

his victim over the broken shore-ice, close to a field which stretched in a southerly direction. All depended upon our coming up with him before he should reach this field, as he would carry his prey over the open plain with the speed of a horse, and thus escape. We succeeded. The bear turned upon us for a moment, and then, scared by our continuous fire, let fall his prey.

"We lifted our poor comrade upon the ice to bear him to his cabin, a task which was rendered difficult by the slippery and uneven surface of the ice. But after we had gone a little way, Børgen implored us to make as much haste as possible. On procuring a light, the coldest nature would have been shocked by the spectacle which poor Børgen presented. The bear had torn his scalp in several places, and he had received several injuries in other parts of his body."

As spring advanced, the crew of the *Germania* made preparations for their homeward journey. The vessel, so long a prisoner in icy chains, became free about the first of July, and the engine being repaired as well as circumstances would permit, some cruising was done as a finishing touch to the work of the season. After examining Shannon Island and vicinity they departed for Germany, where they arrived on the 11th of September, after an uneventful voyage of three weeks.

## CHAPTER XXII.

### EXPEDITION OF CAPTAIN GEORGE NARES.

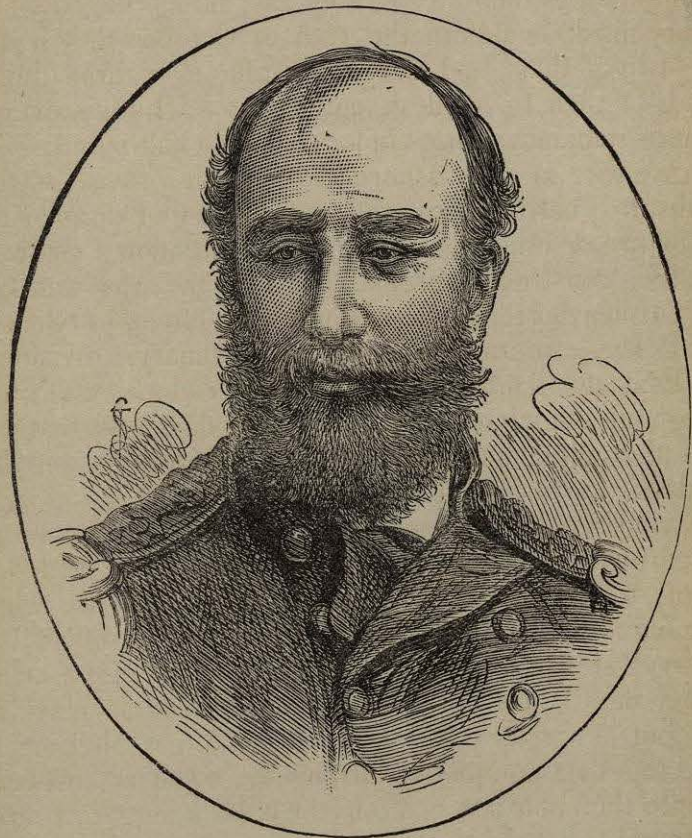
*The ships Alert and Discovery—Death from Exposure—Markham's Sledge Journey—He reaches the Highest Point attained thus far—Lieutenant Schwatka's Expedition—In King William's Land—Relics of Sir John Franklin Discovered—The Records of McClintock Found—Safe Return.*

ANOTHER Arctic expedition, consisting of the ships *Alert* and *Discovery*, under Captain Sir George Nares, Commander A. H. Markham and Captain H. F. Stephenson, was sent out by the British Geographical Society in the year 1875. The officers and men of both vessels numbered 120, many of whom had seen Arctic service as whalers or explorers. The *Valorous* accompanied them to Disco Island as store-ship, and having there transferred her surplus stores to the other two, she left for home July 16th, 1875.

On the voyage to Disco they had encountered much loose ice off Cape Farewell, and many heavy gales, in which they lost two of their whale-boats. Leaving Disco on the 22d, the *Alert* and *Discovery* steamed across Baffin Bay to the northwest instead of hugging the Greenland shore through Melville Bay, and struck the great central ice-pack July 24th. In thirty-four hours they succeeded in boring through the pack into open water—a feat never before performed, and which the Greenland masters declared "would ne'er be credited at Peterhead." It helped to prove the superiority of steam-power for Arctic navigation. Reaching the vicinity of Cape York many icebergs were seen aground and closely crowded, indicating that they would perhaps not have fared so well had they taken the old route through Melville Bay, and around that cape. Pushing north they soon arrived at Carey Islands, where they landed and established a depot of supplies, depositing the usual record under a cairn. Passing Littleton Island, where they left a record, and Port Foulke, which Nares styles "the Elysium of the Arctic regions," they made for Cape Sa-



bine, the easternmost promontory of the Ellesmere Land of Inglefield, in  $78^{\circ} 45'$ . Off that point, July 30th, they saw the ice in great quantities, but in the middle of Smith's Sound it consisted of detached floes, five or six feet thick, with occasionally an old floe of twice that thickness, but much decayed, and presenting no serious obstacle to their onward progress. At length, however, their way was blocked by impenetrable ice, and they were detained three days in Payer Harbor,



SIR GEORGE NARES.

awaiting a practicable opening. Several fruitless attempts were made to bore through, but at last success crowned their efforts, and on the 4th of August they forced their way through twenty miles of Hayes Sound. Soon, however, they got entangled in the pack, making but little headway, and finally were completely beset, barely escaping collision with a huge iceberg, and finding it necessary to unship their rudders. With great labor, and amid many dangers for three weeks

longer in Kennedy Channel, they reached Cape Lieber, Hayes' limit of 1860, on the 24th of August, and entered Lady Franklin Sound.

Here in the shelter of an island was found a good harbor, perfectly suitable for winter-quarters; and to enhance their good fortune, they saw on the next morning a herd of nine musk-oxen peacefully cropping the fresh and short-lived Arctic vegetation, all of which were killed, forming a very seasonable addition to their stores, notwithstanding the flavor "was so very musk." Before the 10th of October they had shot thirty-two of them, and had at one time over three thousand pounds of their frozen flesh hanging up. The Discovery was left here, remaining frozen in for ten and a half months. Their first care was to take ashore and deposit provisions for six months to guard against the contingency of disaster to the ship by fire or otherwise during her detention. Snow-walls were then constructed around her after the now well-known type, but heavier than usual, being made fifteen to twenty feet thick. These precautions, with the ordinary provisions for heat, kept the temperature of the lower deck at  $48^{\circ}$  to  $56^{\circ}$ , throughout the winter. The period of darkness, that is, absence of sunlight, set in on the 10th of October and lasted 135 days.

Leaving Stephenson and his men busy with their preparations for winter, Nares pushed on in the Alert, and on the 31st of August reached latitude  $82^{\circ} 24'$ , in Robeson Channel—the highest point ever attained by ship, and only 21' short of Parry's sledge limit,  $82^{\circ} 45'$  north of Spitzbergen. In this channel the sea-ice approached the land-ice so close as to leave but a narrow waterway, and off Cape Sheridan they closed together, completely locking the northern entrance, or exit, into the polar sea. Along the coast a jagged parapet of ice fringed the shelving ledges, rising to an average height of about twenty feet, interrupted at intervals by ravines. Having rounded the northeast point of Grant Land, he found himself where Hayes had been so anxious to reach, but instead of the Open Polar Sea of that navigator he found the "Sea of Ancient Ice," impenetrable and forbidding. The ice was of unusual age and thickness; for instead of the five or six feet of the common floe, and the ten or twelve of the old floes hitherto encountered, it presented a front of fifteen or more feet above water, and a total of eighty to one hundred



and twenty feet—resembling a connected chain of low icebergs rather than the floes or packs of more southern latitudes. In the shelter of such ice, where the submerged portion, extending to the land, left a sufficient waterway for the ship, Nares found safe though not inviting winter-quarters; and here they were soon frozen in by the newly formed shore-ice.

While most of the ship's company were briefly engaged in the usual labors for the safety of the ship and stores Lieutenant P. Aldrich, accompanied by Adam Ayles, set out September 21st, with two dog-sledges—dogs and sledges for the expedition had been secured at Disco—under orders to pioneer a route round Cape Joseph Henry, on the north side of Grant Land, for a larger party which was to follow. Four days later, Commander Markham, with Lieutenants A. A. C. Parr and W. H. May, started with three sledges to establish a depot of provisions as far to the northwestward as would be found practicable. On the 27th Aldrich and Ayles, from a mountain top two thousand feet high, in latitude  $82^{\circ} 48'$ , descried the wide-extending land to the northwestward as far as  $83^{\circ} 7'$ , with lofty mountains to the south. They returned to the Alert on the 5th of October, after an absence of fourteen days. A week later they entered on the Arctic night, the sun having disappeared below the horizon; and on the 14th Markham returned after a trip of nineteen days, having established the depot at  $82^{\circ} 44'$ , and tracing the coast two miles farther to what might be regarded as the exact latitude reached by Parry, elsewhere, nearly a half a century before. Markham's party comprised twenty-one men and three officers, of whom seven men and one officer returned badly frost-bitten, three so severely as to require amputation, the thermometer ranging through the trip from  $15^{\circ}$  to  $22^{\circ}$  below zero. Meanwhile, from the 2d to the 12th, Lieutenant Rawson had made an unsuccessful attempt to open communication with Captain Stephenson in Lady Franklin Sound. The ice was found impassable within nine miles of the ship, being rotten and unsafe in the channel, and piled up thirty feet high on the shore, while the deep snowdrifts in the ravines made the overland route equally impracticable.

The usual efforts to amuse and instruct the ship's company were inaugurated under the auspices of the commander, who says that of fifty-five men who composed the crew of the

Alert only two were found who could not read. Besides the school for instruction there were lectures, readings, concerts, and theatrical representations, Thursday of each week being devoted to these entertainments. The first theatrical performance was given on the 18th of November, and was thus formally announced: "The Royal Arctic Theatre will be opened on Thursday next, the 18th inst., by the powerful Dramatic Company of the Hyperboreans, under the distinguished patronage of Captain Nares, the members of the Arctic Exploring Expedition, and all the nobility and gentry of the neighborhood." On the Discovery similar entertainments were given, its theatre being opened December 1st, and the plays being rendered alternately by officers and men. Each vessel had a small printing press, which was used for issuing programmes and bills of fare on occasions of great dinners. On the anniversary of the Gunpowder Plot, November 5th, they had a bonfire on the ice, and burnt Guy Fawkes in the approved style. Christmas was thus observed: "First of all, in the morning we have Christmas waits in the usual manner. A sergeant of marines, the chief boatswain's mate, and three others, went around the ship singing Christmas carols suited to the occasion, and made a special stay outside the captain's cabin. On the lower deck in the forenoon there were prayers, and after that captain and officers visited the mess in the lower deck, tasted the pudding, inspected the decorations which had been made, and so on. Then the boxes of presents by friends in England were brought out, the name of him for whom it was intended having been already fixed to each box, and the presents were then distributed by the captain. Ringing cheers, which sounded strange enough in that lone place, were given for the donors, some of them very dear indeed to the men who were so far away from their homes. Cheers were also given for the captain, and for absent comrades on the Alert. A choir was then formed, and 'The Roast Beef of Old England' had its virtues praised again. The men had their dinner at twelve o'clock, and the officers dined together at five."

"The sun reappeared on the last day of February. From November till February, with the exception of the starlight and occasional moonlight, we had been in darkness," says the chaplain, "not by any means dense, but sufficiently murky to excuse one for passing by a friend without knowing him"



And now the time for sledge-exploration was near at hand; and it became important to establish an understanding between the two ships, so as to secure concert of action. Accordingly, on the 12th of March, 1876, sub-Lieutenant Egerton and Lieutenant Rawson, accompanied by Christian Petersen, interpreter, were despatched to attempt once more to open communication with Captain Stephenson. Four days later they returned to the *Alert*, Petersen having completely broken down. His hands were paralyzed, and his feet so badly frozen as to require amputation, which, however, did not save him, as he died some three months later. Egerton and Rawson, accompanied by two seamen, resumed the attempt, and were successful; and communication as well as co-operation between the sledge-parties of both vessels was established.

Lieutenant Beaumont of the *Discovery*, in command of eight men, crossed Robeson Channel with great difficulty over the broken and moving ice, and explored the Greenland coast to latitude  $82^{\circ} 18'$ . Scurvy broke out among his men, and two died before reaching Polaris Bay. Beaumont pushed on to his limit, but four others succumbed soon after turning their faces to the ships. The three that were not disabled hauled the sick with the provisions on the single sledge, always making the journey twice, and often thrice, over the rough ice. "The gallant band," says Nares, "struggled manfully onward, thankful if they made one mile a day, but never losing heart." While they were thus laboring on in the heart of a frozen desert, a search party consisting of Lieutenant Rawson, Dr. Coppinger and Hans, the Esquimau, was despatched, and had the good fortune to fall in with them when the remaining assistants of Beaumont were on the point of also succumbing to the disease. The three officers had now for a time a monopoly of the hauling business, but no lives were lost, and the party reached their depot of provisions on Polaris Bay, where they well succeeded in shooting game, and the invalids soon recruited. Including a lengthened stay at that point, they were absent from the ship one hundred and thirty-two days. Lieutenant Archer surveyed Lady Franklin Sound, and found its head, sixty-five miles inland, surrounded by lofty mountains and glacier-filled valleys. Lieutenant Fulford and Dr. Coppinger explored Petermann Fiord or Bay, which also was found to terminate in a steep glacier-

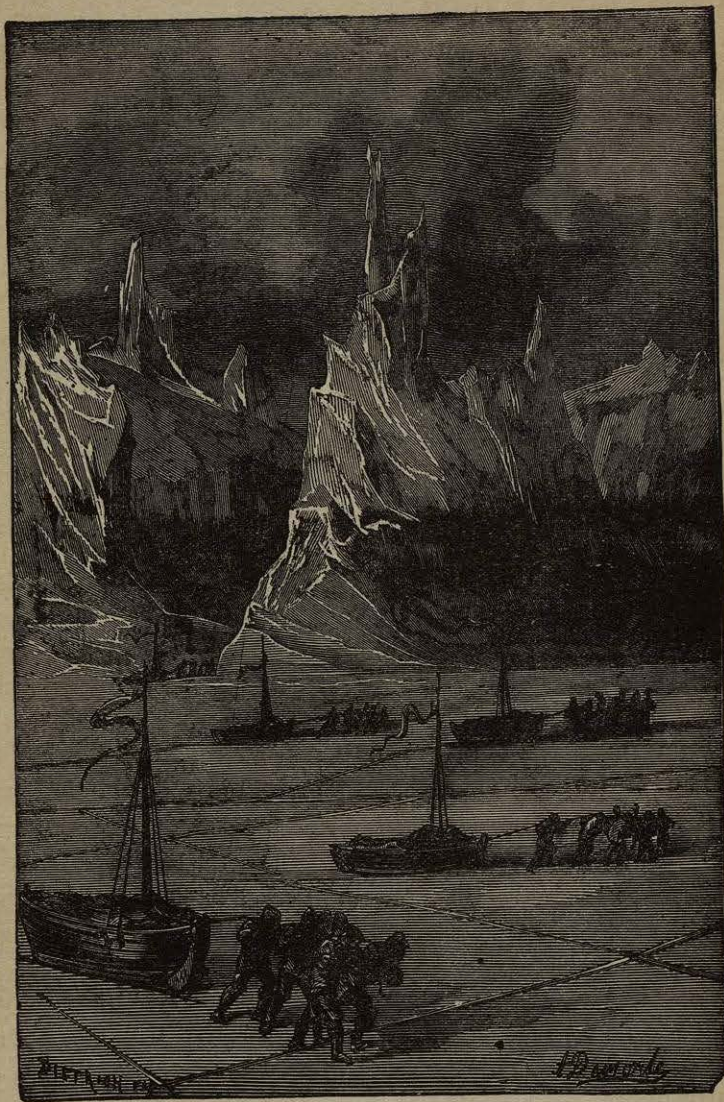
front. Some good coal was found on Discovery Bay. These local trips and Beaumont's Greenland Division of Arctic exploration constituted the *Discovery's* quota; the *Alert's* men took charge of the Western and Northern Divisions. Lieutenant Aldrich, with seven men, explored two hundred and twenty miles to the west side of Grant Land, finding nothing in sight beyond but the wide-expanded sea. On his return, when met by a relief party under Lieutenant May, only one of his men was in a condition to assist in hauling four disabled comrades, while the other two feebly struggled along by the side of the sledge.

It was noticeable that the officers in all these sledge-journeys escaped the scurvy, while nearly all the men were attacked. Captain Nares was severely criticised, on the return of the expedition, for alleged neglect of sanitary precautions, in failing to provide liberal supplies of anti-scorbutic remedies on these trips; but it was learned that the same difference in health between officers and men was manifest on the vessels. Men who had not been detailed for any of these expeditions, but had all along been within reach of hygienic, medical and anti-scorbutic treatment, were also attacked, there being no less than thirty-six cases at one time on the *Alert*. It was therefore probably due to the generally superior physical condition and the greater self-helpfulness of the officers that the disparity was due, and the same phenomenon may be noticed in any epidemic. The better-kept men, intellectually, morally and physically, always show the smallest percentage of deaths.

The great exploring feat of the expedition was performed by Commander Markham's party. Accompanied by Lieutenant Parr, Dr. Moss and Mr. White, one of the engineers, and twenty-eight men, he set out for the north on the 3d of April. The equipment consisted of four eight-men sledges—so called because each was manned by seven men and an officer; two boats for possible navigation in northern waters; four tents, eleven feet long, and about seven feet wide; and between 1700 and 1800 pounds of provisions to each sledge. The sledges were named Marco Polo, Victoria, Bulldog and Alexandra. The costume of the men was composed of a thick woollen, blanket-like material, under a suit of duck to repel external moisture. On their feet, besides thick woollen hose, were worn blanket-wrappers and moccasins; and all



wore spectacles as a protection against snow-blindness. Each slept in a separate bag of the same heavy woollen material as the day-clothing, and the eight, in the compass of the eleven feet of tent, which was of the same warm material. Breakfast



STARTING ON A SLEDGE JOURNEY.

was taken before quitting the bags, and consisted of a pannikin of cocoa, some pemmican and biscuit. After five hours' travel a lunch of biscuit, with four ounces of bacon and a pannikin of hot tea, was taken; and at the close of the day's journey, varying from ten to twelve hours, when the tents

were pitched, and all, except the acting cooks, snugly ensconced in their bags, a supper of pemmican and tea was served. With the pemmican was always mixed a certain proportion of preserved potatoes.

For the first few days fair progress was made, though from the outset the way was rough and difficult, and the temperature rather low for comfort—on the 6th it was  $35^{\circ}$  below zero. On reaching the depot of provisions at Cape Joseph Henry, established before the close of the previous season, the party was rearranged. Fifteen men, with three sledges, and a total weight in provisions and supplies of 6,079 pounds, accompanied Markham and Parr over the high, rough hummocks of the "Sea of Ancient Ice." On the 10th, "Distance made good," says Markham, "one mile; distance marched, seven." "On the 12th it was  $1\frac{1}{2}$  made good to nine travelled; the 17th,  $1\frac{1}{4}$  to nine; and on the 18th, one to ten, and taking ten hours to do it." "Course and distance made good, north, four miles; distance marched, thirteen miles," and similar entries mark the most favorable proportions. But often only a single sledge could be dragged over the hummocks at a time with their combined force, thus requiring five successive trips to cover the same piece of ground; and this was sometimes varied by two additional trips to carry forward a few disabled comrades. On the 19th it was deemed advisable to lighten the burden by leaving one of the boats behind—it was not likely they should need more than one for all the "Open Polar Sea" they would fall in with. This weighed about 800 pounds, but two of the men were prostrated by the scurvy, and had to take its place. "Before quitting the boat, an oar was lashed to its mast, and the mast stepped, yard hoisted, and decorated with some old clothes," to serve as a signal whereby to reach it on their return.

With the hummocks recurring every hundred yards or so, varying only in height, and the intermediate spaces covered with drifted snow-ridges, and the temperature almost constantly below zero, their progress was necessarily slow—very slow, snail-like and tortuous. "The journey," says Nares, "was consequently an incessant battle to overcome ever-recurring obstacles, each hard-worn success stimulating them for the next struggle. A passage-way had always to be cut through the squeezed-up ice with pickaxes, an extra one being carried for the purpose, and an incline picked out of the per-



pendicular side of the high floes, or roadway built up, before the sledges—generally one at a time—could be brought on. Instead of advancing with a steady walk, the usual means of progression, more than half of each day was expended by the whole party facing the sledge and pulling it forward a few feet at a time." On the last day of April they were compelled to halt in the presence of a new enemy, the fog, which endangered their becoming entangled in a labyrinth of hummocks. This weary work was continued through the first third of May, with a constant increase in the number of the sick, when it was decided to leave them behind, while the stronger ones were to make a final push for the highest point attainable. A camp was established for the invalids, provisions and supplies on the 11th, and left in charge of the cooks. On the morning of the 12th, Markham and Parr, with such of the men as were still in a condition to venture forward, set out, encumbered only with a few instruments and the national colors. Markham thus relates the last advance: "We had some very severe walking, through which the labor of dragging a sledge would be interminable, and occasionally almost disappearing through cracks and fissures, until twenty minutes to noon, when a halt was called. The artificial horizon was then set up, and the flags and banners displayed, these fluttering out bravely before a southwest wind, which latter, however, was decidedly cold and unpleasant. At noon we obtained a good altitude, and proclaimed our latitude to be  $83^{\circ} 20' 26''$  north, exactly three hundred and ninety-nine and one-half miles from the North Pole. The leaders, Markham and Parr, though they had reached the highest point ever attained, were no more than half content at the meagre result of so many hardships. But they were destined soon to find that the decision to return was the salvation of the party, as almost all the men were stricken down with scurvy before reaching Depot Point, near Cape Joseph Henry. By forced marches and indomitable energy they succeeded in getting the men to camp on June 7th; and while Markham watched and labored for their comfort, Parr set out for the Alert, thirty miles away. Equipped with only a walking-stick and a couple of light rations, he trudged off alone to hurry up a relief party, stimulated by the consciousness that on his exertions depended the life-chances of those he had left behind. Fortunately he proved equal to the emergency, and in twenty-

four hours reached the ship. Before midnight of the 8th, Captain Nares was on the way to Depot Point at the head of a relieving party. Lieutenant May, Dr. Moss and a seaman, with a light dog-sledge, were sent forward as a lightly equipped advance party, and reached the camp in fifty hours from Parr's departure. Short as had been the interval, one of the sick, George Porter, had died, and was already buried in the snow; but no other life was lost. Of the fifteen men who left Depot Point two months before with Markham and Parr, only three were able to assist in dragging the sledges back; three others struggled along behind, often falling and sometimes fainting; while nine had been utterly prostrated and had to be carried on the sledges in the tedious manner already described. They had reached seventy miles north of Grant Land over the Palæocrystic ice, as Nares called it.

Captain Nares concluded to return to England, where he arrived on the 27th of October, 1876, after an absence of sixteen months, with his ships uninjured and with only the loss of life already mentioned.

Early in the summer of 1878 Lieutenant Schwatka, U. S. A., who had taken an active interest in the subject from boyhood, asked for leave of absence from his place of duty on the plains, came to New York and asked permission to organize a search party, for the purpose of discovering the supposed records of Franklin's last voyage. After listening to his proposition, Judge Daly, of the Geographical Society, gave him all the information in his possession concerning the probable whereabouts of the missing treasures; commending him also to General Sherman, and indorsing his application to be detailed to command the exploring party. The lieutenant also conferred with Messrs. Morrison & Brown, of New York, concerning the use of a whaling vessel for the transportation of the party to the scene of their labors. Their only available ship, the *Eothen*, was at sea, but upon her arrival her owners offered her for the use of the expedition, and she was refitted in the best manner for the comfort of the party.

Prior to his departure Lieutenant Schwatka received instructions for his procedure as follows, from Mr. Morrison: "Upon your arrival at Repulse Bay you will prepare for your inland journey by building your sledges and taking such provisions as are necessary. As soon as sufficient snow is



on the ground you will start from King William's Land and the Gulf of Boothia. Take daily observations, and whenever you discover any error in any of the charts you will correct the same, marking thereon also any new discoveries you may be fortunate enough to make." He was further admonished to carefully preserve all records found, and keep them safely in his own possession or to intrust them to his Esquimau interpreter. Finally, he was advised, even though his expedition proved a failure in its particular end, to make it a geographical success, as his facilities for doing so would be excellent.

The Eothen sailed from New York on the 19th of June, 1878, being accompanied down the bay by several tugs containing the friends and relatives of the explorers. Her officers and crew were as follows: Captain, Thomas F. Barry; Jeremiah Bomepus, chief mate; James Piepper, second mate; James Kearney, boatswain; H. Omenheuser, cooper; Frederick Woern, blacksmith; Charles Budley, carpenter, and ten seamen. The exploring party was composed of five persons: Lieutenant Frederick Schwatka, commander; Colonel W. H. Gilder, a New York correspondent; Joseph Ebierbing, Esquimau guide and interpreter; Henry E. Klietchak, civil engineer, and Frank Mellers, assistant engineer.

After leaving the investigating party at the scene of their adventures, the Eothen cruised about for whales a short time, and finally returned to New London.

Schwatka and his comrades spent the winters of 1878-79 and 1879-80 in investigating King William's Land, the supposed last resting-place of most of Franklin's men. In this work they were greatly assisted by the activity, intelligence and willingness, both of their native interpreter whom they had brought, and also of the Esquimaux of the neighborhood which they were examining. In the summer of 1880 many interesting relics of Franklin and his party were discovered. There were many pieces of wood, iron and other material, which by names marked upon them, or by other signs, were proved to have belonged to one of the two ships. Many articles with private marks were discovered. The general testimony borne by Rae in 1854 received ample confirmation, and many additional proofs of the fate of Franklin and his men were unearthed. Not only was the record of M'Clin-

tock's discovery in 1859 found where he had deposited it, but the camp of Captain Crozier, which had been found and occupied by his whole party, was discovered, with many relics of interest. There were several cooking-stoves with their accompanying copper kettles, besides clothing, blankets, canvas, iron and brass instruments, and an open grave, where was discovered a quantity of blue cloth, part of which was wrapped around a body.

On his return late in the summer of 1880, Schwatka received great homage from the American government for his discoveries, and also from the English nation, for his delicate and humane service to the remains of the lost English subjects.