

CHAPTER II.

THE GRINNELL EXPEDITIONS. — REVIVING ARCTIC EXPLORATION. — PRESIDENT TAYLOR'S MESSAGE TO CONGRESS TRANSMITTING CORRESPONDENCE WITH LADY FRANKLIN. — RESOLUTION AUTHORIZING THE EXPEDITION APPROVED MAY 5, 1850. — MR. GRINNELL'S MEMORIAL SUPPORTED BY CLAY, SEWARD, AND PEARCE, IN THE SENATE. — OFFICERS OF THE FIRST EXPEDITION. — INSTRUCTIONS OF SECRETARY PRESTON TO DeHAVEN, WHO SAILS FROM NEW YORK MAY 22, 1850. — DISPATCHES FROM ST. JOHNS AND THE WHALE-SHIP ISLANDS. — DeHAVEN'S REPORT OF THE GRAVES FOUND AT BEECHEY ISLAND. — HE ARRIVES AT GRIFFITH ISLAND. — DRIFTS NORTHWARD. — GEOGRAPHICAL DISCOVERIES. — EASTWARD INTO BAFFIN'S BAY. — FREED FROM THE ICE JUNE 10, 1851. — AGAIN RELEASED, AUG. 18. — SAILS FROM HOLSTEINBORG, SEPT. 6. — ARRIVES AT NEW YORK, SEPT. 30.

THE records of the State and Navy Departments show that each of these voyages in search of Franklin is to be credited to the special and long-cherished interest of Mr. Henry Grinnell, of New York, who, to the very last, entertained a hope of the safety of the missing navigators. Lady Franklin, in two letters dated April 4 and December 11, 1849, respectively, had addressed President Taylor soliciting the aid of the United States Government in the search. In the first letter she expressed her gratification at the respect and courtesy received on her visit to the United States three years previously, and especially at the interest which she had found to be felt in the enterprise in which Sir John was known to be engaged. Referring also in brief to the British expeditions sent out since the year 1847 in proof that her own Government "had not forgotten the duty to brave men sent on a perilous service," Lady Franklin adverted to the fact that the Admiralty reward of twenty thousand pounds for any efficient assistance had been offered too late for the British whalers, who had then already sailed. She therefore looked "with more hope to the

American whalers, both in the Atlantic and Pacific, as competitors for the prize, being well aware of their strength and bold spirit of enterprise." She added, "I venture to look even beyond these: I am not without hope that you will deem it not unworthy of a great and kindred nation to take up the cause of humanity which I plead, in a *national* spirit, and thus generously make it your own." Cherishing the hope that the Russian Government would send out exploring parties from the Asiatic side of Behring's Strait, she said: "It would be a noble spectacle to the world if three great nations, possessed of the widest empires on the face of the globe, were thus to unite their efforts in the truly Christian work of saving their perishing fellow-men from destruction."

To this letter the Secretary of State, Mr. Clayton, replied for the President, that the appeal was such as would strongly enlist the sympathy of the rulers and the people of all portions of the civilized world.

"To the citizens of the United States, who share so largely in the emotions which agitate the public mind of your own country, the name of Sir John Franklin has been endeared by his heroic virtues and the sufferings and sacrifices which he has encountered for the benefit of mankind. The appeal of his wife and daughter, in their distress, has been borne across the waters, asking the assistance of a kindred people to save the brave men who embarked in his unfortunate expedition; and the people of the United States, who have watched with the deepest interest that hazardous enterprise, will now respond to that appeal by the expression of their united wishes that every proper effort may be made by this Government for the rescue of your husband and his companions.

"To accomplish the objects you have in view, the attention of American navigators, and especially of our whalers, will be immediately invoked. All the information in the possession of this Government, to enable them to aid in discovering the missing ships, relieving their crews, and restoring them to their families, shall be spread far and wide among our people; and all that the Executive Government of the United States, in the exercise of its constitutional powers, can

effect to meet this requisition on American enterprise, skill, and bravery, will be promptly undertaken.

“The hearts of the American people will be deeply touched by your eloquent address to their chief magistrate, and they will join with you in an earnest prayer to Him whose spirit is on the waters, that your husband and his companions may yet be restored to their country and their friends.”

In addition to the reward offered by the Admiralty, Lady Franklin had herself offered the sum of three thousand pounds, or a proportion thereof, according to the services rendered, to such ship or ships as should afford effectual relief to any portion of the expedition. In her second letter of December 11, at which date Sir James Ross had returned without the discovery of even a trace of the expedition, she again appealed to the President for his recommendation of national assistance, with the plea that, “until the shores and seas of the frozen regions had been swept in all directions, or until some memorial should be found to attest their fate, neither England, who sent them out, nor even America, on whose shores they had been launched in a cause which had interested the world for centuries, would deem the question at rest.”

January 22, 1850, President Taylor, in a message to Congress, transmitted the correspondence which has been here named. The President said that he had anxiously sought the means of affording assistance, but was prevented from accomplishing the object in consequence of the want of vessels suitable to encounter the perils of a proper exploration, the lateness of the season, and the want of an appropriation. All he could do was to cause the advertisements of reward promulgated by the British Government, and the best information he could obtain as to the means of finding the lost ships, to be widely circulated among American whalers and seafaring men. The propriety and expediency of an appropriation was submitted to Congress. A board appointed by the Secretary of the Navy had reported to him that no ships were ready for such an expedition or could be equipped in season, and that there seemed to be no constitutional power to authorize an equipment.

The message of the President, referred in the House to the Naval Committee, brought from the chairman of that committee, Hon. F. P. Stanton, a favorable report in the form of a Joint Resolution, by which the President was authorized "to accept and attach to the navy two vessels offered by Henry Grinnell, Esq., to be sent to the Arctic Seas in search of Sir John Franklin and his companions," and to "detail from the navy such commissioned and warrant-officers and seamen as may be necessary for said expedition, and who may be willing to engage in it. The said officers and men shall be furnished with suitable rations for a period not exceeding three years, and shall have the use of such necessary instruments as the departments can provide. The said vessels, officers, and men shall be in all respects under the laws and regulations of the Navy of the United States until their return, when the vessels shall be delivered to Henry Grinnell. Provided that the United States shall not be liable to any claim for compensation in case of the loss, damage, deterioration, use, or risk of the vessels."

The Resolution, reported April 25, was passed by the House on the following day, and by the Senate May 1; it was approved by the President May 5, 1850.

Lady Franklin, on her visit to the United States, had been the guest of Mr. Grinnell, whose interest in Arctic explorations had been first aroused by a letter from her to a citizen of New York, asking whether something could not be done in the United States towards the rescue, and had been increased by frequent letters subsequently received from her.

In the early spring of 1856, assisted by the hearty good-will and personal labors of Lieutenant M. F. Maury, U.S.N., Superintendent of the then "National Observatory," he presented the following memorial to Congress:—

"The interest felt in the fate of the Franklin expedition is not confined to the country under whose flag it sailed. Commerce and science, not less than philanthropic benevolence, are deeply interested in the efforts now making for the discovery of the missing navigators. While so deep and generous a sympathy pervades the civilized world on this

subject, your memorialist feels strongly desirous that some effort be made by his country to signalize its zeal in such a cause. Entertaining a confident belief in the safety of the expedition, and that the gallant men who have so nobly risked their lives in the cause of geographical science may yet be rescued and restored to their country and their families, the earnest desire of your memorialist is to contribute something to so beneficial a result. Moved by these considerations, he has prepared and is now fitting out two vessels of the proper size, and with the needful appointments to proceed with all dispatch to the polar regions.

“He has been permitted to call on the officers of the Navy for volunteers to take charge of this expedition. This call has been answered with a zeal and nobleness of spirit beyond praise, without the promise or hope of reward; Lieutenant DeHaven, assisted by Passed Midshipman Griffin as second in command, has been selected to take command of the expedition.

“It is the opinion of this officer and of others that it is of the first importance that the expedition be placed under naval laws during the term of its service. Your memorialist, therefore, prays for the needful legislation at an early date, in order that time may be afforded for the necessary action consequent upon it.

“Your memorialist has from his own resources provided for the principal expenses of the expedition. It would strengthen his hope of ultimate success, and facilitate greatly the object in view, if the act of Congress should authorize the word to be passed in the navy for volunteers among the men, as well as the officers, limiting to fifteen the number for each vessel. Should the pay and naval rations be deemed insufficient by the crew, your memorialist wishes to give from his own purse such additional sums as may be proper and satisfactory to the volunteers.

“The two vessels now purchased and fitting out are of ninety-one and one hundred and forty-four tons' burden respectively. Every proper means will be taken to insure strength and durability, and power to overcome all obstacles in the way of success. The paramount inducement to this expedition on the part of your memorialist is the

rescue of Sir John Franklin and his companions, but he shall think it due to science to instruct the officers in command to use all diligence and zeal in the exploration of the frozen region to which they are bound.

“There are good grounds for believing this to be a propitious season for such an exploration, and he shall not easily relinquish the hope of his being in some degree instrumental in solving the long-disputed question of the Northwest passage from the Atlantic to the Pacific.

“Hoping that your honorable body will give the subject an early and favorable consideration, your memorialist will ever pray, etc.

(Signed) “HENRY GRINNELL.”

Henry Clay, in presenting the memorial, which secured the passage of this resolution, said of Mr. Grinnell, “I am proud of the manner in which the mercantile classes of our country administer in all great enterprises the wealth which they have acquired in the pursuit of business. Among the most eminent of these merchants stands the gentleman whose petition I present.

“I am very much afraid that the unfortunate person and his companions whose fate Mr. Grinnell and the world are so anxious to learn will be found to be no more. But if the enterprise should fail to discover their existence, or even their fate, the attempt will be gratifying to the whole world; and if nothing whatever is discovered in respect of them, useful discoveries may be made, which will add to the amount of information we possess, and amply repay any expenditure that may be incurred by our granting the prayer of the petitioner.”

To the objections made by Senators King and Foote, that it is inconsistent with the dignity of the Government to mix itself up thus with a private enterprise, and that it would be better for the United States to send out its own expedition, it was replied by Senators Miller and Seward that, owing to the lateness of the season, this was not practicable, and that the vessels would become national vessels for the time in which they would be engaged, naval discipline being asked for by the memorialist as a necessity; further, that all our enterprises are

more or less carried into execution, not by the direct action of the Government, but by lending its aid and countenance to individuals, corporations, states, colleges, or universities.

To the objection raised by Senator Jefferson Davis, that it is improper to appropriate money for the purpose, of the error of which opinion he said he "could only be convinced by its being shown that this Government is not a *corporation formed by the States*, with limited powers and for specific purposes," no reply appears to have been made.

SAILING OF THE FIRST EXPEDITION, MAY 22, 1850.

On the 15th of May, 1850, Secretary Preston gave to Lieutenant DeHaven his instructions. The lieutenant, in expectation of the passage of the resolution by Congress, had been in New York for several weeks, and had been closely occupied in fitting out the two ships offered by Mr. Grinnell. The expedition consisted of the brigantines "Advance," 144 tons, and the "Rescue," of 91 tons burden. It was the opinion of experienced officers that vessels of about these dimensions, drawing not above ten feet of water, would answer as well as larger ships the purpose of a careful search. They were officered as below:—

"Advance."

Lieutenant Edward J. DeHaven, commanding the expedition.

Passed Midshipman William H. Murdaugh, first officer

Midshipman William J. Lovell, second officer.

E. K. Kane, M.D., passed assistant-surgeon.

"Rescue."

Acting Master Samuel P. Griffin, commanding.

Passed Midshipman Robert R. Carter, acting master and first officer.

Boatswain, Henry Brooks, second officer.

Benjamin Vreeland, M.D., assistant-surgeon.*

* OFFICERS' RECORD.—E. J. DeHaven entered the navy as midshipman, Oct. 2, 1829; promoted to be passed midshipman, July 3, 1835; lieutenant, Sept. 8, 1841; retired, Feb. 6, 1861; died, May 1, 1865. Samuel P. Griffin entered the service as midshipman,

Lieut. DeHaven had seen nearly twenty years' naval service, and had passed through something of a like experience with that seemingly now before him when in command of the "Flying Fish," one of the vessels of the United States exploring expedition of 1838, in the Antarctic Ocean, under Lieut. (late Admiral) Wilkes.

In the instructions from the Navy Department for the expedition, Secretary Preston suggested as the outline of its course that the ships, after passing Barrow's Straits, should turn their attention northward to Wellington Channel, and westward to Cape Walker, and should then be governed by circumstances, — sailing either in concert or separately. They were to enter and search every headland, promontory, and conspicuous point for signs or records of the missing party; but on no account was the safety of officers or ships to be hazarded by unnecessary exposure. Should Lieutenant DeHaven find it impossible to reach Barrow's Straits, he was to turn his attention to Jones' and Smith's Sounds; and if these were found to be either closed or impenetrable, and he should fail to secure any trace of the missing expedition, he must return to New York, as the season would probably be then too far advanced for any further attempt to be made. A like provision for avoiding a second winter in the Arctic regions instructed him that, if after entering the strait he should be unable to penetrate sufficiently far into the unexplored regions to gain a position from which operations could be favorably commenced in the season of 1851, he was to endeavor to escape from the ice, and return.

Sept. 9, 1841; promoted to be passed midshipman, Aug. 10, 1847. William Murdaugh entered the service as midshipman, Sept. 9, 1841; promoted to be passed midshipman, Aug. 10, 1847; master, Sept. 14, 1855; lieutenant, Sept. 16, 1855; resigned, April, 1861. William J. Lovell entered the service as midshipman, Nov. 8, 1847; promoted to be passed midshipman, June, 1853; master, Sept. 15, 1855; lieutenant, Sept. 16, 1855; resigned, May 3, 1859. R. R. Carter entered the service as midshipman, March 30, 1842; promoted to be passed midshipman, Aug. 15, 1848; master, Sept. 15, 1855; lieutenant, Sept. 16, 1855; resigned, May, 1861. Dr. E. K. Kane entered the service as assistant-surgeon, July 21, 1843; promoted to be passed assistant-surgeon, Sept. 14, 1848; died in Havana, Feb. 16, 1857. Dr. B. Vreeland entered the service as assistant-surgeon, May 9, 1850; promoted to be passed assistant-surgeon, March 30, 1857; surgeon, April 26, 1861; died, March 26, 1866.

The chief object of the expedition—the search for Sir John Franklin—required that for this he should use all diligence, and make every exertion, offering assistance, and communicating his plans and route to any British parties engaged in a like search whom he might meet.

He was, however, to pay attention to subjects of scientific inquiry, but not to allow such attention to interfere with the main object. In view of the facts elicited by Lieutenant Maury in support of the theory of a Polynia, or “open sea,” beyond the icy barrier, in which investigation Lieutenant DeHaven had shared, his instructions had in view the hope of an entrance into that basin. And should he possibly penetrate beyond the barrier so far as to make it more prudent to go on than to turn back, he was to push forward and put himself in communication with any of the United States forces serving in the waters of the Pacific, or in China. The officers there stationed were instructed to be ready, in such event, to offer to him every facility. Notwithstanding his instructions on these and other points, DeHaven was permitted to depart from them, if on arriving out he should find that by so doing his search would probably be more effectual.

At the Brooklyn navy-yard the expedition received every aid in the way of equipment usually furnished from special naval stores, and in addition Mr. Grinnell provided far more for the object and comforts of the expedition than was asked for by its officers. The vessels themselves Dr. Kane has described as, perhaps, more thoroughly adapted for Arctic service than any previously fitted out. The hull was double, a brig within a brig, an outer oak sheathing of two and a half inches being covered with a second of the same material, strips of heavy sheet-iron extending from bow to beam. The decks were double, and made water-tight by an interlined packing of tarred felt, and the entire interior was ceiled with cork.

“Forward, from keelson to deck, was a mass of solid timber for seven feet from the cutwater; and to prevent the ice from forcing in her sides, an extra set of beams ran athwart her length at intervals of four feet, so arranged as to ship or unship. From the Samson-posts, shores

diverged in every direction, with as many hanging and oblique oaken knees as the space permitted. The rudder could be taken on board and replaced again in four minutes. In all respects, everything about the two vessels bore the marks of intelligent foresight and unsparing expenditure."

Of the nautical equipment, the chronometers were especially approved; several of them having been carefully tested at the Observatory, one under charge of Passed Midshipman Murdaugh varying on the cruise, from May 18, 1850, to October 3, 1851, 10 min. 45 sec. By the aid of Professor Loomis, Kane had collected some instruments for thermal and magnetic registration; his private journal furnishes a meteorological abstract of more than thirty pages for his narrative of the expedition. The two ships left the navy-yard May 22, crowds upon the wharves, and cheers from ferry-boats, steamers, and ships showing the popular sympathy until the Battery was passed. Off Sandy Hook friends on board left for home, Mr. Grinnell and his sons continuing to bear company with the ships in a pilot-boat to a point reached on the 25th, seventy-five miles further east.

The commander said, in his farewell report to the Department, that all were well, and seemingly inspired with the right spirit for the success of the expedition. Officers and crews were volunteers; and it is to their lasting credit that the late Admiral Sherard Osborn, one of the most distinguished of British Arctic navigators, should have been able to say, "I was charmed to hear that before sailing, officers and men had signed a bond not to claim, under any circumstances, the £20,000 reward which the British government had offered. We, I am sorry to say, had acted differently." The "Advance" reached St. Johns, Newfoundland, June 8, and DeHaven reported that the east winds and several gales had occasioned slow progress; he had not unwillingly parted with the "Rescue," whose slower sailing qualities had additionally detained him. The Whale-fish Islands were to be the rendezvous. Arriving at these on the 29th, he reported that on the east coast of Newfoundland many icebergs had been met, in striking against one of which, in lat. 49° 3', the "Advance" had lost a jib-boom. From that date he had a clear sea within one hundred miles of

the islands; the "Rescue," by steering further east, had seen but few icebergs.

From the islands, officers and men once more sent home their letters by the storeship of Commodore Austin's squadron there, out in the search; their next and last were sent from Port Leopold, Beechey Island, August 23, no further opportunity offering until their return to New York, October 4, 1851.

The history of the expedition from the date of August 29 appears in the report of the commander, made on his return, and more in detail in Dr. Kane's narrative of the first United States Grinnell expedition. To Dr. Kane the world is indebted for the graphic history of each expedition, as well as for his brilliant services in both. His singular qualifications for each calling are best referred to in the following brief sketch, drawn chiefly from his biography, written by Dr. William Elder, of Philadelphia.

Born in Philadelphia, February 20, 1820, he early developed a frame fitted for athletic exercises, but showed tendencies to disease which, it will be seen, manifested themselves throughout his whole life to a degree which would have shut out from active duty any one not exercising the iron will exhibited.

Seemingly unappreciative of the value of systematic study until his sixteenth year, he then distinguished himself at the University of Virginia by his pursuit of an elective course in the natural sciences, and, during the short period which his health permitted, aided Professor Rogers in his investigation of the geology of the Blue Mountain range. A long and severe illness caused him to withdraw from the university, but on his recovery he entered on the study of medicine at the University of Pennsylvania, graduating at the head of his class in his twentieth year, with the honor of having his theme, on a special subject in medicine, requested for publication by the Faculty.

Dr. Kane entered the naval service July 21, 1843, and in the same year sailed on board the United States frigate 'Brandywine,' Commodore Parker, as surgeon to the United States embassy to China, under the late Mr. Caleb Cushing. Touching at Rio Janeiro, he had the opportunity of examining the geological character of the eastern

Andes, and on the arrival of the ship at Bombay, of visiting the famous caverned temples of Elephanta, and of crossing the Ghauts at Kandalah, and exploring the cave temples of Karli, passing thence to Ceylon.

He remained in connection with the embassy until the close of its work by the treaty of July, 1844, and then, procuring a substitute, crossed to the Philippines, traversed the island of Luzon from Manilla to the Pacific coast, and descended the volcano of Tael—a feat but once before attempted by a foreigner, and then without success. By this descent he subjected himself to an encounter with the natives, who considered it a profanation.

After three and a half years' private practice as surgeon at Whampoa, on his recovery from the rice fever, he sailed in January, 1845, for Singapore, and thence for Alexandria, visiting some of the wonders of Egypt. He was seized with the plague, on recovering from which he made a restorative foot journey in Greece, and later examined the glaciers of the Alps of Switzerland, to which he afterward had occasion to make frequent references in his ice theories of the Arctic regions.

In May following he was again on board ship, under orders for the coast of Africa, on which voyage—although, when the fever had broken out on board, he had written of his good health—he was stricken down, and sent home invalided by Dr. Dillard, the surgeon of the fleet.

When convalescent, he was an early applicant for duty in Mexico. The war between the United States and that country had witnessed the surrender of the capital. Dr. Kane was selected by President Polk to be the bearer of an oral dispatch to the general-in-chief, which had three times failed in its delivery from the War Department. He was ordered also to make special investigations of facts relating to the field and hospital organizations of the American army for the War Department.

Threading his way through the Mexican country, he received a severe lance wound in an encounter with a party of Mexicans, from the effect of which he lay ill until July following in Philadelphia. In

February, 1849, he was again on naval service on board the storeship "Supply," and returned to Philadelphia from the Mediterranean in September. His next service, the year following, was again on the Mexican coast, on duty for the United States Coast Survey.

His application for duty on the first Grinnell expedition was long unanswered, probably from the record of his past frequent severe illnesses; but, at the moment of entire despondency, he was placed under orders, in the manner which he himself best describes as follows: "On the 12th of May I received one of those courteous little epistles from Washington, which the electric telegraph has made so familiar to naval officers. It detached me from the Coast Survey, and ordered me to proceed forthwith to New York, for duty on the Arctic expedition. Seven and a half days later I had accomplished my overland journey of thirteen hundred miles, and in forty hours more our squadron was beyond the limits of the United States. The Department had calculated my travelling time to a nicety." It was certainly the exhibition of most exceptional characteristics, that one who had the ever-present consciousness of liability to prostration by disease should apply for and enter with such alacrity on duty within the rigors of the Arctic zone. But it was a service congenial to his nature, and in keeping with his varied experiences in other regions. His future records will show with what skill he turned all those experiences to good account, applying the resources gained from the natural sciences, and from explorations in other zones, to the widely different life on which he now entered.

June 17, 1850, when the ships drew near Davis' Straits, they found themselves near Cape Farewell on the east, and Frobisher's Meta Incognita on the American side. The Arctic days began, the thermometer being read at night without a lantern, and the sun setting at ten, to rise again before two. On the 24th the sun did not pass below the horizon. The words night and day began to be meaningless, and the soothing influence of darkness was missed at the bed-hour. But the regular calls for rising and for meals were steadily observed. In common with all others resident or voyaging in the Arctic regions,

officers and crew now found within themselves the power of adaptation to their new circumstances; without this power, light and darkness during the periods of the zone could not be endured.

From the Whale-fish Islands the passage to Lancaster Sound was to be made by one of the three crossings, — the south, the middle, or the northern.

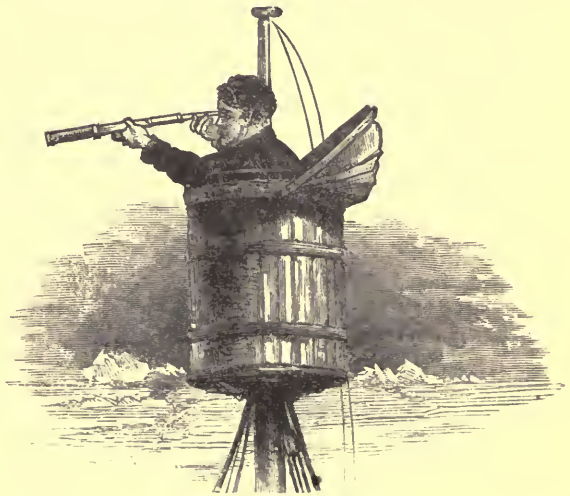
By the first of these, vessels reach the American side south of 68°. It is but the alternative for whalers when failing to cross the North Water. Attempts of the middle passage are rare. In 1819, Parry first crossed it in seven days, but, on repeating the experiment, July, 1824, was forced to turn northward, and did not reach the open water till September. The north passage passes westward from the ice of Melville Bay, through a comparatively open area, known as the North Water, and through this, ships generally reach the highway of Arctic search. This crossing was now the object of the expedition. The bay itself, ice-clogged and full of danger, had been, since its opening in 1819, the scene of the loss of two hundred and ten ships.

The time for reaching the North Water varies, as DeHaven well knew, with the season. Parry's delay was to be contrasted with that of the five days of Sir John Ross in 1829; Austin, now out in the search, was found to have been kept back forty-five days; and it may be mentioned here that eight years afterwards, McClintock, in the "Fox," passed a dreary winter in the pack. "Nothing," he said, "is more uncertain than ice navigation; one can only calculate upon the chances." Avoiding the middle passage, on the 6th of July DeHaven was in lat. 72° 54', beating to windward, between the pack and the land; on the 8th he was boring and sometimes warping — "helplessly fast." After an imprisonment of twenty-one days, during which he had made an average northern progress of about a mile a day, a steady north and northwest breeze began to relax the ice, and on the 10th of August he was crossing Melville Bay. Midday gave them the warm skies of the Mediterranean, and on the 18th the expedition reached its most northern point in Baffin's Bay, latitude 76° 25', the next day entering Lancaster Sound. Crowding all sail for Port Leopold, Beechey Island, they now had the pleasant sight of two of the

relief ships of that year, the "Felix," Sir John Ross, and the "Prince Albert," Captain Forsyth. In concert with these officers, the first traces of the missing ships were now found.

From Port Leopold, DeHaven reported to the Department that he had found little difficulty in forcing his way to that point until he had reached latitude 74°, where the ice had closed, and was continuous along the land, so that northward progress was barred, while a clear and wide opening to the west tempted his course in that direction. After a run of forty miles, however, the ships were wedged, and remained so till July 29, when the ice suddenly opening, and a southeast wind springing up, they forced their way into clear water, and, after another detention in latitude 75°, longitude 60°, pushed on to Cape York, and on the 19th of August were in the North Water. Meeting soon after Captain Penny's ships, he resolved to touch at Port Leopold with them. Here he met with an unexpected discovery.

In his final report he says: "On the 25th of August, 1850, off Cape Riley, the 'Advance' was hove to, and a boat sent ashore to examine a cairn erected in a conspicuous position. It was found to contain a record of H.B.M. ship 'Assistance,' deposited the day before, containing the information that Captain Ommaney, R.N., had discovered traces of an encampment, and other indications of a camping-ground of some civilized or hunting party. Fragments of painted wood and preserved-meat cans were also picked up on the low point of the Cape. Our speculations at once connected them with the object



THE CROW'S NEST.

of our search. Captain Griffin, of the 'Rescue,' had shared in these discoveries."

Of these traces Kane says, that although they were meagre indications, the conclusion they led to was irresistible. Bird-bones and the rib of a seal were found in a centre, around which a party seemed to have sat eating, and with the tins were other relics, such as pieces of a garment, and parts of a boat, apparently collected for kindling wood. These could not have been the work of Eskimos, and Parry, the only European who before this had visited the Cape, had not encamped here. The indications were those of a land party from Franklin's squadron.

DeHaven pressed onward along the eastern shore of Wellington Channel. Passing Beechey Island, and running through a narrow lead, he found the ice above Point Innes fixed and unbroken from shore to shore — generally eight feet thick, the sharp, angular hummocks rounded down by the action of the weather. Further progress to the north was out of the question. Returning to Point Innes for security until a favorable change should take place, he found himself, on the 27th, in company with two English commands — Sir John Ross's and Penny's.

Captain Penny, in company with Dr. Goodsir, brother of an assistant-surgeon on board the missing vessels, here reported that they had found, between Cape Spencer and Port Innes, scraps of newspaper of the date of 1844, with other paper fragments bearing the name of an officer, and other small articles of personal wear. Consulting with Ross and Penny, a joint search was then instituted along shore in all directions. In a short time one of Penny's men reported the discovery of graves, and the commanders, DeHaven, Penny, and Phillips, joined by a party from the "Rescue," after a weary walk, found the three memorials which follow. They were painted headboards, with inscriptions cut by the chisel: —

" Sacred to the memory of
W. BRAINE, R.M.,
H.M.S. EREBUS.
Died, April 3, 1846,
aged 32 years.

* Choose ye this day whom ye will serve.' — Joshua ch. xxiv. 15.

“Sacred to the memory of
JOHN HARTNELL, A.B., of H.M.S.
EREBUS,
aged 23 years.

‘Thus saith the Lord, consider your ways.’ — Haggai ii. 7.

“Sacred to the memory of
JOHN TORRINGTON,
who departed this life, Jan’y 1, A.D. 1846,
on board of
H.M. Ship TERROR,*
aged 29 years.”

These sad memorials, with a series of mounds filled with fragmentary remains (some of them written astronomical and other notes), and especially rows of six hundred preserved-meat cans, proved beyond dispute that the missing ships had made some stay here. The cans had been emptied, and filled with limestone pebbles, probably to serve as ballast on boating expeditions. At Cape Riley and Beechey, another cairn, found in a conspicuous position, was dug round in every direction, and between the hills, which come down towards Beechey Island, the searching parties of the “Rescue,” and Mr. Murdaugh of the “Advance,” found the tracks of a sledge clearly defined, and unmistakable, both as to character and direction, pointing to the eastern shores of Wellington Sound. Additional proofs of Franklin having organized sledge parties were found in the tracks of sledge runners

* In 1858 Lieutenant McClintock placed here a marble tablet, which had been constructed in New York, under the direction of Mr. Grinnell, by request of Lady Franklin, and which Captain Hartstene, U.S.N., in 1855, had been unable to take to this place. A small tablet is also to be found here, sent out by Mr. John Barrow, in memory of Lieutenant Bellot, of France, who went out as volunteer in the English expedition of 1853, and perished in the ice. Lady Franklin’s monument reads :—

“FRANKLIN,
CROZIER, FITZJAMES,
and all their
gallant brother officers, and faithful
companions who have suffered and perished
in the cause of science, and the
service of their country,

THIS TABLET
is erected near the spot where
they passed their first Arctic
winter, and whence they issued
forth to conquer difficulties or
TO DIE.”

still visible in the limestone crust and upon snow-slopes; on which Kane remarks, "It was startling to see the evidences of a travel nearly six years old preserved in intaglio on so perishable a material. The alternations of congelation and thaw give to the Arctic snows at times an ice-like durability, but these traces had been covered by the after-snows of five winters."

These few memorials of the navigators, so long lost to history, were all that told of them. Not a written memorandum could be found,



THE THREE GRAVES.

or a pointing cross, or even the vaguest intimation of the intentions entertained by Franklin when at this point. His route was to be learned only from the explorations to be made at a much later date by McClintock. The world can

never know anything of the written notices which, according to his instructions, Franklin was to deposit at this place.

From the date of these most interesting discoveries DeHaven endeavored to push westward and northward, reaching Barlow's Inlet September 4, and passing through a lead along the south side of Cornwallis Island, where the English searching vessels were descried, fast in the ice. This western lead, however, closing, he was also compelled to make fast, and the ice being exceedingly unfavorable for further progress, and the season far advanced, after consultation with the commander of the "Rescue," he decided that according to his instructions, as they "had not gained a point from which advantageous operations

could be commenced," it was an imperative duty to extricate the ships and return home. September 13, he signalled to the "Rescue" to cast off.

But the return within that season was quickly overruled by forces utterly beyond control. After leaving their English friends, the two ships of Lieutenant DeHaven were caught fast in the new ice in the midst of Wellington Channel, and although the wind for a short season bore from the north and east, the drift began steadily to set northward up the channel. Through the whole of October and November the changing winds drifted them helpless to and fro, but never drove them out of the strait. From December 1, the eastward drift brought them by January 14 into Baffin's Bay. Here the ice around the vessels soon became again cemented and fixed, but the ships kept driving southward along with the whole mass until the close of the first week in June. Cut out as usual with saws, axes, and crowbars, and with the rudders again shipped, they then forced their way into an open, clear sea in latitude $65^{\circ} 30'$; and the "Advance" a second time cast anchor at Disco on the 17th of July: the "Rescue," which had more than once suffered severely, coming in next day.

From Disco the ships touched again at Proven and Upernavik. Alternately closed in, and then with hard labor released, they finally left Holsteinborg for New York September 6, 1851. The commander, referring to the instructions, which enjoined him not to spend, if it could be avoided, more than one winter in the Arctic regions, had of necessity resolved to give up the search, "with sad hearts that our labors had served to throw so little light upon it." His reports and Kane's narrative dilate at large on the traces of Franklin which have been described, and upon their disappointments at two later dates, at each of which the hope of renewed efforts had lingered.

The first of these was at the beginning of the winter of 1850-51, when they found they were not fixed, as they had hoped to be, in a position from which operations could be carried on by travelling parties in the spring: "the ships were fast being set out of the region of search." The remaining disappointment was at the close of August of the second year, when the ships stood again to the northwest in the

Greenland Sea, but the lead before them closing at the distance of a few miles, and the ice appearing as unfavorable as ever, they did not deem it prudent to run the risk of being again beset, and considered that even if successful in crossing the pack, it would be too late to attain a point as far west as had been reached the year previous.

Important geographical discoveries had been secured. Dr. Kane's journal of September 21 and 22, at the date named, reads: "When in latitude 75° north, the sky being clear, and the position of the sun favorable, I saw distinctly, bearing north by west, a series of hilltops (not mountains), apparently of the same configuration with those around us, and separated from Cornwallis Island by a strip of low beach, or by water and land to the north and west; its horizon that of low ground, without bluffs, and terminating abruptly at its northern end. Still further on to the north came a strip without visible land again, with mountain tops distant and 'rising above the clouds.'" To this large mass of land visible between northwest to north-northeast, which DeHaven also distinctly observed, he gave the name of Grinnell Land; to the peak bearing north-northeast, and distant about forty miles, the name of Mount Franklin; and to an inlet discovered by Acting Master Griffin, in a land excursion, the name of Griffin Inlet. In May of the following year these were seen and visited by one of the officers of Captain Penny. On the admiralty charts and those issued by the United States hydrographic office, Penny's Strait and Grinnell Land will be found laid down.

When the American expedition had found itself at Murdaugh Islet, near Cornwallis Island, a wide channel appeared before them, leading to the westward, the frost smoke hanging over which seemed to indicate a large area of open water in that direction, and the signs of animal life were abundant. To the channel appearing to lead into this supposed sea DeHaven gave the name of "Maury," in remembrance of the investigations on the theory of "an open polar sea," to which the instructions of the Secretary had referred him as having shared at the Observatory. The conjectures made by the expedition that Franklin had passed up this channel were afterwards confirmed; his return through it, and southward drift, added nothing in favor of the theory.

It had been an additional disappointment to DeHaven and his officers that, after sight of the westward channel and its indications, he was debarred from pressing forward in the direction in which he believed the greatest chances for success in the search existed, and also from entering within the mysterious basin.

The Secretary of the Navy, in his report of November 29, 1851, said:—

“The expedition under Lieutenant-Commanding DeHaven to the Arctic seas, in search of the British commander, Sir John Franklin, and his companions, returned to the port of New York in October, having discovered only supposed traces of the objects of which it was in quest, and leaving in entire uncertainty their actual fate. The vessels of the expedition proceeded in the direction where, in the opinion of the best-informed officers, the missing navigators are to be sought, and on which the traces in question were found. Though failing in the main object of their search, Lieutenant DeHaven and his officers verified by their explorations many facts before unknown to science, but indicated in the course of investigations carried on at the Naval Observatory, concerning the winds and currents, and to which reference was made in instructions for the expedition.

“In this expedition the officers and men were all volunteers; in its prosecution they encountered the greatest dangers and hardships. To mention a single example: their vessel was caught by the ice and frozen up in the open sea, in which perilous situation they were confined for nine months, and drifted to and fro in the ice for more than a thousand miles. By the skill of the officers, and the mercy of a superintending Providence, they were released from their imprisonment, and restored to their country and friends, not a man having been lost in the expedition. They have received no other pay than would have been due on a cruise to Naples or the Levant, and I would respectfully suggest that they be allowed the same pay and emoluments that were granted to those in like positions in the last expedition to the South seas.

“Mr. Henry Grinnell, the owner of the vessels employed by Lieutenant DeHaven, has generously offered them for another cruise in

search of Sir John Franklin, should Congress think proper to order a second expedition."

No condensation can be justly made of the graphic notices journalized by Kane of the natural features of the Arctic zone, its icebergs, hummocks, and floes, and especially its glaciers; of the beautiful displays of refraction and the auroras; or of the fauna and flora examined. The forms of the glacier and berg, in their fantastic varieties and swift transformations and disappearance, frequently brought to his mind memories of the objects visited with such pleasure in the Old World. This will appear by a single extract:—

"July 5, 11 P.M. A strip of horizon, commencing about 8° to the east of the sun, and between it and the land, resembled an extended plain, covered with the *débris* of ruined cities. No effort of imagination was necessary for me to travel from the true watery horizon to the false one of refraction above it, and there to see huge structures lining an aerial ocean margin. Some of rusty, Egyptian, rubbish-clogged propyla, and hypoethral courts; some tapering and columnar, like Palmyra, Baalbec; some with architrave and portico, like Telmessus or Athens, or else vague and grotto-like, such as dreamy memories recalled of Ellora and Carli.

"I can hardly realize it as I write; but it was no trick of fancy. The things were there half an hour ago. I saw them, capricious, versatile, full of forms, but bright and definite as the phases of sober life. And as my eyes ran round upon the marvellous and varying scene, every one of these well-remembered cities rose before me, built up by some suggestive feature of the ice.

"An iceberg is one of God's own buildings, preaching its lessons of humility to the miniature structures of man. Its material, one colossal Pentelicus; its mass the representative of power in repose; its distribution simulating every architectural type. It makes one smile at those classical remnants which our own period reproduces in its Madeleines, Walhallas, and Girard Colleges, like university poems in the dead languages. Still, we can compare them with the iceberg; for the same standard measures both, as it does Chimborazo and the hill of Howth. But this thing of refraction is supernatural through-

out. The wildest frolic of an opium-eater's revery is nothing to the phantasmagoria of the sky to-night. Karnaks of ice, turned upside down, were resting upon the rainbow-colored pedestals; great needles, obelisks of pure whiteness, shot up above their false horizons, and, after an hour-glass-like contraction at their point of union with their duplicated images, lost themselves in the blue of the upper sky.

"While I was looking—the sextant useless in my hands, for I could not think of angles—a blurred and wavy change came over the fantastic picture. Prismatic tintings, too vague to admit of dioptric analysis, began to margin my architectural marbles, and the scene faded like one of Fresnel's dissolving views. Suddenly, by a flash, they reappeared in full beauty; and, just as I was beginning to note in my memorandum-book the changes which this brief interval had produced, they went out entirely, and left a nearly clear horizon."

The display of such weird and ever-changing scenery in the arch above him, happily for the time being, takes from the Arctic explorer all sense of even the extreme peril in which he is placed. A noted instance of this will be found in the experience of the officers of the "Jeannette," as cited in Chapter X. of this volume. In the case especially of Lieut. Chipp, it is some little consolation to remember, that during so many hours of the fearful imprisonment of the ship, his official duty lay in observations of phenomena attractive and elevating, and of high value in scientific inquiry.

No occupation, however, in which Dr. Kane engaged was permitted to interfere with his services as medical officer to the expedition, and these were called into most active requisition during the winter of 1851, when the dreaded scurvy assailed every officer and many of the crews. His commander reported that every case was kept under control by the unwearied attention and skilful treatment of the medical officers, and that it was in a great measure owing to the advice and the expedients recommended by the senior officer that the expedition was able to return without the loss of a man. Kane himself was down with the disease, and his old wound became discolored and painful; but out on the floes his energies were excited and his blood

warmed, and he tramped away freely. The powers of endurance and of restoration from repeated attacks of disease enabling him thus to save others, and to prepare himself for a renewed exploration, were those not ordinarily possessed or shown to the world. They were kept alive, doubtless, by the iron will-power within, and by the variety of pursuits of his every-day life, — the observations, during all hours, of the wonders of nature; the pursuit of game, whenever opportunity offered, and the familiarizing himself with the movements of the ships, and the duties of their navigation pertaining to the executive and the watch officer. By this last experience he fitted himself to command in person the second expedition, in which he was soon to awaken an interest in the United States.





**E. K. KANE, M.D., SURGEON OF THE FIRST GRINNELL EXPEDITION;
COMMANDER OF THE SECOND.**

Author of "The U. S. Grinnell Expedition under DeHaven," 1850-52; of "Arctic Explorations," 1853-55. Assistant Surgeon in the Naval service, July 21, 1843; promoted to be Passed Assistant Surgeon, Sept. 14, 1848; Medallist of the Royal Geographical Society of London and of the Société de Géographie of Paris. Died at Havana, Feb. 15, 1857.