

## CHAPTER XX.

### THE POLARIS EXPEDITION OF 1871.

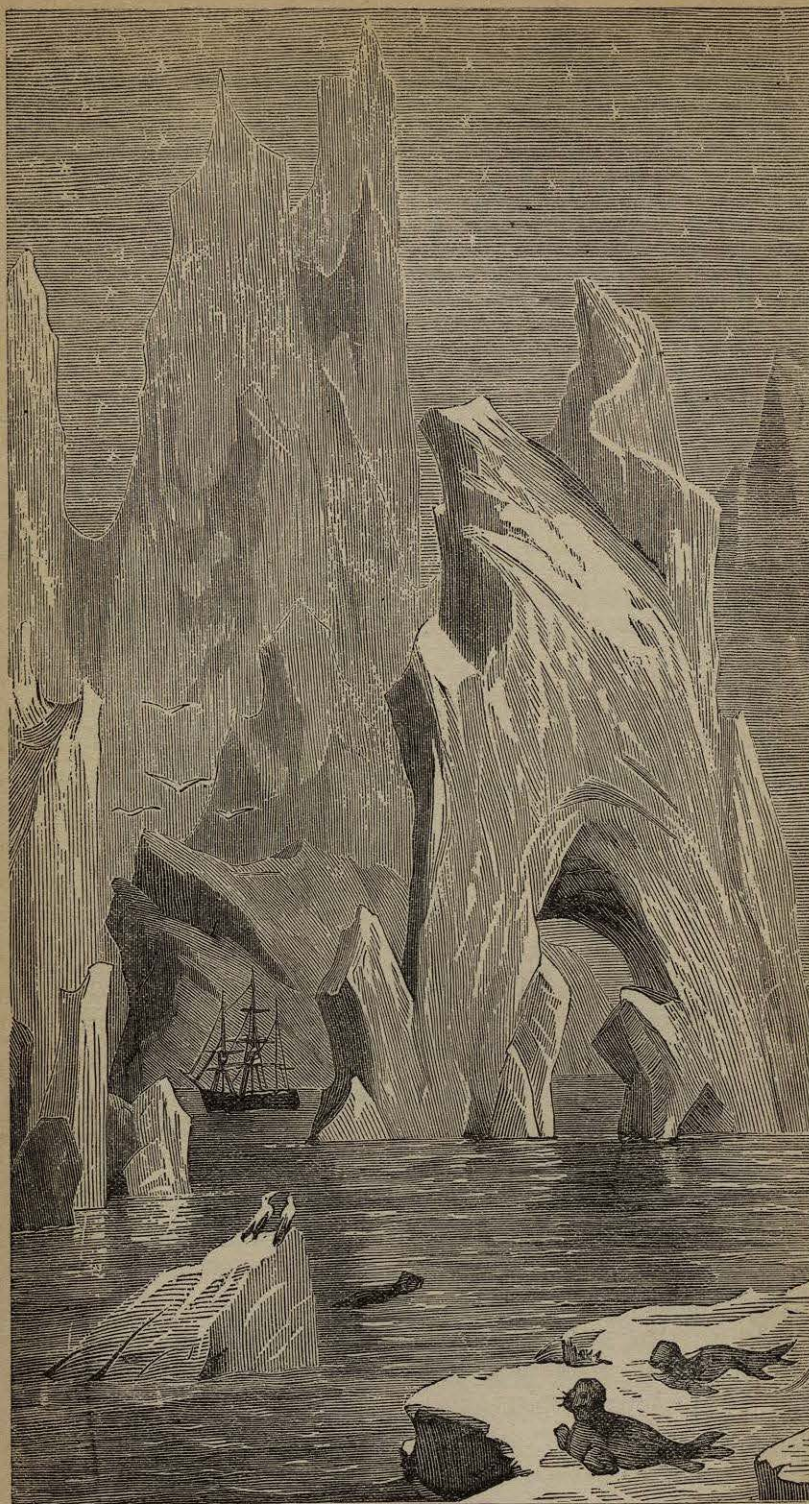
Death and Burial of Captain Hall—The Polaris Leaves the Harbor and Drifts South—The Separation—Drift on the Floe—Rescue by the Tigress—Rescue of the Polaris party by the Ravenscraig.

IN 1870 the Congress of the United States appropriated the sum of \$50,000 for an expedition to the North Pole, and eight days afterward Captain Hall received a commission as commander of the same.

The vessel selected was the steamer *Periwinkle*, a tug which had seen some service in the war of the rebellion; her burden was 387 tons. After being newly and heavily timbered and strengthened in her side-planking, the bottom was thoroughly caulked, then double-planked, caulked, and coppered. Everything else deemed necessary for safety and comfort was also done with such care that "no vessel, even if especially built, could have been better adapted to the service." Launched at the Washington yard, April 25th, 1871, she was named by Hall the *Polaris*, under which name she sailed for New York, June 10th, and, after further equipment at the Brooklyn yard, proceeded to New London, June 29th, and sailed for the Arctic zone July 3d.

Her complement of officers, including the scientific corps, was: C. F. Hall, commander; S. O. Budington, sailing-master; George E. Tyson, assistant navigator; H. C. Chester, mate; William Morton, second mate; Emil Schumann, chief-engineer; A. A. Odell, assistant engineer; N. J. Coffin, carpenter; Emil Bessels, surgeon, chief of scientific staff; R. W. D. Bryan, astronomer; Frederick Meyer, meteorologist. The crew consisted of fourteen persons, and the two Esquimaux, Joe and Hannah, were again Hall's companions.

On June 29th, 1871, the *Polaris* steamed out of New York harbor, and on the 13th of July reached St. John's, Newfoundland, where the governor and citizens extended to the expe-



THE POLARIS ENTERING THE ICE.

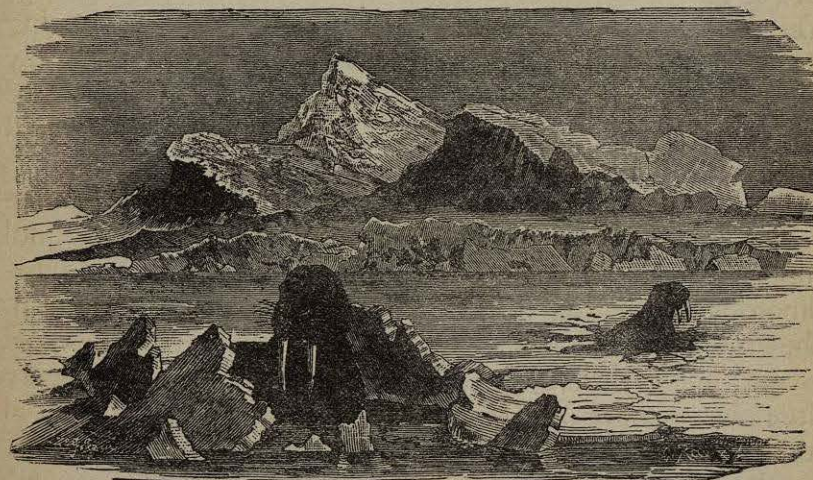
dition a hearty welcome. From St. John's they proceeded up Davis' Straits, and arrived at Holsteinborg, Greenland, on the 31st. They remained there purchasing dogs, furs, and other articles necessary, until the arrival of the transport Congress, with additional stores and supplies; after which, on August 17th, the journey to the pole was fairly commenced. Stops were made at Upernavik and Kong-i-toke, for the purchase of more dogs, and on the 22d, Tessuisak was reached, the most northern permanent settlement on the globe, being in latitude  $70^{\circ} 30'$ .

When they were in Holsteinborg there was a difference of opinion between Hall and his scientific associates as to the course to be pursued. Hall's object was to reach the pole, and to this he determined that all else should be subordinate. The dispute was adjusted, and Hall's view prevailed. During the three days they remained at Tessuisak he wrote a lengthy despatch, showing that all the party were in excellent spirits, and full of hope, but this despatch did not reach the United States for nearly a year.

On the 24th of August, 1871, the *Polaris* entered the regions of perpetual ice and snow, and from that time until the 30th of April, 1873, not a word was heard from the expedition by the civilized world. When the *Polaris* left Tessuisak she crossed the head of Melville Bay, passed Northumberland Island, going through Smith's Sound. Meeting with very little obstruction from the ice, she proceeded until she entered what Kane, Morton, and Hayes pronounced the open polar sea, but which proved to be but an expansion of the sound, and to which the name of Kane Sea has since been given. In a week they reached their highest northern point,  $82^{\circ} 29'$  by Hall's reckoning, and  $82^{\circ} 16'$  by Meyer's calculation, a difference of about fifteen miles. On August 30th the channel, which had been named Robeson Strait, became blocked with floating ice, through which it was found impossible to make a passage. A small bay was found close by named Refuge Harbor, in which Hall desired to take winter-quarters. A consultation, however, decided against this, and soon after the ice became master of the situation, drifting the *Polaris* in a southerly direction for four days. The pack opened on September 3d, and a cove was made to the eastward, which set into the Greenland shore. An immense iceberg sheltered its mouth, and here it was determined to

pass the winter. The cove is in latitude  $80^{\circ} 38'$  and was named Polaris Bay, while the huge island of ice was designated Providenceberg. This point is about 200 miles north of Kane's famous winter-quarters, and about three miles north of the farthest point reached by Hayes.

The iceberg was used as a mooring-place for the *Polaris*, an observatory was at once established, scientific work was commenced immediately, and Hall began preparations for a sledge-journey in the direction of the pole, which were soon completed. On October 10th he started with four sledges and fourteen dogs, accompanied by Chester, the mate, and the Esquimaux, Ebierbing and Hans. The expedition was planned to last two weeks, one to go north, and the other in



HARBOR OF REFUGE—SMITH'S SOUND.

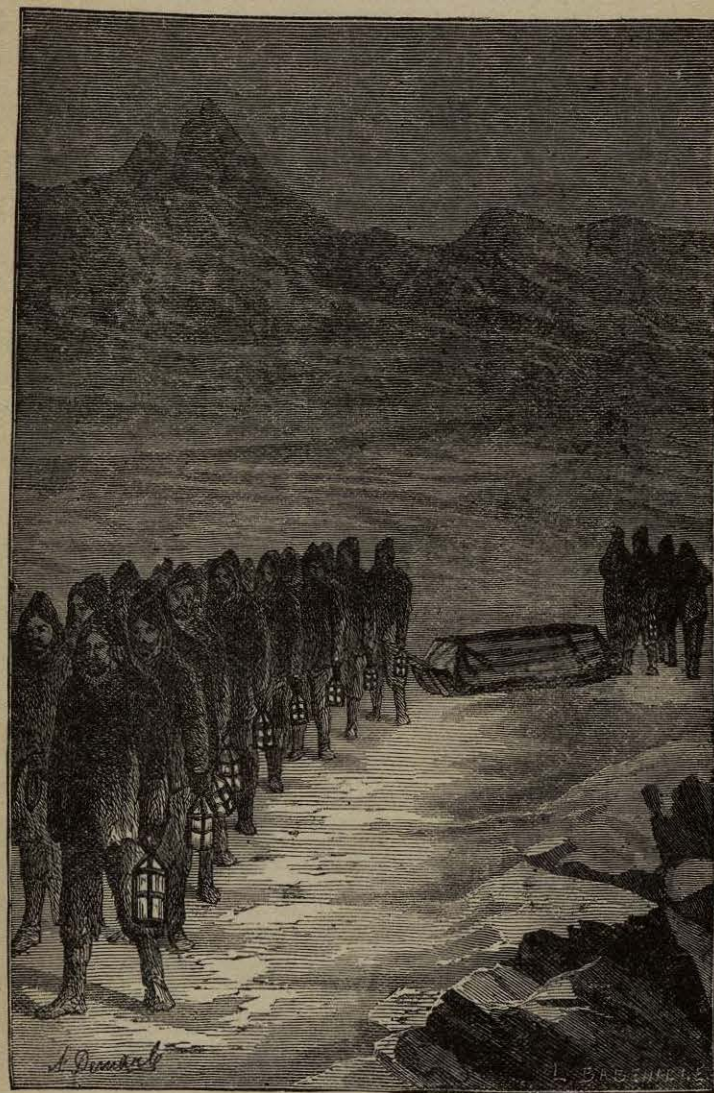
which to return. On the evening of the 20th Hall wrote the last words ever penned by him, which were a communication to the Secretary of the Navy. It was a description of their voyage up to the time of settling down in their winter-quarters, and was full of words of hope and confidence in the success of the expedition. A copy of the despatch was placed in a pillar at Brevoort Cape, the northern headland of the bay, where the encampment was made on the 21st of October, 1871. The original, which was first read in Washington nearly two years after it was written, showed conclusively that he was confident of success, and, taken in connection with the one written formerly, refuted the charges that the equipment of the *Polaris* was incomplete. The expedition advanced

north ten days, making six encampments and progressing seventy miles, or about  $83^{\circ} 5'$  north. At that point there was an appearance of land still north of them, but a cloud prevented any observation which would definitely settle the matter. With the exception of a glacier on the east side of the strait, commencing in latitude  $80^{\circ} 30'$  north, the mountains on all sides of Kennedy Channel and Robeson Strait were free from snow and ice. Live seals, geese, ducks, musk-cattle, rabbits, wolves, foxes, bears, partridges, lemmings, etc., were found in abundance. On the 13th, three days after they started, the Arctic night set in, the thermometer then being  $7^{\circ}$ .

The return trip was made rapidly, the party reaching the Polaris in four days. Hall was apparently in his usual health, but the change from an open-air temperature of from  $15^{\circ}$  to  $20^{\circ}$  below zero, to the atmosphere of the cabin of  $60^{\circ}$  or  $70^{\circ}$  above, had a bad effect upon him, and he partook of no refreshment except a cup of coffee. After indulging in a hot sponge bath, he retired for the night. In the morning his condition had changed for the worse, and he suffered much from a burning in the throat, and vomiting. He steadily grew worse for a week, and to the complications were added partial paralysis and delirium. He partially recovered, and made an attempt to resume his work, believing that in a few days he would be completely restored to health. In this he was doomed to disappointment, as on the night of November 8th he had a fresh attack, and was found in his cabin by Tyson insensible, and breathing heavily. That night he died, and three days later he was laid in a shallow grave in the frozen ground. The doctor pronounced the cause of death to be apoplexy, but Hall believed that poison had been placed in the cup of coffee which he drank, and in the delirium which preceded his death he imagined that every person who went near him was endeavoring to kill him. In regard to the matter, the commission reported without a dissenting voice that "the death of Captain Hall resulted naturally from disease, without fault on the part of any one."

Physically, Hall was an exceptional man. His tenacity of life and powers of endurance were far above those of ordinary men. Above medium height, he was powerfully built, with broad chest, muscular limbs, and a large head. He was remarkable for his temperate habits, and after his return from

his second expedition, after passing through the ordeal of an Arctic winter, a more robust man could not have been found. In the event of Hall's death the command was to fall upon Budington. The winter was passed in the usual manner in



BURIAL OF CAPTAIN HALL.

that region, but no trouble was experienced from cold or want of food. The scientific observations were made constantly, and whenever it was possible to do so, the coast was surveyed. Whenever the opportunity was favorable, the Esquimaux hunted with success, and in this manner an abun-

dance of skins was procured. The storerooms were also well filled with the skeletons of animals and birds, eggs, and many other curiosities of natural history. Nets and lines were set, but no fish could be caught. Considerable driftwood was picked up, which had evidently found its way there from a warmer climate.

A fierce gale from the northeast, about two weeks after the death of Hall, drove the *Polaris* from her moorings, and she dragged her anchors until she landed against the iceberg at the mouth of the cove, where she was secured, and remained there until June following. Later she was driven farther on the berg by pack-ice, where her prow remained fast, while the stern moved up and down, as influenced by the tides. This position strained the stern-piece and started a portion of the planking, so that when she once more settled in her native element it was found that she leaked considerably. However, when emptied once by the steam-pumps, it was an easy matter to keep the hold clear by working a few minutes each hour.

Chester and Tyson, under orders from Budington, undertook a boat expedition early in June. The orders were to go as far as they could up the shore. The expedition was a failure. One boat was crushed by the ice almost at the hour of starting. Its place was supplied by the canvas boat, but they failed to reach a point as far north as that reached by Hall in his sledge-journey. They remained there until the middle of July, 1872, but before the ice opened they were recalled by Budington, and the party was compelled to abandon the boats, and make their way back to the steamer overland. Budington had determined to return home as soon as the ice would leave him at liberty to do so, and under existing circumstances this seemed the wiser course, although it is not believed that had Hall been living he would have consented to it.

The ice left the *Polaris* free early in August, and she steamed slowly down the western shore. At the close of the first day she was fastened in the ice, and was in a very dangerous position. In latitude  $80^{\circ} 2'$  she was made fast to a floe on the 16th, which drifted her hither and thither in Smith's Sound for two months, during which time not more than twelve miles were gained to the south, bringing her in the neighborhood of Northumberland Island, in latitude  $79^{\circ} 53'$ .

Apprehending danger, provisions were carried on deck, a canvas shelter was erected on the ice, and every preparation made for a speedy abandonment of the vessel should it become necessary.

A very severe gale set in from the south on October 15th. The ice pressed in under the ship, and she was actually lifted out of the water and thrown on her beam-ends on the ice. Provisions and stores were thrown over, and under orders about half the crew proceeded to carry them to a more secure place. The boats had been lowered, and in the middle of the night, in the midst of a terrific storm, the *Polaris* broke loose and immediately disappeared, leaving on the ice the nineteen persons who had gone there to save the provisions, at which they labored all night. In the morning they attempted to reach the shore, but failed. The *Polaris* was seen during the day under sail and steam, but soon changed her course, and disappeared. Another glimpse of her was caught a few hours later, but she again disappeared, and they very naturally believed that they had been purposely abandoned.

The hardships endured by those who were left upon the ice are beyond description. For 195 days these nineteen men, women, and children drifted on floating ice through an Arctic winter, at the mercy of wind and water. The floe on which they found themselves on leaving the ship was soon shattered, and the party found themselves distributed on different pieces of ice. They had two boats, with which they finally succeeded in gathering all upon the principal floe, where they remained more dead than alive all night. Several attempts were made to reach the shore. The dogs and sledges were put in readiness, and each attempt to escape proved a dismal failure. When it was seen that there was no prospect of reaching the shore snow-houses were built, and everything possible was done to make the time pass comfortably and pleasantly. Land was seen for several days, but as the weather was unfavorable for taking observations, it could not be recognized. Sometimes they were in a condition bordering on starvation, and saw death staring them in the face. Cannibalism was thought of, but each time food was furnished in time to save them.

Meyer succeeded in taking an observation on New Year's Eve, and found they were in latitude  $72^{\circ} 10'$ , longitude  $60^{\circ} 40'$ ; showing that in nine weeks they had drifted southward

about 525 miles. This was cheering news, though the thermometer stood  $39^{\circ}$  below zero. This was early in January. In February they encountered several storms, and very cold weather. The close of the month found them nearly out of provisions, but early in March they caught some seals, and had food in abundance. Immense icebergs surrounded the floe, and it was soon cracking and splitting with as much noise as is made by artillery and musketry in battle. Everything was broken in pieces, and the party stuck to the largest piece. On the last day of March an observation showed them to be in latitude  $59^{\circ} 41'$ , and that during the last five days they had drifted at the rate of twenty-three miles per day. At that time their piece of ice had grown much smaller, and they were in clear water, no other ice being in sight.

The month of April came in with a terrific storm, and it became evident that they must take refuge in the boat. They got under way early in the morning, but found their craft leaking badly, and loaded too deep to carry them. Meat and clothes were thrown overboard, and nothing was carried but a tent, a few skins for covering, and a little bread and pemmican. About fifteen miles were made in a southerly direction, when a landing was made to lighten the boat. The tent was pitched, and the party remained all night, although the ice was cracking and breaking up all around them. The voyage was resumed again in the morning, but had only proceeded about two hours before they encountered a gale. They had a number of narrow escapes before a piece of ice large enough to land upon could be found; upon landing the boat was rapidly making water, and when cleared a great hole was found in her side. Repairs were made as soon as possible, and they took to the water, only to find themselves again surrounded by ice in such a manner that they were compelled to seek refuge on a floe. Gale succeeded gale, and as the ice continued to break they were constantly removing their things to a new centre. On the night of the 7th it broke again, carrying with it the boat, the kayak, and Mr. Meyer. For a time it seemed as though all were lost. The ice kept closing in on them and they were without hope of saving the boats or their unfortunate companion. When daylight arrived an attempt was made to rescue them, all the party, except two, venturing away on the ice. All who ventured reached the boat in safety, and with much difficulty she was taken back,

and Meyer was saved. The kayak was then secured in a similar manner. The tent was taken down and erected again on the centre of what had then become a small piece of ice, and a snow hut was constructed at its side. Again the wind commenced blowing a gale, and preparations were made to take to the boat. They were literally washed out of the tent and snow hut. The women and children were placed in the boat without a dry spot, and without so much as a piece of fresh water ice to eat. The storm soon abated, however, and the tent was pitched once more. The six months of the voyage on the ice were completed April 16th. At that time they were still without any prospect of a rescue, and starvation was staring them in the face. Seals were in sight all around them, but none could be caught. Only a few days' provisions were left, and cannibalism was staring them in the face. On the 18th a small hole was discovered in the ice some distance off, from which a seal large enough for three days' provisions was secured, and divided equally among the party. On the 20th a sea struck the ice, and carried away everything which was loose upon it. This was repeated every fifteen minutes, and it kept all busy looking for a place which would enable them to successfully withstand the next shock.

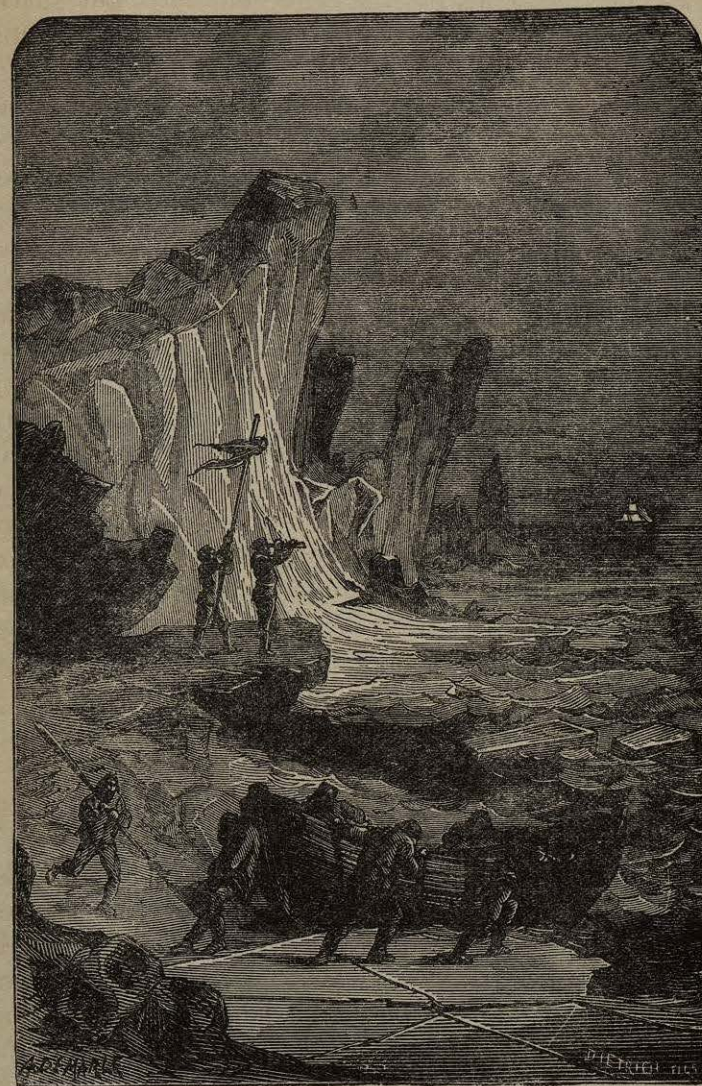
The agony of suspense continued ten days longer, and in that brief space were crowded many perilous adventures, which were a severe tax on the endurance of the sufferers. An observation showed that they were in latitude  $53^{\circ} 57'$ , a distance of 1,875 miles in a straight line south from the point where they started. Each day passed as did its predecessor, the sufferers being all wet and hungry. Sometimes they came within sight of land, but were always driven off again. Meyer seemed to fare worst of all, and his chances for surviving more than a few days longer were considered slender, although all were in a deplorable condition, and had suffered indescribable tortures. Skins that had been tanned and saved for clothing were devoured as a dainty morsel, but even this did not last long, and on April 26th they found themselves without a morsel of food. On that day a bear was discovered on the ice, moving toward them. The Esquimaux, Joe and Hans, took their guns, and at once went to meet it, the result being that the bear, which came after a meal, was soon the substance of one. That night another gale sprung up, accompanied by heavy rain and snow squalls.

By morning the ice upon which they had taken refuge had so wasted away that it became evident it would not outlive the gale, and they were compelled to take the desperate chance of a stormy ocean, in a light boat, insecurely patched and overloaded. The danger was great, but the boat survived the storm, its occupants being thoroughly drenched, without any chance to dry themselves, having seen neither sun, moon, nor stars for a week. They soon struck a sealing ground, where they found more seals than they had ever seen before, but for some time were unable to secure any. They were, however, at last successful, and had seal food in abundance. The ice soon became very thick around them. They again started in the boat, but were soon compelled to land on the ice again, where they repaired the boat, and dried their clothing to some extent. On the 28th of April the inevitable gale commenced again, and all night they stood by the boat, launching her in the morning, but were compelled to haul her up on the ice, where icebergs threatened her destruction, but which they fortunately escaped by taking to a floe. The ice became slacker, and during that afternoon they caught sight of a steamer ahead of them and a little to the north. They hoisted their colors, and endeavored to cut her off, but she disappeared without seeing them. Wearied with hardship and disappointment they landed for the night on a small piece of ice.

For the first time in many nights they beheld the stars, and the new moon also made her appearance. A fire was kept up all night in the hope that they would be seen by the steamer; though in this they were disappointed. In the morning they started early, and at daylight again sighted the steamer about five miles off. The boat was launched and for an hour they gained on her, but in another hour they became fastened in the ice, and could proceed no farther. Landing on a piece of ice they hoisted their colors upon the most elevated point they could find, and then fired three rounds from their rifles and pistols, which were answered by three shots from the steamer. She was again seen the same evening, and while looking for her another steamer hove in sight on the other side.

The morning of Wednesday, April 30th, was thick and foggy, but when the fog broke a glorious sight met the eyes of the drifting party. A steamer was seen close to them, and as soon as they were discovered she bore down, and soon all

were on board the staunch little craft *Tigress*, ending their perilous journey in latitude  $52^{\circ} 35'$  north. The *Tigress* was in command of Captain Bartlett, and was owned in Newfoundland. Some time after the party was landed in safety at St.



TYSON'S CREW SIGHTING THE SCOTCH WHALER, WHICH RESCUED THEM OFF LABRADOR.

John's, Newfoundland, and a few days later the tidings of their rescue reached the United States. A steamer was despatched by the government from New York to bring the party to Washington, where they arrived early in the month of June.

Thus closes what is probably the most remarkable voyage in the history of navigation. It is marvellous that nineteen persons, two of whom were women, and five children, one of them only two months old, should have drifted almost two thousand miles, for one hundred and ninety-five days, through an Arctic winter of extraordinary severity, alive, and in good health. The harmony which existed among the party was striking. No one had a word of blame for any of his fellows, and the men, gathered as they were from nearly all nationalities, always thought first of what could be done for the Esquimaux women and children. In his testimony before the commissioners, one of the men said: "Captain Tyson had command on the ice; but he never seemed to take much of a lead. Everything seemed to go on very well. There was not a great deal of commanding; it was not wanted. When we did not do as he directed, it turned out wrong."

Let us now return to that portion of the expedition remaining on the *Polaris* after the sudden separation on the 15th of October, 1872. For a long time she had been leaking so badly that it was evident she could not float many days, and it was resolved to abandon her. Everything which could possibly be of use in a sojourn in that wilderness of ice and snow was taken out. The hawsers which held the steamer to the ice-floe parted, and she drifted away in a helpless manner. The lives of those on board were in great danger. It was clear she was in no condition to reach port, so it was determined to keep her afloat and beach her at some point where the stores could be saved. Her engines were useless, having evidently frozen up. Fortunately the ice cracked, and an opening was made, through which a favorable wind blew her to the shore, distant about twelve miles. The beaching was successfully accomplished, and the work of providing shelter for the winter was immediately commenced. The ship was stripped of all her material as rapidly as possible, and soon became a mere hulk. The timbers between deck were taken out, and all the planking and boarding removed. From this material a hut was built and roofed over with sails. A party of Esquimaux made their appearance, and for some strips of iron helped to carry the provisions, coal and stores from the dismantled *Polaris* to the hut. Having been extremely successful in their hunting expeditions they had a large surplus of skins which they dis-

posed of to the party, and from which was manufactured warm clothing. During the long winter they suffered little. The snow which fell banked up the hut and protected its inmates from the cold, while the *Polaris* formed a convenient wood-pile, where they obtained all the fuel they needed. Their provisions were ample for a time, but they knew they would soon be exhausted, and became fearful of their fate. They knew that for at least a year no news of the probable loss of the *Polaris* would reach the United States. "How should they escape?" was the great question propounded by each. There is always a man for every emergency, and in the present instance Chester, the mate, proved the hero. Assisted by the carpenter, Coffin, he set about building some boats, or scows, from the boards which had been used as a lining for the cabin. The work was patiently persevered in, and as summer drew near, the boats were finished.

Scurvy, that dreaded disease of the Arctic regions, made its appearance, but following the teachings of the dead Hall, the men abandoned the use of salt food, lived on raw walrus liver, and soon the malady was eradicated.

A fortunate thing for the party was the unusually early appearance of good weather. By the middle of June the ice commenced giving way, and at the earliest possible moment thereafter they took to the boats, and commenced their voyage in search of transportation home, with the odds fearfully against their success. While they were on their way the *Tigress* and *Juniata* were being fitted out to go in search of them.

The frailty of their boats compelled them to proceed slowly and cautiously. During the day they rowed along, and each night the boats were hauled up on the ice, where the only warm meal for the day was enjoyed. Their stove was a slight improvement on the Esquimaux lamp, and their fuel was oil, while their wicks were strips of rope, and the fire-place a remnant of an iron kettle. A snow-storm delayed them several days at Hakluyt Island, a breeding-place for the auks, which were at that time hatching their young, and which supplied them an abundance of food limited only by their powers of consumption and the means of carrying it away.

After leaving the island their progress through the slush was very slow and laborious. They skirted the solid ice-

floes until July 20th, and just two days before the *Tigress* left New York in search of them, they sighted a vessel, which soon discovered them, and took them on board. She proved to be a Scottish whaler, the *Ravensraig*. Not having secured a full cargo, and wishing to do so before he returned home, the captain of the *Ravensraig* transferred the party to another steam-whaler, the *Arctic*, homeward bound, and on the afternoon of September 17th they landed at Dundee, Scotland. Their arrival was at once telegraphed to London, and the safety of the crew of the *Polaris* was announced the following morning in the American papers.

Thus ended one of the most wonderful voyages on record. Out of the forty men, women and children comprising the expedition, only one death, that of Captain Hall, occurred, a most marvellous preservation of life amid the greatest danger to which mariners were ever subjected. The unfortunate decease of Hall in the infancy of the enterprise prevented the accomplishment of such results as were desired and expected. With the commander died the hope and heart of the expedition, and no further attempt at discovery or original exploration was made. The loss of so brave and skillful a navigator may well be an occasion for the deepest sorrow and regret amongst all who reverence and admire American prowess and heroism.

## CHAPTER XXI.

### THE GERMAN EXPEDITION UNDER KOLDEWEY.

Departure from Bremerhaven—Separation from the *Hansa*—Wreck of the *Hansa*—Adrift on the Ice—Danger of Starvation—Return to Fredericksthal.

THE first German Arctic expedition, commanded by Captain Koldewey, and originated by the celebrated scientist, Dr. Peterman, of Leipzig, departed from Bremerhaven on the 15th of June, 1869. The ship *Germania* was especially built for this expedition, and nothing was overlooked to make the outfit as complete as possible. The ship *Hansa* was to accompany the *Germania* as a tender. The vessels sailed up through the North Sea together, and did not separate until January. Mayen Land was passed, and the Arctic Ocean actually entered. On the 15th of July the *Germania* entered the ice-circle of Greenland. The two vessels became separated, and met again on the 18th, but through some misunderstanding of signals they became once more separated, and never met again.

Meeting with impassable ice to the west, the *Hansa* steered to eastward out of the ice, and began afresh. Having reached open water a second attempt was made at penetrating to the coast in the latitude corresponding with the instructions. Until the 10th of August the *Hansa* experienced good weather, and with a favorable wind sailed along the edge of the ice in a northerly direction, until, reaching the desired latitude, it was once more thought best to attempt the desired coast. But disappointment again met the crew. After sailing westward one night, they found themselves on the morning of the 14th hemmed in again on all sides; fresh ice formed between the floes, besides filling up every passage, so that the *Hansa* was fast again; and from this time forward until the complete blocking up of his vessel, the captain's log-book unfolds a series of troubles, dangers, and reverses.

For a long time it was hoped that the floes would part and allow the unfortunate craft to make toward the coast. Land