what they were going to do with these animals. Several of the Samoyedes were fighting, but they did not strike one another; they merely strove to tear the clothes off each other's bodies. Some amused themselves with a kind of skittles. The pins were pegs stuck into the ground, and at these they threw a piece of wood. Scott-Hansen looked into a tent and saw in a corner a strange-looking bundle of rags. He was rather taken aback when he saw the bundle begin to move and the face of an old woman appeared among the rags. She was completely drunk, and had rolled herself up into a bundle.

Trontheim and some of the Russians were several times obliged to interfere and keep them in order. Nor did the dogs seem to like all this noise. While we were going to the place where they were tied up a drunken Samoyede accompanied us. He wanted to show us that it was not with him that the dogs were angry, but with us. He courageously went up to one of the smooth-haired, white dogs, with upstanding ears, and wanted to pat it; but the dog snarled and snapped at him, and finally seized hold of one of the Samoyede's mittens, which hung and dangled at the end of his coat-sleeves, and held on to it with its teeth. This certainly did not help to convince us as to the dog's friendship for the Samoyede; but it undoubtedly convinced the Samoyede that dogs' teeth can easily find their way through fur mittens.

During these days we were busy cleaning the boilers and shifting the coals. Pettersen and I were inside the boiler chipping off the salt which had been deposited on its sides. There was not much space for moving about inside the boiler. When we wanted to turn round we had to pull ourselves out and then crawl in again on the other side.

We looked a pretty sight when we had finished. The dirtiest of the Samoyedes would have looked clean in comparison with us. Nansen thought we ought to be immortalised, so he took a photograph of us.

Nansen, Sverdrup, and Peder Hendriksen—also called "Smallboy"—set out one day in the petroleum launch to investigate the state of the ice in the Kara Sea. They found plenty of ice; but along the coast there was a channel of open water. They shot a number of birds and one seal. As they were returning to the ship the engine got out of order, so that they had to make use of the oars.

While at Khabarova we put up an electric bell apparatus between the crow's nest and the engine-room, so that the engineer might be in direct communication with the man aloft. We also got ready the apparatus for firing under the boiler with kerosene. The coaster with our coals was now anxiously expected. We began to fear she would never turn up.

On the 3rd of August we were ready, and the dogs were then brought on board. Trontheim was presented with King Oscar's gold medal of merit in recognition of the satisfactory manner in which he had performed his task. Nansen's secretary, Christofersen, also left us here. We should have been greatly pleased if he could have remained and accompanied us on the expedition. It was a solemn moment when he took leave of us

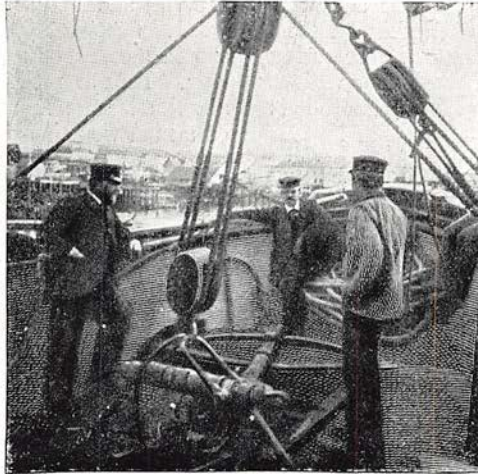
and stepped into the boat with our letters for Norway. He had been supplied from the *Fram* with provisions for his journey. Afterwards we often thought of Christofersen, as he set off for the Samoyede camp in his white reindeer coat which he had bought of Trontheim, and with his rifle and otherwise scanty outfit. In all likelihood he would have many an adventure to go through before he returned home. On our return to Norway we learned that a day or two after our departure the coaster arrived—too late for us, however—and Trontheim and Christofersen returned in her to Vardö.

On the last day of our stay at Khabarova Bernt Bentsen was finally engaged to go on with the expedition. That boy did not take long to make up his mind! The weather

was foggy as, late in the night, we weighed anchor. Nansen preceded the *Fram* in the petroleum launch to take soundings. On this occasion Nansen was in great danger of being seriously burnt. It appears that some of the petroleum was spilt in the boat and caught fire. There had always been something wrong with that launch ever since we began to use it on the Christiania fjord. We passed safely through the Yugor Strait. The firing with kerosene under the boiler had not been successful. So much steam was required to blow the oil into the furnace that it became a question whether anything in particular was gained by it.

On Sunday, the 6th of August, on account of the fog, we made fast to an ice-floe close to the Yalmal coast.

The quiet of Sunday reigned on board. We were all comfortably seated in the saloon, while the dynamo worked away steadily. Nansen, Scott-Hansen, Blessing, Hendriksen and I went ashore for a stroll. Near the beach, where we landed, the water was so shallow that we had to get out and wade, dragging the boat after us for a long way. Those of us who had sea-boots on had to carry the others on our backs both from and to the boat.



Pi'ot.

Scott-Hansen.

Petterson.

AT ANCHOR.

Scott-Hansen and I started off after ducks and managed to shoot a few. While thus occupied we had strayed away from the others. Near one of the small lakes, of which so many are to be found here, we discovered traces of a Samoyede encampment. While walking along and looking cautiously around us, for the night was somewhat dark, we suddenly saw a tent in the distance, probably a Samoyede tent, as we thought. We approached it warily to avoid being attacked by the dogs which, we presumed, would be sure to be about. But as we came nearer we found it was our comrades, who had taken some tarpaulins and oars from the boat and made a tent, inside of which they had made themselves comfortable. We found some driftwood, with the help of which we made some

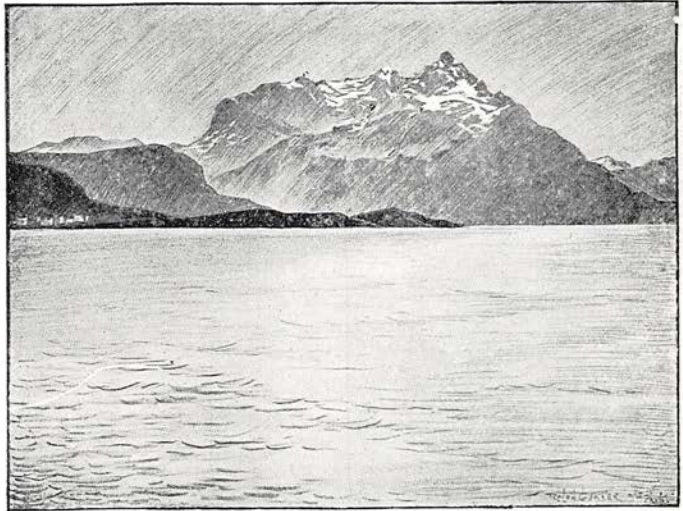
excellent coffee. This, along with a pipe of tobacco, we greatly enjoyed. We returned to the ship early in the morning.

On the 8th of August a boat with two Samoyedes came rowing out to the *Fram*. They kept near the stern of the ship. They were evidently afraid of leaving their boat, or perhaps they were afraid of being unable to get back to the shore again, on account of the ice. One of them was an old man with a grey beard, and the other quite young. We gave them some food, upon which they pointed towards land, evidently indicating thereby that there were more of them there. Bentsen, who was on the after-deck, threw down some biscuits to them, which they seized greedily. The young man at once tried his teeth upon them. There were some dog-biscuits among them, but this made no difference to them. Bentsen then took a matchbox from his pocket and struck a match. They looked up at the flame with open mouths. Bentsen threw the box down into the boat to them. The young Samoyede at once seized it and struck a match. He looked smilingly at the flame and then blew it out, after which he carefully put the burnt-out match back into the box. He evidently intended using it another time. In their gratitude they made Bentsen a present of a pair of boots made of reindeer skin. Soon afterwards we saw them rowing towards the land in their wretched boat.

As we were obliged, by the state of the ice, to remain in the same place, several of us went ashore in order to see something of this little-known country and meet with some of the Samoyedes and barter with them. The party consisted of Nansen, Sverdrup, Mogstad, Blessing and myself. Blessing at once began gathering plants on the desert plain, and I joined him. The other three caught sight of some figures in the distance. They were, no doubt, Samoyedes, but they appeared to be frightened, and took to their heels. Our comrades beckoned to them, but they ran still faster, and soon disappeared from sight altogether. After having gathered some plants and shot

some birds, Blessing and I returned to the boat, up to which the water had now risen. We took the tarpaulin from the boat and made a kind of tent, which formed a good shelter for the night after the others had returned, as it began raining and blowing somewhat sharply. We went on, however, telling stories and yarns until we fell asleep from sheer fatigue. Sverdrup never enjoyed himself so much as on such excursions. As soon as there was sufficient driftwood to make a good fire, and he could get the coffee-kettle to boil, and our pipes were lighted, he was happy, even though the shelter against wind and rain was not of the best.

Early next morning we packed up and started for the ship with the wind right against us, so that at first we did not make



OFF THE NORDLAND.

much progress. When, therefore, late in the forenoon, we got on board and could put on some dry clothes and eat some food, these comforts were all the more welcome. The observations made on this occasion showed that the coast-line at this part of the country had been laid down about 35 miles too far west.

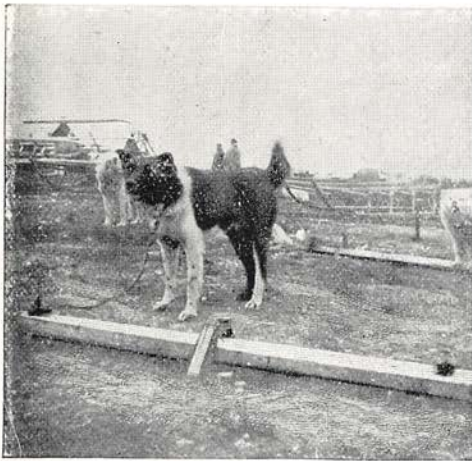
CHAPTER III.

A heavy sea—Sverdrup Island—A reindeer hunt—The first bear—A stiff pull—Firing with kerosene.

DURING the following days the ice was loose and we made good progress under sail and steam. Petterson and I, who usually kept

watch together in the engine-room, now observed that our hair had grown inordinately long, so we set to work and cut each other's hair as closely as ever we could.

On the 12th of August the engine was stopped and we used sails only. To the great joy of all of us we got on famously, for we wanted to save our coals as much as possible, since we expected them to be so valuable to us later on. Two days later I wrote: "August 14th.—We have a head wind. We are now beating about under sail and are making but slow progress. On deck the dogs are faring badly with this heavy rolling; we have been obliged to pat them farther aft. They are thoroughly drenched every time the sea washes over the bulwarks; they keep on lifting their paws from the wet deck and howl terribly while pulling at their



DOG ENCAMPMENT AT KHABAROVA.

chains. Many of them also suffer greatly from sea-sickness, otherwise they have become more quiet and manageable."

One day during my watch in the engine-room the water-glass burst, but fortunately none of the bits of glass struck me in the face. I got off with a douche of the boiling salt water. On the 16th of August we had very bad weather. The dogs suffered greatly. The petroleum launch was very nearly washed overboard. The large massive iron davits in which it was hanging were bent as if they had been steel wires every time the waves broke over the ship, tearing and dragging at the boat. Time after time they threatened to carry it away, but at last we succeeded in lashing it to the ship's side.

"We have a lively time on board this 'rolling tub' every time we have a stiff

breeze. The guns rattle in their stands, the camp-stools fly hither and thither over the saloon floor, the saucepans make a terrible noise in the galley. In the engine-room we have to be careful to avoid being thrown into the machinery."

On the morning of the 18th of August Sverdrup sighted an island. We had not expected to come across any new land on the Kara Sea. The island was named Sverdrup Island, after its discoverer. In the evening we again saw land; evidently it was the mainland near Dickson Harbour.

On Monday, the 21st of August, we anchored near the Kjellman Islands while the boiler was being seen to. We soon discovered that there were reindeer on the islands. There was great excitement on board; nearly all who could handle a gun went ashore, while five remained on the vessel. We landed on the biggest of the islands and set out in pursuit of the deer. The animals were exceedingly shy. We had to creep on all fours for long distances; the ground was not good for stalking, and the deer scented us long before we got within range and set off at lightning speed. We had then to begin a wearisome tramp afresh across moors and plains and again stalk them—with the same result.

Hendriksen and I kept together. We had just sat down on a stone, tired and hungry, when Peder suddenly took the pipe out of his mouth and said—

"There's a bear," and sure enough there was a polar bear coming towards us from the shore. "What small bullets we have!" exclaimed Peder; he had no faith in the Krag-Jørgensen rifle.

We crept cautiously behind a stone, but the bear saw us and came straight at us. We raised our guns—Peder had a long gun and I a carbine—and we fired at the same time, but both of us missed fire. Peder had probably been too liberal with the vaseline. We fired again, and this time the bear was hit in one of its fore-legs. It turned round and made for the shore. It received another shot in one of its hind-legs, but it ran on as fast as ever. Peder's gun got out of order, and he shouted to me not to fire any more, but to run after the bear.

I reloaded and set off after it down the stony incline, and succeeded in sending a bullet through its shoulder, which felled it to the ground.

"Have I finished him?" I asked Peder, who had now come up.

"No," he said, "he can stand more," and

the bear got on its legs and twisted itself round so that its other side turned towards us, when Peder sent a bullet through its other shoulder. He again walked up to it and fired a shot at it just behind the ears.

I expressed my opinion that this was rather superfluous.

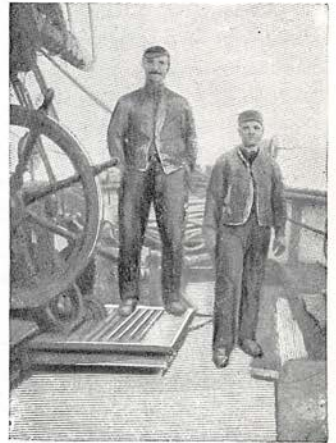
"No," said Peder, "you don't know how sly these beasts are."

I had to bow to his authority—Peder had shot between forty and fifty bears, while this was the first I had had anything to do with. We skinned it and then set off to find our comrades.

We heard some shots; the sun was standing just above the ridge of the rising ground, and as we walked along we saw something in front between us and the sun, which at intervals was shut off from our view. We then saw the big antlers of a reindeer, which came limping towards us. We threw ourselves down on the ground; it came nearer, but suddenly it saw us and set off at full speed in the direction of the shore. One of its legs was broken and hung dangling by the skin. We ran to cut off its retreat, but before we got within range several shots were fired, and the next moment we saw Nansen strike his knife into the neck of the animal. He told us he had already shot another reindeer, and we told him about the bear. Later on, when we all met by the boats after a hard struggle through the boggy moors, we were glad to get some biscuits and butter to stay our hunger with. It was settled that Sverdrup, Jacobsen, and Scott-Hansen should return in one boat to the *Fram* and move her nearer the shore, while we others went in the other boat for the bear and the reindeer. As we approached the spot where the carcass of the bear was lying we saw another one, a fine white specimen, lying asleep a little higher up on the land. It was awakened in rather a rough manner; we approached it quietly and silently, treading in each other's footprints, and when we came within suitable range we closed round him, and a bullet in his forehead and several others in his body sent the bear into a still sounder sleep. It was a fine long-haired beast and was quite wet. It had, no doubt, come straight out of the sea and had been sitting on the shore watching for the young of the whitefish, of which we found the remains near the spot.

The carcasses of the bears lay some distance from the shore, and we had considerable trouble in getting them cut up and carried down to the boat. We were

already tired and hungry, and this work did not improve matters. A stiff breeze began blowing, and while we had been busy with the bears the sea had turned the boat over on her side and filled it with water, so that our guns and bread were soaked. After much exertion we got the boat emptied of water and drawn up on land. We, of course, got wet through. When at last we had got all the flesh and skins into the boat by hauling them on board with a line, we began rowing for the ship. It was very tough work. The current and the wind were against us and we seemed to be stuck to the spot. We again saw a bear on the shore while rowing along it, and Nansen seized his gun, took aim, put it down again and once more took aim, but he did not fire. The swell of the sea was too great to allow him to get a good aim, and so we let the bear go. We pulled away at the oars as hard as we could. Nansen, Blessing, Mogstad, Hendriksen, and myself were in this boat. First we rowed



JOHANSEN AND PETTEYSON AFTER CLEANING THE BOILERS.

along the shore till we got abreast of the ship, when we made straight for her. The boat was heavily laden and the seas were continually breaking over her. The current and wind were as strong against us as ever and we began drifting back. Then we went at it again. We were very much knocked up after all our toil on the island, but all of us set to with a will and pulled with all our might. At last we were near the *Fram*. A buoy was lowered for us, and at length we were not very far from the ship. Peder was rowing on the bow seat, and was to catch hold of the buoy as soon as he should get a chance.

"Have you got it, Peder?"

"No, not yet."

Nansen urged us on and we made another spurt. At last Peder cried out—

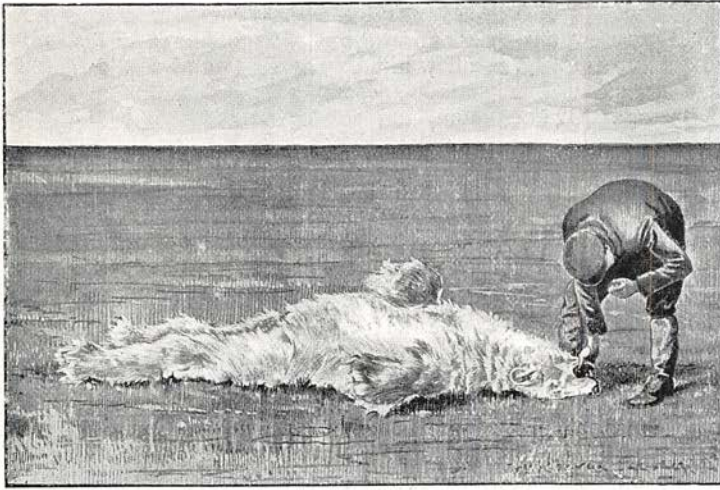
"I have got it!"

This was a great relief to us; but we were

not yet on board—the line might break, so we kept on rowing. At last we got on board with the flesh, skins, and all. Oh, what a treat it was to get into dry clothes and to get some warm food and then to creep into our berths!

Later on the weather calmed down a little. Sverdrup, Nordahl, Bentsen, and Amundsen rowed ashore to fetch the two reindeer that had been shot. On returning to the ship, they kept along the shore for a longer distance than we did before they made for the *Fram*. This made it easier for them to get on board, and they managed it splendidly.

On the 22nd of August we made an attempt to get away from these confounded currents near the Kjellman Islands; but even with the steam at its highest pressure



OUR FIRST BEAR.

we did not succeed in making any headway. We had to anchor again and remain there with the steam up.

"It is now snowing and cold. We are having bear's-flesh for dinner, and we find it excellent. The heart especially is in great demand. A bear's heart is no trifle. Two of them suffice for thirteen men."

On the 24th of August we weighed both anchors, and put on all the steam we could command in order to get away from the currents. This time we succeeded and we steered our course to the north with sails close-hauled. The next day we passed seven unknown islands on the starboard side. Peder was busy cleaning bear and seal skins. The beefsteaks made from bear's flesh are to our taste as good as a "Chateaubriand" at the "Grand."

The wind, which had been so long against us, now began to go down. On the 27th of August we again sailed past some islands and skerries which are not to be found on Nordenskiöld's chart. We were sailing through unknown waters, and had therefore to take soundings from time to time. The dogs are beginning to like their quarters on board much better, and they have also become more friendly with us.

The 28th of August was a notable day, for an important discovery was made in the engine-room. In the morning, while busy firing with the kerosene oil under the boiler, we discovered in the very nick of time, so to speak, that the oil had eaten away a part of the boiler to such an extent that it threatened to burst. A thick crust in the shape of a pointed bullet had been formed in the plate, which would have burst and sent the terrible hot, scalding steam from the boiler over Petterson and myself, who were then in charge of the engine-room. Fortunately this vulnerable spot was discovered in time, and we were not likely to use this method of firing for the future. We should, of course, have to be careful even when using coals.

That afternoon we had been lying moored to a large ice-floe and had been refilling some of our tanks with fresh water. It was a treat to be able to use our legs and walk on the ice. We all turned out and had a regular washing-day in the fresh water ponds on the ice. The dogs were also able to satisfy their thirst properly, for we had been rather short of water on board of late.

CHAPTER IV.

Death among the dogs—Taimur Island—Cape Butterless—The northernmost point of the Old World—A walrus hunt—To the North.

AUGUST 29TH.—"Things do not always go as we should like. We have lost nearly two days in trying to get through an ice-belt.

It turned out that we made this attempt in the wrong place. But this is one of the risks one must run in the Arctic regions. We have encountered a good deal of ice here. On the one side we have land—whether that of an island or the mainland we do not know—and on the other we seem to see open channels, which look as if they would admit of progress. It appears as if we shall have to turn back and make for land and try again. But at present the fog prevents us moving. One of the dogs unfortunately died to-day. Several of them have been ill of late. They have not fared well on the cold, wet deck, exposed to all kinds of weather. If they could only agree with one another, we should put them under the forecabin; but they will fight and quarrel together, and do not seem to know what is best for them—just like a good many of us human beings. Some of us have been out hunting and have returned on board with a few seals.”

On the 30th of August we anchored off the Taimur Island in an open channel. Two dogs have now died and have been dissected by Blessing, who declared that they must have died from eating bears' fat, which in some way or another had poisoned them.

Nansen, Sverdrup, and I went ashore with two dogs after a she-bear with its young one. We followed up the track for a couple of hours, when we found they had gone into the sea. There are now heaps of fresh meat, fat, and skins lying on the deck. We remained off the Taimur Island till the 2nd of September. During that time we cleaned the boilers and looked after the engine, our guns, and the dogs. We made muzzles for all of them with plaited rope, so that they might be let loose and have a better time. It turned out, however, that the muzzles were not of much use.

The nights were now getting colder, and we commenced using reindeer-skins for bed-covering. We steamed for the south-western

end of the Taimur Island to try to get through the sound between the island and the mainland. On the 3rd of September we anchored in two different places. It appears that Nordenskiöld's chart is not so complete as we had believed it to be. We could not quite make out our whereabouts from it. Nansen, Juell, Nordahl, and I set out on a reconnoitring expedition on the 4th and 5th of September. We rowed for seventeen hours, and had no other food than biscuits and a little dried reindeer meat; we had forgotten the butter. The first promontory at which we touched and rested we called "Cape Butterless." We rowed on, taking soundings as we proceeded; here and there we had to pole the boat, and even pull it over the ice.

We shot five seals, all of which sank. We had taken with us our ski, some clothes and tarpaulins for making a tent, and were on the whole well equipped with the exception of food.

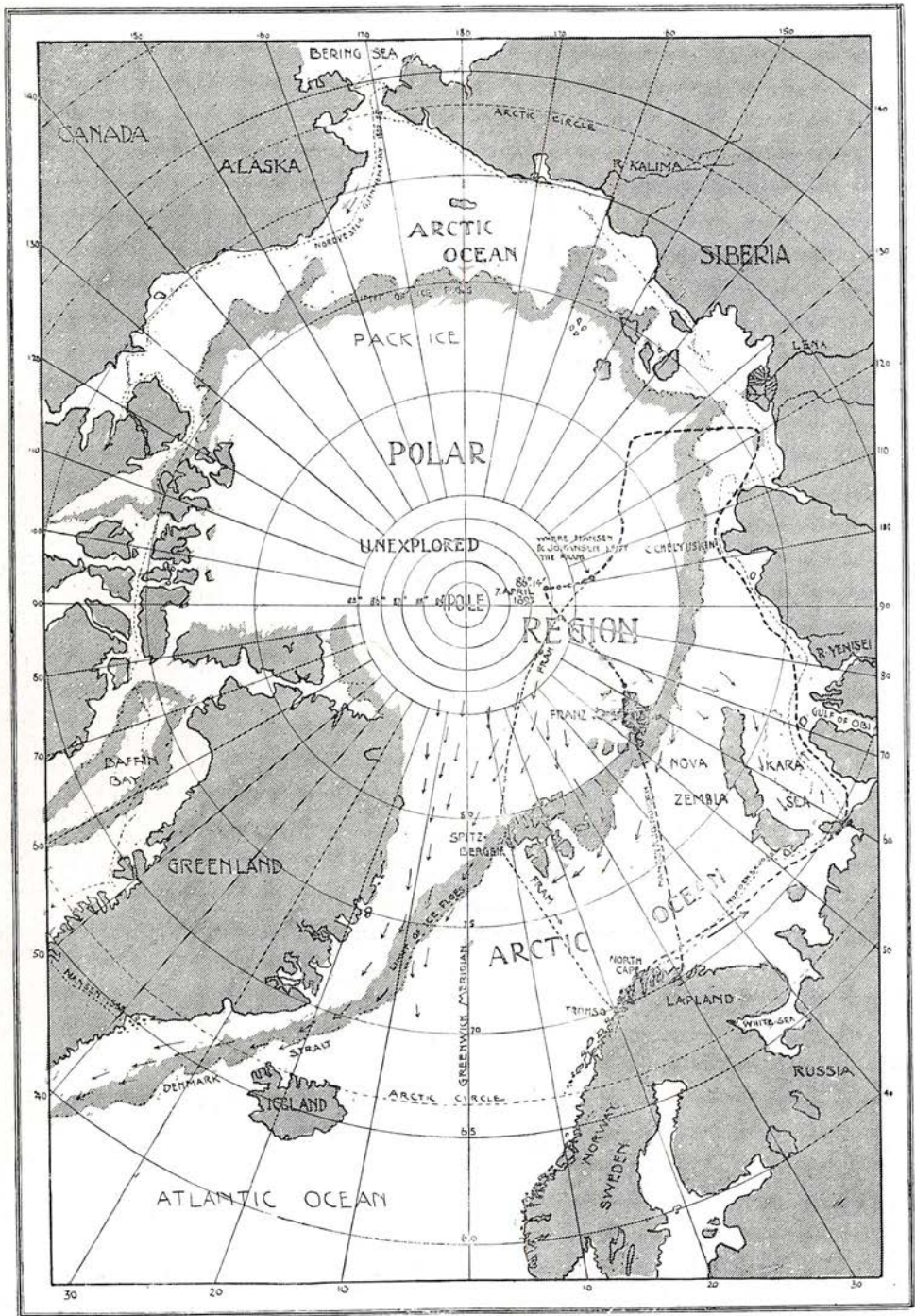
We saw numerous traces of reindeer and bears, but we had no time to trouble about them. We found we could proceed some considerable distance through the sound, but then came an ice-belt which separated us from the open sea, which we thought we could discern in the distance under the blue horizon. It is



SCOTT-HANSEN AND NANSEN HAULING IN SAIL.

very strange that every time we go away from the ship for some purpose or other we always meet with bad weather on our way back, so that, hungry, wet, and sleepy as we are, we have always to exert ourselves to the utmost to get on board. We are always thinking how slowly we get along, and, whenever we look round for the *Fram*, she seems to us as far away as ever.

There had been some talk about taking up our quarters for the night on one of the islands in the strait, but it was a fortunate thing we did not do so, for, on returning on board, the wind increased to a hurricane. We were busy among the coals while we were lying here with both our anchors out. We afterwards tried to push our way through in several places, but without success. Our



MAP SHOWING DR. NANSEN'S ROUTE.

observations here do not agree with Nordenskiöld's chart.

On the 7th of September we did a capital stroke of business. "We have forced our way through the worst part of the ice, which, to all appearance at least, separates us from open water. With Nansen and Sverdrup in the crow's nest, and the electric bell apparatus to the engine-room in order, with the anchor hanging at the bow ready to be dropped, and with one man taking soundings, the *Fram* has to-day made great progress, which has evidently saved us from being shut up in the ice for a year off Taimur Island, and even then we might not have been able to get through."

In the evening we were stopped by the ice, and we remained moored to it till the 9th inst. Nansen went ashore and shot a reindeer. We discovered new islands, as well as fjords and sounds, in every direction, which have not been observed by Nordenskiöld. "To-day, Saturday, the 9th of September, we have made splendid progress—thirty-five miles in the watch—under full steam and sail, after we got out of the ice. It looks as if Jacobsen will lose his bet with me and some of the

others that we shall not get past Cape Chelyuskin this year. Jacobsen is a great hand at betting. He bets with all of us, backing a thing with one and laying odds against it with another, so that he is generally all right in the long run.

"We have now a pleasant time on board the *Fram*, and plenty of good food into the bargain—fresh reindeer, seal, and bears' meat—so that we do not use much of the ship's stores. Mogstad has been shifted from the galley into the engine-room, and Nordahl has taken over the cooking, at which he seems to be unusually clever. We generally assemble in the chart-room after meals, and there we talk and smoke our pipes in cosiness and comfort.

One watch consists of Sverdrup, Bentsen and Blessing on the deck, and Amundsen, with Nordahl or Mogstad, in the engine-room; and the other of Jacobsen, Juell, and Peder Hendriksen on deck, and Petterson and myself in the engine-room. Nansen is in the crow's nest early and late, and Scott-Hansen takes observations."

Sunday, September 10th.—At last I may say we have reached a point which, as it were, marks the beginning of a new section in the history of the expedition. During the last three weeks our prospects have been anything but promising, owing to the condition of the ice we have encountered; and, many a time, when lying at anchor, have we thought that we should have to winter where we were.



LAUNCHING AT REINDEER ISLAND.

Cape Chelyuskin has been on everybody's lips during these weeks, and we were all yearning to get there. At four o'clock in the morning we actually reached it. There was great festivity on board. At four o'clock, just as the sun rose, the Norwegian flag, and our pennant with "*Fram*" on it, at a given signal, were run up on the mastheads. At the same time we saluted with our three remaining shots, the last of which turned out a failure as the cartridge was wet. A bowl of punch, containing a concoction which we afterwards called "Chelyuskin-punch," with fruit and cigars, was served in the festively-lighted saloon, and we emptied our glasses in honour of our safe arrival here.

A festive spirit prevails; even Jacobsen is delighted at having lost his bets.

On the 12th of September, Nansen, Juell and Peder set out to hunt walrus. Several of them were lying crowded together on an ice-floe, and two out of their number were shot. There was a regular commotion among these colossal creatures, as Nansen fired and Peder threw his harpoon the moment the boat touched the floe. From the ship we could see the walruses flinging themselves into the sea and we could hear the bulls bellowing. They did not succeed in securing more

than the two they had shot first. They had not harpoons enough with which to secure more. In the afternoon two others were shot.

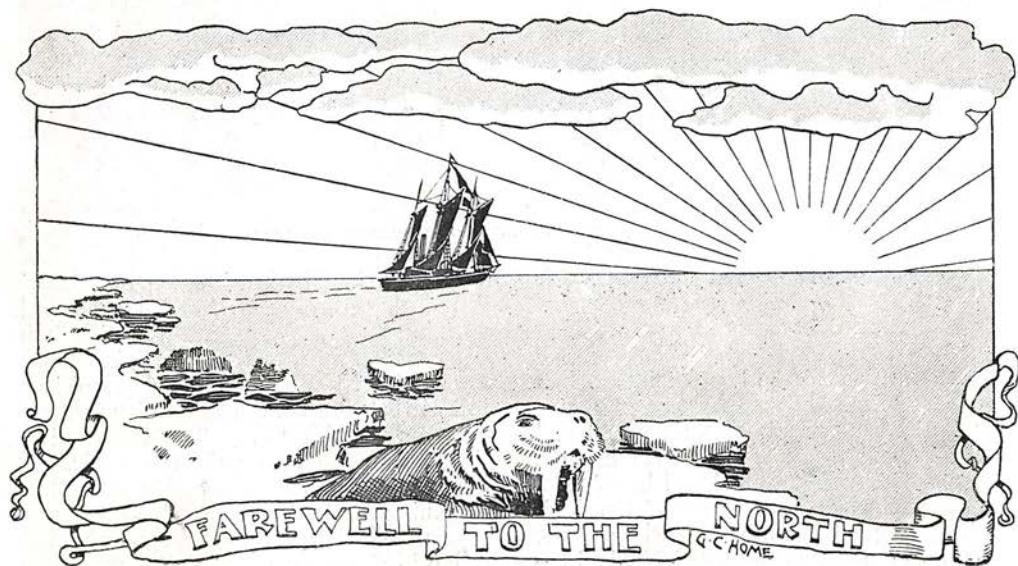
From the 15th to the 17th of September we continued our course, mostly under steam and sail, in different directions, according as the state of the ice permitted. On the 18th we shaped our course northwards from the western side of the New Siberian Islands, which we, however, could not see owing to the darkness. On these islands depôts of provisions had been established for our use

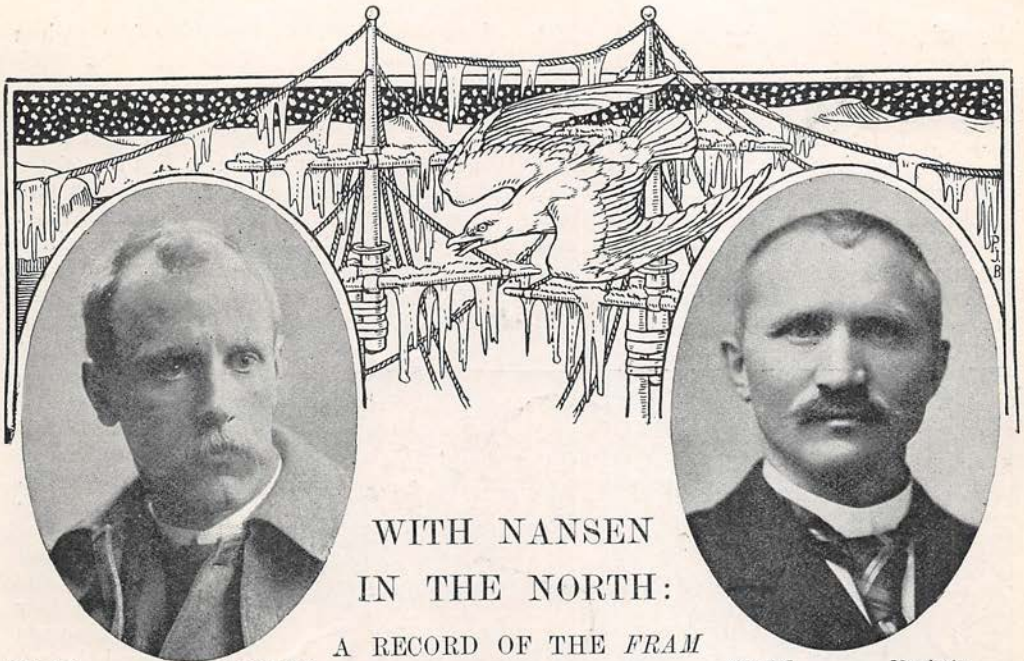
by Baron Toll, of St. Petersburg, who also had provided the dogs for the expedition.



JACOBSEN ON WATCH.

(To be continued.)





WITH NANSEN IN THE NORTH:

A RECORD OF THE *FRAM*
EXPEDITION.

Photo by]

[Lankester.

DR. NANSEN.

Photo by]

[Lankester.

LIEUT. JOHANSEN.

BY LIEUT. HJALMAR JOHANSEN.

CHAPTER V.

Open water—Unwelcome guests—Fast in the ice—Warping—The Northern Lights.



TO-DAY, the 19th of September, we are in 76° north latitude, and are now steering due north in open water with a fair wind and with full steam.

Everyone on board is in the best of spirits at such progress in waters through which no one has ever sailed before. We are eagerly discussing how far we will get before we are laid up in the ice.

A bottle, with a piece of paper on which the longitude, latitude, and the words "All well" have been written in Norwegian and English, has to-day been thrown into the sea.

On the 20th of September we reached $77^{\circ} 44'$ north latitude. In the evening we came into conflict with the ice, and had to alter our course; but, at any rate, it is some satisfaction to know that this is in a northerly direction. The fog came on thickly from time to time.

There is a regular mania amongst us on board for letting our beards assume the most fantastic shapes. Scott-Hansen is exactly

like Olsen, the master carpenter who built the *Fram*; Nordahl is the picture of Victor Emmanuel, and Bentsen of Napoleon III. The last-named is indignant, however, at the idea of his resemblance.

We have seen some birds, both snipes and sea-gulls. Possibly there may be land to the north. On the 21st we sailed north until we were stopped by the ice. The fog is again troubling us from time to time. During the night we proceed, as usual, at half speed. We threw overboard six bottles with letters in Norwegian and English.

To-day we have made an unpleasant discovery. We find that we have some nasty vermin on board, and every man has to undergo a thorough examination. To-morrow we are going to have a thorough boiling of all the clothes infested by the vermin. We blame the Samoyedes from Khabarova for having introduced these unpleasant visitors to us.

September 22.—A grand massacre! We took our clothes, put them in a cask, and sent the steam right into it direct from the boiler through a hose. We almost thought we could hear our enemies singing their death-song. But they got the better of us, after all, as it turned out afterwards. I was busy steaming the bed-clothes, when

the cask, not being strong enough to resist the force of the steam, suddenly exploded, and the deck was covered with clothes enveloped in clouds of steam.

About four o'clock in the afternoon we moored the ship to an ice-floe. Our little community is now in $78^{\circ} 54'$ north latitude, in the midst of the polar ice, far away from civilisation. The weather is splendid and the view around us is magnificent. The ice-floes are of different thicknesses; they are high and low, with open channels

donna does not have anything like such a beautifying effect upon them as coal-shifting.

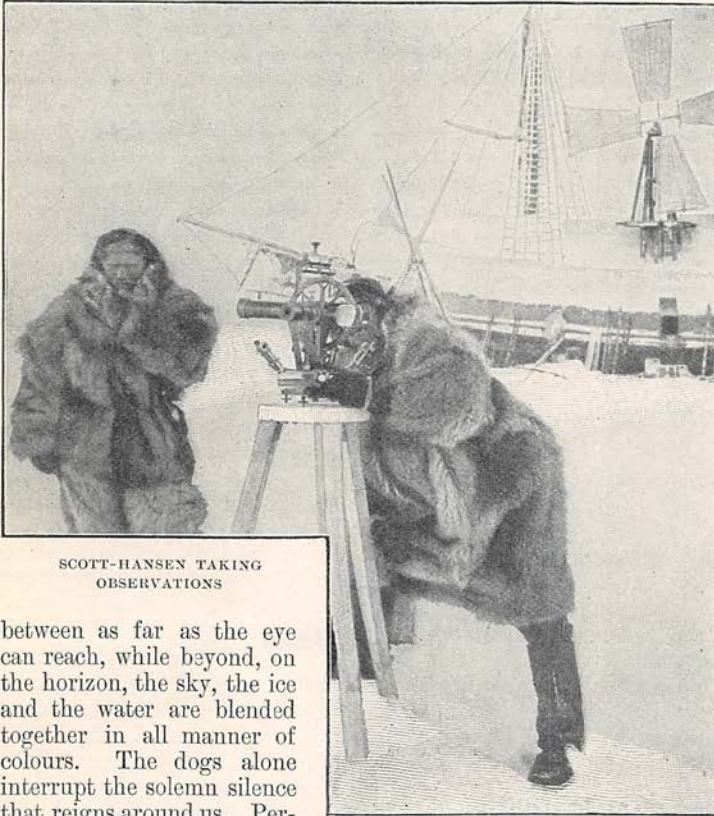
We are beginning to make up our minds that we are shut in, and that these will be our quarters for the winter, with almost the same surroundings as now. The temperature has been from 17 to 19 degrees of frost. Observations for determining our position are taken as often as the fog or the overcast sky permits. The slush ice between the floes is now frozen, and it seems almost as if the ship is beginning to be exposed a bit to the pressure of the ice.

The weather is fine and bright, with 17 to 19 degrees of frost. We have begun cleaning up the place where the dogs are kept, and stowing away in the hold and in the bow some of the deck cargo of planks and beams, including the windmill, which has been lying on the after-deck. We have thus got the deck clear and ample space for taking exercise.

One day we discovered a big bear behind a hummock, not far away from the ship. Nansen and Sverdrup started off there and then, only filling the magazines of their guns with cartridges. All hands went up into the rigging to get a good view of this rare sport; but the bear would not have anything to do with them; it turned

right round and bolted off in a north-westerly direction and then disappeared. It was impossible to get within range of it, although three of the dogs were let loose after it.

We can now get to our stores in the main hold through the dynamo-room and the passage leading up to the half-deck near the entrance to the saloon on the port side, so that we have now access to the stores without going on deck. All the coal dust and rubbish has been swept away and the carpenter's bench has been put up in the hold,



SCOTT-HANSEN TAKING
OBSERVATIONS

between as far as the eye can reach, while beyond, on the horizon, the sky, the ice and the water are blended together in all manner of colours. The dogs alone interrupt the solemn silence that reigns around us. Perhaps they scent a bear or some other animal, and then they give an occasional bark.

Saturday, September 23. — At seven o'clock all hands were ordered to help in shifting the coals. The work goes on merrily. This coal-shifting is a kind of connecting-link between us, for we are all at work at the same time. Of course we become as black as niggers, and at night, even after we have washed, it must not be supposed that we are altogether clean. The eyes especially have a Southern look about them, and we are quite agreed that bella-

so that the deck is now clean and tidy. The cabins have been washed and cleaned out, and one day all hands had a grand washing day in the main hold. On this occasion we weighed ourselves for the second time on board. It afforded us a good deal of amusement, as the weighing-machine, through some defect or other, gave our weights, as far as most of us were concerned, altogether in excess of the actual increase during a month's time. Captain Sverdrup is now, as before, the lightest man on board, and Juell the heaviest.

Blessing has begun for the second time to examine our blood. The water required for washing ourselves and for use in the cabins was heated in the following manner. We took the kerosene oil, which we could no longer use under the boiler, and poured it over some bricks, which then burnt on being ignited. This method was satisfactory enough, but we found that the jet apparatus for distributing the oil in the form of spray was better.

On the 28th of September we moved all the dogs out upon the ice alongside the ship. They were immensely delighted as they were let loose one by one and were allowed to scamper over the ice during their short span of liberty, until they were again tied up. One of them, called "Billettören" (ticket collector), set off at once straight for the Pole. He evidently wanted to get there in time to collect the tickets, as one of us remarked. We have tied the dogs to long boards, which we weighted with blocks of ice, so that they should not be able to get away from us. Nansen is busy during the day catching amphipodæ and other small animals under the ice.

The 29th of September was Blessing's birthday, in honour of which the following dinner was served:—

Soupe à la Julienne, avec macaroni pâtés.
Potage de poisson.
Hanche de renne, avec pommes de terre.
Pouding à la Nordahl.
Glace de Groenland.
Bière.

During dinner we had plenty of music, the organ playing its most appropriate pieces. A festive spirit prevailed, and all of us enjoyed ourselves thoroughly. Everyone apparently over-ate himself; at least, no one would have any supper!

There is a good deal to attend to in the engine-room, where Amundsen and Petterson are constantly at work. Bentsen and Peder are cleaning walrus and seal skins, and

stretching them on the ship's side to dry. The dogs seem to thrive well on the ice. They are very fond of company, and are mad with joy when any of us come to see them. Mogstad is now going to look after them.

September 30.—We are still busy clearing and tidying up in preparation for the winter, and have in consequence plenty to do. To-day we have had snow-shovelling on a grand scale. This afternoon we have begun a laborious but useful task. We have to warp the ship backwards in the slush ice, which is now frozen. Our position is not quite satisfactory, as we run the risk of being exposed to severe ice-pressure here. The great ice-floe which we have on our port side may fall in upon our deck at any moment if the squeezing should begin. Moving the ship is not quick work. We have fixed two ice-anchors in the ice some distance aft the ship, and by means of the capstan, wire ropes, twofold purchase straps, etc., we manage to heave her inch by inch through the frozen slush ice, which, however, has first to be broken up.

Now and then some of us fall through this deceitful slush. I remember Peder falling plump into it, but he managed to turn himself round on his back. He knew he could not get out of it without help, so he remained quietly with outstretched arms and legs and shouted out to Sverdrup, who was close at hand, "Come and catch hold of me, captain." Then Sverdrup came and helped Peder up on to a solid ice-floe.

We have now a fine display of the Northern Lights in the evenings. They quiver across the mid-heavens in ever-changing spirals and tongues of fire. At times, too, we see the grand sight of a shooting star exploding like a rocket, as it is suddenly stopped on its long, curved trajectory. Cards have now begun to make their appearance in the evenings.

CHAPTER VI.

First day of rest—Surprised by bears—The dogs are let loose—Ice pressure—A hunt in the dark.

SUNDAY, the 1st of October, was the first Sunday we had as a real day of rest on board. Otherwise the Sundays had been very much like any other day, so we were glad of a day on which we could have a complete rest. In the forenoon we had

some sacred music on the organ, and read books from our well-stocked library; in the afternoon we had a nap, and after that we settled down for a quiet evening.

Next day at noon we stopped warping the ship, and her final position for the winter was settled. The *Fram* is now lying with her bow to the south; she turned herself southwards at the time when we got fixed in the ice, and afterwards drifted stern forwards.

Scott-Hansen, Blessing, and I were engaged in erecting a tent for magnetic obser-

there was no need for us to be anxious about frightening it away, for it came straight at us. It was evidently in want of a meal. The situation was becoming serious. When Blessing set off to go on board, the bear altered its course, a manœuvre which told us, as plainly as if the beast had opened its mouth and said, "Here, my bold fellow, just keep where you are; you have no business on board; none of your nonsense." We then began gesticulating energetically and to shout and scream with all our might, but all of no avail. The bear was now close upon us, and



Johansen.

Sverdrup.

HUNTING THE BEAR.

vations, sufficiently distant from the ship to prevent the iron on board from having any influence upon the instruments. Just as we were busily engaged in levelling the ice where the tent was to be pitched, I happened to catch sight of a bear about fifty paces off, coming straight towards us. "There's a bear," I shouted. Our first thought was not to defend ourselves, but quietly to signal to the ship, so that the bear should not be frightened away like the first one we saw here. We decided that Blessing should run and fetch the guns from the ship. But the bear seemed to have made 'up its mind;

Scott-Hansen took an ice-staff and I an axe, the only weapons of defence we had. Blessing came back to us and we put ourselves in position to receive the bear. Fortunately, it first walked up to the tent and sniffed at it, and then we began beating a retreat; but it came on in pursuit of us. Just at this moment those on board suddenly became alive to our situation, and Nansen and Sverdrup jumped out on the ice with their guns. Nansen raised his gun to his shoulder and we saw our pursuer fall down. One more shot through the head and all was over.

It was a fine he-bear. No trace of food could be found in its stomach, so it must have been famished with hunger. The only thing we found in the stomach was a piece of brown paper, which it must have swallowed just before, as we could plainly distinguish the name of a Norwegian firm, "Lütken & Moe," stamped on the paper. This was a lesson to us for the future always to take arms with us whenever we left the ship, even if only for a short distance. The bear was photographed by Nansen as it lay on the ice in the last throes of death.

On the 4th of October we took soundings and found a fine, bluish clay at the bottom, at a depth of 800 fathoms. On the same day the ice cracked suddenly astern of the ship, and the clear water that appeared looked like a long ribbon stretching from east to west. We notice that the ice is beginning to pack. A strange feeling comes over one when pacing the deck at night during one's watch; one hears the distant roar and the weird sound made by the heavy ice-floes as they are ground against one another by wind and current. There is nothing to be seen except thirty-three dark bodies lying on the floe close alongside the ship. These are our dogs, which now and then give a sign of life by a bark or a movement which makes their chains rattle.

Next morning a bear was seen approaching the *Fram*. Nansen and Hendriksen went off towards it, moving cautiously from hummock to hummock, but it scented them and trotted off. Nansen, however, succeeded in shooting it down with two bullets at quite a long distance. For dinner we had the great pleasure of eating cutlets from the very bear which had evidently intended making a meal of us. The cutlets tasted excellent. The observations show that we are now in 78° 47' 5" north latitude. The rudder has been hoisted up out of its well and put on the deck. Another unpleasant discovery has been made: the vermin have not yet been completely exterminated on board. When they can stand such an overhauling as that which we gave them, one is almost compelled to believe that they are immortal. Some of us will now have to go through another overhauling.

The windmill is to be put up on the port side, close to the half-deck, and the "Grand" has, in consequence, been moved forward, with its bow resting on the fore-castle. The dogs have been let loose. They made a terrible row and at once began quarrelling and fighting; it took several of us with rope-ends

in our hands to quieten them and get them in order; it seemed as if they had suddenly become wild and imagined themselves back on the Siberian steppes again. When two begin to fight, the entire pack rushes at one of the combatants, and, strange to say, it is always the weaker one that they all go for. It would seem, too, that the fighting is growing worse and worse. All the dogs are going about in a more or less wounded condition, but they seem greatly to enjoy their frequent fights all the same. Some day they will no doubt find out which is the strongest, and then, perhaps, they may quieten down. These dogs are very curious animals; they are a constant topic of conversation and the object of various kinds of observations. We have given them all characteristic names. Thus we have one called "Job." This dog is remarkably quiet and timid; he has long, upright, donkey ears of a yellowish colour, and is of a low, longish build. He keeps himself to himself, goes all alone on long excursions, renounces everything, and has never once growled or snarled at any of us. Then we have "Billettören," with his inquisitive "ticket-collector's" face. He generally stands near the companion leading to the engine-room and barks at us as we put our heads up through the hatchway. Then we have "Barabbas" and "Pan," which have been fighting each other up till now to see which is the stronger. And then there is "Narrifas," a small and active animal with black hair, bright black eyes, and shining white teeth, which he is always showing. "Ulinka" is dark-spotted and smooth-haired, with a pointed head, and is very affectionate. This cannot be said about "Sultan," a brown and white, strongly built creature, with brown eyes and the reputation of being a great fighter. "Caiaphas" has a thick, whitish, woollen coat and a hoarse bark; he seems to suffer from a chronic cold. And, above all, I must not forget the most important of the pack—the one representative of the fair sex—"Kvik," who is brown-spotted and smooth-haired, with a black nose and strongly built frame.

Altogether there are three different races represented among our thirty-three dogs. It generally took some time before all of us could make out how many there were, as long as they were kept on deck, and this frequently gave rise to a little wagering, more than one bet being made regarding the number.

We have now finally disposed of the vermin that have been troubling us. The last five of us who were still infested with

them had to take off every stitch of clothing and deliver up all the old clothes in the cabins and put on brand new ones, while the old things were thrown out on to the ice. The clothes specially made for the expedition have now been handed out to us. They are made of grey Norwegian tweed; knee-breeches with leggings, and Greenland anoraks for the upper body, with fur-bordered hoods, and Laplanders' boots made of sealskin for our feet. Scott-Hansen and I have, in addition, received a wolfskin suit each, for use while taking observations, when they are much needed. We are now using

cracked in several places, so that we were obliged to fasten several ice-anchors to the ice to prevent the floe with the dogs and the one with the observation tent from drifting away from us. On my night watch, between four and five, the pressure was terrible. The *Fram* trembled in her timbers, but she bore the strain well. The pressure against the bow was so great that a thick wire rope, which was fixed to one of the ice-anchors, snapped as if it had been a sewing-thread. I had just stepped on to the fore-castle, and, seeing the great strain on the rope, I jumped quickly down on to the deck, and had no



A "FRAM" GROUP AFTER THE FIRST ARCTIC NIGHT.
(Photographed March 5, 1894.)

sleeping-bags in both the four-men cabins. They are simply grand to sleep in.

October 9.—The rigging-up of the wind-mill has turned out to be a long job, as so many preparations and rearrangements have had to be made on deck. The ice is beginning to press in earnest. We are drifting in a southerly and westerly direction. Some days ago the soundings showed a depth of water of 800 fathoms; now we have 150 fathoms.

Last night all hands had to go on deck, as there was a great movement in the ice. It pressed with great force against us and

sooner got hold of the rope in my hand to let it go, than it snapped with a shower of sparks. Fortunately this did not happen at the moment when I was just above the rope.

To-day, the 10th of October, is Nansen's birthday. No preparations for celebrating it have been made, as Nansen is not well. He has been feverish for several days, and is not yet quite himself. There will not be much difficulty about getting something to do every day during the winter. As yet we have not taken down the running-rigging, stored the sails, nor fixed the awning over the ship; nor have we begun to restow the pro-

visions, sew boat and other sails, nor made any of the necessary preparations for suddenly leaving the ship. There is, in short, a good deal of work to be done besides the daily observations. After eleven o'clock at night we have each an hour's watch in turn. Nansen, Sverdrup, Scott-Hansen, and the cook for the time being are exempt from these watches. Juell is, by rights, store-keeper and cook, but Mogstad and Nordahl have hitherto attended to the kitchen department in turn. Just now it is my turn to be cook, and I find it is as much as one can do to cook and serve up food for thirteen men. We use petroleum lamps when cooking, but they have an obstinate way of their own of getting out of order. One day I was going to boil some corned beef for dinner, and the meat, as was our custom, had been hung in a bag under the ice to soak. But it had been taken out of the water too soon and put on the deck, where it of course froze into a solid mass. As it happened, the lamps were just then giving me a lot of trouble. Nansen had to come to my assistance with the "Primus," but it was six o'clock in the evening before dinner came to table. There was, of course, no necessity for getting any supper ready that evening, and I have not been called upon to cook since.

On the 11th of October we experienced a good deal of ice pressure. We had to turn out and heave or slacken on the four ropes with which we were moored to the different ice-floes.

To-day poor "Job" departed this life. His comrades have made an end of this unobtrusive and remarkably shy animal, which never did any harm to man or beast. It appears that all the other dogs attacked him and tore him to pieces while we were having our dinner.

Nansen continues his researches regarding the sea-water at different depths, and has caught a great number of crustaceans and other marine animals. We have prepared a thermometer house, and placed it on top of the hummocks on the "dog floe." Blessing has been occupied during the last few days in unpacking and arranging in order all our books. He has arranged the library in the room by the companion on the starboard side, and we have now about six hundred volumes in all.

October 13.—The ice has been troublesome to-day. All of a sudden it begins pressing with such a force that one would think the *Fram* would be ground to pieces; then the next moment we have clear water

round the ship. This morning, at five o'clock, the pressure was tremendous. The biggest floe in our neighbourhood, the "dog floe," split in two, and the floes pressed together from all sides. All hands had to set to work. An ice-anchor was lost by being buried under a mass of broken blocks of pack-ice. Shortly after being thus blockaded the ice slackened again, and we now discovered that five or six floes were drifting off with the dogs, all howling and barking. A wild chase ensued to get them on board, and with the aid of our light larchwood pram we finally succeeded in recovering them.

Amundsen and Petterson are busy putting the engine together again. There may be an opportunity of pushing on further north, as the ice seems likely to slacken. It is in a state of unrest both night and day. Scott-Hansen and I had been to the observation tent and taken a magnetic observation, and on our way back to the ship the ice was packing and cracking in all directions round about us, even under our very feet as we jumped from floe to floe.

When evening came we settled down to cards. All at once we heard the dogs beginning to bark furiously. One of us—I think it was Peder—ran on deck to see what was the matter. He came down and said he thought he could distinguish a bear behind a small hummock not far from the ship. We all rushed on deck in the dark, lightly dressed as we were, notwithstanding the 36° of frost. Peder, Scott-Hansen and myself were the first to get hold of our guns, which hung in readiness, the magazines filled. We ranged ourselves along the railing, eagerly looking out over the ice and among the scattered barking pack of dogs. And, sure enough, away among the hummocks, one, if not two massive forms are seen moving parallel with the ship. And so we look along the barrels of our guns and fire away, taking aim as best we can, and loading as rapidly as we can.

A muffled roar is heard, and a form is seen sinking to the ground close to one of the hummocks. The ice presses and creaks; ice-floes are being tilted up and set on end. The dogs are roving about from floe to floe, barking all the time in one particular direction. From the railing of the *Fram* flash follows upon flash. The shots are resounding through the stillness of the night, while the men run to and fro, most of them only half dressed. We refill the magazines of our guns, and then set out over the ice,

one after the other, in the darkness. With our finger on the trigger, feeling our way with our feet, gazing all around us into the night, we steal along, and at last perceive a shapeless form on the ice. It is the bear. We fire a shot at it to assure ourselves that it is dead. Yes, it is as dead as a herring.

Hush! What is that? We hear a pitiable groan further out on the ice. So there must have been two of them, after all. Is the other one wounded? Is it far off? Is it coming back? We get hold of a rope and a lantern, which, however, goes out, and we make a running noose round the bear's head and drag it on board. It is a young one, so it must have been the mother which was moaning out on the ice. The cub has only been hit by two or three bullets, but that is not bad shooting, seeing

itself over the ice by the help of its fore-body, while the hind part of it appeared to be disabled. It was put out of its misery by a bullet and dragged on board. Nothing was seen of the mother. This result of a bear hunt in the dark—two tender young bear cubs, one a year and the other two years old—could not be called bad.

CHAPTER VII.

*More bears—The power of baking powder—
"Johansen's friend"—Electric light—
Shooting competition.*

JUST now Scott-Hansen is engaged upon magnetic observations. Every other day, weather permitting, we determine our position for the time being.

Nansen is occupied in ascertaining the saltness of the water at different depths. Scott-Hansen and I were one day on the ice, determining the deflection with the magnetic apparatus, when the ice began pressing and compelled us to pack up in post haste and hurry-scurry on board. The daily meteorological observations consist in investigating the direction of the wind and its strength, the clouds and their drift, in reading the different thermometers, barometers, and the barograph (a self-registering aneroid barometer), the thermographs, and the hygrometers. This is done every fourth hour, day and night. Later, it was done every other hour.

One morning, while I was busy with these observations, I heard the dogs, which we have had on board since the ice has been packing so much, beginning to howl and whine. I especially noticed "Caiaphas," which stood with its paws on the deck-rail staring intently at something down upon the ice, and barking all the time with its hoarse bark. I looked cautiously over the rail and saw the back of a fine, white bear close to the ship's side. I stole across to the saloon door for a loaded gun. The bear, however, advanced along the side of the ship with a suppressed growl, and would very likely have come on board to us if it had not got my bullet in its shoulder. It gave a roar, jumped a few steps, and fell down. I put two more shots into it. The others were down in the saloon at their breakfast, but came rushing on deck as soon as they heard the shots.

An hour later Scott-Hansen and I were



ICE HUMMOCKS NEAR THE "FRAM," AS SEEN BY MOONLIGHT.

that it is so dark. Later in the evening we are busy mooring the ship.

Next day, Sunday, the 15th of October, the dogs were taken on board and chained up in their old places. Another of them, little "Belki," has now died. Two have disappeared; whether they have been lost during the ice pressure, or have been caught by the bear, we know not. They were "Fox" and "Narrihas." On examination to-day we found that not only had there been a second bear near the ship last night, of which we had felt sure, but we also discovered traces of a third. Nansen, Sverdrup, Blessing, Jacobsen, Bentsen and Mogstad—perhaps more of them—set out on the ice, while Scott-Hansen and I cast longing eyes after them as we stood over by the observation tent, which we were about to take down and bring on board. The sportsmen discovered a young bear with a broken back dragging

busy with some observations on the floe, not far from the ship, when we suddenly discovered a large bear trudging towards us; but as soon as it noticed the blood of the bear which we had just skinned on the ice, it bent its steps in that direction. Scott-Hansen seized the revolver, our constant companion when on the ice. But just then we caught sight of Peder on the after-deck of the *Fram* with his Krag-Jørgensen gun. He took aim, pulled the trigger, cocked the gun again, aimed and fired, but the gun would not go off. Peder began cursing the gun. "The confounded thing won't fire!" he growled. He had, as usual, been too free with the vaseline. At last the gun went off, and the bear, which in the meantime had got close to the ship, set up a terrible roar, raised itself on its hind legs and bent its head to tear the place where it was wounded, beating the air with its paws. It then wheeled round and set off among the hummocks. Scott-Hansen ran after it with his revolver, and sent two bullets into its head as it lay on the ice. We afterwards discovered that Peder's shot had gone right through its heart. That was not a bad catch so early in the morning. It seems likely that we shall keep ourselves going with fresh meat for some time.

Nansen is busy sledge-driving with the dogs. They go excellently when all pull in one direction, but they are not always inclined to do this. On the way back to the ship, however, they pull well together, and go at first-rate speed.

Sverdrup has made up his mind to make some kind of a trap for catching bears. He is speculating on a steel trap, but there has also been some talk about a bear-pit. "So long as we don't catch dogs instead of bears," is Nansen's remark. The dogs are always breaking loose, and if one gets away on to the ice the others at once begin barking. They seem to envy each other the pleasure of getting free.

The temperature is now -12° to -13° . In the saloon it is between 42° and 53° above zero. We are beginning to be troubled with dampness in the cabins. We have had to make thin wooden frames to put between the sleeping bags and the walls in order to preserve them. Jacobsen has invented a very complicated arrangement, with cotton wicks and tin boxes, which will absorb the damp in the cabins.

One day Juell was going to make a cake, which, by the by, is not an uncommon occurrence, and for this he had used a kind of baking powder with the raising properties

of which he was not quite familiar. Before long we noticed a somewhat suspicious smell coming from the galley. Suddenly Bentsen appeared at the saloon door, crying out, "The cake is coming after me, boys!" It appeared that Juell had painted "FRAM" in big letters on the top of the cake, and Bentsen meant to imply that these letters were crawling out through the galley door, the one after the other. "The 'F' and 'R' and the 'A' are outside already," he continued, "and now there is only the 'M' left, and that is so big that it covers the whole cake."

We are not using any heating apparatus in the saloon; we only keep a lamp burning there. Blessing has been engaged in examining the proportion of carbonic acid in the air in the saloon and in the open. On the 23rd of October the *Fram* again lay in open water; the ice had slackened and a big lane had been formed in the ice to the north and the south of the ship. The next day the ice closed in upon us again and began to pack. We had a net for catching marine animals hanging in the water, which was only saved in the nick of time; we found a big catch in it this time.

We have a black and white dog on board which has taken a decided objection to me; as soon as he sees me or hears that I am on deck he begins to bark and growl continuously. Even when I go up into the crow's nest to read the thermometers which we have up there, and he sees the light from the lantern which I carry on my breast while climbing up the rigging, the dog knows it is I, even if he is far away on the ice, and will then begin to bark and growl. The dog, I suppose, must have been frightened the first time Scott-Hansen and I put on our wolf-skin clothes. The dog has no other name than that of "Johansen's friend."

On the 25th of October the windmill, which drove the dynamo for our electric light, was tried for the first time. The result was more successful than we expected after the trials we had made while lying at the wharf of the Akers Engineering Works. We sat down to our dinner in the best of spirits, the saloon being brilliantly illuminated by the electric light. Mr. Oscar Dickson, who had presented us with the electric light installation, was gratefully remembered, and his health was drunk in Norwegian Lager beer. Our supply of beer lasted up to the first Christmas in the ice, after which we restricted ourselves to a mixture of lime juice, sugar, and water.

The electric light was a source of great usefulness and enjoyment to us. When the wind was blowing 4-5 metres in the second, it was sufficiently strong to drive the wind-mill, and we always called that kind of wind "mill-breeze."

On the 12th of October there were great festivities on board and on the ice. The first birthday of the *Fram* was celebrated in a worthy manner. We inaugurated the day's proceedings with a splendid breakfast, French rolls and apple cakes being the great attraction. Scott-Hansen, Blessing and I set about at once arranging a shooting competition in honour of the day. We quite felt the greatness of the occasion as we assembled on the ground with our guns. Two flags were hoisted on the spot where the competitors took up their position, and the *Fram*, the hero of the day, had also flags flying. The range was 100 yards long, and each competitor had five shots. It was the last day on which we saw the sun before it left us altogether. It set blood red as it disappeared before our eyes, not to return again until the next year. The moon, however, was in the sky day and night, shining bright and clear.

The result of the competition was as follows :

First prize . . .	Jacobsen.
Second prize . . .	Johansen.
Third prize . . .	Scott-Hansen.
Fourth prize . . .	Sverdrup.
Fifth prize . . .	Blessing.
Sixth prize . . .	Hendriksen.
Seventh prize . . .	Bentsen.
Eighth prize . . .	Petterson.
Ninth prize . . .	Nansen.
Tenth prize . . .	Nordahl.
Eleventh prize . . .	Juell.
Twelfth prize . . .	Mogstad.

The thirteenth prize was awarded to Amundsen, although he did not take part in the competition.

The committee had collected a few nick-nacks for prizes, each of which was accompanied by suitable mottoes in verse. The presentation of the prizes was to take place in the evening with great ceremony. Scott-Hansen had prepared as the first prize a handsome star, made of birchwood, decorated with a piece of lace, which he had procured from goodness knows where. This was awarded to Jacobsen, the champion marksman. The second prize, a nightcap, was presented to me. The other prizes consisted of a pipe made out of a reindeer-horn, a needlecase, cigars, a roll of tobacco, a memorandum book, etc., etc.

We spent the rest of the evening pleasantly and merrily round a bowl of punch, to which we have given the name of "Fram-punch." It is made of lime juice, sugar, and water, and is flavoured with strawberry or cloudberry jam.

On the 27th of October we again took the rudder out of its well, where it had frozen fast in the ice. While engaged in this work a sharp, bright, bluish light fell suddenly over the ship and the ice around us. It came from a fireball of unusual size and splendour. It left behind it a long double trail of burning particles which was visible for quite a long while.

Blessing still continues his monthly examination of our blood. Instead of decreasing, the number of blood corpuscles has in most cases increased.

Nansen has for the first time been dredging, and has brought up from the bottom of the ocean a wonderful collection of plants and animals. It appears that there is plenty of life here under the polar ice, both animal and vegetable.

The 31st of October was the birthday of Sverdrup, our commander, which, as a matter of course, was kept up with great festivity. We fared grandly on the very best things to be found on the ship. The elements were friendly enough to contribute towards the celebration. There blew such a fine "mill-breeze" that we could use all the electric lamps in the saloon. The arc-lamp sent its powerful rays through the skylight and illuminated the half-deck, where the dogs were lying, just as if it were broad daylight. The light shone far out over the ice, and must have surprised any animals that were out there. We had a revolver competition in honour of the day, and on this occasion Scott-Hansen turned out to be the champion.

Mogstad and Blessing have challenged each other to a revolver match, and a number of bets have been made on the event. The match took place amid great excitement. In the end Blessing won with twenty-five points, while Mogstad scored twenty-one. Loud cheers for the victor resounded over the ice.

CHAPTER VIII.

*Foot-races on the ice—More about the dogs—
The Northern Lights—Adulterated beer—
Ice pressure—Peder attacked by a bear.*

WE have now 54° of frost. Notwithstanding this low temperature, we have still no heating apparatus in the saloon. We

have now received our supply of under-clothing for the winter. With the exception of the stockings, which have been made by Norwegian peasants, all the rest of the hosiery is of English manufacture.

Sverdrup has invented an excellent foot-gear, which consists of wooden clogs with long canvas leggings. Many of us have followed his example and made ourselves similar boots. They are very roomy in the foot, so we can put on plenty of socks. To Scott-Hansen and myself, who have often to remain motionless for hours on the ice during the magnetic observations, they are simply invaluable.

For Sunday, the 5th of November, we had arranged some foot-races on the ice. A long lane which had frozen between the floes formed a splendid course, which was measured and got ready for the occasion. Juell had prepared thirteen prizes, which all turned out to be cakes. The first prize was a great big one and the thirteenth quite a tiny one. But when the day arrived, the course had cracked right across. The gap, however, was not very wide, and we could easily have jumped over it and continued our course on the other side. When, however, the time came, we were too lazy and out of trim for running, and the races did not come off. We were not, in the meantime, to be cheated out of the prizes. It was decided that they should be apportioned by lot, a method which we all agreed was far more easy and comfortable than having all the trouble and bother of running for our prizes.

The next day there were several openings in the ice owing to the strong south-westerly wind that had been blowing for some time. This is the wind we like, for it takes us further to the north, nearer to the goal we are longing for. Here we were only in sixty fathoms of water. On the following day the temperature rose suddenly to 21° and the barometer fell steadily down to 734 mm., when the temperature again fell.

The dogs have again killed one of their comrades. This time it is "Ulabrand" who is the victim. He was attacked in the stomach, and his blood had been sucked from him in the same way as poor "Job's" was. There are two more of the dogs which the rest have got their eyes on. One is a brother of "Job," and the other is a small white dog. But since these savage beasts seem unable to make a right use of their liberty, they must just suffer confinement, and we have therefore had to chain them up again on board.

We are now in 77° 43' north latitude and 138° east longitude. We have thus been drifting to the south and the east, but we could not, of course, expect to drift due north from the very outset.

We have been considering how best we could make use of the kerosene oil, which we cannot use for firing under the boiler, but up to the present we have not been able to come to any decision. The lamps which we use for cooking require a great quantity of the large, round, woven wicks, and we are afraid that our supply of them will run short. Sverdrup, who understands everything, has begun making a weaving loom.

It is not an easy matter to find snow which is entirely free from salt, even in the crow's nest, for the "earthdrift"—as we call the snow which the wind whirls up from the ice—penetrates right up there. The ice is cracking round the *Fram*, and the pressure is becoming violent. They are indeed magnificent trials of strength which we see before our eyes, when the floes collide with one another and are ground to pieces, forming ridges and hummocks all around us.

We have begun making harness of canvas for the dogs, so that it may be ready for use whenever it may be wanted. These dogs are really very curious animals. It now seems as if the whole pack have got their eyes on "Sultan," and as if they have agreed amongst themselves upon his fate, which obviously means death. No sooner do they see their opportunity than the whole pack, with "Pan" as the leader, rush at the doomed one and attempt to strangle him. It was in this way that they killed "Ulabrand" and "Job." And the doomed dog is perfectly aware of what is in store for him. He looks depressed, crest-fallen and frightened, and sneaks about by himself. At the present moment it is "Barabbas," "Sultan," and a little white dog which are doomed. We dare not let them loose on the ice during the day together with the others, but always keep them fastened up on board.

November 15.—When we have a "mill-breeze," and the dynamo is going, one might take this for a factory, or something of the sort, particularly as one goes below through the half-deck into the main hold, where we have our carpenter's shop and many strange things, and hears the noise and whizzing of the machinery and the belting.

This illusion, however, soon comes to an end when we come on deck, where the cutting wind makes us feel the cold twice as

much as we otherwise would, penetrating, as it does, to our very bones and marrow, while the eye only faintly discerns in the darkness the interminable ice-fields, where our little community represents the only visible life.

At times the Northern Lights give the sky the appearance of the whole heavens being on fire. From the zenith the light spreads itself out in fiery flames over the vault of the heavens; the arch with its tongues of fire stretches downwards and is met by draperies and bands of light, while fanlike rays are suddenly ignited and gradually merge into soft waving streamers, which assume all the colours of the rainbow, while close to the horizon the luminous haze of the Northern Lights forms a long, hazy belt of mystic iridescence. We are becoming so accustomed to displays of the Northern Lights that we scarcely take any notice of them, unless they are exceptionally magnificent.

The darkness and the cold have the effect of making all our work slow and tedious. Whenever we have any work in hand, be it ever so slight, we have always to carry lights with us. This, together with the heavy clothes which we are obliged to wear, encumbers us in all our occupations, so that we find our work gives us quite enough to do.

Scott-Hansen shows an exceptional perseverance and patience in his difficult work in connection with the magnetic observations. Hour after hour he will remain on the ice with his instruments, in the severe cold and darkness, observing the deflection and oscillation of the magnetic needle and reading the fine gradations with a magnifying glass, while holding his breath, lest the cold should cover everything with frost. It was a wonder his hands and feet did not get frost-bitten oftener than they did.

The first winter, when I assisted him in the magnetic observations, he was obliged to take these on the bare ice, as it was of no use erecting any tent owing to the pressure of the ice. We afterwards built a snow-hut, where we were very comfortable. We used, therefore, the first winter, to set out on the ice in the darkness with our boxes and tripod stands; and when we had been standing still for some time, we would take a run, walk on our hands, turn some somersaults, or dance to some national tune. Our hands fared the worst, for we were now and then obliged to uncover them during the observations. It was a great treat when we got on board again and settled down in our cosy saloon with a cup of warm tea before us.

On the 17th of November we were in $78^{\circ} 27'$ north latitude and 139° east longitude. We have thus been making good progress towards the north.

Bentsen came one day and asked Amundsen if he had heard that a brother-in-law of Blessing was living on the New Siberian Islands, where he carried on the business of a trader, and was a kind of governor over some thousands of Poles, who had been exiled thither. We began a rather amusing discussion as to whether we ought not to pay a visit to Blessing's brother-in-law, as he was not so very far off after all.

One Sunday evening, just as Scott-Hansen, Blessing, Sverdrup and I were in the middle of a pleasant game of *marriage*, the two first suggested that we should have some beer. They had both for some time been saving up their share—or at least part—of their dinner beer. Some practical joker or other—most probably Bentsen—had evidently got the idea that some fun might be obtained from this mania for saving up the beer; without letting anyone know of it, he mixed some coffee and water with the beer in one of the bottles. As it happened, this very bottle of “bock-beer” was brought in, and Sverdrup and I were invited to partake of the precious beverage; but no one cared to drink first—we all seemed to have our suspicions about that beer. I shall never forget the expression of Scott-Hansen's face when he took a draught, nor that of Blessing when he was going to taste it, in order to decide what kind of stuff it was. A roar of laughter drowned the imprecations hurled by the victims at the culprit's head. They tried hard to discover the guilty one, but all in vain; this only tended to increase the fun. We tried to make as much as we could of this incident, and the discovery of the coffee adulterator became the burning question of the day on board; but he was never found out.

On the 21st of November we took soundings, and reached the bottom at a depth of not quite 50 fathoms. Nansen has been busy photographing by electric and magnesium light.

After each meal we generally got hold of our pipes and took refuge in the cook's galley, which we made our smoking-room, as we were not at first allowed to smoke in the saloon. In the galley we would stand packed like herrings in a barrel, smoking away till we could hardly see one another, and listening to stories and yarns of all sorts, at which Bentsen and Sverdrup were the

best hands. Now and then the cook would grumble and wish us far away, and no wonder, for there was not too much room for washing up.

The dogs, with no roof over their heads, have not been having a very good time. We have now made kennels for them round the skylight, with shavings for them to lie on. In the mornings they are let loose to get some exercise, when one of us, for a week at a time, has to look after them. They do not seem to like leaving their quarters, although these can be anything but warm.

On the 23rd of November there was a ring round the moon, with two mock-moons. The thermometer stands at 22° below zero.

For some time we have suffered from damp in the cabins, and we have the greatest difficulty in preventing our sleeping-bags from being damaged. In both the four-berth cabins we have made an awning of canvas above the berths, and greased it well with tallow, so that the drops roll off and fall into a receiver.

On the 25th of November we were in 78° 38' north latitude. We are now drifting along quite satisfactorily. In order to control our four chronometers we now and then observe the time when Jupiter is being passed by his satellites. We have an excellent astronomical telescope, and in clear weather we get brilliant observations.

November 29.—The dogs have again killed one of their comrades. This time "Fox" was the victim.

When we cut our hair we use a clipper; some of us have had it cropped quite close to the head. There is, consequently, not much to protect our heads from the cold, but then we always wear our catskin caps. Scott-Hansen, when cropping us, left, unknown to us, a small tuft of hair on the nape of our necks, very much like a Chinaman's pigtail, which caused great merriment among the others whose hair had not been cut.

Friday, December 8.—To-day, while dozing in the saloon after dinner, we

suddenly heard a heavy crash on the deck, accompanied by several smaller falls and a rattling noise, as if the whole of the rigging had fallen upon the deck. All hands rushed on deck in an instant. It was the ice, which was in a perfect uproar, making a rumbling noise like an infuriated man who cannot control his temper. This morning masses of ice have pressed up against both sides of the stern in great piles. Suddenly, and without our having been warned by any previous sound, these piles of ice must have fallen down over the stern as the floes receded from the ship.

It was a tremendous crack, but the *Fram* withstood it. We all agreed that no other ship could have stood the pressure we have



DR. NANSEN AMONG THE PACK-ICE NEAR THE "FRAM."

experienced up to the present time. The ice breaks up into pieces, which, as a rule, are forced in under the ship, which, in consequence, is gradually lifted up. The pressure went on for some time during the afternoon. At six o'clock it began again, this time accompanied by a thundering noise and uproar. We were having our supper, but some of us went on deck to have a look at the turmoil around us, while those who remained behind in the saloon had to shout at the top of their voices in order to be heard. Nansen, who forgot nothing in connection with the equipment of the expedition, had been thinking of taking a phonograph with him, but it came to nothing after all. It would, however, have

been most interesting to have been able to bring home with us the voice of this generally silent desert of ice, groaning in anger, as it seemed, because mankind had ventured to force their way into it to lay bare its hidden secrets.

The *Fram* was screwed 4° over to the port side.

Blessing and Nordahl have been unlucky at cards of late, and have lost their rations of French rolls and cakes for the whole of the next month. Poor fellows, they will now have to be content with the hard rye biscuits.

On the 10th of December appeared the first number of our paper, the *Framsjaa*.* It is as yet, of course, only an infant; time will show if we can rear it and bring it up to anything here among the ice. It has begun well, in any case, and goes in for all sorts of subjects; Blessing is the responsible editor.

December 13.—This has been a day full of events in our usually quiet life in the ice. Last night all the dogs suddenly began to bark and make a terrible row. We ran on deck and found that they were all out of their kennels, and those who were near to the railing had jumped up on it, while all were barking in the same direction. They were, however, all tied up. We could not, of course, see anything in the darkness, but Mogstad and I thought we could hear something like the screech of foxes out on the ice among the hummocks. The dogs did not become any quieter during the night; they seemed to be afraid to settle down and go to sleep. Each watch had the same report to make about their uneasiness, especially of those which had their kennels at the foot of the half-deck on the starboard side close to the gangway, which stood open for passing to and from the ice. Three of the dogs, which were fastened close to the gangway, disappeared in the course of the evening. We thought it was because these three had torn themselves loose, and got out on the ice, that the others were whining and making a noise, which they generally did on such occasions.

Next day Hendriksen and Mogstad went to fetch ice for the galley some distance away from the ship. They had not taken any weapons with them. When they had gone some way on the ice they caught a glimpse of a bear coming in their direction, fighting with the dogs, which were close round it. The bear was making straight for them, and they had to make all haste on board to avoid

getting the bear's claws into them. Mogstad, who knew his way about better in the darkness than Hendriksen, having been minding the dogs earlier in the day between the hummocks on this part of the ice, succeeded in getting on board, but it had fared almost fatally with Peder, as he was anything but light-footed with his big, heavy foot gear. When he had run some distance, and believed that the bear was not following him, he turned round and cast the light round about him with the small lantern he was carrying; but before he was aware of it the bear was right upon him, and struck him in the side. Peder, believing his last hour had come, uttered a fearful roar, then, quick as lightning, he struck the beast over the head with the lantern, which then went spinning over the ice. The bear let go its hold and sat up on its hind legs, staring in great surprise at Peder, who at once took to his heels. The bear, however, was not going to let off an enemy so easily—one who had treated him so uncivilly—and set off after Peder, when a delivering angel, in the shape of one of our dogs, appeared upon the scene and attracted the bear's attention, so that Peder this time escaped his clutches. The dogs, which had been barking furiously the whole time, now surrounded the nimble and agile bear, which set off straight as an arrow for the ship, from which shots were now being fired in the darkness. It was Mogstad, who had got on board and had got hold of Scott-Hansen's carbine, which hung near the saloon door. At this moment Peder, quite out of breath, but luckily unwounded, got on board. The first shot missed its mark, and so did the second, and then the gun got out of order. Peder came clattering down the companion in his heavy boots, crying out, "A bear has bitten me in the side! Cartridges! cartridges! Shoot him! shoot him!" Scott-Hansen, Jacobsen and Nansen seized their guns and turned out; but, as bad luck would have it, the guns were not quite ready for use, the barrels being stopped up at both ends with wadding. It was no easy matter to put the guns in order in the dark. There they were, standing with their guns, while the bear had now got close up to the side of the ship and had just struck down a dog and was standing over it. In the meantime Peder was rummaging about in his drawer and calling out for cartridges. Blessing and I now came out deck; I had my gun in perfect order, and Jacobsen, who had been running about looking for a walrus-spear with which to stick the bear, cried out,

* *Fram's Outlook*.

"Shoot! shoot! he is just down there! He is killing the dogs!"

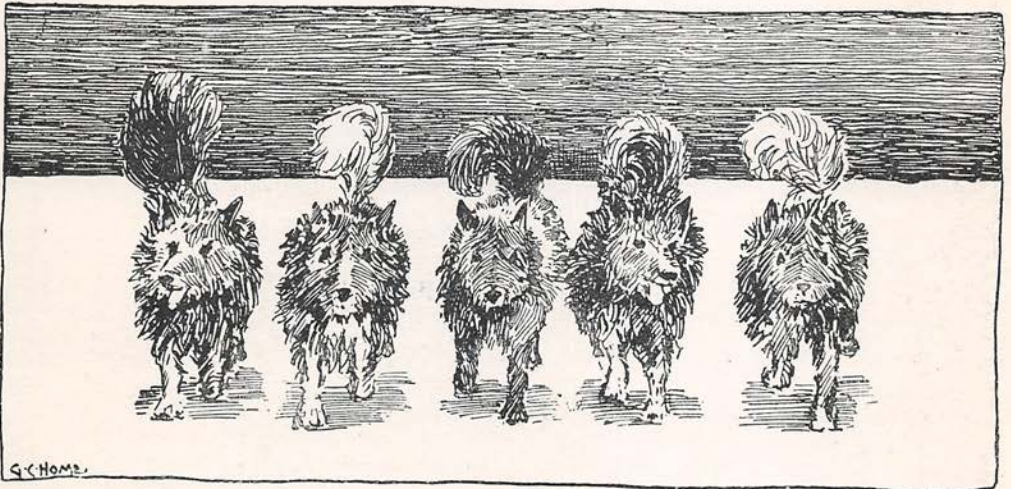
I caught a glimpse of something down on the ice and fired three shots one after the other; we could hear the blood trickling from the bear on to the ice. "Give him another!" cried Jacobsen, which I did. As the beast lay on the ice in the agonies of death, Nansen, who now had his gun in order, sent one more bullet into it. At my first shot one of the dogs jumped up from under the bear, happy and quite un wounded.

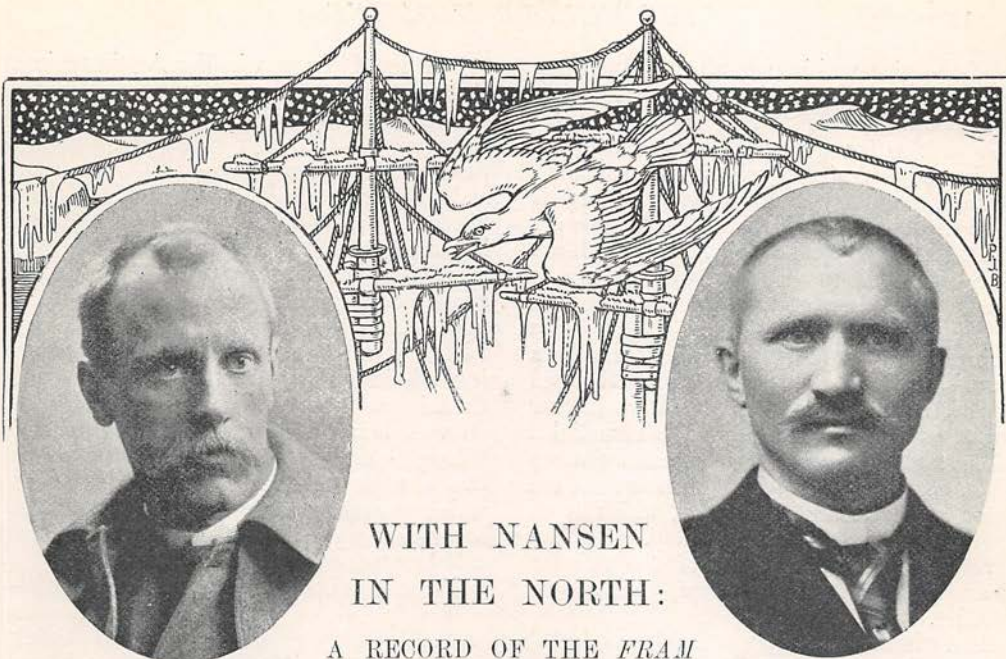
We now saw that the chains of three of the dogs were broken; the bear had simply gone in through the gangway, seized the dogs, torn them from their chains and carried them off over the ice. On searching among the hummocks we found the bodies of two of the dogs; they were "Johansen's friend" and the brother of "Suggen," two of our best dogs. I could now approach "my friend" without being snarled at; poor creature, there he lay with his back all torn

to pieces, a flat, misshapen mass. I felt great satisfaction at having avenged his death by killing his murderer. The other dog had been bitten right across the snout, and it was no doubt this one which had been screeching like a fox. We could see that the bear had been lying right across him while eating away at the other.

It was lucky for Peder that things happened as they did. Fortunately we were now able to see the incident, with all its accompanying disturbance and noise, in a comical light. The bear was not even fully grown, but it was a smart one for all that. But if we have lost some dogs to-day, we have also got some in return. To-day, which is the 13th of the month, "Kvik" has given birth to thirteen puppies, one for each of us thirteen on board. The much talked-of number thirteen has on several occasions proved quite a lucky number for the expedition. We killed five of the puppies, as "Kvik" could not very well manage all of them in this cold climate.

(To be continued.)





WITH NANSEN
IN THE NORTH:

A RECORD OF THE *FRAM*
EXPEDITION.

Photo by]

[Lankester.

DR. NANSEN.

Photo by]

[Lankester.

LIEUT. JOHANSEN.

BY LIEUT. HJALMAR JOHANSEN.

CHAPTER IX.

*Deep soundings—The bear and the trap—
Christmas and New Year—The drift—
Our state of health—Walrus.*



AM now a pupil of Scott-Hansen. With his usual kindness and patience he is instructing me in the method of taking the various observations. We are now in $79^{\circ} 13'$ north latitude. According to this we have drifted 4' to the north in about a week.

One day Peder came into the saloon and said, "There's a bear about." Guns and cartridges were brought out, and all hands rushed on deck. The dogs were barking and running about in the moonlight as if possessed. Some of us set off running in the direction in which the bear had been seen. We did not, however, see any bear, but found the tracks of a monster, which must have been in a great hurry to get away from the ship. Sverdrup thought it was now high time the bear-trap was fixed up, and he set about doing so. Soon afterwards the trap was suspended between two supports some distance away from the ship.

To-day, the 21st of December, is our shortest day. We have been taking soundings

the whole of the day without reaching the bottom, although we have run out 1,000 fathoms. The temperature of the water at a depth of 800 fathoms was 23° F. Ten of us have been busy all the forenoon and afternoon hauling up the line with its heavy lead, weighing about a hundredweight. We kept trudging along, one after the other, with the line over our shoulders, for some distance over the ice, and then back again to the hole. This afforded us excellent exercise and diversion; and with the light from the forge, where Petterson was busy repairing the windmill, the scene on the ice was quite a picturesque one.

The dogs are now doing well, and there seems to be a better understanding between them since they have become aware that they are threatened with death and destruction by their common enemy, the bear. "Billettören" is at his old tricks again; he keeps stealing dried codfish, which he hides away among the hummocks, whither he sets off as soon as he is let loose in the morning, and does not appear again except at mealtimes. "Caiaphas's" tail has become adorned with ornaments in the shape of lumps of ice, which adhere to the hairs, and rattle like a rattlesnake whenever he moves his tail. "Kvik" runs away from her pups to take an airing on the ice, and "Baby" is, as usual,

ready to give us his paw whenever we come near him; "Cannibal" is somewhat ferocious, but not dangerous; "Pan" is still king of the pack as far as strength is concerned, but it is really "Suggen" who is in command; "Barabbas" is "Kvik's" favourite, and is in consequence greatly hated by the others; "Bjelki" is always keeping a sharp look-out for bears, and stares at us with his great, black, melancholy eyes.

December 22.—At four o'clock this morning a bear was near the ship. Jacobsen saw it, forward on the port side. He fired a shot at it, but did not succeed in hitting it at such a long range in the moonlight. Hendriksen, Mogstad, Bentsen, and Sverdrup then came on deck. In the meantime, the bear had approached the trap, which is on the starboard side of the ship. It had evidently crossed in front of the ship to have a look at the strange object over

yonder. It raised itself three times on its hind legs and cautiously examined the whole arrangement. It carefully put a paw against the supports on each side of the trap, sniffed at the bait, which consisted of blubber, and looked all round. It then lowered itself carefully and walked along by the steel wire with which the apparatus was fastened to a small hummock, sniffing round this as if it wanted to see whether it was properly made fast, after which it walked away without troubling itself any further about the whole arrangement. "That fellow has as much sense as a man," said Sverdrup. "I'll swear, now, that a Samoyede would not have been able to make anything out of it, but would have walked straight into the trap."

The bear, on coming nearer the ship, was shot; a bullet through the shoulder settled it. Jacobsen and Peder could never agree as to whose bullet it was. The bear was not very large, but it was pretty fat. We discovered on cutting it up that it had devoured a considerable portion of a copy of the *Illustrated London News*, which it had found close to the ship.

Our first Christmas in the Arctic regions is upon us, and the saloon of the *Fram* resounds with the old greeting of "A merry Christmas!" To-day, in the old country, these words pass everywhere between man and man, between high and low. We are keeping Christmas all by ourselves, free and independent of everybody, here in our own kingdom. We do not need to trouble ourselves about authority and laws; we have none other than those we ourselves have made. And our little community is thriving admirably up here. Yet how much should we like to be among the dear ones at home, if only for a little while! Thoughts every now and then overcome us like a warm current, thawing all the ice which separates us from the south, and then everything up here in the darkness and the cold becomes quite light and warm.

We were seated round the table on Christmas Eve, in our thick woollen jerseys or anoraks, when suddenly an elegantly dressed person, with collar and cuffs and a white tie, stood in our midst. It was Scott-



A SKI COMPETITION.

Hansen, who had dressed in his cabin for the occasion. He looked just as if he had come straight from Norway with greetings as he shook hands with us all. From the captain's cabin came another well-dressed figure. This was our commander, who, in his usual quiet way, silently took his seat. All this seemed to us like a breath of civilisation.

After supper Nansen fetched two boxes from his cabin. They contained presents to us all from Scott-Hansen's mother and *fiancée*. With child-like pleasure we received our gifts of knives, pipes, cigarettes, etc. I got a target with darts, and I think it would have pleased the fair donors if they could have seen how, on many an evening and far into the night, we amused ourselves with this game, winning cigarettes and gingerbread from each other as the result of our skill.

Cakes, which did great honour to Juell, almonds and raisins and other fruit, as well as some toddy, were then placed on the table.

The organ was out of order, and Mogstad had not yet got out his fiddle, so I had to play on my accordion. And then we sang, and Nansen gave us some recitations. Now and then we took a trip on deck, and it was then that the absolute solitariness of our position impressed itself upon us, with the magnificent moonlight shining over the endless ice-fields around us which separated us from civilisation. It was very cold, the temperature being 36° below zero.

On Christmas Eve we were in $79^{\circ} 11'$ north latitude. Our paper, *Framsjaa*, appeared this week—a specially well-filled number. We had now an artist on the staff of the paper, and he contributed some clever sketches entitled, “The Nansen Boys in Time of Peace,” and, “The Nansen Boys in Time of War.” In the former, when no danger is at hand, we are represented as armed with guns, revolvers, and long knives; in time of war, when the bears are about, we have nothing but a lantern.

Between Christmas and New Year things go on as usual. Some of us complain of being unable to sleep at night; sometimes they lie awake the whole of the night. I, for my part, cannot complain. Blessing has begun taking notes of the sleeping on board for statistical purposes.

The Old Year is rapidly coming to an end. As yet we have not proceeded very far to the north since we became fixed in the ice. It seems that it is the wind which has most to do with our drifting. If it is northerly we drift to the south, and if it is southerly we drift to the north. To-day, we had a fire in the saloon for the first time. It was very pleasant, but I am afraid we are not very well off with regard to fuel.

The last day of the year arrived dark and cloudy, but the weather cleared up in the course of the day, and when the Old Year bade us farewell the whole of the heavens were ablaze with Northern Lights. We were then in $79^{\circ} 6'$ north latitude, and the thermometer stood at 33° below zero.

We spent the evening pleasantly and merrily. The *Framsjaa* contained, among other news, telegrams from Norway about most remarkable political changes. “Hutetu,” our artist, contributed a drawing in pastel, representing a female figure sitting on the horn of the moon, surrounded by flaming Northern Lights running in spirals and bands, and looking in surprise at the *Fram* as she lay in the ice below. Nansen made a speech just as the Old Year was passing, thanking us all for our pleasant

comradeship throughout the Old Year, and hoping this would continue in the New.

January 1, 1894. — A welcome to the New Year! May it be a good year for us, and enable us in course of time to reach our goal. It brings us cold, with the thermometer at 36° below zero; but then it also brings light with it. It has made its appearance among us with the heavens radiant with Northern Lights. It will also bring us another great light, one that we can discern from day to day on the horizon in the south. Perhaps it will also enlighten us with knowledge when it has become a little older; but that at present is the secret of it alone. Perhaps, however, it is darkness in grim earnest that the New Year has in store for us. But, whether it comes with light or with darkness, it is no doubt best that its knowledge of the future should remain unrevealed. The days, as they pass by, the one after the other, grow longer and longer.

When the sun arrives we are to have a grand sun festival. This will be a kind of service, a sort of sun-worship, if you like. Let me here mention that there is no kind of divine service held on board; each one is left to worship in his own way.

With regard to our life on board the *Fram*, I can only say that on the whole we got on well together, and that our relations with one another were all that could have been desired. It was, of course, impossible to avoid frictions altogether. The continual intercourse day and night in such limited space, with its monotony, in the very nature of things would tend to ruffle one's temper on the slightest provocation. The Arctic night, no doubt, had also to a certain extent a depressing influence upon our spirits. I think, however, that the whole thirteen of us will agree that we got on well together.

During the month of January we had almost continuous southerly winds, and we drifted, therefore, at a good pace towards the north. Now that it was clearly proved that it was the wind upon which we had to depend, we all, naturally, only wished for southerly winds, so that we might push on further and further to the north. Never were such beaming faces seen as when a regular gale from the south-east was blowing. Then the question of reaching the Pole itself was often discussed, the time in which we might possibly get there, whether we were likely to reach it in the ship or by sledges, whether we might after all be compelled to leave the *Fram*, and so forth. Maps were brought out, and the history of

former expeditions was read and discussed. We lived through all their experiences, but at the same time we knew that we were far better off than any other Arctic expedition before us. Many a life has been lost in the service of Arctic exploration, and dearly bought were the experiences upon which Nansen built, when he prepared his plan and fitted out the expedition which was destined to excel all others in its achievements. Here we were, on our splendid ship, with all the comforts one could desire, with plenty of food and with no fear of hunger or cold. The horrors of the Arctic night were unknown to us; we sat safely in our gallant craft, and let the ice outside thunder and crash as it liked. Of illness we knew nothing, and scurvy, that terrible and most dreaded enemy of the Arctic explorer, we did not fear, for our provisions had been well and carefully chosen.

On the 6th of January we were in $78^{\circ} 57'$ north latitude, and two days later in $79^{\circ} 6'$; during the following days we went on drifting steadily to the north. The thermometer was at 40° below zero; the quicksilver was frozen, and we were obliged to use thermometers with spirits of wine and other liquids.

As early as the 14th of January we were discussing the idea of making a sledge expedition to the Pole, when we had got further north, and thence to Franz Josef Land, while the *Fram* was to try to get out of the ice and steam thither and meet the sledge expedition there. The sledge expedition was only to consist of three men, while all the dogs were to be used.

Scott-Hansen has begun taking observations with the pendulum apparatus; this has to be done at night, when everything is perfectly quiet. The thickness of the floes on the side of the ship is four and a half feet, while the floes before the bow are five and a half feet through. How thick the ice will be when the pressure forces one floe under the other, it is not easy to foretell.

On the 22nd of January a large open lane was seen not very far off in a north-

easterly direction. We then enjoyed the rare sight of seeing the reflection of the moon on the surface of the water. Next day the lane was covered with a thin sheet of ice. Later in the morning we heard one of the dogs making a terrible row in that direction; we thought, of course, it must be a bear, as they were barking as they generally do on such occasions. Nansen and Sverdrup had gone over to the place, and Nordahl and I also set out in the same direction to measure the temperature of the water and to take a sample to test its saltness. As I lay on my face on the ice, reading the thermometer by the light of the lantern, I heard a puffing noise and the splashing of water and ice. We got the guns ready and jumped upon a small hummock to receive the animal, shouting to the men on board that we thought there was a bear about.

We could hear Nansen shouting back that it was a walrus and that we must not fire; they had gone on board for harpoons and lines with which to catch it.

When we got on board we heard that Nansen and Sverdrup had come across a walrus lying on the ice, when they came to the place where "Caiaphas" stood barking. It threw itself into the water



A SEA OF ICE.

and vanished. They were now trying to find it again, but they were not successful.

It gave rise to a good deal of speculation, to meet with a walrus here, in the midst of the desert of drifting ice, with hundreds of fathoms to the bottom of the ocean, where it seeks its food. There must surely be land in the neighbourhood, or we must be above some banks. We had taken soundings with a line nearly 130 fathoms long, without finding any bottom. For some time that walrus remained a mystery.

When we are out on the ice the *Fram* looks quite picturesque as she lies there somewhat coquettishly on one side, while the ice-floes lovingly embrace her powerful hull, the masts pointing majestically towards the sky, and the rigging thick with hoar-frost. The windmill is going, and whirls round and round, showing that there is life in the midst of the solitude.

CHAPTER X.

Changes in the ice—Trying the dogs with the sledges—The return of the sun—A ski-tour in 60° below zero—An eclipse of the sun—Unsuccessful bear-hunting—Spring.

WE have now begun taking long walks on the ice, and have a kind of notion that we may find land to the north of us. One after the other comes down from the rigging, believing that he has caught a glimpse of land. When daylight returns we shall see.

On the evening of the 27th of January a violent pressure began in the ice. We got through it all right, however. In the lane, about 200 yards to the north, there was a terrible hurly-burly. But although it was some distance off, and the ship lies as securely fixed as if in a vice, we now and then feel violent shocks, as if there were a wave-like motion in the ice. And these waves of ice, which are about six feet thick, and in many places packed together to the treble and even to greater thicknesses, are not to be despised.

Scott-Hansen and I had to set out to save the anemometer and the thermometer on the floe close to the ship, as the ice was beginning to crack on the port side about thirty yards off. The following day we set out to look at the terrible havoc around us. It was an imposing sight to see the results of the forces which had been at work. The ice was crushed to pieces and piled up in blocks and smaller fragments to a height of nineteen feet. In one place we saw an ice-floe in the shape of a monolith raised on end, and reaching twelve feet in the air, while it was only two or three feet in breadth. The *Fram* now lay as if in a valley surrounded by ridges of ice on all sides, but mostly astern. Between the ridges, which generally run in a western-easterly direction, the enormously thick ice had cracked and been ground to pieces, so that our surroundings were now quite new.

Towards the end of January it was so light that we could read a newspaper in the middle of the day, but still no land was to be seen. On the 1st of February we assumed that we had passed, or were passing, the 80°. On account of the overclouded state of the weather we had not been able to take any observation. Nevertheless, as we had had a splendid wind, we decided upon celebrating the occasion in a small way. The more *fêtes* and celebrations we have the

better, and we always try to avoid amalgamating them.

The next day we found we were in 80° 9' north latitude, and 132° east longitude, showing a drift of 19' in three days.

During the whole month of February we made but slow progress. On the 9th inst. we again passed the 80°, having drifted southwards. And after that we drifted forwards and backwards, so that in the beginning of March we found ourselves still in 79° 53' north latitude, and 134° 57' east longitude.

There was now great activity on board; we were busy making sledges and mending our ski. We were driving with the dogs and learning how to guide them with whips similar to those used by the Eskimos, consisting of a short handle with a very long



PETTERSON TAKING A "CONSTITUTIONAL" ON THE ICE.

lash. Occasionally, also, we were to be seen on the ice alongside the ship busily engaged in practice at hitting the empty tins which Juell had thrown there.

When out driving, however, we did not succeed in guiding the dogs in the Eskimo manner. We were obliged to drive with them in the way to which they had been used, that is, by letting a man go on in front and show them the road. When the ice is flat, a team of four dogs can easily draw two men. We also tried experiments with different sledges to ascertain which were the best for hard and for loose ground. Nansen and Sverdrup had the experience gained on their Greenland expedition to help them in these experiments.

We tried different kinds of runners and metal-fittings: round, concave, and flat runners, and fittings of aluminium, German

silver, and steel. It was, of course, important to have all these thoroughly tested, so as to ascertain which was the best.

"Billettören," poor fellow, has just died quietly and peacefully. He has been poorly of late, and died, so to speak, in his bed. The climate was, no doubt, too severe for him; so he has had to leave this life and his favourite occupation of gathering together dried codfish away among the hummocks. The editor of the *Framsjaa* offered a prize for the best epitaph on "Job" and "Billettören." I believe it was Juell who won the prize.

The saloon has been transformed into a workshop for all kinds of work. On the deck are lying sledges which have to be lashed, and ski which want new fastenings. Some of us are repairing *komager* (Lapp boots made of reindeer-skin), while others are looking to their canvas boots, which they prefer. From Sverdrup's cabin cometh the homely sound of a sewing machine; he is making sails for the boats.

We are also taking tours on ski round about our quarters. The temperature is generally about 45° below zero, but it takes a good deal to make one feel cold when on ski.

On the 16th of February we saw a mirage of the sun above the horizon in the shape of a red flaming torch. This was the occasion of a preliminary sun festival. The proper celebration was held on the 20th of February, although we could not see the sun on account of the cloudy sky; we could only see the reflection of its light in the clouds above. We had another shooting competition in honour of the day, but without prizes. Peder and Nansen were the best shots on this occasion.

Our first Arctic night was thus at an end. But we did not find that any of us had suffered in any way during this dreaded period. The sun did not meet those pale and emaciated faces and bowed figures of which we hear so much in connection with other expeditions. It was our good ship and our excellent provisioning which we had to thank for this.

We measured the thickness of the ice in several places. In a lane which was formed about a month earlier, where the snow was thinnest, the ice was thickest, viz., 22 inches, while where the snow lay thicker it was only 17 inches, by no means a slight difference.

On the 1st of March we attempted to take some soundings. In our first attempt, however, we lost the lead through the breaking of the wire, and in our second we ran out a line of about 1,700 fathoms, but did not reach the bottom.

No one had thought of such a depth in these regions. For this reason we were not too well supplied with materials for soundings; but we started a rope-walk on the ice, and began making sounding-lines from wire ropes in a temperature of 40° below zero.

One day Nansen caught in his net a great number of small infusoria, which looked like a kind of living fireworks. They shone with a wonderfully pretty greenish-blue colour as he shook the net.

The severe cold has not had any injurious effect upon us worth speaking of, but we have, of course, had to be careful.

Peder has had his cheek frost-

bitten, while Bentsen has had one side of his nose frozen every day. He thinks that part of it will become quite black when he gets back to warmer climes. Scott-Hansen has often had his fingers frost-bitten when taking observations, and on one occasion, when Nansen was photographing me, my nose all of a sudden turned white without my being aware of it. Nansen had to tell me to make haste and rub it with snow.

One day Nansen, Sverdrup, Scott-Hansen and I set out on a ski tour, the temperature being 60° below zero. We wore fur coats, but only our ordinary thick tweed trousers. When we had proceeded some distance we discovered that we had nearly lost all feeling in our knees, and had then to begin rubbing and beating them to get life into them again. We now altered our course so that we got the wind, which was travelling about three metres in the second, obliquely, instead of



A HALT ON A SKI TOUR.

directly against us. The ski are easily broken in severe cold, as the wood becomes very brittle. Many a pair were destroyed in consequence. As for Jacobsen, none of the ski were strong enough to carry him. Eventually some were specially made for him with steel runners underneath, but they also went to pieces.

When we are out on similar excursions we generally use our Iceland woollen jerseys and wind-clothes. The latter are made of a light material through which the wind cannot penetrate, the trousers being made wide enough to pull on over the usual ones, and

Sverdrup followed the dogs and soon discovered some holes made in the ice in the lane by a walrus. More of us went to join in the search for the walrus, but all in vain. It is most difficult to understand how these animals can manage to exist here in the midst of the thickest and closest drift-ice; but the fact remains that they are found here.

We are having westerly and south-westerly winds, and are, in consequence, unfortunately drifting southwards. Our life on board goes on as usual; we have now more opportunity for taking exercise since daylight has returned.



A SKI EXCURSION.

the jacket in the shape of an Eskimo anorak, with a hood to draw over the head which can be pulled tightly with a cord. We find these clothes most useful as a protection against the biting wind.

On the 12th of March the temperature was 60° below zero. This was the lowest temperature observed by us.

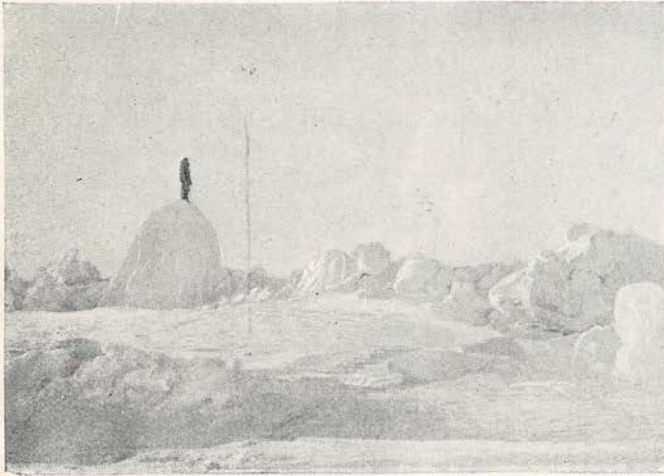
One day we heard the dogs making a terrible row and barking loudly. We all thought there were bears about. "Ulinka" and "Pan" were let loose and they set off westward towards a lane which had been formed in that direction. Nansen and

Our library has been in great request; on more than one occasion it has been a great comfort and pleasure to us. Books about earlier Arctic expeditions were those read at first. A number of volumes of English illustrated papers are great favourites; we enjoy the pictures almost as children do.

The dogs are let loose in the mornings, as usual, to take exercise on the ice; they bark and carry on terribly to get loose, but no sooner have they got on the ice than they want to get on board again. But they are not allowed on board until dinner-time, when most of them creep back into their kennels.

One of them, little "Bjelki," who has a remarkably thick coat, always remains outside and goes to sleep in a temperature of -60° ! Another one, "Haren," a long-legged, white, smooth-haired dog with pointed ears and a long snout, will never come on board with the others; he never feels cold, and likes best to be on the ice. "Sjöliske," a small, snappish brute with a tangled white coat, and a great fighter, although he has scarcely any teeth left, was to-day taken down into the saloon to be dried. "Kvik," who has the privilege of being there, became exceedingly jealous at this. When any of the dogs are brought down into the saloon, they become so quiet and docile as to seem quite embarrassed at all the grandeur and finery to be seen there.

We have had to shoot one of "Kvik's"



JOHANSEN ON A HUMMOCK WATCHING FOR THE BEARS.

pups, which suddenly went mad and ran round and round the deck, frothing at the mouth.

Daylight is now shining right down into the saloon to us. We have taken away the kennels round the skylight and put in double windows. The electric light is well enough, but it is not to be compared with sunlight.

At the end of March we are in $80^{\circ} 4'$ north latitude, and the temperature stands at -26° . The sun is now quite high in the heavens, and we are using it for our observations. In spite of the cold, the sun gives out so much heat that the snow in the bow of the *Fram* has begun to melt. The dogs are basking in the sunshine, and showing their joy by trying to tear each other to pieces. The puppies take after their elders,

and every morning they fight on the deck to their hearts' content.

On the 6th of April we expected an eclipse of the sun. Scott-Hansen had made a calculation as to the time it would occur, and how long it would last. He, Nansen, and I began in good time to watch the sun. We used the large telescope and the theodolite, two of us observing, one at each instrument, while the third kept the time. Scott-Hansen and I were observing as the time drew near, and we both almost simultaneously cried out, "Now!" when the moon entered upon the disc of the sun, which occurred a few seconds later than Scott-Hansen had calculated.

The next morning, while I was taking the meteorological observations, my attention was drawn, by "Ulinka's" barking, to two bears close to the large hummock astern of the ship. It was difficult to distinguish them in the bright sunshine, as they were as white as the snow. I seized a carbine which hung ready loaded with a few shots, and Mogstad, who in the meantime had come on deck, seized another. The bears, which stood scenting the air, and had probably been disturbed by the noise of the dogs, faced right round and made off. We jumped down on to the ice and ran after them. I had low wooden shoes on my feet, and was constantly losing them in the snowdrifts. It was a she-bear with her one-year-

old cub that had been near the ship. I was to be responsible for the mother, and Mogstad for the cub. When we reached the large hummock we could see them some distance ahead, but at rather a long range. We fired, and could see that both the bears were hit. The mother was hit by three bullets, and then fell over, and the cub was also seen to fall. But neither of us had any more cartridges besides those that had been in the guns, and, unfortunately, these did not contain expanding bullets. The cub raised itself and made a spring forward. The mother twisted herself round, got on to her legs, and trudged off as if in a dazed condition. Then she lay down for a while, and then again set off after her cub. I ran on board to fetch more cartridges, and to give the alarm that two

bears had been fired at close to the ship. All hands helped to get guns and cartridges ready. Nansen set off on ski without having had anything to eat. We did not see him again until the evening.

Quite an expedition was now fitted out and started for the place where the bears had been wounded, but we saw neither them nor Nansen. I climbed a hummock to get a better view, while the others went on in advance with sledges to fetch the bears, of which we felt sure. Suddenly I caught sight of two other bears, not far away, but they discovered me at the same time, and took to their heels. It was only the work of a moment to get the gun off my shoulder

and to load it, and off we ran, across ridges and past hummocks and lanes, while we now and then caught a glimpse of the bears in front of us. Peder, who was the only one besides myself who had a gun, followed up the chase for a while, and Nordahl and Petterson also joined. I was lightly clad, and pushed on as fast as I could. In about an hour and a half I was the only one in a pursuit which, after all, led to nothing. I could see by the tracks that the bears had reduced their speed, and I hoped to have gained upon them; but at last I saw it was impossible to overtake bears on ski, and, when shortly afterwards a fog came on, I had to retrace my steps to the ship, which I reached in time for dinner. In the afternoon many of us set out in search of the bears, but all in vain.

Nansen came back in the evening after a long and difficult pursuit of the wounded bears; he had followed up the blood-stained tracks as far as he could, but the animals had managed to get away somehow.

We have impregnated our ski with a mixture of tar, stearine, and tallow, which makes them run exceedingly smoothly. There is a great difference of opinion as to which of

us has the smoothest ski; we often have competition runs from some hummock or other which is suitable for the purpose, and use all the tricks we know of to get our ski to slide, if only a couple of inches further than those of the others. Those belonging to Sverdrup and Nansen slide the longest distance, the former being a pair which Nansen has made himself on board, while the latter are a pair of thin birchwood ski from Finland.

During the month of April we have been drifting northwards fairly well. On the 18th we were in $80^{\circ} 23'$ north latitude, and on the 28th in $80^{\circ} 40'$. During the latter part of the month the temperature was about



TAKING THE TEMPERATURE OF THE WATER.

4° below zero. We take observations of the temperature at different depths in the ice both morning and evening. We have four holes bored in the ice, respectively at a depth of 0.40, 0.80, 1.20, 1.60 metres, and we find that the further we get down into the ice the warmer it is. At 1.60 it is only half as cold as at 0.40 metre. The temperature of the water is 33° at a depth of 200 metres.

We greatly enjoy going on ski in the sun, and the dogs also seem to enjoy the warm weather, although they may feel rather warm with their thick fur. Little "Bjelki" is puffing and panting, with his tongue lolling far out of his mouth, just like the dogs at home in the dog days, the difference being

that the temperature here is 5° below zero, and that the dogs can cool their heads by burying them in the snowdrifts. We have now sunshine throughout the twenty-four hours.

Yes, at home the spring is approaching; the birds are coming from the south as its first messengers, and all nature is brightening up and enjoying the new life around. At home the sun and the snow are fighting the old battle with greater results than here with us.

Everything here is just as before; the great difference is that now it is light both night and day, while before it was dark. But here there are no fields requiring to be laid bare, no plants or trees anxious to shoot forth; we see no flowers, and hear no birds singing, we see nothing of all those things we now think were so wonderfully pretty when we were at home.

When May arrived, the weather became milder; we had plenty of favourable wind to gladden our hearts, and on Whit Sunday, the 13th, we had reached a latitude of 80° 53'. The same day we saw a sea-gull coming floating over the big hummock. It was a message of spring. In the course of the summer we shot several birds: ivory gulls, Arctic petrels, snow bunting, and no less than eight young specimens of the very rare Arctic-rose gull, or Ross's gull. Peder would not allow us to shoot the black guillemots. "They are lucky birds," he used to say.

Our paper, the *Framsjaa*, appeared pretty regularly, but one Sunday no number was published. In the next number the editor informed his readers, in reply to many anxious inquiries, that the new rotary printing machine had been delayed by ice in the Elbe, but that now it had arrived safely, and the paper would thereafter be greatly enlarged and appear regularly. A column for "questions and answers" would be a new attraction, and the editor would undertake to reply fully to all kinds of questions, no matter what they might be. The last number contained a remarkable poetic effusion, with the title, "What is eternity?" This contribution, the editor remarked, had arrived after the edition was printed, but he was so impressed with the poem that he would not keep it from his readers for another week, so he decided, quite regardless of expense, to print a new edition containing the poem. "With our new rotary machine nothing is impossible for us," said the bare-faced editor.

CHAPTER XI.

Summer excursion on the ice—Midsummer Day—"Suggen" and "Caiaphas"—The drift.

THE 17th of May, 1894.—The anniversary of the Norwegian Day of Independence opened with bad weather, like the previous day. But we took no notice of the weather, for we had been in a festive mood since the early morning, and were bent on celebrating the day in a worthy manner. Such a curious procession the world has probably never seen as that which on this day, high up on the interminable ice-fields in the far North, wended its way around a ship lying fast between masses of ice. The weather was such as no festival in honour of the Norwegian Day of Independence had ever been celebrated in before. The *Fram* was, of course, decorated as befitted the occasion.

First of all came Nansen with his small Norwegian flag on a bear-spear, and then Sverdrup with the pennant of the *Fram* waving in the breeze. Next came a sledge drawn by two of our best dogs, while the other dogs ran about, apparently surprised at the strange sight. The sledge was driven by Mogstad, while I sat beside him with my accordion, representing the band. The music was not brilliant, but it must be remembered that with the thermometer at ten degrees, and a biting wind, one's fingers were somewhat affected by the cold. After the sledge came Jacobsen and Peder, the former with his gun, and the latter with his long harpoon and walrus-line round his shoulders; then Amundsen and Nordahl with a red banner, in the midst of which stood a Norwegian viking breaking a spear in two, with the inscription, "Forward! forward, Norwegians! What we do, we do for Norway!" Then came Blessing with his banner; it was one of his own shirts, on which was painted with large red letters, "N. A." (Normal Arbeidsdag, or Normal Working Day). The shirt was fastened to the end of a harpoon-spear with a cross-piece for the sleeves, and in defence of his banner he carried rifle, revolver and knife. After him came Scott-Hansen with the meteorologist's banner, consisting of a large tin plate, on which stood, on a red background, the letters "Al. Str." (Almindelig Stemmeret, or Universal Suffrage). It was a striking banner enough, but it gave us a lot of trouble; it was blown to pieces during the procession, and had to be repaired, and later

on, when Nansen was speaking, it would persist in keeping up a rattling noise, and had, at last, to be turned edgewise to the wind. Last of all came Juell, our cook, with the kettle belonging to our cooking range on his back, and a big fork in his hand.

In the early morning we had decorated ourselves with bows of the national colours. We had some trouble about the blue colour, and had, at last, to use paper, but for the red and white we found some suitable cloth. Even "Suggen," the patriarch among the dogs, went about with a long ribbon bow at his neck. Bentsen and Petterson did not join us, as they were devoting themselves to the preparation of the dinner.

At twelve o'clock the procession started in the order mentioned above. A strange, solemn sight, no doubt, it must have been to see us, with our banners and devices, gliding on our ski around the *Fram*, which lay there, safe and sound, pressed a little over on one side by the ice. I played the Norwegian national song, "Yes, we love this country," etc., and we all thought it sounded most impressive. We marched twice round the ship, and thence to the big hummock astern, where Nansen proposed a cheer for the *Fram*, which had hitherto borne us so well on our expedition, and which he hoped would do the same in the future. The ringing cheers resounded far out over the ice. We then returned to the ship, where we made a halt by her side, while Nansen ascended the bridge and delivered a speech in honour of the day. He hoped that all at home were well; there were, perhaps, some, whose minds were filled with anxious thoughts on our account, but he only wished they could know how well we were faring, and they would be quite easy in their minds. Up to the present we had reason to be satisfied, and if some unforeseen circumstance did not occur, we might succeed in bringing honour to our country, and make it respected in the eyes of the world, should we really succeed in reaching our goal. The speech was received with cheers for our country, which

were given with the full force of our lungs.

Then followed the salute: four shots from our cannons thundered forth over the silent ice-fields. Some of the dogs took to their heels, frightened out of their wits. "Baby" and "Rattlesnake" did not appear for some time afterwards.

A splendid dinner was then served in the saloon, which was festively decorated with flags. The conversation turned upon our return home, a subject upon which, in our happy moments, we are generally apt to fall back, and which always carries us away. After dinner cigars and coffee. In the evening refreshments, consisting of figs, raisins, almonds, and ginger-bread, were served round.



A MERIDIAN ALTITUDE OF THE SUN IN THE SUMMER OF 1894.

May 18.—"The day after"—but no visible after-effects among any of us. The wind continues with drifting snow. It is E. to S., and travels about 10 metres in the second. The ship has been twisting herself round, and is now lying in the direction of S. $\frac{1}{2}$ E. instead of S. $\frac{1}{2}$ W. The sky is overcast, and we can take no observations at present. The temperature is 14° below zero.

Two days afterwards we take an observation, according to which we are in $81^{\circ} 12' 4''$ north latitude, and in $125^{\circ} 45'$ east longitude.

Amundsen is making an apparatus with which to measure the current at different depths, and Petterson, who is fond of cooking, has relieved Juell as cook, and they will now act as such for a fortnight each.

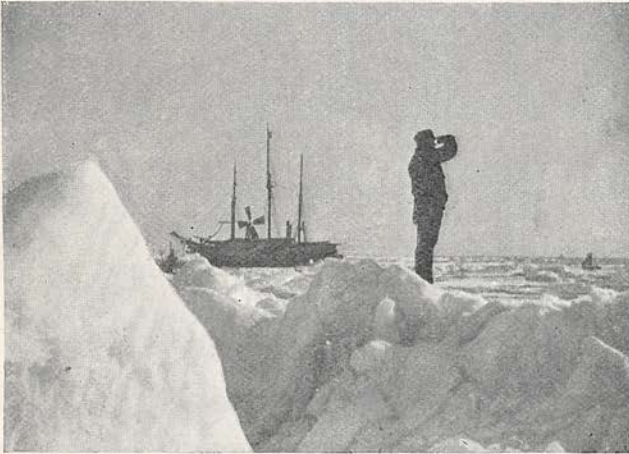
On the 1st of June we took a sounding

with a line 4,400 metres in length, made out of a wire rope. We only got back 3,200 metres; the rest of the line, with ten iron grids and a bottom-sampler, are lying at the bottom of the ocean.

In the beginning of June the ground was in the best possible condition for ski-running. On our tours Sverdrup and I saw several "breathing-holes" made by walrus or seal in various places in the lanes. One evening we played a game of "bold" * on the ice close to the ship; we played with heart and soul till the snow flew about our ears and the steam rose in clouds from our bodies.

We hoisted our sails one day in order to get them dried. The sails swelled out in the wind, but of course the *Fram* did not move.

The summer has brought with it misty rains and a mild temperature up to 40°.



A SUMMER EVENING, JULY, 1894.

The snow is melting, and pools of water are being formed here and there on the ice. Numerous indications on the sky in all directions tell of open water in various places. In this mild weather, light as it is both night and day, we promenade the deck, which is kept nice and trim, smoking our pipes and talking to each other about the ice, the drift, and our chances of reaching our goal. When the wind blows from the south our spirits rise. For the present our object is to get further to the north than any ship has previously done, such as the *Alert*, the English ship, which reached 82° 27' north latitude, and the *Polaris*, the American ship, which got as far as 82° 26' north latitude.

* A game something like the English game of "rounders."

We are also on the look-out for land, especially Peder, who is constantly spying from the crow's nest. Every time he appears at the door of the saloon he is greeted with the ironical query, "Well, have you seen anything?" or "Have you heard anything?" which Peder receives with imperturbable calmness.

On the 16th of June we have reached 81° 51' north latitude. The temperature is maximum 39°, and minimum 19°. Scott-Hansen, Nordahl and Peder have been away on an expedition, the longest that has hitherto been undertaken across the drift-ice. From the crow's nest Peder had seen an unusually large hummock with black stripes down its sides. They took its bearings and set off for it one Sunday morning on ski, taking plenty of provisions with them, and

more than half the dogs. They did not succeed in finding the same black hummock which Peder described, but they came across another one about twenty-five feet high, from which they brought back with them some clayey soil. They also found a log of drift-wood, a piece of which they also brought with them. On their way back they found in an open lane a curious animal or plant, they did not know which. It turned out to be an alga. When they got back they were much fagged and knocked up with toiling across hummocks and lanes on the heavy slushy ground. Scott-Hansen and Peder became slightly snow-blind after this

expedition, and Blessing had to cure them with cocaine.

The pool around the ship is gradually getting bigger, so much so that we can practise in our kayaks on it. Scott-Hansen is especially keen at this sport; he lets himself capsize with his kayak, and then tries to right himself with it again. Nordahl holds a line, which is fastened around Scott-Hansen's body, and when the latter is on the point of drowning, he is pulled ashore, and has then to hurry to his cabin and change his clothes. He seems greatly to like these experiments in capsizing.

From the pools on the higher ice, small rivers run down the slope to the lower ice-strata, with just the same sound as the rippling brooks among the mountains at home. On board we find that the mould-

mushroom seems to thrive wherever there is any dampness. Blessing is cultivating the bacteria which he has obtained from the dead puppies. But as yet he has found no bacteria in the air.

On Midsummer Day we are in $81^{\circ} 43'$ north latitude. The weather is bad, with cold northerly wind and sleet. There are no signs of birch-leaves, or of flowers; only ice, ice everywhere. While we were sitting at dinner a bear paid a visit to the big hummock astern, where Mogstad and Jacobsen are building an ice-cellar for our stock of bear, walrus and seal flesh, which we are keeping as food for the dogs. When they returned thither after dinner they discovered the tracks of the bear.

Nansen was away the whole afternoon in search of it, but had no success. It is now most difficult to get over the hummocks and across the lanes; in fact, in many places one would want water-ski to get across.

We celebrate Midsummer Day in the usual way, with a really good dinner. We have not many ways in which we can keep up our celebrations. Our life is somewhat monotonous; one day is exactly like any other. There is the same kind of work at the same time, and the same recreations at the same hours. The latter consist of cards and reading, but we are beginning to get tired of cards. We are, however, very comfortable; of that there can be no doubt, and so we must just rest satisfied.

June 30.—Dull weather, with an overcast sky and mild rain, which tells greatly on the ice. The pools on our floe are now getting bigger and bigger, and the observation-tent and the cage are now almost inaccessible, and can only be reached by jumping from one place to another. The next day there is a break in the clouds, and we are able to take an observation. The latitude is $81^{\circ} 32'$, so we have been drifting south again this week. During June, therefore, we have made no progress northwards at all, though it was a month of which we had really great expectations.

We filled our water-tank with water from the ice-floe. This water was somewhat salty, but for all that we used it for a considerable time. The first time we got new, fresh water, we all thought the tea was poor and weak; it was the salty flavour we missed, and we did not think much of the fresh water. We were not so much afraid of water which was a little saltish as, for instance, the crew of the *Jeannette*. Every piece of ice which was brought on board that vessel for cooking or drinking purposes was first carefully examined; they believed that the smallest quantity of salt would produce scurvy among them.

According to the observations we made,



THE "FRAM" IN THE ICE, MIDSUMMER, 1894.

the temperature in the strata nearest the surface of the water varies greatly:—

On the surface	32.76°
1 metre below surface	32.63°
2 metres below surface	32.51°
2.5 " " " "	32.00°
2.6 " " " "	31.90°
2.7 " " " "	31.95°
2.8 " " " "	29.25°
2.9 " " " "	29.10°
3 " " " "	29.15°

At the last depth we found a thin layer of ice, which was easily broken, and pieces of which rose to the surface.

When the ice was measured on the 10th of July, we found that on the old solid floes it had increased about eight inches in one week. It is most remarkable that the ice should increase in thickness while it continually goes on melting at the surface. The reason may be that the fresh water, which is formed by the melting of the snow, has run down through the ice, and there come into contact with the colder salt water, and, gradually assuming the temperature of the latter, has frozen.

The appearance of the surroundings in the neighbourhood of the ship is not, at present, very attractive. The *Fram* now lies so high above the ice that we have to use ladders to get down to it and back on board again. Down on the ice are heaps of broken glass, the remains of all the beer bottles we have emptied, the last of which was finished many a day ago. Everything which we have thrown overboard during the course of the year is now laid bare by the melting of the snow. The kennels, which we have now erected on the ice, and which consist of two long wooden boxes divided into separate rooms for the worst fighters, look dirty and rickety as the snow goes on melting, while here and there a merry brook winds its way under the kennels, forming pools of varying sizes.

The appearance of the ice in the direction of the horizon is no longer white against white; the blackened ice and the pools have now changed it all and given it a cheerless appearance. The snow that is still left on the ice has the appearance of coarse moist sugar.

On the starboard side we have a fine fresh-water lake, on which we sail with the longboats. Scott-Hansen, Mogstad and Bentsen are the three who are most interested in this sport. Sverdrup has rigged the boats with a square sail of the same kind which they use in the north of Norway. When there is only a slight breeze they get on all right, but if there is a fresh wind, it generally happens that the spectators on board get a good laugh; the water is shallow, and every now and then they go aground, the boat

fills with water, and they have often to lower the sail.

One day, all hands started for the fresh-water lake to test the bearing capacity of the boats. All the dogs seemed to understand that there was something unusual going on, and followed us inquisitively; even "Kvik," who was with her pups, left her kennel and a bone to join the others. "Barabbas" at once took her place at the bone, and was the only one that remained behind. As soon as we had got into the boat, which easily carried the whole thirteen of us, and had begun to push her along, the dogs began to show signs of the greatest fright. The poor animals evidently thought we intended going away and leaving them behind by themselves on the ice. They kept whining and running backwards and forwards on the floes. "Suggen," the veteran, set off and ran round



SAILING ON THE FRESH-WATER POOL NEAR THE
"FRAM."

to the opposite side of the lake, followed by several of the others. Little "Bjelki," after some hesitation, rushed into the ice-cold water and swam towards us, his thick coat looking very much like a bundle of wool. As soon as our trial trip was over we returned to our starting-place, and then the dogs became quiet once more. "Suggen," who perceived that he had

made a mistake, took things quite coolly. He did not return, but took a long tour on the other side of the lake, as if he wanted to show us that he had not been at all anxious about us. "Suggen" is evidently a personage of importance among the dogs. He takes no part in any of the fights, and all the other dogs make concessions to him. He is a kind of chieftain, and is not tied up like the others; he goes about as he likes, and has his own kennel. He never descends to breaking into the ice-cellar, which the others do; many of them often come out of that cellar stuffed like a sausage after a successful raid. When "Suggen" becomes tired of his own kennel, he simply takes possession of one of the others, generally "Pan's." The latter is the most unmanageable of them all. When "Suggen" comes and stirs him up, he has to go out and lie down on the roof; if he does not go,

"Suggen" lies down quite coolly on top of "Pan," who, strange to say, quietly puts up with it. "Suggen" makes a sort of long speech whenever he wants meat. He always keeps himself clean and tidy. One dog who does not keep himself clean is "Caiaphas"; he is the dirtiest of them all. His thick coat is always full of dirt. ("Caiaphas" and "Suggen" subsequently proved themselves our faithful friends, and kept up longest on the sledge expedition. They were true to the end, and suffered many hardships before they gave up their lives in the service of science.)

July 18.—So far the summer has been a disappointment to us. We expected to drift a good deal more northwards at this time of the year, but we have been almost stationary. Many of us were quietly hoping that before the summer came we should be free from ice, and able to steam northwards through the open lanes. Although the ice around the ship is apparently decreasing, she is still in the same slanting position in her solid bed, with masses of ice crammed in both her wells astern. It is the wind, and that alone, which will carry us to the north, and therefore we may wait a long time, as there is no current. When we compare the observations from day to day with the direction and strength of the wind, we see that it is by the wind alone that our movements are influenced.

July 20.—Weather overcast, rain and fog. No observations. Temperature 32° and 34° . This morning a slight breeze from the north-east began blowing; perhaps we are going to have a spell from that quarter now.

In the summer months there is great activity on deck. Foremost, at the smithy, stand Lars and his assistant, hammering out iron for the sledge-runners. Under the

awning over the fore-deck Sverdrup is busy building six double kayaks, and Jacobsen is occupied in lashing parts of the sledges together. Strong materials are necessary, in case we have to leave our good ship. Nansen is in the workroom, studying algæ with the microscope far into the night. Blessing is similarly occupied, but often fishes for algæ



DR. BLESSING COLLECTING ALGÆ

in the fresh-water pools. When he has anything remarkable under the microscope, Scott-Hansen and I go to look at and admire his find.

But Blessing can also do something else besides examine algæ and blood. He is both joiner and sailmaker, and Sverdrup can always find a job for him in his shop whenever he applies for work.

(To be continued.)

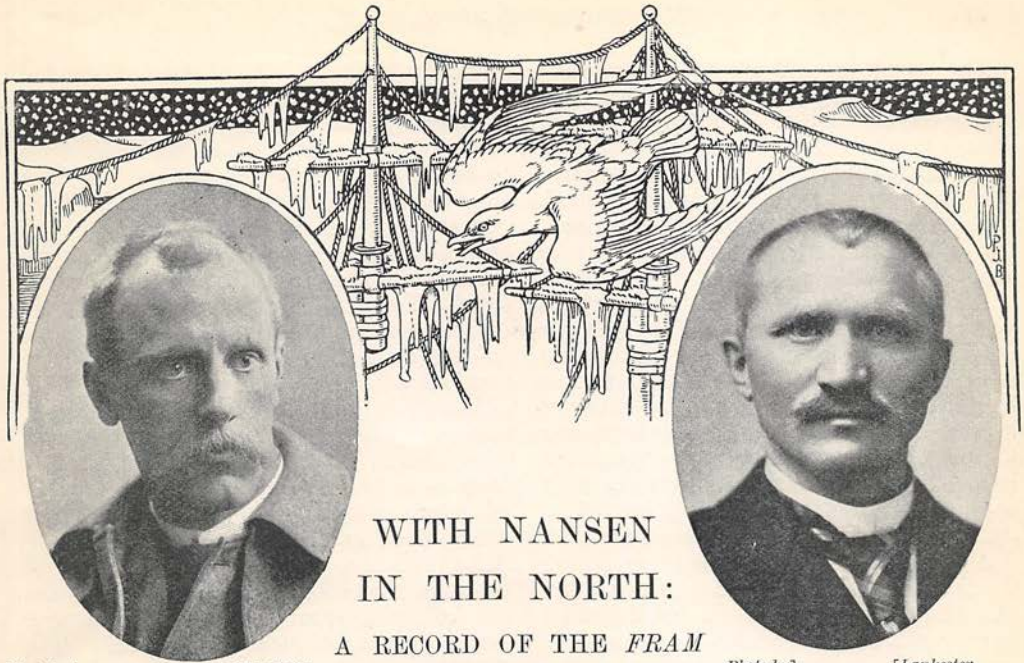


Photo by

[Lanckester.

DR. NANSEN.

WITH NANSEN
IN THE NORTH:
A RECORD OF THE *FRAM*
EXPEDITION.

Photo by]

[Lanckester.

LIEUT. JOHANSEN.

BY LIEUTENANT HJALMAR JOHANSEN.

CHAPTER XII.

*Snow-blindness—Mistaking a dog for a bear
—A real bear—A retrospect—Nansen asks
me if I will accompany him to the Pole.*



URING the last days of July we had constant westerly winds and drifted slowly to the south. Now and then we were troubled a little with snow-blindness. Peder, who had sailed in the polar regions since he was a boy, had never been troubled with it, and would not believe there was any such thing. But even he himself had at last to resort to Blessing and get some cocaine, and used snow-spectacles thenceforth. We had also brought with us veils for protection against snow-blindness. They were pretty, red, blue, and black silk veils, which, however, were not used very often. I remember Sverdrup walking about with a blue veil covering his eyes and nose, which looked rather ludicrous just above his bright red beard. He, too, was somewhat careless about his eyes, and had to consult Blessing eventually and ask him "to look in his eyes, as he thought he had something in them."

One evening, as I was going on board

after a stroll on the ice, I chanced to catch a glimpse of the hind part of a retreating bear some distance off. I seized the watch-gun, which always stands loaded near the companion leading to the cabin. The others thought it was merely fun on my part; but soon Blessing saw the bear as well, and all hands were speedily on deck. Some ran up the rigging and began shouting to one another, so that the bear was frightened and made off. Nansen and Sverdrup set off in pursuit, but, of course, it was impossible to overtake it, the ground being in such a terribly bad condition.

In the beginning of August we had the loveliest summer weather it is possible to conceive. Scott-Hansen talked about having a dip, but perhaps it was as well that he did not carry out his intention, for the water was only 32.70° at the surface. We were on deck the whole of the day, while in the evening we smoked our pipes and played cards.

Scott-Hansen and Nordahl went away on an excursion and found two pieces of drift-wood in the ice, probably pine-logs from the Siberian forests. Peder, who is always on the look-out for anything curious, found a tuft of grey moss among some sand on a floe—another message from some land or other.

The examination of the temperature and the saltness of the water at different depths began on the 2nd of August. It is conducted in the following manner: four men heave the line up on a winch with two handles. The line passes out through a metre-wheel, so that we can read how much has been paid out. We reached the bottom at a depth of about 2,000 fathoms.

About this time we one day discovered a virtuous point in "Cannibal," one of our dogs. He had, no doubt, been accustomed to look after things. For several days now he had been lying continuously on a bag of biscuits which we kept on the ice for feeding the dogs. He never stirred away from the bag, and showed his teeth to every dog that approached it. Yet he never attempted to steal anything from the bag himself!

August 10.—A clammy, wet fog during the morning. In the forenoon the weather cleared up, and Scott-Hansen and I decided to start on a short expedition to the north to measure the ice-pressures with the photogrammeter. There were enormous accumulations of ice to the north of us, and when one sees such colossal masses of it piled up from twenty to thirty feet in height, three or four times as long as the *Fram*, and a good deal broader, and how even the biggest ice-blocks are ground to pieces and lifted high up on to the top, then one is apt to lose all faith in the stability of any kind of ship if it were exposed to a pressure such as this. We had splendid warm weather during our expedition, so that we were able to take off our anoraks and walk in our shirt-sleeves, just as we do at home in the summer.

We put up our apparatus and began our work, feeling quite lonely in the midst of this silent desert of ice. We could just catch a glimpse of the ship in the distance, the only object which indicated that man had penetrated so far; we gazed at it with pleasure and admiration, and felt that we were fortunate to be so comfortable as we were on board her. This excursion gave us a foretaste of what it would be to work our way across the ice if ever we should have to leave the ship. We should not be able to make great progress if we had to proceed over ice like this in search of some land or other, and it would be in any case an arduous and fatiguing undertaking.

August 16.—Fine rain this morning. Last night after twelve, when it was my watch, I was nicely taken in. There was a thick fog which made all objects loom

unnaturally large in the distance. I fancied I saw a bear over by the big hummock, scratching and digging his way into the meat-cellar, so that the ice flew about his ears. I could only see part of his back and his paws; but feeling that it could not be anything else but a bear, I fetched the watch-gun, rested it on the railing, and took aim carefully, as the distance was about two hundred yards. I took my time and waited, in order to be able to see something more of the animal. At last more of its body came into view and I pulled the trigger. Then all was silent for a moment. Nansen came at once on deck and asked what was the matter. I told him I had fired a shot over to the big hummock, as I thought there was something over there. The next moment we saw the supposed bear advancing leisurely across the ice towards us; but as it came nearer to us we discovered it was one of our dogs, to which, curiously enough, we had given the name of "Icebear." The fog had magnified it into a big bear; at the same time it was partly due to the fog that I, fortunately enough, missed it, for "Icebear" was one of our very best dogs. I heard frequently from my comrades of this exploit afterwards!

We have several times seen seals in the lanes about here; Sverdrup shot one, one day, but it sank before anyone could manage to get it on to the ice. "We had not expected to be drifting back during the summer. We had been depending so much upon it. It is the winter in which we now put our faith. We believe, of course, we shall reach our goal; but we also believe we shall have to fortify ourselves with a good deal of patience."

Towards the end of August it began to grow cold again, and the pools were soon covered with ice. After a fall of snow on the new ice the ground was in excellent condition for ski-running, which was soon in full swing. At three o'clock one morning, when I came on deck to relieve Blessing on his watch, we discovered, while standing by the railing, something moving about on an ice-floe about five hundred yards away. It was a bear, which was lying on its back rolling itself luxuriously in the newly-fallen snow. A strong north-westerly wind was blowing towards it, at the rate of nine metres in the second, and the windmill was going at full speed. But it did not seem to mind this in the least, for we plainly saw it raise itself, first with its fore-legs, and leisurely begin to move towards the ship,

moving its head from side to side as bears usually do when they are after their prey. With its extraordinary sense of smell it had, of course, scented the dogs.

The watch-gun was full of vaseline, so I went quietly into the saloon for a couple of guns, whereupon we went cautiously forward and laid ourselves in ambuscade on the fore-castle. The bear came steadily nearer; the fellow was not in the least afraid, although

heart, so the bear had, of course, been killed on the spot. The dogs, which were tied up on the ice and had thus escaped danger, had not noticed the bear till they heard the shots and saw us on the ice with our guns, when they became quite frantic with excitement. We hauled the bear up from the thin ice, but not before Blessing had fallen through, and dragged it up to the side of the ship, where we left it with its jaws wide open, so



THE "FRAM" IN THE ICE DURING THE SUMMER, 1894.

the windmill was making a great noise. We lay quietly with our fingers on the trigger. When it had reached the other side of the lane in front, about 100 yards off, it crossed this on the thin ice and jumped up on to the other side. Now was our time. As the bear was making a tack eastwards we both fired at the same time, and the monster fell backwards over the edge of the floe. We found that it had been hit by both shots. One had cut the artery just where it issues from the

that the next watch, which happened to be Nordahl, might have a surprise.

The dogs sat the whole day barking in the direction from which the bear had come. I suppose they remembered the bear of last winter which came on board, stretched its paws into the kennels, tore a couple of the dogs away from their chains, and carried them off to make a meal of them. Such things are not easily forgotten even by a dog.

On the 28th of August our observations

showed we were in $80^{\circ} 53'$ north latitude, having thus drifted back past the 81° again, but on the 4th of September we were again in $81^{\circ} 14'$ north latitude, and $123^{\circ} 36'$ east longitude, although the wind had been easterly and even north-easterly. During the next few days we again drifted south.

The daily routine of life on board goes on somewhat in this fashion :—

The cook (Juell and Petterson take the post in turns, a fortnight each) gets up at six o'clock, when the last watch goes to bed. The coffee or chocolate is on the table at eight o'clock, when all hands are called. But there is not much breakfasting till a little later on; the two doctors, Nansen and Blessing, are generally the last. Mogstad, who is an early riser, reminds us of the old saying, "In the morning hours the finest gold is found"; but Blessing thinks this is a mistake, and that it should run, "Morning slumbers are sweet and sound." After breakfast everyone commences his particular work. The dogs are fed and let loose. (Later on it was decided that every man should take exercise on ski for two hours daily. This was carried out in all sorts of weather, and we found it agreed splendidly with us.) Nansen has been busily employed in making a

kayak to hold one person. Blessing and Sverdrup have for a long time been making some canvas coverings. We have dinner at one o'clock and supper at six. In the evening we either play cards or search the treasures of our library. Amundsen will never touch cards—"They are the devil's playthings," he affirms. Jacobsen goes early to bed and seldom joins us at cards. But some of the others go in frequently for gambling, and they are in the habit of paying their losses with I.O.U.'s, which run up to such big amounts that it is difficult to keep account of them, and then we wipe them out altogether and begin afresh again. There is generally a good deal of betting and bartering of bread going on. Sometimes we have heated discussions on the state of affairs in Tromsö or Horton.

September 22.—It is a year to-day since

we became fixed in the ice. We can now look back upon the year's drift. Scott-Hansen has made a chart of it, and so we can see what our progress has been. Notwithstanding the many zigzags which we have made, we see that the drift has gone on in one particular direction, viz., $N. 36^{\circ} W.$, and about 120 miles in length from east to west, and about 140 miles towards the north. The progress has been slow, but it has been in the right direction. We fully believe that during the coming year we shall drift more rapidly northwards than we have hitherto done, and that we shall not be driven back to the same extent as during the last twelve months. At the rate we have drifted during this time we should want about seven years before we could get out of the ice. We do not think we shall be able to drift right across the Pole, or in its neighbourhood, but we may most likely traverse the Polar Sea in 86° north latitude.



JOHANSEN AND AMUNDSEN RECONNOITRING IN THE NEIGHBOURHOOD OF THE "FRAM."

September 29.—Blessing's birthday. We have been keeping high festival on mackerel and meat-pudding, with cauliflowers, rice with cloudberry, and malt extract, for dinner. When we occasionally get malt extract, it is not served out in spoonfuls as suggested in the directions on

the labels, but in bottlefuls, and it does us a lot of good.

We have been experimenting in drawing loaded sledges on ski and on foot. About 250 lbs. were placed on the sledge, but we had no proper harness for drawing, and, in the present condition of the ground, it seems as if "trug"—something like the Canadian snow-shoes—would be better than ski. We tried three dogs to the same sledge, and they managed the load exceedingly well.

October 10.—To-day it is Nansen's birthday. The flag is flying from the mizzen-masthead and the saloon is decorated. The thermometer is 22° below zero, and in the forenoon we took a long ski-tour. Petterson did his best to provide a specially choice dinner, and Blessing treated us to Lysholm's Aquavitæ (a favourite Norwegian gin). After dinner we had coffee and cigars, the



JOHANSEN SHOOTING AT THE DOG, "ICEBEAR," IN MISTAKE FOR A BEAR, IN THE FOG.

latter being Nansen's gift. In the evening followed the usual fêting.

October 21.—We have passed the eighty-second degree.

In the course of the day we discovered tracks of a bear and two cubs; they had evidently not scented the ship, but the tracks of the ski had apparently interested them greatly. We have taken soundings again, and found the bottom at a depth of 1,800 fathoms. In the evening there was such merry-making on board as had not

Sverdrup, Mogstad, Peder, and I set out at once after it. It was not light enough for shooting. We had all the dogs with us and in about a quarter of an hour we saw the three bears quietly pursuing their course to the south, much more quietly now than by daylight. The dogs were very courageous, as they had us at their heels. We quickly overtook the bears, but we had to get quite close to them, as there was not light enough to take aim properly, and even then we had just to look along the barrel and fire at random.

The bears stopped and turned round when they found that the dogs were getting at close quarters. The latter at once struck off at a right angle, as if by word of command, and began worrying the bears sideways. The mother now helped us in obtaining a good aim at her in the dark, as she, followed by the cubs, made straight for us, now and then making a rush at the dogs and striking out at them with her paws. We dropped on our knees and fired at the mother. Peder's gun, as usual, would not go off, and Mogstad's also missed fire twice; but just as Sverdrup and I fired, his gun also went off. The first volley practically settled the bear, so that she could not, in any case, get away. One of the cubs was killed outright by a bullet, and the other was set upon by the dogs, which, having thrown it down on its back, were biting and tearing at it. Some of the others wanted to try on the same game with the old bear when they noticed she was disabled, but she raised herself on her legs and struck out viciously with her paws. Peder was going to settle her for good, but the gun missed fire again. "You give her a shot! mine won't fire!" he cried, and one of us sent a bullet through her head. The dogs were tearing away so madly at one of the cubs that Mogstad had the greatest difficulty in sending a bullet into it, after which they tore and pulled away furiously at the carcasses, "Ulinka" and "Suggen" being the worst. All this passed in less than no time; twelve shots were fired in all, and in a very few minutes the three bears lay there dead. At this moment Nansen arrived upon the scene. He had seen us in the distance, and could not make out at what we were driving, as we lay there firing in all directions. The bears' flesh was a welcome addition to our larder, as it was a long time since we had tasted any fresh meat. On our return on board all the guns were cleaned of the vaseline, so that there should be no missing



A MONSTER BEAR.

been witnessed for some time. We played on the organ and danced like mad, although the dance music was not of the best.

October 31.—We have again had a festival on board, this time in celebration of Sverdrup's fortieth birthday. "No one is quite sure about the date," he says, "for I have two different birth certificates."

November 4.—To-day we had a change in our otherwise monotonous life. Peder discovered a she-bear with two cubs west of the ship. The whole crew became animated.

fire again when we had bears about. Peder had gone about with his gun in this state on long excursions with the dogs, thinking that as long as he had a gun he was safe and all right. If he had met a beast like the one which "struck him in his side," I fancy he would have been badly handicapped.

We have had magnificent displays of the Northern Lights every evening. They flash in all the colours of the rainbow, and notwithstanding the bright moonlight the aurora is exceedingly brilliant. With an incredible speed it travels silently across half the vault of the heavens in incessantly changing flames, bands, streamers, spirals and arches. It seems as if we have passed north of the belt of the Northern Lights, as there is less of the aurora in the northern sky.

November 17.—To-day, again, we have a south-westerly wind, 5-6 metres in the second. The temperature is -20° . We are now mostly engaged in mending our clothes in our leisure moments. Old trousers and woollen shirts are cut up and made into swathing-bands for the feet, or used for mending socks. We have all become accomplished clothes-patchers. The work is not exactly what you may call superfine, but it is strong and durable, and that is the main thing.

November 19.—Nansen asked me to-day if I was willing to go with him on an expedition to the North Pole. He explained his plan to me in the presence of Sverdrup. His idea is to leave the ship at the end of February or in the beginning of March next. We are to take all the twenty-eight dogs with us—four sledges with seven dogs to each. The course will be direct north to the Pole; thence, under favourable circumstances, to Spitzbergen, or, if unfavourable, to Franz Josef Land. According to his calculation we should be at Cape Fligely* ($82^{\circ} 5'$ north latitude) in the beginning of June—that is, if progress could be made at the rate of eight miles a day on an average, when there still would be left provisions for eighteen days, after all the dogs, with the exception of five, had been killed in order to feed the others. We should only take provisions for the dogs for fifty days. Two kayaks, to carry one man each, would be used. From Franz Josef Land we should make for Spitzbergen or Novaya Zemlya, in the hope of falling in with the whalers. As soon as we reached the coast of

one of these islands we should have to depend upon hunting for our subsistence.

This is in rough outline the plan which Nansen explained to me most carefully in the course of nearly three hours.

He laid stress upon the dangerous nature of this expedition. We should both be running the same risk; if we were attacked by scurvy we should be hopelessly lost. He had decided upon asking me, he said, because he thought I was specially fit for such an expedition, but he begged me to consider my answer well.

As of late I had been thinking a good deal about such a journey, I had been imagining to myself that I was likely to be asked to take part in such an expedition, particularly as this also seemed to be the general opinion among my comrades on



A FROZEN SEA.

board, when its possible undertaking had been talked about. I was, therefore, able to answer that I did not require any time for consideration, as I had already been thinking it over, and that I was willing to go with him. I looked upon it, of course, as a distinction that the choice had fallen upon me. I should, at any rate, do my best to obtain a successful result. And if we were to fail, it would be no disgrace to die in such an attempt.

CHAPTER XIII.

Nansen's lecture—Fitting out the sledge expedition—Christmas and New Year once more—Our worst pressures.

NOVEMBER 20.—We are now north of the eighty-second degree. This evening Nansen called us all together in the saloon, where he

* The most northerly point of the group of islands known as Franz Josef Land.

had hung up a polar map, for the purpose of giving a lecture. He began with the origin and theory of the expedition, and dwelt upon the knowledge possessed of the conditions of the ice in the Polar Sea, and upon the discoveries we had made with regard to ice drift. In all probability the *Fram* would be able to keep to the route originally laid down, perhaps a little more to the south. But it had always been the object of mankind to get as far north as possible, even to reach the Pole, and the question now was whether we ought not to make an attempt in that direction. There would scarcely be such a good opportunity for some time to come as we should have in the coming spring, when a sledge expedition for the Pole would have a starting-point much further to the north than that from which any former expedition had set forth.

He had decided that two men should set out on such an expedition—he and myself. He then recounted his plan and calculations regarding the expedition. It was possible, of course, that something might happen to the *Fram* during her drift. The ice pressure might become too severe, she might be forced on to the land, or she might be burnt, which would be the worst of all. He then went on to explain that it would be quite possible for the crew to save themselves and reach land, for there was little or no chance of the *Fram* drifting so far to the north as to render any difficulty in getting to land. Next summer the *Fram* would most probably lie in open waters. The lecture was most interesting and we all listened intently to it.

A busy time now began on board the *Fram* in fitting out the sledge expedition. No little work was put into its equipment; it had cost our chief a good deal of brain-work to think out all its details. Nothing must be forgotten. A Russian expedition to Novaya Zemlya, for instance, could not attain anything because its members had forgotten snow-spectacles. Success depends upon getting everything as serviceable and as light as possible. The question of weight is especially an important one; three or four pounds saved in packing means provisions for a couple of days more.

My duties as assistant in taking the meteorological observations on board have now ceased, and Nordahl is assisting Scott-Hansen instead. Nansen has finished a one-man kayak, and Mogstad is going to make another. These are necessary craft on such an expedition in order to get across

lanes and open water with which we are likely to meet near land, whether it be Franz Josef Land or Spitzbergen. The frame of the kayak is made of bamboo cane and is afterwards covered with sail-cloth. Nansen and I are busy making these coverings. The kayaks are broader, but not so long as those of the Eskimos, in order that they should be more durable and easier to manœuvre on the sledges while going across the ice. In the middle of the upper covering of the kayak there is a hole encircled by a wooden ring, over which we can turn down the lower part of our kayak fur coats. After having pulled the hood tightly round our faces and tied the sleeves round our wrists, we can sit perfectly dry in the kayak, no matter how much the sea may wash over us. In order to get easily at the provisions and other things which are stowed away in the kayak, we have trap-doors fore and aft in the deck.

Scott-Hansen and I are each wearing two watches, and are comparing them daily with the large chronometers, in order to check their rate exactly, so that we may take the two best watches with us on our expedition. Sverdrup is making our two sleeping-bags of the skin of reindeer calves, in order to make them as light as possible. Juell is our saddler. He has measured the dogs, and is now making new, strong harness of canvas for them. For those which are the worst at biting the harness in pieces he puts wire inside the canvas, upon which they will have an opportunity of trying their teeth. Mogstad, who is very handy at almost everything, is going to make the sledges which we are to take with us.

The sledge expedition is now, of course, the topic of the day. We have discussions for and against it—about the condition of the ice, about open water, the endurance of the dogs, the provisions, the cold, etc., etc. All of us, of course, wish it every success and good fortune. We are going to take letters with us for dear ones at home. The post we shall thus carry will be rather a unique one. The letters, as a matter of course, will not be heavy ones. The writers, in fact, will have to count their words and keep down their number.

The days are passing rapidly. We shall soon enter upon our second Arctic night, which will bring with it the same cheerless darkness that we experienced last winter. I do not feel the cold so much this year as last, and I believe we are all of the same opinion. As a contrast to this, I may mention that the members of the Tegethoff

Expedition found that they stood the cold best the first year.

Our cooking arrangements for the coming expedition are of the greatest importance, and we are carrying on experiments in cooking in the tent, which has been erected close to the ship. The tent we are going to use is of silk, and of the same size as a military tent for four men. It is made in one piece, and has a small opening in one of the corners for a door. We fix it up with a ski-staff, and use plugs for the straps.

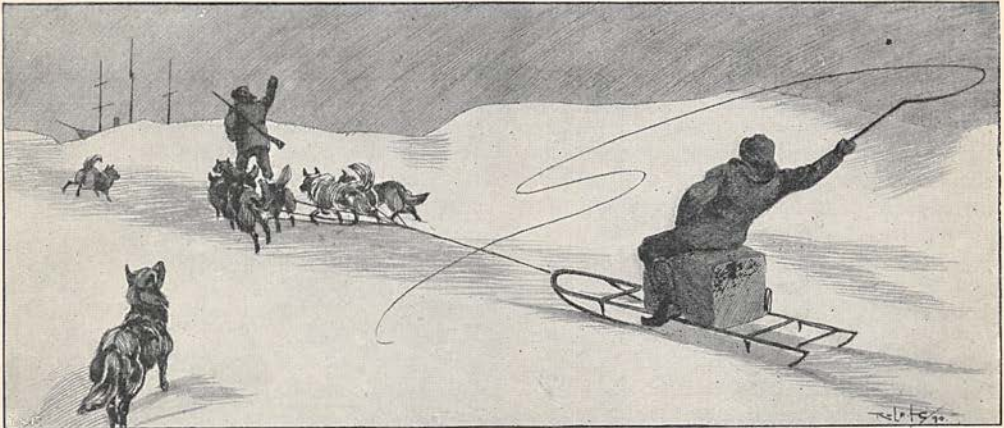
Nansen and I have been out on a ski-tour in the moonlight to try how the wolfskin clothes suited us.

During December we had a good deal of south-easterly wind, and on the 13th we were able to hold a festival in honour of the *Fram*, as being the ship which had travelled

even able to say almost to a minute how much we had drifted, according to the more or less slanting position of the line. Never were we in better spirits than when the line "lay dry" under the ice in a southerly direction, and when the windmill was going round with reefed sails before a regular "south-easter." We then knew that we were making headway to the north and getting nearer to the open water on the other side of the Pole, and we two who were soon to start were glad, because it made the way to the Pole shorter for us.

From time to time we tried the dogs with fully laden sledges, using different teams, bad and good together. The trials went off satisfactorily.

Christmas Eve.—The wind is blowing hard from the south-east, and the barometer



Johansen.

Scott-Hansen.

RACING TO THE SHIP ON THE WAY BACK FROM A SLEDGE DRIVE.

farthest north of all, the observations showing that we were in $82^{\circ} 30'$ north latitude.

From this time all of us followed the observations with the greatest attention. As soon as Scott-Hansen had got hold of the stars, he had always to determine our position. It was especially after south-easterly winds that we were intent about the result of his calculations, and many a wager was lost in betting upon how far we had gone.

In the hole in the ice, where we took samples of the water and the temperature of the sea, we also had hanging on a long line a bag net made of thin silk for catching small animals, and according to the direction taken by this line, we could guess the drift. If it showed to the south, we knew that the ice was drifting to the north. Peder was

has fallen right down to 726.65 mm. While the storm is raging over our heads across the ice-fields in the dark arctic night, a feeling of real comfort and security comes over one at the thought of being so well housed as we are on board the *Fram*. Christmas Eve comes upon us like any other day, lying here as we do far away from the noisy world and all the Christmas fun. It is a quiet Christmas which we thirteen are celebrating. To-day we have had a kind of cleaning up of the saloon and the cabins. It has not exactly been a thorough one, but we feel satisfied for all that. The weather just now is cloudy and overcast both night and day, so we cannot take any observations. In the meantime, however, we can safely say that we are a good way north of the eighty-third degree. Perhaps it is as a sort of

Christmas present that we have had the satisfaction of reaching $83^{\circ} 24'$ north latitude, the most northerly point of the world that any human being has ever reached.

Nansen and Blessing were up in the work-room the whole of the day, busy with some mysterious brew. When the bottles came upon the table in the evening it turned out to be nothing less than champagne — “polar champagne 83° ” — undoubtedly the most unique in the world. It was made from spirits of wine, cloudberry jam, water, and baking powder, and there was as much as two half-bottles for each of us.

It seemed, however, as if the true festive spirit was wanting, for this Christmas was not a very lively one. We spoke little, and there often occurred pauses in our conversation, which plainly showed that our thoughts were far away.

And there was nothing wonderful in that. There was nothing strange that we thirteen, on an eve like this, should let our thoughts dwell where we ourselves should like to be. No, no one can find fault with us for being so quiet on board, although we were so comfortably off. In regard to food we were perhaps better off than a good many that Christmas Eve; we were well and warmly housed in the ice-desert, but we were prisoners. We lay far away from the world, fast in a frozen sea, where all life was extinct, and in the exploration of which so many lives have been sacrificed. With such surroundings one might well, after a long absence from home, think of those left behind.

On Christmas Day we were treated to “polar curaçoa,” which was really good, and in the evening we danced to Mogstad’s fiddle.

The ice began cracking last night not far from the thermometer house, and we had to set to work and save the instruments. The crack occurred in the ice on the old channel, which has now been frozen for nearly six months.

Next day we took soundings with a line 1,700 fathoms long, without reaching the bottom. In the afternoon the *Fram* received a very violent shock, which reminded us that the ice was in motion. The following day the pressure was again violent and continuous in the lane ahead of us, and the *Fram* shook herself several times in her firm bed. A large upheaval of ice-floes took place not far from the bow.

December 31, 1894.—The last day in the Old Year. A welcome to the New, and

may it bring good luck with it! Light it will bring with it in any case. Will it also, through us, shed more light upon these unknown parts of the globe? Let us hope so! To-day we are in $83^{\circ} 20.7'$ north latitude, and $105^{\circ} 2'$ east longitude. The temperature is -42° .

In the evening we sat round a bowl of “polar toddy” waiting for the New Year. Nansen spoke about the Old Year, which had passed by more rapidly than he and we others had expected; and that, he believed, was due to the good relations existing between us. There had been frictions now and then — each of us had had his own dark hours — but that was unavoidable; there had, at any rate, been a good understanding between us. As the clock struck twelve we drank to each other in Lysholm’s Aquavitæ, to which Blessing treated us. Sverdrup then took his glass and, in his quiet manner, wished the whole expedition every success in the New Year, and success especially as far as the sledge expedition was concerned. Nansen spoke to those who were to remain behind on board the *Fram*. There was, he said, an Irish saying something to this effect — “Be happy; and if you can’t be happy, take it easy; and if you can’t be easy, be as easy as you can.” He would ask those who were to remain behind to take this to heart. If they would act according to the old saying, the New Year would, no doubt, pass quickly for them also, and that would probably be their last year in the ice.

January 2, 1895.—Nearly all hands have now begun their letters for home. The thing is to get as much as possible into a minimum of space. Fine pens and thin, strong paper are therefore in great demand; all are going in for a fine, microscopical hand. Scott-Hansen’s letter is a masterpiece of this kind. The writing is so small that it can only be read with a magnifying glass. The ice has again been in motion of late. Last night the ship received a severe shock; we have not had such a violent one since last winter.

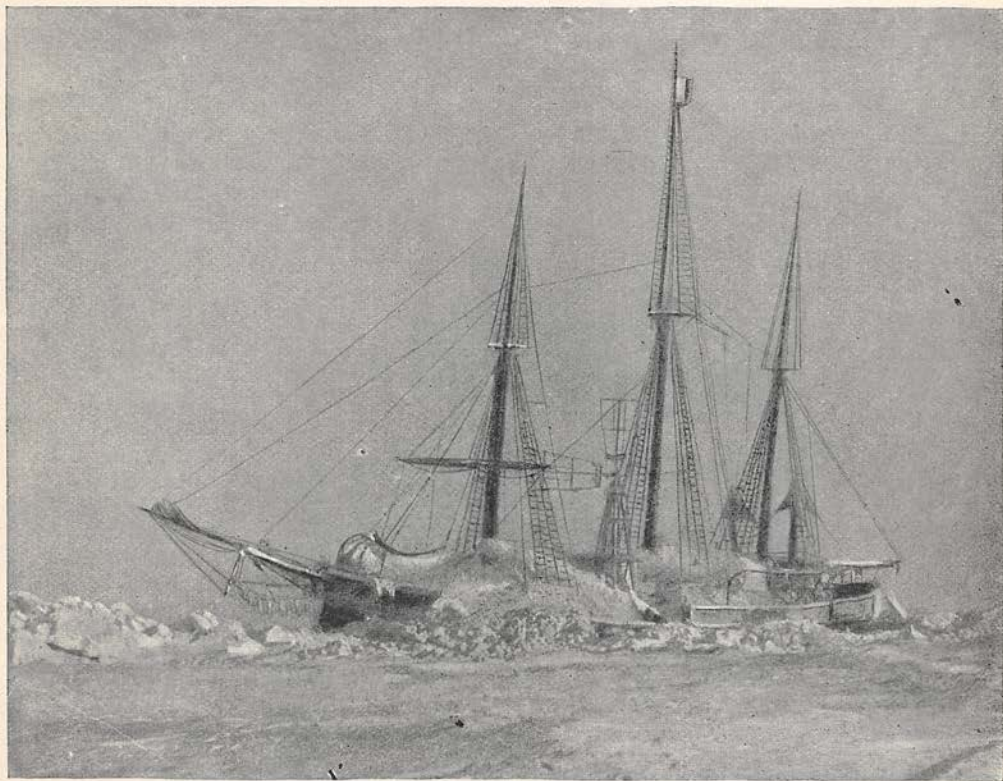
Thursday, January 3.—Last night everything was quiet, but early this morning, at half-past four, the pressure began again and continued till about nine o’clock. On the port side the ice packed and pressed closer and closer upon the ship, which from time to time trembled from the pressure which transferred itself to the ice under the ship. Scott-Hansen and I took a walk round about it to have a look at the havoc. There was a high ridge on the port side, with a fissure

on the side near to the ship, about eighteen paces distant from it.

On the other side of the ridge behind the tent and the observation hut was a lane, extending in an oblique direction towards the stern of the ship. In two places the ice in the lane was unbroken, and they bore the pressure of the floe against the vessel. The pressure has been going on from time to time in the forenoon and the ice cracked in several places over in the neighbourhood of the new lane. After dinner came a fresh pressure. The ridges on the port side came

should have to leave the *Fram* suddenly. The sledges are placed ready on deck, provisions have been brought up and put in a safe place, the cases containing dog-biscuits are out on the ice, and the kayaks are made clear. As yet the main body of our floe—the thickest part of it, in which the *Fram* lies embedded—has not been attacked. We all agree that, to move these great masses of ice in the way which we are now witnessing, terrific forces must be at work.

“It represents millions of horse-power,” says Amundsen, and had not the *Fram* been



MOONLIGHT EFFECT OF THE GREAT ICE-PRESSURE. NEW YEAR'S DAY, 1895.

tumbling down, reaching up to the big fissure near the ship. The Samoyede sledge with the sounding apparatus and another loaded sledge, which were on the ice, had to be placed in safety.

While we were at supper we felt another shock. We found that our floe had cracked again in several places, both amidships and in front of the bow. This solid floe, of which we were so proud and on which we felt so safe, is thus breaking up into pieces and being pressed together. To-day we have got everything in readiness in case we

so built that she was lifted up so as to let the pressure under her bottom go on as much as it liked, she would not have been able to withstand the enormous squeezing. But the vessel has been so constructed that she is able to withstand any pressure whatever, and she could hardly have got into a more dangerous position than that in which she was on this occasion, when she lay as if in a vice, resisting the pressure from the pack-ice as it advanced against her side.

On Friday night the watch was placed, as usual, at eleven o'clock. The ice was uneasy,

and was packing hard on the port side. The part between the ship and the lane was exposed to a severe pressure, and masses of snow fell in here and there over the ship. New fissures were being formed crosswise in the ice, the edges of which were being doubled upwards by the continuous pressure of the ice.

I was on watch from one till two, and during this time the same incessant pressure continued. Sometimes it roared and moaned in loud and exceedingly deep tones, like a thing of life. In the dark night it made one's flesh creep. It lasted the whole night, until five o'clock in the morning, when all hands were called. The pack-ice was by this time close upon us, and had crept up almost to the gangway. We had then to

awning on the fore-deck and piled itself up aft on the deck to a level with the bridge. It was now high time to save ourselves, as Nansen called out, "All hands on deck." He had hurried on deck and set loose the dogs, which the awning had protected from the masses of ice that had fallen upon it, and it was really a wonder that the awning withstood the strain.

I was in the galley at the time, waiting my turn for a wash after Sverdrup had done, and had just managed to dip my hands into the water. I was barefooted, and only lightly dressed. It was not at all pleasant to sit there dressing while one after the other of my comrades vanished on deck and the pressure went on with deafening noise, the *Fram* groaning in every timber.

I did not get on deck till nearly all was over and the others came down again to fetch up their bags, clothes, and sleeping-bags. Everything was in readiness, but at the last moment we found that there were still a good many things which we ought to take with us. Fortunately the temperature was only about 8° below zero.

If the *Fram* were to be lost, we were so far in safety on the ice, with provisions for a year, clothes, sleeping-bags, tents, sails, sledges, and dogs; but we should,

of course, be in the midst of the polar ice, about a thousand miles away from the nearest known land. We did not feel despondent, but we thought ourselves remarkably lucky when the pressure suddenly stopped. It seemed as if it had spent its fury, and was satisfied now that it had driven us out upon the ice. We found afterwards that the *Fram* had been lifted up about a foot and shifted somewhat backwards, also righting herself a little towards the port side. She is now listing over $6\frac{1}{2}^{\circ}$; on Friday night it was 7° .

It was decided that we should remain on board for the night. The watch was taken in turn, while we settled down in the empty bunks, ready to jump out at a moment's warning. Soon after the pressure began the door on the port side had been shut up, as it was dangerous to pass the ice on that side.



TAKING SOUNDINGS.

transport the remaining boxes of provisions to our depôt by the big hummock, and we had the same trudging backwards and forwards with the sledges in the dark as that of a day or two ago.

We have had a regular rummaging in the hold to find the boxes containing provisions, and we were hard at work until dinner-time getting them on deck. Cartridges were taken from our stores, ten being apportioned to each of us to carry in his bag, and a box containing shot and ball cartridges was sent over to the depôt. To-night we had supper later than is usual on Saturdays. We hoped we should be able to get some good rest for the night, but it was to be otherwise. About eight o'clock the pressure began again, and this time with a vengeance. The mass of ice on the port side came rushing in over the

On account of the present state of things we slept even less than the night before. We dozed for a while, then went on watch, and then back to doze again. But during the night, and up to the present moment—Sunday dinner-time—when I am sitting making these notes on a piece of paper, as our journals are now over at the depôt, the ice has been at rest.

CHAPTER XIV.

Beating the world's record—More about the equipment of the sledge expedition.

SUNDAY, January 6, 1895.—This afternoon all hands were hard at work clearing the ice away from the side of the ship. It was not such an easy job as we imagined, for a mass of ice and snow slush had forced its way in and filled the deck between the windmill and the half-deck.

To-day we have beaten the world's record. The observations show that we are in $83^{\circ} 34' 2''$ north latitude, and $102^{\circ} 2'$ east longitude. The occasion was duly celebrated this evening, but we were all tired and sleepy.

From time to time Petterson is prophesying that we shall have fair winds. If his prophecy does not come true, which happens now and then, he does not get off without a good deal of chaffing. Not long ago he expressed himself something like this: "I am not a sailor, but I feel sure that, very shortly, we shall get a devil of a hiding from the south." As the "devil of a hiding" did not come, Petterson was asked for it at every meal-time. When a south-westerly wind sprang up a long time afterwards, blowing at the rate of ten metres to the second, and accompanied by snow, Petterson was again in his glory.

January 15.—We are in $83^{\circ} 27' 3''$ north latitude, and $103^{\circ} 41'$ east longitude. We have been drifting south again on account of the north-westerly wind.

One of the dangers of which we were most apprehensive on the sledge expedition was that of breaking a leg or an arm. In order that we might be prepared for any such accident, it was necessary that we should understand how to splint and bandage broken limbs. Blessing gave a lecture on the subject one evening, with practical demonstrations of the treatment to be used. Nansen sat on the top of the table in the saloon, represent-

ing a person with a broken leg. The rest of us stood round and watched the operations. When Nansen was ready, I was placed under treatment, and was supposed to have a broken collar-bone. Blessing's instructions were clear and interesting, but we both hoped that the time might never come when we should require each other's aid.

Jacobsen, assisted by some of the others, built a fine smithy of ice-blocks over by the ridges on the port side. Fire was now constantly in the forge, and Petterson let his hammer dance merrily on the anvil, feeling not a little proud at being the world's most northerly smith, working away in a temperature of 40° below zero, in a smithy where he was quite safe from fire, and where he need not trouble about insurance or anything else.

He made an axe for the sledge expedition, the blade of which was no bigger than a matchbox. He could not understand what we wanted with anything so "devilish small." He also made a small bear-spear for Nansen. This was, however, never used upon any bear, but as a soldering-iron when we had to make our kayaks watertight in the seams with stearine. We made the spear hot by warming it over our train-oil lamps. We had a regular soldering-iron with us, which we also used for the same purpose.

But the smithy was also used for many other purposes. For instance, the many pairs of ski which we took with us had to be carefully impregnated with a mixture of tar, tallow and stearine, so as to stand better the wear and tear over all kinds of ground. The runners for the sledges were steamed over a cauldron on the forge in order that they might be more easily bent. Afterwards they were impregnated with the same composition as that applied to the ski before the German silver plates were fixed under the runners. Mogstad had prepared thin guard-runners of maple to be fixed outside the German silver plates.

We found it was far easier to draw sledges with wooden runners impregnated with the above composition of tar, etc., than with metal plates under the runners; and, besides, these double runners strengthened the sledges considerably. Petterson is also manufacturing small nails in his smithy. Mogstad is using silver for soldering the German silver plates. This is the only occasion upon which the question of money has been raised on board the ship. Scott-Hansen had a five kroner note, but that was of no use. It was real silver that was

wanted, and Mogstad managed finally to raise some half kroners, which he used for solder. We had a miniature fire on one of these occasions; the lamp exploded, and our table now bears the marks of this conflagration.

Our departure, for the present, has been fixed for the 20th of February—that is to say, if it should not be too dark at that time. I have been busy copying all our meteorological and deep-water observations on thin, strong paper with ink which will resist water. We must take every precaution to preserve and bring these home safely.

We are again taking deep-sea soundings, and all hands are thus fully occupied, so that all are contributing in some way or other towards the success of the expedition.

On a sledge expedition such as ours it was, of course, of the greatest importance that the provisions should be chosen with the greatest care; above all, they must be wholesome and nutritious, so as to avoid scurvy, and they must be prepared and preserved in a light and concentrated form.

It was also important that they should be so prepared that they could be eaten without any cooking or preparation. The principal food on sledge expeditions is generally pemmican, which experience has proved to be the best. Pemmican is, as everyone knows, fresh meat dried in the wind. On Nansen's expedition across Greenland they suffered from want of fat, the pemmican being too dry. Nansen had taken precautions that this should not happen again. Our pemmican was made from the very best kind of beef cut from the solid, fleshy parts, dried quickly, and pulverised, to which the same quantity of fine beef suet was afterwards added. It was almost entirely free from water. We had also some liver *pâté* prepared in the same way. Then we had some pemmican which had been prepared with vegetable oil instead of suet, but this was not a success. We took a good supply of this staple food, as the dogs had also to be fed upon it. The pemmican came from the makers in the form of small cheeses in tins, but as we did not care for loading ourselves unnecessarily with any heavy packing, we took the contents out of the tins and made boat-grips of them in the following manner. It was necessary to use grips under the kayaks, so that they could rest safely and steadily when passing over the uneven ice. Instead of making these grips of wood, Sverdrup sewed some canvas bags of a shape to fit the bottom of the kayaks,

and after having warmed the pemmican, we filled these bags with it, just as one does a mattress. As soon as they came into the open air they became hard and solid.

Professor Waage's fish-meal proved to be an excellent food during the sledge expedition. Mixed and boiled with flour and butter it made a splendid dish; one actually became warm all over the body after a meal of it. We took also some dried potatoes with us; mixed with pemmican it was the most delicious lobsauce in the world. Nansen preferred the "fish-gratin," as we called it, while I fancied the lobsauce—at any rate, at first.

When Nansen and his companions crossed Greenland they were always feeling hungry. In order that we should feel properly satisfied and comfortable now and then, we took some steamed oaten groats and maize with us for making porridge. We had also some "vriil-food," a kind of sweet meal, which we soon learnt to appreciate; in fact, sugar and flour were most highly prized. And we did not forget chocolate, of which we had both the ordinary kind and another sort made with powdered meat, the latter being hardly distinguishable in taste from the former.

Of "serin," or whey powder, we had a good supply with us. This is really nothing else than pulverised whey, which we mixed with boiling water. We used to drink it at night, before we put our frozen bodies to rest in the sleeping-bag. It did us a wonderful amount of good, and we often longed for this drink on our laborious journeys in the cold.

The bread we took, of course, contained as little moisture as possible; we had two kinds—wheaten bread and aleuronate bread.* Peder saw to the butter, and kneaded all the water out of it, but it became very hard, for all that—in fact, so hard that on one occasion on our journey I broke a knife in trying to cut off a piece.

Sverdrup made three small sails for the sledges, as we should have to make as much use as possible of the wind, both on the ice and on the water. He also made some special oar-blades to be fixed on to our ski-staffs and to be used as oars. The blades consisted of frames made of cane covered with canvas. A small sledge with a white shooting-sail, such as is used by the Eskimos when they hunt the seal, was also made ready for us.

* Bread made of wheaten flour mixed with aleuronate (vegetable albumen).

Guns and ammunition were, of course, matters of paramount importance. After much deliberation and many trials, we decided to use the same guns which Nansen had with him on his Greenland expedition. These were two double-barrelled guns, each having a barrel for ball of 360 calibre, and one for shot of 20 bore. Our ammunition consisted of 180 rifle-cartridges and 150 shot-cartridges.

We took several knives with us. Nansen had a large, fine, Lapp knife, of the same kind as the Lapps use in the summer, with a large, flat, broad blade of iron and steel. This knife could also be used as a hatchet. One of the excellent "tolleknives," from Toten, with handle covered with birch-bark, turned out a most useful implement. We also had several small knives.

Of foot-gear we had each two pairs of Lapp shoes and one pair of "komager." The former are made of the skin of the hind legs of reindeer oxen, not of the skin of the head, which, although it may be warm, is not so durable. The "komager" are made of tanned sealskin, well impregnated with tar and train oil. We used "senne" grass (*carex asicaria*) inside the shoes and socks of wolfskin and hair, and foot-bandages of thick "vadmel" (Norwegian homespun tweed). Stockings we did not use. We took a pair each with us, however, but these we cut in two so that we could use the legs and the feet separately.

Our cooking apparatus was so arranged that we could cook our food and melt as much ice as possible for drinking purposes, with the least possible expenditure of fuel. It consisted of several vessels, the innermost being the cooking vessel proper, made of German silver. This was inside a ring-shaped vessel, which was filled with ice. Above the two was placed a flat vessel, also for melting ice. The whole was surrounded

by a thin, light mantle or cap of aluminium, and outside this we again placed a hood of wolfskin, so that none of the heat should be lost. For heating, we used petroleum in the "Primus" lamp; this apparatus proving itself the most economical of all in regard to fuel.

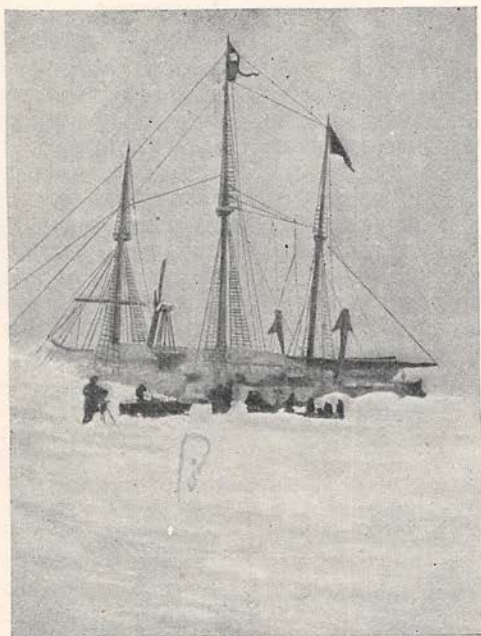
On the 23rd of January we took two soundings, and reached the bottom at a depth of 1,800 and 1,850 fathoms respectively.

January 25.—I have been in the hold to-day with Nansen, getting our ski ready. The weather is clear; the streak of light on the horizon in the south at noon, which heralds the approach of day, is gradually growing bigger. We have now fought through the worst part of the arctic night. The temperature has to-day, like yesterday, been down to 58° below zero. We have had hardly any wind to-day, but Peterson has been prophesying again.

Nansen and I tried the two sleeping-bags which Sverdrup had made for us, to ascertain if they were warm enough. They only weighed 6½ and 4½ lbs. respectively. We lay out on the ice for a couple of nights, but we felt rather cold; the bags were evidently too thin. Sverdrup had then to set to work to make a double bag from the

thick skins of grown-up reindeer, so we did not save anything in weight here.

February 22.—To-day we have got over the worst. The ski are now all ready, with fastenings and a double layer of birch-bark; the provisions have been carefully stowed away on the sledges, all four of which are now at last standing ready packed by the ship's side. We have made a list of the provisions, and find that there is about 200 lbs. of overweight when the instruments and ammunition are included. Our equipment will have to be gone through again and rearranged. As the time drew near a number of small things were added which



DR. NANSEN AND JOHANSEN LEAVING THE "FRAM" ON THEIR SLEDGE EXPEDITION ACROSS THE POLAR ICE.

had not been thought of before, such as small harpoons for fixing on our ski-staffs, pumps for the kayaks, dogs' shoes of seal-skin, and two wire ropes, provided with short, double leashes for stretching between the sledges and fastening the dogs to when we encamp for the first few nights. We imagine that they will prefer their old quarters to remaining with us on the ice, but with the aid of these leashes we need not be afraid of their getting back to the ship.

CHAPTER XV.

The departure—We make two starts—I act as snow-plough.

SUNDAY, February 24.—Yesterday and to-day were to have been days of rest before our departure, but instead of this they turned out to be two of the busiest days we have had. We are in a regular bustle; everything is being hurried on, and before long we shall be ready to start.

In spite of all the commotion, however, our comrades have found time, in the course of the night, to decorate the saloon with flags, and three new electric lamps, embellished with coloured paper, over the sofa.

The dinner to-day was a solemn affair. Scott-Hansen produced some claret, which he had been carefully keeping all the time. Blessing made a speech, in which he congratulated Nansen on the result the expedition had obtained up to the present time, and wished us both a successful journey, hoping we should find everything well at home.

Nansen, on behalf of us both, replied that we should be sure to think with pleasure of our life on board the *Fram*, and that as surely as we reached home safely we would remember our comrades in the ice. He hoped that no one on board would ever regret having joined the expedition, and asked us to drink to our next meeting—a happy meeting of all of us home in Norway. After dinner we had to set to work again with sewing, loading cartridges, and packing away fishing tackle, sewing materials, and kayak pumps. Some of our clothing had also to be looked to, and bands and straps had to be sewn on our wind-clothes. There was something to do up to the last moment.

I am writing this in the middle of the night, and to-morrow, Monday morning, we are starting. I have also my letters for

home to finish, and finally I have been thinking of having a good wash. We all keep awake, and Bentsen is sitting in our cabin telling yarns. We had a festive gathering in the evening, with polar toddy, raisins, almonds, and other fruit. Captain Sverdrup spoke a few hearty words, wishing us all success on our journey. Afterwards Nansen went back to his work, which consisted of dictating to Blessing a lot of instructions relating to his observations of the small marine animals.

On Tuesday, the 26th of February, we were at last ready to say farewell. But the weather was anything but inviting for a start. The morning was grey; there was a slight snowfall, and the wind was east to south. The last good-bye was said to those who were to remain on board, while Sverdrup, Scott-Hansen, Blessing, Mogstad, and Hendriksen were to accompany us some distance on the way. They took a tent and the necessary equipment with them, in order to spend the night with us in our first encampment. Nansen glided off in front on his ski, leading the way, and next came the first sledge, with "Kvik" as the first dog in the team. But the journey did not last long. We had not proceeded very far from the ship, and the sound of the guns had only just died away, when one of the heavily-laden sledges broke down in being dragged across a ridge; a projecting piece of ice had smashed three of the crossbars, and there we were left standing. There was nothing else to do but to return whence we came. We should not have believed that we should see each other again so soon; we had only just said good-bye.

It was fortunate, however, that we had not gone very far away with our things. It appeared that the sledges were not strong enough for the heavy load we had put upon them. We should have to strengthen them. Nansen decided that we should add two new sledges to the four we had, making in all six, and the load on each would thus be considerably less. The same activity began again on board; Sverdrup and I were once more in the smithy, busy tarring the two new sledges. All were now fitted with a long broad board, which was lashed underneath the cross-bars with steel wire, so that any projecting pieces of ice should not again damage them. The sledges were once more overhauled. We had finished all the repairs and outfitting on Wednesday night, and the next day we were to start for the second time.

Thursday, February 28.—We set out this morning with our six sledges, accompanied by Sverdrup, Blessing, Mogstad, Scott-Hansen, and Hendriksen, who had fitted out a sledge with a tent and other necessities for one or two days' journey. Our other comrades also accompanied us for some distance, Jacobsen and Bentsen being the last to leave us. Although we now had a man to each sledge to assist it over ridges and other obstacles, we travelled very slowly. It took us all our time to assist in pushing on, and helping the sledges over when the dogs pulled up, and this not only when there were obstacles, but even when we were on flat ice. It was clear that the loads were too heavy, and after having journeyed some distance we pulled up and took off two boat-grips with pemmican, and a bag of the same, which lightened the sledges to some extent.

At this point Bentsen and Jacobsen returned to the ship, the latter expressing his opinion that we were sure to have to come back to the *Fram* once more.

We then proceeded on our journey with the reduced loads, but we did not make much progress, and soon decided upon pitching our tents and encamping for the night. The dogs were fastened in couples, side by side, and fed. We thus obtained an idea of how long a time it would take us to encamp when we two were left to ourselves. It appeared that we must be prepared to find it taking a considerable time, especially at the beginning. We spent a pleasant evening in the great tent which our comrades had brought with them. But we did not get much sleep, owing to the dogs, which fought and howled during the whole night.

Next day the weather was dark, the wind east to south. After several hours of work, occupied in cooking and getting the sledges and dogs ready, we broke up, and the whole party set out again.

In the afternoon came the hour for leave-taking. The weather was cold and depressing, and so were our spirits; the arctic night had not yet come to an end. All were moved as we shook hands for the last time and sent greetings to all at home.

And then Nansen and I were left alone on the desert ice-fields with the dogs and

sledges. We did not get very far during the rest of the day, as we found progress very difficult. Nansen was in front, leading the way, when the sledges came to a stop through some impediment or other—and we could hardly proceed many paces at a time without this happening. We were continually running backwards and forwards in order to be able to make any progress at all.

Next day things went on in much the same way. We soon discovered that the loads were yet too heavy, both for the dogs and ourselves, although they were becoming somewhat lighter the farther we proceeded northwards. The ice, moreover, was in a very rough condition and difficult to get over. We therefore made a halt, and Nansen declared that the loads would have



CROSSING A RIDGE.

to be still more reduced. "If the others had not gone back to the ship," he said, "the best thing would have been to have returned with them at once." He then went some distance to the north to reconnoitre, while I fed the dogs and got our encampment in order. When he came back we lighted our cooking apparatus, had our supper, and then crept into our sleeping-bag.

When the morning came, Nansen selected a strong team of dogs and set off on one of the sledges for the ship to get assistance in bringing back the sledges. Thus I was left entirely alone in the solitude. This was on Sunday, the 3rd of March.

Instead of lying inactive in the tent waiting for the others to return, I thought I would begin moving in the direction of the ship with the whole caravan. I began the

return journey in the following manner. I started with three of the sledges, using all the dogs, and leaving the other two sledges behind. Then, when I had proceeded some distance on the way, I took the dogs from the sledges to go back and fetch the remaining two, and tied the traces round my waist. I tried first to stand on my ski and let the dogs drag me along; but I soon had to give this up, as the ice was rough and uneven, and the progress became too violent and jerky. The dogs set off at a great pace as soon as they became aware of the lightened load, but the speed was too much for me. Down I went, sprawling in the snow, and the next moment I was being dragged along with the ski on my feet as if I were a snow-plough. At last this undignified method of progress was stopped by a ridge, over which the dogs scrambled, while I was landed right up against it. The wild creatures tore themselves loose, dragging my knife-belt away with them on their mad career. I was afraid they had left me for good; but, strange to say, they pulled up as soon as they felt themselves free, and stood staring at me just as if they wanted to see how I was getting on.

I enticed them back to me, and giving up the ski, I fastened the dogs again to my waist, and set off trotting behind them in my Lapp boots till the snow flew about my ears.

In this way I reached the sledges, which were brought up to the others one by one. The chief difficulty was to get them over the rather high edge of a frozen lane near the camp, but, owing to my "free and easy" method of travelling, we managed to get on quickly enough; so much so, that when the evening came we had travelled back a greater distance than we had advanced the day before.

I found a nice place for encamping, gave the dogs some pemmican, and began getting my supper. While I was attending to the cooking apparatus "Suggen" began to bark, and presently I heard some one answer away on the ice. I turned out, and could now hear voices not far off. Soon afterwards I caught a glimpse now and then, between the hummocks, of dogs drawing a sledge, on which sat two men. In a few minutes they came driving at full speed into the camp, while the dogs made a terrible row. It was Scott-Hansen and Nordahl, who had come to keep me company during the night.

Next morning Nansen, Sverdrup, and Peder arrived from the ship on ski. We broke up the encampment and returned for the second time to the *Fram*.

When we started for the first time with the four sledges, each load weighed about 550 lbs.—we could not tell to a few pounds, for every little thing was not weighed. The total weight of the provisions was not quite 2,000 lbs. On starting the second time the same weight was distributed over the six sledges, but shortly afterwards two boat-grips and one bag with pemmican were left behind, reducing the weight by about 300 lbs. There were thus about 300 lbs. on each of our six sledges. On the two sledges with the kayaks, however, we had rather heavier loads, besides the weight of the sledges themselves. The larger of these, with guard-runners and ski, weighed 70 lbs.

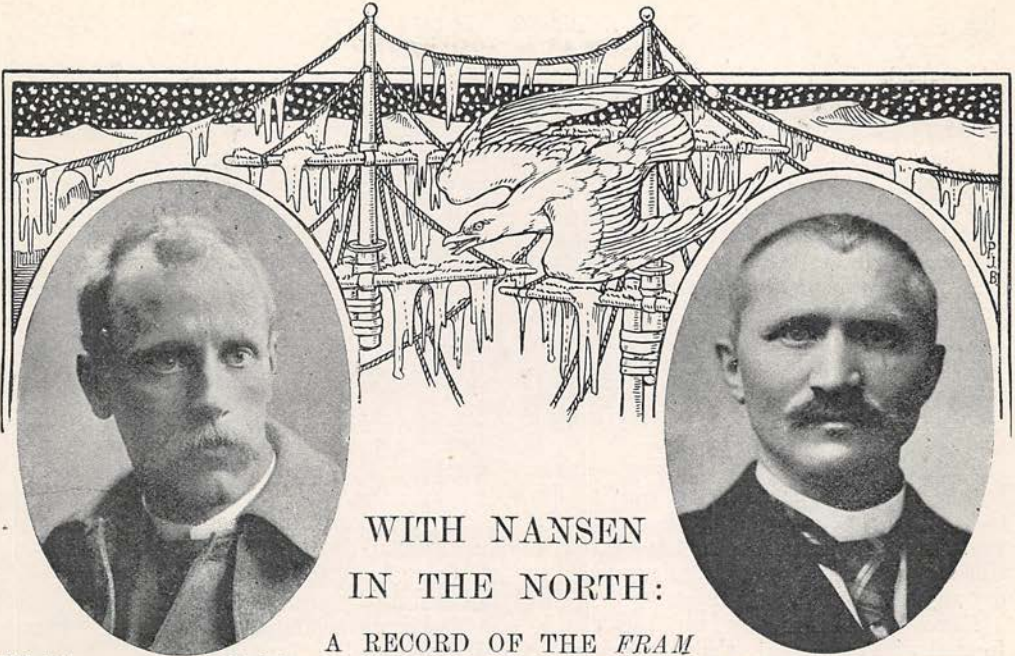
It was clear that we could not manage so many sledges, or so great a load upon each sledge. After renewed deliberations and calculations, Nansen decided that we should take only three sledges with 440 lbs. on each. This would give us sufficient food for 100 days and the dogs sufficient for 30 days. The wolfskin clothes had not turned out suitable for our journey. By using them at night in the sleeping-bag they, as well as the bag, became damp, the latter having the hairy side out; and when we put on the wolfskin clothes in the evening before going into the bag they were so stiff that we could hardly pull the hood over our heads.

We made our blankets into a sort of nightshirt, so that we could button them round us when we crept into the bag. We also used this garment to throw over our shoulders when making a halt on the journey. Sverdrup made the sleeping-bag somewhat larger, as it proved to be too small when we turned the hairy side in.

The third equipment was now ready, and the time had arrived for us to exchange our third and last farewell with our comrades and the *Fram*. I had been down in the hold with Jacobsen, lashing iron fittings to the sledges, and while there he told me that he would not say good-bye any more to us, since we kept on coming back every time. We were sure, he declared, to come back the third time as well.

Well, we did come on board again, but that was not until we met again in the harbour of Tromsö, after many a long day had passed.

(To be continued.)



WITH NANSEN
IN THE NORTH:

A RECORD OF THE *FRAM*
EXPEDITION.

Photo by]

[Lankester.

DR. NANSEN.

Photo by]

[Lankester.

LIEUT. JOHANSEN.

BY LIEUTENANT HJALMAR JOHANSEN.

CHAPTER XVI.

*Off at last—The fight across the ice—
Farthest north.*

ON the 14th of March, 1895, the guns again thundered forth across the desert ice-fields, and the flag was hoisted on the *Fram*. This time our journey began in earnest. Several of our comrades came some distance on the way with us. Sverdrup and Mogstad left us in the course of the day, but Scott-Hansen, Hendriksen, and Petterson remained with us until the following day. Nansen went in front, as before, and led the way; next came the sledge with his kayak; then came the middle sledge; and, lastly, mine with my kayak. The dogs of our respective teams numbered twenty-eight in all. On the flat ice everything went capitally, but the ice-ridges caused us a great deal of trouble and loss of time. I broke one of my ski soon after we started, but I obtained a new one from Mogstad, who had to return to the ship on a ski and a half. When we made a halt to camp for the evening, the odometer on the hindmost sledge showed that we had covered six miles, and we ourselves were both hungry and thirsty.

Next day we parted with our three

comrades: they had spent the night in a snow-hut which they had built with the aid of their ski and staffs. They had not been very warm, and had been astir early in the morning. They now helped to break up the encampment and to look after the dogs, whereupon we thanked them for accompanying us on the way, gave them a farewell hand-grip, and then shaped our course to the north, feeling not a little emotion at parting.

Through some trouble which I had with one of the teams, as well as through my long leave-taking with Scott-Hansen, I got left behind and had to hurry on after the sledges. I found time, however, to look back after our three comrades, who were standing gazing, no doubt with strange thoughts in their minds, after us, who were setting out for the unknown regions in the north.

Monday, March 18.—This is the fifth day of our journey; the odometer shows that we have done over twenty-four miles. Sometimes we go over the flat, even ice at a great pace, but at times we come across ridges and lanes over which we have to climb. The lanes are the worst, as we have to look for safe places by which to cross, and this takes time. The *Fram* has long since vanished on the horizon; there are only our two

selves and the dogs here. The ice is improving as we travel farther north, and the sledges are becoming lighter day by day. We have a good deal of trouble with the one sledge, which has to look after itself pretty well. It often capsizes, and whenever I have to right it the other one comes to a stop, and then I have to get it started again. We suffer greatly from the cold, the temperature being about 40° below zero. During the daytime we have to toil along till we perspire, and it is then warm enough, but it is during the night that it is worst, especially as our clothes and sleeping-bag are damp.

Yesterday we spread our blankets over the kayaks, in the hope of being able to dry them in the sun as we went along. But it was a vain hope to look for the sun. It is still far away, and its rays are not likely to dry anything for some time yet.

March 19.—Yesterday we had a misfortune with our middle sledge, which came into contact with a sharp piece of ice, and one of the bags with fish-flour had a hole cut in it. This caused some delay, as the whole sledge had to be repacked and lashed. The odometer has been broken, and my kayak has got a hole in its side through capsizing. Nansen has lost the sheath of his bear-spear, and left his pocket-compass behind on a hummock, but I fortunately discovered it in time.

The days which now followed—before the sun had risen very high in the heavens, and the cold had abated—must be reckoned as the worst we experienced during the whole expedition. Throughout the day we had a continual struggle to get forward at all, and in the night we suffered exceedingly from the cold and from want of sleep. The exudations from our bodies during the march collected in our *vadmel* clothes, so that during the first days they became stiff and frozen. As the time went on, the icy surface on the clothes gradually increased, and during the continuous and severe cold, which froze the quicksilver, they became a veritable glacial suit of armour. For a time, I used to change my outer clothing when we crept into our sleeping-bag, and used alternately my anorak and my camel-hair jacket, but this plan I soon had to give up, as it was too painful to have to turn one's frozen garments inside out with one's benumbed fingers. We had just to leave them as they were, and they cut into our wrists and loins until they were quite sore. The dogs gradually became intractable, and would

not pull. They would come to a stop all of a sudden, and jump over each other's traces until these looked as if they had been plaited. Over and over again the traces had to be disentangled—rather a nasty job with frozen, bleeding fingers. Some of the dogs were in the habit, as soon as a halt was made, of gnawing through the traces. For some of the worst of them the harness had been interlaced with steel wire, that belonging to "Russen" being entirely composed of wire. But if "Russen" could not free himself, he generally managed to gnaw through another dog's traces and set him free. A good deal of time was thus lost in catching the dogs, and sometimes we had to go on as best we could with a smaller team, while the loose dogs followed the caravan at a respectful distance.

Our gloves, too, became stiff and icy, and we had finally to protect our fingers by using wolfskin gloves lined with "senne" grass. We managed to keep our feet fairly warm, but then we took the utmost care of them; making elaborate leg-toilets, both before we entered the sleeping-bag in the evening and when we turned out in the morning. In the evening we took off everything we had on our feet and unravelled the wet "senne" grass, which we put next to our body so as to dry it, till the morning, when we put on the hair and wolfskin socks or some foot-bandages before putting our feet back into the Lapp boots, which had been turned inside out for the night.

The sleeping-bag was our best friend, but day by day it grew stiffer and heavier with the ice which gradually collected in the hair; now and then we had to turn it inside out and knock the ice off it with our ski staffs. In the evening, when we crept into it, both the bag and our clothes gradually became more pliant. Our poor bodies had first to thaw them up before we could begin to feel warm. The stiff frozen gloves and the wet "senne" grass which we had to wear about us did not improve matters. Still, the sleeping-bag was always the goal for which we longed during our march—the moment when we should be able to get into it and get some warm food into our hungry, frozen bodies. A cup of warm whey-drink afterwards was our greatest comfort. We would then close the flap of the bag as tightly as possible, creep closer to one another, and compose our weary limbs to rest.

When we awoke next morning, ready for the day's march, our clothes were pliant and damp, and when we opened the flap of our bag

and stretched our arms and the upper part of our bodies, the fine rime frost which had gathered on the inside of the tent fell down upon us in showers, and before long our clothes were freezing again and became as stiff as a suit of armour.

We had a good drink of water every morning, so that we did not suffer from the so-called "Arctic thirst." If, at times, we began to talk about hot "bock-beer" and such luxuries, we were sure to feel thirsty and suffer not a little; but if we could only leave off thinking of being thirsty, the feeling soon went away. We had taken with us pocket-flasks of ebonite, which we filled with water in the morning and carried against our breasts, but we only used them at the beginning of our journey; besides, I lost mine before long.

March 23.—Yesterday we travelled eight miles, and did not get into our bag until two o'clock in the early morning. The temperature is -48° and -38° . I have been shouting at the dogs so much during the last few days, that I scarcely know my own voice, and I can feel by my back and my sides that the loads have been heavy to get over the ridges and difficult to right after every capsizing.

March 24.—The thermometer is 49° below zero. Yesterday we had a sharp north-easterly wind, ice in bad condition, and terrible hard work in getting along. We killed "Livjægeren" yesterday to feed the other dogs. We used the bear-spear, but he died hard, although he was in a miserable condition. The other dogs did not seem to like his flesh, being, I suppose, not yet sufficiently demoralised by hardship. This Sunday is the nastiest I have ever experienced. It has been an unpleasant and trying day altogether. We were so tired and sleepy that we were simply staggering with fatigue by the time we reached the spot where we encamped for the night.

March 25.—We are in $85^{\circ} 20'$ north latitude. This terrible cold does not seem to be abating. We lose so much time in camping and breaking up, the work being so laborious and slow, that the day is hardly long enough for us. It is a long and unpleasant job to feed the dogs, as you have to dig out the frozen pemmican from the boat-grips with your sore hands, and portion out the food to the dogs according to their deserts.

March 30.—Last night the temperature was -43° , to-day it is -32° . The barometer is steadily going down, the sky is overcast,

and the wind is south-easterly, blowing about four metres to the second. A change in the weather now seems imminent. We decided to-day to keep our course a point or so to the west of due north. We did not finish our work or get any food till six o'clock in the morning, as the cooking apparatus had become disorganised. Nansen had a lot of trouble with it before he discovered why the air escaped, however much he pumped. It was the lid, which had not been screwed on tightly, a layer of ice having got in under it.

March 31.—I am sitting in the bag, writing this in peace and comfort with my woollen gloves on my hands. What I have written at other times on this tour in my day book has been written in the mornings,



DR. NANSEN ON SKI.

just before we started from our camp, on my kayak, with big, heavy wolfskin gloves on my hands, the pencil being hardly visible.

We made an excellent start very early in the morning, with the wind right at our backs. Suddenly we came to a lane, across which we had just managed to convey one sledge safely, when the ice on both sides of the lane glided away from one another, and Nansen and I with one team of dogs on one sledge stood on the one side, while the two other sledges and dogs were left on the other side. We were standing on the edge of the pack-ice, near the lane, watching the movement of the ice, when suddenly the floe on which I was standing slid away from under me, and I fell plump into the water. Fortunately the floes prevented my sinking

deeper than just above my knees. I managed to scramble across to the other side and to drag myself up on to the ice. This was anything but a pleasant situation in a temperature 40° below zero, my clothes becoming at once frozen and stiff. There we stood, one on each side, while the lane gradually grew broader and broader. It was not a pleasant prospect, to be separated for the rest of the night; Nansen had the tent and cooking apparatus on his side. I had to run up and down the ice and among the dogs to keep myself warm, while Nansen walked along on the other side of the lane to find a way across, so that we might get together again. We could not use the kayaks to ferry us across, as the ice had torn

progress in the course of the day, although we are pushing on with all our might. It is, of course, always light now in these regions.

April 3.—“Russen” was killed to-day to serve as food for the other dogs, but all of them did not seem to like him. They preferred the flesh of the dogs which they themselves had torn to pieces in the good old days on board the *Fram*. The weather is comparatively fine and clear, and the wind is a little more easterly. The temperature is now -24° , and the barometer is falling. It has been pretty high up till now. Our observation yesterday showed we were in $85^{\circ} 59'$ north latitude. We had hoped to find ourselves farther north, but the ice has

been in such a bad condition of late that we have not been making very great progress; in fact, it looks as if things were going to be worse.

In my opinion we ought not to venture any farther north, as we may find it difficult enough to reach Franz Josef Land from where we are now in the midst of the drift ice. Nansen is also beginning to have his misgivings about the advisability of continuing to the north, and to-day he is keeping more to the west. The difficulty of maintaining the dogs in order is increasing. The traces will soon consist of no-



JOHANSEN TAKING "BARBARA" TO BE KILLED.

the canvas into pieces in several places during the many upsets we had endured. Nansen found a way across at last, however, but it was a long and laborious job to get the other sledges across by this roundabout way, the whole process lasting several hours.

April 1.—During our march yesterday it struck Nansen that it was a long time since we had wound our watches, and when we looked at them I found that mine had stopped. Nansen's, fortunately, was still going. The temperature has now quite changed, it has been -11° , and this evening it is even -8° , and a snowstorm from the south-east has sprung up, and is blowing right in our backs during the march. The ice is getting worse and worse; there are innumerable ridges to climb over, and we do not make much

thing but knots, and these must be undone many times a day, besides every morning and evening—a pleasant job!

We had not travelled far on Sunday morning, the 7th of April, before Nansen said that he would not proceed any further. The ice made it impossible for us to make any real progress. Nansen made a short excursion to the north on his ski to examine the ice, but he found it just as bad as ever. We then selected a place for camping, and there made ourselves as comfortable as possible. At this point of our journey—the most northerly that any human foot has ever trodden—we prepared a little banquet, consisting of lobscouse, dry chocolate, stewed whortleberries, and whey-drink afterwards. Nansen took an observation from the top of

a high, massive hummock close to our tent, and his calculations showed we were in $86^{\circ} 13' 6''$ north latitude.

Thus far and no farther, then, it was our fate to penetrate. Of course, we should have liked to have pushed on more to the north. It was, however, our consolation that we had done what we could, and that in any case we had lifted something more of the veil that shrouds this part of our globe. But as we were now situated—when the eye, strained to the uttermost, could discern only ice of such a nature that it was only with the greatest efforts that we could drag ourselves onward for the very shortest distance each day—we had to bow to the inevitable and turn our faces in the direction of warmer climes.

CHAPTER XVII.

*The Norwegian flag in the farthest north—
On the way home—Tracks of foxes—Mild
weather.*

ON Monday, the 8th of April, we turned back, and, having planted a couple of Norwegian flags in this the most northerly camp in the world, we shaped our course for Franz Josef Land.

Curiously enough, our first day's march in the new direction was very satisfactory, the ice here having changed for the better, and permitting of good progress. I was now able to go long distances on ski behind the sledges. Before this I had been obliged to trudge along on foot, pushing and helping the sledges along.

April 10.—Last night and to-day we have made good progress—indeed, the best we have made as yet. We keep at it as long as possible when we once get properly started.

April 11.—Last night was the most comfortable we have had hitherto. It was actually warm in the bag, and the inside of the tent, which lies right in the sun, was free of hoar frost.

I am sitting writing without anything on my hands. We are in the best of spirits, and are talking about home, and when we are hungry, which is generally always the case, we discuss what fine spreads we are going to have when we get back. The "Arctic thirst" has not troubled us much hitherto, but yesterday we suffered a good deal from it. The temperature last night was -18° .

"Barbara" was killed on the 12th, and given to the dogs; they are beginning to like the taste of dog-flesh, no doubt because

they are getting more hungry. The dog, poor creature, tried to bite my hand when we killed her. I suppose she thought she was too young to die. She was born and bred among the polar ice, and found her death there without having seen anything else of the world but snow and ice.

On Saturday, the 13th of April (Easter Eve), we did not accomplish so much as we had done during the last three days. We came to a lane which it was impossible to cross. Nansen started off to find a place for crossing. He was away so long that I began to be anxious about him. He came back at last, however, after having looked in vain for a crossing, and proposed that we should camp and wait till to-morrow, and make ourselves as comfortable as possible on Easter Eve. Nansen sat in the bag, working out some observations, while I attended to the dogs, and afterwards we had a festive meal in our tent, consisting of fish-gratin, bread and butter, vril food, and a new concoction—lime-juice toddy. I was busy putting our camp in order when the ice began packing over in the lane, which was soon closed up, while in the neighbourhood of our encampment the ice creaked and groaned, so that the dogs became uneasy. Twice of late the dogs have attacked our butter-bag. I caught "Storræven" in the act, and although he was an excellent dog, there was nothing for it but to give him a thrashing. We were afterwards compelled to place the butter-bag inside the tent.

Easter Day we spent comfortably in our tent, Nansen being busy with calculations, and I with mending and patching clothes. Yesterday, the 13th, we were in $86^{\circ} 4'$ north latitude and 86° east longitude, the variation being $42' 5''$. Nansen's watch had stopped about an hour. No doubt the reason we are so far north is that the ice is drifting in that direction. To-day we shaped our course more southerly. Last year about this time the *Fram* drifted rapidly towards the north, and it is not improbable that the same drift is being repeated this year about the same time.

Monday, the 15th of April, was a splendid day. The thermometer showed -15° , and the sun was quite warm. About noon, before we got into our bag, after having kept going during the night and the forenoon, we hung up nearly all our belongings on the staffs and ski to dry in the beautiful sunshine. Inside our tent, upon which the sun was shining warmly, we sat enjoying a couple of cups of steaming "Julienne" soup.

We made a good record on the 16th of April. We set out early in the morning and pushed on for fourteen hours, covering a considerable distance, the ice being in good condition, and the dogs pulling much better, due to the loads having become lighter.

During our march we generally halted midway to have some food. We used to get into the sleeping-bag with some bread, butter, and pemmican between us. At first, when the cold was severe, these halts were anything but pleasant as we lay shivering with cold and gnawing at the frozen lumps of butter, which almost vanished in our immense wolfskin gloves. Later on things improved, but it sometimes happened that we fell asleep while we lay munching our food, and thus lost valuable time.

The apportionment of our chocolate once a day was, of course, a bright spot in our existence. The chocolate had been broken into bits, so that it was not easy to portion it out equally, but we managed it in this way: one of us arranged two portions on the kayak, while the other turned his back upon him and chose his lot by calling out "Right" or "Left." We were quite fair to one another. Nansen, who was a bigger man than I, never made any difference in the rations. As a rule we had sufficient, but there were days when we thought our allowance rather short.

April 19.—Our last day's march began on the 17th in the evening, and lasted till the forenoon of the next day. From the observations taken yesterday and to-day we find that we are in $85^{\circ} 37' 8''$ north latitude, and $79^{\circ} 30'$ east longitude, which shows that we have been getting on fairly well lately. I have been so unfortunate as to have had two of my ski broken; the dogs set off with the sledges, which went right over them. "Perpetuum" was killed yesterday. We thought it would be better to strangle him than to cut his throat with a knife, so we tried that method, but we had to give it up and use the knife after all. The most humane way, of course, would have been to shoot the dogs, but we could not very well afford ammunition for this, as we might find a better use for it later. These slaughtering were rather unpleasant work, but they did not affect me so much as I at first thought they would. I soon became so skilled in cutting the dogs' throats that they did not seem to suffer any great pain. The poor creatures went quite willingly with me behind a hummock. There they were placed on their side in the snow, and

while holding them down by the collar with my left hand, with my right I stuck the knife right through the throat down into the snow. In most cases they died without uttering a sound. The worst part of the work was to cut them up and serve out the rations, so that each dog should get according to his deserts. It was only strict, imperative necessity that to some extent made the work endurable.

April 21.—Our last day's march lasted from four o'clock in the afternoon of the 19th to half-past eight in the morning of the 20th. We got on fairly well, notwithstanding the numerous ridges and lanes. We had, especially, great difficulty in getting across one large, broad lane, full of slush and pieces of ice, but we ultimately succeeded, the ice pressure going on all the time under our very feet. On the other side we found fine, flat ice—a regular "Land of Canaan," as Nansen used to say when he came back from his reconnoitring and had found good ice.

From half-past nine in the morning of the 21st to half-past one in the afternoon of the 22nd we had got over at least twenty miles, which was our best record. But then the great open plains of ice were in excellent condition, with only a ridge and a short stretch of rubble ice here and there.

The next day we also had good ice, and notwithstanding a slight fall of snow, over which our ski glided less easily, we managed to cover close upon twenty miles.

During the 24th and 25th of April the ice was not quite so good, but nevertheless we travelled over a considerable stretch of ground. During the last days the temperature has been -15° to -18° in the day, and about -22° at night. Strange to say, we saw the track of a fox right across our course ($S. 5^{\circ} E.$) and shortly afterwards we came across another track of the same animal, this time near an open lane which stopped our progress, and upon the side of which we encamped. When we discovered the first trail there were also traces indicating that the fox had had something to eat not long before. But how could it have found food out here in the midst of the drift-ice? According to our reckoning it should not be more than about 120 miles to the west coast of Petermann's land. The question then was, how far does it extend eastwards?

On the 28th we travelled right on from the morning until ten o'clock at night, when we had to camp, on account of the overcast weather and the strong southerly

wind. When we began our march we came to a broad, open lane, the ice on both sides of which was in motion. The lane extended from east to west and we had to walk along one side for a couple of hours before we found a place where we could get over, and then it was only with great difficulty, having to wait until the lane closed up in order to get the sledges across.

April 30.—This is the last day of April, and then comes the beautiful month of May; but it may not bring us much change.

We did not travel for more than five to six hours yesterday. The beginning was promising, but we came to an immensely broad lane, which we followed westward. Nansen then explored further alone, being away for several hours, but no crossing was to be found, and so we had to encamp.

The weather is fine now, being quite mild; yesterday the temperature was 4° below zero. In the tent we feel warm and comfortable, and at night we sleep well.

CHAPTER XVIII.

*More lanes—Summer weather—
Another "seventeenth of May"
—A whale—Where in all the
world is land?*

DURING the early days of May the wind was the same as that which used to raise our spirits on board the *Fram*. Now, of course, we were not at all pleased with this south-easterly breeze, for it produced so many open lanes in the ice, and these sorely tried our patience. First of all, we had to find a crossing, and after many detours we might succeed in finding one, when it often happened that the crossing itself caused us many difficulties and troubles. Several more of the dogs have been sacrificed at intervals to keep their fellows alive. So far it is a case of the survival of the fittest.

On Sunday the 5th of May we marched from half-past one in the morning until six in the evening.

May 6.—I woke last night feeling cold; a fresh wind had blown one side of the tent down on to my face. Of late we have not closed the flap of our sleeping-bag, as we feel sufficiently warm otherwise. But the wind has now changed and is blowing hard from

the north, which is in our favour. We are now in $84^{\circ} 30'$ north latitude and $66^{\circ} 17'$ east longitude. We must have drifted a good deal to the north and west on account of the south-easterly wind we have had of late. The temperature is one degree above zero.

Our next day's march lasted from five o'clock in the morning till nearly nine o'clock the following morning, the 7th of May. We had, of course, a good many ridges over which to struggle, but there were extensive plains of flat ice now and then, and we made good progress.

The next day the wind, which had been blowing from the north-east all the time, increased steadily, and in the course of the afternoon it became so intolerable, when the



NO LAND IN SIGHT.

snow began falling, that we had to pull up and encamp before we had intended doing so.

May 8.—The temperature is about 10° above zero, and we are having splendid summer weather compared with that to which we have been accustomed. Our fingers are still sore and tender, but now we need not fear to take off our gloves or other clothing.

The weather was overcast and misty on the 9th of May. After having proceeded for some hours we fancied we saw fine, extensive plains of ice before us, and we congratulated each other on the prospect of good, flat ground again. But the sky became more and more overcast, and the snow began to fall, so that it was impossible to see anything before us. Now and then the weather

cleared up for a few moments, and we pushed on for some time, though at last we had to give in and stop.

During the following two days it was difficult for us to find our way, as the whole sky was completely overcast, with the exception of a strip of blue sky in the south-west which was visible for about eight hours while we lay waiting for fine weather. But we struggled along, and managed to accomplish a fair day's march after all. The ice was now assuming a different character, which we thought indicated the proximity of land. It was not so flat as the ice we had traversed of late, but we managed to get along somehow.

May 13.—Yesterday's march was a troublesome one. From the outset we had to force our way across long stretches of rubble ice and ridges, rendering it more difficult to proceed. The sledges were certainly much lighter, but we had only twelve dogs left. In several places between the hummocks, when we had to help the dogs and sledges across, we often sank up to our waists in the snow. We could not use our ski on these occasions; Canadian snowshoes would have been more suitable. We pushed on from three o'clock in the morning until about half-past eight in the evening, when we encamped and rested, after a day of toil and struggle, covering some ten or twelve miles.

May 14.—We had to give up all idea of going on yesterday. After breakfast we were talking as usual about making good progress in the course of the day, and were preparing to start, when the weather became overcast and thick, a snowstorm from the north-west setting in at the same time. We then set to work to get rid of one of the sledges, which, perhaps, we ought to have thought of before. The load on this one had now diminished so

much that we found it better to divide and distribute it over our two kayak sledges, most of it being utilised as supports under the kayaks, while we put the rest of it inside the latter. I am glad of this change, as I hope it will be easier to follow one sledge than two, which has been my task during the sixty days since we left the *Fram*.

May 16.—Yesterday we again had splendid weather, a clear sky and warm sunshine. We had to use our snow spectacles, which, fortunately for us, have not been much in requisition. We have now only two sledges, with six dogs to each. We are not making any better progress than before, as the dogs are too worn out.

We are now in $83^{\circ} 36'$ north latitude, and $59^{\circ} 55'$ east longitude. We are crawling along towards the south, but our pace is slow. We are constantly wondering at not having sighted land yet. The land which the Austrians saw from Cape Fligely should not be more than nine miles off from where we are now, but we see no sign of it. The reason we have not seen any tracks of foxes or any other animal of late may be due



TRYING TO FIND A CROSSING.

to the continuous fall of snow we have had.

On the 17th of May—the Norwegian Day of Independence—we set out about six o'clock in the afternoon in anything but good spirits, although the flags were hoisted on both our kayaks and were waving in the wind in honour of the day. We had arranged, for a change, that I with my sledge should lead the way; but my dogs, which had been accustomed to follow behind the others, would on no account fall in with this new arrangement. They could not understand why they should go first, and their attention was continually taken up with the other team. As I could not very well force them ahead by thrashing them, we gave up this experiment.

Soon afterwards Nansen thought he heard

a noise like the blowing of whales in a large pool in front of us. I had also heard the noise while busy in the camp in the morning, but I thought it was the ice-floes grinding against one another. But it really turned out to be a whale. We could now plainly see one gambolling on the surface of the water and then disappear. In the twinkling of an eye we were over by the kayaks, seized our guns and cartridges and got out a harpoon and line. A whale would be worth while getting hold of, as that meant food for a long time. Nansen set off along the pool, fully armed and ready for the fray. In the meantime I was to look for a crossing. Nansen soon came back, however, without having had any success. "It was a nar-whal," he said, "and they were exceedingly shy."

The 20th of May.—We are now weather-bound by a snowstorm that is raging. Yesterday we did a good day's march over fairly good ground—about twelve miles or more. We saw several large hummocks on the way, but as for land, it seems that we shall look in vain for it for some time to come. It is really pleasant to lie like this in the tent, while the storm is shaking it and the snow outside is piling up higher and higher by its side. We feel quite safe here in the bag, and can let the storm rage as it likes; it does not inconvenience us in the least. It is difficult to say when we shall get home. We have just been talking about our prospects. These continuous easterly and north-easterly winds are carrying us further and further west, so it may happen that we shall not come across any land until we reach Spitzbergen, and we may not get there in time to get home this year. We must take our chance. During this last march we saw tracks of bears in two different places. This, perhaps, may be a sign of land.

On the 21st of May the bad weather still continued, but we could not wait for it to improve any longer, and so set out, after having fed the dogs with half rations of pemmican and having removed the guard-runners from our sledges, which now ran far more smoothly and speedily. The weather soon became worse, with a strong northerly wind and drifting snow. We could not see very far before us, and, besides, the ice was heavy. Notwithstanding this we fought steadily on till noon, across fairly good ice, in which we met with no lanes. After dinner things grew worse, but still we kept at it. Presently it began to clear

up and we came to long plains, across which we proceeded at a good pace. Nansen hoisted the sail on his sledge for the first time, and got along so well that it was hardly necessary for the dogs to pull at all; but, for all that, they did not get along any the quicker. However, they did not stop so often, which was all the better for us, who were following them. We managed to cross a large pool, although the ice was in violent motion, and there were places here and there which were not so safe as they appeared to the eye. We were, however, well satisfied with the day's work; it began badly, but finished up well, and we believed that we had now left the 83rd degree behind us.

CHAPTER XIX.

More ridges and lanes—The first bird and seal—Whitsuntide—Fish—Still no land—Short commons—The first ferry—A lucky shot.

THE 23rd of May was a day of toil and trouble. The number of lanes was terrible, and they could not well have been worse.

Before starting, Nansen set out to reconnoitre along the broad lane which we had seen when we encamped last evening. He was away for three hours. In the meantime I mended the tent, which was beginning to get rather the worse for wear. The temperature is now about 10°, so it is not difficult to do any sewing. Nansen proceeded eastwards along the lane, but was unable to find any crossing. The lane branched off into two arms, and he thought we ought to be able to get across in some place or other.

We then proceeded eastwards, partly because we thought we had gone too far to the west, and partly because we saw indications in the sky of much open water in that direction. Well, the result was that we did not meet with and cross one lane only, but something like twenty. Such a confusion of lanes and loose ice we have never seen; one minute we wound our way in one direction, and the next minute in another, after having with great trouble looked about for a crossing.

We also passed a number of ridges, the ice being all the time in violent motion. We were often deceived by the snow-slush which covered some of the pools and lanes, as it appeared like a fine solid sheet of ice to the eye.

The pressure was at its worst in one particular place, just where we were going to cross the ridges; these grew higher and higher, and large blocks began tumbling down from the sides, when suddenly the pressure stopped and all became quiet. We cleared away the worst of the ice and made haste to get the sledges over, but no sooner was this safely accomplished than the pressure began again. It often happened when we had found a place for crossing that it was destroyed by the time we came up with the sledges, for we took some time, of course, no matter how much we hurried.

A meridian altitude, which we took to-day, showed that we were in $82^{\circ} 52'$ north latitude. We are glad to find that we are so far south, but it is strange that we have not seen any sign of land. This, of course, is our chief concern.

Next day we covered about twelve miles, as far as we could make out. During the first eight hours we had to contend with lanes, but later on things improved. We used the sail on the first sledge, thus utilising the strong north wind. Our longitude was now $61^{\circ} 27'$ east. We were pleasantly surprised to find this, as we believed we were much further to the west, and were afraid that we might drift past Cape Fligely, for which reason our course has of late been shaped a good deal to the east. Now we are steering due south.

May 27.—We are in $82^{\circ} 29'$ north latitude. We now take it for granted that we must be a good deal east of land, otherwise we ought certainly to be in sight of it now, especially as we thought we were south of Petermann's land.

We could not possibly be too far west; in that case we should be about 10° wrong in our observations, which is hardly credible. We are, however, presuming that we are east of land, and are therefore steering in a south-westerly direction. Time will show if we are right, but at present we are really in the dark. We have been examining our maps, and have been speculating backwards and forwards about our whereabouts. There is one thing we have noticed, during our marches and when encamping, for the last few days, namely, that there is no fresh-water ice to be found anywhere; all the ice we have passed is exclusively salt-water ice a winter old. There must be open water where that ice comes from.

During the last days of May we went through the same toil and trouble, our progress being greatly impeded by lanes and ridges. On the 28th Nansen saw a fulmar

(*procellaria glacialis*) hovering about above one of the kayaks. It seemed to want to share the remains of "Kvik" with the dogs. Next day we saw several narwhals in a lane, a seal on the ice, and a black guillemot circling round us. These appearances of animal life are a delightful sight to us—they revive us and induce us to believe that land must be near.

May 31.—This is the last day of May, and still there is no land; we only see clouds on the horizon, and everywhere around us the eternal ice-fields which we have now been gazing at for nearly two long years. At times the sight makes us quite depressed. Time seems to drag so heavily so long as there is no sign of land. And then what sort of land will it be? A desert, cheerless, ice-bound coast in the far north, where no human being can desire to live; it is for this land that we are now and have for long been wearying. Day after day goes by, and yet we never seem to reach it. But we must get there some time, and then we hope we shall be safe; but it must come soon, for the number of our dogs is diminishing at a terrible rate. Yesterday we killed "Pan," who formerly used to pull for three dogs, but had now become a shadow, and "Kvik," who at last took to eating her canvas harness, has also met her fate. Nansen was quite out of sorts on the evening when "Kvik" was killed. She was the only one of our dogs who had been in Norway. Nansen had had her in his own house, where she was a great favourite. I took her quietly away, and had killed her before he was aware of it.

Our marches, as well as the times for resting, are now much shorter. We are trying to get a regular amount of work and rest into each day, so that one does not encroach upon the other. We feed the dogs oftener now, as we think that by so doing we shall be able to reach land the sooner.

We no longer take our midday meals and rests in the sleeping-bag; we place a sail on the snow and sit down on it to eat some bread and butter. We have found the fresh tracks of three bears at the foot of a hummock; they led to a lane, but we were not prepared to follow them up. We are now in $82^{\circ} 21'$ north latitude, which is rather satisfactory. An unpleasant, strong, southerly wind is now blowing and shaking the tent, although we are in the lee of a group of hummocks. Among these we found some fresh-water ice.

For seven days in the beginning of June we were obliged to remain on an island of

ice surrounded by lanes on all sides. We set to work to repair our kayaks, taking off the canvas covers and mending them, and relashing and splinting the frames, which had fared badly over all the bad ice which we have encountered.

During the early days of June we had a bad time of it, and things began to look more and more serious. Our rations were being daily reduced, and we had to be most sparing with our fuel. The dogs were getting thinner and weaker, the sledges with their loads were still heavy, the ice became worse and worse, and the days passed by, but no land appeared.

Thursday, June 11.—We have just partaken of our rations and are ready for our day's march. It is not an easy matter to keep up one's spirits as one should do situated as we are just now. It will soon be impossible for us to proceed any further; the snow is melting and is soft all through—we are, in fact, wading through a sea of slush, and the poor dogs, of whom only five now remain, sink deeply through it at every step. We shall soon have nothing but water to walk in. Progress is rendered more difficult than ever by the innumerable lanes and the bad state of the ice. We do not know where we are. The land which we have been steering for so long we have almost given up all hopes of finding. It is the open sea which we now long for, but it is far away, and it will be difficult enough to reach Spitzbergen across it. We shall have to depend upon our guns for subsistence.

Yesterday we covered about three miles. After dinner, which consists of three and a half ounces of pemmican and three and a half ounces of bread, the sun appeared at times between fantastic clouds, dark or almost black in hue, while others near the horizon were quite light. The ice-fields are white as the driven snow, the water in the lanes is a deep black, and the horizon to the south is yellow and red, while dark, cumulous clouds are continuously drifting up from E.S.E., darkening the sun from time to time. This was a wonderfully beautiful sight, which we greatly enjoyed and which revived our spirits.

Our marches are now pursued in the following manner: Nansen goes on for some distance in front to find a way, while I follow behind with both sledges, one behind the other, until I fall in with Nansen on his way back after having found a passage, when we each take our sledge. It often takes both of us to get the sledges over the ridges or across the lanes and over the loose ice.

Now that the ice is in as bad a state as it possibly can be, we make but slow progress. All our hope of reaching land now rests on the prospect of meeting with "slack" ice with plenty of lanes running in a south-westerly direction, through which we may proceed towards land in our kayaks after having killed our last dog, whose flesh we must ourselves be prepared to eat.



OUT RECONNOITRING.

It was during this march, while Nansen was away reconnoitring that I killed "Lilleræven," who had fallen down in front of the sledge. "Storræven" kept up until the evening, when he, too, met his sad fate. Nansen made our suppers from his blood. Were I to say that I liked it, I should not be telling the truth; but it went down, and that was the main thing.

Sunday, June 16.—We have now made ourselves harness for pulling the sledges, and are obliged to use all our strength to get on at all.

June 20.—We are practising starvation as best we can, until we groan with pain. When this becomes intolerable, we take about two ounces of pemmican and the same quantity of bread. We have had only one

meal in the course of two days and a half, and this consisted of two sea-gulls, which, confronted with our appetites, seemed to vanish like dew before the sun. On another occasion our meal consisted of two ounces of bread and just as much pemmican, and our next of two ounces of aleuronate bread and one ounce of butter.

June 22nd.—We set out again in the evening on the 20th, after having vainly made many attempts to shoot a seal. Nansen had been out reconnoitring and told me that some distance off there was a large pool, where we should have an opportunity of trying our kayaks. On the way there we came to the conclusion that, in order to make any real progress, we should have to put wooden grips under the kayaks, and take the loads which we had on the sledges into the kayaks, so that we might float the whole load across the lanes and pull the sledges up again on the other side, and so continue our journey without any loss of time. And we must also get rid of everything which we do not absolutely want.

Before reaching the pool we saw a seal in one of the cracks in the ice; Nansen fired, but missed it. As soon as we came to the pool we prepared for our first ferrying. The kayaks were placed side by side on the water and tightly bound together, with the ski stuck through the straps on the deck of the kayaks, while the sledges were put right across the kayaks, one forward and one aft. We got the pumps ready and, with the guns between our knees, we set off and began paddling across the pool. Here we were, with all our worldly belongings, at the mercy of the glittering waves. Our gipsy-like turn-out was certainly a curious sight, but to us it was a welcome change in our mode of travelling. We had to use the pumps frequently, my kayak especially being very leaky. As soon as we came to the other side of the pool Nansen jumped upon the ice with his camera and took some shots at our floating conveyance, while my kayak was gradually being filled with water and drifting away from the ice. All of a sudden we heard a great splash in the water behind us.

“What’s that?” I shouted.

“A seal,” replied Nansen, and began pulling ashore the sledge which was lying aft on my kayak, whereby the water rushed in and filled it right up to the gunwhale, where the cover had not yet been sewn together. It was no use pumping, I was simply sitting in water. Another splash,

and up came the big, shining head of a seal; it struck a couple of blows with its flappers against the edge of the ice and then dived under the water again. We did not think we should see it any more, but I took the harpoon which was lying on my kayak and threw it across to Nansen, in case he should want it. In the meantime the water rose more and more in my kayak, and something would have to be done to get it on to the ice at once. There was another splash, and the head of the seal again appeared, close to the edge of the ice. I quickly seized my gun and fired at the seal just as it was disappearing under the ice. It made one final splash, and then lay floating in the water, which was coloured red by the blood flowing from its shattered head. Nansen came running like the wind to the place with the harpoon and threw it into the seal. The harpoon was small and slight, so Nansen thought it best to plunge his knife into the seal’s neck in order to make sure of it.

Now followed an exciting scene. Both the kayaks began to drift away, mine being kept afloat by the other, while the sledge which we had been trying to land was half-way under the water.

The dogs now began to feel uneasy, and no wonder. I sat fixed in the kayak and dared not let go the sledge, nor could I venture to stand up and attempt to pull it up on to the kayak.

Over by the edge of the ice lay Nansen, not daring to let the seal go, for it meant abundance of food and fuel to us, who were so sadly in want of it.

Finding that the seal kept afloat, he came rushing up just in the nick of time to save me and my sinking flotilla. I and the dogs were safely got ashore, and the sledges with my kayak were dragged up on to the ice, while the other was left to itself, whereupon we both ran off to secure our precious prize; but it was no easy task for two men to pull a big, fat seal out of the water. While we were busy with this, our attention was again turned to our other effects, as we noticed Nansen’s kayak adrift some distance from us, while our cooking apparatus was having a trip of its own, floating away lightly, high out of the water. After having rescued our property, we returned to the seal, which we finally succeeded in pulling out of the water, after having fastened a rope to it by its lower jaw.

There it lay on the ice at our feet, a sight which gladdened our hearts, as there was

now no danger that we should starve to death for the present; now we should have food for a long time, not to mention fuel, and we could now rest and wait for the ice to loosen still more.

Nansen then started to cut up the seal, collecting the blood that was still left in it. I set to work to find a place for our tent, to collect all our things, which lay spread about on the ice, and to bring them to

all, and settled down first to eat and next to sleep. The pot was filled with the flesh of the seal, which tasted remarkably fine, along with the raw blubber. It was now more than twenty-four hours since we had had anything to eat.

Thus all our anxiety with regard to food is at an end for some time to come. We may, perhaps, soon become tired of living only upon seal's flesh for a month, but it cannot



JOHANSEN HAULING THE SLEDGE OVER PACK-ICE.

the tent, where I then unpacked all the wet things.

In the meantime, Nansen had cut up our find nicely, and the flesh and skin, with a mass of blubber, lay temptingly in the pure, white snow. It was all brought to our camp, where we began preparing a really square meal.

We had made up our minds, just before we caught the seal, to lie for the coming night in our blankets only, to see whether we could do without the sleeping-bag; but we used both the blankets and the bag after

be helped; the main thing is that it is food. To-day the wind has shifted right about; it is now blowing freshly from the north. I have been out for a walk to look at our surroundings.

The flesh, the blubber, and the skin of the seal are lying round about our tent, while the gulls at times are cruising about over it. Some distance away stands the sledge, with our three remaining dogs at a respectful distance from the flesh. Poor creatures! they were doubtless as thankful as we were when that seal was caught.

CHAPTER XX.

“Longing Camp”—St. John’s Eve illuminations—Three bears—The white cloud-bank—Land!—In a bear’s clutches.

WE remained for a whole month on the same spot where we had shot the seal; we called it “Longing Camp.” And the spot was well named. It tried our patience to the utmost, as we lay there waiting for the snow to melt and make the ice passable, and enable us to proceed towards the unknown, unseen land which we felt could not be far off.

During this time we lived on the flesh of the seal, which we boiled or fried over our train-oil lamps. Nansen had been among the Eskimos in Greenland, and had had great experience in living as a wild man, by which we greatly profited both now and later on. The lamp consisted only of a small bowl made out of a plate of German silver which we had brought with us to repair the mountings of the sledge-runners, and for wicks we used some of the canvas of which our provision-bags were made, or the soft, antiseptic bandages which we had in our “medical-bag,” and for which we could scarcely have found any better application. Several of the doctor’s things came to be used in quite a different and much more pleasant manner than was originally intended; thus some plaster, intended for use in the event of a collar bone being broken, came in most usefully, for we discovered that the adhesive matter with which it was coated was a most excellent putty for making the seams in the kayak covers watertight.

One day we resolved to treat ourselves to pancakes made from seal-blood for supper. Nansen began frying them over a splendid fire, the flame of which was produced by several wicks; everything went all right until he was engaged on the last pancake but one, when the heat became alarmingly great, as the pieces of blubber which were put in the bowl to provide oil for the wicks caught fire while melting. The tent being crowded with boxes and utensils, it was not an easy thing to put out the fire, so Nansen took a handful of snow from the floor of the tent and threw it into the flaming bowl, expecting to put out the fire with it; but apparently it did not like such treatment, for the flame leaped high up into the air against the sides of the tent and set fire to one part of it. We jumped out of the bag and made a rush for the opening of the tent, bursting off the buttons on our way through it, and so got

out into the open air. The fire, which had confined itself to one corner of the tent and burned a hole through it, was soon out, and we had to use one of our sails to patch it.

This happened on St. John’s Eve, and so far the conflagration was quite opportune* as our contribution towards the usual festivities on Midsummer’s Eve. We swept up the floor of our tent and bestrewed it, not with fresh juniper or birch leaves—of which there is rather a scarcity in these parts—but with snow, which is plentiful here even in the midst of the summer.

June 25.—To-day I lay asleep bare-legged and in my shirt sleeves on the top of the sleeping-bag, with my legs sticking outside the tent, the weather being so fine and warm—the best, in fact, that we have hitherto had. I was suddenly awakened by Nansen calling out, “Johansen, here is more seal-steak for us.” He had been out and had shot a young seal.

July 1.—The month of June has gone out with fine weather; the air is still and warm, but it is seldom that it is quite clear. We prefer the warm mist, however, for then the snow melts most rapidly, and we are able to get nearer to our goal.

We are now lying on top of the sleeping-bag making notes, with the aperture to the tent quite open, while a gust of wind moves its sides from time to time, throwing shadows across my note-book, so that I imagine myself at home under the pines and birches. It is wonderful what things one’s imagination can conjure up.

We now have our meals twice a day: in the morning boiled seal’s flesh and soup, and in the evening seal’s flesh fried in train-oil. The blubber we generally eat raw. Our appearance has changed considerably of late; we are quite black with the smoke and soot of the train-oil, and we scarcely recognised ourselves when we saw ourselves yesterday in the artificial horizon, which we used for a mirror.

July 4th.—The only event of any importance yesterday was the killing of “Haren.” Poor creature, I think he has been the best of all the dogs! How he has worked from first to last, even after his back had become a little crooked. It was not a pleasant task to cut his throat, especially as I could not finish him so quickly as I had wished, but he was so thin and skinny that

* In Norway it is an old custom to light bonfires on the hills on St. John’s Eve.

it was difficult to find the arteries at once. Now we have only "Suggen" and "Caiaphas" left of the twenty-eight dogs.

July 6.—To-day we suddenly heard the dogs barking in an unusual manner and guessed at once that something out of the common was in the air. We rushed out of the tent, Nansen first and I after him. A huge bear was standing sniffing at "Caiaphas." Nansen seized the gun, which was standing at the entrance of the tent, and fired, but the shot could not have struck a vital part, for the bear at once took to his heels, leaving traces of blood behind. Nansen fired another shot at it, this time also without result. I now got hold of my gun, and both of us set off after the bear. Suddenly we saw the heads of two cubs looking over the ridge of a hummock. The hunt now began in earnest; the ground was in a terrible state, covered as it was with deep snow, lanes, and hummocks. Now and then we gained on the bears, but we wanted to be well within range, as we had not many cartridges with us; out of mine Nansen had two. We then came to a point where they had turned off in a different direction. Nansen followed their tracks, while I made a circuit, thinking that we might thus succeed in approaching the bears from opposite sides; but after I had proceeded some distance in the deep snow I was stopped by a lane, and Nansen and the bears got right away from me. This was most irritating, but the spirit of the chase was upon me, and I flew across some floes only just sufficiently large to save me from a cold bath. I had not gone far on the other side when I heard a shot fired, followed immediately by another. Shortly afterwards, when I got up with Nansen, I found the three bears lying among some nasty drift-ice close to a lane, one of the cubs being quite dead, while the mother and the other cub still showed signs of life, although they were bleeding profusely. The mother was finished off with a bullet, and the cub received a shower of shot in the head.

We cut up the bears and then returned to the camp by an easier way than we had come. We then took both the dogs and a sledge and fetched one of the cubs. "Suggen" also seemed now to be done up; he was no longer able to walk, and we had to put him on the sledge. At this he began howling and making a terrible noise, for he was evidently highly indignant at this treatment.

We had now three splendid bearskins to lie upon instead of the bag, which had

become hairless, and through which we were beginning to feel the sharp edges of the ski.

The dogs were now given as much food as they could eat, and they seemed to thrive well on the nourishing bear's flesh; we also ate a great quantity of it ourselves, both morning and evening. Any housewife would pray Heaven to preserve her from having guests like ourselves, if she could but see the meals which we managed to get through; but then, of course, there was a considerable interval between each meal, generally twelve to fourteen hours.

In clear weather we were always on the look out for land from the "observatory hummock." We noticed that to the south a



IN "THE CAMP OF LONGING."

white bank of clouds always kept over the same spot, and we could not but think that it must be standing over the land.

Later on, however, it turned out that it was not clouds, but land itself, at which we had been gazing; the bank of white clouds was really nothing else but the inland ice on one of the islands of Franz Josef Land.

On the 22nd of July we packed up and said good-bye to "Longing Camp." After having divided our baggage into two heaps and drawn lots for them, we started off. We had lashed some bamboo rods to the sledges to serve as shafts in addition to the drag rope fastened to our harness.

We took with us some dried meat and

about sixteen pounds of blubber. Everything went satisfactorily—in fact, better than we expected. Although the ice was in as bad a state as it could be, we managed to get along with our sledges all the way with one dog to each. Nor was it necessary to use our ski all the time; sometimes we came across a belt of snow, when we could dispense with them and walk.

July 24.—At last the longed-for event has happened! We have sighted land. It was,

tioned the matter to Nansen, however, and towards evening he saw the same oblique stripe from the top of a ridge, and after having taken the glass to examine it more closely, he exclaimed, "Yes, you must have a look at it, too; it is certainly land!" And sure enough the black stripes were rock, that we could plainly discern—rock projecting through the ice-sheet with which the land was covered. To the east of the two smaller black stripes we saw that the horizon



DR. NANSEN GETTING HIS GUN TO RESCUE JOHANSEN FROM A BEAR.

however, a most difficult land to sight, for it was covered with ice, just like that on which we are travelling. It was a black, oblique stripe on the horizon, evidently composed of bare rock, which enabled us to discover it. I saw this stripe yesterday about noon from the top of a hummock, while Nansen was out reconnoitring, but I did not think it was anything but one of the usual black streaks on the ice caused by mud, of which we have lately seen a good many. I men-

was bounded by ice—probably inland ice—of the same colour as that we are travelling over, but arched in form and sharp in outline, with a little irregularity on the top. It was the same outline which I noticed from the observatory hummock at "Longing Camp," and which I had thought to be clouds lying over the land.

Later in the evening I also noticed to the west of the black stripes a similar mass on the horizon, but much smaller, and this, too,

I think, must be land. This, we discovered later, must have been Crown Prince Rudolf's Land.

So the blessed land for which we have been looking so long is there at last! We shall soon be able to say farewell to this drift-ice we have had so long beneath our feet. We shall be able to push forward on the channels near the shore, or along the shore-ice to Spitzbergen, and thence to our "promised land."

Everything seems now to smile upon us; we have sighted land, and hope to reach it in a couple of days, so near does it appear to be. The idea of wintering up here, which of late has more and more forced itself upon us, must now give way to thoughts of an early return home. Of this we now feel more sure, seeing that we have the land before us—a land which, although it is doubtless as barren as can be, is still land all the same.

At this time we saw several specimens of the rare Ross's gull. Lightly and gracefully, silently beating their wings, they came flying about us and were not at all afraid. They floated right over our heads, so that we could see the pink colour of their breasts. Perhaps this is the country where this mysterious bird lays its eggs.

"We are not likely to reach land tomorrow, but certainly the next day," we said to one another, as we began our march towards land. Alas! it took fourteen days before we had worked our way up to the wall of the glacier on the shore.

This was partly due to the land being further away than we thought it to be, and partly to the ice being in such a state that it was almost an acrobatic feat for a person to get on by himself; how much more difficult, then, when encumbered with a sledge and kayak! At times the lanes and pools were filled with small floes, too small to carry a man, but large enough to prevent us using our kayaks. We had then to jump from floe to floe and pull the sledges and the kayaks across after us by a rope. Our gymnastic skill, indeed, stood us in very good stead. And, most unfortunately for us, the ice was in motion and drifting away from the shore, while we were making our way across it towards land. When we encamped in the evening we could see that the blue wall of the distant glacier was nearer to us than when we began our march in the morning. On turning out next morning it was again further off. And, to make matters worse, Nansen was taken ill with pains in his back, probably lumbago, and was almost

helpless for some days. He was only just able to limp along with the aid of sticks after the caravan, which, however, did not make much progress, as I had to see to the sledges alone through this abominable ice. It was a sad job to have to help Nansen off and on with his clothes and "komager" evening and morning; he suffered great pain, but he did not complain, and dragged himself on as best he could, instead of giving in. Fortunately he got better at the end of three days, but this experience was sufficient to make us understand what it would be like if one of us should break a limb or fall ill in real earnest.

July 31.—Our progress yesterday was much the same as on the two preceding days. Nansen still suffers in his back, so I have to get over all our obstacles by myself. Yesterday the weather was cold and bitter, the barometer standing at 723 mm. A strong south-westerly wind was blowing, accompanied now and then by snow squalls, so that, in spite of our hard work in getting along, we had to dress as if it were the middle of winter. But we should not have minded all this if only the wind had not altogether destroyed our chances of getting on; it had loosened the ice all round the lanes, so that these were completely filled with slush and small pieces of ice, which is the worst hindrance we can have. We have not noticed such a movement in the ice before. When, after much reconnoitring, I had found a way, it was generally destroyed by the time I got back to it. We had then to make fresh attempts, taking short stretches at a time.

But, notwithstanding all this, we saw we had really made progress when we encamped last night; the edge of the distant blue ice by the land is now much nearer—so near that we hope to reach it to-day in spite of all hindrances. We have now no more food for the dogs; I shot a couple of ivory gulls for them yesterday. "Suggen" ate his with evident relish, but "Caiaphas" does not like the flesh of the birds. Yesterday we also saw some of Ross's gulls. The dogs will not cross the lanes by themselves if they are ever so narrow, and they often fall in.

On the 2nd of August we were in $81^{\circ} 36'$ north latitude. We had then got the north point of the land due west of us, and had consequently drifted eastwards. We were in the same latitude as the land; this must have been from twenty to twenty-five miles distant when we first sighted it, but this distance is no small matter with such ice.

It was on this march that I just escaped being eaten by a bear. It happened in this way. Yesterday when we set out the weather was very foggy, and presently it got worse and worse; the ice was impassable; it was all struggling up mountains and down valleys and through deep snow, with lanes, some wide open, others nearly closed, and still others full of the most impenetrable brush. Just as the fog was at its thickest and the ridges at their highest, we were stopped by a lane, which we prepared to ferry over. We generally did this in the following manner: we put both the sledges with the kayaks side by side close to the edge of the water, and placed our ski and staffs across them, the whole being securely lashed together. This floating arrangement was then ready to be launched on the water.

Nansen had just brought his sledge to the edge of the water and stood holding it, as the ice inclined down towards the water. My sledge and kayak were standing a little way back, and I went across to fetch it. I leant down to pick up the drag-rope, when I suddenly observed an animal just behind the kayak. I thought at first that it was "Suggen," but the next moment I discovered that it was not he, but a bear sitting in a crouching position ready to spring at me. Before I had time to get up from my stooping position, it was right upon me, pressing me backwards with its two legs down a slight incline to a fresh-water pool. The bear then dealt me a blow on the right cheek with one of its powerful fore paws, making the bones rattle in my head, but fortunately it did not stun me. I fell over on my back and there I lay between the bear's legs. "Get the gun," I shouted to Nansen, who was behind me, while at the same instant I saw the butt end of my own loaded gun sticking out of the kayak by my side, my fingers itching to get hold of it. I saw the bear's jaws gaping just over my head, and the terrible teeth glistening. As I fell I had seized the brute's throat with one hand, and held on to it for dear life. The bear was somewhat taken aback at this. It could not be a seal, it must have thought, but some strange creature to which it was unaccustomed—and to this slight delay I no doubt owed my life. I had been waiting for Nansen to shoot, and I noticed the bear was looking in his direction. Thinking that Nansen was taking his time, I shouted to him as I lay in the bear's embrace, "Look sharp, or you'll be too late." The bear lifted one of its paws a little, and strode across me, giving "Suggen," who

stood close by barking, and watching us, a blow which sent him sprawling and howling over the ice. "Caiaphas" was served in the same way. I had let go my hold of the bear's throat and, taking advantage of the bear's inattention, I wriggled myself away from between its paws. Getting on my legs I seized my gun, when Nansen fired two shots and the bear fell down dead beside the pool.

Nansen had, of course, made haste to my assistance, but when he saw me lying under the bear and went to get his gun, which was lying in its case on the top of the kayak, the sledge with the kayak slipped right out into the water. There I lay under the bear, and there stood Nansen, and out on the kayak lay the gun. His first thought was to throw himself into the water and to fire from over the kayak, but he soon gave up this idea, as he might just as likely hit me as the bear. He had then to begin and pull the whole concern up on to the ice again, which did not, of course, take up much time, but to me, situated as I was, it was an age. The bear fell down dead at the first charge, which happened to be small shot. In the hurry of the moment Nansen had cocked the shot-barrel, which was the nearest to him. To make sure of the bear he fired the other barrel containing the bullet into its head.

I bore no traces of the bear's embrace except some white streaks on one of my cheeks, which were quite black with the soot and smoke of "Longing Camp," and two small wounds in my right hand. Fortunately we could now afford to make merry over these trifles. No sooner had the bear fallen to the ground than I suddenly caught sight of two more bears, which were standing on their hind legs behind a ridge close by, and had been following the whole incident with great attention. They were two cubs about a year old, evidently waiting for their mother—the bear which had attacked me—to bring them food. I set off to shoot one of them, for the flesh of the cubs is better than that of the old bears; besides, my blood was on fire with excitement; but they took to their heels and I gave them up. While we were busy cutting the flesh off the bear—we did not give ourselves time to skin it—we saw the cubs again, and I started off in pursuit again, but could not get within range of them. I fired a ball at one of them, however, and a terrible howl told us that it had taken effect, but not mortally, for they both ran off. We saw them again several times afterwards, but could not afford to

waste any more shot on them. The blood was running down the sides of one of them and the animal bellowed all the while like a bull. They went round about the spot where the mother's carcase lay, in a circle, and we heard the bellowing of one of the cubs a long time after we had left the spot.

The dogs were allowed to eat as much as they liked; they were both uninjured, "Caiaphas" having only got a scratch on his nose. We also had a good meal; we cut up thin slices of raw meat and placed them on the snow to cool, and then ate them with great relish. Bear's flesh was a welcome addition to our stock of provisions; we took both the hind legs with us, as well as some of the inside fat, which would be useful as fuel.

I took the claws of the paw with which the bear gave me the blow, and Nansen the claws of the other paw. We could not very well drag unnecessary things with us, but we thought we ought to have some memento of this incident about us.

On our journey, further on towards land, we saw numerous tracks of bears in all directions. Here, it seemed, were plenty of bears, but we did not now trouble ourselves about them. One of them had been right up to our tent while we were asleep.

CHAPTER XXI.

Farewell to the drift-ice—"Suggen" and "Caiaphas" must die—Under sail at last.

WEDNESDAY, the 7th of August.—At last we have reached the goal for which we have been striving; last night we slept on the shore-ice at the foot of the glacier which we have had so long before us. It is no longer a delusion; we can now hear the thunder and the roar of the glacier itself.

To our great surprise and joy we found a great improvement in the state of the ice on the last stretch of our journey. It was much more even and there were hardly any lanes, and our day's march was as good as several of the previous days combined. We pushed on with all our might. The edge of the glacier gradually came nearer; soon we could see it from the ice without mounting any hummock, and at last we stood by the edge of the drift-ice, a large open channel with drifting floes lying between us and the glacier, which fell precipitately into the sea.

Nansen stood by the edge of the ice drying the sweat off his brow and waving his hat at me, who followed a little behind; I waved



A PARTING LOOK AT THE BEAR WHICH NEARLY KILLED ME.

my hat in return, and the first hurrah on the whole expedition now rang out clearly across the open water. We looked back triumphantly at this drift-ice, which had tried our patience and our endurance for such a length of time.

And now we should have to depend upon the water for making progress. We tried to take a sledge on each kayak and proceed separately, but this we found impracticable, and had to lash the kayaks together as before. We could no longer take the dogs with us. Ungrateful creatures that we human beings are! After these dogs had toiled for us and suffered such cold and hunger that it was a wonder they held together at all, we rewarded their fidelity and devotion with death now

that we believed we could get back to a life of civilisation amongst men again. It was a heartrending business to be obliged to kill them; but, unfortunately, it had to be done. In order to make it less painful to us, Nansen took my dog and I took his. Poor creatures, they followed us quite quietly as we went each our way behind a hummock, when two shots soon announced that "Caiaphas" and "Suggen" had ceased to exist. We had become quite fond of them, and could not kill them in the same way as the others, so we sacrificed a cartridge upon each of them.

We now said farewell to the drift-ice and set out in our kayaks. The weather had



SAILING IN OUR KAYAKS.

become somewhat foggy, but we had the wind right at our backs, so we rigged up our sails and could now sit at our ease and in comfort, while at a fairly good speed we were approaching the glacier, which we soon saw emerging out of the fog.

We could not land on the glacier, as the edge formed a solid wall of ice, about fifty feet high, in which we could clearly see the various strata. The current flowed in a westerly direction, the same as that in which we were journeying. So we steered westward, and at last found the floe on which we spent the night. In all probability we have drifted westward with it while we slept. There is great commotion in the ice around us.

August 8.—Yesterday was our first day at sea, and everything went excellently. In the morning we had to haul our kayaks and sledges over some floes, by which we had been surrounded, and which were continually grinding against us, giving us now and then a friendly push and preventing us from getting out into the open water, of which we could catch glimpses to the west of us in the thick fog. At intervals there came from the glacier great crashes like cannon-shots, occasioned by large masses of the glacier breaking loose and falling into the sea.

We settled down on a large floe near the edge of the ice to make paddles from a broken ski, which we lashed to our ski-staff, as the canvas blades we had brought with us turned out impracticable. We then set off again in our kayaks, lashed together as before, with our sledges across us, on the splendid open water. Unfortunately the sky was so overcast that we could not take any observation.

After having paddled along the wall of ice for some time, we had to shape our course towards the north, as we were met by the shore-ice; we were probably in a bay between the large glacier and the land with the black, rocky mountains. Later on, when the fog lifted a little, we could see these, and before long we had them right in front of us.

There are plenty of seals about here, so we shall not have any difficulty about food. We began our journey at six o'clock in the morning, and paddled on until the same hour in the evening, when it began to rain, whereupon we encamped on the shore-ice. The temperature is now about the same as we have had of late, about freezing point.

August 9.—It is wet work sailing in our kayaks as we do; my clothes are still wet, and during the night I felt the cold not a little; but we are getting on quickly, so we do not mind any bodily discomfort.

(To be continued.)

WITH NANSEN IN THE NORTH:

A RECORD OF THE *FRAM* EXPEDITION.

By LIEUTENANT HJALMAR JOHANSEN.

CHAPTER XXI. (*continued*).

What land is this?—Drift-ice again—Bears and walrus.

WHEN we first started sailing the weather was extremely foggy, and we could see very little round about us, but at last it cleared up sufficiently for us to discern some fresh land just inside the edge of the ice along which we were sailing. The land is a small island covered with ice and snow, like the two other islands we have just passed, and opposite this island, further to S.S.W., we see some other land which is much larger. Altogether we have thus four islands. It is this group to which Nansen later on gave the name of "White-land."

August 10.—Yesterday morning we ascended the glacier on the small island where we had camped; the fog lifted sufficiently to enable us to take bearings of the islands we have hitherto seen.

After having rigged up our kayaks we sailed away from the four islands, in bright, sunny weather and with a fair wind across the sea, which, as far as we could see, was quite open. We were thoroughly comfortable in our craft. We made our dinner of cold boiled bear's flesh and three ounces of bread, while we were being swiftly carried along by the wind.

Towards evening we encountered some flat ice, which was in violent motion. The current then was evidently on the turn, and we had to take to the ice with our kayaks, lashed together as they were, the ice pressure beginning just behind us.

At noon to-day we took an observation near our tent, and another while on our way across the ice. We hauled our sledges across a flat floe on the other side of which we came to open water, but the current was by this time so strong that we found it best to remain and encamp where we were. Shortly afterwards the ice closed in upon us from the opposite direction and pressed against our floe, forming ridges here and there as it collided. The floes, however, were very large and flat, and we felt sure that they must have something to do with land.

The next day, after proceeding some distance over flat ice, we came to open water, which extended in a southerly and south-westerly direction. In one place we saw a herd of walrus lying on the ice, but we did not trouble ourselves about them, as we had sufficient food for the time being.

Eventually we steered due south, and we were wondering where and when we should meet with land, when we came to the edge of the ice, which turned out to be shore-ice, and which extended in a westerly and later in a more southerly direction. It appeared that in the fog we had got into a bay and had now to get out of it again; but we had the current right against us, while some thin ice was beginning to form on the water, so we were obliged to seek the shore and proceed along it on the ice.

Sunday, August 11.—In the evening we were closed in by the ice, and the weather being very foggy we encamped for the night on the shore-ice, and began cutting the sledges and making ourselves proper kayak paddles. In the course of the night, while busy with this, the fog, which had so persistently enveloped everything around us and depressed our spirits, gradually lifted, and little by little we discovered land in front of us, extending from S.E. to W.N.W., covered with glaciers and precipitous mountains. In the west there appeared to be a sound. As this veil of mist was gradually drawn aside, we watched from a hummock with the keenest interest throughout the entire night the gradual unveiling of the land.

August 16.—We have not now so much opportunity of getting on by water as we had before. We have been obliged to haul our stumpy sledges over the ice a good deal again, but in a way we are making progress, after all. Last night we lay down to rest without pitching our tent and without cooking any food; in fact, we lay down without tasting a morsel. We were waiting for the turn of the current, which is preventing us from proceeding by water. But the current turned without bringing about any change, and we had to set out, hauling and pulling steadily and laboriously at our sledges the whole of yesterday. On the way we

passed an iceberg, about fifty feet high, which we tried unsuccessfully to ascend. At last we reached the island, and had for the first time bare land under our feet, and last night we slept on granite sand.

It was a strange, indescribable feeling we experienced in setting foot on *terra firma* again—to let our feet feel that it really was land, and not ice, they rested upon. At first we walked most carefully over the hard granite blocks, our feet touching the ground almost lovingly. And our feelings on finding moss and flowers among the rocks! We sat down, each apart by himself among the rocks, overwhelmed with thoughts.

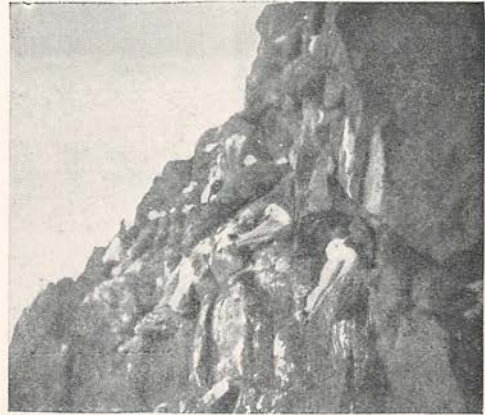
What a strange influence land has upon us human beings! We hoisted the Norwegian flag in honour of the day. To the west of us there is an island with comparatively high mountains, whence we hear the merry twitter of the little auks.

Next day we set off in the direction of the alluring island in the west. Nansen went on in front to examine and measure the coast line.

There was plenty of life on the island: the snow buntings flew chirruping from stone to stone, and the little auks set off in flocks for the open lanes, and then returned to their nests. The merriment of these little birds was quite infectious, and put us in good humour. High up on the pointed crags sat the black-backed gulls, anxiously guarding their young ones, their melodious, flute-like

algæ, which grows on the snow and gives it this appearance.

We set out again in our kayaks, but could

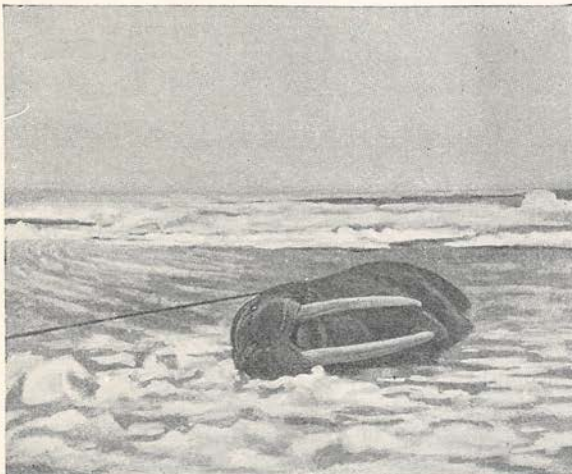


BIRD MOUNTAIN NEAR CAPE FLORA.

not proceed far on account of the floes and the thin, new ice on the water. So we took to the ice, pulling our sledges and kayaks along until at last we stood by the large open water which extended from the sound down to a promontory covered with ice which ran out from the land. Behind this promontory we should learn our fate. If the coast trended towards the south, we must be on the west coast; but if we found more land in a north-westerly direction, then it must be the east coast. At last we reached the promontory, and to our great joy we found that the coast was trending southward, with open water along it.

Saturday, August 24.—“For luck, it often changes,” says the old ballad, and we have certainly experienced the truth of the saying often enough during our roving life. A week ago we were full of hope that we should be able to return home this year, having the open water before us. Now we have been stopped by the ice, which is packed tightly against the coast, and we have not been able to stir for a week. We shall have to say farewell to our brilliant hopes; we shall in all probability have to spend another polar night in these regions, and it may prove the worst of the three for us.

A week ago we set out in our kayaks, in bright, beautiful weather, not unlike a spring night at home, after having made allowance for the cold, and we were



HAULING IN A WALRUS.

notes floating down towards us. At the foot of the mountain the surface of the snow was coloured a beautiful red; it is a kind of

making good progress along the shores of the new land we had found. Then we came to a promontory, outside of which there was a number of small islands, and here we encountered the ice. We tried to find a path close along the shore, but could not get on, owing to the slush and thin ice.

We then lay down on the floe, without pitching the tent, to get some sleep and to wait for better times. Before long we were awakened by the wind, which must have changed, as we were no longer sheltered from it, and the ice had packed tightly around us, while we ourselves were adrift on our little floe, which had broken loose from the shore-ice. It was an unpleasant awakening, especially as I had just been dreaming that I was at home eating cherries in the garden.



OUTSIDE OUR HUT IN SPRING.

We had now to make haste and scramble across the floes on to the shore-ice again, where we are at the present moment.

On the third day Nansen shot a bear from the tent; it had been right up to it, and might have turned out an ugly customer if it had been of the more ferocious sort, but it hesitated and turned round.

We both lay awake in our sleeping-bag. Nansen heard something pawing about outside, and looked out through a hole in the tent, when he caught sight of the fellow. He lost no time in snatching up his gun, and sent a bullet through the hole right into the bear's breast. It fell forward, but raised itself again and was going to struggle on, when it received another shot in the side, whereupon it dragged itself, in the agonies of

death, over to some rough ice, where we had some difficulty in getting hold of it. That bear came at the right moment, for we had not much food left just then, and this was an unusually big monster.

Monday, August 26.—At the present moment we are safe again on the shore-ice close to land. We have now got a good bit past Cape Athos, the name we gave the promontory which we have been so anxious to pass for so many days.*

It was yesterday that we got away from the drift-ice; before this the wind had been blowing harder than at any previous time on the whole expedition. After having speculated as to the best means of getting on, we settled down for the night, but after a few hours' rest we had to take the tent down, as it was impossible to find a sheltered place for it; we then laid it over us and went to sleep. When we awoke we discovered that the wind had gone down considerably, and that we had now drifted a long way from land; we then turned out at once and got ready to start. When we reached the edge of the ice the wind began to blow just as hard as ever, carrying with it much loose snow from the land, which greatly inconvenienced us. We walked for hours along the edge of the ice, looking for a chance to launch our kayaks. Nansen set out in his first, to try how it would weather the seas. It was with the greatest difficulty that he got free of the loose ice and floes, but the kayak answered very well. When Nansen came

back I seized the opportunity and tried my kayak, which also did very well. Nansen then started out again in his, and we began paddling towards land. But we soon found that we could not keep on in this way, for the kayaks were too heavily laden in front with the bear's flesh we had taken with us, and leant so heavily over to leeward that we could only use one oar-blade, and could therefore make but little headway. We then landed on a floe, had our dinner, lashed our kayaks together, and rigged up our mast, as we thought we could now venture to set

* Nansen did not give this promontory any name later on, as he thought that the English sledge-expedition from Cape Flora in 1895, under Mr. Jackson, had in all probability discovered it before we got there.

sail, the wind having gone down somewhat. We got on capitally in the high sea, Nansen steering and I looking out for the seas, so that we could steer clear of them. We sailed merrily along for a considerable time, but for my part I must admit I did not altogether escape sea-sickness. We began to be afraid that our craft would not hold out, especially if we should venture to set the double sail. A squall, however, soon compelled us to lower one sail hurriedly and proceed again under single sail.

Both we and our baggage got a soaking, and when we encamped for the night we had to wring out the sleeping-bag, which was drenched; but we had reached land, and that was the chief thing. We were glad to be able to creep into our tent, although we were as wet as rats and had nothing dry to lie upon.

Thursday, August 29. — Last Monday evening we left our encampment. It looked as if we should have some difficulty in getting on, but we managed to get over the ice into the open water, and shaped our course towards the promontory in a S. by W. direction. As there was every appearance of a fair wind we landed on a small island in our course and rigged up the kayaks ready for sailing; but when we got away again the wind began to go down and to blow from the opposite quarter. We then took to paddling, each in our own kayak, and had fairly good weather during the night. But very soon the wind began to blow so hard from the south-west that we had to steer for land, and thus we arrived where we are now encamped.

As soon as we landed Nansen took a walk along the shore, but came back almost immediately and asked me if I wanted to have a shot at a bear which was coming along. Yes, of course I did. We crouched down behind the kayaks near the shore, and, sure enough, there came the bear trotting along towards us at a quick march; then it stopped and sniffed at Nansen's tracks not far from us. "Bang!" went the bullet into its shoulder and felled it to the ground. It was not, however, mortally wounded; its back was broken, so that the hind part of its body was paralysed and refused to act. It kept pawing with its fore-legs and trying to get along, and then it sat down and began biting furiously at its paralysed hind-legs, after having first tried to tear away at the wound. It growled and scowled at us, who were standing close by; we then sent a bullet through its skull and put an end to its sufferings.

There are a great number of walrus here; there is one spot on the ice in our neighbourhood where they assemble and lie grunting, fighting, and sleeping on the floes for hours, safe in their greatness, afraid of neither bear nor any other animal, and still less of human beings, whom they have never seen.

While lying asleep in our tent last night we were awakened by a strange wailing sound outside, near the place where we kept the bear's flesh, and on looking out we saw a she-bear with a cub standing over it, and actually wailing over the loss of their comrade.

CHAPTER XXII.

We are obliged to winter—Our "den"—Hunting the walrus—Adrift again—A hard struggle for land—Awakened by bears—Hunting bears in the kayak—Our implements—The "hut."

WE are now at the end of August and the winter is at hand, and still we are just as wise as ever about the country we have reached. We should have to prepare to winter here; there was no help for it.

We resigned ourselves to our fate and set to work to make ourselves as comfortable as possible. As matters stood we thought it would be a nice change to get a proper rest in a good, cosy hut, after all the hardships we had undergone on our march across the drift-ice.

We built one night a stone hut, which we called the "den." It was but a poor place. It was so low that I could hardly sit upright, while Nansen had to lie down at full length. We used the tent and the sail for a roof; later on we used bearskins for this purpose; but we were then always visited by gulls, which annoyed us greatly by their continual screaming and their pecking away at the roof. On the 28th of August we prepared for a walrus hunt, but we could not discover any on the ice, and had to go out to the open water after them.

Before long we saw two walrus getting on to the ice some distance out on the fjord. We gave them some time to settle down, while we fetched the flesh of two bears we had shot. We then approached the walrus cautiously, treading in each other's footsteps like Red Indians. We had to go some distance across the flat ice before we came up to them. The walrus now and then turned round, so we had to remain

motionless while they were looking back, but finally we succeeded in getting close upon them unnoticed.

Nansen first shot the one lying in the most advantageous position, the one shot killing it on the spot. The other started up from its sleep, but the next moment I had fired a bullet into his head.

We fetched our sledges to bring the catch home. Nansen thought we had better take the kayaks with us as well, and it was fortunate for us that we did. Before we began skinning the animals a strong wind from the S.E. sprang up, which gradually increased in strength and made us afraid that the ice on which we were standing would get loose and drift out to sea with our catch. This fear proved only too well founded, for we had scarcely skinned half of the biggest walrus before we discovered we were adrift. We saw we could not save the whole of our catch. We hurriedly took a few pieces of the flesh, flung them into our kayaks, and set out. We intended to cross over to the edge of the floe on the windward side and thence to set out for the shore-ice and work our way to the land. In the meantime the wind increased rapidly and loosened a number of small floes. We could not make any progress with the kayaks lashed together, so we had to separate them and paddle ahead, each in his own.

Now began a hard struggle towards land, sometimes on the water between small floes with the sledge aft on the kayak and the spray dashing over us; at other times across half-melted floes with the kayaks on the sledges, drifting, however, constantly to the north-west, past our store of bears' flesh and the den. It seemed only too probable that we should once more drift out to sea amidst the hateful drift-ice. At length we came to a considerable stretch of open water in the direction of land, and embarked for the last time in our kayaks. Nansen paddled ahead first, and I followed in his wake. I took off my gloves, as I was afraid of losing the paddle if I kept them on.

It was a hard pull, but we were glad to see that we got nearer and nearer to land, although our pace was slow; and at last we succeeded—thoroughly fagged out and wet through as we were—in scrambling up on the shore-ice to the north-west of our den. Here we chipped off small bits of ice wherewith to allay our burning thirst. We then proceeded along the shore-ice and safely reached the bare shore, where we pulled up the kayaks and wrung the water out of our

clothes. We then crept into our bag, ate some bear steak, and soon fell asleep, tired with the day's exertions, and pleased at having also got safely through this adventure.

We had not been long asleep, when I was awakened by hearing a strange, moaning sound just outside the door, and a similar sound answering some distance off. "That's a bear," I said to Nansen, who was now awake also. We at once turned out and caught sight of three bears. After several shots Nansen killed the mother, while her two somewhat large cubs vanished between the boulders, only to appear afterwards, side by side, out on a small ice-floe, which was hardly big enough to hold them and keep them above water, their heads alone being visible. It was of no use to try to shoot them under these circumstances; I therefore waited until they should swim ashore, and lay in ambush for them; but they drifted out to sea on the floe before the wind, which had now gone down considerably. We let them drift on, as we should have to hunt them from the kayaks in any case.

The bears had been rummaging about terribly in the kayaks. Nansen's had been thrown into the water. They had been right into the kayaks and dragged out the walrus-flesh from them, and after having torn and eaten some of it, had scattered it all over the place; they had evidently been having a fine time. While thus occupied they had done some damage to my kayak by splintering some of the bamboo stretchers in it; but fortunately it was still fit for use.

The two bears had now drifted so far out to sea that they were almost out of sight; but we set out and soon gained upon them.

We wanted them to leave the floe and let us drive them towards land, where we might then shoot them. This, of course, would give us least trouble in securing them. And, sure enough, as soon as we made for them, they slipped off the floe and began swimming towards land. An interesting chase now began; each of us went in pursuit of one bear and drove it before us in the direction we wanted it to take. They growled and showed their teeth whenever we came too near them with our kayaks, and exerted themselves all the more to get away from us. Nansen's bear was a better swimmer than mine, which was very broad across the back; he therefore soon got ahead of me. I had to stir up mine from time to time, when it would hiss angrily at me, but swim on all the quicker.

Nansen was now close under land and

fired; I saw him throw his harpoon into the bear to make sure of it, after which he towed it ashore. I steered my bear towards the shore just outside the den where our meat was kept. When we were close to the edge of the ice I fixed the paddle by the strap, took the gun and sent a bullet through the head of the bear, just as it was making some hasty strokes to get ashore. We now had all three bears.

On the 7th of September we began in earnest to build our winter abode. We chose a piece of flat ground covered with soil and moss, close to where the cliffs projected from the glacier, and where there were sufficient stones among the steep talus for building materials. Here and there small arms of the glacier had found their

But one day Nansen fortunately found a piece of drift wood of suitable dimensions frozen fast between the boulders in the neighbourhood of the den, some distance from the shore. This we decided to use for the ridge-pole, and then roof over the hut with the walrus skins. For tools, we had nothing but a sledge-runner, a bear-spear, a miniature hatchet, and a ski-staff with an iron spike. We made a spade out of the shoulder-blade of a walrus and the cross-tree of a sledge, together with the remains of a ski-staff, but this soon came to pieces after we had dug for a time in the hard, frozen soil. The bear-spear and the iron-shod ski-staff served as a pickaxe, till Nansen struck a tusk off one of the walruses, for which I made a handle out of another cross-tree.



OUR FIRST ENCAMPMENT ON OUR MARCH SOUTH.

way down among the *débris*. The area on which we built our hut measured six feet in breadth and nine to ten feet in length. We dug the same distance into the ground as the height of the walls over the ground, which we built with stones from our quarry. The entrance was at the south-western corner, where we dug a passage in the ground, and covered it with stones, ice-blocks, and snow, so that we had to creep out and in just as the Eskimos do.

It was not an easy job to build our hut without tools and implements, and with no other wooden materials than ski and ski-staffs. We had no difficulty about the walls, but we could scarcely make the roof without spars or planks of some kind; the stones were not suitable for building a vaulted roof.

Sometimes the weather was so mild that the water came trickling down to us from the melting snow and ice, but at other times everything was frozen quite hard. The soil which we dug out we used together with moss to fill up between the stones in our walls.

CHAPTER XXIII.

An uninvited guest in our hut—We change our quarters.

ONE morning, as we were walking along the shore on one of our usual excursions between the den and the hut—I with a bucket and gun in my hands—I saw Nansen, who was some distance ahead of me, suddenly stop and then begin to step back cautiously. A

bear was standing sniffing a walrus-skin, which it had pulled out of the water, where we had placed it to thaw. Nansen went off for his gun; but as I had mine I began to steal a march upon the creature



ALL DOGS KILLED AND EATEN: OUR SOUTHWARD JOURNEY IN THE SPRING OF 1896.

under cover of some large boulders. I soon came to open ground between me and the bear, and could not, therefore, proceed any further. As the range from where I stood was too long, I lay down and waited quietly until it should approach me, for it was facing me and seemed as if it would proceed in my direction. Apparently it had not as yet seen me. But it set off across the boulders towards the hut, which made it still more difficult for me to get within range. As soon as it arrived at the hut, it began sniffing at the roof, when to my great surprise I saw another bear appearing in the opening in the roof, where it had torn down the skins. It was standing on the stone bed, growling and hitting out with its paw to keep the new arrival off.

By this time Nansen had returned, just as the first bear was beginning to walk towards the shore again. I called Nansen's attention to bear number two, which had now completely emerged from the hut. There was nothing else to be done but to go ahead and fire at as close quarters as possible. Nansen was to see to the one by the shore, and I to the one by the hut. We rushed out simultaneously from our cover towards the bears, which were greatly frightened by the sight of the two-legged creatures running towards them, and both took to their heels. Nansen hit his bear in the hind quarters, and soon afterwards I saw him some distance off in full pursuit of the wounded animal. In the meantime my bear

made a long detour out on the ice, where I could not very well follow it. I therefore confined myself to watching its movements from behind a hummock on the shore. I noticed that its attention was greatly engrossed by its comrade and Nansen, and soon it began gradually to approach the shore, where there was blood upon the ice and where the traces of the hunt began; it evidently wanted to examine the tracks of the strange beings who had so suddenly appeared upon the scene. By this time it had come near enough to the place where I lay hidden to enable it to meet its doom. My first shot hit it in the spine and my next in the head, the latter shot, however, not before the bear had managed to drag itself along the smooth ice to a larger and safer floe.

I began at once to skin it, and was nearly ready, when I saw Nansen coming quietly along with his hands in his pockets and his gun slung across his back. As I had not heard any shot from him, I thought at first he had had to give up the pursuit; so when he came nearer I said, "It was a pity we did not get the other one also." "Oh, yes," said Nansen, "we have got it, sure enough; it was a beast of a bear, but now it is lying dead up in a snowdrift at the foot of the glacier further inland."

At last we moved into our new palace. On each of the main walls inside the hut a ski was fastened with straps, which went right through the wall between it and the roof. Between these ski we stretched the skins which were to be dried, and they had to hang for weeks before we could take them down and hang up new ones.

Besides the large ridge-pole proper, we had to support the sides of the roof as well as possible with ski, bamboo-rods, and our two paddles, and when the cold finally set in thoroughly, the whole of the roof froze into one solid stiff mass, with a thick layer of snow on the top.

In the south-eastern corner of the hut we built a hearth, with a bearskin for smoke-board; the smoke issued through a hole in the walrus-skin and a chimney, which we built of snow, bears' bones, and walrus-meat. When the fire was out on the hearth, we put a piece of bearskin in the hole to keep the draught out. It happened sometimes, of course, that our chimney began to melt, especially when the weather was less cold than usual, or when we made a big fire to cook a first-class beef steak, and then the sooty water would drip into our frying-pan; but we were not very particular about such trifles.

In the south-western corner a bearskin hung from the roof in front of the opening, which led to the passage out of the hut. Through this we had to creep on all fours and up through a hole, over which we laid a bearskin, which formed the outer door, so to speak.

It was often difficult to get out again in the morning, when the wind had blown the snow over the hole into a hard drift in the course of the night, and it weighed heavily on the skin across it. Nansen had especial difficulty in getting out; being tall, he could not manage to bend himself sufficiently in the narrow passage so as to get into such a position as would enable him to lift the skin off with his back. He had to loosen the snow along the edges of the skin with a knife, or ski-staff, before he could manage to get it up.

CHAPTER XXIV.

Life in the hut—Our domestic animals—Foxes—Christmas once more.

A MONOTONOUS and dreary life now began for us during our third and worst polar night; but, after all, it might easily have been worse. It was a great satisfaction to know that, as far as food was concerned, we had sufficient, whatever should happen; our larder outside the door was well stocked with bear-flesh—legs, shoulders, and whole carcasses of it being buried in the snow round about the hut. The little we had left of the provisions from the sledge-expedition we had also placed in the snow and covered with stones to protect them from the foxes. We resolved not to touch these provisions until we should set out again in the spring, unless we found it necessary to use them medicinally in the event of either of us becoming ill from the sameness of our flesh diet.

We lay in the sleeping-bag most of the time, both night and day, and slept as long as we could. We took it in turns to be cook for a week at a time.

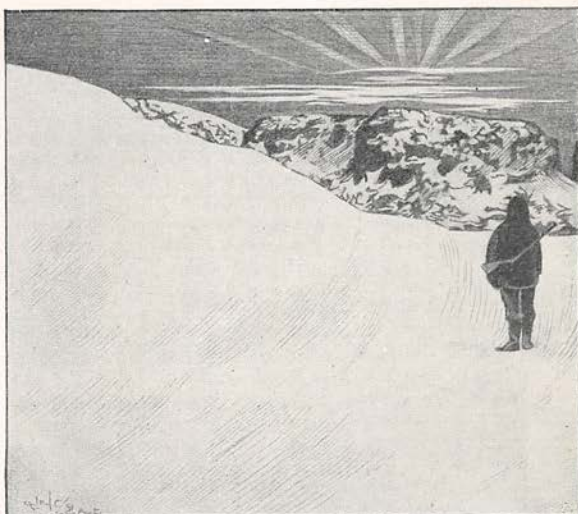
He whose turn it was to be cook lay outermost in the sleeping-bag, and it was his duty to attend to the lamps night and day; consequently we did not use many matches. The cook had to take in a leg or a shoulder,

sometimes even a whole bear, when it was a small one, and put it near the hearth, so that the meat should thaw until it was about to be used. Of course it became black and dirty with the soot, but we did not mind that very much.

He who had not the cooking to do had to keep the hut provided with fresh and salt water ice, or by preference salt water, if it were possible to find any. We had no salt; the little we took with us from the *Fram* (it was only a small quantity of table-salt in a mustard box) had been used long before we got away from the drift-ice.

In the course of the winter we did not go out of doors more than was absolutely necessary; it was too cold for us in our greasy, much-worn clothes, and there was generally a bitter wind blowing, which went through our bones and marrow. But when the weather was fine and we had the Northern Lights and moonlight, we defied the cold and kept running up and down outside our hut.

The foxes used to walk about the hut like domestic animals, gnawing away at the carcasses of the bears; but we did not mind this, as we had plenty of meat. They used to come in parties of two or three and tramp about on our roof, which we did not at first



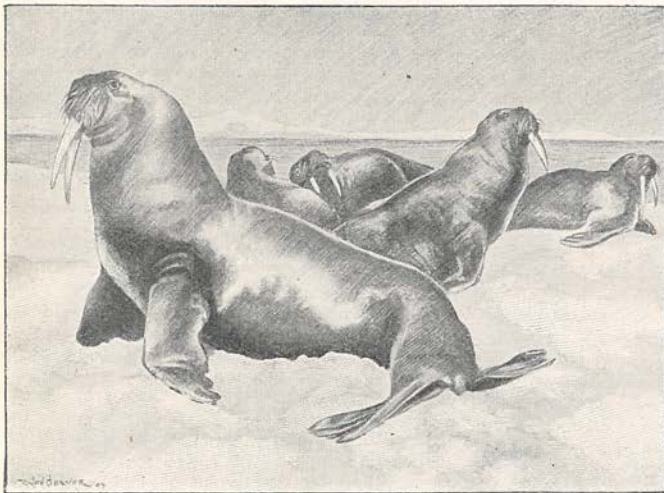
REACHING TERRA FIRMA AT THE END OF THE SLEDGE EXPEDITION.

like, as every little sound was so loud in the intense cold. We used to knock at the ridge-pole in order to frighten them away, but this was of no avail!

These foxes used to steal everything they

could get hold of, even articles for which they had no love whatever, but which were of no small importance to us. Nansen had put several things in the silk bag-net which we used for catching marine animals, and had hidden it close to a big stone; but the foxes managed to steal from it a harpoon-line, a small bag with specimens of stones, which Nansen had brought with him from the first bare land we encountered, and, worst of all, a ball of twine, which we intended making into thread. They were especially fond of the thermometer, which they had twice dragged away with them, but which we found again. On the third occasion when it was stolen they must have dragged it off to their den, for we never saw it again.

Nansen liked the flesh of the fox very



WALRUSES WE MET.

much; on one occasion, when I was doing the cooking, I remember I roasted the whole back of one for him. I also tasted it, but I did not like it so much as bear's flesh. There was, of course, a great difference in this also. Altogether we shot nineteen bears before leaving the hut, and yet our stock had nearly run out when we left. On board the *Fram* and in "Longing Camp" we had disposed of thirteen, and before we got to the hut some more had been consumed.

The cook for the week had also to act as waiter. When the food was cooked, we both crept into the bag, after the pot had been placed on the stone bench by our bedside. We then brought out our tin cups, and the cook had to fish up the pieces from the pot, and so we set to work, using our five fingers and eating long and heartily. Last of all we

drank the bouillon in long draughts, after which we lay down to sleep away the time that separated us from spring and the light.

Here I may, perhaps, be permitted to break away for a moment from the course of events to reproduce a picture of the dwelling of certain other human beings, whom we were to meet later, and who were that very winter living on the same group of islands as ourselves, but almost a month's journey further south.

I refer to the English expedition under the leadership of Mr. Jackson. The eight members of this expedition were quartered in a well-built log-house, well-supplied with light, warmth and suitable food, with plenty of soap, water, and clean clothes. They were cosy and comfortable, and did not trouble themselves much about the arctic winter. They had also a good library, a thing we were very much in want of; we had only a "Nautical Almanack," in which we could read all about the Royal Family and the treatment of the apparently drowned, and I was longing so much for the last volume of Heyse's novel, which I had not managed to get through on board the *Fram*.

But although these men were not far away from us at that time, neither of us knew anything about the other.

December 11, 1895.—During the last few days we have had stormy weather, with south-easterly wind, which pierces through the snow and in between the stones in the walls, so that they become coated with rime; the lamps flicker, and a cold blast sweeps over our couch. The storm has broken a ski, made of maple, which had been fixed on end in the snow-drift outside the hut; while my kayak, which has been lying buried in another snow-drift so that scarcely anything could be seen of it, was carried away by the wind—heavy as the kayak was, and full of snow—about a hundred yards off among the boulders just below the glacier.

This week I have made an excellent snow-shovel out of walrus skin. In the cold weather this skin becomes as hard as iron, although inside the hut it could be easily worked and, in a thawed condition, given any shape. With this shovel I set to work,

covering the roof of the hut with snow again.

We have now been away from the world for about three years, and for nine months we have been living like the wild animals found in these inclement regions; for nine months we have not had the clothes off our backs either night or day, and we have suffered much from cold and from many other hardships.

Tuesday, December 24, 1895.—Christmas has again come round. I do not suppose there are any other human beings in the whole world who are celebrating this festival under the same conditions as we are. Here we lie in our stone hut in the midst of the arctic regions, enshrouded in the polar night, far away from the world, and deprived of everything that belongs to civilisation. We have, however, made some preparations for the occasion, modest though they be. We have still some remnants of our provisions from the sledge expedition left, partly damaged, such as fish-flour and a little bread, sufficient chocolate for one meal, and two portions of Knorr's soup. This is not so bad, after all, and we have kept a tender young bear for Christmas.

December 25.—Christmas Day! We celebrated Christmas Eve as well as we could. We boiled fish-meal and some maize-meal together with train-oil, and then fried it in the pan. It did not taste so well as we expected, but the bread fried in bear's blubber tasted excellent.

This morning we had chocolate and aleuronate bread and blubber—a grand Christmas morning breakfast! In spite of everything, we are doing very well; we are satisfied with what we have got, and enjoy life so much that there are, perhaps, many who might envy us.

CHAPTER XXV.

The New Year—The sun reappears—The bear which wanted to get into the hut—Preparing to start again.

JANUARY 1, 1896.—On the last day of the old year Nansen proposed that we should begin to say "du"* (thou) to one another. Hitherto we had called each other "de" (you).

January 9.—On New Year's Eve I

relieved Nansen of his duties as cook. Instead of the usual bear-steak we had a grand supper of maize-porridge with train-oil. It was really a nice change to have a meal of farinaceous food. The breakfast on New Year's morning was equally grand; it consisted of fish-soup made from fish-flour, a packet of Knorr's lentil soup, and some stock made from bear's flesh, as well as aleuronate bread fried in bear's fat—a splendid breakfast indeed.

Thursday, February 13.—It is now some time since I wrote anything in my diary. The reason is that I have had to be cook for two weeks at a stretch, as Nansen has been suffering with his back, and has been obliged to keep to his bed day and night. Last Tuesday he was all right again, and resumed his duties as cook.

We are still in a fog as to our whereabouts—that is to say, we know we are in 81° 27' latitude, but the longitude—? We feel sure, however, that we are a good bit to the west. During the two weeks I got through a good deal of work. I have dug out our blubber heap, which has been buried in a hard snowdrift, and now we can easily take stock of our supply of flesh and blubber. We had made great inroads into it, but we think we have sufficient left. I have taken a bearskin into the hut, scraped off the blubber, and hung it up to dry; we are going to use it for gloves and socks. The chimney on our roof had melted away, and had to be built up again with snow. It is a fine thing to go out in the middle of the day now when the weather is clear; it is so light that we can see our surroundings just as they were before the arctic night set in.

February 25.—To-morrow we shall see the sun; we have seen its golden light reflected on the clouds above the ridge over yonder, while the sky above it was grandly illuminated in all sorts of colours.

March 10.—Another push forward since last I wrote in my diary. It has been somewhat dark of late, but now it has cleared up again. During the last few days we have been talking about leaving here in April; but we have been obliged to give up this favourite plan of ours, as we are running short of blubber. We shall not have sufficient of it for food and fuel on the journey, and, moreover, we shall not be able to get any flesh dried by boiling it in train-oil, as we originally intended to do. A material reduction has to be made in our consumption

* A sign of intimate friendship, like the French "tu."

of blubber, and now we can only afford to boil food once a day, and burn a lamp just long enough to melt blubber for oil and ice for water.

On Sunday, March 8, I had a proper cleaning out of the hut, when I discovered just outside the opening a regular monster of a bear with a white, shiny coat, which almost blinded my eyes, so unaccustomed was I to the light. In less than no time I tumbled along the passage back into the hut, where I seized my gun from under the roof and told Nansen the great news. After

get a proper aim at the animal in the narrow passage. I therefore placed the barrel of the gun in a slanting position towards the opening, so that it should point right at the chest of the bear, and fired. A furious roar announced that it had been hit.

Now we have a busy time before us in the hut, getting ready for our journey southwards. There were many things which had to be looked to, but worst of all were our ragged and greasy clothes. Fortunately we had the two blankets, and after much measuring and calculating we found we should just be able to get a pair of knee-breeches and a jacket for each of us out of them; but it was a long time before the solemn moment came when we dared to insert the scissors in the blankets and actually cut them up. We were no longer afraid of running short of thread, for we had discovered that the cotton threads in our canvas provision-bags did good service. For weeks we sat side by side in the sleeping-bag, sewing at our new clothes. We had to make new soles for our Lapp boots out of walrus-skin, which we pared to a suitable thickness and then dried over the lamp. I even managed to make a pair of Lapp boots.



IN THE NEIGHBOURHOOD OF JACKSON'S DEPÔT.

seeing that the gun was loaded I crept out again into the passage, and found the bear standing over the opening, with its head and neck far down into the passage, its broad, flat skull presenting a most tempting target. I cocked the gun and put it up, but had to take it down again, as I discovered a large tuft of bear's hairs in the muzzle of the gun. At this movement the bear pulled back its head, but began scratching with its forepaws at the edge of the opening. It was now high time for me to fire if we did not want the bear in the hut, but nothing except its paws was visible, and I could not

back. We were constantly returning also to the topic of the whalers at Spitzbergen. We discussed what sort of provisions and clothes they were likely to have on board their vessels. Sugar and bread they were sure to have, and butter as well, so that we should be able to have some fried "dænge," and no doubt they would be able to spare us some clothes—and soap! And when we got to Tromsø—we always supposed we were to fall in with a Tromsø vessel—we would buy all the cakes we could get hold of. Yes, we would have a regular good time of it!

CHAPTER XXVI.

Across the ice-fields on ski—Weather-bound for fourteen days—Where are we?—We hear dogs barking—Nansen does not return from his reconnoitring—Six strangers on the ice—The Norwegian flag hoisted—Sap and civilisation.

ON the 19th of May we were at last ready to start for the south.

On the 21st of May we reached the promontory, tired and worn-out after our unaccustomed exertions.

To-day, May 23, we have made an excursion in a southerly direction and seen that the land trends still further to the south.*

On Sunday afternoon, May 24, we broke up our encampment on the promontory and set out for the island just outside it in order to reach the open water beyond. A slight easterly wind was blowing and we hoisted sail on our sledges. We reached the island during the night, when suddenly a storm blew up from the south-west and we had to make for land in hot haste. I had to stop to save the mast and the sail of my kayak by lashing them securely to the deck. In the meantime Nansen had got a good way ahead of me, when all at once I noticed his sledge and kayak at a standstill, but there was no sign of Nansen. I thought to myself that he must have slipped on his ski and fallen, which happened to us now and then when we had to get over the big snow-drifts, but the next moment I discovered him lying in front of his sledge. I was now ready to start, but what could have happened to Nansen? He remained lying on the same spot; it was strange that he did not get on his legs and proceed on his way! Then I heard him shouting. I set off at once on my ski, tied fast to my feet as they were, and soon came up to him, when I found him lying in an open crack in the ice, which had been filled with drifting snow. He also had his ski tied on to his feet, and so could not move, while he was sinking deeper and deeper into the slush at every moment. The sledge and the kayak were behind him, so he could not see them, and did not know whether they were over or

under the water. The drag-rope was fastened to the harness across his back, which also prevented him from turning round.

I placed myself carefully on the edge of the crack, got a good hold of his Iceland jersey and pulled him up on to the ice. He must have been waiting a long time for help, and he must have shouted several times before I heard him.

Tuesday, June 23.—The month of May is over and we are not getting on at all. Unfortunately we have had more bad weather and are still weatherbound at the south end of this island, which we have called "Goose Island," because we have found some remains of geese here. Last Thursday we left the place at the north end, where we had encamped, and managed to drag ourselves to our present pitch, where we have gone through two more snowstorms. We hope that we shall be released to-morrow, after having been weatherbound for two weeks at the very outset of our journey. It is indeed sad. Our stock of flesh will soon be finished, we have only a little boiled meat left.

June 6.—An observation at noon to-day shows that we are now in 86° 45' north latitude. It seems now pretty certain that we are not on Franz Josef Land, but on some land further west, consisting of innumerable islands. If so, our road to Spitzbergen will be all the shorter.

During the two following days we sailed before a stiff breeze over the ice. To the west we had a great glacier-land, and on the east we passed two low promontories with sounds and islands between.

On June 8 we were stopped by a snow-storm; we buried ourselves in a snowdrift in the forenoon, after having marched all the night through. Next day we were able to proceed, and we sailed along merrily; the snow was becoming rather wet, but still we got on all right.

June 9.—Under this date I wrote: We are getting on well just now. We are sailing rapidly southwards along the coast before a fresh breeze. The land still trends in this direction, but we are not sure how it is with the land to the south.

Wednesday, June 17 (evening).—Great things have happened to-day. We have heard dogs barking in the interior of the country this morning. It was Nansen's turn to cook, and after having filled the pot with young walrus-flesh and salt water, and lighted the fire, he went up on a hummock close by, which we had been using as a look-out; and in a little while he called out to

* On this excursion we were, as we afterwards discovered, within a few yards of a depôt of provisions which the Jackson Expedition had, on their visit to this place in the spring of 1895, deposited in a narrow ravine. Nansen went into the ravine and cut off some pieces of the rock to take home with him, but saw no sign of any depôt, but we learnt afterwards, from the Englishmen's description of the place, that we had been on the very spot.

me as I lay half asleep in the bag, "Johansen, I hear dogs barking inland!" I lost no time in getting out of the bag and on to the top of the hummock, where I stood listening for a time while Nansen looked after the cooking. I was not quite sure whether it was dogs that I heard two or three times, or whether it was only the noise made by the thousands of birds which were hatching among the neighbouring rocks. Nansen decided, however, to make an excursion inland and inquire into the matter, while I was to remain behind and look after our things, so that they should not drift away with the ice, for that part of the floe on which our encampment was pitched might easily get loose and drift out to sea. While we were having our breakfast we made all sorts of guesses as to who these people could be, if there really were human beings in these parts. Perhaps they belonged to the English Expedition, of which we had heard just before the *Fram* left Norway, or perhaps it was Eckerole, the Norwegian Arctic traveller. So long as we met some people, no matter who they were, we should at least be able to get a proper outfit from them, and find out where we were.

As soon as we had finished our meal Nansen prepared to start; he took my gun, as his had no shoulder-strap. As we only had a ski and a half each left, he took mine which was whole, so as to make up a perfect pair, and the aluminium glasses he strapped to his back. He also took a good supply of cartridges with him, and thus equipped he set out, after having arranged with me that I should hang a shirt on a bamboo pole, so that he could see where I was.

After Nansen left, I went up on the hummock again and listened. I still heard the noisy chatter of the birds, but this surely could not be what Nansen had taken for the barking of dogs. Then suddenly, borne upon the wind from the interior of the land, came the barking of several dogs, some with hoarse, others with shrill voices; several times, and quite plainly, did it reach my ears, as if it were close at hand on the ice, not more than a mile away, and not from the interior. By this time I was quite sure that it could not be anything but the barking of dogs, so that there must be people about also.

I was becoming more and more anxious about the solution of it all; my shirt was waving high on a long pole fixed on the top of the hummock, and could be seen a good way off, black as it was against the white

snow. At last I saw a black spot appearing now and then among the uneven ice in the direction of the interior. I thought at first it was Nansen coming back, but I soon discovered that the person who was approaching me had no ski, and, when he came nearer, I saw the long barrel of a gun over his shoulder. He was a stranger—the first strange man I had seen for three years! I hastened to fetch one of our small flags, which I fixed up beside the pole with the shirt, so that he could see what nationality I belonged to.

I next noticed that he had clean modern clothes, and that his face, too, was clean and washed. I could hear him breathing heavily and see him sink through the snow now and then; his long boots reached high up over his thighs. I ran towards him; he waved his cap and I my old greasy hat, and soon we were shaking each other by the hand.

"English?" he asked.

"No," I answered. Unfortunately I could not speak his language. I tried German and French, but no, we could not make ourselves understood to each other. Yet there was already an understanding—that which comes from the heart. Mr. Child—that was his name—had set out at once when he heard from Nansen that he had left his comrade out by the edge of the ice.

I conducted him to our encampment, and when he saw our sledges and kayaks, our miserable tent, our cooking utensils, with bears' flesh and blubber, I saw his fine dark eyes wander from me to all these things, while he seemed to be struck with surprise. I used the "finger-language" as well as I could, and when we had both done our best to explain ourselves to each other, I saw two more persons approaching. They were Mr. Burgess and Mr. Fisher, the botanist, both of the Jackson Expedition. The same hearty greetings and the same expression of surprise followed; one of them spoke a little German and French, but there were so many questions and so many things they wanted information about, that I was far from being able to satisfy them; but they were expecting a Finlander by the name of Blomkvist, whom they thought would no doubt be able to understand me. At last he arrived, together with two other members of the expedition, Mr. Koetlitz, the doctor, and Mr. Armitage, the second in command, as I was informed later. They had taken two fine sledges with them, which at once attracted my attention; they must have been made in Norway, I thought. Blomkvist was a powerfully-

built fellow, with clearly-cut features, which reminded me of the characters described by Runeberg, the Finnish poet. I told him rapidly in rough outlines the history of the expedition, how Nansen and I had left the *Fram* and had penetrated as far as $86^{\circ} 14'$ and wintered in the north without knowing where we were, as our watches had stopped, etc., etc. "Now tell this to the others," I said. "I do not understand you," he replied in Swedish. He had been so long abroad among foreigners that he had almost forgotten his native tongue, and as I spoke to him in Norwegian he had some difficulty in understanding me. I managed, however, to get on very well in German with the doctor, who was born in Germany, and he now became our interpreter.

Mr. Armitage took out his pocket-flask and filled a cup with port wine, which he offered me. All took off their caps, and with uncovered heads they gave a cheer for Norway, while they looked up at our little flag. My feelings at this moment may be more easily imagined than described; there I stood, in the midst of these brave men, a horrible, blackened savage in rags, and with long hair, suddenly restored to civilisation, among a crowd of strange people, who brought with them the fragrance of soap and clean clothes, surrounded by the ice with which we had been struggling for the last three years, while above my head waved the flag which I felt I represented; never have I felt as I did then that I had a "fatherland," and with uplifted head I drank the cup of welcome, while the Englishmen's cheers rang out across the ice-fields.

We now broke up the encampment; it was with a feeling of the keenest satisfaction that I took our store of blubber and bear's flesh and threw it away. It was not now worth while to transport this any further; there would, no doubt, be some food for us where we were now going. I was not allowed to do anything; I had only to say how I wanted our things packed and transported. I did not forget any of our unpretentious things; I did not want to leave behind anything of what had been of so much use to us.

Dr. Koeltitz had at once put a pipe into my mouth and Mr. Child gave me a well filled tobacco pouch. We then set off inland, three to each sledge; I went along quite free and easy on what remained of my ski; smoking my pipe. Now and then, when we made a halt, I had to tell Dr. Koeltitz about our journey. Before long I could see the Englishmen's houses, one large and four small, just above the shore, and when we got nearer I saw Nansen standing outside the biggest house, black and dirty and with his long hair, being photographed. I waved my hat and he waved with his in return. As soon as I came up to him I told him that of all our various methods of travelling over the ice, that by which I had traversed the last part



WATCHING THE FIRST SAIL IN SIGHT.

of our journey was the most agreeable, and to this he also assented.

Mr. Jackson, the chief of the English Expedition, now came up to me, and Nansen acted as interpreter between us. I did not take much notice of what was said, but the grasp of the hand which he gave me and his merry, pleasant face told me that the well-known English hospitality had in him a splendid representative. I was also introduced to Mr. Hayward, the cook, who set to work to get some hot water ready for the two wild men who had just arrived.

After Nansen had left me to look after the sledges he again heard the barking of dogs, and before long he met a man with a dog. It was Mr. Jackson. The meeting was a cordial one. Both fired their guns, but,

strange to say, I did not hear the shots. Probably the wind was blowing right inland just then.

Nansen had already been inside the house and had some food. Now it was my turn to sit down to the well-spread table; I was sitting in a real chair, eating with a knife and fork, there was bread, butter, sugar, tea, chocolate, and other kinds of civilised food. I looked at my dirty, greasy hands and did not quite know what I should do with them. Then someone put a looking glass just before my face—good heavens, what a sight! I had to laugh, I scarcely recognised my own features. We then had a warm bath with soap and towels; that was the best of all. How comforting to be able to say good-bye to our more than a year old dirt! And then to get clean, soft, woollen clothes on our bodies again, such as we had so often spoken about!

And now began the never-to-be-forgotten days at "Elmwood" on Cape Flora. The Englishmen expected a ship from London, which might arrive any day. She would first have to make a trip along the western coast and then shape her course homewards.

Nansen was quartered with Mr. Jackson in his room, while Dr. Koetlitz moved out of his comrade's, Mr. Armitage, and gave up his place to me. The others lay on the floor in

to be found. There were photographs and pictures everywhere, yes, this was indeed something quite different from the hut in the far north! And then we got clean, splendid night-shirts of wool, and soap and water before every meal!

CHAPTER XXVII.

English hospitality—A new life—Visit from a bear—Waiting for the ship—The "Windward" arrives—Farewell to Franz Josef Land—The last of the ice—Norwegian soil under our feet—The "Otarua"—The "Fram" has arrived!—We meet our comrades again—Andrée—Festivities.

THE time passes quickly and pleasantly; we receive the greatest possible attention from these kind people with whom it has been our fortune to meet; they vie with one another in making life as pleasant as possible for us, interested as they all are in Arctic research.

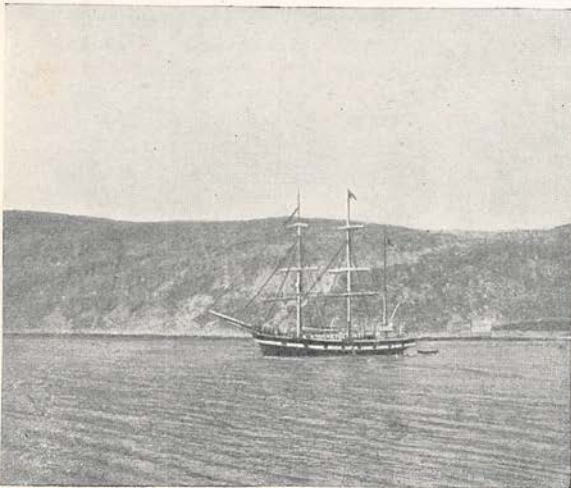
I began at once to learn English, Nansen and Dr. Koetlitz kindly assisting me in my studies. The latter brought out a number of illustrated English comic papers, and was indefatigable in translating the text into German for me. Blomkvist had an old

English-Swedish dictionary, which helped me a good deal, and in the library I found all Cooper's novels, which I knew well, having read them in Norwegian.

It seems quite strange to us to get so many meals a day, we who have been so long accustomed to one or two only during the twenty-four hours, but we eat just as much at each meal as we did formerly, and do not think we eat too often, but look forward with pleasure to every mealtime.

We were now able to ascertain the correctness of our observations. Mr. Armitage compared Nansen's watch for some time with the chronometer at "Elmwood." We then found that we had not been so far out, after all, with regard to our observations for longitude, and that the watches had gone fairly well.

Nansen began at once to prepare a new map of Franz Josef Land, in accordance with our observations, and with the map which Mr. Jackson had made from his journeys in these islands.



THE "WINDWARD."

the large common room with a splendid stove in the middle of it. The shelves on the walls and up to the roof were filled with books.

The guns had their place in a corner of the room, where a large musical box was also

I began to collect and copy our meteorological observations from Nansen's journal since we left the *Fram*, a piece of work which was difficult enough on account of all the grease and dirt which had made most of the figures almost unintelligible.

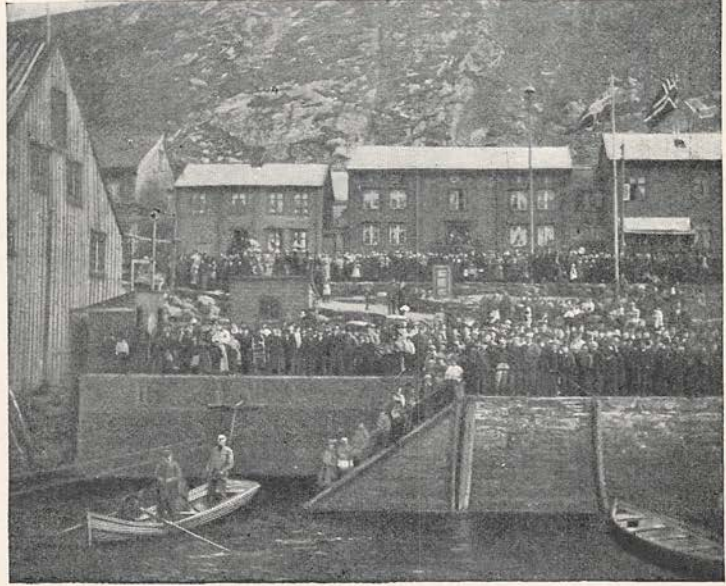
We were now beginning anxiously to expect the ship, which was overdue, and to pay more attention to the state of the ice and the direction of the wind. It might easily happen that the ice prevented the ship from reaching land, and in that case Nansen and I would have to remain where we were for another winter; we talked about a journey across to Spitzbergen, but we were now in the month of July and we could not be sure of getting there in time to catch the whalers, and we should then have to winter on Spitzbergen.

The only chance of getting home this year would be if the English ship arrived within the next few days.

Monday, July 27.—Another important event in our lives during this remarkable journey has occurred. Early on Sunday morning I was awakened by hearing my companions busily talking; they were all running about in their nightshirts. The ship from London had arrived! She lay by the edge of the ice, looking enormously big, with her hull and three masts! And how near land she had got! In the course of the night the north wind had swept loose ice, which had been lying outside the edge of the shore-ice, out to sea. The name of the ship was the *Windward*; she had found her way from the largest city in the world up among the eternal ice, and was bringing tidings from the busy world from which we had been so long away.

Mr. Jackson and Blomkvist were the first to go on board, and the latter came back with the information that the *Fram* had not returned to Norway, and that nobody had heard anything about her. Nansen afterwards went on board, while Mr. Armitage and I went to bed again, after having enjoyed

the sight of the *Windward* for some time. But before long the room was filled with people from the ship; they were all speaking at once, questioning and answering each other. I had heard that there used to be



ARRIVAL AT VARDÖ.

Norwegians among the crew of the *Windward*; perhaps, thought I, some of those in the other room might be my countrymen? I went into the room in my nightshirt and asked in Norwegian, "Is there anybody here from Norway?" "Yes, I!" said one voice. "I also!" said another. "Here is one!" came from a corner of the room; there seemed to be plenty of them. I was now thoroughly awake; I began asking questions and the three all answered at once.

We were received with open arms by the whole of the crew on board the *Windward*. The able and excellent Captain Brown did all he could to make us as comfortable as possible. He had brought with him two new Arctic explorers, Dr. Bruce and Mr. Wilton, who both were to winter and take part in Mr. Jackson's expedition. Nansen and I were daily guests on board, where the cook dished up the best things the ship possessed, while Captain Brown and the others were busy telling us what had happened during the last three years. There was a party every evening, with singing and merriment, in the pleasant saloon of the vessel.

One morning, when we awoke and looked

out of the window, the ship had disappeared. A gale, blowing in shore, had driven the ice in against the shore-ice, and the *Windward* had gone adrift and was obliged to seek a harbour further west in very shallow water. But the ice began closing in upon her, and at one time it seemed as if she would be wedged in against the land. Fortunately in a couple of days she got clear, and now there was a busy time getting ready in earnest for the ship's departure. On the 7th of August the *Windward* was lying with steam up, some distance out to sea, as there was a good deal of loose ice outside the shore-ice which made it somewhat difficult to get on board. Captain Brown sat in the crow's nest watching the treacherous ice and giving his orders in a loud voice. He kept the ship going backwards and forwards, incessantly blowing the ship's whistle. The boat which had come to fetch Nansen and myself only just escaped being crushed between two floes. We saw them approaching each other some distance off, but it was the only opening which we could get through for the moment, and the men rowed with all their might; things looked critical, but we just managed to get through, and the moment the stern of the boat was clear of the ice, the heavy floes clashed together with such a force that their edges were crushed to bits.

It was not long before we met with the ice. Captain Brown sat in the crow's nest and directed the course with that rare ability which he has acquired in his Arctic voyages during many years.

He sat there day and night, only going down now and then to get something to eat. He slept no more than was absolutely necessary. The *Windward* broke through the ice at last, on the 11th of August, and then we said farewell to the ice, in which Nansen and I had spent three years of our life. On the same day we saw the first sail on the horizon, and afterwards we saw several more. We felt that we were approaching our goal—the moment which had so often stood before us as the highest of all our desires; the goal of our longings could not now be far off.

The next day we caught sight of land on the horizon. It was Norway, our native country. We were only just able to distinguish it in the evening twilight; but still, there it was. Next morning we saw its rocky coast. We had got in under land too far north, and had now to shape our course southwards to Vardö. We now saw many

ships, with which we exchanged greetings, and before long we had the pilot-boat alongside. The pilot came on board with his son, and after having exchanged a few words with Captain Brown, the latter asked him, pointing to Nansen, whether he knew that man. The pilot had heard Nansen speaking in Norwegian to me, and was wondering who the Norwegians were who were standing on the bridge of the *Windward*. He evidently seemed to think that we were not properly dressed, either. The captain had to tell him it was Nansen, and then he opened his astonished eyes. Surprise and joy were to be read in his weather-beaten features. He shook hands with us and wished us welcome home. Both he and many with him had never believed that any of the *Fram's* crew would escape with their lives. But of the *Fram* no tidings had been heard since she left Norway. While we pressed the pilot for news, and he in turn got us to relate some of our adventures, the *Windward* had entered the harbour of Vardö, and the harbour-master came on board. While the anchor was being dropped, Nansen and I got into a boat with the pilot and rowed ashore in order to get to the telegraph office, to which the pilot showed us the way. No one knew the two strange men, whose dress was the only thing that attracted attention. We then walked over to the hotel, where, according to the telegraph superintendent, Professor Mohn was staying. He had taken special interest in the *Fram* expedition, and we were, of course, most anxious to meet him.

Having ascertained the number of his room, Nansen rushed straight in to see him. I have never seen anyone so surprised as the Professor was, as he jumped up from the sofa on which he was lying smoking his pipe and recognised the tall figure before him. "It is Fridtjof Nansen! Is it possible?" But when he heard Nansen's voice, he was no longer in doubt, and, greatly moved, he clasped Nansen in his arms.

Before long the town had got to know who we were; there were crowds of people outside the hotel, and the ships in the harbour ran up their flags, while a band, called the "Northpole," played the national anthem outside our windows.

After a pleasant time in Vardö, where we met with the greatest hospitality, we went on to Hammerfest, where the whole town turned out on our arrival. In the harbour lay a fine English yacht, the *Otaria*. The owner was on deck, as our steamer came gliding in, and shouted a welcome to Nansen.

Nansen recognised in him an English friend, Sir George Baden-Powell, who came on board to us at once and asked us to be his guests on board his yacht. We accepted his kind offer and moved at once to the *Otaria*, the splendid and elegantly furnished saloons of which did not exactly remind us of our poor hut, but we could not help making a comparison between our life now and then; it seemed an eternity since we were up there in the north.

It was indeed a joyful experience to be home again. Everybody was so kind and amiable, nothing but happy faces were to be seen around us everywhere. The town gave a splendid fête in our honour, amid general jubilation and festivity. There was one drawback in all our joy: where were our comrades on board the *Fram*? We could not be quite happy as long as their fate was unknown. Although we believed they were safe on board their gallant craft, we had as yet no definite assurance of their welfare, and it was getting late in the season. If they did not arrive now, we could not expect them till next year. Perhaps they were just as badly off as we were well off. On the morning of the 20th of August, a man came on board the *Otaria* with a telegram for Nansen, who was not yet fully dressed. He must come as he is, said the man—it was the superintendent of the telegraph office himself—the telegram was important! Nansen, evidently suspecting something, came out and tore open the telegram. I heard a great noise in the passage outside my cabin and opened the door a little, when I caught sight of Nansen with the telegram in his hand. There was a peculiar expression, full of emotion, in his face; his eyes were staring at the writing. At last he managed to blurt out, "The *Fram* has arrived! The *Fram* has arrived!" It was the one thing wanting

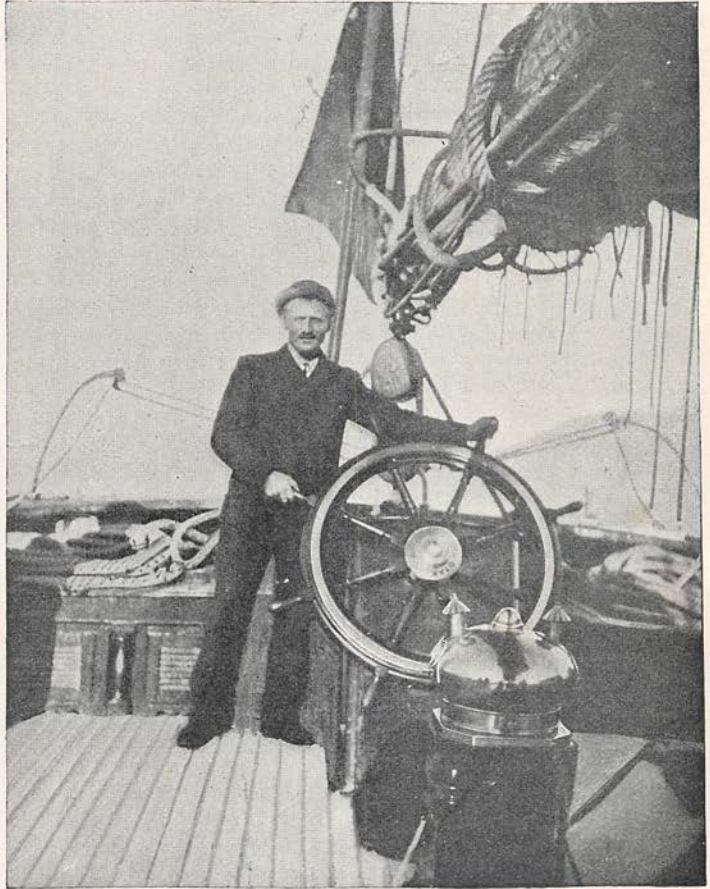
to make all our happiness complete. The telegram ran as follows:—

SKJECERVÖ, 20—8—96, 9 a.m.

Doctor Nansen. *Fram* arrived to-day in good condition. All well on board. Leaving at once for Tromsø. Welcome home.

OTTO SVERDRUP.

So they were not so far away, after all—and we should meet them in Tromsø. The news spread like wildfire over the town; the



JOHANSEN ON BOARD SIR GEORGE BADEN-POWELL'S YACHT.

people went almost wild with joy. We on board the *Otaria* longed to be on the way to Tromsø. The *Windward* heaved her anchor before us and steamed out of the harbour amid jubilant cheers for the *Fram*.

The next day we caught sight of the lofty masts and the crow's nest of the *Fram*, and soon we glided alongside her, our good, faithful ship. She seemed a little the worse for wear and tear, and well she might, but she had escaped safe and sound from the ice,

which was pressing her so hard in its embrace when we left her in the great loneliness of the far north. Now the merry waves played caressingly round the strong hull. "Three cheers for the *Fram*!" came from the *Otaria*, as she glided slowly alongside the former and dropped her anchor. "Hurrah!" shouted the boys on the *Fram* in return, as they lowered one of the boats and jumped into it. They now came rowing

close to the bow of the *Otaria*, where I was standing. I leaned over the railing and shouted, "Welcome, boys!" Bentsen seized my hand and tried to haul me down into the boat; they then jumped over the railing one after the other. "You have done well," said Nansen to them. I cannot describe the moving scenes that followed on the deck of the *Otaria*. It was joy at being together again after having escaped, unscathed, the terrors of the ice-desert, which animated us. Sir George Baden-Powell and his wife stood at some distance, enjoying our happiness. "Your comrades seem to be very glad to see you again," said Sir George to me later on.

Yes, indeed, our gladness was such as one seldom feels in this life.

We had then to tell one another our adventures since we parted up in the far north. Nansen and I learnt how they had fared during the last and the longest arctic night; it seemed that they had not had it altogether so comfortable, either; but they had all along grown fonder and fonder of the *Fram*—she had carried them right up to 86° north latitude—no finer craft sailed the seas, and she did not disappoint her friends. She bore her name well, and forced her way where it often seemed hopeless; she did not mind if they laid mines which shattered the heavy ice against her hull—she

merely shook herself from truck to keel, but as for betraying us—no, that she never did!

On August 13, the same day that Nansen and I set foot on Norwegian soil, the *Fram* forced her way out into open water and shaped her course for Spitzbergen, where one morning they fell in with a sailing ship which they hailed and asked after Nansen and Johansen. "Have they come back?" "No," was the answer. They felt sure, when we



MEETING OF NANSEN AND ANDRÉE IN TROMSÖ.

towards us; most of them were still dressed in their arctic clothes, and some of them had grown long beards. I saw Bentsen in the bow and Scott-Hansen in the middle of the boat; he had already provided himself with a new hat and clothes, but he had not shaved off his beard. There, too, was Peter, with an arm in a sling, and all the others beaming with joy and standing in the boat, waving their hands. The next moment they were

left them, that if we did get home, we should do so the same year.

The name of the ship they met was *The Sisters*. From the captain they learnt that M. Andrée, the Swedish explorer, was at Dane's Island with a balloon, in which he intended to start for the Pole. Sad at heart, they steered for Dane's Island, to ascertain if the Swedish Expedition there had heard anything further about us. They met with a cordial reception from the Swedes, but they could give no other information than that they had heard nothing. But when our comrades heard

about the Jackson Expedition on Franz Josef Land, they thought we might be there. If we were not, they knew that if we were alive at all we should want immediate assistance. They therefore decided to make for Norway to get certain information as to whether we had been heard of. If not they intended returning at once to search for us.

But when they arrived at Skjærvö one night, and Sverdrup had got the telegraph superintendent roused, he learnt the joyful news that Nansen and I had arrived at Vardö on the 13th. Blessing told me afterwards that he had seen Sverdrup coming running back at a great pace from the telegraph office. They then suspected he was bringing good news, and when their expectations were turned into certainty, the cannons were loaded and a salute of two shots announced in the early morning to the sleeping inhabitants of Skjærvö that something unusual had happened. And here they were, the whole thirteen of them had come back hale and

hearty to their native land, and now all their troubles and cares were at an end.

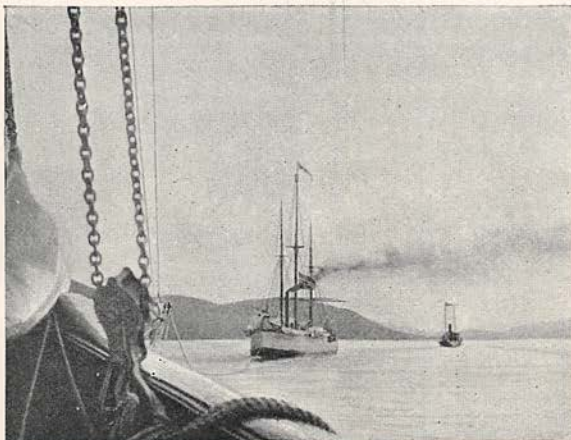
Soon after the meeting with our comrades in Tromsø another ship steamed into the harbour; it was Andrée's ship, the *Virgo*, which had returned from Spitzbergen with the members of the expedition and the balloon on board. Andrée had not been able to make his ascent on account of the bad state of the weather. Some of us went on board to pay our respects to the members of the expedition and we were received with the utmost heartiness. Andrée made a speech and

cordially wished us welcome home, to which Nansen replied, wishing that Andrée's ingenious plan might be realised the following year, when the conditions might be more favourable. Andrée told me, in the course of the conversation I had with him, that it was with no light heart he was obliged to return, but his resolution and his belief in the pos-

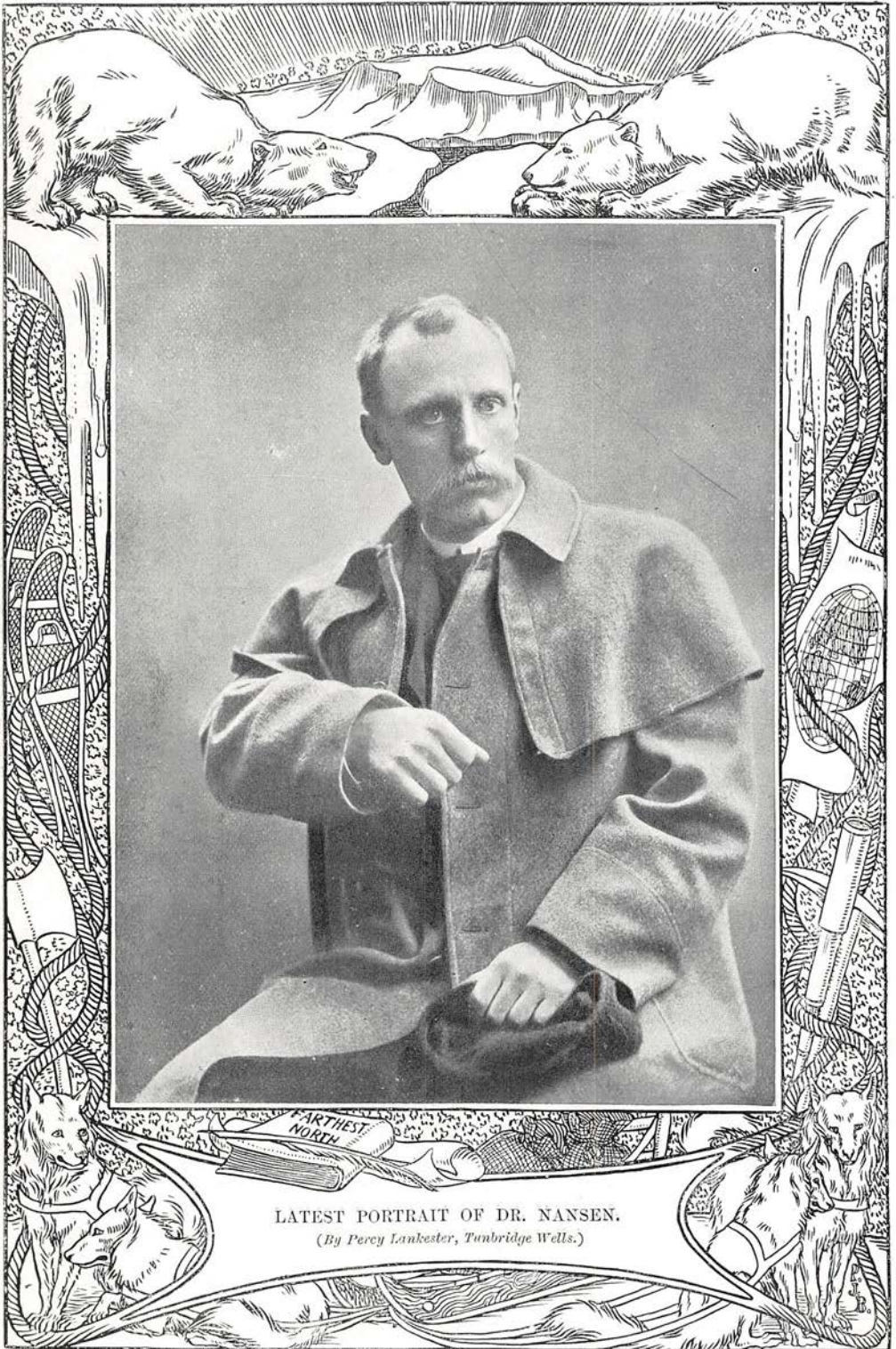
sibility of carrying out his plan were as great as ever; it was only a question of patience, and to me he appeared to possess this rare virtue, so indispensable to an arctic explorer.

Our reception in Christiania was most impressive. None of us will ever forget the moment when we landed. The whole of the fjord was filled with vessels in gala attire, and on the shore there was one interminable mass of people.

But there was a silence over the people which inspired one with a feeling of solemnity, especially when the large choir intoned, "Praise the Lord, the mighty King, with honour!"



THE "FRAM" BEING TOWED ALONG THE NORWEGIAN COAST ON THE HOMEWARD JOURNEY.



LATEST PORTRAIT OF DR. NANSEN.

(By Percy Lancaster, Tunbridge Wells.)