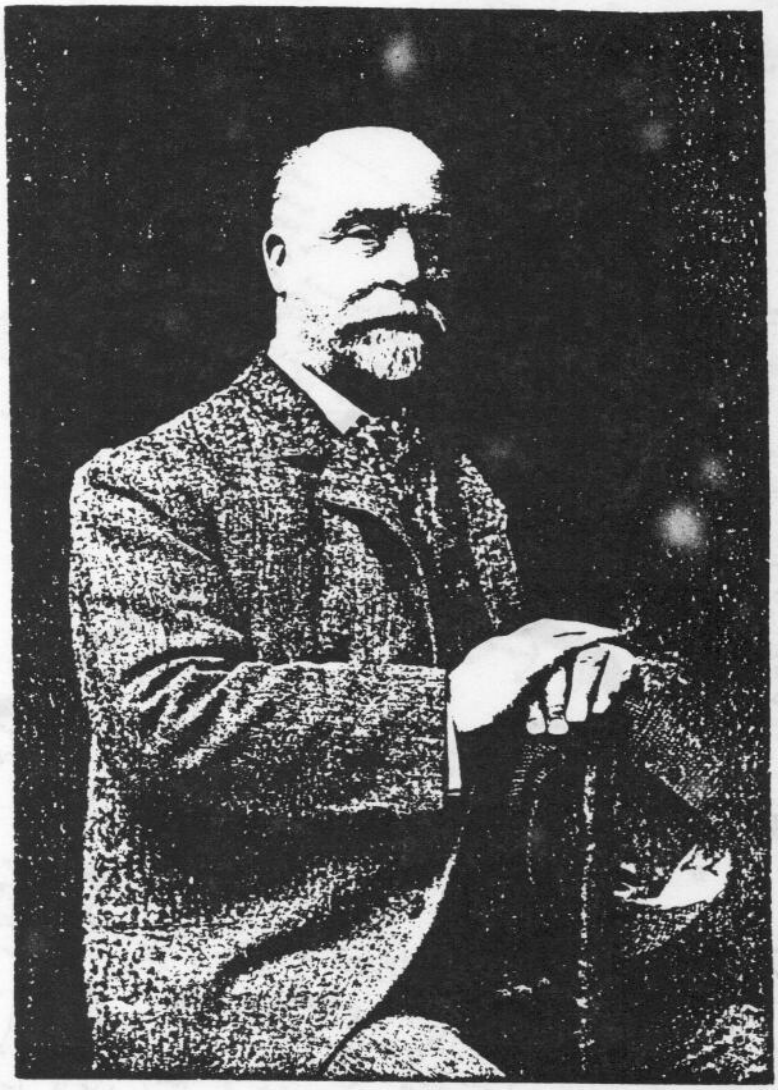
GASPÉ OF YESTERDAY

EXPEDITION TO HUDSON BAY AND CUMBERLAND GULF IN THE STEAMSHIP "DIANA" UNDER THE COMMAND OF WILLIAM WAKEHAM IN 1897.

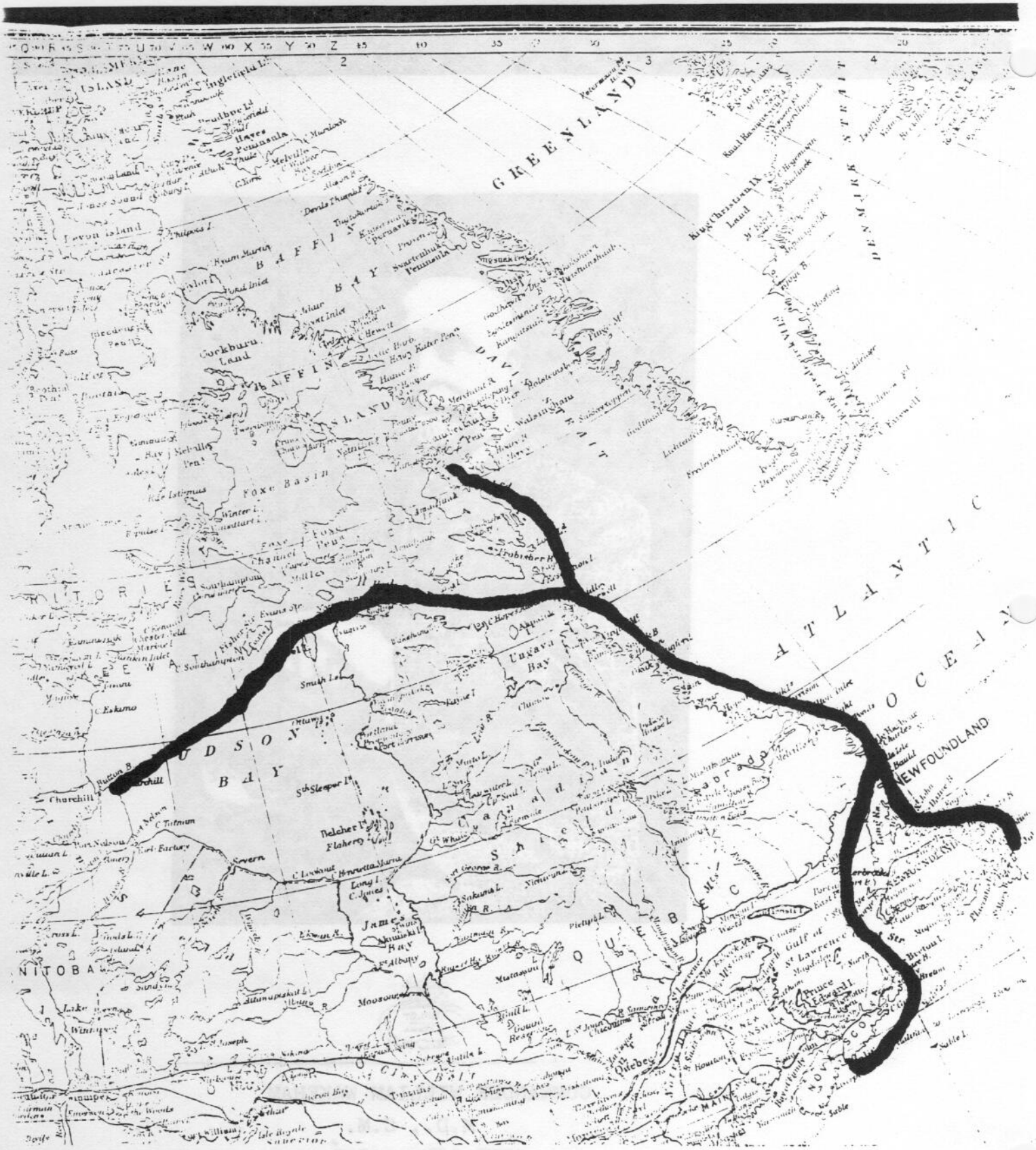
****

KEN ANNETT



COMMANDER WILLIAM WAKEHAM
M.D., C.M.
"ONE ASH", GASPÉ

IN COMMAND OF THE "DIANA"
EXPEDITION OF 1897 WHICH
LAID CANADA'S CLAIM TO
THE ARCTIC ISLANDS.



SCHEMA OF ROUTE OF THE "DIANA" EXPEDITION UNDER THE COMMAND OF DR.WAKEHAM TO HUDSON BAY AND CUMBERLAND STRAIT IN 1897.

THE "DIANA" EXPEDITION

A previous article of the GASPE OF YESTERDAY series, published by SPEC on May 13, 1981, recalled some aspects of the life and career of William Wakeham, M.D.,C.M., whose Gaspé Basin home, "ONE ASH" still stands as a reminder of one of Gaspé's most illustrious residents. If any justification was needed in recalling his outstanding career it might be found in the neglect of the index to the recent HISTOIRE DE LA GASPESIE, launched with much éclat in 1981, to provide even a reference to his name. Yet, over a long and distinguished period, William Wakeham was one of Gaspé's most widely known and respected citizens and his accomplishments were of local, regional and national importance.

This account proposes to concentrate on the expedition under the command of William Wakeham in 1897 to Hudson Bay and Cumberland Gulf in the S.S. "DIANA". Not only was this expedition of great national significance in establishing Canada's formal claim to the Arctic Islands but it expanded knowledge of navigation in the icy waters of the North and gathered invaluable scientific data for a vast region that is now of increasing national interest, economically and strategically.

THE SCOPE OF THE WAKEHAM REPORT

The official Report of the expedition by Commander Wakeham, illustrated by a remarkable series of photographs, was submitted to the Minister of Marine and Fisheries of Canada in 1897, Sir Louis Davies, K.C.M.G., and was published in the Sessional Papers of the Parliament of Canada the following year. It was considered of such importance that it was also published separately in both English and French. Prefaced by an informative, covering letter to the Minister, in which Commander Wakeham dealt with the choice of the S.S."DIANA" as expedition vessel and gave details of her crew, the Report proper consisted of the four, following parts:

PART I. The Daily JOURNAL of the Expedition.
PART II. Account of the more Important Events of the Voyage.
PART III. Early Voyages to Hudson Bay.
PART IV. Fishing Capabilities of the Region.

Appended to the Report were Meteorological Observations and an

S.S."DIANA"

The choice of a vessel for this expedition to the dangerous, ice-bound waters of Hudson Strait and Cumberland Gulf was a serious one and was made by Commander Wakeham both from his long, personal experience in the Fishery Patrol in the Gulf of St. Lawrence and Labrador and with the advise of distinguished Arctic navigators such as Admiral Markham. An initial offer of the S.S."STANLEY", a vessel built for winter service in Northumberland Strait, was rejected after careful study and the decision taken to employ the S.S."DIANA". Built in Dundee, Scotland, in 1870, as a steam whaler for service in northern waters requiring ice navigation, the "DIANA" had been rebuilt in 1892 in the Dundee shipyard from which she had been launched originally. She had the reputation of being one of the handiest and fastest of the fine Dundee ships. Of 275 net tons and 473 gross tons, "DIANA" was powered by a motor of seventy horsepower. Her reinforced wooden hull was considered to be superior to the steel vessels, then in service, for ice navigation.

OUTFITTING FOR SEA

"DIANA" was handed over to the command of William Wakeham at Halifax, N.S. on May 16,1897 and immediate steps were taken to assemble her crew and to provision her for a crew of fifty for a voyage of seventeen months. The officers and men of the "DIANA" were selected with special care and due regard to the nature of the expedition. Captain Whitley, the navigating officer, was selected as one of the best known and most successful ice captains of Newfoundland. Captain James Joy, another Newfoundlander, joined as first officer from a background of solid experience in northern voyages. Nearly all the petty officers and men had been engaged previously on whalers, Arctic relief vessels or on former expeditions to Hudson Bay and Strait. At sailing time the "DIANA" crew included:

1 the officer in command
2 mates
12 able seamen
5 oilers and stokers
1 surgeon
1 sailing master
3 boatswain, carpenter, coxswa
2 engineers
1 secretary and photographer
1 chief steward

3 members of the Geological Survey of Canada.

6 men in the employ of the Geological Survey.

1 representative for Manitoba and the North-West Territories.

It is probable that some of the mariners of Gaspé were included in Commander Wakeham's crew on the "DIANA". Should any reader have information on this it will be hoped that they will make it known through SPEC.

ACCOUNT OF THE VOYAGE

While it is beyond the scope of this account to include the fascinating, but lengthy, DAILY JOURNAL OF THE EXPEDITION, the following, ACCOUNT OF THE MORE IMPORTANT EVENTS OF THE VOYAGE, as given by Commander Wakeham in his official Report is presented here by GASPE OF YESTERDAY. It is hoped that in reading his account the reader will catch the indomitable spirit of this great Gaspesian whose remains rest in St.Paul's Anglican Cemetery, overlooking the lovely Basin and hills of Gaspé.

/4

Hudson Bay Expedition, 1897.

PART II.

DETAILED ACCOUNT OF THE MORE IMPORTANT EVENTS OF THE VOYAGE, WITH OBSERVATIONS ON THE ICE MET WITH.

Leaving Halifax on the 3rd of June we proceeded directly to sea. The ship was extremely deep in the water, as besides our 400 tons of coal, stores, and supplies for practically one year and a half, steam launch and spare boats, we had on deck two large decked yachts of 35 feet over all, together with their iron ballast and boats, they were fitted internally with cabins, bunks, etc., for an extended cruise. These craft were taken north for the use of the parties sent out by the Geological Survey, the intention being to use one on the southern coast of the strait, and the other on the north for the purpose of surveying the shores. However, in spite of our deeply loaded condition, the ship made good weather and proceeded around Scatari and up along the western shore of Newfoundland. We entered the Straits of Belle Isle on the afternoon of Sunday, the 6th of June, standing on down we met our first ice off Forteau Light; the ice increased as we stood to the eastward, and shortly before midnight as it was getting heavier and closer, and the ship was taking some heavy knocks, we stopped the engines to wait for daylight. We were then in sight of Belle Isle, and it at once became a question whether we should force the ship on to the eastward and thus get through the pack which we knew to be outside of us, or stand up along the Labrador coast inside of the ice. Before leaving Halifax I had been furnished with a statement of the ice conditions, and a report showing the position of the ice from January to shortly before the time of sailing, together with a synopsis of the reports of the masters of such of the north Atlantic steamers as had met the ice on their western voyages. This had been prepared and kindly forwarded by Mr. James Elliot, of Montreal. It showed, as I myself knew, having followed the reports carefully all winter and spring, that besides being packed on the eastern shore of Newfoundland, the ice extended much further to the south and eastward than usual. The quantity of ice coming down from Davis Straits had been abnormal, it had been coming down steadily since December, 1896. The sealing steamers had found unusual difficulty in working through the ice in March and April. Many of them in fact only got clear in May. They had with one or two exceptions missed the seals, as these had passed far to the south of the usual sealing grounds. The wind we had been having since leaving Halifax had been from the north-east; it was my opinion, and that of my officers, that our best course lay in working out between Belle Isle and the Labrador shore in a north-easterly direction, in the hope of finding a lead, which would take us to the open water on the outside of the ice. We were under way again at 2.30 next morning, and soon got out of the ice into comparatively open water off Battle Harbour. It was then blowing a fresh north-east breeze, was very cold, and the ice extended eastward as far as we could see from the lookout with no appearance of water sky beyond, the ice was setting rapidly up the straits to the westward.

On our return to Halifax in November, we found that from the day of our passage up to the end of June, the Straits of Belle Isle had been more or less full of ice, this came in from the Atlantic and extended as far west as Meccatina, greatly interfering with the cod fishery.

The report of the lightkeeper at Belle Isle for June, 1897, states "that this month commenced with fresh and strong gales from east to north-east. On the 7th the ice commenced to come into the straits, and remained scattered until the 29th. The weather had been cold, foggy and wet. The first steamer passed through inwards on the 29th. Schooners bound north have been greatly delayed by the ice." Cape Bauld and Cape Norman made practically the same report as Belle Isle.

When off Battle Harbour a boat was seen coming out to us; we stopped the ship and the occupants came on board. They told us that the "Diana" was the first vessel

they had seen. They further said that we would not meet much ice, as westerly winds had prevailed in the spring, and they had had more open water than usual.

We continued at once in a north-easterly direction, heading the ship towards the most open water. It was blowing fresh from the north-east; we worked through more or less open ice all day and from the fact that there was no swell we judged that there must be a heavy body of ice outside; towards night the weather came down thick, and as the ice was coming together we were forced to stop the ship. We were at it again early in the morning as soon as it was clear; inside of us the ice seemed solid to the shore. Some of us now had our first experience of what it meant to drive a ship full speed at heavy ice, and certainly no vessel not constructed specially for the purpose could ever have stood the blows the "Diana" gave and took. Most of the ice we were in was floating 6 and 8 feet out of water, and much of it was on a level with or even above our rail; scattered through this were many growlers and a few bergs. The ice was not in large pans, but heavy lumps, and though we were often jammed fast in it there was no nipping and the ship lay easy.

From the 8th to the 19th of June we were either fast in the ice or working through it in an off shore direction. At times it would go abroad enough to let us make fair speed, at other times it would close tight about the ship, and progress in any direction was impossible. During the morning of the 19th we began to feel a heavy swell setting in from the eastward, and the ice at once began to go abroad; at 2.45 a.m. we put the ship about head to the sea, and going ahead full speed by 7 a.m. we got out of the ice into the open water of the Atlantic. We had a very rough and critical time getting out of the ice, there was a heavy sea on and the ice was rolling and boiling in all directions; in spite of the wonderful handiness of the ship and the skill of the officer in the top we got some very severe glancing blows. Any one at all conversant with ice navigation will know what it means to steam out of or into an ice pack in a heavy seaway. We had, however, to accept the risk as we had been so long fast in this ice that we dare not miss the first chance of getting out.

As soon as we were well clear of the ice we stood away along the edge of the field under both steam and canvas; during the forenoon our course was a north-easterly one but towards evening the edge of the pack falling away in the direction of the land, which though high was not visible, we were able to head to the north. On Sunday the 20th, we stood in to try and make the land at Cape Mugford, hoping to get into the Moravian Mission at Okkak and pick up an interpreter, but we found a solid pack of ice against the land which it was quite out of the question to think of entering. We kept away along the margin of the ice to the north-east, with fine clear weather; by Monday the 21st we were in the latitude of Nachvak, and about 85 miles off shore, with the ice solid inside of us. We sounded at noon 120 fathoms, no bottom, showing that we were outside the bank described by Captain Gordon in his report for 1886, when he had to steam 70 miles off shore to get 100 fathoms. We were now nearing the 61st parallel, at which line I had determined to haul square in for the mouth of Hudson Bay. The morning of Monday the 22nd of June, Jubilee day, broke fine and clear: at 5 a.m. being then, as I believed, on the 61st parallel, I decided to take the first fair looking lead and head in. We did so and found the ice in larger pans, but much lighter and more worn than that we had been so long delayed in further south. As the day advanced, the ice ran abroad more and with only a few interruptions, when we had to slow down to swing round a pan, or back off and ram at an opposing barrier, which it would have given us more delay to have worked around. We were able to hold our course all day, with very little deviation, as the lanes of open water were running east and west (true). At 5 p.m., as we were momentarily hoping to make the land, we emerged into a lake of open water, showing no ice ahead; at 6 p.m. we made the Buttons under a bank of fog which lifted as we neared the islands. While away to the north we could, from the crow's nest, make out the top of Resolution Island; being sure of our position, we shaped a course up the centre of the strait, keeping along the southern edge of a heavy field of ice which extended in a north-westerly direction from Resolution Island along the shore of Baffin's Land.

The ice we had passed through was much of it new, of only one season's growth, being about five feet in thickness; scattered through it were a few large bergs, a good

many growlers, and a considerable quantity of thick old floe ice. It was very much gone abroad, as can be judged from the fact that we had, between 5 a.m., when we first headed into it, and 6 p.m., when we made the Buttons, steamed some 80 miles in a straight line; our actual course amounted to a great deal more, though as the lanes of open water were generally parallel to our course, we never had to deviate very far from it. Needless to say we were greatly rejoiced at our good fortune in entering the strait under such favourable conditions, and pointed the ship up the comparatively open water of the strait in the hope of making an early and rapid passage into the bay. So open did we find the water that at 8 p.m. we set the patent log; we were then standing along the southern edge of a field of heavy ice which extended westward from Resolution Island along the Baffin shore; though we were compelled to take our log in again at 10.30 p.m., yet we met with no serious obstruction until next day, the 23rd of June, at 3.15 p.m., when we came up with a solid barrier of ice which extended as far as we could see right across the strait at right angles to our course.

There was a very general feeling of disappointment as we knew at once that the chances were that the whole strait was blocked as far as beyond the Narrows above Big Island. We came up to this barrier just beyond Saddle Back Island so that we had since 6 p.m. the evening before, steamed about 120 miles into the strait, we had driven the ship through some heavy belts of ice, and had given and taken blows that could not have been risked with an ordinary iron steamer. Yet since first heading in we had met no ice that would have entirely stopped such a vessel as was described by Captain Gordon as most suitable for the route, though even such a vessel could not have made as direct a course as we had done. When we stopped the ship abreast of this ice wall we were about 18 miles off the north shore land; the top of the Grinnell Glacier had been visible all day. After scanning the ice carefully from the crow's nest and finding no sign of open water in or beyond the pack, we at once decided to steam along the border of the ice to the southward with the hope of finding a lead; by 6 p.m. we judged ourselves to be about forty-five miles away from the north shore, and as the evening was hazy and a heavy bank of fog was hanging not far off to the south-east, we tied up to the edge of the pack for the night. We were under way again early next morning and continued standing to the south until we made out the south shore land in the direction of Hope's Advance. We found the ice trending away in an easterly direction (true), and seeing no sign of open water between us and the Labrador land, at 9 a.m. we put about and ran back to the north shore, intending to hang on to the edge of the ice until it ran abroad, or offered some chance of a lead through. All the authorities had advised the north side of the strait as offering the best and earliest chance of open water, as the set of the current along the north shore is steadily to the westward. At 3 p.m. next morning the weather being fine and clear, we thought we noticed a disposition to slack in the ice right ahead of us, and in one or two places a little open water began to show among the pans. We were very much in doubt whether it was wise to force the ship into the pack; my own feeling, as is shown by my log at the time, was that we could gain nothing by forcing into such a jam, but that our wisest plan would be to cruise off the edge of it, and wait until the ice went abroad; at the same time we were all anxious to go on, and if at all possible be in the bay for Dominion Day. Our orders were "to press through the strait." We had been led to expect that the ice we would encounter as we went west, though "heavier" than that passed at the eastern entrance, would be "composed of small pieces" packed loosely, appearing as if the floes had been broken up, and then drifted together; that these "innumerable small pieces" would in a great measure deprive the pack of the force necessary for the "serious injury of any vessel beset in it." When there is a nip the small pieces, being composed of "soft brashy ice" would act as a "cushion" between the ship and the larger floes, thus protecting her from "violent pressure," &c., &c. So we decided to press in, and at 3.45 a.m. on the 25th of June the "Diana" entered the pack which was slowly setting to the westward. We worked steadily ahead until 7.35 a.m. when the ice packed together solidly and we could neither go ahead or astern, and just here let me say that the first intimation we usually had that the ice was running together was an inability to go astern, the ice would close in quickly behind the ship and prevent us from using the screw astern, thus preventing us from backing off to ram ahead; invariably when this happened we were

set solid at once. We were set fast until the evening; about dinner time the ice slacked off enough to let us surge the ship ahead and astern and get some way on her, when at 6.30 p.m. we went ahead and made fair progress until 10.45 p.m. when we were jammed up solid again; as we got to the west we found the pans getting larger and heavier. When forced to stop the ship, we invariably tried to do so in what our first officer, who was an old and experienced ice master, called a soft spot, that is in small ice, or in a bay or cove in a larger pan with projecting points ahead and astern, which would shelter or protect the ship from direct pressure. Our experience, however, during all the time we were in the ice in the strait was that whenever shoving began, the heavier pans sailed through or over all this small ice, so that it was little or no protection to us. The shoving always began with the flood tide, it occurred sometimes during slack water, due to the action of the wind on the heavily rafted pans, and it would come with a rush during a squall; it was at its worst when the wind and tide co-operated. From the evening of the 26th until the afternoon of the 29th of June, we were set fast, and driving slowly up the strait in the direction of Big Island. At times the nipping was severe, and we were forced to resort to powder and dynamite to relieve the strain on the rudder and the after part of the ship. The blasts were set off on the ends of poles, which were placed under the ice at the points of greatest pressure. The pans which surrounded us were many of them fully a mile in circumference, and where holes were made to get the blasts under the ice we found the thickness to be from ten to fifteen feet. During the afternoon of Tuesday the 29th we began to feel considerable swell in the ice; we immediately went ahead but did not get far, as shortly before 6 p.m. the ice came together quickly, and we were hard and fast again. On Wednesday the 30th of June, during the afternoon, the ice slacked away, and we at once went ahead and made considerable progress for about five hours, when again the ice came together quickly and we were jammed fast. We were by this time well up with the eastern end of Big Island, and about 15 miles off shore; the ice about us we found, from actual measurement, to be from five to nineteen feet in thickness. The ship was very severely nipped this evening. The ice was rafting and forming in pressure ridges all about us; for the first time things looked serious. We got our provisions on deck, and had them divided into convenient packages; the boats were swung out, and got ready for lowering quickly; all hands were told off to their different boats; the ship strained and groaned, as we all stood helplessly by. However, as we were momentarily expecting the ice to go through her, she was suddenly lifted out of the water. the ice passed anunder her, she ceased to be waterborne, and for the time the danger was over. The wind was now blowing half a gale from the south-east, and the whole pack was driving up against the shore of Big Island. In this condition we passed Dominion Day and the following night. About 10 next morning—2nd July—a large and heavy pan, which we had noticed some little distance astern of us, came on suddenly with the wind and tide, and, driving all the lighter ice anunder or to one side, brought up against our stern, driving the ship bow on into the ice ahead of her, and, the moment she brought up, forcing the rudder to one side and carrying away the stock (a piece of 14-inch oak) just about the water-line. . The ship was straining greatly, and for a time we felt sure that the rudder-post and screw would go with the rudder; but again she lifted, and the pressure was at once relieved. Our officers and crew, men who had been accustomed to ice all their lives, were astonished at the weight and thickness of the ice about us, and at the manner in which it was surging and swirling about. It is needless to say that no ship, unless specially constructed for the purpose, could have withstood for an instant the pressure to which the "Diana" had been subjected during these days; and even the "Diana" could not have survived had she not allowed the ice to pass anunder her. Between the 1st and the 4th of July the ice continued shoving, and pressure ridges were formed in various directions about the ship. With the falling tide the pressure was always relieved, and we worked the ship in an off shore direction whenever the ice was slack enough; but it never ran abroad sufficiently to permit of our going far. The most we could gain at any time never being more than a few hundred yards; our main object in moving at all was simply to keep the ship from driving any nearer the land, and to work her into a softer berth and away from the heavier pans which kept forcing towards the shore through the lighter ice. All this time the wind was blowing steadily from the east, with fog and rain at intervals.

We had our most severe nip of all on the evening of the 4th of July; the squeeze came heaviest abaft the fore chains, where the ice piled up on the port side level with the rail; the main and 'tween deck beams were hove up, they were regularly bowed up in the centre, the oilcloth on the cabin floor was gathered up in ridges, the deck fastenings were started, the seams and butts opened, and as it was raining at the time the water poured down into the cabins below, the fore rigging hung limp from the mast head like garlands from a May pole, and things generally looked blue; those who were below came tumbling on deck one over the other, prepared to take to the ice at once. However, just as we were expecting to see the ship's sides come together, she took a list to starboard; owing to the pressure of the ice having risen on the port side, in doing this she presented her starboard side at an angle to the ice on that side of her, and at once slid upon it, the ice passing anunder her, she ceased to be water borne and the danger was over, this could not have happened with a deeply laden or even a wall sided ship. This was the last nip we had, after this date the wind moderated, and began to blow from the north shore of the strait slacking the ice away from the shore of Big Island. The ice came up from anunder the ship and though it came together again with the rising tide yet there was no more rafting and shoving. On the 6th of July we got under way and began to work ahead through the ice, the ship made no water and it surprised some of us who had not had any previous experience of the work, to see how she came to herself again—after a few rams she seemed to open out, the deck seams and butts closed, the rigging began to be set up of its own accord, and generally she began to feel more solid under us than she did when we first moved her. On the morning of the 8th of July we got our first glimpse of open water to the south of us, just a few streaks where the pans had opened out a little, we at once began to work for it; at first the ice was very heavy and firm, and we had great difficulty in getting way enough on the ship to give her any chance, but as we got further off shore and the ice was softer and more open, her speed increased, she made better way and we drove her hard at it. On the 9th we had thick fog all day, the ice did not go abroad to any extent, and we made but little headway. On the 10th there was a great change, and we made a good day's work, getting by night into some comparatively open water. By the 11th we were close over to the Labrador shore and found the ice gone well abroad; by midnight we had passed Charles Island; all this time the heavy solid pack was close on our starboard hand, extending away to the Baffin's shore, and we were steaming along its southern shore in fairly open water. We had Cape Digges at the western end of the strait abeam at 2 p.m. on Monday, the 12th of July, with no ice in the direction of Hudson Bay to stop us, but were obliged to stop the ship owing to the fog. This however cleared up after a couple of hours when we at once went ahead again and stood across in the direction of Mansfield Island. We met no ice that would stop any ship, and on the evening of the 13th put about and steamed back with the intention of going out of the strait again. We had, however, on our way back, to land the two geological parties that we had on board, and as Dr. Bell, who was detailed for the survey of the north shore of the strait, wished to be landed at or near King's Cape at the south-eastern entrance to Fox Channel, we set our course on the morning of the 14th from Cape Digges to pass to the eastward of Salisbury Island and thence over to King's Cape. We had considerable fog during the day, which necessitated frequent stoppages, so that it was late in the evening before we made out the eastern end of Salisbury Island. We found our further progress barred by a stream of heavy ice which was pouring out of Fox Channel, filling the entire strait between Baffin's Land and Salisbury Island, and also the narrow pass between the latter island and Nottingham Island. This ice was setting to the eastward at the rate of five knots. There being a good deal of fog we could not fully make out the conditions, so we laid by for the night, holding the ship a short distance from the edge of the pack. The weather cleared up early on the morning of the 15th and we steamed along the margin of the ice close up to the end of Salisbury Island. The ice we had to the north of us, and into which it would have been folly to have put the ship, was heavier than anything we had yet seen in the strait. The pans were large and greatly discoloured, much of it was floating five and six feet out of the water, showing that it was of considerable depth. I informed Dr. Bell that it was impossible to attempt to get to King's Cape to land him, and that I would try and do so

further to the eastward. We at once put about intending to stand to the eastward and look out for an opening by which we could get over to the north shore, or failing this, land the other party which was conducted by Mr. Low at the first available point on the Labrador or south coast ; we put about at 7.30 a.m. and had not gone more than a mile from our turning point before we were suddenly surrounded on all sides by heavy pans of ice ; we had been careful not to get into the stream which was passing to the north of us; all night we had noticed the remarkable way in which this ice was surging and jostling in all directions, the tide or current fairly boiling among the pans. Pans of many acres in extent were moving at the rate of five knots, some east others west, while the heavier and more extensive ones were moving with irresistible force through or even across the track of the lighter ones, the whole in the most amazing confusion. We were steaming along at fully eight knots, looking with wonder at this astonishing turmoil and exhibition of confused power when there suddenly shot out from the field ahead of us a wing of ice of many miles in extent, a similar wing came up from the ice astern and before we could extricate the ship we were beset closely in the whirling, grinding mass. The conditions were extremely serious and we used every exertion to extricate the ship ; the open water was only a short distance to the south of us, but in spite of all we could do during some three hours, we did not make more than 100 yards, and finally our screw jammed fast so that we could neither move it ahead or astern. At 11 a.m. there was a sudden increase in the shoving and rafting, and one particularly heavy pan forcing down through the ice about us, took the ship fairly on the port side ; she was suddenly lifted some three or four feet out of the water, and was carried spinning about on the pan which had passed anunder her, but relieved from all pressure. This rather astonishing condition of things lasted for a couple of hours, when at about 1 p.m. just as quickly as it had come together, the ice went abroad again, the grinding ceased, the pans separated, the ice began coming up with a loud noise from under the ship, she became waterborne, and in half an hour we were steaming on our course at full speed in fairly open water. This fortunately was the last occasion on which we got fast; though we were in ice several times again during the next two weeks, it was always loose and gone abroad, and we had no difficulty in holding our course through it. We trimmed along the edge of the ice until next morning, the 16th, without finding any lead which would allow us to make the north shore. I had now to think about getting Mr. Low afloat. We had been unable to land him anywhere to the west of Charles Island because of a belt of ice along shore through which he could not have penetrated in his yacht. At 4 a.m. on the 16th we found ourselves broad off the entrance to King George's Sound with no ice to prevent our entering. I at once decided that this was the best chance to put Mr. Low afloat on his own account, as he was very anxious to be off. The ship was therefore headed in for the sound. We went in slowly, as the place was unsurveyed, and took the precaution of sending a boat about half a mile ahead with a hand lead. As we got close in and were making for what appeared to be a pass between two islands we were met by four Esquimaux in kyacks. They made the most frantic cries and gestures with the object of explaining to us that the pass was bad and that we should find an anchorage in another direction, which we did. We had at this time no regular interpreter on board, as we had not been able to call anywhere on the Labrador to secure one, and though several of our men had previously been among the Esquimaux with Peary or on whaling vessels and knew a little of the language, yet none of them were expert enough to keep up any conversation. We anchored on the western side of the sound at 8 a.m., and at once prepared to hoist out Mr. Low's yacht. We had her afloat by 4 p.m. We had to shift our anchorage several times owing to the ice which was coming out of the inner bays, and as it would not have been safe to remain where we were during the night I had sent the second officer with a boat to look for a safer anchorage further in behind the islands. He returned during the afternoon and reported finding a safe and commodious harbour with nowhere less than seven fathoms in the entrance. We at once went in and anchored in it. We found it to be roomy, free from rocks or shoals, and sheltered from all winds. This place I called Douglas Harbour. We were glad on many occasions throughout the rest of the season, and more particularly during the stormy weather in September and October, to run into it for shelter. We were engaged during Saturday,

the 17th of July, ballasting, rigging and putting the stores in the yacht. On Sunday morning, the 18th, we parted company with Mr. Low, who stood up the sound, while we left to land Dr. Bell on the north side of the strait.

We had now to face back to Big Island, having decided to put Dr. Bell afloat at Ashe Inlet. To do this we had to cross the strait pretty much over the track that we had taken when working out of the ice in which we had been fast from the 1st to the 9th of the month. We found a great change in the conditions. The ice had become greatly worn and thinned. It had gone abroad, and presented no serious obstacle to our passage. We made the beacon near Ashe Inlet at 7 p.m., but owing to fog along the land we had to lay off for the night. Early next morning, the 19th, we were off the mouth to the inlet, but found it full of ice, so much so that we could not get in. The ice in the inlet was undoubtedly that which had formed there during the winter, and which had just broken up. The shore ice was still fast to the rocks all round.

We backed off a few miles and held on, expecting that the ice would be carried out with the falling tide. At 9 a.m. we went in again and found that it was pretty well gone, so that we steamed up to the anchorage and let go our anchor off the observing station erected by Captain Gordon in 1884. We had Dr. Bell's yacht afloat and ballasted by 6 p.m., the wind had freshened to half a gale by 7.30 p.m., and as the ice was coming back into the inlet, which was quite open to the south south-east, we had to cast the yacht off and let her run further in, where she would be in shelter. We held the ship at her anchorage, but had to keep her under steam during part of the night so as to steer her clear of the ice. The wind went down during the night, and with the turn of the tide the ice went out. Early next morning the yacht got back alongside, and Dr. Bell's stores being on board by noon we parted company, the Dr. intending to cruise to the west along shore, while we left for the Button Islands.

Once clear of the inlet, the breeze being fair, we set our sails, got the patent log out, and for the rest of that day the "Diana" made her ten knots by the log; the only ice in sight being one or two small bergs. We had a fine run down to the Buttons, which we made about nine the next morning. We saw ice in Ungava Bay, and a light stream of it was coming out by the Buttons, and wheeling down along the outer Labrador shore. We had the islands abeam, about ten miles to the south, and seeing no ice outside of us to seaward, we put the ship about and started back to Hudson Bay at 11 a.m. on the 21st of July. We got back to Cape Digges at midnight on the 23rd, steaming the whole length of the strait in sixty-one hours, including a stoppage of four hours on the night of the 22nd, when it was too obscure to see our way through a heavy belt of ice which barred our passage off the Maiden's Paps; we had also a strong breeze against us. Our intention in making this direct run was to see how long it would take us to make the passage of the strait. In doing this we drove the ship as directly through everything as we could, and though we met no ice through which a strong iron ship could not have worked her way, yet she could not have risked driving through some of it as we did, and a less handy ship than the "Diana" would have had delay in working round or among the larger pans. On the 24th we steamed back from Port Laperrière to the eastern end of Salisbury Island, to have another look at the entrance to Fox Channel. Between Digges and Salisbury we found no ice in crossing, but between Salisbury Island and Baffin's Land the channel was filled with heavy old ice, which was passing in a stream to the eastward. We kept away along the southern edge of this, and were gradually headed away to the south, off the eastern end of Charles Island. We found the ice extending right in to the south shore, where we had passed along in open water on our way west only three days before. The ice was open and much worn, being water soaked and soft. We had been headed away from our proposed mid-channel course by this ice, so that we were now close up with the Labrador land. When nearly up with Wegg's Island, we changed our course and headed the ship across the strait in the direction of Emma Island; as we got near the north shore and found the ice more open, we kept the ship away for Big Island. At 5 p.m. on Monday, 26th July, we were quite clear of the ice, which was extending in a much scattered condition away in the direction of Hope's Advance. We at once set the log and shaped a course for the Buttons. By 8 a.m. next morning we had made 125 miles, and as we had a few days to spare before meeting our coal supply ship at Nachvak, I

decided to go and look for Green Island. The existence of this island in the mouth of the Ungava Bay had been constantly disputed; some asserting that it really existed, others having positively denied its existence. Captain Gordon had failed to find it, and had advised its removal from the chart. We hauled the ship up for the supposed position of the island, and at 11 a.m. on the 27th we made out high land where the island was placed on the chart. We were, however, prevented by the ice which filled Ungava Bay from getting near the land we saw, and the mirage was so great that we could form no estimate of the size of the island. At 1.30 p.m. we kept away along the edge of the ice in the direction of Port Burwell which we made that same evening; we could not, however, get in, as a belt of ice about ten or twelve miles wide separated us from the land. We held on for the night to a pan which was drifting in the direction of the Buttons, and at 2 a.m. on the 28th we cast off and steamed round the Buttons and out to sea. We passed through considerable much-worn and open ice, extending in long strings at right angles to our course, with lanes of open water between. We got outside of all this by 9.45 a.m., and saw no sign of any field ice beyond. A few bergs were scattered here and there, and there was a slight swell from the eastward; any vessel could have safely steamed through all the field ice we met this morning. Having satisfied ourselves that there was no more ice to the eastward, we put about and ran back through the ice to Sir Terence O'Brien Harbour, inside of Cape Chudleigh, and anchored. Leaving this harbour on the morning of the 30th, we steamed down along the Labrador to Nachvak. We did not get into the Bay of Nachvak until Sunday morning, the 1st of August, having been delayed by fog. We saw no field ice on our way down, and very few bergs. When we reached the anchorage of the Hudson's Bay post, we were at once boarded by Mr. Ford, the agent in charge. We had expected to meet the Hudson's Bay Company's ship "Eric" here, but found that she had left for Churchill a week before. She must have passed in along the north shore of the strait while we were looking for Green Island. We remained at Nachvak until the 13th of August, overhauling our engine and boiler, shipping a new rudder which we had on board, taking in 300 tons of coal, and cleaning up generally. We found from Mr. Ford that the ice had only gone out of Nachvak Bay in the beginning of July; so that we could not possibly have got in on the 21st of June when we had passed on our way north.

On leaving Nachvak we proceeded directly to Cape Mercy, at the easternmost point of the entrance to Cumberland Sound. Our course took us right across the mouth of Hudson Strait, about 45 miles outside the Buttons; we saw a few bergs, but no field ice whatever. We made Cape Mercy early on the morning of Sunday the 15th of August, and steamed along the north-east shore of Cumberland Sound up to the whaling station at Kekerton. We were here informed by Mr. Milne, the officer in charge, that the season was a remarkably open one; that it was quite unusual to find the sound free from field ice as it now was; that in 1896 it had been full of ice all season, and that we could hardly have got up to Kekerton. On the 18th of August we crossed the sound to the only other sedentary whaling station now in operation on Baffin's Land—at Black Lead. Here we met Mr. Sheridan, the agent in charge, and the Rev. Mr. Sampson, an English missionary to the Esquimaux. We left Cumberland Sound for Churchill, on the western shore of Hudson Bay, on the evening of the 19th of August. We only made Resolution Island on the morning of the 21st, having been delayed by fog; passed into the strait to the westward of the Buttons, and round to Port Burwell, where we anchored at 2.30 p.m. We saw no ice on our passage from Cumberland Sound. At Port Burwell we found the SS. "Nimrod," belonging to Messrs. Job Brothers of St. John's, Nfld.; cod had just struck, and her crew were doing well. We left again the same evening for the west; had a stormy passage up the strait to abreast of Big Island; were off the eastern end of Salisbury Island at 9 a.m. on the 24th of August, and found the channel across to King's Cape still blocked with ice. We made no attempt to enter the pack, but kept away for Churchill, passing south of Nottingham, and down between Coates' Island and Mansfield. We had strong winds and dirty weather crossing the bay, and only got into Churchill Harbour on the evening of Sunday the 29th of August. We saw no ice after leaving Salisbury Island.

We left Churchill on the 2nd September, and spent a couple of days trying for fish in the bay. I intended devoting a week to this work, but the weather was so rough

that we could do nothing in the way of fishing, and as we were due at Ashe Inlet on the morning of the 10th of September to meet Dr. Bell, I had on Monday the 6th of September to give up my fishing and get under way for the strait. We might have held on a day or two longer, but there was always the chance, against which we had to provide, that the Fox Channel ice might with the strong north-easters which we had been having, wheel down against the Labrador shore and to some extent block our passage out. We rounded the long shoal off the south end of Mansfield on the evening of the 6th of September, steamed round Digges in a snowstorm. At 2 a.m. on the morning of the 7th were off Cape Wolstenholme in open water, saw no ice, but there was a distinct ice glint to the north-east. We found this morning the land of Labrador everywhere covered with new snow, we had snow at intervals all day on the 7th, and during the next night we were forced to lay the ship to off the eastern end of Charles Island for eight hours during a heavy snow storm. We steamed in and made the land as soon as it was light, and anchored in Douglas Harbour during the afternoon. Here we found everything having a wintry look, the ground was covered with snow, in some places drifted to a considerable depth.

We went out of the harbour on the evening of the 9th and steamed across the strait for Ashe Inlet off which we were at 5 a.m. on the 10th. It was then blowing a gale from the south-east with a heavy sea. We dare not venture in to anchor as the sea was running right in, and there was no shelter there for us. We held the ship off the mouth of the inlet for some time hoping that Dr. Bell or his men would make her out and know that all was well, and that we were on hand to pick them up. We then stood off shore and laid the ship to, to wait for fairer weather; at 10 a.m. the gale was increasing, and as it was snowing heavily, we decided that it would be more comfortable in harbour, so we kept the ship away and ran back for Douglas Harbour, we were lucky enough to pick up the islands outside and got to our anchorage at 4 p.m. The weather cleared up during the afternoon of the 11th and we left at once to return to Big Island, making the inlet at daylight next day; there was no ice whatever in the strait between Douglas Harbour and Big Island. We got Dr. Bell and his party with their stores and specimens on board, and as Dr. Bell wished to have his yacht taken to Fort Chimo we took her in tow and left about noon on the 12th for Ungava, where we were due to pick up Mr. Low and his party on the 15th. It was my intention on this passage to settle the question of the existence of Green Island, therefore on leaving Ashe Inlet we shaped our course for the spot where we had sighted land on the 27th of July. We had a fine clear night crossing and made out the land we were in search of at 2 a.m., we laid by for daylight and at 6.30 a.m. steamed in for the north-east point of the island, which we found to be very much larger than Green Island, as it was laid down, could possibly be. At 10 a.m. while steaming along the south-east shore of the island, looking for a landing place we sighted several natives in kyacks in under the land, on standing towards them and hailing, two of them came off to the ship, they told us that the island was Akpatok, and that there was no such place as Green Island. Akpatok Island is therefore wrongly placed on the chart, being shown some 25 miles too far south in Ungava Bay. The natives directed us to the best anchorage, and as soon as we were anchored I sent a boat on shore with Dr. Bell who was anxious to examine the rocks. Akpatok Island is of great extent being some 60 miles in length; it lies almost north and south (true) and is remarkable on account of its precipitous limestone walls.

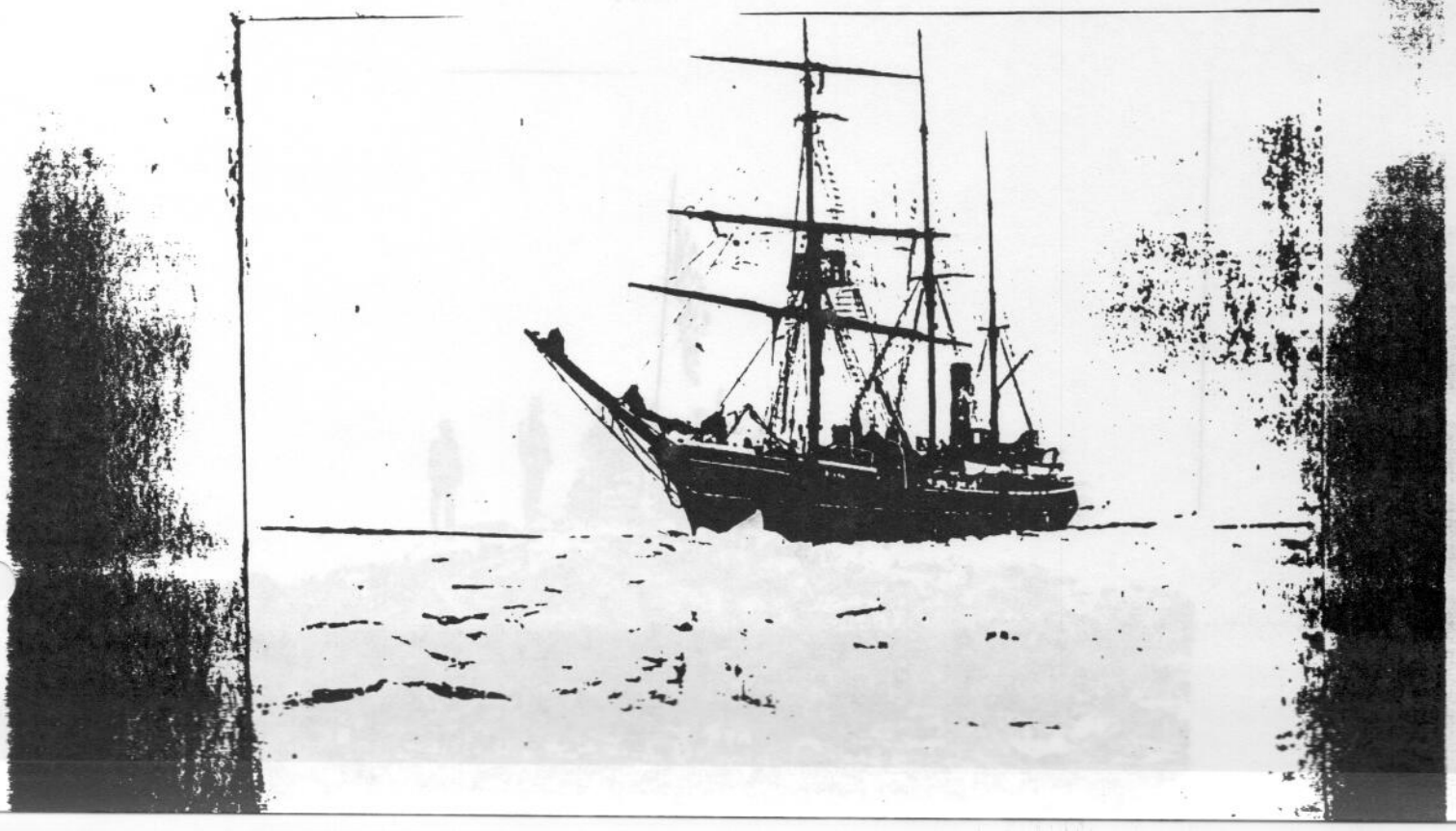
The natives we found here had been the first to visit the island for a long period of years, they had made an extraordinary bear hunt, and reported walrus to be plenty also. They had been fitted out by the Hudson's Bay agent at Fort Chimo, and were honest enough to refuse to sell us their skins, as they said they belonged to the Hudson's Bay Company; on our telling them that we knew the agent, Mr. Mathewson, and would make it all right with him, they then offered to give us their skins, but with the proviso that we should take them to Mr. Mathewson and arrange with him for payment, so that he might credit them with their value; as we knew that the Hudson's Bay Company would not sell us any fur, this arrangement would not have suited us, so that we did not get the skins. These were Pagan Esquimaux and I merely mention this fact to show how strict were their ideas of honesty compared with the practices of the white christians living to the south of them.

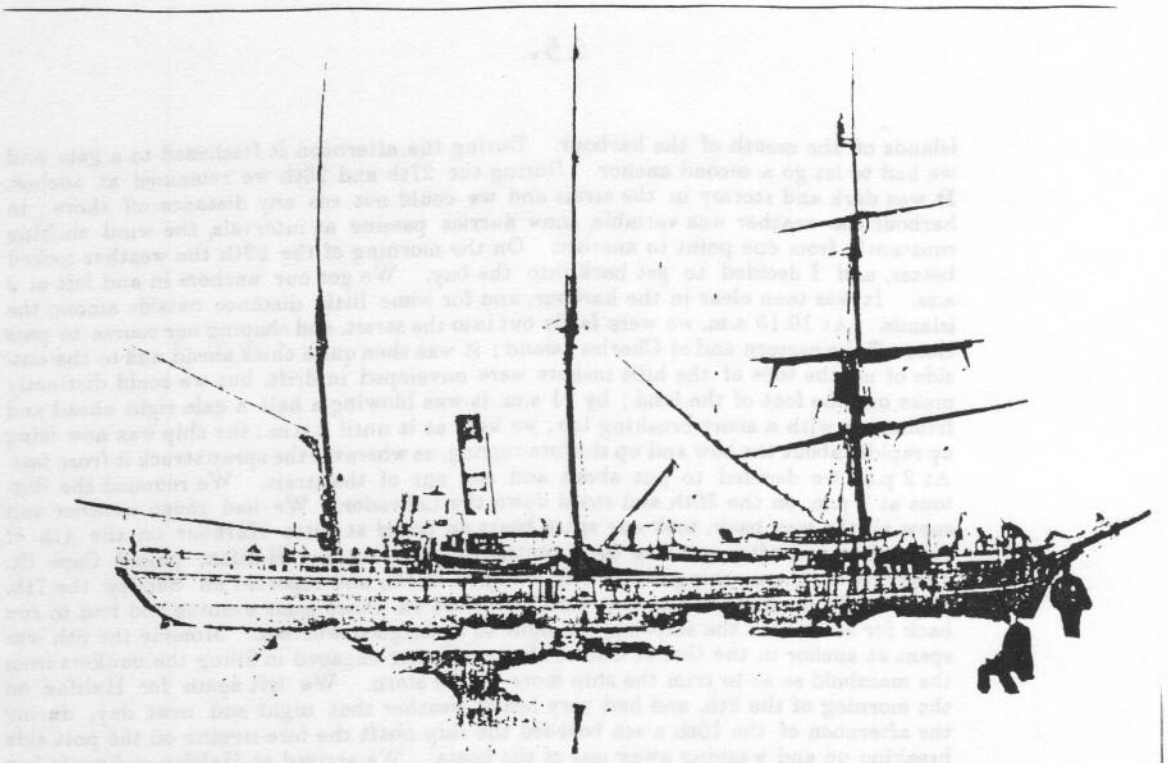
In January, 1860, Akpatok was the scene of a terrible crime. The barque "Kitty" had left London on the 21st of June, 1859, for Hudson Bay, she was nipped and crushed in the ice on the 5th of September off the Middle Savages, the crew left the ship in two boats and made the land on Saddle Back Island, both these boats attempted to cross the strait, and work their way down the Labrador; sixty-one days after one of them reached the northernmost of the Moravian Mission stations. The other boat with the captain and ten men landed on Akpatok Island, they were at first hospitably received by the Esquimaux, but as food grew scarce, and the natives began to realize their helpless condition, they were all murdered one night while sleeping in their tents. It is said that the Esquimaux who perpetrated this outrage all died on the islands shortly afterwards; be that as it may, the island was soon after deserted, it was supposed to be haunted and until this present season the natives could never be persuaded to go near it. We left Akpatok at noon on the 14th intending to pass the night under Saiglorsoak Island, and next morning steam over to the mouth of the Koksoak River and meet the pilot that Mr. Low had promised to have out for us. Saiglorsoak Island, however. was not where we should have found it, and we only got to the mouth of the Koksoak on the morning of the 16th. We met our native pilot and steamed up the river in a thick snowstorm, anchoring off Fort Chimo at noon on the 17th. Here we found Mr. Low and his party in good health, and were very kindly received by Mr. Mathewson, the agent in charge. It was winter here, there being several feet of snow on the hill sides in the rear of the post. We left Fort Chimo at noon on the 19th going down the river in charge of our Esquimaux pilot, again in a snowstorm. We had snow at intervals all that night and next day. I had intended calling at O'Brien Harbour to shift coal, and take in a few tons of rocks for ballast before continuing to St. John's, Nfld., where I had to land the geological parties and re-coal, but on nearing Cape Chudleigh Islands, which form the seaward shelter of O'Brien Harbour, I decided that as we had a rising glass and the beginning of a fresh westerly breeze, it would be better to keep right on, shift my coals at sea, and dispense with the extra ballast, this we did. We rounded Cape Chudleigh on the evening of the 20th; made a fine run down to St. John's where we anchored at 2.30 on the morning of the 25th. The "Diana" had averaged nearly nine knots on the run back, we saw no field ice and very few bergs.

At St. John's we were treated with great kindness by His Excellency the Governor Sir Herbert Murray, Mr. Job the owner of the "Diana" and all others. We remained there making a general overhaul and taking in a further supply of coal until the morning of the 6th of October when, as soon as it was clear, we left to return to Hudson Bay. We had fine weather up to Belle Isle, but beyond that almost constant gales and snow; we ran into Pitt's Harbour on the 8th to land our steam launch and extra gig; were detained there until the morning of the 10th. We had barely got round Cape Charles when we met a heavy north-west gale and snowstorm; we hauled in under the land at Cape Bluff and got in to Snug Harbour for the night; the gale and snow continued until the 12th when as soon as it moderated and cleared we continued north. We made the Buttons at noon on Friday the 15th and shaped our course to pass south of the islands up through Grey's Straits, but just as we were passing Cape Chudleigh it came on to snow heavily; it had been snowing at intervals all day. The weather looked squally and bad and we decided to run into O'Brien Harbour and anchor for the night. Everything had a wintry look ashore and a good deal of snow fell during the night. The weather cleared shortly after breakfast next morning, the 16th, and we went out for the second time, we had gone out at 7 a.m. but finding it dark and snowing heavily outside in the strait we had returned to our anchorage. We passed the Western Buttons shortly after noon, and shaped a mid-channel course up the strait, had snow at intervals during the afternoon and night; there was some swell on, as the wind was pretty well ahead and the ship iced up considerably about the bows and fore-rigging, nevertheless we made fairly good way and by 5 p.m. on the 17th we had the high land of Big Island abeam, we slowed down during the night as we intended calling at Douglas Harbour to shift coal and take in fresh water. During our former passages through the strait in the summer we never had any difficulty in getting a supply of water, as it was only necessary to make fast to an ice pan and put the end of the suction hose over into one of the pools of fresh water which accumulate on the surface of the ice and

pump away, there being no field ice about in October we had to seek our fresh water on shore. I snowed steadily during the early morning of the 18th and we had some difficulty in finding our harbour, owing to its being almost impossible to distinguish the islands from the mainland, when both are alike covered with snow, the former do not show in relief against the high land behind. We anchored in Douglas Harbour at 3 p.m., the same Esquimaux that we had met with here in July were now camped in a cove in the outer bay for the seal and walrus hunt; during our visit here in September they had been away inland for the deer hunt, they were greatly rejoiced to see us back. On the 19th they moved over to Douglas Harbour, men, women and children, intending to come on board, but by the time they reached the beach near the ship it was blowing a gale from the north-east with drifting snow and as we could not attempt to land a boat on the rocky beach to bring them off, owing to the heavy surf, they at once set to work and in half an hour had built an igloo or snow hut in which they passed the succeeding night in warmth and comfort, though they had no fire. The gale of the 19th prevented us from sending boats after water, but next day the 20th the wind having moderated and veered to the north-west they were despatched up the north-west arm where we had found several good streams of water in the summer, but late in the evening when we were getting anxious about them they returned without any water, as they had found all the streams frozen solid to the bottom. On the 21st we got our water tanks filled from a lake half a mile inland, the water had to be carried by hand to the boats on the beach; it froze in the buckets, about the boats and on the men. On the 22nd the morning was fine and we left at 7 a.m. for Hudson Bay. It was just light by 8 a.m. At 9.30 a.m. or as soon as we had got fairly out into the strait it began snowing again. We had had more or less snow every day since passing Cape Chudleigh on the 15th. During the afternoon of the 22nd the weather came bright and clear overhead, and we passed about ten miles to the north of Charles Island, shaping our course for the eastern end of Salisbury Island hoping to get a final look into the mouth of Fox Channel in the morning. We steamed slowly back and forth on our course during the night which was very dark. At 7.45 a.m. on the 23rd we supposed ourselves to be close up to the island and knew by the tide rips and the strong current that we were about the neighbourhood where we had heretofore found ice. At 9 a.m. it began to snow heavily, we held on for a while hoping that it was only a squall and would clear up, but by 10 a.m. it had settled into a heavy snowstorm and, as the currents were so strong and uncertain, we gave up attempting to make the island and steamed away to Cape Digges; during the afternoon we got close up against the land of Cape Wolstenholme. We made this land several hours before we should have, and too far to the eastward, showing that we had been swept to the south-east during the night. We followed close along the land which is bold to, until dark. About 4.30 p.m. we headed the ship off shore and kept her under easy steam, head to the wind for the night, it was blowing fresh and snowing. We made Cape Wolstenholme next morning, the 24th, at 8.30 a.m. and followed closely along the land, round Cape Digges, hoping to get into Port Laperrière and hold on there for clearer weather, but it was snowing too heavily to risk making the harbour. The shore was everywhere covered with snow and one point looked so exactly like another that we could not make out the entrance. We could only see a few feet above the water line on the beach, the hills were obscured in the drift so that we could distinguish nothing. It was freezing hard, and wherever the spray fell it froze. At 10 a.m. being then in Hudson Bay, off the south-western point of Digges Island, we put the ship off shore, head to the wind; it was blowing a strong breeze from the north-east with considerable sea. By 2 p.m. there was an unusually heavy sea running, and to get about at all on the slippery decks we had to stretch life lines to hang on by. It was snowing heavily all the time and showed no sign of clearing up. We then decided to steam back to the eastward, while we could get a good departure. During the early morning of the 25th the wind hauled to the north-west, and it cleared up a little; we got a glimpse of the high land of Cape Moses Oates and soon after made the Labrador shore which we followed along, anchoring in Douglas Harbour shortly after noon. It had been snowing all morning, but when we got under the shelter of the land we ran into clear weather. On the 26th the wind was back to the south-east, and it was snowing again so thickly that we could not see the

islands off the mouth of the harbour. During the afternoon it freshened to a gale and we had to let go a second anchor. During the 27th and 28th we remained at anchor. It was dark and stormy in the strait and we could not see any distance off shore ; in harbour the weather was variable, snow flurries passing at intervals, the wind shifting constantly from one point to another. On the morning of the 29th the weather looked better, and I decided to get back into the bay. We got our anchors in and left at 9 a.m. It was then clear in the harbour, and for some little distance outside among the islands. At 10.15 a.m. we were fairly out into the strait, and shaping our course to pass close off the eastern end of Charles Island ; it was then quite thick ahead and to the outside of us, the tops of the hills inshore were enveloped in drift, but we could distinctly make out the foot of the land ; by 11 a.m. it was blowing a half a gale right ahead and freshening with a short breaking lop ; we kept at it until 2 p.m.; the ship was now icing up rapidly about the bow and up the fore-rigging, as wherever the spray struck it froze fast. At 2 p.m. we decided to put about and run out of the strait. We rounded the Buttons at 7 p.m. on the 30th and stood down the Labrador. We had rough weather and snow all the way back, took our spare boats on board at Pitts Harbour on the 4th of November, and after securing them continued same day for Halifax, passed Cape St. Lawrence on the morning of the 6th, called at Canso and reported on Sunday the 7th, met a gale of south south-west with heavy sea off Canso same evening and had to run back for shelter, as the ship was too light to make good weather. Monday the 8th was spent at anchor in the Gut of Canso, the crew being engaged in filling the bunkers from the mainhold so as to trim the ship more by the stern. We left again for Halifax on the morning of the 9th, and had very heavy weather that night and next day, during the afternoon of the 10th a sea boarded the ship abaft the fore-rigging on the port side breaking up and washing away one of the boats. We arrived at Halifax and made fast to the Marine wharf at 1 p.m. on Thursday the 11th of November.





SS. "DIANA" IN THE ICE (JUNE 24).