

THE
LAST OF THE ARCTIC VOYAGES;

BEING A NARRATIVE OF

THE EXPEDITION IN H.M.S. ASSISTANCE,

UNDER THE COMMAND OF

CAPTAIN SIR EDWARD BELCHER, C.B.,

IN SEARCH OF SIR JOHN FRANKLIN, DURING THE
YEARS 1852-53-54.

WITH

NOTES ON THE NATURAL HISTORY,

BY

SIR JOHN RICHARDSON, PROFESSOR OWEN, THOMAS BELL,
J. W. SALTER, AND LOVELL REEVE.

IN TWO VOLUMES.

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TO
REAR-ADMIRAL SIR FRANCIS BEAUFORT, K.C.B.,
F.R.S., F.G.S., F.R.A.S., ETC.,
THE HYDROGRAPHER OF THE ADMIRALTY,
UNDER WHOSE
GENEROUS SYMPATHY AND UNFLINCHING PATRIOTISM
THE VARIOUS EXPEDITIONS ENGAGED IN SEARCH OF
SIR JOHN FRANKLIN AND HIS GALLANT ASSOCIATES
HAVE BEEN CHIEFLY PLANNED AND EXECUTED,

This Narrative
OF
THE LAST OF THE ARCTIC VOYAGES
IS (BY PERMISSION)

WITH FEELINGS OF RESPECT AND GRATITUDE
DEDICATED
BY HIS VERY FAITHFUL FRIEND AND ADMIRER,

THE AUTHOR.

P R E F A C E.

THE details of Arctic Exploration, including wintering and sledge-travelling, having been so fully described by preceding voyagers, my object in presenting to the public the following narrative has been rather to place on record an account of the Expedition of H.M.S. Assistance, as being 'The Last of the Arctic Voyages' undertaken by this country in search of the lost Franklin, and as being that which penetrated up Wellington Channel to the extreme limits of navigation. The Title of the work may appear open to objection, but taking into account the dates of original Orders, and those in force in April, 1854, it will be apparent that the final command of the British Naval Expedition within the Arctic Seas was vested in me. That I conceived aright the intent of my Instructions, the probabilities attending the safety of other branches not acting immediately under my control, has been sufficiently verified by the safe return of all engaged, to this country.

Recent accounts affording the satisfactory intelligence

of the release of the American Expedition adds another proof of the uncertainty of the navigation even of the mouth of Lancaster Sound, which was found late in August to be completely barred by ice; and consequently Captain Hartstein was unable to place the monument to Captain Franklin on Beechey Island. With such facts before us, we cannot but rejoice that no vessels and crews were left, to distract the feelings of relatives nor uselessly to exhaust the revenues of the country.

The system of Arctic travel by sledges over vast distances, and the powers of men in carrying out labours under which the quadruped, taking man- against horse-power, would succumb, present a new feature as compared with the labours of the lamented Parry and his associates. True it is that the qualities of the professed seaman find but small scope in this narrative; but the exertions of those who did venture upon travel offers matter for reflection on the powers of men in every stage of action where their services may be required, be the enemy frost, fire, patient endurance of monotonous labour, or battle.

The value of the seaman—I mean the disciplined man—in carrying out the service here recorded, entailing questions even of existence if they faltered or failed in strength, has not, I fear, been sufficiently estimated by those who merely read of the exploits of the sledge travellers; nor can my pen do justice to their labours, to the passive endurance, the high discipline, which characterized their performance, only to be sustained on the

homeward route under the conviction that failure would entail the most cruel death.

Unwittingly we allot the credit to the officers; but, as one of those travellers who entered most fully into the feelings of the men, their habits and prejudices, and free from the killing labour of the drag-rope, my duty compelling me to stop labour when I perhaps felt quite able to endure more, I do conscientiously assert that the greatest credit is due to the fine moral crew which it was my good fortune to command, and to return to this country without even the threat of the lash. What has been their reward? The excitement of war possibly has blinded their countrymen to their deserts, or Arctic service, now that search has terminated, is eclipsed by labour in the trenches

Thus much then for Arctic service. Next will be found matters connected with science, which, although treated of in the early history which broke ground through Lancaster Sound in 1818-19-20, still left us in doubt as to the general laws which prevailed over a series of years,—indeed did not afford any decided data on which argument could be founded, as to the mean temperatures of months or seasons, nor of the ratio in which the freezing of the winter ice covering those seas proceeds. Nor do I pretend to have determined these questions, but merely in producing possibly the most perfect collection of such records, and, as an observer on the spot, furnishing such ideas as forced themselves on my mind, afford to those more deeply versed in meteoro-

logical questions data on which they may build more reliable theories than prevailed previous to this Expedition.

Another question, and one not unattended by opportunity for cavil, may be found in the measures which were adopted by me for the preservation of the health of my crew, as well as the comfort between decks ; but on all these matters I think that figures and facts must drown all cavil, and that in any future fittings the system advocated and proved by me must have force in a sanitary point of view. The deaths which occurred were clearly those which might have been avoided by a more strict attention to the selection of the individuals ; none could be classed as the result of Arctic travel or exposure.

Other matters, embracing periodic returns of gales, bad weather, and unaccountable disruption of the ice after winter had apparently set its seal on the season, offer subjects for interesting discussion. The effect of contrary tides, meeting as they do in this country about Dover, point out unmistakably the reason that Wellington Channel remains sealed at the very moment that nature appears to promise its free navigation.

One only question remains in mystery, that is the final report as to the fate of the gallant Sir John Franklin and his companions. I have treated that with the same confidence which induced me to assert, in August, 1852, "that he never passed northerly or westerly of Beechey Island ;" and, until positive intelligence to the contrary

reaches us, must yet believe that his parties divided as I have imagined.

Although I have not in these pages asserted any claim to the participation in the solution of the Northern Passage to the Pacific, still any geographer will readily understand that the continuous frozen sea, traced by the officers under my command, in 1853, proves a water communication through Wellington Channel, round Parry Islands, to the position attained by Captain McClure; and that in 1854 our sledge-parties had penetrated to the southern extreme of Prince of Wales Strait, perfecting the labours of Dease and Simpson.

I am indebted to Sir John Richardson, Professor Owen, Professor Bell, Mr. Salter, Mr. Glaisher, and Mr. Reeve, for their valuable contributions to the Natural History portion of the second volume. Each statement offered is supported by documents, accessible to any who may be desirous of further evidence.

To those who have seconded and supported me in my duties, whether named or otherwise, my thanks are due; and I thus express myself because I know it will be acceptable to those who honestly performed their duty: "*Palnam qui meruit ferat.*"

EDWARD BELCHER.

London, November 1, 1855.

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GLOSSARY OF ARCTIC TERMS.



Anchor, Ice, a round bar of iron twice bent like a pot-hook the end to which the rope is bent is cut short off and bent suddenly back, the other is tapered after the bend, which is at an angle of 60° to the body or shank. A hole being cut in the ice by an axe fashioned for this purpose, similar to half a pickaxe, this hook serves to secure the vessel to the ice.

Axe, Ice, as above described

Barber is properly the condensation of vapour rising from ice, the result of freezing, also breath condensed

Bay Ice, that which freezes continuously on the surface, and derives its name probably from its forming more rapidly in bays, or spots sheltered from the breeze

Beset, the approach of floating ice on all sides, leaving no opening for advance or retreat, and leaving the vessel unmanageable.

Bight, any hollow, bay of ice, land, etc

Berg. See *Iceberg*.

Blasting this operation is generally performed by cutting a hole through the ice of sufficient bore to admit of a canister of six inches diameter, containing powder, being passed through, a flexible fuse of sufficient length to burn three minutes being lighted, affords time to permit the men to recede from danger.

Bore: to bore through the pack, the forcing a vessel through loose, movable pack under canvas or steam, with the chances of taking advantage of cracks or openings.

Braak, comminuted ice.

Buckle, bending or arching of the ice upwards, preceding a nip.

Calf, a huge splinter splitting off from a berg, or the berg detaching itself from the main mass on which it formed; sometimes misrepresented by a shelf, or loose piece, which is driven from under the floe, and rises suddenly to the surface, damaging ship or boat.

Clear Water, no ice obstructing navigation.

Crow's-nest, a watch-box constructed at the top of the mast-head, to protect the man looking out for whales or ice from the inclemency of the weather; sitting comfortably ensconced in the Crow's-nest, the Ice-master pilots the vessel through the best lanes or open places in the ice.

Curled, the bending over or disruption of the ice at the point of resistance, causing it to pile slab over slab, or throw over the comminuted bits.

Cutting, out or in, performed by sawing canals, out of which the ice is lifted above, or passed beneath, the floe, enabling the ship to advance towards open water.

Dock this is simply an opening cut out of the floe into which the ship is warped for security against threatened pressure, from extensive floes coming into opposition. It is, as reason will point out, at right angles to any extensive crack or open water. A "natural dock" is frequently afforded by some deep gap, out of which, at some of these convulsions, the ice has floated. Any extensive floe falling across the mouth of such an opening would naturally close it, expending its force on the projecting irregularities.

Field Ice, any great extent of smooth ice, the result of water frozen in a quiescent condition, and of equal thickness throughout.

Floe may be any portion of a field of ice disconnected, as floe pieces.

Bay floe, or *Land floe*, would be that attached to the land. *Bay floe* is also considered as bay ice of the last season, now become floe of the present.

Hummocks, lumps of ice, generally bits of pack frozen together, and snow covered during winter.

Ice. See *Bay Ice*, *Field Ice*, *Floe*, *Pack*, *Pancake Ice*.

Ice Anchor. See *Anchor*.

Ice Axe. See *Axe*.

Iceberg this term is frequently misapplied; properly it belongs only to huge mountains of ice entirely of freshwater formation, which

by constant increase from the summer thaws become at length too heavy to be supported by cohesion to the land mass, and then *calve*, or split off from the glacier. They are termed by the Greenland authorities (*vide* Graah, p. 24) *Ice Blinks*.

Ice Blink: this term, as understood by our Greenland whalers, does not bear the same meaning as that given by the Danes. With us "*blink*" indicates the reflection in the atmosphere over the object. The term in the English dictionary defines it, "to glisten, show white," etc. If the atmosphere immediately over the object be charged with vapour, its image may be perfectly reflected or represented, or, when very distant, a whitish auroral divergence of rays constitutes the blink, seen long before the object itself can be distinguished; it is comparative with our "*loom of land*."

Ice Chisels, large socket chisels, into which poles are inserted, used to cut holes in the ice.

Ice Hooks, or *Claws*, similar to timber claws, a double hook, with rectangular pointed claws to hold on by abrupt ice or cracks.

Ice Master, or *Ice Quartermaster*, a whaling captain or mate, selected for his experience in the whale-fishery, to afford advice to the officers commanding. He usually pilots the vessel either from the Crow's-nest, or *spike plank*, when amongst the ice.

Ice Plank, or *Spike Plank*, a platform projecting across the vessel seven or eight feet above deck and beyond the sides, to enable the pilot to run from side to side, to pilot the vessel clear of ice.

Ice Saws, huge saws made from half-inch plates of iron, and varying in length from ten to twenty-four feet.

Ice Sludge, smaller comminuted ice, or bay ice broken up by the wind.

Lane, any open cracks, or separations of floe, offering navigation.

Lead, similar to *Lane*.

Nip: when two floes are in motion and approaching each other, the result generally is a grinding action in passing or until their impetus is expended, which destroys the opposed surfaces, raising long ridges of curled or thrown-up ice. When a vessel unhappily has not time to dock, or becomes entrapped between the opposed bodies, she becomes nipped, or, in many cases, the floe, which is weakest, rises over and overwhelms her entirely,—to use the whaler's term, "*walks clean over her*."

Old Ice, that of previous seasons.

Pack is that collection of broken floe which, huddled together under pressure, is constantly varying in its position; it cannot be dealt with nor can it be travelled over until cemented together by freezing; it has no limit,—it may cover a mile or hundreds of miles, as in Baffin's Bay. Simply it is any loose ice packed into a space before vacant.

Pancake Ice, that which results from snow falling into the sea without thawing, and by the action of the waves driven into pancake forms, which offer no solid obstruction, but nevertheless hamper a vessel more than small ice

Reeving, following up various labyrinthine or angular channels until the vessel reaches open water; as, "reeve the pack."

Run, when the ice is suddenly impelled by an unaccountable, fitful, rushing motion.

Sailing, loose ice relieved from pressure, which admits of picking a way through the weakest parts.

Shearing, or *Lapping*. this applies more peculiarly to young or thin ice with boats, one plate overlapping another where a boat has made an extensive crack. Where boats have been thus destroyed the crews have rarely escaped, the ice being too weak to bear, and the plates overlapping those attempting to swim.

Shelf, or *Tongue*. frequently, on the meeting of adverse floes, a smaller interposing floe-piece is forced under, and, cohering or freezing to that above, presents, below water, a tongue or shelf, which annoys the keel of a vessel, or, breaking off, comes up as a "calf" with great violence.

Sludge, comminuted ice.

Smoke, or *Vapour*, a peculiar kind of vapour, the natural result of the conversion of water into ice, which is constantly supposed to indicate lakes or open water in an unfrozen state.

Water Sky: this evidently is connected with smoke or vapour, and is the reflected colour of the blue sea in the atmosphere or vapour arising from the warmer sea; it generally exhibits a dark, dull, neutral tint, which is never seen to the eye, at least of an intelligent ice-master, unless water be under it. This is peculiarly the case in Melville Bay.

Young Ice, that immediately formed, or of the present season.

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THE

LAST OF THE ARCTIC VOYAGES,

UNDER THE COMMAND OF

CAPTAIN SIR EDWARD BELCHER, C.B.

PRELIMINARY.

Admiralty Instructions.—List of Officers.—The ‘North Star.’—Boat Department.—Supplies.—Instruments.—Azimuth Tables.—Library and Printing Press.—Ships Undocked.—Leave Woolwich.—Visited by the Admiralty.—Quit the Nore.

HER Majesty’s Government having deemed it necessary to prosecute the further search for the ‘Erebus’ and ‘Terror,’ which left England in the month of May, 1845, as well as for any traces of Sir John Franklin or his followers, my Lords Commissioners of the Admiralty were pleased to entrust me with the command of the Expedition, the entire objects of which will be nearly apparent from the following Instructions :—

ORDERS.—No. I.

By the Commissioners for executing the Office of Lord High Admiral of the United Kingdom of Great Britain and Ireland, &c. &c.

1. Having appointed you to the command of the Expedition (to consist of the ships named in the margin*) preparing for the further

* Assistance, Resolute, Pioneer, Intrepid, North Star.

search for Sir John Franklin, you are, whenever such ships shall be in all respects ready to put to sea and proceeding down Channel or "north about," make the best of your way to Barrow Strait, calling at Disco (if in your way) for such replenishments as the place affords, and for a supply of dogs for sledging purposes.

2. We have entrusted you with this command in the full persuasion of your thorough acquaintance with its obligations, and of your judgment and ability to meet them.

3. We do not therefore consider it necessary to encumber you with minute instructions for your guidance at each step of your proceedings; but furnishing you with papers which point out the views of the Admiralty, as successive expeditions have been despatched from this country, and those also relative to the difficulties occurring to oppose those views, we leave it to you to decide as the case shall present itself.

4. We deem it right, however, that a certain course of proceedings should be pointed out to you; and adopting the recommendation of the Committee appointed in October, 1851, to inquire and report upon a previous expedition, the plan of future operations there proposed is to be considered as the basis of your proceedings. By that plan, Beechey Island is the point indicated as the basis of your operations, and you are to consider it as the grand rendezvous to which you are to push forward, there to establish the 'North Star' as a general *dépôt*.

5. Arrived at this point, two great objects will engage your attention:—

1st. The endeavouring to pass up Wellington Channel with one sailing-vessel and one steamer.

2nd. The advance of a similar force towards Melville Island.

6. The object of the first of these expeditions will be, the endeavour to recover those traces of Sir John Franklin which ceased at Cape Bowden, to the north of Beechey Island; and to follow up such traces if they should be found. The object of the other expedition will be, to deposit, if possible, at Winter Harbour, Melville Island, or failing that, at Byam Martin Island, a supply of provisions, fuel, and clothing, for any parties that might reach such positions from Captain Collinson's or Commander McClure's ships.

7. As regards the first-named Expedition, and the possible contingency of coming upon Sir John Franklin's track, we cannot too strongly impress upon you the necessity of your establishing along your line of route *cachettes* of provisions sufficient to supply your crews and those of the missing ships, should any accident happen to your own

vessels, and render it necessary for you to return without them to the general rendezvous at Beechey Island; and you will be most careful along the line of such route, as well as in every other direction you may have to take, to avail yourself of every remarkable promontory, point of land, or other distinctive locality, to deposit exact notices of your condition and intended proceedings; and you are to give positive orders that these notices or records are to be deposited ten feet *true* north of the cairn or staff, and likewise beneath or in the cairn itself.

8. With regard to the Expedition to be despatched towards Melville Island, it is scarcely to be contemplated that, under the most favourable circumstances, more could be done in the first season than to reach that point; and the officer in charge of that service will of course have to take into account the having to winter in that quarter.

9. His earliest attention in that case, in the ensuing Spring, will be, —1st, the depositing such supplies at Melville Island as he can spare, or endeavouring to convey them thither by sledges if he should not reach the island with his ships; and 2nd, the detaching travelling parties in a westerly direction for the combined purpose of a search for traces of Sir John Franklin, and of depositing notices in conspicuous situations as to where the supplies are left, but being at the same time strictly enjoined to return to their ships before the usual period of the breaking up of the ice, in order that such ships may return to their rendezvous at Beechey Island, or otherwise prepare for quitting Lancaster Sound to return to England, according as the supplies on board of his ships and the length of time consumed in the above service shall require.

10. And here we think it necessary more particularly to call your attention to the instructions to be given by you to the officer charged with this branch of the Expedition; for whilst there is a possibility of your calculating on an early return of such officer from Melville Island in the summer of 1853, and of his being able to afford you support in any particular direction, it is, on the other hand, not improbable, that from a prolonged detention to the westward, it may be his bounden duty not to hazard a further stay in those seas, but to make the best of his way home; in which case he must endeavour to communicate with the rendezvous at Beechey Island before finally quitting Barrow's Strait, in order to obtain information of the other ships, and to deposit records of his proceedings.

11. He should therefore be made to understand the nature of the responsibility that devolves upon him, both as to the execution of his

orders in the first instance, and determining the point at which the power of compliance with those orders ceases.

12. It is of course possible that seasons such as were^e experienced by the Expedition in 1850-51 may again occur to prevent a passage by ships up Wellington Channel or to the west of Griffith Island; and, under such circumstances it will be for you to consider how far it might serve any useful purpose to undertake an examination by travelling parties from Baring Bay or Prince Alfred Bay, in the direction of Jones's Sound; in addition to those which it will be your duty to send out to the north and north-west, for traces of Sir John Franklin, in the direction of Queen's Channel.

13. Our instructions therefore are without reference to the possible circumstance of records still being found at Beechey Island or elsewhere (and for which it will be your duty to search), at a certain distance from the respective cairns, where it has been stated it was Sir John Franklin's custom to deposit them;* and if by such records it should prove that Sir John Franklin proceeded to the eastward out of Lancaster Sound, after he wintered at Beechey Island in 1845-46, you will still continue to push forward two of your ships towards Melville Island, as already directed by us, and with the other two you are to act as circumstances may render necessary, depending on the information which those records may convey. And adverting to the report of two ships having been seen on the ice in the North Atlantic in the spring of 1851, we think it expedient to draw your attention to this subject, that you may adopt such steps on your way from Baffin Bay, with reference to search and inquiry on the shores of Davis Straits, as you may consider most advisable under the circumstances above stated, and the information the records may convey.

14. You are aware of the deposit of stores and provisions at Port Leopold, and of the steam-launch left there by Sir James Ross: you are at liberty to employ that vessel in any way that her services may be made available; but with reference to the store of provisions at Port Leopold, and also those for one hundred men which were landed by Mr. Saunders on an island in Navy Board Inlet, it is our directions that such provisions and stores shall on no account be touched by any of the vessels under your orders, unless compelled to do so by absolute necessity.

* The piece of tin or copper, said by Adam Beek to have been dropped from a staff, should also be looked for.—*See Evidence before the Arctic Committee.*

15. We have furnished you with copies of these instructions, which you are to deliver to the Captain and Officers in command of vessels under your orders. And we deem it necessary that you should be directed to communicate freely and unreservedly with your second in command and the officers in charge of the other ships, on all points connected with the Expedition, keeping them acquainted with your views and intentions, that, in case of an accident happening to yourself, or a separation of the ships, these officers may be fully aware of the course of proceedings intended to be adopted by you; and when the ships are separated from you for the purpose of carrying out our orders, the same unreserved intercourse and communication is to be maintained between the officers in command of the respective ships.

16. You are no doubt aware of the 'Prince Albert,' private vessel, being engaged in a like search in the Arctic Seas; you are to afford that vessel every aid and assistance, in the event of falling in with her, but you are in no way to interfere with her orders or take her under your charge.

17. The various logs and private journals, with drawings, plans, etc., are to be sent to this office on the return of the Expedition. And you are to be careful that, from the date of your parting company with the ships sent to assist in towing you, your own letters to our Secretary, together with those of the officers addressing you, are duly numbered as well as dated; and you are invariably, should any opportunity offer, to leave letters for us at such places as Cape Warrender, Ponds Bay, etc., provided no delay be incurred thereby.

18. Your ships have been fully equipped for the service they are going upon, and it has been our desire that you should be provided with every means and resource that might be made available. We have an entire reliance on the best use and application of those means on your part, and we have equal confidence in the care to be exercised by you for those employed under your orders; but there is one object which in the exercise of that care will naturally engage your constant attention, and that is, the safe return of your party to this country.

19. We are sensible however that notwithstanding a wish to keep this part of your duty prominently in mind, yet that an ardent desire to accomplish the object of your mission, added to a generous sympathy for your missing countrymen, may prevail in some degree to carry you beyond the limits of a cautious prudence.

20. You are therefore distinctly to understand our directions to be, that the several ships under your orders shall each be on its way home,

and to the eastward of Barrow Strait, whenever their stock of provision shall have been reduced to twelve months' full allowance; and commending you, and those employed under you, to the providence of God, we trust that success may crown your efforts and that you may be the means of affording succour to those of our countrymen whose absence we have so long deplored.

Given under our hands this 16th day of April, 1852,

NORTHUMBERLAND.

HYDE PARKER.

PHIPPS HORNBY.

THOS. HERBERT.

ALEX. MILNE.

To SIR EDWARD BELCHER, C.B.,

*Captain of Her Majesty's Ship Assistance,
at Greenhithe.*

By Command of their Lordships,

W. A. B. HAMILTON.

No. II.

*By the Commissioners for executing the Office of Lord High Admiral
of the United Kingdom of Great Britain and Ireland, etc.*

We have to inform you that we have despatched her Majesty's steam-vessel 'Phoenix,' under the command of Commander Inglefield, with the 'Breadalbane' transport, to Beechey Island, for the purpose of replenishing the ships under your command with stores and provisions, in case your supplies may have been so far reduced by the depôt formed at Melville Island and the various *cachettes* on the coast as to prevent you from continuing further search for Sir John Franklin during this season and the winter of 1853-54, if the information you may have gained determine you to continue such further search.

2. In communicating with you on the subject of your former orders and the service on which you are employed, we are aware how impossible it is for us to send out any definite instructions with reference to your future proceedings, when we are ignorant of the position in which you may now be placed, or whether any traces of Sir John Franklin's Expedition may have been found during last Autumn or the Spring of this year, and what steps you may have considered it most expedient to adopt. But if no trace of the missing ships have been found beyond the Wellington Channel, and if it should appear that by

the extended search you may have been enabled to make in that quarter, that the missing ships did not proceed in that direction, and if Captain Kellett should have reached Melville Island, as directed by his instructions, and his land expeditions should also have failed in finding any such trace, it does not appear to us that there is any other direction in which a prospect of their discovery can be expected. Every accessible part of the shores of the Polar Seas west of Lancaster Sound will have been visited without finding a trace of the missing ships, except their former station at Beechey Island in 1845 and 1846. In such a contingency as this, and if such should likewise be your opinion after mature consideration with the senior officers under your command, there appears no other course left but to abandon all further search.

3. But in case you should have found any trace of the Expedition, it will be your duty to follow up that trace. In doing this you must exercise extreme caution, so as not to lose your means of communication with Beechey Island; nor are you to incur any hopeless risk by proceeding beyond reasonable limits, for the safety of your own crews must be your first care. We place every confidence in your zeal and intelligence, and feel assured that you will act with sound judgment in whatever situation you may be placed; we therefore leave it to you either to abandon the Expedition altogether, if you are of opinion that no further steps can be practicably taken, or to send such of the ships to England as you may not require; transmitting by them to our Secretary not only a full account of all your proceedings, but charts of all your discoveries, and keeping us informed of your views and intentions, so that, if it should be necessary, every requisite aid may be given you in the Summer of 1854.

4. Before your final departure from the Polar Seas, should you think proper to adopt that course, there appears one very important subject which will require your serious consideration; and that is the present position of the ships under the command of Captain Collinson and Commander McClure, which entered the ice to the north-east of Point Barrow (Behring Straits), the latter in August, 1850, and the former in July, 1851. These officers with their respective crews may have been compelled by circumstances to abandon their ships. If such should be the case, they may probably attempt to reach Melville Island; and having had this in view when you left England, we directed in your instructions that a depôt of provisions and other stores should be formed at that island. From this position they will no doubt

endeavour to make their way to Beechey Island or Port Leopold. It will therefore be your duty, before returning to England, to be fully satisfied that a proper depôt of coals, provisions, etc. had been formed at Melville Island by Captain Kellett, and that clear information had also been left there that similar supplies would be found at Beechey Island.

5. This depôt on Beechey Island is to consist of a full store of coal, provisions, clothes, and other stores, and you will take care to have it most carefully secured against the depredations of bears or other animals; you are also to leave one of your ships there, with or without a crew, as you may deem most advisable, so that Captain Collinson or Commander M'Clure's parties may find every possible assistance which they may require, and have the means at their command of returning to England; but should you find it to be practicable to place the ship, or a depôt of stores, in a more advanced position, between Melville and Beechey Islands, it might be expedient to do so. This is a point on which you can form a better judgment than we can. Our most anxious wish is to establish the best possible arrangement with the view of giving succour and support to the crews of those ships, should they be compelled to seek refuge in the direction we have pointed out.

6. Having expressed these general views, which will require your careful consideration, we leave it to you to take such steps as you may consider most expedient for meeting the circumstances of the case.

7. On the arrival of the transport at Beechey Island, you are immediately to hasten her discharge, and despatch her to England with the least possible delay; and you are not to detain the 'Phœnix' longer than may be necessary, or to risk her being frozen in, but to send her also to England with intelligence of your proceedings, exchanging any of her men, and sending invalids, etc.

Given under our hands this 11th day of May, 1853,

(Signed)

J. R. G. GRAHAM.

HYDE PARKER.

M. F. F. BERKELEY.

R. S. DUNDAS.

ALEX. MILNE.

To SIR E. BELCHER, C.B.,

*Captain of Her Majesty's Ship Assistance,
Arctic Seas.*

By Command of their Lordships,

(Signed) R. OSBORNE.

No. III.

Instructions to Captain Sir Edward Belcher, C.B., or the Senior Officer of Her Majesty's Ships at Beechey Island.

Admiralty, April 28, 1854.

SIR,

My Lords Commissioners of the Admiralty have directed Her Majesty's ships *Phoenix* and *Talbot*, under the orders of Captain Inglefield, to proceed with provisions and stores to Beechey Island, for the purpose of replenishing the ships and depôts under your orders; and I am commanded by their Lordships to acquaint you that on the return of the '*Phoenix*' from Beechey Island last year, they had the satisfaction of hearing of the safe arrival of Her Majesty's ship *Investigator*, under the command of Captain M'Clure, at Banks Land, having completed the discovery of the North-West Passage, though unhappily, without discovering traces of Sir John Franklin, and that part of the crew had been enabled to reach Captain Kellett's station at Melville Island. By despatches which they received from Behring Straits they have information that in August, 1851, Captain Collinson, in Her Majesty's ship *Enterprise* passed the entrance of the Colville River; and their Lordships trust by the reports he may have obtained from the natives of Prince Albert's Land, as well as from the records deposited by Captain M'Clure on his passage along that shore, that he may also have been enabled to reach some harbour on Banks Land, from whence he has made known his position either to Captain M'Clure or Captain Kellett.

Their Lordships have desired me to direct your special attention to the measures they now require to be adopted for at once withdrawing, if possible, the whole of the force now employed in the search of Sir J. Franklin from the Polar Seas; for effecting this object they refrain from issuing any positive instructions how you are to act, or what steps you are to take, as they are aware you must be entirely guided by the position of the ships, and those varying circumstances which in that region must influence your operations; but their Lordships' view may be stated generally as follows:—

1. If the crews of the '*Enterprise*' and '*Investigator*' are at Banks Land, they must abandon their ships, and every endeavour should be made to get them to Beechey Island, that they may return to England. If this has already been effected, and Captain Kellett with his ships has returned from Melville Island, you are immediately to proceed to England with the whole of the ships and their crews, abandoning all

further search for the missing Expedition, unless any circumstances (on consultation with the senior officers of Her Majesty's ships) should induce you to believe that your remaining out another year would tend to clear up the fate of our missing countrymen. But if Captain Kellett has been unable to move from his position at Melville Island, it may be necessary to give orders to him to abandon the 'Resolute' and 'Intrepid,' and secure his retreat to Beechey Island; but as this cannot be accomplished this year, you need not detain any officers or men who may have already reached Beechey Island, but send them to England forthwith.

2. Should no tidings have been heard of Captain Collinson in her Majesty's ship *Enterprise*, it becomes absolutely necessary to provide for his safety. For this purpose the Melville Island depôt must be replenished with provisions and stores; and it will be necessary for a ship and steam-tender to remain there, also the 'North Star' or 'Talbot,' with a tender, at Beechey Island, and at those stations everything which can add to the health and comfort of the crews should be deposited; and having done this, it does not appear to their Lordships to be necessary that any of the other ships should remain another year in the Polar Sea, unless, as before stated, you consider further search to be prudent and necessary.

These are the views of their Lordships: their great object being to recall, with the least possible delay, the whole of the ships or crews named in the margin,* if it can be done; if not possible to do so, they leave it to your judgment and discretion to send home such of them as may not be required, and to adopt those measures which you consider most necessary to ensure the safety of Captain Collinson and his crew, and their speedy return to England. This, their Lordships are aware, must depend on the information you may have received from Melville Island, the position of the respective ships under your orders, the state of the depôts, etc.; all their Lordships can do is to confide in your judgment, and they authorize you to take such steps and give such orders, and to make such exchanges of officers and men, as you may deem necessary for carrying their wishes into effect.

They trust however Captain Collinson is safe; and if so, it will be a source of much satisfaction to them, if during the approaching Autumn the whole of your ships and crews shall arrive in England.

* Assistance, Pioneer, Resolute, Intrepid, Enterprise, Investigator, North Star, Phoenix, and Talbot.

On the return of any of the ships to England from Beechey Island, it is desirable that the coast to the southward of Ponds Bay, namely, from the River Clyde towards Cape Walsingham, should be examined; and you are therefore to endeavour, in your instruction to the ships proceeding to England, to meet this contingency.

In the event of your health rendering it necessary for you to return to England, and the necessity of a part of the squadron remaining out another winter, you are to make known to the officer whom you may appoint to succeed you in command, all your views and arrangements respecting further proceedings.

Although this country is now at war with Russia, you are clearly to understand that you are not to commit any hostile act whatever, the ships under your command having been fitted out for the sole purpose of aiding those engaged in scientific discoveries, and it being the established practice of all civilized nations to consider vessels so employed as exempt from the operations of war.

I am, Sir,

Your most humble servant,

R. OSBORNE.

I have used the expression "nearly apparent," but at the sixth paragraph of these first Instructions it will at once occur to my readers that my mission was not quite single. Independent of the leading feature of this search for Sir John Franklin, two others of Her Majesty's ships, under the command of Captain Collinson, C.B., and Commander M'Clure,—the 'Enterprise' and 'Investigator,'—were yet to occupy my attention, and that too of a nature not contemplated, but, to my perception, to increase in interest, as well as importance, with each succeeding season of my absence from this country; and unless recalled by intelligence of their safety, still demanding my presence in those regions until every security for their comfort and final relief was provided for by depôts of provisions, as well by leaving behind some

vessel of the squadron to await either their arrival or recall from England.

Other objects, not enumerated, but clearly understood by my previous employment, will find their customary notice, simply observing that, so far as science was concerned, this Expedition was not, when not otherwise engaged, to neglect its interests.

Fortunately, at the moment that I received my appointment, on the 10th of February, 1852, my old companions, Captain H. Kellett, C.B., and Commander Richards, volunteered to support me, the former taking command of the 'Resolute,' and the latter (third in command) of my own ship, the 'Assistance.' Commander M'Clintock, Mr. Loney and Mr. M'Dougall, Masters, had also served under me, the two latter in the 'Samarang.' The other officers were appointed, as having volunteered, and having served in the former Expedition, under my predecessor, Captain Austin.

It has been customary to annex the names of the officers engaged in such Expeditions, and I shall therefore follow the example, which is simply an extract from the official 'Navy List:—

	ASSISTANCE.	RESOLUTE.	NORTH STAR.
<i>Captain</i> . .	Sir E. Belcher, C.B.	H. Kellett, C.B.	
<i>Commander</i>	G. H. Richards .	F. L. M'Clintock†	W. J. J. Pullen.
<i>Lieutenant</i> .	Sherard Osborn*	G. F. Mécham	
	Walter W. May	B. C. T. Pim	
	J. P. Cheyne .	R. V. Hamilton	
<i>Master</i> . .	J. F. Loney .	G. F. M'Dougall	T. C. Pullen.
	T. Allard*	F. T. Krabbé†	W. Shellabeer†
<i>Surgeon</i> .	David Lyall, M.D.	W. T. Domville, M.D.	R. M'Cormick.

* Additional for 'Pioneer' tender. † For 'Intrepid' tender.

‡ Second Master.

	ASSISTANCE.	RESOLUTE.	NORTH STAR.
<i>Mates</i> . .	F. B. Herbert . .	R. Roche . .	A. H. Alston.
	T. B. Grove . .	G. S. Nares	
	F. W. Pym (act.)	Mons. De Bray.	
<i>Asst. Surg.</i>	J. B. Ricards* . .	R. C. Scott† . .	F. Y. Toms (lent)
	F. Y. Toms		
<i>Boatswain</i> .	Mr. Taylor		
<i>Carpenter</i> .	Mr. Kerr	Deans	
<i>Officers and Crews</i>	91	91	40

Includes—Ice Quarter-masters, Marines, etc.: Total, 222; of which each Tender took 30 individuals.

The 'North Star' was added to the Squadron, in consequence of the great difficulty, indeed impossibility, of the other vessels embarking stores from a transport at Disco, and the further probability of my not touching at all on the eastern side of Baffin's Bay. Beyond these questions she was imperatively necessary as a dépôt to fall back upon, should either the northern or western division meet with accident. Commander Pullen, having just returned from his excursion along the northern coast of America, between Point Barrow and the Mackenzie, was selected for this command, with a reduced crew, so as to derive the utmost possible stowage. Having been already strengthened for former Arctic service, she was peculiarly adapted for this special dépôt. But two clear months, and those at the most unfavourable season, intervened for every preparation (the 15th April being originally determined on as the day of departure).

In as far as the vessels were concerned, they were supposed, having been superintended by Captain Austin, to be complete. Indeed, there was no time to make alteration, if required.

In the Boat department Captain Austin had left me

little to add, but that little was due principally to the kind suggestions of Captain Hamilton, from whom I obtained a very beautiful model of a flat yawl, which, under the hands of the famed builder, Mr. Searle, and the inventor of a light shaving plank one-eighth of an inch in thickness (Mr. Forster), produced four very beautiful ice-boats, two of sixteen and two of twenty feet, the heaviest weighing but 300 lbs. The heavy lifeboats, unmanageable in ice, were left behind, the other boats being more than sufficient to take care of the crews.

In all such expeditions the numberless schemes proposed, and correspondence to be answered, are enough to occupy the attention most seriously, to the detriment of public duty, and the inconvenience of being either drawn into interminable discussion, or the charge of want of courtesy to those unanswered. To all, who may feel so offended, I can only plead, "not want of courtesy," but inability by my own hand. They were answered generally by dictation.

The provisions, clothing, as well as the selection of the crews, remained as principal features, to which unremitting attention was necessary.

Every possible facility was afforded by their Lordships' "special orders," as well as by all their leading officers in the several departments, so that, if anything went wrong, I alone must take upon myself the discredit to a very great extent. Upon the first and vital point, the provisions, I was immediately in communication with Captain Milne, and the Comptroller of Victualling, Mr. Grant; and after recent exposures on preserved meats, it became a matter of very serious consideration.

The beef and pork were cured at our naval establishments at Deptford, Haslar, and Plymouth. The prime pieces alone, free from bone, were selected, and as recent as the time permitted. At Haslar, under the especial superintendence of Sir Edward Parry and Sir John Richardson, our store of pemmican was prepared.

Our other supplies were principally from the firms of Hogarth, Fortnum and Mason, Gamble, Moir, Moore, Allsop, Edwards, Masson, Chollet and Co., Fadeuille ; and to the result of my public reports I must refer these parties for the general good opinion entertained of their supplies.

I do not imagine that the reading public will feel any interest in the account of the general amount of provisions, comforts, etc. embarked ; but as I have myself frequently been disappointed at not finding the list of extras, and the value assigned to them, I have inserted such a list in the Appendix, with the collective opinion thereon.

Among the leading schemes proposed were the balloons used by my predecessor, and blasting by aid of galvanic agency. In the latter I took peculiar interest, owing chiefly to the success which attended that mode of simultaneous explosion on heavy charges at Round Down Cliff, near Dover, in 1843 (displacing 400,000 cubic yards by 18,500 lbs. of powder !). But chamber-practice and ice-practice are yet to be tested, on which refer to separate article on Ice-Blasting : Appendix. On this mode alone we were not dependent, and were also fully provided with Bickford's match.

From the Ordnance every possible attention was

shown by Sir Thomas Hastings; and at the Royal Arsenal every portion of our equipment was complete within the ability of the Storekeeper. But to Colonel Colquhoun, my old friend and sometime companion, I feel under great obligation, for his unremitting, untiring perseverance and ingenuity in suggesting, as a practical iceman, many little articles of equipment which have proved eminently valuable. Our cylinders, of copper, containing twenty pounds of powder, and fitted with screw stuffing-boxes and galvanized india-rubber packing for the fuses, were most perfect. Our whale rockets and tubes, harpoon-guns, etc. all belong to his fertile mind.

To numerous other individuals not filling public situations our thanks are also due. But as this has been deemed a scientific expedition in connection with the great search, and in which I am happy to associate the names of Kellett, Richards, Pullen, Loney, and M'Dougall, I am sure that they all feel with me, that I do well to reserve for our especial debt of gratitude that which is so eminently due to the Hydrographer, Rear-Admiral Sir Francis Beaufort, for his watchful care over every public as well as private convenience that might lessen our difficulties and tend to our comfort.

Associated with him, Colonel Sabine, Captain E. Johnson, and Mr. Glaisher, have each rendered their time and service to the cause. That the great and primary object of our Expedition could not allow of any delay or deviation from our route, it is needless to observe. But the mind cannot tamely follow the sledge-track, and constantly pore over the weary desert of the floe: it requires occupation, relaxation, and amusement. Such, science

offers. And in the gloom of winter, independent of well-organized registers of the customary requirements of our present improved profession, many scraps will be found worthy of note, and possibly of deeper interest than our scale of knowledge may possibly at the time deem important. The record of nonsense can be obliterated, but the failure to record undeniable facts, only to be witnessed once in a life, is unpardonable.

The instruments from the Hydrographic Office rested on my selection from those in store. Several were made expressly for me, but the deficiency in reliable light altitude and azimuth circles could not be made up. Of these, at least of two more, I felt the want, even of good theodolites. Of the artificial black horizons I must say they were useless—untrue: but the entire blame, if any, rests with me. The five-inch azimuth and altitude, by Cary, was perfect, and saved many a position. It was my companion for fifty-two days over very rough ground, and to the summits of many mountains, without fault or damage.

In the compass department, the Hydrographer and Captain Johnson were unremitting in their endeavours to produce the best travelling instruments, and which should at the same time occupy the smallest space. In all this they acted with their customary forethought and ability; and if the magnetic needle ever was called in aid, the instruments were good.

But in the Arctic travelling season very seldom was it used. The sun, the great umpire in all matters of truth, was not often so long veiled, night or day, but we had his advice. And here, indeed, the labour and forethought

of the Hydrographer furnished the doubtful traveller, dubious of his variation, an unerring Mentor. This was a portable tabular compilation of azimuthal bearings of the sun, at intervals of twenty minutes, between the latitudes of 70° and 81° north, embracing the travelling period between March and September inclusive.

I should make but a feeble attempt to explain these matters to the general reader. Professional men need none. The words of our Hydrographer are too perfect, and they will speak for themselves.

“In the neighbourhood of the magnetic poles the compass becomes so sluggish as to be of little use, either to the mariner in his boat or to the traveller on his sledge, and both are therefore obliged to depend, for the direction of their course, on the bearing of the sun. But in high latitudes the path of the sun is inclined at so small an angle to the horizon, and its rise or fall is therefore so slow, that it is difficult to determine its azimuth or bearing by a rough altitude measured from an horizon encumbered with ice, and a more careful observation, by reflection, would not only consume much valuable time, but would be impracticable in the earlier months, from the severity of the weather, which would render it dangerous to expose the hands.

“Assuming, therefore, that at every station where the boat is moored, or the sledge party is encamped, the apparent time has been correctly ascertained, and the pocket watches duly set; then will the following tables, by showing the true bearing of the sun, enable the leader to adopt what course he pleases, and moreover to adhere to it, by repeatedly looking at his watch and estimating

the angle between the sun and his track,—which operations require no unnecessary exposure.

“The tables are computed for the zone comprised by the parallels of 70° and 81° north, and extend from the beginning of March to the end of September—the season most likely for exploring expeditions; but should their use be required before or after those periods, the intelligent traveller can readily estimate the allowance he should make, by comparing the differences in the preceding and subsequent columns, and by observing the changes produced by the varying latitudes; though the reader will perceive, that even a material error in the assumed latitude would be scarcely appreciable in taking up a line of march.”—*F. B.*

This merely evinces the scientific interest in the matter. The compasses themselves were enclosed in neat leathern cases, suspended by a belt (spare pins and needles included), and the magnetic needle itself so adapted to the card that at noon the compass could be set by the sun to tell the *true meridian*; and thus, until a fresh opportunity was afforded of obtaining further proof of the time by that cheering luminary, the traveller was relieved of the perplexities attending the correction for variations amounting to almost half the circle in extent, 142° to 156° .

The libraries furnished to each vessel contained all that was asked, which, aided by private collections, left nothing to be wished for in that department. A very excellent printing press, with full type, was supplied to the leading commands, and was found useful.

In the comforts and extras for the sick, and for the complete equipment for the collection and preservation

of rare objects, and all matters connected with natural history, our acknowledgments are specially due to Sir William Burnett, the Director-General of the Medical Department of the Navy.

The tents, sledges, and general equipments, as on the last expedition, were furnished by the Dockyard at Woolwich. Gutta-percha cases of all descriptions were provided, but none succeeded: they will not stand intense or moderate cold; but some adaptation of this, or Jeffries' marine glue, would, I am satisfied, under judicious arrangement, prove highly important.

On the 19th of March the ship left the dry dock, making a most ominous lurch, and was secured alongside the Dockyard. On the 25th, hauled off to the 'Charger' hulk, and nothing appeared likely to detain us beyond the contemplated day, April 15.

On the 10th of April all the vessels were in the stream, and constantly crowded by inquiring and interested visitors. On the Monday the magnetic instruments were embarked, and a series of very valuable thermometers, specially prepared, from Greenwich and Kew Observatories. Tuesday and Wednesday were exciting days: the presentation of twenty-five silken wrought banners for the sledges, by ladies deeply interested in our success, and our leave-taking from these warmly esteemed friends and their relatives, will never be effaced from our memories.

To the Lords of the Admiralty generally, to Captain Hamilton, Captain Milne, and Mr. Grant, I personally owe my acknowledgments, for the kindness and facilities afforded me throughout the equipment of this Expedition.

To Mr. Barrow all are deeply indebted for his un-deviating kindness, anticipating wants which in our excited preparation we had but little leisure to dream of, and for promises fully realized during our absence.

Under such conditions, like spoiled children, with everything our own way—with even the weather favouring every motion of our equipment—behold the Expedition ready, if need be, at the appointed hour!

I have an almost superstitious dread of *indecision*, and do not consider men liable to it fit for any species of trust. And under such feelings, on the 15th of April, much to my relief, the Squadron slipped their fasts to the hulks to which they had been secured, and, towed by the steam-tugs, proceeded down the river.

It was a deeply interesting scene in every sense. Groups might be noticed on the Dockyard walls, scanning with eager interest for the last signal. Now a white handkerchief rose and fell with an almost passionate action. On board frequently a laced-cap individual might be noticed intently gazing through a telescope, and suddenly holding up the badge of recognition. Often the wave of the blunt seaman's hand told where his heart was, "without leave." Fortunately the steam-tug dispensed with any but the sacred duties of the last farewell.

In addition to these interesting matters, the Dockyard authorities had summoned the workmen to line the walls, the band striking up 'Should auld lang syne' and other appropriate tunes, between the peals of cheers which kept our crews incessantly engaged, and which were responded to with equal vigour. This friendly fire was again taken up by our warm-hearted friends, the True

Blues of the Arsenal, and finally by a very unexpected sally from the Minié Rifle division at the Marshes, who had advanced to the river-side.

And now all was silent. Deep thought prevailed, and the fidgety, short walk clearly indicated that some weight had been removed, and that duty was sought for change.

Shortly after noon the first stage of our eventful journey was accomplished, and the vessels secured to their mooring-buoys at Greenhithe.

On the 16th the vessels were swung for local attraction due to the iron on the compasses. My duties carried me to London. Captain Johnson performed this duty, Captain Kellett attending to his own ship. The stowage and iron fittings of the tenders remaining nearly the same, the tables for those vessels remained unchanged.

The 'North Star,' having been detained by provision still unstowed, dropped down and joined company. The powder was embarked in rather large quantity for blasting purposes, and nothing now prevented our proceeding but final instructions, and the customary visit of the Lords of the Admiralty, which had already been duly notified.

On Monday, the 19th, the Board, comprising His Grace the Duke of Northumberland, Rear-Admiral Sir P. Hornby, Captain Sir T. Herbert, Captain Milne, the Private Secretary, and Sir B. W. Walker, the Surveyor of the Navy, inspected the ships, officers, and crews. Privy Council duties requiring the attendance of the Duke in town, the Board left rather in haste, leaving me to receive and entertain Prince D'Aguila, from the Neapolitan Court, for which purpose the state barge had been sent down with Mr. Gore, flag-lieutenant, from Woolwich.

After His Royal Highness had inspected the vessels, he returned to London.

On the 20th Commodore Eden arrived with the pay-clerks, paid the crew up to this date, at which they commence their double pay, and six months' ordinary pay in advance (two months' being customary). Under ordinary circumstances, the payment, with such facility to escape, many having no men-of-war's time, would have been considered hazardous. We had no such feeling on the whole, nor were we deceived. A finer body of men never trod the decks of any of Her Majesty's ships of war. Our North Sea pilots being embarked—the same who took out Sir John Franklin having been allotted to us—I went to London to receive my final instructions, returning by eleven o'clock that night, accompanied by a warm-hearted friend, who had volunteered to see me to the Orkneys, and be the bearer of our last adieus. Such friends are not butterflies. My detention to this date was by superior will.

Shortly after four A.M. on the morning of the 21st we slipped our moorings. The Squadron, towed by the 'Lightning,' 'African,' and 'Monkey,' and tenders under steam, quitted Greenhithe before the good people had time to open their eyes, or think of anything like cheering. About eight o'clock we sighted the ships at Sheerness, the 'Ocean' bearing the broad pendant of Commodore Hope, Admiral the Honourable Josceline Percy being absent on leave.

About nine o'clock, casting off the steamers, we anchored at the Nore, in order to complete the stowage of the 'North Star,' and to make good certain defects

caused by the 'Pioneer' running into us. Here we were joined by the 'Basilisk' and 'Desperate,' reserve war-steamers, commanded by Commander Gardiner and Lieutenant Stevens, ordered to accompany us as far as the 20th meridian west; the 'African' to tow for six days from the Nore.

Commodore Hope came off in the steam-tender 'Sprightly,' and, in order to expedite our supplies, I accompanied him to the Dockyard, the 'Monkey' and 'African' also running in to coal.

Having paid my respects to the Admiral's lady and family, and invited them to visit the ship during our detention, her daughters, as well as those of my old friend Sir Charles and Lady Colville, availed themselves, with other visitors, of the opportunity.

At three o'clock, our defects having been made good, we took leave of our friends, the Commodore passing under the stern of each vessel, giving and receiving in return our three last and most exciting cheers; for here we felt that the final knot was cut which connected us with civilized England.

Our anchors were tripped, and, towed by our respective tugs through the lowering mists which hung over the embouchure of the Thames, we took our last look at the shores of Kent, and dived to our cabins, to meditate on the great work we had undertaken;—not in pride of command, but in the feeling that we were merely following up the clue which others had barely left us enough to hold on by—hardly enough to warp ahead with.

CHAPTER I.

At Sea.—Reach the Orkneys.—Stromness.—Scarcity of Stock.—Departure of the ‘Basilisk’ and ‘Desperate’—Enter Baffin’s Bay.—Whalefish Islands.—Reception by Esquimaux.—Lievely.—Disasters.—Moored at Lievely.—Survey of the Port.—Quit Lievely.—Search for Coal—Quit the Waigat.

UP to this moment all has gone well. The sun has shed his cheering ray on all our movements, and not a day’s rain interfered either with our rigging or embarkation of stores. One cannot but be grateful for all these benefits, and deem them but a prelude, under God’s blessing, to a fortunate termination to our efforts.

In tow of the steam-tugs ‘Monkey’ and ‘African,’ and accompanied by the ‘Desperate,’ ‘Basilisk,’ ‘Lightning,’ and our steam-tenders ‘Pioneer’ and ‘Intrepid,’ we formed rather an imposing than warlike squadron. The tide being in our favour, we moved rapidly through the shoals of the Thames-mouth, and entering the North Sea soon began to feel the old sensations of being again on the ocean. The breeze freshening fast, and my instructions directing the return of the ‘Lightning’ and ‘Monkey’ from the Sunk Light off Harwich, the ‘Intrepid’ also having signalled defects in machinery, I determined on

anchoring for the night, complete 'Desperate' with coal from 'Monkey,' and despatch the latter vessel to Woolwich.

Before daylight, the 'Intrepid' having made good defects, we again moved forward; the 'Assistance' towed by the 'Basilisk;' the 'Resolute' by the 'Desperate;' 'North Star' by 'African;' and 'Lightning,' 'Intrepid,' and 'Pioneer' under steam; but the breeze soon rendering towing inconvenient, sail was made, and each vessel moved independently. As the sea rapidly increased, and would soon render communication unsafe, I despatched my last communication by the 'Lightning,' directing her return to Woolwich; and as the breeze very soon increased and separated the Squadron, and 'African' did not rejoin, I imagine that she followed the 'Lightning.'

April 23.—About one A.M. we rounded the Dudgeon Light and steered for Buchanness, where the consorts, 'North Star' excepted, rejoined.

April 25.—About three A.M. on the morning of the 25th, the breeze failing, the steamer resumed tow, and about seven A.M. the 'North Star' was seen under the high land of Caithness. About seven we took on board an Orkney pilot, and shortly before noon, under a most brilliant and cheering sun, not a breeze moving and sea glassy smooth, we threaded the Orkneys, passing Long Hope, where I had at first purposed anchoring, and by noon were safely anchored off the town of Stromness. The 'Basilisk' was then sent to aid the 'North Star.' The remainder of the Squadron gradually dropped in, and before sunset all were in security, the tenders and steamers within the inner harbour.

This being Sunday, and the inhabitants at church at the time of our arrival, we were not visited until the afternoon, when the Custom-house authorities and Dr. Hamilton came on board, tendering their services.

Understanding from these gentlemen that a vessel laden with coal on sale was within the harbour, I was enabled, before the arrival of the steamers, to make arrangements for their entering at once, to transfer it more conveniently without further delay or expenditure of fuel. This, probably, was the first time that the inner harbour of Stromness bore on its waters four steamers of war of such length and tonnage.

Unfortunately the Post-office at Kirkwall did not forward our letters, notwithstanding that the official envelopes were addressed to Stromness,—possibly, in the expectation that the seekers for them would find their way thither. In this they were not mistaken, as our younger men were rather anxious to commence their explorations and breathe a little pure air,—an example which Captain Kellett and myself soon followed *à pied*, on the rising ground in the immediate vicinity. The observations on the town and scenery are hardly expected in these days, and amount to *nil*. Our attention was chiefly directed to the points and facilities for watering, obtaining the necessary supplies, and other trivial duties.

Nor was time idly expended on board. We had as yet had but our first shaking, and it was not long before my indefatigable aid, Commander Richards, found stow-
holes for many objects which doubtless puzzled him, and which probably never before lumbered the quarter-deck of any vessel bearing a pendant. These comprised heavy

cases of concentrated sulphuric acid (oil of vitriol), galvanic batteries, balloon gear, *cum multis aliis*, which would probably involve more queries than I would care to answer. At every step these were really obstructions, and some were subjects not to be ill-treated with impunity, even thus far out of Scotland. In the midst of all these duties, involving almost a restowage of the ship, watering, coaling, etc., we began to discover that our private stock of animals and other requisites, involving the comfort of both inner and outer man, had been most peculiarly overlooked. The natives, too, had discovered our weakness, from a certain *furor* displayed by one or two leading purchasers, and did not even, while thus patriotically and philanthropically engaged, fail in forming just estimates of the contents of our purses, probably understanding from previous visitors that men-of-war's men are fair game.

Independent of any such feeling, and setting aside any presumption that stock here is cheap and easy to be procured, I would strongly advise my brother officers not to trust to any such fallacy beyond eggs, milk, and butter. Animals, ducks, fowls, etc., are not fit to kill, do not live, and turn out eventually very dear bargains. But this applies in most minor ports. It is only the practised stockman who will supply objects fit to eat, or which will endure the caging on board ships.

Our rambles exhibited to us, or rather to myself, no improvement since my visit to the Orkneys in 1821,—a private individual, and most warmly and hospitably entertained by some good friends at Kirkwall, whose names have escaped my memory, but their kindness has not

been forgotten. Possibly they recollect me at the Manse only as the inquisitive "stone-breaker." I rode over to Stromness and back the same evening. To expect hospitality or attention under present circumstances would be unfair: who could entertain such an army of locusts?

One of our deserters, or rather an unfortunate midddy whose dreams were more powerful than the cheers at parting, had now given himself up, having posted and railed, express, through two parts at least of Great Britain to overtake us, and crossed by gig from Kirkwall. As there was no "cheque without leave," no further questions were asked; I was only too glad to see him. By him we received information that the steamer which brought him to Kirkwall would depart on the next day evening for Aberdeen.

I had now to lose my kind companion Mr. E. Ray. We took leave of him on the evening of the 27th, seeing him off by the mail-cart; and to his kindness, and interference with the Post-office, I feel that we in a great measure owe the reception of our letters by our return officers. He carried with him our final despatches, with which he would sail at dawn on the morning following for Aberdeen.

April 28.—Fortunately we obtained the sun for our chronometers at two p.m., just as the weather began to exhibit a suspicious, murky appearance, when the Squadron weighed, cleared the islands, and was once more on its forward progress. The absence of the 'African' we now felt seriously; her services might have proved important to tow out the 'North Star,' as in this thick weather one more tug would have kept us securely con-

nected. We were compelled to lie to—and that is, under tow, a most tedious operation—until one of the steamers could extricate the ‘North Star;’ much valuable calm and offing in this variable climate was thus lost.

Having fairly gained an offing, the ‘Basilisk’ was allotted to the ‘Assistance’ and tenders, and the ‘Desperate’ to the ‘Resolute’ and ‘North Star.’ About four A.M. on the 29th, we passed Cape Wrath lights, and before nightfall had cleared the northern end of Lewis Island.

We were now truly at sea. My instructions were explicitly *limited* to taking the two steam aids as far as the longitude of 20° west. It was my intention, on reaching that meridian, to complete the tenders with coal, and then release them. That the orders were worded so imperatively was unfortunate. Had it been simply, not to carry them beyond their safe means of return, I might easily have taken the supplies out at an earlier date, or, at reduced coal, worked a day or more longer, until smoother water prevailed.

Unfortunately this distance was not made good until Sunday, the 2nd of May, when the labour did not appear sufficiently imperative to disturb that day of rest; but, the breeze suddenly freshening at nightfall, and towing-hawsers parting, it became necessary to make sail independently.

Bad weather continued until the 8th of May, when, taking advantage of a lull, we communicated with the steamers, exchanging a marine and taking their towing-hawsers. Our despatches were sent by the ‘Desperate,’ Lieutenant Stevens, as being more likely, by steam and

canvas combined, to reach Plymouth, and, by rail, London, earlier than the 'Basilisk,' bound to Portsmouth with paddles and canvas. Much pleased with the diligence and handling of these vessels by their respective commanders, we cheered and parted company, thus severing the last link on this side of Greenland.

Shortly after parting with the steamers, we fell in with a dead whale, and began to experience the customary visitation of the fish-hunting birds, mollymoks, gulls, etc., of Greenland. On the 15th of May, being in latitude $57^{\circ} 56'$ north and longitude $38^{\circ} 26'$ west, we were visited by a snow-bunting, and on the 20th noticed the first iceberg; but, although we passed between several small pieces of ice, neither the air nor sea exhibited any change of temperature.

On the 1st of May we passed Cape Farewell, and on the 24th were becalmed off Godhavn. The dredge was sent down and some few shells obtained, but the cod-fish and halibut, notwithstanding the most enticing baits were tried, could not be induced to bite. Suddenly a long rolling swell came in from the south-west, causing the vessels to pitch very heavily, and, as they rose to the summit of the wave, exhibiting the land-ice, not before noticed, as lining the coast-line. The effect was curious, and not pleasing.

The customary routine of such tedious navigation continued until the 29th, when we got a fair wind and ran up to the Whalefish Islands.

As customary in these cases, reference was made to "the voyages," and to persons on board who had been here before; but no one could afford any information

calculated to be of use. We were therefore compelled to grope our way, aided by our dead reckoning.

To the seaman seeking Whalefish Islands nothing can be more deceitful than the first sight of the group, when distant about ten miles, and more particularly if the wind should be light and the sea very smooth, when probably it would prove glassy calm at the islands. They would then appear merely like a scattered reef on the surface of the ocean; but the mystery is easily dispelled. If they display a wide extent, you are to the south-west; and if you bring them to bear nearly *true north*, you must be in the fair way for the entrance, which is by the south-east end of the southern island. E.N.E. by compass, they show in the centre of Disco and as one island.

The two main islands are high, about *six hundred feet*, and will exhibit a deep gap between them. It is in this gap, about half a cable wide, that vessels anchor. The Danish Establishment is on the southern island, termed Kron-Prins Island. If the breeze be steady, shave it on the east, as a rock lies off about a cable's length north-north-east *true*, and run for the gap until Boat Isle is seen midway in the channel; drop anchor in the mouth, and veer to secure to either or both shores. Five of Her Majesty's ships were safely berthed well within the mouth.

The latitude of Boat Island was determined to be—latitude $68^{\circ} 58' 42''$ N., longitude $53^{\circ} 13' W.$, variation $70^{\circ} 46' 39'' W.$

In Captain Mangles' account I notice that Sir John Franklin was much in the same dilemma as ourselves;

indeed when I was first informed that they were truly the Whalefish Islands, I could scarcely credit it. They did not appear to afford the slightest chance of shelter.

On the other hand, no seaman who has once visited them, and used his eyes, can for one instant be in doubt. There are no others to mislead him, if he approaches them on the proper bearing. Disco may also be in sight, and the very remarkable mountain over Lievely will, bearing north (true), be an infallible aid. If these islands should be sought from the northward, bring the easternmost point of the high eastern island to bear south true, and run down until you perceive the channel, with a rock in the centre, between the two highest islands. Round all rocks easterly, at a good berth, and enter this channel boldly; steer for the starboard channel; pass Boat Island; after which run for the port side, to avoid a rock, close in shore, on the starboard hand; anchor as you open the narrows. Bergs sometimes plant themselves at the southern mouth of this gully; it is therefore safer to be well within, as they ground and may break your anchor, if you should be just outside the opening.

The moment any vessel is noticed steering for these islands, the Esquimaux, or "Huskies,"* as the Danes customarily term them, come off in sufficient numbers to satisfy you that you are near the haunts of uncivilized men, and will afford sufficient information to guide any stranger to his anchorage. They are all in the pay of, or dependent on, the Danish Resident there or at Lievely, and carry on the seal-fishery for the Company's interest.

* "Husky" is their own term. I recollect the chorus to a song at Kamtehatka was "Husky, Husky."

The establishment at the Whalefish Islands must have degenerated in a most extraordinary degree of late years, if it ever deserved the reputation of having one decent house in it within the memory of man. Never did I witness such utter filth and degradation in any Esquimaux western tribe in my life; but visits to Lievely, Upernavik, and Cape York, satisfy me that the tribes here are more filthy. Upon the occasion of our visit, nine kaiacks formed in line ahead, awaiting our arrival, with lances poised, as if we had been some mighty monster of the deep they intended to attack. These kaiacks probably were manned by their select men, and intended to exhibit a visit of courtesy, as they were better clad than we afterwards noticed. They kept up with the ship, throwing their spears at objects which offered, recovering them with great agility as they came up with them, buoyed by their light fish-bladder. One unfortunate *lumme* was struck, probably gazing in astonishment at us, but pursuit was overbalanced by the chance of the nice things they might pick up from us, particularly as it was our dinner hour, and Jack is generous in his way. They probably had seen the ship before, but no whaler ever could be mistaken for her. Many of them have some pretension to head and stern, and are even gilded; but why our predecessors deemed it expedient to make our vessels so unlike anything before created, not a little perplexes me, for in truth we have less of the heavy ice to encounter. The day will yet arrive when whalers, or those intending to amuse themselves in "northern researches," will prefer clipper-moulded vessels, instead of tea-chests.

Our time here, whilst refitting, watering, and restowing our holds, was employed examining the islands and shooting ducks, chiefly the eider (*Anas mollissima*). As to any communication with the so-called Governor, or oil-cooper to the settlement, only distinguishable by a white face and reddish hair from the as filthy Esquimaux, there was no inducement. Taking our departure by the northern route, on the 5th of June, we passed up the eastern side of the group, in search of Lievely.

The same remarks apply to information about Lievely. It must be sought by latitude and longitude, being situated in latitude $69^{\circ} 13' 56''$ N., longitude $53^{\circ} 42'$ W.

The surest and unerring mark is a flat-crowned beetling cliff, about one-third from the western point of Disco, where indeed they appear to terminate. On nearing the land, which is "safe to," the rocks which form the port of Lievely will be seen to project well to the southward, and fine gravelly beaches commence immediately to the eastward of the rocks which, externally, form this very close port. It is indeed the port of the *island* of Lievely. At about two miles westerly from these fine dark gravelly beaches, the jutting angular headland will exhibit the great red beacon, which at once sets further doubt at rest.

This beacon is on the outer south-west head, and has a deep bay within, which at first sight might be mistaken for the port. Steer past this bay on the outer side of the islet, which lies off, and round the next inner point, within which a deep strait will open, and pilots will meet the vessel. The port lies at the eastern extremity of this strait, and is a most perfect, land-locked, safe anchorage.

The town cannot be seen until you reach the eastern bight of this strait.

In our case, the tenders having been directed to look out, the beacon was signalled by 'Pioneer;' and running in with the ship to a safe distance, I left in my gig, to ascertain where the port lay. I was much puzzled by the outer bay; but immediately on rounding the inner point, the warping-rings let into the rocks, and numbered, clearly indicated where to proceed. I was not a little surprised to find that no pilots were coming out, and, until I reached the Resident's house that none were ordered; but they immediately accompanied me in their own whale-boat, and on opening the point I made the signal to the ship 'to steer for my position,' advancing in the course which she was to maintain. This was immediately complied with by Commander Richards, and rejoining off False Bay, we stood in, prepared to beat up to the harbour. I had hoped that the ship would have beat in to the anchorage in decent style; but fate seemed to decree unusual disasters, and either flurries of wind or counter-currents acted to the annoyance of each. The 'Assistance,' always weatherly outside, would not keep to the wind, and lost ground in tacking. The pilots (too many) were all uttering unintelligible jargon, and giving contrary orders, twice putting us on the same rock without damage, owing to its abruptness; so that I found, with such a strong breeze prevailing, that it was necessary to anchor. In the meantime the 'Pioneer' had made love to an iceberg, which deprived her of her mizenmast. 'Intrepid' grounded in stays; 'Resolute' anchored; and next morning, after it moderated, and the

wind favoured us to get in, 'North Star' tailed on the harbour spit, and remained one tide. We all had our taste of beating into Lievely. Had all this happened to raw hands, it would have been clear enough, but we had too many surveyors accustomed to greater difficulties. The undertow must have been the cause, by the strong wind from the eastward forcing the water through the channel on the east, at the same moment as the flood was making high water on the surface from the west. One decided point in my own mind was the want of rake to our mizenmast. This I had strongly urged before leaving Woolwich, but it was not complied with. I now insisted on its being done: the result has proved that I was right.

Having all the Squadron now securely moored in this beautiful little harbour—none under the length of any five hundred ton ship—I began to reflect how any one could venture to waste time by frequenting the Whalefish Islands, when such a complete refuge as Lievely could be gained, with a civilized Governor, clad at least with respectable clothing, and gentlemanly in manners, and where every other accommodation which a port should afford was to be obtained. Port charges might prevent the generality of whaling ships from entry, but this could not influence vessels of war. Referring to Sir E. Parry's remarks, I notice that he only visited this port in his boat in 1824, and, unless he sounded it, or consulted the pilots, could hardly be supposed to know its capacity. He considers it excellent for small vessels, but narrow for ships of three hundred or four hundred tons. I should be very glad of such a harbour for three sail

of the line. It conveniently accommodates five sail, in berths where fifty-gun frigates would be safer than in Portsmouth harbour.

The Governor, Mr. Erasmus Møeldrup, showed us every attention, and afforded us all the information in his power. A survey was made of the port and entrance, and some of our sportsmen managed to find exercise and amusement, if not game, by climbing some of the frowning hills immediately over the anchorage, particularly that which I have noticed as the best guide in seeking this port. This hill, estimated by some of those who had not tried its ascent, was estimated at seven to eight hundred feet above the level; measurement, however, proved it to be 2100 feet. The Governor and family were entertained on board both vessels, and some of the younger hands had an opportunity of getting up their polkas and quadrilles, etc, with some of the half-breeds of Danes, who really performed to admiration, and having been duly dressed, from "the theatre property," in European feminine costume, were not wanting in beauty.

Having obtained seal-skins for booting our travelling parties, and other supplies, we quitted Lively on the 10th of June, intending to examine a locality in the Waigat, where the Governor informed me that coal abounded, and might be obtained at the beach with little labour,—but that it was cheaper for them to get it from England, than to pay the wages demanded by the Esquimaux.* Another spot, within forty miles, was also named.

As the ice threatened westerly, I hoped to get round inside it by the Waigat channel, coming out by the north

* This coal since visited by the 'Phoenix.'

end of Disco, and therefore determined to seek this coal. Our dogs were procured here; but we did wrong in trusting solely to the Governor: he had some which he wished to get rid of. We were informed that all the best bred were absent hunting.

Light airs delaying us, I quitted the ship in my gig, near the entrance of the Waigat—a sound which divides Disco Island from Greenland; and keeping along the shore, at length reached a spot where the banks exhibited unmistakable signs of a coal-bearing district. The coal was found in detached pieces on the beach, but not in sufficient quantity to reward delay. I therefore moved easterly, to the mouth of a great valley barred by sand, and which appeared during the summer season to be the bed of some great river. Within, it being low water, it was cut up by streams in all directions, the sea-beach forming a kind of barrier. Strewed along this sandy beach, about three bags of loose pieces were picked up; but no cliffs, banks, or rocks near, which exhibited the slightest chance of coal *in situ*. The surrounding hills appeared, at two or three miles inland, to be formed of some very dark stone, constantly disintegrating and tumbling down into the valleys; but neither time nor labour could be afforded to examine them. The Governor's explanation, that "it would not repay the labour of collection," was but too apparent. • That this was one of the spots alluded to, as "near a house forty miles east," I was fully satisfied, as he had informed me that it was at a sandy beach not far beyond where they had a house; and this house I visited, and similar coal to that picked up on the beach easterly had there been

used as fuel. Further along the coast a party again landed, but no traces of coal: it must therefore lie inland, and is probably brought down by the heavy streams which the thaws throw down through the valleys. The interval between the nearest mountain-faces and the shore was covered by a thick peaty soil, in which a person would sink deeply in any thaw; the labour, therefore, of transporting coal, even if it existed within one mile, would be excessive.

During the day and night previous to our departure from Lievely, it had snowed heavily, and covered the land generally to some depth; but the line separating this coal-bearing region was most clearly delineated by the total absence of snow,—doubtless due to the generation of heat by the previous thaws and sun's rays acting upon the shaly beds, charged with iron pyrites. To the eye, as viewed by telescope, the hill-ridges appeared to be composed of a slaty shale, or coal, cropping out occasionally like dykes, and were in immediate association with a ferruginous clay, deeply channelled by late thaws.

The coal found was not bituminous, but more of a slaty wood-coal; burned well and retained its heat when mixed with other coal, and would be admirably adapted as an aid for our steamers, especially for banking up or retaining low steam.

A white fox came to inquire our reasons for visiting this part of the country, but departed abruptly before he came within gunshot.

As the evening continued calm, I sent the officers on shore, to shoot and amuse themselves by making further researches inland towards the black formations; this

latter they found too tedious, by reason of the yielding peat over which they had to travel; but they were more fortunate in securing several brace of ptarmigan, now very acceptable to our invalids,—particularly Captain Kellett, nearly on his legs again, and regaining his customary spirits.

June 12.—Having contended in this neighbourhood for some time with strong breezes, and loose ice increasing so fast as to render the navigation a severe duty to the crew, even to keep the ship clear of it, and the prospect to windward unsatisfactory, I bore up round the south end of the island, and, passing Lievely, reached the sea again, now invested with larger and more numerous bergs than we had before noticed. This, however, indicating a great southerly motion, afforded me hopes of making an easier passage, as these monsters generally clear away all before them and break up the small floes.

I notice that the Danes differ from us, in terming these masses “blinks,” whereas we apply that term to the reflection of ice or water, as ice-blink, water-sky.

CHAPTER II.

Anchor at Upernavik.—The Squadron adrift.—Dangers numerous.—Prospects of the Voyage.—Browne Islands.—Preparation for Flitting.—The 'Resolute' nipped.—Docking.—Blasting Ice.—Wreck of the 'Regalia.'—Meet a Whaler.—Irregularities of the Crew.—Melville Bay.—Floe Law.—Capture a Bear.—Cape York.

ON the 16th of June we had reached the western entrance of the Waigat Channel, and found it closely blocked; the ice also, to seaward and the north, apparently closely packed; but in this we were undeceived as we neared it, several lanes opening, which admitted of sailing, by a little caution in selecting the weakest points for breaching. The floe pieces, or flat ice, were so much eaten into and rotten, that, if due calculation was made for the impetus in running into them at almost natural fissures, no difficulty existed in dividing them and reaching the next "lead." After some little excitement of this nature, and giving a few shakes to the old craft, merely to let her know that she must awaken to her old duties, we reached the open water, and were making good progress, unfettered by further obstacles, to the northward.

On the 18th we were off Anderson's Hope; winds light and adverse. Beat up amongst the islands, and,

as usual, no one able to speak distinctly to any land in sight,—and yet so remarkable, that he who has once seen ought never to forget it. Late in the evening, as we reached close in upon one of the islands, it was thought, on the view we had of a very high perpendicular cliff (3300 feet), that it might be “Anderson’s Hope;” but I, who had never before seen the land, knew full well where I was: but where to find the anchorage at Upernavik was the mystery to be solved. The difference between noon and midnight, in this latitude, was scarcely taken into account by us, and therefore I felt surprise that no colours were exhibited, or pilots came off. They were all asleep; it was past midnight.

Early on the 19th, a boat, manned by Esquimaux, came off, but no Danes. At two A.M. I sent the cutter, with the master, to seek for anchorage and point out the settlement. Still no notice was taken of us by the Danes; nor could we distinguish the settlement. At length we noticed the cutter, in a deep bight, with the signal flying for anchorage, and shortly after discovered the chapel and residence of the Superintendent (or Governor) on a point above.

Upon the return of the boat, we stood in to a small but snug bay, open to the northward, and anchored, securing to a small islet, as well as to an iceberg grounded off the mouth of the bay.

I now proceeded to call upon the Governor, Karl Gelmeiden Flaischer, and received from him every attention, apologizing for not sending out any pilots, as most vessels frequenting this place are well acquainted with the usual anchorage. We obtained about twenty

good "water-skins" (a peculiar seal), for the soles of our travelling-boots, which we were unable to get at Lævely; purchased boots and mocassins, pup-seal skins for linings, and sundry curiosities, Esquimaux models. The priest also, Jens Michael Peter Kragh, came to pay his respects,—a sharp, intelligent man, particularly conversant with the value of a British sovereign. Both these individuals were the offspring of mixed parents on the mother's side and Danish fathers, were born in Greenland, and partially educated in Denmark. Their wives are Danish, and the children interesting, animated, and likely to be handsome. We were also introduced to a pretty dark-eyed brunette, the daughter of Petersen, who accompanied Mr. Penny as interpreter in his late expedition. In the window of the Resident we noticed several varieties of flowers in bloom, but principally natives of Greenland, although common in England.

We were most anxious to obtain seal's flesh for the dogs of the expedition generally; but my endeavours were completely frustrated by the interference of private interests, by which the natives were induced to demand as much for one carcase as the Governor informed me would have purchased all in the colony. The result was, that all were disappointed; the Resident absolutely refusing to allow any sales under these exorbitant demands.

In the evening, it came on to blow very fresh, and I now began to congratulate myself in not trusting to the stability of bergs; our bower anchor was well placed, and an intervening rocky ledge prevented the berg from driving upon us.

The 'Resolute' commenced by breaking adrift, owing

to the turning of the berg; 'Pioneer' fell foul of her, taking away the jib-boom of 'Resolute,' and losing her own fore-topmast. Both went adrift in a strong gale, with thick fog, into the Strait.

Our own berg, although close in shore, took leave of us, carrying off the ice-anchors and hawsers of the 'Assistance,' 'North Star,' and 'Intrepid.' The uncertain condition of the 'Resolute' and 'Pioneer,' in fog and bad weather, amongst rocks, kept us in unpleasant suspense during the night, but fortunately they rejoined the day following, when our hawsers, etc., were also recovered. We dropped our second anchor, and rode it out comfortably, although the gusts at times were very heavy.

June 20.—The day turned out very fine,—bright sun, and little wind. After prayers, I took leave of the Resident, and joined the vessels outside, but, fog coming on, had some difficulty in collecting the Squadron.

We now passed in to the eastward, between the islands, into the Great Sound, having been informed that "Sir James Ross did so, and avoided much unpleasant ice." But in this we were mistaken. After knocking about until midnight, frequently obscured from each other, and the sight of land, by fog or snow-drift, and without any appearance of an opening, I determined on effecting my escape by the first western outlet between the islands. Within, as far as we had proceeded, the ice was fast. With our accustomed good fortune, we soon hit on a fair lead between them, and just cleared the southern band of ice, interposed between us and Upernavik.

This neighbourhood is very dangerous to navigate, and I have been since informed, that scarcely a whaler passes

by this route without striking on, or discovering, some new rock. Several were noticed by the 'Resolute,' as well as ourselves, just capped by ice, and both escaped once or twice; the 'Resolute' found out her mistake when intending to graze the ice which concealed the danger; great caution must therefore be exercised. As to fixing the position of any which we saw on the charts, it was impossible: fog and other difficulties entirely prevented our knowing where we were.

If one calmly casts his eye on the chart, and there views the dots decorating the coast, each of which is intended to represent an island—and sixty of such dots would represent sixty miles—the difficulty of placing anything there to warn navigators may be understood.

The navigator in these regions must, like the pilots of the Bermudas, carry his chart in his head, and use his eyes properly. Latitude and look-out may help him, but the water is very deep—too deep for the lead—and but few soundings on the chart.

Before quitting this neighbourhood, I will endeavour to give my own opinion as to the approach to and anchorage at Upernavik. It is necessary, in the first instance, to know the latitude and longitude of the place bound to. The anchorage point of Upernavik Bay is situated in latitude $72^{\circ} 48' N.$ and longitude $55^{\circ} 53' W.$, about one mile east of the church. The Danish vessel, which makes her annual visit, I am informed, moors within a line of rocks, in the depth of this bay, which forms a natural dock; and she is, I doubt not, in perfect security, if properly provided with ground-tackle. Our anchorage in the outer bay showed the flag-staff of the

settlement open between the two outer islands, in eleven fathoms stiff clay, with a ledge of rocks, probably, between us and the anchor, as the grinding noise of our cables evinced, and the anchors and hawsers used in warping were entangled with much kelp. The anchor was let go when the flag-staff was clear outside the rocky islet.

The approach to Upernavik is considered to be safest by "the inner passage," immediately under the high cliffy part of Anderson's Hope, inside of the two islands. When the last point on the right exhibits the eastern passage open, haul easterly and southerly withal. The settlement will be noticed about south-east, on the starboard hand, with the Danish colours flying, and a white-faced chapel beside it, unless you happen to do as we did—visit it at midnight: then, even a gun, unless charged with sovereigns, might not elicit much attention. Even the Danes have very sound ideas of luxury: in such climates it requires great inducement to get out of bed. Some of the officers of the 'Resolute,' I believe, visited the "Rookery" and Plumbago districts; but of this I am unable to give any account.

Having now, I conceive, done my duty to those mariners who may follow me (?), I shall proceed with our monotonous voyage; for really, but to seamen, I cannot flatter myself that bergs, floes, sailing ice, etc. will greatly interest any one not in want of such information. All narratives of voyages of this nature demand great indulgence from the general reader. One should possess the pen of Marryat, Hall, or Glascock, and indeed coin interesting matter, to induce any one to enter these pages.