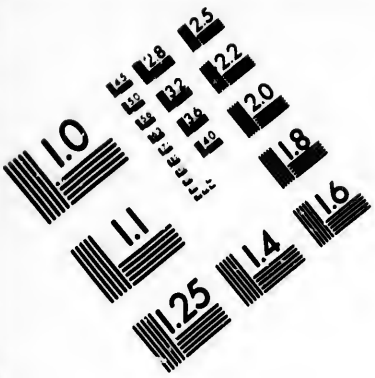

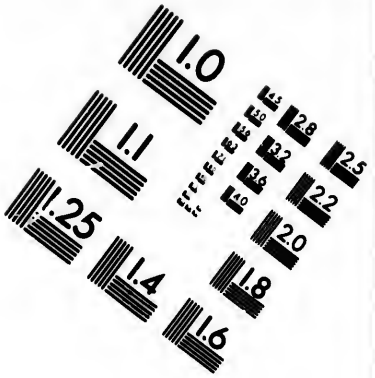

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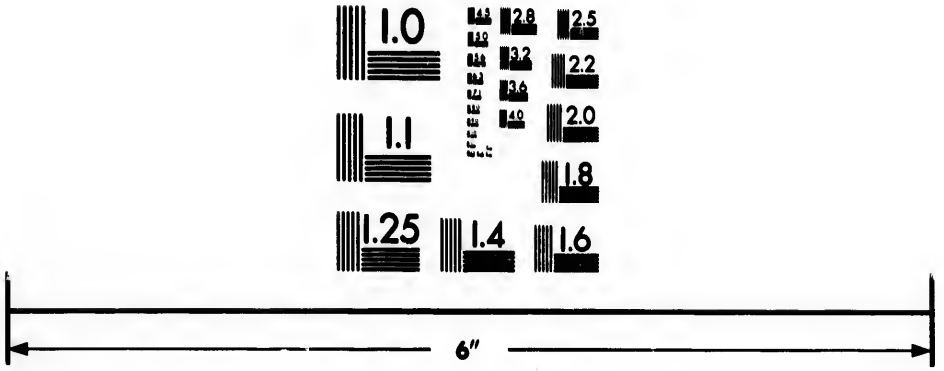

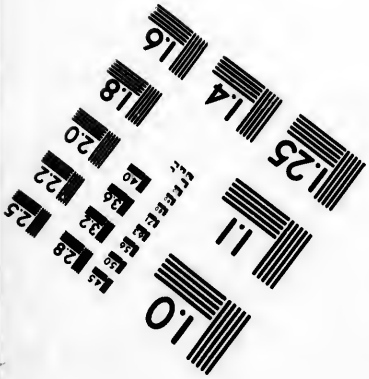

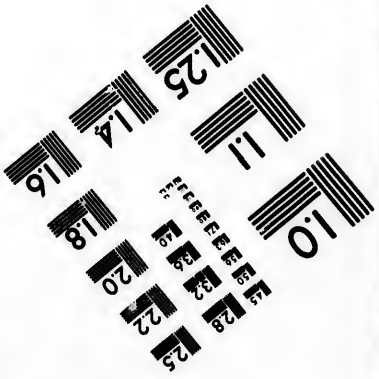

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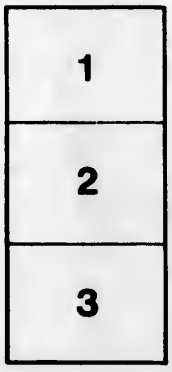
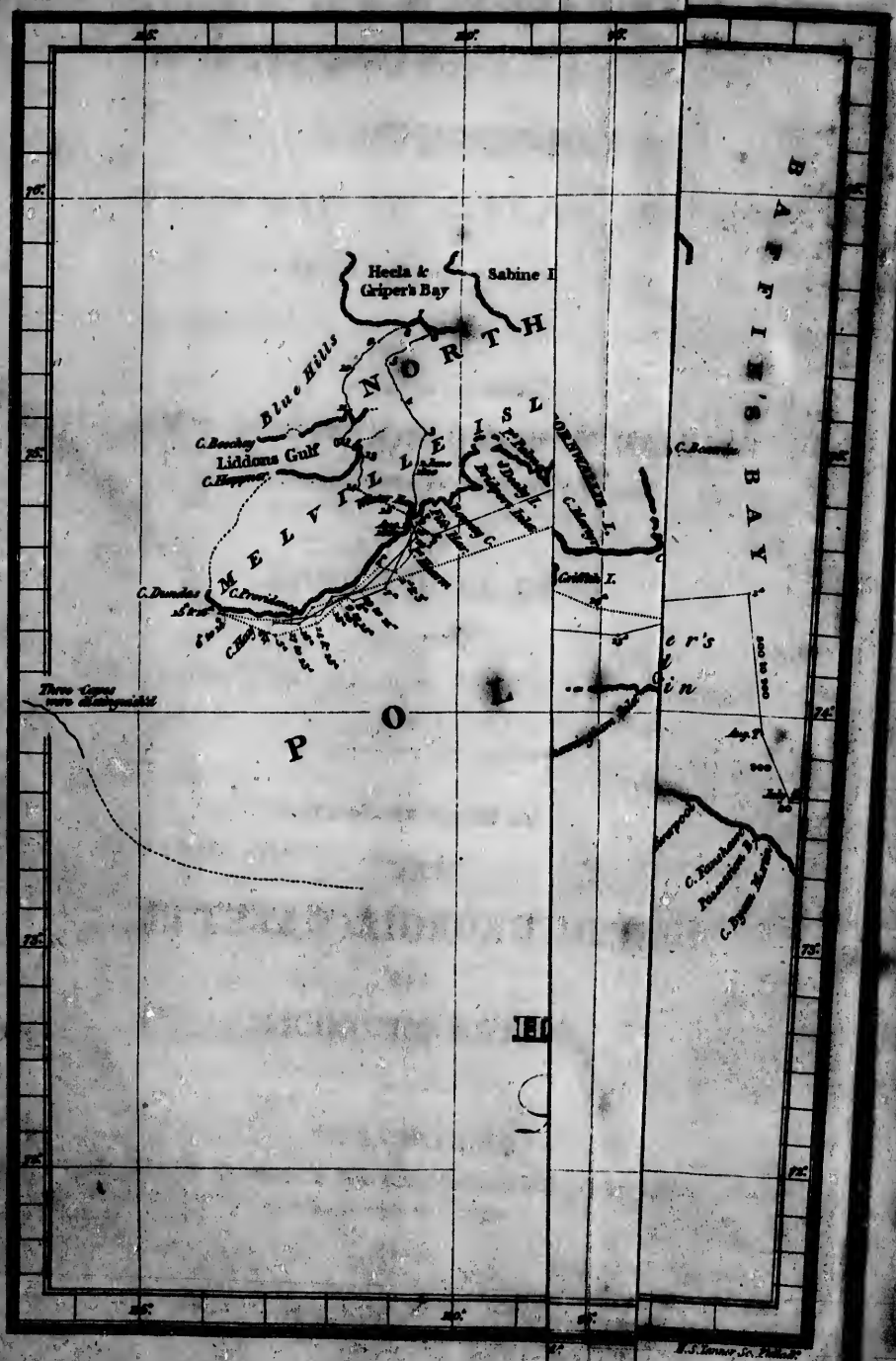
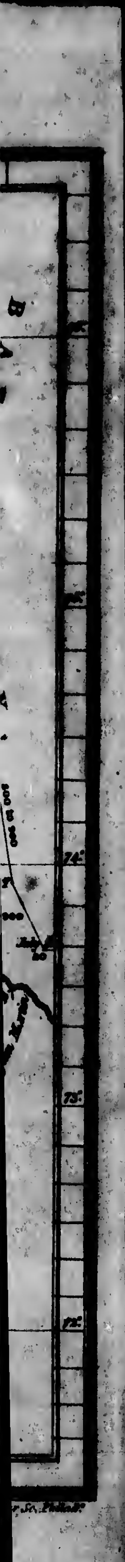



Hecla & Gripen's Bay
Sabine I.
NORTH
Blue Hills
C. Beechey
Liddons Gulf
C. Hay
MELVILLE ISL
C. Dundas
BAFFIN'S BAY
Griffin I.
POLE



JOURNAL

OF A VOYAGE FOR THE DISCOVERY OF A

NORTH-WEST PASSAGE

FROM THE ATLANTIC TO THE PACIFIC;

PERFORMED IN THE YEARS 1819–20,

IN HIS MAJESTY'S SHIPS HECLA AND GRIPER;

UNDER THE ORDERS OF

(Sir) WILLIAM EDWARD PARRY, R.N., F.R.S.,

AND COMMANDER OF THE EXPEDITION.

WITH AN APPENDIX.

PUBLISHED BY AUTHORITY OF THE LORDS COMMISSIONERS OF THE ADMIRALTY.

TO WHICH IS ADDED,

THE

NORTH GEORGIA GAZETTE,

AND

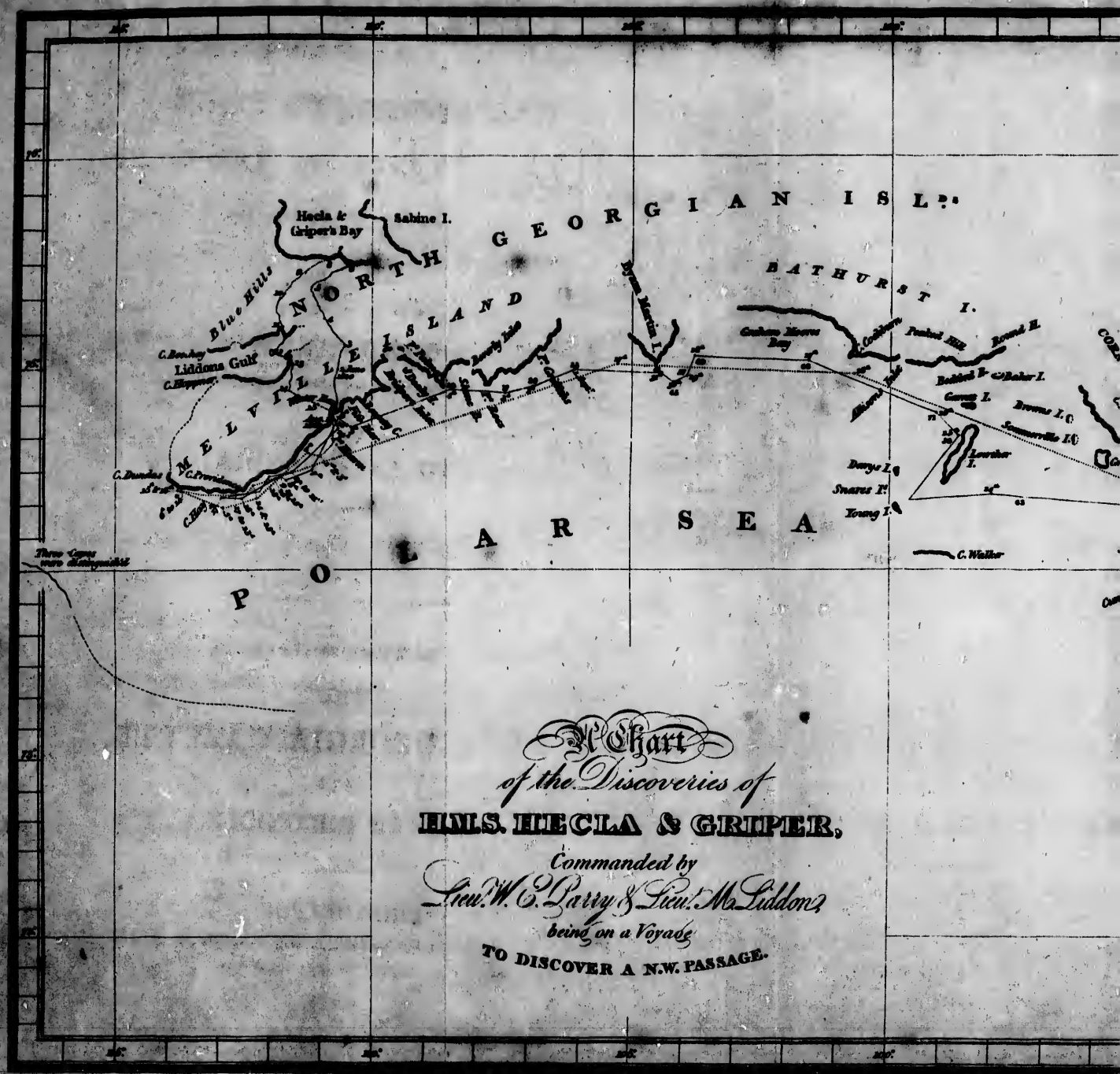
WINTER CHRONICLE.

PHILADELPHIA:

PRINTED AND PUBLISHED BY ABRAHAM SMALL,

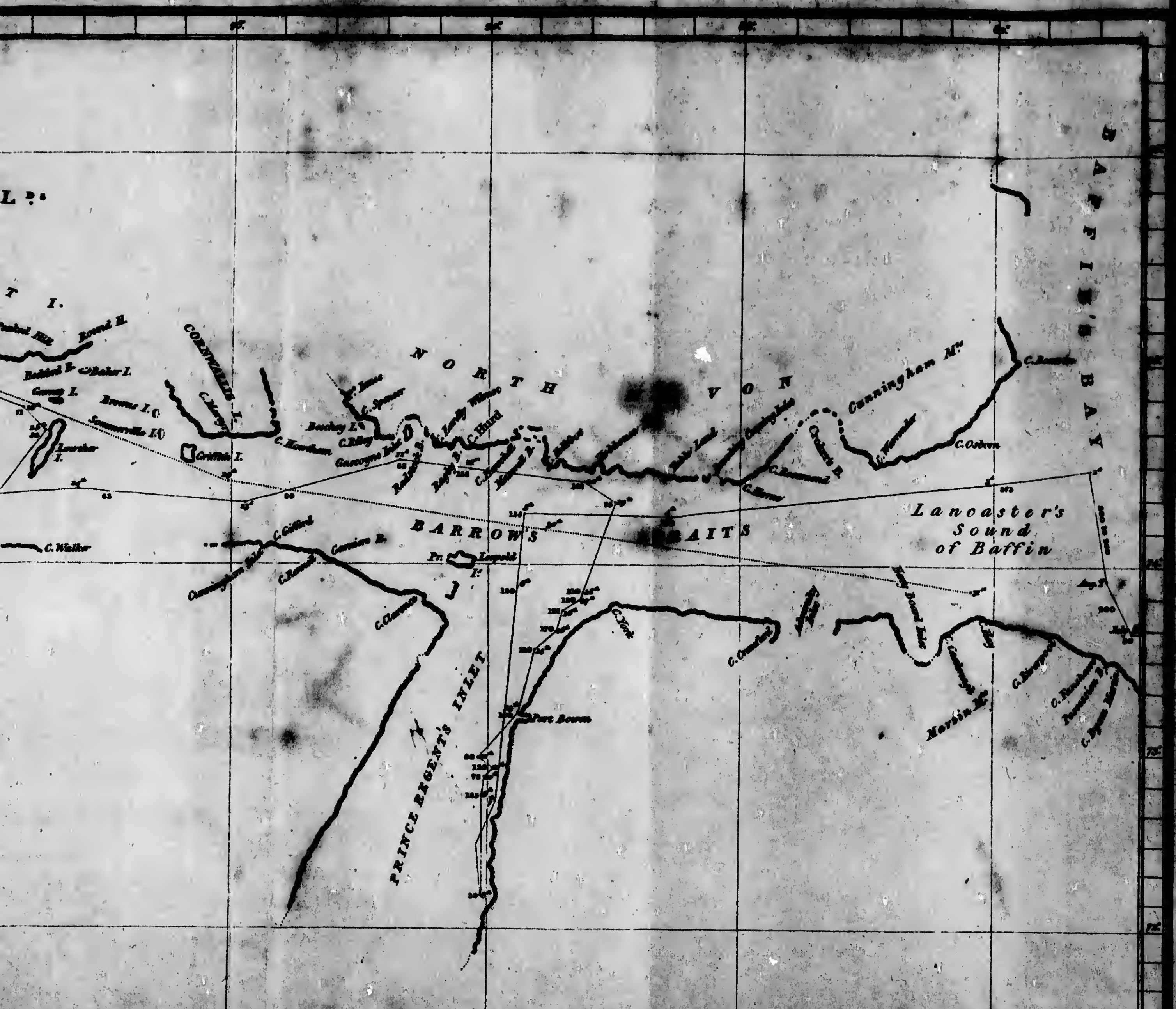
No. 165, Chesnut Street.

1821.



A Chart
of the Discoveries of
H.M.S. HECLA & GRIPER,
Commanded by
Lieut. W. E. Parry & Lieut. M. Liddon
being on a Voyage
TO DISCOVER A N.W. PASSAGE.

Published by A. Small, Pall



Published by A. Small, Philadᵃ

H.S. Tanner Sc. Philadᵃ

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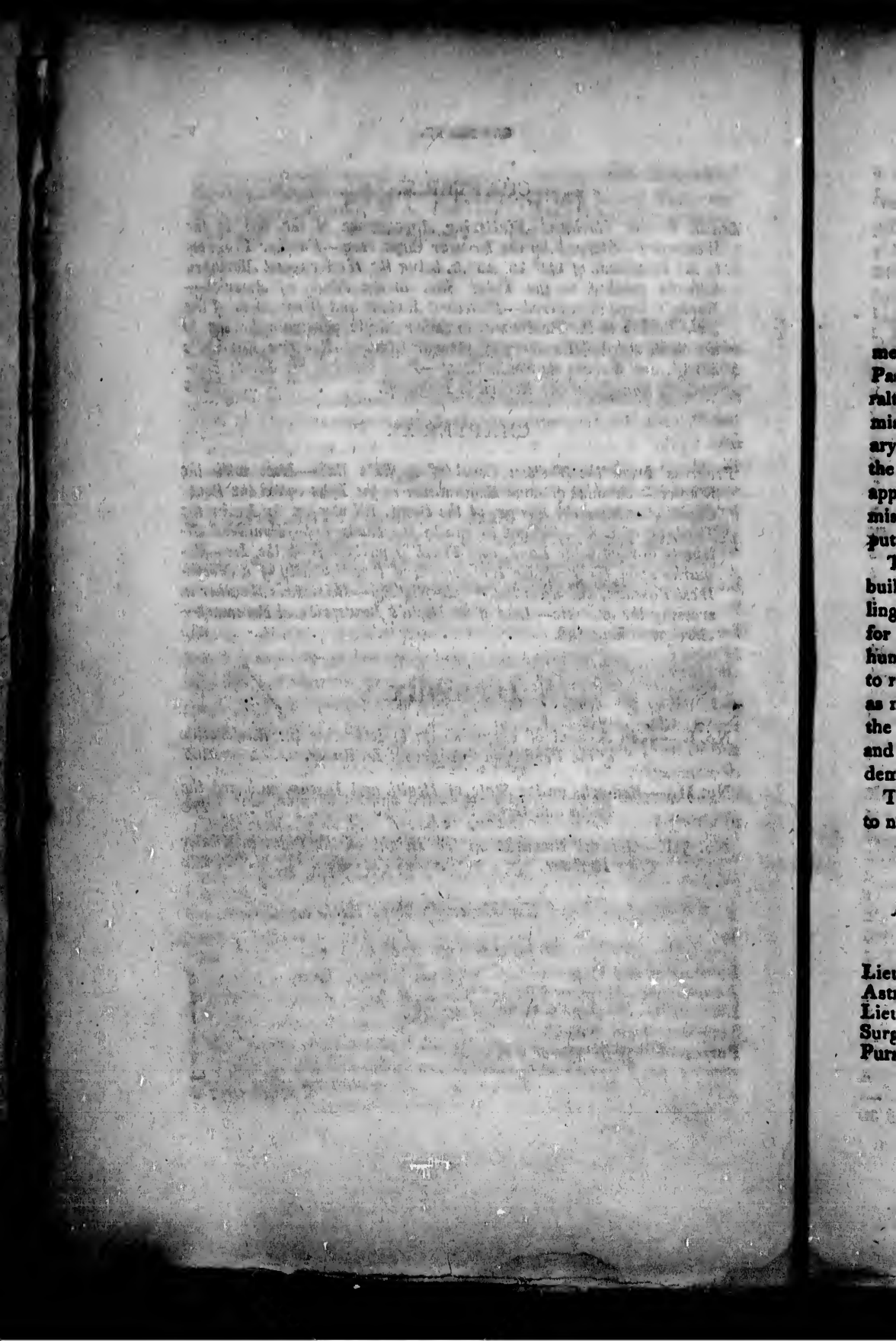


INTRODUCTION.

HIS Majesty's Government having determined on the equipment of an Expedition to attempt the discovery of a North-west Passage into the Pacific, the Lords Commissioners of the Admiralty were pleased to honour me with the command; and my Commission for His Majesty's ship Hecla, was dated the 16th of January, 1819. I arrived in London on the 20th, and commissioned the Hecla at Deptford on the following day. The second vessel appointed for this service was the Griper, gun-brig; she was commissioned by Lieutenant Matthew Liddon, who was directed to put himself under my orders, on the 29th of January.

The Hecla was a bomb, of three hundred and seventy-five tons, built in a merchant's yard at Hull, in the year 1815, of large scantling, and having a capacious hold, which made her peculiarly fit for this service. The Griper was originally a gun-brig, of one hundred and eighty tons; and it was proposed by the Navy Board to raise upon her a deck of six feet, so as to increase her stowage as much as possible. Both ships had been taken into dock about the middle of December, in order to undergo a thorough repair, and to receive every strengthening which the nature of the service demanded.

The number of individuals employed on this service, amounted to ninety-four; their distribution on board each ship is here shewn.

OFFICERS, SEAMEN, MARINES, &c.

Embarked on board His Majesty's Ships Hecla and Griper.

ON BOARD THE HECLA.

Lieutenant and Commander—William Edward Parry	1
Astronomer—Captain Edward Sabine, R.A.	1
Lieutenant—Frederick William Beechey	1
Surgeon—John Edwards	1
Purser—William Harvey Hooper	1
	—
Carried over	5

Brought over	5
Assistant Surgeon—Alexander Fisher	1
Midshipmen—Joseph Nias, William J. Dealey, Charles Palmer, James Clarke Ross, and John Bushnan	5
Clerk—James Halse	1
Gunner—James Scallon	1
Boatswain—Jacob Swansea	1
Carpenter—William Wallis	1
Greenland Master—John Allison	1
Greenland Mate—George Crawford	1
Cook	1
Leading Men	4
Quarter-Master	1
Gunner's-mate	1
Boatswain's-mate	1
Carpenter's-mate	1
Armourer's-mate	1
Sail-maker	1
Able Seamen	22
Serjeant of Marines	1
Privates of ditto	5
Serjeant of Artillery, Private of ditto } Accompanying Capt. Sabine	2
Total	58

ON BOARD THE GRIPER.

Lieutenant and Commander—Matthew Liddon	1
Lieutenant—Henry Parkyns Hoppner	1
Assistant Surgeon—Charles James Beverly	1
Midshipmen—Andrew Reid, A. M. Skene, and William Nelson Griffiths	3
Clerk—Cyrus Wakeham	1
Greenland Master—George Fife	1
Greenland Mate—Alexander Elder	1
Cook	1
Leading Men	3
Quarter-master	1
Gunner's-mate	1
Boatswain's-mate	1
Carpenter's-mate	1
Armourer's-mate	1
Sail-maker	1
Able Seamen	12
Corporal of Marines	1
Privates of ditto	4
Total	36

As an encouragement to the officers, seamen, and marines, who were desirous of being employed on this service, the Lords Commissioners of the Admiralty were pleased to grant to every individual engaged in the Expedition, double the ordinary pay of His Majesty's Navy. The ships were speedily manned with a full complement of excellent seamen; nearly the whole of those who had served on the former Expedition having again volunteered their services, besides numerous others who were anxious to be employed on this occasion.

The mode of fortifying or strengthening the ships was principally the same as that adopted on board the Isabella and Alexander in 1818. The Lords Commissioners of the Admiralty were pleased to direct the Navy and Victualling Boards to furnish every thing which the experience of the former voyage had suggested as necessary, and during the whole progress of our fitting, I received the greatest attention and assistance from those Boards, who most readily complied with every wish expressed by me for the more complete equipment of the ships.

The mode of rigging the vessels was that of a barque, as being the most convenient among the ice, and requiring the smallest number of men to work them; a consideration of no little importance, where it was a material object to sail with as few persons as possible, in order to extend our resources to the utmost. The Hecla's mizen-topsail was, therefore, taken away, and the mizen-mast, top-mast, gaff, and driver-boom lengthened, so as to make up, by a large driver and gaff-topsail, nearly the same quantity of after-sail as before, the foremast and mainmast remaining the same as on the former establishment. By this alteration we were enabled to put the ship's company into three watches, a regulation which is well known to tend very essentially to the health and comfort of seamen, while it serves also the important purpose of teaching them their own strength, and increasing their activity on occasions requiring more than ordinary exertion.

The ships were completely furnished with provisions and stores for a period of two years; in addition to which, a large supply of fresh meats and soups, preserved in tin cases, by Messrs. Donkin and Gamble, of Burkitt's essence of malt and hops, and of the essence of spruce, was also put on board, besides a number of other extra stores, adapted to cold climates, and a long voyage. The antiscorbutics consisted of lemon-juice (which forms a part of the

daily rations on board His Majesty's ships), vinegar, sour-krout, pickles, and herbs; and the whole of the provisions, which were of the very best quality, were stowed in tight casks, to preserve them from moisture or other injury. As a matter of experiment, a small quantity of vinegar, in a highly-concentrated state, recommended and prepared by Doctor Bollman, was also put on board, and was found of essential service, the greater part of the common kind being destroyed by the severity of the frost. In order to save stowage, only a small proportion of biscuit was received; flour, which had been previously kiln-dried with great care, being substituted in its place. For the purpose of baking for the daily consumption of the crews during the winter months, a portable oven was furnished to the Hecla; and after a good leaven had been once obtained, we found no difficulty in baking light and wholesome bread, even in the severest part of the season. The ships were ballasted entirely with coals, (of which the Hecla stowed seventy, and the Griper thirty-four chaldrons), together with such a quantity of fire-wood as was necessary for the stowage of the casks in the holds.

To add to our warmth, and to keep out the snow during the winter, a housing-cloth was prepared of the same materials as that with which wagons are usually covered, and which being laid on planks, supported amidships by spars lashed fore and aft between the masts, and resting with their lower ends on the gunwale, completely answered the purpose for which it was intended.

Care was taken to provide abundance of warm clothing, and one suit of the best quality was liberally furnished for each man employed in the Expedition, to be served *gratis* at my discretion. Among the numerous articles of this kind which contributed essentially to our comfort, a wolf-skin blanket was supplied for each officer and man, which, in addition to those of the common sort, effectually kept the people warm in their beds, although from the necessary economy in fuel, the temperature of the decks was frequently much below the freezing point during the nights.

To be prepared against the chances of meeting with any natives in the countries which we were about to visit, the ships were directed to be furnished with a large quantity of various kinds of presents, both to secure their friendship, and to purchase any supplies of which we might stand in need. In short, nothing was

omitted which could in any degree tend to the success of the enterprise, or to the health, convenience, and comfort of those engaged in it. I feel myself particularly indebted to the kindness of Commissioner Cunningham, and the officers employed under him in the different departments of the dock-yard at Deptford, in complying with, and even anticipating, my wishes for the promotion of these objects. My thanks are also due, in an especial manner to my friend Captain Henry Garrett, agent victualler at that port, whose ready attention to all our wants in his public department, could only be equalled by the warm hospitality we experienced from him during the time of our equipment.

While care was thus taken that nothing should be wanting to ensure the success of the Expedition in its main object, the improvement of geography and navigation, as well as the general interests of science, were considered as of scarcely less importance. For this purpose, a number of valuable instruments, (of which a list is subjoined), were furnished to each ship; and Captain Sabine, of the Royal Artillery, who was recommended by the President and Council of the Royal Society, was embarked on board the Hecla, as Astronomer to the Expedition.

Previously to our leaving Deptford, the ships were visited by Viscount Melville, who presided at the Admiralty, as well as by several of the Lords Commissioners, and by the Comptroller of the Navy, who were pleased to express their satisfaction at the manner in which their directions and intentions had been complied with in the general equipment of the Expedition. On the 2d of May, I repaired to the Admiralty, to receive their Lordship's final Instructions for the conduct of the Expedition, a copy of which immediately precedes the Narrative.

List of the Instruments, &c. embarked on board each of the two Ships.

Those marked with an Asterisk were furnished to the Hecla only.

* 2 Astronomical Clocks, with stands.

11 Chronometers on board the Hecla, and four on board the Griper.

* 1 Transit instrument.

* 1 Portable observatory.
* 1 Repeating circle.
1 Dipping-needle. * A second ditto, the property of Henry Browne, esq.
* 1 Instrument for magnetic force, on Captain Kater's improved construction.
* 1 Variation transit.
* 1 Variation needle.
4 Azimuth compasses, on Captain Kater's improved construction.
1 Dip-sector, invented by Dr. Wollaston.
2 Mountain barometers.
2 Marine ditto.
2 Altitude instruments, invented by Captain Kater.
1 Theodolite.
2 Anglometers.
1 Circular protractor.
3 Artificial horizons.
1 Hydrometer.
1 Water-bottle, invented by Dr. Marcet.
10 Thermometers.
* 4 Self-registering ditto, (Size's), with iron cases for fastening to the deep-sea lead.
* 2 Electrometers, with chains.

Together with a complete set of drawing instruments, scales, beam-compasses, &c. for the construction of charts.

On our return to England, in the beginning of November, 1820, all the journals, logs, charts, and drawings, which had been furnished by every individual belonging to the Expedition, were delivered to the Lords Commissioners of the Admiralty, to be at their disposal; and their Lordships were pleased immediately to direct them to be returned into my hands, for the purpose of preparing for publication, under their authority, an official account of the voyage.

In performing this duty, it has been my earnest endeavour equally to avoid, on the one hand, a too minute and tedious detail of occurrences, which, as the materials for a future account, properly form a part of a manuscript journal, but which, if given in their original form, would only serve to tire by their repetition; and on

the other, to omit nothing which came under my notice, and that may be considered interesting, either by the scientific or the general reader.

The following account of the proceedings of the Expedition is taken principally from the official Journal kept by myself on board the Hecla, and always written within twenty-four hours after the occurrence of the events recorded in it. In several instances, however, I have been happy to avail myself of the journals or reports furnished by the other officers, in all which cases the obligation is acknowledged by inverted commas, and by personally mentioning the individual who supplied the account.

The Chart in this volume, comprising surveys of every coast visited by the Expedition during the voyage, is reduced from those drawn on board the Hecla under my immediate inspection, by Mr. Bushnan, Midshipman of that ship, a gentleman well skilled in the construction of charts, and in the art of marine surveying. The original is lodged in the Hydrographical Office of the Admiralty, together with a detailed account of all the angles and other materials used in their construction. As it was known that no reliance could be placed on the compasses from the spot where our discoveries commenced (namely, from the entrance of Sir James Lancaster's Sound, westward), it was determined, from the first, altogether to reject magnetic bearings in the construction of the charts, using only those deduced astronomically from the sun's altitude and azimuth, together with its angular distance from the object whose true bearing was required. Astronomical bearings were always thus obtained at the same time with observations for latitude and longitude. Whenever it was considered expedient to take them at other times, the log was of necessity resorted to, in order to obtain the ship's place from the nearest observation; and when this time happened to fall nearly midway between two observations, the mean of the reckoning, worked backwards, and forwards, was taken to fix the ship's place. In the selection of angles for the construction of the charts, those have, for obvious reasons, been preferred, which were most easterly or westerly, when an observation for latitude was made; and those which were most northerly or southerly, at the time of an actual observation for determining the longitude. When angles only were taken, that is, when the sun was obscured so as to prevent the possibility of obtaining his altitude and azimuth, the angles were used by laying

them off from one or more points, whose geographical position had been previously fixed; and by this means, in many instances, the former angles have been found to correspond and intersect accurately, when there would otherwise have been considerable doubt as to the exact place of the ship. The observations for latitude and longitude have been seldom or never made by less than two, and frequently by three or four, observers, and a mean of these used in the construction of the chart. The observers were generally Captain Sabine, Lieutenant Beechey, Mr. Hooper, and myself; the angles were taken with a sextant; sometimes by myself, and sometimes by Lieutenant Beechey, to whose skill and industry in this department of my duty, I am happy to acknowledge myself very materially indebted.

To avoid unnecessary repetition in the course of the following Narrative, it must be remarked that all the bearings are the *true* ones, unless otherwise expressly noticed; and the whole of the latitudes are *North*, and the longitudes *West* from the meridian of Greenwich. The temperatures were registered entirely by Fahrenheit's thermometer, and it may be necessary to inform the general reader, that the signs + and — preceding any number of degrees, signify above or below *zero* of that scale.

The temperature of the sea at different depths was obtained, unless otherwise noticed, by Sixe's self-registering thermometer, confined in an iron case, and attached to the deep-sea lead. The bottle used for bringing up water from different depths below the surface, was invented by Doctor Marcet, expressly for the use of this Expedition. It consists of a strong and heavy cylindrical box of cast iron, having a small aperture at each end; through these apertures passes a bolt which, when let down into its place, completely closes them, but when held up by means of a catch in the upper part of the box, allows the water to pass through them freely, both at the top and bottom. Being thus set, it is let down to any depth required, by a line passing through a hole in a spherical iron weight about the size of a four-pounder shot, which is retained on board till the instrment is low enough; the weight is then let go, and running rapidly down the line, strikes the catch so as to release it, and close the apertures, confining the water which has entered the cylinder. This instrument, from its extreme simplicity, and the certainty with which it obtains the water from a

known depth, seems the best of any which has yet been adopted for this purpose.

Care has been taken to avoid, as much as possible, the use of technical expressions, which might serve to render the Narrative unintelligible to any but seamen: as, however, such expressions cannot at all times be dispensed with, especially in the navigation among ice, the nature of which is totally different from any other, I have subjoined an Explanation of the few terms of this kind which occur in the course of my Journal.

I had once thought to have cursorily drawn up a connected Narrative of the numerous efforts and the results of former Expeditions, sent out, by this country and other maritime nations, to explore the Arctic regions, from the earliest periods to the present time; but as this would have occupied a considerable space, and, after all, would have been but a brief abstract of what Forster, Burney, and Barrow, have already done, it appeared, on second thoughts, a superfluous undertaking. My motive indeed, it must be frankly owned, was rather of a selfish kind, the gratification of myself and comrades, by thus bringing together the repeated exertions of two centuries, and those of a single voyage, and by instituting a comparison of their results, so favourable and so flattering to all of us who had the good fortune to be employed on that voyage. Here, however, I must be permitted to say that, whatever the extent of our success may have been, it is to be ascribed, in a great degree, to the zealous and cordial co-operation of Lieutenant Liddon and all the officers of both ships, and the uniform good conduct of the men, to all of whom, collectively and individually, I am most happy in availing myself of this opportunity, of publicly rendering that justice which is so eminently their due.

In closing this introductory part of the work, I would willingly offer a few words by way of apology, for the many faults which, I am but too well convinced, will be found in the style, of the Narrative. It has been said, "*Les marins écrivent mal, mais avec assez de candeur.*" None can feel more deeply than myself the truth of the former part of this assertion; and none, I can with equal sincerity aver, have studied more to deserve the concluding part; but I build my chief hopes of disarming the severity of criticism, on a consideration of that early period of life at which the nature of our profession calls us from our studies, and which, in my own case, drew me away at the age of twelve, and has kept me con-

stantly employed at sea ever since. The extent of my aim has been, to give a plain and faithful account of the facts which I collected, and the observations which were made by myself and others, in the course of the voyage; and these, as far as they go, may be relied on as scrupulously exact. It is for others, better qualified than ourselves, to make their deductions from those facts.

EXPLANATION OF TECHNICAL TERMS

Made Use of in the course of the following Narrative.

Bay-Ice.—Ice newly formed upon the surface.

Beset.—The situation of a ship, when so closely surrounded by ice, as to prevent her sailing about.

Bight.—An indentation in a floe of ice, like a bay, by which name it is sometimes called.

Blink.—A peculiar brightness in the atmosphere which is almost always perceptible in approaching ice, or land covered with snow.—Land-blink is usually more yellow than that of ice.

Bore.—The operation of "boring" through loose ice consists in entering it under a press of sail, and forcing the ship through by separating the masses.

Clear Water.—The sea unincumbered with ice.

Crow's-Nest.—A circular house, like a cask, fixed at the mast-head, in which the look-out man sits, either to guide the ship through the ice, or to give notice of whales.

Dock.—An artificial dock is formed by cutting out with saws a square space in a thick floe, in which a ship is placed, in order to secure her from the pressure of other masses which are seen to be approaching, and which might otherwise endanger her being "nipped."—A "natural dock" is simply a small bight, accidentally found under similar circumstances.

Field.—A sheet of ice, generally of great thickness, and of such extent that its limits cannot be seen from a ship's mast-head.

Floe.—The same as a field, except that its extent can be distinguished from a ship's mast-head.—A "bay-floe" is a floe of ice newly formed upon the surface.

A Hole, or Pool of Water.—A small space of clear water, surrounded by ice on every side.

Land Ice.—Ice attached to the land, either in floes, or in heavy grounded masses, forced up near the shore by external pressure.

A Lead.—A channel through the ice.—A ship is said to take a right lead, when she follows that channel which conducts her into a clear, or at least, a navigable sea, and *vice versâ*.

Nipped.—To be forcibly pressed between two or more masses of ice.

A Pack.—A large body of loose ice, whose extent cannot be seen.

A Patch of Ice.—The same as a pack, but of small dimensions.

Sailing Ice.—Ice of which the masses are so much separated, as to allow a ship to sail among them without great difficulty.

A Tongue.—A mass of ice projecting under water, in a horizontal direction, from an ice-berg or floe.—A ship sometimes grazes, or is set fast on a tongue of ice, which may, however, generally be avoided, being easily seen in smooth water.

A Water-Sky.—A certain dark appearance of the sky which indicates clear water in that direction, and which, when contrasted with the blink over ice, or land, is very conspicuous.

Young Ice.—The same as bay-ice.

OFFICIAL INSTRUCTIONS.

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

WHEREAS we have thought fit to appoint you to the command of an Expedition, for the purpose of endeavouring to discover a North-west Passage from the Atlantic to the Pacific Ocean; you are hereby required and directed to put to sea in the Hecla, and, in company with the Griper, which, with her commander

Lieutenant Liddon, has been placed under your orders, make the best of your way to the entrance of Davis' Strait.

On your arrival in this Strait, your further proceedings must be regulated chiefly by the position and extent of the ice; but, on finding it sufficiently open to permit your approach to the western shores of the Strait, and your advance to the northward as far as the opening into Sir James Lancaster's Sound, you are to proceed in the first instance to that part of the coast, and use your best endeavours to explore the bottom of that Sound; or, in the event of its proving a strait opening to the westward, you are to use all possible means, consistently with the safety of the two ships, to pass through it, and ascertain its direction and communications; and if it should be found to connect itself with the northern sea, you are to make the best of your way to Behring's Strait.

If, however, you should ascertain that there is no passage through Sir James Lancaster's Sound, but that it is enclosed by continuous land, or so completely blocked up with ice as to afford no hope of a passage through it, you are in that case to proceed to the northward, and in like manner examine Alderman Jones's Sound. Failing to find a passage through this Sound, you are to make the best of your way to Sir Thomas Smith's Sound, which is described by Baffin as the largest in the whole bay; and carefully explore, as far as practicable, every part of it, as well as of any strait you may discover, leading from it into any other sea. On failing to make a passage through this Sound, you are to return to the southward down Baffin's Bay, and endeavour to make your way through Cumberland Strait, or any opening in that neighbourhood which may lead you to the seas adjoining the eastern or northern coast of America; you are then, by whatever course you may have reached these seas, to pursue your voyage along that coast, to the northward or westward to Behring's Strait.

We have hitherto supposed that, on your first arrival in Davis' Strait, the navigation to the northward shall be found practicable. If, however, you should find the contrary to be the case, and that the sea towards the western side of the Strait is so loaded with ice, as to render it difficult and dangerous for the ships to proceed so far to the northward as Lancaster Sound, at so early a period of the season; it may be advisable, in that case, to endeavour in the first instance, to examine Cumberland Strait, or any other opening that may be likely to bring you to the eastern coast of America, in pre-

ference to the loss of time and the danger to the ships, which might be occasioned in persevering too anxiously in the attempt to get to Lancaster Sound; and should you, on your first reaching Davis' Strait, find it to be impracticable to make your way up the western side of the Strait to that Sound, or even to Cumberland Strait, you will understand that you are at liberty to proceed towards those places, going round by a more easterly track, if the state of the ice, and all other circumstances, should induce you to think it most advisable to do so. Thus, although the track, which we wish you to pursue, if practicable, is pointed out; you will, nevertheless, perceive, that the course to be finally adopted by you for getting to the northward, is, in fact, left to your own discretion, on a careful examination into the state of the ice on your arrival in Davis' Strait; always bearing in mind, that, it is an important object of the Expedition, that Lancaster Sound be thoroughly examined by you, and afterwards those of Jones and Smith, if you should have failed in previously finding a passage to the westward.

Should you be so successful as to find a passage to the westward, it will be advisable to make the best of your way, without stopping to examine any part of the northern coast of America, to Behring's Strait; and if you should fortunately accomplish your passage through that Strait, you are then to proceed to Kamtschatka (if you think you can do so without risk of being shut up by the ice on that coast), for the purpose of delivering to the Russian Governor, duplicates of all the Journals and other documents which the passage may have supplied, with a request that they may be forwarded over land to St. Petersburgh, to be conveyed from thence to London. From Kamtschatka you will proceed to the Sandwich Islands, or Canton, or such other place as you may think proper, to refit the ships and refresh the crews; and, if during your stay at such place, a safe opportunity should occur of sending papers to England, you should send duplicates by such conveyance. And, after having refitted and refreshed, you are to lose no time in returning to England, by such route as you may deem most convenient.

If, at any period of your voyage, but particularly after you shall have doubled the north-eastern extremity of America, the season shall be so far advanced as to make it unsafe to navigate the ships, on account of the long nights having set in, and the sea not being free from ice; and the health of your crews, the state of the ships,

and all concurrent circumstances, should combine to induce you to form the resolution of wintering in those regions, you are to use your best endeavours to discover a sheltered and safe harbour, where the ships may be placed in security for the winter; taking such measures for the health and comfort of the people committed to your charge, as the materials with which you are supplied for housing in the ships, or hutting the men on shore, may enable you to do. And, if you shall find it expedient to resort to this measure, and you should meet with any inhabitants, either Esquimaux or Indians, near the place where you winter, you are to endeavour, by every means in your power, to cultivate a friendship with them, by making them presents of such articles as you may be supplied with, and which may be useful or agreeable to them. You will, however, take care not to suffer yourself to be surprised by them, but use every precaution, and be constantly on your guard against any hostility.

You will endeavour to prevail on them, by such reward, and to be paid in such manner, as you may think best to answer the purpose, to carry to any of the settlements of the Hudson's Bay Company, or of the North-West Company, an account of your situation and proceedings; with an urgent request that it may be forwarded to England with the utmost possible despatch.

In an undertaking of this description, much must, of course, be always left to the discretion of the commanding officer; and, as the objects of this Expedition have been fully explained to you, and you have already had some experience on service of this nature, we are convinced we cannot do better than leave it to your judgment, when on the spot, in the event of your not making a passage this season, either to winter on the coast, with the view of following up next season, any hopes or expectations which your observations this year may lead you to entertain, or to return to England, to report to us the result of such observations; always recollecting our anxiety for the health, comfort, and safety of yourself, your officers, and men; and further considering how far the advantage of starting next season from an advanced position, may not be counter-balanced by what may be suffered during the winter, and by the want of such refreshment and refitting, as would be afforded by your return to England.

We deem it right to caution you against suffering the two vessels placed under your orders to separate, except in the event of

accident or unavoidable necessity, and we desire you to keep up the most unreserved communications with the commander of the Griper; placing in him every proper confidence, and acquainting him with the general tenor of your orders, and with your views and intentions, from time to time, in the execution of them; that the service may have the full benefit of your united efforts in the prosecution of such a service; and that, in the event of unavoidable separation, or of any accident to yourself, Lieutenant Liddon may have the advantage of knowing, up to the latest practicable period, all your ideas and intentions, relative to a satisfactory completion of this interesting undertaking.

We also recommend, that as frequent an exchange take place, as conveniently may be, of the observations made in the two ships; that any scientific discovery made by the one be, as quickly as possible, communicated for the advantage and guidance of the other, in making their future observations; and to increase the chance of the observations of both being preserved.

We have caused a great variety of valuable instruments to be put on board the ships under your orders; of which you will be furnished with a list, and for the return of which you will be held responsible; and we have also, at the recommendation of the President and Council of the Royal Society, ordered to be received on board the Hecla, Captain Sabine, of the Royal Artillery, who is represented to us as a gentleman well skilled in Astronomy, Natural History, and various branches of knowledge, to assist you in making such observations as may tend to the improvement of Geography and Navigation, and the advancement of science in general. Amongst other subjects of scientific inquiry, you will particularly direct your attention to the variation and inclination of the magnetic needle, and the intensity of the magnetic force; you will endeavour to ascertain how far the needle may be affected by the atmospherical electricity, and what effect may be produced on the electrometer and magnetic needle on the appearance of the Aurora Borealis. You will keep a correct register of the temperature of the air, and of the sea, at the surface and at different depths. You will cause the dip of the horizon to be frequently observed by the dip sector, invented by Dr. Wollaston; and ascertain what effect may be produced by measuring that dip across fields of ice, as compared with its measurement across the surface of the open sea. You will also cause frequent observations to be made for as-

certaining the refraction, and what effect may be produced by observing an object, either celestial or terrestrial, over a field of ice, as compared with objects observed over a surface of water: together with such other meteorological remarks as you may have opportunities of making. You are to attend particularly to the height, direction, and strength of the tides, and to the set and velocity of the currents; the depth and soundings of the sea, and the nature of the bottom; for which purpose you are supplied with an instrument better calculated to bring up substances than the lead usually employed for this purpose.

And you are to understand, that although the finding a passage from the Atlantic to the Pacific is the main object of this Expedition, yet, that the ascertaining the correct position of the different points of the land on the western shores of Baffin's Bay, and the different observations you may be enabled to make with regard to the magnetic influence in that neighbourhood, supposed to be so near the position of one of the great magnetic poles of the earth, as well as such other observations as you may have opportunities of making in Natural History, Geography, &c., in parts of the globe, &c., little known, must prove most valuable and interesting to the science of our country; and we, therefore, desire you to give your unremitting attention, and to call that of all the officers under your command, to these points; as being objects likely to prove of almost equal importance to the principal one before-mentioned, of ascertaining whether there exist any passage to the northward, from the one ocean to the other.

For the purpose, not only of ascertaining the set of the currents in the Arctic Seas, but also of affording more frequent chances of hearing of your progress, we desire that you do, frequently after you have passed the latitude of 65° north, and once every day, when you shall be in an ascertained current, throw overboard a bottle closely sealed, and containing a paper stating the date and position at which it is launched; and you will give similar orders to the Commander of the Griper, to be executed in case of separation; and, for this purpose, we have caused each ship to be supplied with papers, on which is printed, in several languages, a request, that whoever may find it should take measures for transmitting it to this office.

And although you are not to be drawn aside from the main object of the service on which you are employed, as long as you may

be enabled to make any progress; yet, whenever you may be impeded by the ice, or find it necessary to approach the coasts of the continent or islands, you are to cause views of bays, harbours, headlands, &c., to be carefully taken, to illustrate and explain the track of the vessels, or such charts as you may be able to make; in which duty you will be assisted by Lieutenants Beechey and Hoppner, whose skill in drawing is represented to be so considerable, as to supersede the necessity of appointing professional draughtsmen.

You are to make use of every means in your power to collect and preserve such specimens of the animal, mineral, and vegetable kingdoms, as you can conveniently stow on board the ships; and of the larger animals you are to cause accurate drawings to be made, to accompany and elucidate the descriptions of them: in this, as well as in every other part of your scientific duty, we trust that you will receive material assistance from Captain Sabine.

In the event of any irreparable accident happening to either of the two ships, you are to cause the officers and crew of the disabled ship to be removed into the other; and with her singly to proceed in prosecution of the voyage, or return to England, according as circumstances shall appear to require; understanding that the officers and crews of both ships are hereby authorised and required to continue to perform their duties, according to their respective ranks and stations, on board either ship to which they may be so removed, in the event of an occurrence of this nature. Should, unfortunately, your own ship be the one disabled, you are, in that case, to take the command of the Griper; and, in the event of any fatal accident happening to yourself, Lieutenant Liddon is hereby authorised to take the command of the Hecla, placing the officer of the Expedition, who may then be next in seniority to him in command of the Griper; also, in the event of your own inability by sickness or otherwise, at any period of this service, to continue to carry these Instructions into execution, you are to tranfer them to the officer the next in command to you employed on the Expedition, who is hereby required to execute them in the best manner he can, for the attainment of the several objects in view.

His Majesty's Government having appointed Lieutenant Franklin to the command of an expedition to explore the northern coast of North America, from the mouth of the Copper-mine River of Hearne; it would be desirable, in the event of your touching on

that coast, to leave some testimonial of your having been there, with the date, and such circumstances as you may find convenient, for the lieutenant's information; and you will do the same wherever you may stop on that coast, by erecting a pole, having a flag, or some other mark by which it may be distinguished at a distance, (and you should endeavour to place such mark on the situation in which it may be most extensively visible,) and burying a bottle at the foot of it, or otherwise, containing an abstract of your proceedings and future intentions; corresponding instructions having been given to Lieutenant Franklin to leave a similar notice at any convenient part of the coast which he may discover between the mouth of the said river and the eastern part of North America.

You are, while executing the service pointed out in these Instructions, to take every opportunity that may offer of acquainting our Secretary, for our information, with your progress: and on your arrival in England, you are immediately to repair to this office, in order to lay before us a full account of your proceedings in the whole course of your voyage; taking care, before you leave the ship, to demand from the officers, petty officers, and all other persons on board, the logs and journals they may have kept; together with any drawings or charts they may have made; which are all to be sealed up; and you will issue similar directions to Lieutenant Liddon and his officers, &c.; the said logs, journals, or other documents, to be thereafter disposed of as we may think proper to determine.

Given under our hands the 1st day of May, 1819.

(Signed) MELVILLE,
G. MOORE,
G. COCKBURN.

By Command of their Lordships,
(Signed) J. W. CROKER.

To *Lieutenant William Edward Parry,*
Commanding His Majesty's Ship
the HECLA.

VOYAGE FOR THE DISCOVERY

OF A

NORTH-WEST PASSAGE.

CHAPTER I.

Passage across the Atlantic—Enter Davis' Strait—Unsuccessful attempt to penetrate the Ice to the Western Coast—Voyage up the Strait—Passage through the Ice to the Western Coast—Arrival off Possession Bay, on the southern side of the entrance into Sir James Lancaster's Sound.

THE HECLA and GRIPER were ready to drop down the river in the early part of April; but, the wind continuing to the eastward, the pilots would not venture to turn them down. The wind remained in the same quarter till the beginning of May, beyond which time it would not have been prudent to delay our moving. Application was, therefore, made for a steam-boat to tow the ships to Northfleet, and on the 4th, at eight A.M., the Hecla was taken in tow by the Eclipse, of sixty-horse power. With a fresh breeze right a-head, she moved at the rate of three miles and a-half an hour through the water, and was made fast to the buoy at Northfleet at a quarter past noon. The steam-boat returned to Deptford for the Griper, and arrived with her at night.

The guns and gunner's stores were received on board on the 6th; and all the iron being now stowed, as it would probably remain for the rest of the voyage, the afternoon of that day was occupied in obtaining some steady observations on the irregularities of the magnetic needle on board the Hecla, by turning her head round to each point of the compass in succession.

The ships took their powder on board on the 7th, and moved to the Lower-Hope. On the evening of the following day they anchored at the Nore, where the instruments and chronometers were embarked. I furnished Lieutenant Liddon with a complete copy of the instructions which I had received from the Lords Commissioners of the Admiralty, together with an order contain-

ing general directions for the economical use of the provisions and stores, and for the mode of registering the various observations to be made during the voyage; appointing also certain places of rendezvous in case of unavoidable separation.

Captain Sabine went on shore at Garrison-Point, on the 9th, to make observations on the magnetic force with some needles of a new construction by Captain Henry Kater.

Commissioner Boyle came on board on the evening of the 10th, to superintend the payment of the arrears of wages, and three months' advance, to the seamen and marines. On the following day, when the men had supplied themselves with a sufficient stock of clothes, according to a list which had been previously issued, the ships weighed at ten A.M., and at noon were abreast the Nore-light. The wind being free, the Hecla, at sunset, had outsailed the Griper about three miles.

Finding the Griper continued to detain us this morning, I determined to take her in tow, and at three P. M. we ran through Yarmouth Roads, but anchored in the evening with the flood-tide, the wind being too light to enable the ships to stem it. Soon after midnight we again weighed, the wind having got round to the N.b.W. On the morning of the 14th, in beating to the northward, the Hecla touched the ground on the east end of Sheringham-Shoals, Cromer Light-house bearing S.b.E. per compass. The pilot should not have brought it to the eastward of south, on which bearing there is no danger. Finding the ships made no way, and that it would not be practicable to anchor with the ice-tide, we bore up for Yarmouth Roads, and anchored within the Cockle Gat at two P.M.

At noon on the following day, while getting under weigh, I received a visit from Captain Wells, of His Majesty's sloop the Wye, who kindly offered every assistance in his power, and sent us our last supply of English beef, as we passed his ship. A favourable breeze springing up on the morning of the 16th, the Griper was taken in tow, and at two P.M. on the 19th, we made Fair Island.

It fell calm in the evening, and several fine cod (*Gadus Morhua*) and coal-fish (*Gadus Carbonarius*) were caught; the centre of the island bearing N.E. half N. per compass, distant eight or nine miles. This was the last supply of fresh fish that we obtained during the voyage. It was light enough at midnight to see Fair Island distinctly at the distance of ten miles.

On the 20th, we spoke the Danish brig David Eske, from Copenhagen, bound to Disko Island. The Griper was taken in tow again in the evening, and we rounded the northern point of the Orkneys, at the distance of two miles and a half, having from thirty to thirty-six fathoms of water.

We made the island of Rona on the 21st, and Bara on the fol-

lowing morning. The position of these islands by our observations is:

	BARA.	RONA.
Latitude, -	59° 04′ 24″	59° 05′ 54″
Longitude, -	6° 14′ 34″	5° 52′ 04″.

As we ran along to the northward of them, at the distance of six or seven miles, the soundings were from fifty to seventy-five fathoms, the deepest being off Bara, on a bottom of gravel, coarse sand, and broken shells.

It is recommended by the most experienced of the Greenland Masters, to cross the Atlantic to Davis' Strait, about the parallel of 57½° or 58°, and I shaped our course accordingly. A bottle was thrown overboard, containing a printed paper, stating the date and the situation of the ships, with a request, in six European languages, that any person finding it would forward it to the Secretary of the Admiralty, with a notice of the time and place where it was found.* One bottle at least was thrown out daily during the voyage, except when the ships were "beset" in the ice.

The wind being right aft on the morning of the 24th, the Griper, still in tow, took the wind out of our sails, and forged a-head, obliging us to cast off the hawser. Soon after noon we made Rockall; its latitude, by our observations, was 57° 38′ 40″, and its longitude 13° 47′ 42″. The geographical position of this remarkable rock was determined by Captain Capel, in 1818, to be latitude 57° 39′ 32″, longitude 13° 31′ 16″, which is to be preferred to ours, owing to the distance at which we passed it. There is, perhaps, no more striking proof of the infinite value of chronometers at sea, than the certainty with which a ship may sail directly for a single rock like this, rising like a speck out of the ocean, and at the distance of forty-seven leagues from any other land. At seven P.M., the Griper having again dropped five or six miles astern, we hove to for her to come up; and, taking this opportunity to try the temperature of the water below the surface by Six's self-registering thermometer, we unexpectedly obtained soundings in one hundred and forty fathoms, on a bottom of very fine white sand, Rockall bearing S. 85° E., distant thirty miles and three quarters. The temperature of the water at the bottom was 47½°, that of the surface being 49½°, and of the air 50°. The Griper was again taken in tow, with a breeze from the eastward, which increased to a fresh gale the following morning, when the hawser, by which we towed the Griper, gave way; we hove to for her in the evening, being in lat. 57° 04′ 10″, long. 17° 52′ 50″, when some water was brought up from one hundred fathoms' depth in the bottle contrived by Doctor Marcet; its specific gravity was 1.0268, at the temperature of 58°,

* The purpose intended to be answered by this kind of communication, will be best understood, by referring to my Instructions from the Lords Commissioners of the Admiralty.

that of the surface water being the same. The temperature of the water at the same depth was 49°, that of the surface being 50°, and of the air 50½°.

On the 27th, we cast off the Griper, and hauled a little to the northward, in order to pass near the spot where Lieutenant Pickersgill obtained soundings, from three hundred and twenty to three hundred and thirty fathoms, on the 29th of June, 1776; and at six P.M., being in lat. 56° 59′ 39″, and long. by chronometers, 24° 33′ 40″, the deep-sea clamms were sent down with one thousand and twenty fathoms of line, without finding bottom. The temperature of the sea at that depth was 45½°, that of the surface being 48½°, and of the air 49°.

It fell calm towards noon on the 28th, the ship being in lat. 57° 26′ 16″, long. 25° 11′ 51″. The current was tried in a boat moored by an iron kettle, in the usual way, but not the smallest stream was perceptible. Six's thermometer was sent down to one hundred and twenty fathoms, but did not indicate the temperature, owing to the mercury rising past the index, instead of pushing it up before it; a failure I have often had occasion to regret in this useful instrument, when thus exposed to a very sudden change of temperature. It might, perhaps, be improved for this particular purpose, by making the lower end of each index a little larger, so as to prevent the passage of the mercury between it and the tube. Some water, from one hundred and thirty fathoms depth, was at the temperature of 48° on coming to the surface, that of the surface being 49°, and of the air 49°. Its specific gravity was 1.0266 at the temperature of 61°, being the same as that of the surface-water.

The wind veered to the westward on the 30th, and increased to a fresh gale, with an irregular sea, and heavy rain, which brought us under our close-reefed topsails. At half-past one, P.M., we began to cross the space in which the "Sunken Land of Bus" is laid down in Steel's chart from England to Greenland; and, in the course of this and the following day, we tried for soundings several times without success.

This being the anniversary of His Majesty's birth-day, and the weather being calm and fine, I directed an additional allowance of grog to be served out, or, in seamen's phrase, "the main brace to be spliced." In the evening, being then in lat. 55° 01′, and long. 35° 56′, we tried for soundings with two hundred and fifty fathoms of line, without finding bottom. The temperature of the sea at that depth was 44½°, surface 44½°, air 43°.

On the 7th and 8th, we had hard gales from the westward, with a heavy sea. Indeed, from the 1st to the 14th of June, we experienced a continued series of unfavourable winds and unpleasant weather, so that very little progress could be made to the westward.

On the 13th, being in lat. 57° 51′, and long. 41° 05′, the tempe-

rature of the sea, at two hundred and thirty-five fathoms' depth, was found to be 39°, surface 40½°, air 41½°. A very slight current was found to set to the southward. We saw, to-day, large flocks of sheerwaters (*Procellaria Puffinus*), called by the sailors, "cape hens," from an idea that they are only to be found near Cape Farewell. I do not remember to have met with these birds in any other part of Davis' Strait, or in Baffin's Bay.

On the 15th, a breeze sprung up from the eastward, and at noon we very unexpectedly saw land at a great distance, bearing due north. This could be no other than the land about Cape Farewell, of which the longitude, by our chronometers, being the same as that of the ship, was 42° 56′ 41″, agreeing nearly with that given in the tables of Maskelyne, Mendoza Rios, and Robertson, and in the *Connaissance des Tems*, being from 2° to 3° to the eastward of the position assigned to it in most of the charts. This accounts for a remark, which is common among the whalers, that they always make this headland, in coming from the eastward, sooner than they expect; a circumstance which they naturally attribute to the effect of a westerly current. If the latitude of Cape Farewell be so far to the northward as 59° 37′ 30″, which is the mean of nine different authorities, our distance from it this day must have been more than forty leagues. It is by no means impossible that the bold land of Greenland may be distinguished at so great a distance; and it is proper to remark, that the weather, at the time we saw it, was precisely that which is said to be most favourable for seeing objects at a great distance, namely, just before or after rain, when the humidity of the atmosphere increases its transparency*.

The wind again backed to the westward on the 16th, and we stretched to the northward towards the land. On the evening of the 17th, being in lat. 58° 52′, and long. 48° 12′, the colour of the water was observed to be of a lighter green than that of the ocean in general; but we could find no soundings with two hundred and ninety fathoms of line. The temperature of the sea at that depth was 38¾°, of the surface, 38½°, and of the air, 38½°.

Early in the morning of the 18th, in standing to the northward, we fell in with the first "stream" of ice we had seen, and soon after saw several ice-bergs. At daylight the water had changed its colour to a dirty brownish tinge. We had occasion to remark the same in entering Davis' Strait in 1818, when no difference in its temperature was perceptible. The temperature of the water this morning was 36½°, being 3° colder than on the preceding night; a decrease that was probably occasioned by our approach to the ice. We ran through a narrow part of the stream, and found the ice beyond it to be "packed" and heavy. The birds were more numerous than usual; and, besides the fulmar petrels,

* Humboldt. Personal Narrative, I. pp. 81. 101, 102.

boatswains, and kittiwakes, we saw, for the first time, some rotges (*Alca Alle*), dovekies, or black guillemots (*Colymbus Grylle*), and terns (*Sterna Hirundo*), the latter known best to seamen by the name of the Greenland swallow. Soon after noon, being in lat. 59° 40′, long. 47° 46′, and the water being of the same colour as in the morning, we tried for soundings, but could find no bottom with two hundred and sixty fathoms. The temperature of the sea at that depth was 39°, that of the surface being then 37°, and of the air 35°. The specific gravity of the surface water which at noon was 1.0262, at the temperature of 56°, had decreased to 1.0257, at that of 57°. On the 19th, at noon, we were in latitude, by observation on the ice, 59° 48′ 26″*, and in longitude, by the chronometers, 48° 01′ 50″, when a current was found to set S. 50° W. at the rate of six miles per day. A breeze springing up from the eastward, we bore away to the W.N.W., through rather close "sailing ice." The fog which had prevailed during the day cleared away in the evening, and discovered to us the coast of Greenland, bearing from N. 3° W. to N. 62° E., at the distance of twelve or thirteen leagues. On the following morning a very remarkable hill, being the highest land in sight, was found, by a base measured by Massey's patent log, to be in lat. 60° 53′ 29″, and long. 48° 42′ 22″. This position answers nearly to an island called Noua in Arrowsmith's chart, a little to the eastward of Cape Desolation. The water still continued of the same dirty colour as before; but at half past four P.M., when we hove to, for the purpose of taking the Griper in tow, we could find no bottom with a hundred and forty fathoms of line. On the evening of the 21st, having run to the westward as far as 55° 01′ W. in the lat. of 61° 26′, we observed the colour of the water to have changed from the brownish tinge before-mentioned, to a light bluish green, and it is remarkable that its specific gravity was found to have increased, within a few hours, from 1.0257 to 1.0261, both being at the temperature of 57° when weighed. These experiments seem to confirm those made on the 18th, and to render it highly probable, that the brown colour remarked in the sea was occasioned by the admixture of a large portion of fresh water, supplied by the melting of the snow and ice.

On the 21st and 22d, we sailed to the W.N.W. in an open sea; and, on the 23d, at noon, being in lat. 62° 43′ 09″, long. 61° 32′ 49″, we saw several icebergs, and some loose ice, to the northwestward. We obtained soundings in the evening in two hundred

* The ice here having a motion which was very perceptible in the artificial horizon, we had recourse to a mode of observing the meridian altitude, which we had occasionally adopted in the former voyage. Two observers brought the same limb of the sun down in separate horizons; the first of these taking care never to allow the two images to separate entirely, and the second never permitting them to overlap. The mean of the two observations being then taken, the error arising from the rolling motion of the ice may thus be in a great measure obviated, and the altitude obtained within the nearest minute.

fathoms, fine sandy bottom, being close to a large iceberg, from which copious streams of water were flowing on the side next the sun.

On the clearing up of a fog, on the morning of the 24th, we saw a long chain of icebergs, extending several miles in a N.b.W. and S.b.E. direction; and as we approached them, we found a quantity of "floe-ice" intermixed with them, beyond which, to the westward, nothing but ice could be seen. At noon, being in lat. 63° 34′ 24″, long. 61° 34′ 28″, we had soundings, with one hundred and twenty fathoms of line, on a bottom of fine sand, which makes it probable that most of the icebergs were aground in this place. In the afternoon, we sailed within the edge of the ice, as much as a light westerly wind would admit, in order to approach the western land, as directed by my instructions. Some curious effects of atmospheric refraction were observed this evening, the low ice being at times considerably raised in the horizon, and constantly altering its appearance. An iceberg at the distance of two or three miles from us, assumed an inverted shape.

The weather being nearly calm on the morning of the 25th, all the boats were kept a-head, to tow the ships through the ice to the westward. It remained tolerably open till four P.M., when a breeze, freshening up from the eastward, caused the ice through which we had lately been towing, to close together so rapidly, that we had scarcely time to hoist up the boats before the ships were immoveably "beset." The clear sea which we had left was about four miles to the eastward of us, while to the westward nothing but one extensive field of ice could be seen. It is impossible to conceive a more helpless situation than that of a ship thus beset, when all the power that can be applied will not alter the direction of her head a single degree of the compass. On the 26th, we were in lat. by observation, 63° 59′ 29″, and long. 61° 49′ 58″, having one hundred and twenty-five fathoms, on a fine sandy bottom. The deep-sea line indicated a drift to the S.b.W. Some of our gentlemen, having walked a mile or two from the ships, imagined that they saw the marks of a sledge upon the ice, but as no traces either of dogs or of one human foot appeared, they were perhaps mistaken.

The wind increased to a strong gale from the northward, which continued the whole of the following day; when we found by observation that the ships had drifted S. 28° W., thirteen miles and a quarter, the soundings having decreased to one hundred and twenty fathoms.

A large black whale, (*Balæna Mysticetus*,) being the first, was seen near the ships. It is usual for these animals to descend head foremost, displaying the broad fork of their enormous tail above the surface of the water; but, on this occasion, the ice was so close as not to admit of this mode of descent, and the fish went

down tail foremost, to the great amusement of our Greenland sailors.

As long as the wind continued to blow strong towards the ice, so as to keep it close, the ships lay securely sheltered from the sea; but at nine in the evening, when it veered a little to the westward, the ice became more slack, and we began to feel the effects of the swell which was thus admitted from without: each roll of the sea forced the heavy masses of ice against the rudder and counter with such violence as would have greatly endangered a ship built in the ordinary way; strengthened as ours were, however, they escaped without damage. Frequent endeavours were made to heave the heads of the ships round, in order that they might receive the heaviest pressure on their bows, but every attempt proved unsuccessful, and we remained in the same unpleasant situation during the whole of the 28th.

While in this state, a large white bear came near the Griper, and was killed by her people, but he sunk between the pieces of ice. This animal had, probably, been attracted by the smell of some red herrings which the men were frying at the time. It is a common practice with the Greenland sailors to take advantage of the strong sense of smelling which these creatures possess, by enticing them near the ships in this manner.

The swell had somewhat subsided on the 29th, but the ships remained firmly fixed in the ice as before. In the course of the day we saw land bearing N. 69° W. about thirteen leagues distant, appearing from the mast-head like a group of islands, and situated near to the entrance of Cumberland strait; the soundings were one hundred and thirty-five fathoms; the temperature of the sea at that depth 30°; that of the surface being the same; and of the air 34°. On the 30th, the ice began to slacken a little more about the ships; and after two hours' heaving with a hawser on each bow brought to the capstan and windlass, we succeeded in moving the Hecla about her own length to the eastward, where alone any clear sea was visible. The ice continuing to open still more in the course of the day, we were at length enabled to get both ships into open water, after eight hours' incessant labour.

Our first attempt to approach the western coast having thus failed, I consulted the Greenland Masters, as to what were the most likely means to be adopted for effecting this object. Mr. Allison thought it would be advisable to run a degree or two back again to the southward; while Mr. Fife was of opinion, that it might be attempted, with better chance of success, about the latitude of Mount Raleigh, which forms one side of the narrowest part of Davis' Strait. I determined on the latter, as being more conformable to the tenor of my instructions; and a course was accordingly shaped close along the edge of the ice, which led us considerably to the eastward of north, in order to take advantage

of any opening which might occur. On getting into clear water, we found that the rudders were much rubbed by the blows they had received while beset in the ice.

On the 1st and 2d of July, we continued to keep close to the edge of the ice, without perceiving any opening in it. Its outer margin consisted of heavy detached masses, much washed by the sea, and formed what is technically called "a pack," this name being given to ice when so closely connected as not to admit the passage of a ship between the masses. Within the margin of the pack, it appeared to consist of heavy and extensive floes, having a bright ice-blink over them; but no clear water could be discovered to the westward. The birds, which had hitherto been seen since our first approach to the ice, were fulmar petrels, little auks, looms, (*Uria Brunnichii*,) and a few glaucous gulls, (*Larus Glaucus*.)

On the morning of the 3d the wind blew strong from the eastward, with a short breaking sea and thick rainy weather, which made our situation for some hours rather an unpleasant one, the ice being close under our lee. Fortunately, however, we weathered it by stretching back a few miles to the southward. In the afternoon the wind moderated, and we tacked again to the northward, crossing the Arctic circle at four P.M., in the longitude of 57° 27′ W. We passed at least fifty icebergs in the course of the day, many of them of large dimensions. At a quarter past five P.M., we sounded in one hundred and fifteen fathoms; the water at the surface of the sea had the same brownish tinge which has already been noticed, but no difference in its temperature or specific gravity could be detected. Towards midnight, the wind having shifted to the south-west, and moderated, another extensive chain of very large icebergs appeared to the northward: as we approached them the wind died away, and the ships' heads were kept to the northward only by the steerage way given to them by a heavy southerly swell, which, dashing the loose ice with tremendous force against the bergs, sometimes raised a white spray over the latter to the height of more than one hundred feet, and being accompanied with a loud noise, exactly resembling the roar of distant thunder, presented a scene at once sublime and terrific. We could find no bottom near these icebergs with one hundred and ten fathoms of line.

At four A.M. on the 4th, we came to a quantity of loose ice, which lay straggling among the bergs; and as there was a light breeze from the southward, and I was anxious to avoid, if possible, the necessity of going to the eastward, I pushed the Hecla into the ice, in the hope of being able to make our way through it. We had scarcely done so, however, before it fell calm; when the ship became perfectly unmanageable, and was for some time at the mercy of the swell, which drifted us fast towards the bergs. All the boats were immediately sent a-head to tow; and the

Griper's signal was made, not to enter the ice. After two hours' hard pulling, we succeeded in getting the Hecla back again into clear water, and to a sufficient distance from the icebergs, which it is very dangerous to approach when there is any swell. At noon we were in lat. 66° 50′ 47″, long. 56° 47′ 56″, being near the middle of the narrowest part of Davis' Strait, which is here not more than fifty leagues across. Davis, on returning from his third voyage, sets it down at forty leagues;* and in another place remarks: "In the latitude of sixtie-seuen degrees, I might see America, west, from me, and Desolation, (Greenland,) east."† The truth of this last remark had been much doubted, till the observations made on our expedition of 1818, by determining the geographical position of the two coasts thus seen by Davis, served to confirm the accuracy of that celebrated and able navigator.

On the 5th, it was necessary to pass through some heavy streams of ice, in order to avoid the loss of time by going round to the eastward. On this, as on many other occasions, the advantage possessed by a ship of considerable weight in the water, in separating the heavy masses of ice, was very apparent. In some of the streams, through which the Hecla passed, a vessel of a hundred tons less burthen must have been immoveably beset. The Griper was on this, and many other occasions, only enabled to follow the Hecla by taking advantage of the openings made by the latter.

At noon on the 6th, being in lat. 67° 44′ 05″, long. 57° 46′ 26″, we had soundings in one hundred and seventy-two fathoms, on a bottom of shining sand, mixed with small black specks. A number of looms were killed, which being very good to eat, were served to the officers and ship's company. A herd of sea-horses (*Trichecus Rosmarus*) being seen lying on a piece of ice, our boat succeeded in killing one of them. These animals usually lie huddled together, like pigs, one over the other, and are so stupidly tame, as to allow a boat to approach them, within a few yards, without moving. When, at length they are disturbed, they dash into the water in great confusion. It may be worth remarking, as a proof how tenacious the walrus sometimes is of life, that the animal killed to-day struggled violently for ten minutes after it was struck, and towed the boat twenty or thirty yards, after which the iron of the harpoon broke; and yet it was found, on examination, that the iron barb had penetrated both auricles of the heart. A quantity of the blubber was put into casks, as a winter's supply of lamp-oil.

On the 7th, in standing to the northward, we came to a stream of ice, three quarters of a mile wide, which obstructed our passage in that direction. The wind died away as soon as we had entered

* Hakluyt's *Collection of Voyages.*
† *The Worlde's Hydrographicall Discription*, 1595.

the stream, and it required six hours' rowing in the boats to tow the ships into clear water beyond it. It is curious to observe, in passing under the lee of ice, however small its extent or height above the sea, an immediate decrease in the strength of the wind. This effect cannot be attributed to any degree of shelter afforded by the ice, as, in the cases to which I allude, it is, perhaps, not more than a single foot above the surface of the sea. At noon, being in lat., by observation, 68° 24′ 52″, and in long. 57° 00′ 43″, we obtained soundings in a hundred and seventy-five fathoms, on a bottom of greenish coloured mud, into which the lead sunk several inches. At two P.M. a thermometer in the sun rose to 70°, the temperature of the shade being 44°, and the weather perfectly calm and cloudless. The card commonly used in Walker's Azimuth Compass had traversed so sluggishly for some days past, that it was now found necessary to substitute a lighter one, supplied by the maker for this purpose. The looms and tern were numerous near the ice.

On the 8th, at noon, we observed, in lat. 68° 30′ 01″, and long. 57° 22′ 57″, being 6′ 51″ to the southward, and 9′ 53″ to the eastward of the dead reckoning. We sounded in a hundred and seventy-eight fathoms' water, the bottom being of the same nature as on the preceding day.

On the 9th, having reached the latitude of 68° 45′ 53″, long. 57° 49′ 51″, the ship was found to have made less northing by eleven miles and three quarters than the log gave. The soundings were a hundred and fifty-two fathoms, the lead being covered with soft green mud, mixed with sand and gravel.

Large flocks of tern and looms were seen about the ice. A northerly wind prevented our making much progress, for the ice was still so compact in every part, as to render it impossible to penetrate to the westward; and nothing, therefore, remained to be done but to make the best way we could, by beating to the northward, along the edge of the pack.

On the 10th a thick fog came on, which made great caution necessary in sailing, there being a great many icebergs near us. There is, however, even in the thickest fog, a strong reflection of light from these immense bodies of ice, which, with an attentive look-out, is generally visible at a sufficient distance to enable the navigator, if in smooth water, to avoid coming in contact with them.

At noon, the wind being still against us, we had only reached the lat. of 69° 04′ 28″, being 9′ 49″ to the southward of the dead reckoning. The long. by the chronometers, was 58° 10′ 30″, being 23′ 47″ to the eastward of the account in two days. We obtained soundings in a hundred and sixty-seven fathoms, on a bottom of green mud, with a little sand and gravel. At night the fog froze as it fell upon the rigging, making it difficult to work the ship among the ice.

A large bear (*Ursus Maritimus*) being seen on a piece of ice, near which we were passing on the morning of the 11th, a boat was despatched in pursuit, and our people succeeded in killing and towing it on board. As these animals sink immediately on being mortally wounded, some dexterity is requisite to secure them, by first throwing a rope over the neck, at which many of the Greenland seamen are remarkably expert. It is customary for the boats of the whalers to have two or three lines coiled in them, which not only gives them great stability, but, with good management, makes it difficult for a bear, when swimming, to put his paw upon the gunwale, which they generally endeavour to do; whereas, with our boats, which are more light and crank, and therefore very easily heeled over, I have more than once seen a bear on the point of taking possession of them. Great caution should, therefore, be used under such circumstances in attacking these ferocious creatures. We have always found a boarding-pike the most useful weapon for this purpose. The lance used by the whalers will not easily penetrate the skin, and a musket-ball, except when very close, is scarcely more efficacious.

We sounded at noon in two hundred and two fathoms, being in lat. by account, 69° 24′ 40″, long. 58° 16′ 42″, without making any allowance for the current, which, for the three preceding days, appeared to have been setting the ships to the S.S.E. at the rate of from eight to thirteen miles per day.

In the afternoon, on the clearing up of the fog, we found ourselves so surrounded by ice, in every direction, that it became necessary to stretch to the eastward, to avoid the risk of being again beset, a circumstance which might have occasioned a serious loss of time. A great number of seals were seen as we sailed through the ice, but very seldom two together.

The weather was again so thick on the 12th, that we could seldom see above three or four hundred yards. The sun being visible, however, Captain Sabine and myself left the ship, and ascended an iceberg, in order to obtain the meridian altitude, which gave us the lat. of 69° 48′ 43″, and which was 8′ 20″ to the southward of the dead reckoning, our longitude, by account, being 57° 46′ 13″. Streams of the purest water were flowing from this berg, a luxury not so often enjoyed by seamen in any other navigation, and which is, perhaps, of essential importance in the preservation of health, where scurvy is the disease most to be apprehended. The fog froze so hard upon the sails and rigging during the night, that I believe some tons were shaken off in the morning, to enable us to handle the ropes, and to work the ship with greater facility. The fields of ice and the icebergs must occasionally, during the summer, receive a considerable addition by this kind of deposit. Of the latter, when the fog had cleared away for a short time in the evening, we counted no less than sixty-two of large

dimensions, at no great distance from us, besides a number of smaller ones. We were, at noon, in lat. by account, 70° 06′ 32″, and in long. 57° 33′ 56″ having a hundred and forty-seven fathoms water, on a muddy bottom.

The weather continued so foggy on the 14th, that very little progress could be made. We caught some fine specimens of the *Clio Borealis*, called by the sailors whales' food, and also of *Beroes*, which were very numerous near the surface of the water.

On the 15th, the fog being still as thick as before, our latitude, observed on an iceberg, was 70° 28′ 52″; while that observed on board by Lieut. Beechey, with Captain Kater's altitude-instrument, was 70° 27′ 43″, the difference according exactly with the bearing and distance of the iceberg from the ship. The longitude was 59° 11′ 58″, and the variation of the needle, as observed upon the ice, had increased to 79° 48′ westerly. Mr. Fisher made an experiment on the specific gravity of berg-ice. Having formed a piece of this ice into a cube, whose sides measured sixty-eight lines, he floated it in a tub of sea-water, of the specific gravity 1.0256, and at the temperature of 33°, when nine lines remained above the surface of the water, being nearly one-eighth.

On the 16th, in running along the edge of the ice with a fresh breeze from the south-west, we passed the Brunswick, whaler, of Hull, beating to the southward. She crossed within hail of the Griper, and the master informed Lieutenant Liddon that he had, on the 11th, left a large fleet of fishing-ships about the latitude of 74°, unable to proceed farther to the northward. We had been stopped in a similar manner, and in the same place, on the voyage of 1818, which renders it not improbable, that, at this period of the year, the same obstruction will generally be found to occur about that latitude. The annual experience of the whalers has, indeed, long ago, made it evident, that the facility with which a ship may sail up Davis' Strait, depends entirely upon the season at which the attempt is made. For the first fortnight in June, it is seldom practicable to get much beyond the island of Disko, or about the latitude of 69° to 70°. Towards the 20th of that month, the ships usually reach the great inlet, called North-East Bay; and, by the end of June, the ice allows them, though not without great exertion, to penetrate to the Three Islands of Baffin, which lie just beyond the seventy-fourth degree of latitude. From that time till about the end of August, the ice presents, almost daily, less and less obstruction; so that, if the object be simply to sail as far north as possible into Baffin's Bay, without regard to the capture of whales, there is every reason to believe that a ship, entering Davis' Strait on the 1st of July, may sail into the latitude of 74° or 75°, without meeting with any detention on account of the ice, and, perhaps, without even seeing the land till she arrive in a high latitude.

On the 17th, the margin of the ice appearing more open than we had yet seen it, and there being some appearance of a "water-sky" to the north-west, I was induced to run the ships into the ice, though the weather was too thick to allow us to see more than a mile or two in that direction. We were, at noon, in latitude 78° 00′ 21″, longitude 59° 46′ 18″, the depth of water being one hundred and ninety fathoms, on a muddy bottom. The wind shortly after died away, as usual, and after making a number of tacks, in order to gain all we could to the westward, we found ourselves so closely hemmed in by the ice on every side, that there was no longer room to work the ships, and we therefore made them fast to a floe, till the weather should clear up. The afternoon was employed in taking on board a supply of water from the floe. It may be proper at once to remark that, from this time till the end of the voyage, snow-water was exclusively made use of on board the ships for every purpose. During the summer months, it is found in abundance in pools upon the floes and icebergs, and in the winter snow was dissolved in the coppers for our daily consumption. The fog cleared in the evening, when we perceived that no further progress could be made through the ice, into which we had sailed to the westward about twelve miles. We were, therefore, once more under the necessity of returning to the eastward lest a change of wind should beset the ships in their present situation. Previously, however, to our return, we made some observations, on the ice, for the variation and dip of the magnetic needle, the former of which was found to be 80° 55′ 27″ W., and the latter 84° 14′ 9″ W. A thick fog came on again at night, and prevailed till near noon on the 18th, when we came to a close but narrow stream of ice, lying exactly across our course, and at right angles to the main body of the ice. As this stream extended to the eastward as far as we could see from the "crow's-nest," an endeavour was made to push the ships with all sail through the narrowest part. The facility with which this operation, technically called "boring," is performed, depends chiefly on having a fresh and free wind, with which we were not favoured on this occasion; so that, when we had forced the ships about one hundred yards into the ice, their way was completely stopped. The stream consisted of such small pieces of ice, that when an attempt was made to warp the ships a-head by fastening lines to some of the heaviest masses near them, the ice itself came home, without the ships being moved forward. Every effort to extricate them from this helpless situation proved fruitless for more than two hours, when the Hecla was at length backed out, and succeeded in pushing through another part of the stream in which a small opening appeared just at that moment. All our boats were immediately despatched to the assistance of the Griper, which still remained beset, and which no effort could move in any direction. We at length resorted to the expe-

dient of sending a whale-line to her from the Hecla, and then making all sail upon the latter ship, we succeeded in towing her out, head to wind, till she was enabled to proceed in clear water. The crossing of this stream of ice, of which the breadth scarcely exceeded three hundred yards, occupied us constantly for more than five hours, and may serve as an example of the detention to which ships are liable in this kind of navigation. In the course of the afternoon, one of the Hecla's boats was upset by the ice, and Mr. Palmer, with all her crew, thrown out of her; but, by getting upon the ice, they fortunately escaped with no other injury than a thorough wetting.

On the 19th, the wind having veered to the northward, we tacked off and on, beating along the edge of the ice, in which no opening appeared, to encourage a hope of getting through it to the westward. At noon we had reached the lat. of 72° 31′ 38″, and long. 59° 03′ 34″, our soundings being one hundred and forty-two fathoms, on a muddy bottom. In the afternoon, a ship running to the southward, and which we supposed to be one of the homeward-bound whalers, passed us at the distance of seven miles.

At noon, on the 20th, we were in lat. by account, 72° 37′ 31″, long. 58° 40′ 57″, and the depth of water was one hundred and twenty fathoms, the bottom consisting of mud, with small black stones. At this time, the weather being perfectly calm, with a thick fog, we perceived that a current, setting to the S.S.W., was drifting the ship towards a large iceberg in that direction; and a quantity of floe-ice, which was driving the same way, threatened to enclose us between it and the berg. All the boats were instantly lowered, and sent a-head to tow, by which means we cleared the berg, just one minute before the floe-ice came forcibly in contact with it, surrounding it on every side. This iceberg was about one hundred and forty feet high in one part, and from the soundings we obtained near it, must have been aground in one hundred and twenty fathoms, so that its whole height was about eight hundred and sixty feet. The weather continued so foggy during the rest of the day, that it required our utmost attention to keep clear of the numerous ice-bergs which lay in our way.

Early on the morning of the 21st, the fog cleared away, and discovered to us the land called by Davis, Hope Sanderson, and the Woman's Islands, being the first land we had seen in sailing northwards into Baffin's Bay, from the lat. of 63½°. We found ourselves in the midst of a great number of very high icebergs, of which I counted from the crow's-nest, eighty-eight, besides many smaller ones. We tacked immediately to the westward, in order to take advantage of the only clear weather we had enjoyed for the last fourteen days, to examine the state of the ice, and observed at noon, in lat. 72° 58′ 13″, the long., by chronometers, being 58° 42′ 11″. The soundings were two hundred and twenty-eight fathoms,

muddy bottom, having deepened from one hundred and six, in sailing eight miles to the westward.

Having now reached the latitude of 73°, without seeing a single opening in the ice, and being unwilling to increase our distance from Sir James Lancaster's Sound, by proceeding much farther to the northward, I determined once more to enter the ice in this place, and to try the experiment of forcing our way through it, in order to get into the open sea, which the experience of the former voyage led me to believe we should find upon the western coast of Baffin's Bay. This determination was strengthened by the recollection of the serious obstructions we had met with the preceding year, in the neighbourhood of Prince Regent's Bay, where greater detention, as well as danger, had been experienced, than on any other part of that coast. Being now, therefore, favoured with clear weather, and a moderate breeze from the south-eastward, we ran into the ice, which, for the first two miles, consisted of detached pieces, but afterwards of floes of considerable extent, and six or seven feet in thickness. The wind died away towards midnight, and the weather was serene and clear. The altitude of the sun on the meridian below the pole, gave the latitude 72° 59′ 13″, being 11′ 57″ to the southward of that deduced from the observations of the preceding and following noons, which error may, perhaps, be attributed to the elevation of the horizon by terrestrial refraction. The temperature of the air at this time was 40°; of the water, 34°, and the barometer stood at 29.57 inches. A large bear was seen on one of the floes, and we passed the tracks of many others.

On the 22d, the wind was light from the eastward, and we made very little progress. We had occasionally to heave the ships through with hawsers, between the heavy masses of ice, which became more and more close as we advanced, till, at length, towards the evening, we were fairly beset, there being no open water in sight from the mast-head in any quarter of the compass. Some hands were kept constantly employed in heaving the ships through the ice, taking advantage of every occasional opening which presented itself, by which means we advanced a few hundred yards to the westward during the night.

At six, A.M., on the 23d, a thick fog came on, which rendered it impossible to see our way any further. It often happens, in thick weather, that much distance is lost by ships taking a wrong "lead," as the channels between floes of ice are technically called; so that, on the weather clearing it is discovered, when too late, that another opening, perhaps a few yards only from that through which they had sailed, would have conducted them into clear water. We, therefore, warped to an iceberg, to which the ships were made fast at noon, to wait the clearing up of the fog, being in lat. 73° 04′ 10″, long. 60° 09′ 07″. The soundings were one

hundred and ninety-seven fathoms, on a muddy bottom, and the variation of the needle 82° 33′ 21″ westerly. At eight P.M. the weather cleared up, and a few small pools of open water were seen here and there, but the ice was generally as close as before, and the wind being to the westward of north, it was not deemed advisable to move. When ships are thus beset, there is a great advantage in securing them to the largest body of ice that can be found, and particularly to the bergs, as they are by this means better enabled to retain their situation, the drift of the ice being generally less, in proportion to its depth under water. Another advantage in securing a ship to an iceberg is, that these bodies usually keep a small space of clear water under their lee, in consequence of the quicker drift of the floes and loose ice to leeward. It not unfrequently happens that a ship is thus dragged into clear water, as the sailors express it, that is, that the whole of the floe-ice is carried to leeward past the berg to which the ship is attached, leaving her at length in an open sea.

The ice appearing to open a little in the W.N.W., on the morning of the 24th, preparations were made for warping the ships in that direction, the wind being still to the westward of north, but the fog came on again so thick, that it was necessary still to remain at the berg. At noon, by our observations, we were in lat. 72° 59′ 50″, long. 60° 07′ 54″, making a drift of four miles and two-thirds in twenty-four hours, in a S. 1° E. direction. The soundings had deepened to two hundred and sixty-five fathoms, the bottom being light-green mud. The afternoon was occupied in obtaining azimuths on board the Hecla, with her head on different points of the compass, in order to ascertain the amount of the irregularities of the magnetic needle produced by local attraction.

The weather being clear on the morning of the 25th, and a few narrow lanes of water appearing to the westward, the Griper was made fast astern of the Hecla; and her crew being sent to assist in manning our capstan, we proceeded to warp the ships through the ice. This method, which is often adopted by our whalers, has the obvious advantage of applying the whole united force in separating the masses of ice which lie in the way of the first ship, allowing the second, or even third, to follow close astern, with very little obstruction. In this manner we had advanced about four miles to the westward, by eight P.M., after eleven hours of very laborious exertion; and having then come to the end of the clear water, and the weather being again foggy, the ships were secured in a deep "bight," or bay in a floe, called by the sailors "a natural dock." An extra allowance of meat and spirits was served to the ships' companies, and all hands were permitted to go to rest till the state of the weather and of the ice should become more favourable.

Early on the morning of the 26th, there was clear water as far

as we could see to the westward, which, on account of the fog, did not exceed the distance of three hundred yards. We made sail, however, and having groped our way for about half a mile, found the ice once more close in every direction, except that in which we had been sailing, obliging us to make the ships fast to a floe. I sent a boat away to endeavour to find a lane of clear water leading to the westward. She returned on board in an hour, without success, having with difficulty found her way to the ship, by our musquets and other signals. The latitude here, by observation, was 73° 02′ 17″, long. by chronometers, 60° 11′ 52″, by which the drift of the ice in the last twenty-four hours appears to have been N. 1° E., five miles and three quarters, or in a direction nearly opposite to that of the wind. The soundings were two hundred and eight fathoms, on a muddy bottom. At half-past three, P.M., the weather cleared up, and a few narrow lanes of water being seen to the westward, every exertion was immediately made to get into them. On beginning to heave, however, we found that the "hole" of water in which the Hecla lay, was now so completely enclosed by ice, that no passage out of it could be found. We tried every corner, but to no purpose; all the power we could apply, being insufficient to move the heavy masses of ice which had fixed themselves firmly between us and the lanes of water without. In the mean time, Lieutenant Liddon had succeeded in advancing about three hundred yards, and had placed the Griper's bow between two heavy floes, which it was necessary to separate before any further progress could be made. Both ships continued to heave at their hawsers occasionally, as the ice appeared to slacken a little, by which means they were now and then drawn a-head a few inches at a time, but did not advance more than half a dozen yards in the course of the night. By our nearing several bergs to the northward, the ice appeared to be drifting in that direction, the wind being moderate from the southward.

On the 27th, about three A.M., by a sudden motion of the ice, we succeeded in getting the Hecla out of her confined situation, and ran her up astern of the Griper. The clear water had made so much to the westward, that a narrow neck of ice was all that was now interposed between the ships and a large open space in that quarter. Both ships' companies were, therefore, ordered upon the ice to saw off the neck, when the floes suddenly opened, sufficiently to allow the Griper to push through under all sail. No time was lost in the attempt to get the Hecla through after her, but, by one of those accidents to which this navigation is liable, and which renders it so precarious and uncertain, a piece of loose ice which lay between the two ships, was drawn after the Griper by the eddy produced by her motion, and completely blocked the narrow passage through which we were about to follow. Before we could

remove this obstruction by hauling it back out of the channel, the floes were again pressed together, wedging it firmly and immoveably betwixt them; the saws were immediately set to work, and used with great effect, but it was not till eleven o'clock that we succeeded, after seven hour's labour, in getting the Hecla into the lanes of clear water which opened more and more to the westward. Our latitude, by account at noon, was 73° 03′ 56″, the longitude 60° 24′ 27″.

Being now favoured with a fresh breeze from the S.E.b.S., we made considerable progress, though on a very crooked coast, to the northward and westward. In one respect the character of the ice was here altered, as we found a great many floes of "young" or "bay" ice, which had probably been newly formed in the sheltered situations afforded by the larger floes. To avoid the necessity of going round, or where no other channel presented itself, we ran through several of these bay-floes, which were from four to six inches thick, ploughing up the ice before the ship's stem, at the rate of five miles an hour. If they were not very broad, the Hecla did not lose her way in passing through them. Frequently, however, she was stopped in the middle, which made it necessary to saw and break the ice a-head, till she made another start, and, having run a short distance in clear water, was again imbedded in the same manner. We passed one field of ice, about ten feet in thickness, and many miles in length, as we could not see over it from the mast-head. This was the only "field," according to the definition applied to that term by the whalers, that I had ever seen in Baffin's Bay. About eleven P.M. the lanes of open water a-head became very contracted, and at half past eleven, in endeavouring to force through a floe, under a heavy press of canvas, the Hecla was completely wedged in, having run her own length into it, though its thickness was between a foot and eighteen inches. In the course of this day's sailing, the ships received many severe blows from the ice, but apparently suffered no damage. The concussions which the chronometers experienced were, perhaps, such as few watches of this kind had ever before been exposed to; but we did not subsequently discover that any alteration had taken place in their rates, in consequence of them.

On the 28th the wind continued to blow strong from the south-east with heavy rain; and at half-past three A.M., after several hours' sawing, in which the men suffered much from wet and fatigue, we succeeded in getting clear; but after running a quarter of a mile, were again beset in the same manner. By the time the Griper had joined us, we had once more unavoidably hampered the Hecla among the ice, and did not succeed in extricating her till four P.M., after which we found so much clear water as we proceeded, that, with the exception of a few streams and "patches," which we met with on the following day, and through which the

ships sailed without much difficulty, we had now passed every impediment which obstructed our passage to Sir James Lancaster's Sound. The breadth of this barrier of ice, which occupies the middle of Baffin's Bay, and which had never before been crossed in this latitude at the same season, was eighty miles in a N. 63° W. direction. I have been thus particular and minute, perhaps tediously so, in detailing our endeavours to obtain a passage through the ice to the western coast of Baffin's Bay, in order to shew how necessary it is to persevere and not to be discouraged by frequent failures, nor deterred from entering the ice by the apprehension of being beset. By taking advantage of every little opening that is afforded, I believe that a strong-built vessel of proper size and weight may, in most seasons, be pushed through this barrier which occupies the centre part of Baffin's Bay, about this parallel of latitude. It must, at the same time, be confessed, that, had we not been favoured with strong south-easterly winds, it would probably have required several days longer to effect this passage.

On the 29th, we had so much clear water, that the ships had a very perceptible pitching motion, which, from the closeness of the ice, does not very often occur in the Polar regions, and which is, therefore, hailed with pleasure, as an indication of an open sea. At noon we had reached, by the dead reckoning, the latitude of 73° 51′ 17″, and long. 67° 47′ 51″, and we could find no bottom with three hundred and ten fathoms of line. At five P.M. the swell increased considerably, and, as the wind freshened up from the north-east, the ice gradually disappeared; so that by six o'clock we were sailing in an open sea, perfectly free from obstruction of any kind. During the time we had been beset among the ice, the temperature of the air, in the shade, had varied from 28° to 38°, except in very clear and calm weather, when the thermometer had occasionally risen to 42°. The temperature of the water had been almost uniformly from 31° to 33°, but soon after our leaving the ice this evening, it increased to 37°, which temperature continued for a run of sixty-three miles to the westward, and then fell to 32° and 33°, till we had entered Sir James Lancaster's Sound.

At four A.M. on the 30th, two or three icebergs were in sight, being the first we had seen since leaving the ice to the eastward. It is probable that these, together with some streams of ice which occurred in the afternoon, produced the diminution in the temperature of the sea, to which I have alluded above, and which took place soon after noon on this day. The Griper detaining us considerably, and the sea being now sufficiently open to allow us to take her in tow, we hove-to at nine A.M. for that purpose.

We now seemed all at once to have got into the head-quarters of the whales. They were so numerous that I directed the number to be counted during each watch, and no less than eighty-two

are mentioned in this day's log. Mr. Allison, the Greenland master, considered them generally as large ones, and remarked, that a fleet of whalers might easily have obtained a cargo here in a few days. It is, I believe, a common idea among the Greenland fishermen, that the presence of ice is necessary to ensure the finding of whales; but we had no ice in sight to-day, when they were most numerous. At noon we observed, in lat. 74° 01′ 57″, being the first meridian altitude we had obtained for four days, and differing from the dead reckoning only two miles, which is remarkable, considering the sluggishness of the compasses, and would seem to afford a presumptive proof that no southerly current exists in this part of Baffin's Bay. The long. by chronometers, was 75° 09′ 14″. In the afternoon the wind broke us off from the N.N.W., which obliged us to cast off the Griper, and we carried all sail a-head to make the land. We saw it at half-past five P.M., being the high land about Possession Bay, and at the same time several streams of loose but heavy ice came in sight, which a fresh breeze was driving fast to the south-eastward. Sir James Lancaster's Sound was now open to the westward of us, and the experience of our former voyage had given us reason to believe that the two best months in the year for the navigation of these seas were yet to come. This consideration, together with the magnificent view of the lofty Byam Martin mountains, which forcibly recalled to our minds the events of the preceding year, could not fail to animate us with expectation and hope. If any proof were wanting of the value of local knowledge in the navigation of the Polar Seas, it would be amply furnished by the fact of our having now reached the entrance of Sir James Lancaster's Sound just one month earlier than we had done in 1818, although we had then sailed above a fortnight sooner, with the same general object in view, namely, to penetrate to the western coast of Baffin's Bay, where alone the North-west Passage was to be sought for. This difference is to be attributed entirely to the confidence which I felt, from the experience gained on the former voyage, that an open sea would be found to the westward of the barrier of ice which occupies the middle of Baffin's Bay. Without that confidence it would have been little better than madness to have attempted a passage through so compact a body of ice, when no indication of a clear sea appeared beyond it.

The Hecla's cables were bent, and the Griper's signal made to do the same. As we approached the land, the wind drew directly out of the sound, which is commonly found to be the case in inlets of this nature, in which the wind generally blows directly up or down. A flock of white ducks, believed to be male eider-ducks, were seen in the afternoon, flying to the eastward.

The wind increased to a fresh breeze on the morning of the 31st, which prevented our making much way to the westward.

We stood in towards Cape Byam Martin, and sounded in eighty fathoms on a rocky bottom, at the distance of two miles in an east direction from it. We soon after discovered the flag-staff which had been erected on Possession Mount on the former expedition; an object which, though insignificant in itself, called up every person immediately on deck to look at and to greet it as an old acquaintance. The Griper being considerably astern, I thought it a good opportunity to go on shore, in order to make some observations while she was coming up. Captain Sabine and myself, therefore, left the ship, and landed in the same spot, near the mouth of the stream in Possession Bay, where observations had been made the preceding year. We found so much surf on the beach as to make it necessary to haul the boat up, to prevent her being stove. A number of loose pieces of ice had been thrown up above the ordinary high-water mark; some of these were so covered by the sand which the sea had washed over them, that we were at a loss to know what they were, till a quantity of it had been removed. From the situation and appearance of these masses, it occurred to some of us that similar masses, found under ground in those spots called *Kaltusa*, in the islands near the coast of Siberia, might thus have been originally deposited.

The land immediately at the back of Possession Bay, rises in a gentle slope from the sea, presenting an open and extensive space of low ground, flanked by hills to the north and south. In this valley, and even on the hills, to the height of six or seven hundred feet above the sea, there was scarcely any snow, but the mountains at the back were completely covered with it. The bed of the stream which winds along the valley is in many places several hundred yards wide, and in some parts from thirty to forty feet deep; but the quantity of water which it contained at this season was extremely small in proportion to the width between the banks, not exceeding forty feet on an average, and from one to three feet only in depth near the mouth of the stream. This feature is common in every part of the Polar regions in which we have landed; the beds, or ravines, being probably formed by the annual dissolution of the snow during a long series of years. Some pieces of birch-bark having been picked up in the bed of this stream, in 1818, which gave reason to suppose that wood might be found growing in the interior, I directed Mr. Fisher to walk up it, accompanied by a small party, and to occupy an hour or two, while the Griper was coming up, and Captain Sabine and myself were employed upon the beach, in examining the nature and productions of the country.

Mr. Fisher reported, on his return, that he had followed the stream between three and four miles, where it turned to the south-west, without discovering any indications of a wooded country; but a sufficient explanation respecting the birch-bark was, perhaps,

furnished by his finding, at the distance of a quarter of a mile from the sea, a piece of whalebone two feet ten inches in length, and two inches in breadth, having a number of circular holes very neatly and regularly perforated along one of its edges, and which had undoubtedly formed part of an Esquimaux sledge. This circumstance affording a proof of the Esquimaux having visited this part of the coast at no very distant period, it was concluded that the piece of bank above alluded to, had been brought hither by these people. From the appearance of the whalebone, it might have been lying there for four or five years. That none of the Esquimaux tribe had visited this part of the coast since we landed there in 1818, was evident from the flag-staff then erected still remaining untouched. Mr. Fisher found every part of the valley quite free from snow as high as he ascended it; and the following fact seems to render it probable that no great quantity either of snow or sleet had fallen here since our last visit. Mr. Fisher had not proceeded far, till, to his great surprise, he encountered the tracks of human feet upon the banks of the stream, which appeared so fresh, that he at first imagined them to have been recently made by some natives, but which, on examination, were distinctly ascertained to be the marks of our own shoes made eleven months before.

The only animals we met with were a fox, a raven, (*Corvus Corax*,) some ring-plovers, (*Charadrius Hiaticula*,) snow-buntings, and a wild bee, (*Apis Alpina*). Several tracks of bears and of a clover footed animal, probably the rein-deer, were also observed upon the moist ground. Three black whales were seen in the bay, and the crown-bones of several others were lying near the beach. Considerable tufts of moss and of grass occur in this valley, principally in those parts which are calculated to retain the water produced by the melting of the snow. Indeed, moisture alone seems necessary to the growth of a variety of plants which are found in this dreary climate. Mr. Fisher who had an opportunity of examining some of the fixed rocks, considered them to consist principally of basalt. A great quantity of lime-stone was found in the valley, together with pieces of granite, quartz, feldspar, trap, and sandstone.

The latitude observed at the mouth of the stream was 73° 31′ 16″, and the longitude by the chronometers, 77° 22′ 21″, the latter differing only 1′ 30″ to the eastward of that obtained on the same spot, by No. 509 of Earnshaw, the preceding year. The dip of the needle was 86° 03′ 42″, and the variation 108° 46′ 35″ westerly, agreeing nearly with that observed by Lieutenant Hoppner, in 1818. At half-past ten A.M., when we landed, the tide was falling by the shore, and continued to do so till about half an hour before noon; the surf on the beach, however, did not allow me to determine the time with very great precision. By the mean of our observations made now, and in the foregoing year, the time of high water on full and

change days, would appear to be about a quarter past eleven. At two P.M., the water had risen two feet and a half, and the whole rise of tide, as nearly as we could judge from the marks on the beach, may be from six to eight feet. The stream certainly came from the northward and westward along the shore of the bay, during the time that the tide was rising; and Lieut. Beechey observed that, in running along shore, in a south-easterly direction, the ship seemed to go much faster by the land than she sailed through the water. It is more than probable, therefore, that the flood comes from the north-westward on this particular part of the coast. Near the spot on which we made the observations, a bottle was buried containing an account of our visit, and a pile of stones and earth raised over it.

In approaching Possession Bay, the colour of the water was observed to change to a light green, at the distance of two or two and a half miles from the shore, but there was no other appearance of shoal water, and we could find no bottom with sixty and seventy fathoms of line, well within it; we had fourteen fathoms, on a sandy bottom, at a cable's length from the beach.

Having finished our observations, we returned on board, and made all sail for the Sound; but the wind blowing still from the westward, the progress of the ships was but slow in that direction. The sea was perfectly free from ice, except a single berg, and one or two narrow though heavy streams, which offered, however, little or no obstruction to the navigation.

CHAPTER II.

Entrance into Sir James Lancaster's Sound of Baffin—Uninterrupted Passage to the Westward—Discovery and Examination of Prince Regent's Inlet—Progress to the Southward stopped by Ice—Return to the Northward—Pass Barrow's Strait, and enter the Polar Sea.

WE were now about to enter and to explore that great sound or inlet which has obtained a degree of celebrity beyond what it might otherwise have been considered to possess, from the very opposite opinions which have been held with regard to it. To us it was peculiarly interesting, as being the point to which our instructions more particularly directed our attention; and, I may add, what I believe we all felt, it was that point of the voyage which was to determine the success or failure of the expedition, according as one or other of the opposite opinions alluded to should be corroborated. It will readily be conceived, then, how great

our anxiety was for a change of the westerly wind and swell, which, on the 1st of August set down Sir James Lancaster's Sound, and prevented our making much progress. We experienced also another source of anxiety. The relative sailing qualities of the two ships were found to have altered so much, that we were obliged to keep the Hecla under easy sail the whole day, to allow the Griper to keep up with us, although the latter had hitherto kept way with her consort, when sailing by the wind. The ships stretched to the northward across the entrance of the sound, meeting occasionally with some loose and heavy streams of ice, and were at noon in latitude, by observation, 73° 55′ 18″, and in longitude, by the chronometers, 77° 40′. Several whales were seen in the course of the day, and Mr. Allison remarked, that this was the only part of Baffin's Bay in which he had ever seen young whales; for it is a matter of surprise to the whalers in general, that they seldom or never meet with young ones on this fishery, as they are accustomed to do in the seas of Spitzbergen.

The Griper continued to detain us so much that I determined on making the best of our way to the westward, that no more time than was necessary might be occupied in the examination of the bottom of Sir James Lancaster's Sound, provided it should be found to be an inlet surrounded by land. I was the more inclined to do this, from the circumstance of the sea being so clear of ice, as to offer no impediment to the navigation, which rendered it next to impossible that the two ships should not meet each other again; and it seemed to me to be of considerable importance to obtain as early information as possible whether a passage did or did not exist there, as, in the latter event, we should have to proceed still further to the northward in search of one through some of the other Sounds of Baffin; besides, the farther north we had to go, the shorter would the navigable season be to allow us to explore these sounds. On these considerations I ordered the Hecla to be hove to in the evening, and sent Lieutenant Liddon an instruction, with some signals, which might facilitate our meeting in case of fog: and I appointed as a place of rendezvous the meridian of 85° west, and as near the middle of the sound as circumstances would permit. As soon, therefore, as the boat returned from the Griper, we carried a press of sail, and, in the course of the evening, saw the northern shore of the sound looming through the clouds which hung over it.

It fell calm on the morning of the 2d, and at nine A.M., we sounded with the deep-sea clamms, and found one thousand and fifty fathoms by the line, on a bottom of mud and small stones; but I believe the depth of water did not exceed eight or nine hundred fathoms, the ship's drift being considerable on account of the swell. It should be remarked, also, that where the soundings exceed five or six hundred fathoms, even in very calm weather, the

actual depth must, in the usual way of obtaining it, be a matter of some uncertainty, for the weight of the line causes it to run out with a velocity not perceptibly diminished, long after the lead or the clamms have struck the ground. The clamms being now down, we were about to try the set of the current, by mooring a boat to the line, when the breeze again sprung up from the westward and prevented it. At noon we were in latitude by observation 74° 30′ 03″., and in longitude 78° 01″, Cape Osborn bearing N. 79° W., distant forty-one miles.

The weather being clear in the evening, we had the first distinct view of both sides of the sound, and the difference in the character of the two shores was very apparent, that on the south consisting of high and peaked mountains, completely snow-clad, except on the lower parts, while the northern coast has generally a smoother outline, and had comparatively with the other, little snow upon it; the difference in this last respect, appearing to depend principally on the difference in their absolute height. The sea was open before us, free from ice or land; and the Hecla pitched so much from the westerly swell in the course of the day, as to throw the water once or twice into the stern windows, a circumstance which, together with other appearances, we were willing to attribute to an open sea in the desired direction. More than forty black whales were seen during the day.

We had alternately fresh breezes from the westward, and calms on the morning of the 3d, when we had only gained eight or nine miles upon the Griper, which we observed coming up the Sound before an easterly wind, with all her studding sails set, while we had a fresh breeze from the westward. In the forenoon we were between Capes Warrender and Osborn, and had a good view of Sir George Hope's Monument, which proved to be a dark-looking and conspicuous hill on the main land, and not an island, as it appeared to be when at a distance, on our former voyage.

A solitary iceberg being near us, Captain Sabine, Lieutenant Beechey, and Mr. Hooper, were sent upon it to observe the variation of the needle and the longitude, and to take angles for the survey, a base being measured by Massey's log between the ship and the berg. We here obtained soundings in three hundred and seventy-three fathoms, the bottom consisting of mud and small stones, of which a small quantity was brought up in the clamms. By a boat moored to this instrument, a tide or current was found to set north 65° E., at the rate of seven-eighths of a mile per hour; the variation observed upon the iceberg was 103° 58′ 05″ westerly. At noon we were in latitude 74° 25′ 31″, longitude 80° 04′ 30″.

Being favoured at length by the easterly breeze which was bringing up the Griper, and for which we had long been looking with much impatience, a crowd of sail was set to carry us with all rapidity to the westward. It is more easy to imagine than to

describe the almost breathless anxiety which was now visible in every countenance, while, as the breeze increased to a fresh gale, we ran quickly up the Sound. The mast-heads were crowded by the officers and men during the whole afternoon; and an unconcerned observer, if any could have been unconcerned on such an occasion, would have been amused by the eagerness with which the various reports from the crow's-nest were received, all, however, hitherto favourable to our most sanguine hopes.

Between four and six P.M., we passed several riplings on the water, as if occasioned by a weather tide, but no bottom could be found with the hand-lead. Being now abreast of Cape Castlereagh, more distant land was seen to open out to the westward of it, and between the cape and this land was perceived an inlet, to which I have given the name of the Navy Board's Inlet. We saw points of land apparently all round this inlet, but being at a very great distance from it we were unable to determine whether it was continuous or not. But as the land on the western side appeared so much lower and smoother than that on the opposite side near Cape Castlereagh, and came down so near the horizon, about the centre of the inlet, the general impression was, that it is not continuous in that part. As our business lay to the westward, however, and not to the south, the whole of this extensive inlet was, in a few hours, lost in distance.

In the mean time the land had opened out, on the opposite shore, to the northward and westward of Cape Warrender, consisting of high mountains, and in some parts of table land. Several headlands were here distinctly made out, of which the northernmost and most conspicuous, was named after Captain Nicholas Lechmere Pateshall, of the Royal Navy. The extensive bay into which Cape Pateshall extends, and which, at the distance we passed it, appeared to be broken or detached in many parts, was named Croker's Bay, in honour of Mr. Croker, Secretary of the Admiralty; I have called this large opening a bay, though the quickness with which we sailed past it did not allow us to determine the absolute continuity of land round the bottom of it; it is, therefore, by no means improbable, that a passage may here be one day found from Sir James Lancaster's Sound into the northern Sea. The Cape, which lies on the western side of Croker's Bay, was named after Sir Everard Home.

Our course was nearly due west, and the wind still continuing to freshen, took us in a few hours nearly out of sight of the Griper. The only ice which we met with consisted of a few large bergs very much washed by the sea; and, the weather being remarkably clear, so as to enable us to run with perfect safety, we were, by midnight, in a great measure relieved from our anxiety respecting the supposed continuity of land at the bottom of this magnificent inlet, having reached the longitude of 83° 12′, where the two shores

are still above thirteen leagues apart, without the slightest appearance of any land to the westward of us for four or five points of the compass. The colour of the water having become rather lighter, we hove-to at this time for the Griper, and obtained soundings in one hundred and fifty fathoms on a muddy bottom. The wind increased so much as to make it necessary to close-reef the sails, and to get the top-gallant yards down, and there was a breaking sea from the eastward. A great number of whales were seen in course of this day's run.

On the 4th, having made the ship snug, so as to be in readiness to round to, should the land be seen a-head, and the Griper having come up within a few miles of us, we again bore up at one A.M. At half-past three, Lieutenant Beechey, who had relieved me on deck, discovered from the crow's nest, a reef of rocks, in-shore of us to the northward, on which the sea was breaking. These breakers appeared to lie directly off a cape, which we named after Rear Admiral Joseph Bullen, and which lies immediately to the eastward of an inlet, that I named Brooking Cuming Inlet. As the sea had now become high, and the water appeared discoloured at some distance without the breakers, the Hecla was immediately rounded to, for the purpose of sounding; we could find no bottom with fifty fathoms of line, but the Griper coming up shortly after, obtained soundings in seventy-five fathoms, on a bottom of sand and mud. We here met with innumerable loose masses of ice, upon which the sea was constantly breaking, in a manner so much resembling the breakers on shoals, as to make it a matter of some little uncertainty at the time, whether those of which I have spoken above, might not also have been caused by ice. It is possible, therefore, that shoal water may not be found to exist in this place; but I thought it right to mark the spot on the chart, to warn future navigators when approaching this part of the coast. That there is something out of the common way in this neighbourhood, appears, however, more than probable, from the soundings obtained by the Griper, which are much less than we found them in any other part of the Sound at the same distance from land.

At seven A.M., there being less sea, and no appearance of broken or discoloured water, we again bore away to the westward, the Griper having joined us about the meridian of 85°, which had been appointed as our place of rendezvous. Since the preceding evening, a thick haze had been hanging over the horizon to the southward, which prevented our seeing the land in that direction, to the westward of 87°, while the whole of the northern shore, though, as it afterwards proved, at a greater distance from us, was distinctly visible. At noon, being in latitude 74° 15′ 53″ N., longitude, by chronometers, 86° 30′ 30″, we were near two inlets, of which the easternmost was named Burnet Inlet, and the other Stratton Inlet. The land between these two had very much the

appearance of an island. We rounded to, for the purpose of sounding, as well as to wait for our consort, and found no bottom with one hundred and seventy fathoms of line, the water being of a dirty light-green colour. The cliffs on this part of the coast present a singular appearance, being stratified horizontally, and having a number of regular projecting masses of rock, broad at the bottom, and coming to a point at the top, resembling so many buttresses, raised by art at equal intervals.

After lying-to for an hour, we again bore up to the westward, and soon after discovered a cape, afterwards named by Captain Sabine, Cape Fellfoot, which appeared to form the termination of this coast; and as the haze, which still prevailed to the south, prevented our seeing any land in that quarter, and the sea was literally as free from ice as any part of the Atlantic, we began to flatter ourselves that we had fairly entered the Polar sea, and some of the most sanguine among us had even calculated the bearing and distance of Icy Cape, as a matter of no very difficult or improbable accomplishment. This pleasing prospect was rendered the more flattering by the sea having, as we thought, regained the usual oceanic colour, and by a long swell which was rolling in from the southward and eastward. At six P.M., however, land was reported to be seen a-head. The vexation and anxiety produced on every countenance by such a report, was but too visible, until, on a nearer approach, it was found to be only an island, of no very large extent, and that, on each side of it, the horizon still appeared clear for several points of the compass. More land was also discovered beyond Cape Fellfoot, immediately to the westward of which lies a deep and broad bay, which I named after my friend, Mr. Maxwell, to whose kindness and unremitting attention, I am more indebted than it might be proper here to express. At eight P.M., we came to some ice of no great breadth or thickness, extending several miles in a direction nearly parallel to our course; and as we could see clear water over it to the southward, I was for some time in the hope, that it would prove a detached stream, from which no obstruction to our progress westerly was to be apprehended. At twenty minutes past ten, however, the weather having become hazy, and the wind light, we perceived that the ice, along which we had been sailing for the last two hours, was joined, at the distance of half a mile to the westward of us, to a compact and impenetrable body of floes, which lay across the whole breadth of the strait, formed by the island, and the western point of Maxwell Bay. We hauled our wind to the northward, just in time to avoid being embayed in the ice, on the outer edge of which a considerable surf, the effect of the late gale, was then rolling. A second island was discovered to the southward of the former, to both of which I gave the name of Prince Leopold's Isles, in honour of his Royal Highness Prince Leopold of Saxe Coburg. Imme-

diately to the eastward of these islands, there was a strong water-sky, indicating a considerable extent of open sea, but a bright ice-blink to the westward afforded little hope, for the present, of finding a passage in the desired direction. We saw to-day, for the first time, a number of white whales; (*Delphinus Albicans*;) guillemots, fulmar petrels, and kittiwakes, were also numerous near the ice.

The easterly wind died away on the morning of the 5th, and was succeeded by light and variable airs, with thick, snowy weather. At noon we were in lat. 74° 19′ 36″, long. 89° 18′ 40″, the soundings being one hundred and thirty-five fathoms, on a muddy bottom. At half-past ten we tried whether there were any current, and if so in what direction it might be setting, by mooring a boat to the bottom, with the deep-sea chronometer; but none could be detected. An hour before, the same experiment had been tried on board the Griper, when Lieutenant Liddon found the current to be setting east at the rate of nine miles per day. While the calm and thick weather lasted, a number of the officers and men amused themselves in the boats, in endeavouring to kill some of the white whales which were swimming about the ships in great numbers; but the animals were so wary, that they would scarcely suffer the boats to approach them within thirty or forty yards without diving. Mr. Fisher described them to be generally from eighteen to twenty feet in length; and he stated, that he had several times heard them emit a shrill, ringing sound, not unlike that of musical glasses when badly played. This sound, he further observed, was most distinctly heard when they happened to swim directly beneath the boat, even when they were several feet under water, and ceased altogether on their coming to the surface. We saw also, for the first time, one or two shoals of narwhals, (*Monodon Monoceros*), called by the sailors, sea-unicorns.

A steady breeze springing up from the W.N.W. in the afternoon, the ships stood to the northward, till we had distinctly made out, that no passage to the westward could at present be found between the ice and the land. The weather having become clear about this time, we perceived that there was a large open space to the southward, where no land was visible; and for this opening, over which there was a dark water-sky, our course was now directed. It fell calm again, however, in a few hours, so that at noon, on the 6th, we were still abreast of Prince Leopold's Islands, which were so surrounded by ice, that we could not approach them nearer than four or five miles. The appearance of these islands is not less remarkable than that of the northern shore of the strait, being also stratified horizontally, but having none of those buttress-like projections before described. The different strata form so many shelves, as it were, on which the snow lodges; so that immediately after a fall of snow, the islands appear to be striped with

white and brown alternately. The northernmost island, when seen from the E.N.E., appears like a level piece of table-land, being quite perpendicular at each extreme.

The Griper having unfortunately sprung both her top-masts, Lieut. Liddon took advantage of the calm weather to shift them. The Hecla's boats were at the same time employed in bringing on board ice, to be used as water; a measure to which it is occasionally necessary to resort in these regions, when no pools or ponds are to be found upon the floes. In this case, berg-ice, when at hand, is generally preferred; but that of floes, which is in fact the ice of sea-water, is also abundantly used for this purpose: the only precaution which it is necessary to observe, being that of allowing the salt water to drain off before it is dissolved for use. One of our boats was upset by the fall of a mass of ice which the men were breaking, but fortunately no injury was sustained.

A breeze sprung up from the N.N.W. in the evening, and the Griper being ready to make sail, we stood to the southward. The land, which now became visible to the south-east, discovered to us, that we were entering a large inlet, not less than ten leagues wide at its mouth, and in the centre of which no land could be distinguished. The western shore of the inlet, which extended as far as we could see to the S.S.W., was so encumbered with ice, that there was no possibility of sailing near it. I, therefore, ran along the edge of the ice, between which and the eastern shore, there was a broad and open channel, with the intention of seeking, in a lower latitude, a clearer passage to the westward than that which we had just been obliged to abandon lying between Prince Leopold's Isles, and Maxwell's Bay. The head-land, which forms the western point of the entrance into this inlet, was honoured by the name of Cape Clarence, after his Royal Highness the Duke of Clarence; and another, to the south-eastward of this, was named after Sir Robert Seppings, one of the surveyors of his Majesty's navy.

Since the time we first entered Sir James Lancaster's Sound, the sluggishness of the compasses, as well as the amount of their irregularity produced by the attraction of the ship's iron, had been found very rapidly, though uniformly, to increase, as we proceeded to the westward; so much, indeed, that for the last two days, we had been under the necessity of giving up altogether the usual observations for determining the variation of the needle on board the ships. This irregularity became more and more obvious as we now advanced to the southward. The rough magnetic bearing of the sun, at noon, or at midnight, or when on the prime vertical, as compared with its true azimuth, was sufficient to render this increasing inefficiency of the compass quite apparent. For example, at noon this day, while we were observing the meridian altitude, the bearing of the sun was two points on the Hecla's larboard

bow, and consequently her true course was about S.S.W. The binnacle and azimuth compasses at the same time agreed in shewing N.N.W.½W., making the variation to be allowed on that course, eleven points and a-half westerly, corresponding nearly with an azimuth taken on the following morning, which gave 137° 12′. It was evident, therefore, that a very material change had taken place in the dip, or the variation, or in both these phenomena, since we had last an opportunity of obtaining observations upon them; which rendered it not improbable that we were now making a very near approach to the magnetic pole. This supposition was further strengthened on the morning of the 7th; when having decreased our latitude to about 73°, we found that no alteration whatever in the absolute course on which the Hecla was steering, produced a change of more than three or four points in the direction indicated by the compass, which continued uniformly from N.N.E. to N.N.W., according as the ship's head was placed on one side or the other of the magnetic meridian. We now, therefore, witnessed, for the first time, the curious phenomenon of the directive power of the needle becoming so weak as to be completely overcome by the attraction of the ship; so that the needle might now be properly said to point to the north pole of the ship. It was only, however, in those compasses in which the lightness of the cards, and great delicacy in the suspension, had been particularly attended to, that even this degree of uniformity prevailed; for, in the heavier cards, the friction upon the points of suspension was much too great to be overcome even by the ship's attraction, and they consequently remained indifferently in any position in which they happened to be placed. For the purposes of navigation, therefore, the compasses were from this time no longer consulted; and in a few days afterwards, the binnacles were removed as useless lumber, from the deck to the carpenter's store-room, where they remained during the rest of the season, the azimuth compass alone being kept on deck, for the purpose of watching any changes which might take place in the directive power of the needle: and the *true* courses and direction of the wind were in future noted in the log-book as obtained to the nearest quarter point, when the sun was visible by the azimuth of that object and the apparent time.

Being desirous of obtaining all the magnetic observations we were able, on a spot which appeared to be replete with interest in this department of science, and the outer margin of the ice consisting entirely of small loose pieces, which were not sufficiently steady for using the dipping-needle, we hauled up for the nearest part of the eastern shore, for the purpose of landing there with the instruments. We got in with it about noon, having very regularly decreased our soundings from forty to fifteen and a half fathoms; in which depth, having tacked, at the distance of two miles and a

half from the shore, two boats were despatched from each ship, under the command of Lieutenant[s] Beechey and Hoppner, who, together with Captain Sabine, were directed to make the necessary observations, and to collect whatever specimens of natural history the place might afford. They landed on a beach of sand and stones, having passed, at the distance of one mile from it, several large masses of ice aground in six to eight fathoms water, which shoaled from thence gradually into the shore. The officers describe this spot as more barren and dreary than any on which they had yet landed in the arctic regions; there being scarcely any appearance of vegetation, except here and there a small tuft of stunted grass, and one or two species of saxifrage and poppy, although the ground was so swampy in many places that they could scarcely walk about. This part of the coast is rather low, the highest hill near the landing-place being found, by geometrical measurement, to be only three hundred and eighty-eight feet above the level of the sea; and there was at this time very little snow remaining upon it. The fixed rocks near the surface consist chiefly of lime-stone; but quartz, granite and hornblende occurred in detached lumps, most of which were incrusted with a thin coat of lime. The bed of a small stream, which ran between two rocks of lime-stone, was composed entirely of clay-slate. The temperature of this stream of water was 42½°, that of the air, in the shade, being 51°, and of the earth two or three inches below the surface, 34½°. At a short distance from the sea, Lieutenant Hoppner discovered a large mass of iron-stone, which was found to attract the magnet very powerfully. There were no traces of inhabitants to be seen on this part of the coast. Part of the vertebræ of a whale was found at some distance from the beach; but this had probably been carried there by bears, the tracks of whom were visible on the moist soil. The only birds seen were a few ptarmigans (*Tetrao Lagopus*) and snow buntings.

The latitude of the place of observation was 72° 45′ 15″, and its longitude, by the chronometers, 89° 41′ 22″. The dip of the needle was 88° 26′ 42″, and the variation 118° 23′ 37″ westerly. The directive power of the horizontal needle, undisturbed as it was by the attraction of the ship, was, even here, found to be so weak, in Captain Kater's azimuth compasses, which were the most sensible, that they required constant tapping with the hand to make them traverse at all. At half past one, when the boats landed, Lieut. Beechey found the tide ebbing, and it appeared by the marks on the beach, to have fallen about eighteen inches. At fifty minutes past four, when they left the shore, it had fallen six feet and a half more, by which we considered the time of high water on that day to be about half past twelve, and about twenty minutes past eleven on the full and change days of the moon. The whole rise of tide, being nearly the highest of the springs, appears to

have been ten feet, and the ebb was found to set strong to the southward in-shore. A boat being moored to the bottom, at three miles' distance from the land, at five P.M. not the smallest current was perceptible. From these and several subsequent observations, there is good reason to suppose that the flood-tide comes from the south in this inlet. Before the boats left the shore, a staff was erected on a hill near the landing-place, having a board nailed to it, on which the names of the ships and the date were painted; and at three yards in the direction of the magnetic north from the staff, which may be distinguished with a glass at three miles' distance from the land, a bottle was buried, with a paper, containing an account of the time, and the object of our visit to this spot.

As soon as the boats returned on board, we bore up to the southward, running close along the edge of the ice, which l[illegible] nearer and nearer to the eastern shore, so that by midnight [illegible] channel in which we were sailing was narrowed to about five miles. The colour of the water had changed to a very light green at that distance from the shore; but we could find no bottom with fifty fathoms of line, and had thirty-five fathoms while rounding a point of ice at three miles distance from the beach. The weather was beautifully serene and clear, and the sun, for the second time to us this season, just dipped below the northern-horizon, and then reappeared in a few minutes.

A dark sky to the south-west had given us hopes of finding a westerly passage to the south of the ice along which we were now sailing; more especially as the inlet began to widen considerably as we advanced in that direction; but at three A.M., on the morning of the 8th, we perceived that the ice ran close in with a point of land bearing S.b.E. from us, and which appeared to form the southern extremity of the eastern shore. To this extreme point I gave the name of Cape Kater, in compliment to Captain Henry Kater, one of the Commissioners of the Board of Longitude, to whom science is greatly indebted for his improvements of the pendulum, and the mariner's compass.

With the increasing width of the inlet, we had flattered ourselves with increasing hopes; but we soon experienced the mortification of disappointment. The prospect from the crow's nest began to assume a very unpromising appearance, the whole of the western horizon, from north round to S.b.E., being completely covered with ice, consisting of heavy and extensive floes, beyond which no indication of water was visible; instead of which there was a bright and dazzling ice-blink extending from shore to shore. The western coast of the inlet, however, trended much more to the westward than before, and no land was visible to the south-west, though the horizon was so clear in that quarter, that, if any had existed of moderate height, it might have been easily seen at this time, at

the distance of ten or twelve leagues. From these circumstances, the impression received at the time was, that the land, both on the eastern and western side of this inlet, would be one day found to consist of islands. As a fresh northerly breeze was drifting the ice rapidly towards Cape Kater, and there appeared to be no passage open between it and that cape, I did not consider it prudent, under present circumstances, to run the ships down to the point, or to attempt to force a passage through the ice, and therefore hauled to the wind with the intention of examining a bay which was abreast of us, and to which I gave the name of Fitzgerald Bay, out of respect for Captain Robert Lewis Fitzgerald, of the royal navy.

A boat from each ship was prepared to conduct this examination, and we stood in to drop them in-shore, but found, as we approached, that the bay was so filled with ice, as to render it impracticable for any boat to land. I therefore determined, as the season was fast advancing to a close, to lose no time in returning to the northward, in the hope of finding the channel between Prince Leopold's Isles and Maxwell Bay more clear of ice than when we left it, in which case there could be little doubt of our effecting a passage to the westward; whereas, in our present situation, there appeared no prospect of our doing so without risking the loss of more time than I deemed it prudent to spare.

I have before observed that the east and west lands which form this grand inlet are probably islands; and, on an inspection of the charts, I think it will also appear highly probable that a communication will one day be found to exist between this inlet and Hudson's Bay, either through the broad and unexplored channel, called Sir Thomas Rowe's Welcome, or through Repulse Bay, which has not yet been satisfactorily examined. It is also probable, that a channel will be found to exist between the western land and the northern coast of America; in which case the flood-tide which came from the southward may have proceeded round the southern point of the west land out of the Polar sea, part of it setting up the inlet, and part down the Welcome, according to the unanimous testimony of all the old navigators, who have advanced up the latter channel considerably to the northward.

The distance which we sailed to the southward in this inlet was about one hundred and twenty miles, Cape Kater being, by our observations, in lat. 71° 53′ 30″, long. 90° 03′ 45″; and I saw no reason to doubt the practicability of ships penetrating much farther to the south, by watching the occasional openings in the ice, if the determining the geography of this part of the arctic regions be considered worth the time which must necessarily be occupied in effecting it. The ice which we met with in the southern part of this inlet was much less broken into pieces than that to the northward; and the floes, some of which not less than nine or ten feet

thick, were covered with innumerable little round "hummocks," as they are called by the Greenland seamen, which are perhaps first formed by the drift of the snow in particular situations, and which by alternate thawing and freezing, become as solid and transparent as any other part of the ice. This peculiarity I never remember to have remarked on the floes in Baffin's Bay, on which a carriage might travel without much inconvenience, except that which arises from the numerous pools of water found upon them in the latter part of the summer.

From latitude 73° to the farthest progress made to the southward, we found the soundings remarkably regular in approaching the eastern shore. The colour of the water was always observed to change to a beautiful light green before we could obtain soundings with a line of forty fathoms, which occur generally at the distance of four or five miles from the land; after which the depth decreases so gradually that the lead appears to be a safe guide. The bottom is principally mud, into which the lead sinks deep; but there is also some hard ground, and a few pieces of limestone were occasionally brought up by the lead.

The directive power of the magnet seemed to be weaker here than ever; for the north pole of the needle in Captain Kater's steering compass, in which the friction is almost entirely removed by a thread suspension, was observed to point steadily towards the ship's head, in whatsoever direction the latter was placed. It is probable, therefore, that the magnetic dip would have been found somewhat greater here than at our place of observation on the 7th; and it was a matter of regret to me that the primary object of the expedition would not allow of another day's detention for the purpose of repeating the magnetic observations on this spot.

On the 9th, as we returned to the northward with a light but favourable breeze, we found that the ice had approached the eastern shore of the inlet, leaving a much narrower channel than that by which we had entered; and in some places it stretched completely across to the land on this side, while the opposite coast was still as inaccessible as before.

On the evening of the 9th, a circular prismatic halo was seen round the sun, with a bright parhelion on each side at the same altitude with the sun. The radius of the circle was 23° 06'. Several black whales, and multitudes of white ones, were seen in the course of the day, also several narwhals and seals, and one bear. There was an iceberg in sight.

On the 10th, the weather was very thick with snow, which was afterwards succeeded by rain and fog. The compasses being useless, and the sun obscured, we had no means of knowing the direction in which we were going, except that we knew the wind had been to the southward before the fog came on, and had found by experience that it always blew directly up or down the inlet, which

enabled us to form a tolerably correct judgment of our course. We continued to stand off-and-on near the ice, till the evening, when, the fog having cleared away, we bore up to the northward, keeping as near the western shore as the ice would permit; but at eleven P.M. we were stopped in our progress by the ice extending to the land on the eastern side of the inlet, which obliged us to haul our wind. This part of the coast is much higher than that farther to the southward, and the soundings near it are also considerably deeper.

On the 11th, the weather was so thick with fog and rain, that it was impossible to ascertain in what direction we were going, which obliged me to make the ships fast to a floe till the weather should clear up. There being abundance of the purest water in pools upon the floe, our supply of this necessary article was completed on board each ship, and, in the mean time, Captain Sabine took the opportunity of repeating his observations upon the dip of the magnetic needle, the result of which, being 88° 25′ 17″, served to confirm those made on shore on the 7th. The repetition of such observations, which require considerable care and delicacy, is always satisfactory; but was particularly so on this occasion from the circumstance already mentioned of having found at some distance from the place of observation on the 7th, a mass of magnetic iron stone, from which, or from other similar substances, it was possible that the needle might have suffered some disturbance. In the evening, the boats succeeded in harpooning a narwhal, to the great delight of our Greenland sailors, who take so much pleasure in the sport to which they have been accustomed, that they could with difficulty be restrained at times from striking a whale, though such a frolic would almost inevitably have been attended with the loss of one or more of our lines. A few kittiwakes and arctic gulls were flying about the ice.

A breeze sprung up from the northward on the morning of the 12th, but the weather was so foggy for some hours that we did not know in what direction it was blowing. As soon as the fog cleared away, so as to enable us to see a mile or two around us, we found that the floe to which we had anchored was drifting fast down upon another body of ice to leeward, threatening to enclose the ships between them. We, therefore, cast off, and made sail, in order to beat to the northward, which we found great difficulty in doing, owing to the quantity of loose ice with which this part of the inlet was now covered. A remarkably thick fog obscured the eastern land from our view this evening at the distance of five or six miles, while the western coast was distinctly visible at four times that distance. We remarked, in standing off-and-on, near the main body of the ice, that the clear atmosphere commenced at a short distance from its margin; so that we were enabled to obtain a few lunar observations near the edge of the ice, while,

at the distance of a mile to the eastward of it, the sun was altogether obscured by fog.

This being the anniversary of the birth-day of His Royal Highness the Prince Regent, it naturally suggested to us the propriety of honouring the large inlet, which we had been exploring, and in which we still were sailing, with the name of Prince Regent's Inlet.

The weather was beautifully calm and clear on the 13th, when, being near an opening in the eastern shore, I took the opportunity of examining it in a boat. It proved to be a bay, a mile wide at its entrance, and three miles deep in an E.b.S. direction, having a small but snug cove on the north side, formed by an island, between which and the main land is a bar of rocks, which completely shelters the cove from sea or drift ice. We found the water so deep, that in rowing close along the shore we could seldom get bottom with seven fathoms of line; but time could not be spared to obtain the exact depth.

The cliffs on the south side of this bay, to which I gave the name of Port Bowen, after Captain James Bowen, one of the Commissioners of His Majesty's navy, resemble, in many places, ruined towers and battlements; and fragments of the rocks were constantly falling from above. At the head of the bay is an extensive piece of low flat ground, intersected by numerous rivulets, which, uniting at a short distance from the beach, formed a deep and rapid stream, near the mouth of which we landed. The spot was, I think, the most barren I ever saw, the ground being almost entirely covered with small pieces of slaty limestone, among which no vegetation appeared for more than a mile, to which distance Mr. Ross and myself walked inland, following the banks of the stream. Among the fragments, we picked up one piece of limestone, on which was the impression of a fossil-shell. We saw here a great number of young black guillemots (*Colymbus Grylle*), and a flock of ducks, which we supposed to be of the eider species.

The latitude observed at the mouth of the stream was 73° 12′ 11″, and the longitude, by chronometers, 89° 08′ 08″. The variation of the needle, observed in the morning, at three or four miles distance from the land, was 114° 16′ 43″ westerly. From twenty minutes past eleven till a quarter after twelve, the tide rose by the shore six inches, and the high-water mark was between two and three feet above this; but we were not long enough on shore to form a correct judgment of the time at which high water takes place. About three-quarters of a mile to the southward of Port Bowen is another small bay, which we had not time to examine.

Soon after I returned on board, a light breeze from the southward enabled us to steer toward Prince Leopold's Islands, which, however, we found to be more encumbered with ice than before,

as we could not approach them so near as at first by three or four miles. The narwhals were here very numerous; these animals appear fond of remaining with their backs exposed above the surface of the water, in the same manner as the whale, but for a much longer time, and we frequently also observed their horns erect, and quite stationary for several minutes together. Three or four miles to the northward of Port Bowen we discovered another opening, having every appearance of a harbour, with an island near the entrance; I named it after Captain Samuel Jackson, of the royal navy.

The whole of the 14th was occupied in an unsuccessful attempt to find an opening in the ice to the westward, which remained perfectly close and compact, with a bright ice-blink over it. Our latitude at noon was 73° 35′ 30″, longitude 89° 01′ 30″, being in two hundred and ten fathoms of water, on a muddy bottom. Some water, brought up in Doctor Marcet's bottle from one hundred and eighty-five fathoms, was at the temperature of 34°, that of the surface being the same, and of the air 39°.

The ice continued in the same unfavourable state on the 15th; and being desirous of turning to some account this vexatious but unavoidable detention, I left the ship in the afternoon, accompanied by Captain Sabine and Mr. Hooper, in order to make some observations on shore, and directed Lieutenant Liddon to send a boat from the Griper for the same purpose. We landed in one of the numerous valleys, or ravines, which occur on this part of the coast, and which, at a few miles distance, very much resemble bays, being bounded by high hills, which have the appearance of bluff headlands. We found the water very deep close to the beach, which is composed of rounded limestones, and on which there was no surf; we then ascended, with some difficulty, the hill on the south side of the ravine, which is very steep, and covered with innumerable detached blocks of limestone, some of which are constantly rolling down from above, and which afford a very insecure footing. From the top of this hill, which is about six or seven hundred feet above the level of the sea, and which commands an extensive view to the westward, the prospect was by no means favourable to the immediate accomplishment of our object. No water could be seen over the ice to the north-west, and a bright and dazzling blink covered the whole space comprised between the islands and the north shore. It was a satisfaction, however, to find that no land appeared which was likely to impede our progress; and we had been too much accustomed to the obstruction occasioned by ice, and too well aware of the suddenness with which that obstruction is often removed, to be at all discouraged by present appearances.

On the top of this hill we deposited a bottle, containing a short notice of our visit, and raised over it a small mound of stones; of

these we found no want, for the surface was covered with small pieces of schistose limestone, and nothing like soil or vegetation could be seen. We found a great quantity of madreporite among the lime, and at the foot of the hill I met with one large piece, of the basaltiform kind. Several pieces of flint were also picked up on the beech. The insignificance of the stream which here emptied itself into the sea, formed, as usual, a striking contrast with the size of the bed through which it flowed, the latter being several hundred feet deep, and two or three hundred yards wide.

The latitude of this place is 73° 33′ 15″ N., and the longitude, by our chronometers, 88° 18′ 17″; the dip of the magnetic needle was 87° 35′ 95″, and its variation 115° 37′ 12″ westerly. The tide was found to rise three feet from ten minutes past three till seven P.M.; during the whole of which time the stream, within one or two miles of the shore, was carrying the loose pieces of ice to the southward, at the rate of about a mile and a half an hour. By observing the ships, however, at five miles distance in the offing, I had reason to believe that they were set in the contrary direction, and that the current, observed by us in shore, was only an eddy, and not the true direction of the flood tide. The time of high water here, on full and change days of the moon, will probably be about eleven o'clock. A very large black whale was seen near the beach, and a great number of seals, though seldom more than two of the latter together. We saw one of the kind called by the sailors, "saddle-back," (*Phoca Grænlandica*).

The wind was light on the 16th, with cloudy weather and occasional fogs, and we scarcely altered our position, being hemmed in by ice or land in almost every direction. At five P.M., it being quite calm, we had a good opportunity of trying the set of the tide, which, by the preceding day's observations, we knew to be rising at this time by the shore. A small boat was moored to the bottom, which consisted of soft mud, in one hundred and ninety-one fathoms, by a deep-sea lead weighing one hundred and fifty pounds, and a current was found to be setting to the N.N.W., at the rate of a quarter of a mile an hour. This served to confirm the remark I had made the preceding day respecting the drift of the ships in the offing; and, unless there be what seamen call a "tide and half tide," would appear to establish the fact of the flood-tide coming from the southward in this part of Prince Regent's Inlet.

On the 17th, we had a fresh breeze, from the S.S.W., with so thick a fog, that in spite of the most unremitting attention to the sails and the steerage, the ships were constantly receiving heavy shocks from the loose masses of ice with which the sea was covered, and which, in the present state of the weather, could not be distinguished at a sufficient distance to avoid them. On the weather clearing up in the afternoon, we saw, for the first time, a remarka-

ble bluff headland, which forms the north-eastern point of the entrance into Prince Regent's Inlet, and to which I gave the name of Cape York, after His Royal Highness the Duke of York. A little to the eastward of Cape Fellfoot, we observed six remarkable stripes of snow, near the top of the cliff, being very conspicuous at a great distance, when viewed from the southward. These stripes, which are formed by the drift of snow between the buttress-like projections before described, and which remained equally conspicuous on our return the following year, have probably at all times much the same appearance, at least about this season of the year, and may, on this account, perhaps, be deemed worthy of notice, as a landmark.

At half-past ten A.M., on the 18th, it being quite calm, the small boat was moored to the bottom, in two hundred and ten fathoms, by which means the current was ascertained to be setting W.S.W., at the rate of a mile and a half an hour; and, from our preceding observations on the time of the tides on shore in this neighbourhood, it can scarcely be doubted that this was the ebb-tide.

Mr. Crawford, the Greenland mate of the Hecla, being in quest of a narwhal in one of the boats, could not resist the temptation of striking a fine black whale, which rose close to him, and which soon ran out two lines of one hundred and forty fathoms each, when, after towing the boat some distance, the harpoon fortunately drew, and thus saved our lines.

There being still no prospect of getting a single mile to the westward in the neighbourhood of Prince Leopold's Islands, and a breeze having freshened up from the eastward in the afternoon, I determined to stand over once more towards the northern shore, in order to try what could there be done towards effecting our passage; and at nine P.M., after beating for several hours among floes and streams of ice, we got into clear water near that coast, where we found some swell from the eastward. There was just light enough at midnight to enable us to read and write in the cabin.

The wind and sea increased on the 19th, with a heavy fall of snow, which, together with the uselessness of the compasses, and the narrow space in which we were working between the ice and the land, combined to make our situation for several hours a very unpleasant one. At two P.M., the weather being still so thick that we could at times scarcely see the ships' length a-head, we suddenly found ourselves close under the land, and had not much room to spare in wearing round. We stood off-and-on during the rest of the day, measuring our distance by Massey's patent log, an invaluable machine on this and many other occasions; and in the course of the afternoon, found ourselves opposite to an inlet, which I named after my relation, Sir Benjamin Hobhouse. The

snow was succeeded by rain at night; after which the wind fell, and the weather became clear, so that, on the morning of the 20th, when we found ourselves off Stratton Inlet, we were enabled to bear up along shore to the westward. The points of ice led us occasionally within two miles of the land, which allowed us to look into several small bays or inlets, with which this coast appears indented, but which it would require more time than we could afford, thoroughly to survey or examine. The remarkable structure of this land, which I have before attempted to describe, is peculiarly striking about Cape Fellfoot, where the horizontal strata very much resemble two parallel tiers of batteries, placed at regular intervals from the top to the bottom of the cliff, affording a grand and imposing appearance. There is a low point running off some distance from Cape Fellfoot, which is not visible till approached within five or six miles. We passed along this point at the distance of four miles, finding no bottom with from fifty to sixty-five fathoms of line. Maxwell Bay is a very noble one, having several islands in it, and a number of openings on its northern shore, which we could not turn aside to explore. It was, however, quite free from ice, and might easily have been examined, had it been our object to do so, and time would have permitted. A remarkable headland on the western side I named after Sir William Herschel.

At six P.M., when we had passed to the westward of Maxwell Bay, the wind failed us, and the opportunity was immediately taken to try the current, by mooring the small boat to the bottom in one hundred and fifty fathoms. The tide was found to set W. ½ N., at the rate of a quarter of a mile per hour; and at nine o'clock, when we tried it again in a similar manner, there was still a slight stream perceptible, setting in the same direction. The mud and small black stones, brought up from the bottom, consisted entirely of limestone, effervescing strongly with an acid.

On the 21st we had nothing to impede our progress but the want of wind, the great opening, through which we had hitherto proceeded from Baffin's Bay, being now so perfectly clear of ice, that it was almost impossible to believe it to be the same part of the sea, which, but a day or two before, had been completely covered with floes to the utmost extent of our view. In the forenoon, being off a headland, which was named after Captain Thomas Hurd, Hydrographer to the Admiralty, we picked up a small piece of wood, which appeared to have been the end of a boat's yard, and which caused sundry amusing speculations among our gentlemen; some of whom had just come to the very natural conclusion, that a ship had been here before us, and that, therefore, we were not entitled to the honour of the first discovery of that part of the sea on which we were now sailing; when a stop was suddenly put to this and other ingenious inductions by the information of

one of the seamen, that he had dropped it out of his boat a fortnight before. I could not get him to recollect exactly the day on which it had been so dropped, but what he stated was sufficient to convince me, that we were not at that time more than ten or twelve leagues from our present situation; perhaps not half so much; and that, therefore, here was no current setting constantly in any one direction. A bay, to the northward and westward of Cape Hurd, was called Rigby bay.

At nine P.M., the wind being light from the northward, with hazy weather, and some clouds, the electrometer chain was hoisted up to the masthead; but no sensible effect was produced, either upon the pith-balls or the gold-leaf. A thick fog came on at night, which, together with the lightness of the wind, and the caution necessary in navigating an unknown sea under such circumstances, rendered our progress to the westward extremely slow, though we had fortunately no ice to obstruct us. The narwhals were blowing about us in all directions, and two walruses with a young one were seen upon a piece of ice.

The fog clearing up on the following day, we found ourselves abreast a bay, to which the name of Radstock Bay was subsequently given by Lieut. Liddon's desire, in compliment to the Earl of Radstock. This bay is formed by a point of land, on the eastern side, which I named Cape Eardley Wilmot, and on the western, by a bluff headland, which was called after Captain Tristram Robert Ricketts, of the royal navy. In the centre of Radstock bay, lies an insular looking piece of land, which received the name of Caswall's Tower. We now also caught a glimpse of more land to the southward; but, owing to a thick haze which hung over the horizon in that quarter, the continuity of land on a great part of that coast, to the westward of Cape Clarence, remained, for the present, undetermined. Immediately to the westward of us, we discovered more land, occupying several points of the horizon, which renewed in us considerable apprehension, lest we should still find no passage open into the Polar sea. As we advanced slowly to the westward, the land on which Cape Ricketts stands, appeared to be nearly insular; and, immediately to the westward of it, we discovered a considerable opening, which we called Gascoyne's Inlet, after General Gascoyne, and which I should have been glad to examine in a boat, had time permitted. In the afternoon, the weather became very clear and fine, the wind being light from the westward. As this latter circumstance rendered our progress very slow, the opportunity was taken to despatch the boats on shore, for the purpose of making observations; and at the same time a boat from each ship, under the respective command of Lieutenants Beechey and Hoppner, was sent to examine a bay, at no great distance to the northward and westward of us. The first party landed at the foot of a bluff headland, which forms the

eastern point of this bay, and which I named after my friend Mr. Richard. Riley, of the Admiralty. They had scarcely landed ten minutes, when a fresh breeze unexpectedly sprung up from the eastward, and their signal of recal was immediately made. They were only, therefore, enabled to obtain a part of the intended observations, by which the latitude was found to be 74° 39′ 51″, the longitude 91° 47′ 36″.8, and the variation of the magnetic needle 128° 58′ 07″ westerly. The cliffs on this part of the coast were observed to consist almost entirely of secondary limestone, in which fossils were abundantly found. There was little or no vegetation in those parts which our gentlemen had an opportunity of examining during their short excursion; but, as a quantity of the dung of rein-deer was brought on board, the interior of the country cannot be altogether unproductive. One or two specimens of the silvery gull, (*Larus argentatus*), and of the *Larus Glaucus*, with the young of the latter alive, were obtained by Captain Sabine; and five black whales were seen near the beach.

Lieutenant Beechey found that the land, which at this time formed the western extreme, and which lies on the side of the bay, opposite to Cape Riley, was an island; to which I, therefore, gave the name of Beechey Island, out of respect to Sir William Beechey. Immediately off Cape Riley runs a low point, which had some appearance of shoal-water near it, there being a strong ripple on the surface; but Lieutenant Hoppner reported, that he could find no bottom with thirty-nine fathoms, at the distance of two hundred yards from it.

As soon as the boats returned, all sail was made to the westward, where the prospect began to wear a more and more interesting appearance. We soon perceived, as we proceeded, that the land, along which we were sailing, and which, with the exception of some small inlets, had appeared to be hitherto continuous from Baffin's Bay, began now to trend much to the northward, beyond Beechey island, leaving a large open space between that coast and the distant land to the westward, which now appeared like an island, of which the extremes to the north and south were distinctly visible. The latter was a remarkable headland, having at its extremity two small table hills, somewhat resembling boats turned bottom upwards, and was named Cape Hotham, after Rear-Admiral the honourable Sir Henry Hotham, one of the Lords Commissioners of the Admiralty. At sunset we had a clear and extensive view to the northward, between Cape Hotham and the eastern land. On the latter several headlands were discovered and named; between the northernmost of these, called Cape Bowden, and the island to the westward, there was a channel of more than eight leagues in width, in which neither land nor ice could be seen from the mast-head. To this noble channel I gave the name of Wellington, after his Grace the Master-General of the Ordnance.

The arrival off this grand opening was an event for which we had long been looking with much anxiety and impatience; for, the continuity of land to the northward had always been a source of uneasiness to us, principally from the possibility that it might take a turn to the southward and unite with the coast of America. The appearance of this broad opening, free from ice, and of the land on each side of it, more especially that on the west, leaving scarcely a doubt on our minds of the latter being an island, relieved us from all anxiety on that score; and every one felt that we were now finally disentangled from the land which forms the western side of Baffin's Bay; and that, in fact, we had actually entered the Polar sea. Fully impressed with this idea I ventured to distinguish the magnificent opening through which our passage had been effected from Baffin's bay to Wellington channel, by the name of Barrow's Strait, after my friend Mr. Barrow, Secretary of the Admiralty; both as a private testimony of my esteem for that gentleman, and as a public acknowledgment due to him for his zeal and exertions in the promotion of Northern Discovery. To the land on which Cape Hotham is situated, and which is the easternmost of the group of islands, (as we found them to be by subsequent discovery,) in the Polar sea, I gave the name of Cornwallis Island, after Admiral the Honourable Sir William Cornwallis, my first naval friend and patron; and an inlet, seven miles to the northward of Cape Hotham, we called Barlow Inlet, as a testimony of my respect for Sir Robert Barlow, one of the Commissioners of His Majesty's navy.

Though two-thirds of the month of August had now elapsed, I had every reason to be satisfied with the progress which we had hitherto made. I calculated upon the sea being still navigable for six weeks to come, and probably more if the state of the ice would permit us to edge away to the southward in our progress westerly: our prospects, indeed, were truly exhilarating; the ships had suffered no injury; we had plenty of provisions; crews in high health and spirits; a sea, if not open, at least navigable; and a zealous and unanimous determination in both officers and men to accomplish, by all possible means, the grand object on which we had the happiness to be employed.

CHAPTER III.

Favourable Appearances of an open Westerly Passage—Land to the Northward, a series of Islands—General appearance of them—Meet with some Obstruction from low Islands surrounded with Ice—Remains of Esquimaux Huts, and natural productions of Byam Martin Island—Tedious Navigation from Fogs and Ice—Difficulty of steering a proper Course—Arrival and Landing on Melville Island—Proceed to the Westward, and reach the Meridian of 110° W. Long., the first stage in the Scale of Rewards granted by Act of Parliament.

A CALM which prevailed during the night kept us nearly stationary off Beechey Island till three A.M. on the 23d, when a fresh breeze sprung up from the northward, and all sail was made for Cape Hotham, to the southward of which it was now my intention to seek a direct passage towards Behring's Strait. Wellington channel, to the northward of us, was as open and navigable, to the utmost extent of our view, as any part of the Atlantic, but as it lay at right angles to our course, and there was still an opening at least ten leagues wide to the southward of Cornwallis Island, I could fortunately have no hesitation in deciding which of the two it was our business to pursue. If, however, the sea to the westward, which was our direct course, had been obstructed by ice, and the wind had been favourable, such was the tempting appearance of Wellington channel, in which there was no visible impediment, that I should probably have been induced to run through it, as a degree more or less to the northward made little or no difference in the distance we had to run to Icy Cape. The open channel to the westward did not, however, reduce me to this dilemma. It is impossible to conceive any thing more animating than the quick and unobstructed run with which we were favoured from Beechey Island across to Cape Hotham. Most men have, probably, at one time or another, experienced that elevation of spirits which is usually produced by rapid motion of any kind; and it will readily be conceived how much this feeling was heightened in us, in the few instances in which it occurred, by the slow and tedious manner in which the greater part of our navigation had been performed in these seas. Our disappointment may therefore be imagined, when, in the midst of these favourable appearances, and of the hope with which they had induced us to flatter ourselves, it was suddenly and unexpectedly reported from the crow's nest, that a body of ice lay directly across the passage between Cornwallis Island and the land to the southward. As we approach-

ed this obstruction, which commenced about Cape Hotham, we found that there was, for the present, no opening in it through which a passage could be attempted. After lying to for an hour, however, Lieutenant Beechey discovered from the crow's-nest, that one narrow neck appeared to consist of loose pieces of heavy ice detached from the main floes which composed the barrier, and that, beyond this, there was a considerable extent of open water. The Hecla was immediately pushed into this part of the ice, and, after a quarter of an hour's "boring," during which the breeze had, as usual, nearly deserted us, succeeded in forcing her way through the neck. The Griper followed in the opening which the Hecla had made, and we continued our course to the westward, having once more a navigable sea before us.

We now remarked that a very decided change had taken place in the character of the land to the northward of us since leaving Beechey Island; the coast near the latter being bold and precipitous next the sea, with very deep water close to it, while the shores of Cornwallis Island rise with a gradual ascent from a beach which appeared to be composed of sand. During the forenoon we passed several riplings on the surface of the water, which were probably occasioned by the set of the tides round each end of Cornwallis Island, as we found a depth of ninety-five fathoms. An opening was seen in the southern land, which I distinguished by the name of Cunningham Inlet, after Captain Charles Cunningham of the Royal Navy, resident Commissioner at Deptford and Woolwich, to whose kindness and attention we were much indebted during the equipment of the ships for this service. A bluff and remarkable cape, which forms the eastern point of Cunningham Inlet obtained, by Lieutenant Hoppner's desire, the name of Cape Gifford, out of respect to his friend, Mr. Gifford, a gentleman well known and highly respected, as he deserves to be, in the literary world. To the eastward of Cape Gifford, a thick haze covered the horizon, and it prevented us from seeing more land in that direction; so that its continuity from hence to Cape Clarence still remained undetermined, while, to the westward, it seemed to be terminated rather abruptly by a headland, which I distinguished by the name of Cape Bunny.

At noon, we had reached the longitude of 94° 43′ 15″, the latitude, by observation, being 74° 20′ 52″, when we found that the land which then formed the western extreme on this side was a second island, which, after Rear-Admiral Edward Griffith, I called Griffith Island. Immediately opposite to this, upon Cornwallis Island, is a conspicuous headland, which, at some distance, has the appearance of being detached, but which, on a nearer approach, was found to be joined by a piece of low land. To this I gave the name of Cape Martyr, after a much esteemed friend. At two P.M., having reached the longitude of 95° 07′, we came to some

heavy and extensive floes of ice, which obliged us to tack, there being no passage between them. We beat to the northward during the whole of the afternoon, with a fresh breeze from that quarter, in the hope of finding a narrow channel under the lee of Griffith Island. In this expectation we were, however, disappointed, for, at eight P.M., we were near enough to perceive not only that the ice was quite close to the shore, but that it appeared not to have been detached from it at all during this season. We, therefore, bore up, and ran again to the southward, where the sea by this time had become rather more clear along the lee margin of a large field of ice extending far to the westward. The ice in this neighbourhood was covered with innumerable "hummocks," such as I have before endeavoured to describe as occurring in the southern part of Prince Regent's Inlet, and the floes were from seven to ten feet in thickness. It may here be remarked, as a fact not altogether unworthy of notice, that, from the time of our entering Sir James Lancaster's Sound, till we had passed the meridian of 92°, near which the northern shore of Barrow's Strait ceases to be continuous, the wind, as is commonly the case in inlets of this kind, had invariably blown in a direction nearly due east or due west, being that of the shores of the strait. When, therefore, we experienced to-day, for the first time, a fresh breeze blowing steadily from the northward, or directly off the land, we were willing, though perhaps without much reason, to construe this circumstance into an additional indication of the shores near which we were now sailing being altogether composed of islands, down the channels between which the wind blew, and that therefore no obstruction from continued land was any longer to be apprehended.

After various unsuccessful attempts to get through the ice which now lay in our way, we were at length so fortunate as to accomplish this object by "boring" through several heavy "streams," which occasioned the ships to receive many severe shocks; and, at half an hour before midnight, we were enabled to pursue our course, through "sailing ice," to the westward.

A fog came on, on the morning of the 24th, which once more reduced us to the necessity of depending on the steadiness of the wind for a knowledge of the direction in which we were steering, or of having recourse to the unpleasant alternative of heaving-to, till the weather should become clear. The former was, of course, preferred, and we pushed on with all the canvas which the Griper's bad sailing would allow us to carry, using the very necessary precaution of keeping the hand-leads constantly going. We passed one field of ice, of immense length, the distance which we ran along it, without meeting a single break in it, being, according to the report of the officers, from eight to ten miles, and its general thickness about eight feet. In this manner we had sailed between fifteen and twenty miles in a tolerably clear sea, when, on the fog

clearing away, at seven A.M., we found, by the bearings of the sun, that the wind had not deceived us, and that we had made nearly all westing during the night's run. We also saw land to the northward of us at the distance of nine or ten miles, appearing like an island, which it afterwards proved to be, and which I named after viscount Lowther, one of the lords of his Majesty's treasury. Shortly after, we also saw land to the south, so that we could not but consider ourselves fortunate in having steered so directly in the proper course for sailing in this channel during the continuance of the foggy weather. The land to the southward was high and bold, being terminated to the eastward by a bluff headland, which I named after Mr. Walker, of the Hydrographical Office, at the Admiralty. Immediately at the back of Cape Walker, or to the southward of it, the loom of land was distinctly visible, but, from the state of the weather, we could not ascertain its extent. We here obtained soundings in sixty-three fathoms, on a bottom of sand and small stones, with some pieces of coral.

The wind, drawing more to the westward, soon after the clearing up of the fog, obliged us to beat to windward during the rest of the day between the two lands, that to the southward being loaded with ice, while the shores of Lowther Island were perfectly clear and accessible. As we stood in towards the south-west point of the island, in the afternoon, we found the water deepen from sixty-five to seventy-six fathoms, the latter soundings being at the disantce of two miles and a half from the shore: and, in standing off again to the south-westward, came rather unexpectedly to a low sandy-looking island, having a great deal of heavy ice aground near it; to this I gave the name of Young's Island, after Dr. Thomas Young, Secretary to the Board of Longitude. We tacked in thirty-four fathoms at three miles distance from this island; and from the quantity of heavy ice near it, which is a never-failing beacon in these seas, it seems more than probable that it is surrounded by shoal water.

It now became evident that all the land around us consisted of islands, and the comparative shoaliness of the water made great caution necessary in proceeding, surrounded as we were by both land and ice in almost every direction. In the course of the evening, more land came in sight to the northward; but the distance was at this time too great to enable us to distinguish its situation and extent.

Early on the following morning, Lieutenant Beechey discovered, from the crow's nest, a second low island, resembling Young's island in size and appearance, and lying between three and four leagues to the northward of it. I gave it the name of Davy Island, after Sir Humphrey Davy, now President of the Royal Society. The nearest land which we had seen to the northward, on the preceding evening, proved to be another island, four or five miles

long from east to west, which I distinguished by the name of Garrett Island, out of respect to my much-esteemed friend Captain Henry Garrett, of the royal navy, to whose kind offices and friendly attention during the time of our equipment, I must ever feel highly indebted. The land to the northward of Garrett Island was found to be another island of considerable extent, having, towards its eastern end, a remarkable peaked hillock, very conspicuous when seen from the southward. I named this Bathurst Island, in honour of the Earl of Bathurst, one of his Majesty's principal secretaries of state, and a bay near its south-eastern point, was called Bedford Bay.

The islands which we had discovered during this day's navigation, among which I have not ventured to include the land to the southward of Lowther Island, of which we obtained a very imperfect view, are generally of a moderate height, not exceeding perhaps four or five hundred feet above the level of the sea. With the exception of some parts of Bathurst Island, which have a more rugged aspect, and which rise to a greater elevation than this, we found them entirely clear of snow, and when the sun was shining upon them, they exhibited a brown appearance. In standing in towards Garrett Island, the water was found to deepen from forty to sixty-five, seventy, and eighty fathoms; the latter soundings occurring at two miles distance from the south-eastern point of the island, where we suddenly met with a strong rippling on the surface of the water: as no irregularity could be found in the bottom, this rippling was perhaps occasioned by the meeting of the tides in this place.

We had seen no whales nor narwhals since leaving Cape Riley on the morning of the 23d; and it was now (the 26th) remarked, not without some degree of unpleasant feeling, that not a single bird, nor any other living creature, had for the whole of this day made its appearance. It was, however, encouraging to find, while advancing to the westward, as fast as an unfavourable wind would permit, that, although the sea beyond us was for the most part covered with a compact and undivided body of ice, yet that a channel of sufficient breadth was still left open for us between it and the shore, under the lee of Bathurst island. The ice here consisted almost entirely of fields, the limits of which were not visible from the mast-head, and which were covered with the same kind of hummocks as before described. The westernmost land now in sight was a cape, which I named after Vice-Admiral Sir George Cockburn, one of the Lords Commissioners of the Admiralty. This cape appeared, during the day, to be situated on a small island detached from Bathurst Island; but, on approaching it towards evening, we found them to be connected by a low sandy beach or isthmus, over which some high and distant hills were seen to the north-westward. An opening in the land near this

beach, and which had very much the appearance of a river, with some rocky islets at its mouth, was named Allison Inlet, after the Greenland master of the Hecla. The water became very light coloured as we stood in towards this part of the coast, and we tacked in twenty-six fathoms, at six or seven miles' distance from it, continuing to beat to the westward.

We gained so little ground during the night, and in the early part of the following morning, notwithstanding the smoothness of the water, and a fine working breeze, that I am confident there must have been a tide setting against us off Cape Cockburn; but, as it was of material importance to get round this headland, before a change of wind should set the ice in upon the shore, I did not deem it proper to heave-to, for the purpose of trying the direction in which it was running. After three A.M., the ships began to make much better way, so that I considered it likely that the tide had slackened between three and four o'clock; and if so, the time of slack water at this place would be, on full and change days, a few minutes after eleven: and as this time, with the proper correction applied, seems to correspond pretty accurately with that of high water at the other places, to the eastward and westward, where we had an opportunity of observing it, we could scarcely doubt that it was the flood-tide which had now been setting against us from the westward. From these circumstances, I have ventured to mark the time of high water, and the direction of the flood-tide, upon the chart, both being confessedly subject to correction by future navigators. Several seals were here seen upon the ice, and a single bird with a long bill, resembling a curlew.

While beating round Cape Cockburn, our soundings were from thirty-three to twenty-one fathoms, on a bottom of small broken shells and coral; and some star-fish (*Asterias*) came up on the lead. After rounding this headland, the wind favoured us by coming to the S.S.W.; and as we stood on to the westward, the water deepened very gradually till noon, when being in latitude, by observation, 75° 01′ 51″ and longitude, by chronometers, 101° 39′ 09″ we sounded in sixty-eight fathoms, on a bottom of mud of a peculiar flesh-colour. The high land, which had been seen on the preceding evening, over the low beach to the eastward of Cape Cockburn, now appeared also to form a part of Bathurst Island, which we afterwards found to be the case, (on our return in 1820,) the intermediate parts of the land being too low to be clearly distinguished at our present distance. The land to the westward of Cape Cockburn sweeps round into a large bay, which I named after Vice-Admiral Sir Graham Moore.

The weather was at this time remarkably serene and clear, and, although we saw a line of ice to the southward of us, lying in a direction nearly east and west, or parallel to the course on which we were steering, and some more land appeared to the westward,

yet the space of open water was still so broad, and the prospect from the mast-head, upon the whole, so flattering, that I thought the chances of our separation had now become greater than before; and I therefore considered it right to furnish Lieutenant Liddon with fresh instructions, and to appoint some new place of rendezvous, in case of unavoidable separation from the Hecla. A boat was, therefore, dropped on board the Griper for that purpose, without her heaving-to; and the same opportunity was taken to obtain a comparison between our chronometers. About seven P.M. we were sufficiently near to the western land to ascertain that it was part of another island, which I named after Vice-Admiral Sir Thomas Byam Martin, comptroller of His Majesty's navy; and by eight o'clock we perceived that the body of ice to the southward, along which we had been sailing, took a turn to the north, and stretched quite in to the shore, near a low point, off which a great quantity of heavy ice was aground. At ten o'clock, after having had a clear view of the ice and of the land about sunset, and finding that there was at present no passage to the westward, we hauled off to the south-east, in the hope of finding some opening in the ice to the southward, by which we might get round in the desired direction. We were encouraged in this hope by a dark "water-sky" to the southward; but, after running along the ice till half-past eleven, without perceiving any opening, we again bore-up to return towards the island. There was, in this neighbourhood, a great deal of that particular kind of ice, called by the sailors "dirty ice," on the surface of which were strewed sand, stones, and in some instances, moss: ice of this kind must, of course, at one time or other, have been in close contact with the land. On one of these pieces, towards which the Hecla was standing, a little sea was observed breaking; and, on a nearer approach, it so exactly resembled a rock above water, that I thought it prudent to heave all the sails aback, till a boat had been sent to examine it. We saw several fulmar petrels, and one or two seals, in the course of this day's run.

As we approached, on the 28th, the south point of the island, to which I gave the name of Cape Gillman, out of respect to the memory of the late Sir John Gillman, we found the ice in the same position as before; and I therefore hauled to the north-east with the intention of attempting a passage round the north side of the island. In standing in, towards Cape Gillman, our soundings gradually decreased from eighty to twenty-three fathoms, the latter depth occurring at the distance of two to four miles from the shore. At ten A.M., the wind being very light from the S.S.E., I despatched Captain Sabine and Mr. Ross, accompanied by Messrs. Edwards and Fisher, to the eastern point of the island, which we were about to round in the ships, in order to make the necessary observations, and to examine the natural productions of

the shore. Our latitude at noon was 75° 03′ 12″, long. 103° 44′ 37″, and the depth of water forty fathoms. A thick fog came on in the afternoon, soon after the boat had landed, which made me apprehensive that she would not easily find her way back to the ship. We continued to stand off-and-on by the lead, which seems a very safe guide on this coast; firing guns frequently, till five P.M., when we were not sorry to hear our signals answered by muskets from the boat. The gentlemen reported, on their return, that they had landed on a sandy beach, near the east point of the island, which they found to be more productive, and altogether more interesting than any other part of the shores of the Polar regions which we had yet visited. The remains of Esquimaux habitations were found in four different places. Six of these, which Captain Sabine had an opportunity of examining, and which are situated on a level sandy bank, at the side of a small ravine near the sea, are described by him as consisting of stones rudely placed in a circular, or rather an elliptical form. They were from seven to ten feet in diameter; the broad flat sides of the stones standing vertically, and the whole structure, if such it may be called, being exactly similar to that of the summer huts of the Esquimaux, which we had seen at Hare Island the preceding year. Attached to each of them was a smaller circle, generally four or five feet in diameter, which had probably been the fire-place. The small circles were placed indifferently, as to their direction from the huts to which they belonged; and from the moss and sand which covered some of the lower stones, particularly those which composed the flooring of the huts, the whole encampment appeared to have been deserted for several years. Very recent traces of the rein-deer and musk-ox were seen in many places; and a head of the latter, with several rein-deers' horns, was brought on board. A few patches of snow remained in sheltered situations; the ravines, however, which were numerous, bore the signs of recent and considerable floods, and their bottoms were swampy, and covered with very luxuriant moss, and other vegetation, the character of which differed very little from that of the land at the bottom of Possession Bay. The basis of the island is sandstone, of which by far the greater part of the mineralogical specimens brought on board consisted; besides these, some rich granite and red feldspar, together with some other substances, were met with. A number of shells, of the *Venus* tribe, were found imbedded in the bottom of the ravines. A thermometer, of which the bulb was buried two or three inches in the sand, considerably above high water mark, indicated the temperature of 35½°; that of the air, the sun being obscured by clouds at the time, being 33½°.

The latitude of the place of observation was 75° 09′ 23″, and the longitude, by chronometers, 103° 44′ 37″. The dip of the magnetic needle was 88° 25.58, and the variation was now found to have

changed from 128° 58' *West*, in the longitude of 91° 48', where our last observations on shore had been made, to 165° 50' 09" *East*, at our present station; so that we had, in sailing over the space included between those two meridians, crossed immediately to the northward of the magnetic pole, and had undoubtedly passed over one of those spots upon the globe, where the needle would have been found to vary 180°, or in other words, where its north pole would have pointed due south. This spot would, in all probability, at this time be somewhere not far from the meridian of 100°, west of Greenwich. It would undoubtedly have been extremely interesting to obtain such an observation, and in any other than the very precarious navigation in which we were now engaged, I should have felt it my duty to devote a certain time to this particular purpose; but, under present circumstances, it was impossible for me to regret the cause which alone had prevented it, especially as the importance to science of this observation was not sufficient to compensate the delay which the search after such a spot would necessarily have occasioned, and which could hardly be justified at a moment when we were making, and for two or three days continued to make, a rapid and unobstructed progress towards the accomplishment of our principal object. Captain Sabine remarked, in obtaining the observations for the variation, that the compasses, which were those of Captain Kater's construction, required somewhat more tapping with the hand, to make them traverse, than they did at the place of observation in Prince Regent's Inlet, on the 7th of August, where the magnetic dip was very nearly the same; but that, when they had settled, they indicated the meridian with more precision. For instance, on the 7th of August, the compass, when levelled on its stand, would traverse of itself; but if the bearing of any object were observed with it, and the compass frequently removed and replaced, the bearings so obtained would differ from each other, notwithstanding much tapping, to the amount of 3° or 4°; whereas on the present occasion, more sluggishness was observable, yet, at the same time, a closer agreement in the successive results.

The tide was rising by the shore, from noon till half past four P.M., at which time the boats left the beach; and, by the high-water mark, it was considered probable that it had yet to rise full an hour longer. The time of high-water, therefore, may be taken at half-past five, which will make that of the full and change days about twelve o'clock. Mr. Ross found, on rowing round the point near which he landed, that the stream was setting strong against him from the northward. We had tried the current in the offing at noon, by mooring the small boat to the bottom, when it was found to be running in a south direction, at the rate of half a mile per hour. At four P.M., near the same station, it was setting

S.S.W., five-eighths of a mile an hour, so that it would appear tolerably certain that the flood-tide here comes from the northward.

The wind became very light from the eastward, and the weather continued so foggy that nothing could be done during the night but to stand off-and-on, by the soundings, between the ice and the land; as we had no other means of knowing the direction in which we were sailing, than by the decrease in the depth of water on one tack, and by making the ice on the other. The fog froze hard upon the rigging, which always makes the working of the ship a very laborious task, the size of the running rigging being sometimes thus increased to three times its proper diameter. At four A.M. on the 29th, the current was tried by mooring a boat to the bottom, but none could be detected. About this time the fog partially cleared away for a little while, when we observed that the ice was more open off Cape Gillman, than when we had before attempted to pass in that direction. At five o'clock, therefore, we made sail for the point, with a light easterly breeze; but at seven, when we had proceeded only two or three miles, the fog came on again as thick as before: fortunately, however, we had previously been enabled to take notice of several pieces of ice, by steering for each of which in succession, we came to the edge of a floe, along which our course was to be pursued to the westward. As long as we had this guidance, we advanced with great confidence; but as soon as we came to the end of the floe, which then turned off to the southward, the circumstances under which we were sailing, were, perhaps, such as have never occurred since the early days of navigation. To the northward was the land; the ice, as we supposed, to the southward; the compasses useless; and the sun completely obscured by a fog, so thick that the Griper could only now and then be seen at a cable's length astern. We had literally, therefore, no mode of regulating our course but by once more trusting to the steadiness of the wind; and it was not a little amusing, as well as novel, to see the quarter-master conning the ship by looking at the dog-vane. Under all these circumstances, it was necessary to run under easy sail, the breeze having gradually freshened up from the eastward. Our soundings were at this time extremely regular, being from forty-one to forty-five fathoms, on a bottom of soft mud. At ten o'clock the weather became clear enough to allow us to see our way through a narrow part in a patch of ice which lay ahead, and beyond which there was some appearance of a "water-sky." There is, however, nothing more deceitful than this appearance during a fog, which, by the same optical illusion whereby all other objects become magnified, causes every small "hole" of clear water to appear like a considerable extent of open and navigable sea. We continued running till eleven P.M.,

when the fog came on again, making the night so dark that it was no longer possible to proceed in any tolerable security; I therefore directed the ships to be made fast to a floe, having sailed, by our account, twelve miles, the depth of water being forty-four fathoms.

The fog continued till five A.M. on the 30th, when it cleared sufficiently to give us a sight of the land, and of the heavy ice aground off Cape Gillman, the latter being five or six miles to the northward of us, in which situation we had deepened our soundings to fifty fathoms during the night's drift. The state of the ice, and of the weather, not permitting us to move, Captain Sabine, being desirous of making some use of this unavoidable detention, and considering it at all times important to confirm magnetic observations obtained on shore in these high latitudes, by others taken upon the ice, employed himself in repeating his series of observations on the dip of the needle, which he found to be 88° 29'.12, differing only three minutes and a half from that obtained on shore on the 28th, a few leagues to the northward and eastward of our present station. The floe to which the ships were now secured was not more than six or seven feet in thickness, and was covered with innumerable pools of water, most of which had communication with the sea, as we could with difficulty obtain any that was sufficiently fresh for drinking. In many parts, indeed, there were large holes through which the sea was visible, and the under surface was much decayed and honey-combed, being nearly in that state which the Greenland sailors call "rotten." Some of the officers amused themselves in skating on the pools, all of which were hard frozen on the surface; and the men in sliding, foot-ball, and other games. By putting some drag-nets and oyster-dredges overboard, and suffering them to drag along the ground as the ship drifted with the ice, we obtained a few specimens of marine insects.

In the evening a quantity of loose ice drifted down near the ships; and, to avoid being beset, we made sail towards the island, our soundings being from thirty-five to seventeen fathoms: we were soon under the necessity of again anchoring to a floe, till the weather should clear, being in twenty-one fathoms, at the distance of three miles from the land.

The weather cleared a little at intervals, but not enough to enable us to proceed till nine A.M. on the 31st, when we cast off from the ice, with a very light air from the northward. We occasionally caught a glimpse of the land through the heavy fog-banks, with which the horizon was covered, which was sufficient to give us an idea of the true direction in which we ought to steer. Soon after noon we were once more enveloped in fog, which, however, was not so thick as to prevent our having recourse to a new expedient for steering the ships, which circumstances at the time

naturally suggested to our minds. Before the fog re-commenced, and while we were sailing on the course which by the bearings of the land we knew to be the right one, the Griper was exactly astern of the Hecla, at the distance of about a quarter of a mile. The weather being fortunately not so thick as to prevent our still seeing her at that distance, the quarter-master was directed to stand aft, near the taffrail, and to keep her constantly astern of us, by which means we contrived to steer a tolerably straight course to the westward. The Griper, on the other hand, naturally kept the Hecla right a-head; and thus, however ridiculous it may appear, it is, nevertheless, true, that we steered one ship entirely by the other for a distance of ten miles out of sixteen and a half, which we sailed between one and eleven P.M. It then became rather dark, and the water having shoaled from fifty to twenty-three fathoms somewhat more suddenly than usual, I did not consider it prudent to run any farther till it should become light and clear enough to see around us, as it was probable that we were approaching land of which we had no knowledge. We therefore hauled our wind to the S.S.E., on the larboard tack, and at midnight had deepened the water to fifty-two fathoms, being among rather close "sailing ice."

The wind died away on the morning of the 1st of September, and the fog was succeeded by snow and sleet, which still rendered the atmosphere extremely thick. At a quarter before four A.M. I was informed by the officer of the watch that a breeze had sprung up, and that there was very little ice near the ships. Anxious to take advantage of these favourable circumstances, I directed all sail to be made to the westward: there was no difficulty in complying with the first part of this order, but to ascertain which way the wind was blowing, and to which quarter of the horizon the ship's head was to be directed, was a matter of no such easy accomplishment; nor could we devise any means of determining this question till five o'clock, when we obtained a sight of the sun through the fog, and were thus enabled to shape our course, the wind being moderate from the northward.

In standing to the southward, we had gradually deepened the water to one hundred and five fathoms, and our soundings now as gradually decreased as we stood to the westward, giving us reason to believe, as on the preceding night, and from the experience we had acquired of the navigation among these islands, that we were approaching land in that direction. In this supposition we were not deceived, for, at half-past eight, the fog having suddenly cleared up, we found ourselves within four or five miles of a low point of land which was named after Mr. Griffiths, and which, being at the distance of six or seven leagues from Byam Martin Island, we considered to be part of another of the same group. We sailed along the shore at the distance of two to four miles in a S.W.b.W.

direction, and having dropped a boat to obtain observations upon the ice, without heaving-to for that purpose, we found ourselves to be, at noon, in latitude 74° 59′ 35″, and longitude, by chronometers, 106° 07′ 36″. This land very much resembled, in height and general character, the other islands which we had lately passed, being in most parts of a brownish colour, among which we also imagined a little green to be here and there discernible. We had some small rain in the afternoon, which was succeeded by snow towards midnight.

At one A.M. on the 2d, a star was seen, being the first that had been visible to us for more than two months. The fog came on again this morning, which, together with the lightness of the wind preventing the ships getting sufficient way to keep them under command, occasioned them some of the heaviest blows which they had yet received during the voyage, although the ice was generally so loose and broken as to have allowed an easy passage with a moderate and leading wind. As none of the pieces near us were large enough for securing the ships in the usual manner, we could only heave-to, to windward of one of the heaviest masses, and allow the ship to drive with it till some favourable change should take place. After lying for an hour in this inactive and helpless situation, we again made sail, the weather being rather more clear, which discovered to us that the main body of the ice was about three miles distant from the land, the intermediate space being very thickly covered with loose pieces, through which our passage was to be sought. As we stood in for the land in the forenoon, we decreased our soundings uniformly from twenty-seven to eleven fathoms at one and a half or two miles from the beach, and a boat, which I sent to sound in-shore, found the water to shoal very regularly to six fathoms at about half a mile. At this distance from the beach, there were many large masses of ice aground; and it was here that the method so often resorted to in the subsequent part of the voyage, of placing the ships between these masses and the land, in case of the ice closing suddenly upon us, first suggested itself to our minds.

As we were making no way to the westward, I directed two boats to be prepared from each ship, for the purpose of making the usual observations on shore, as well as to endeavour to kill deer; and, at one P.M., I left the ship, accompanied by a large party of officers and men, and was soon after joined by the Griper's boats. We landed on a very flat sandy beach, which did not allow the boats to come nearer than their own length, and we were immediately struck with the general resemblance in the character of this island to that of Byam Martin Island, which we had lately visited. The basis of this land is sandstone, but we met with limestone also, occurring in loose pieces on the surface, and several lumps of coal were brought in by the parties who had traversed

the island in different directions. Our sportsmen were by no means successful, having seen only two deer, which were too wild to allow them to get near them. The dung of these animals, however, as well as that of the musk-ox was very abundant, especially in those places where the moss was most luxuriant; every here and there we came to a spot of this kind, consisting of one or two acres of ground covered with a rich vegetation, and which was evidently the feeding place of those animals, there being quantities of their hair and wool lying scattered about. Several heads of the musk-ox were picked up, and one of the Hecla's seamen brought to the boat a narwhal's horn which he found on a hill more than a mile from the sea, and which must have been carried thither by Esquimaux or by bears: three or four brace of ptarmigan (*Tetrao Lagopus*,) were killed, and these were the only supply of this kind which we obtained. Sergeant Martin of the artillery, and Captain Sabine's servant, brought down to the beach several pieces of a large fir-tree, which they found nearly buried in the sand, at the distance of three or four hundred yards from the present high-water mark, and not less than thirty feet above the level of the sea. We found no indication of this part of the island having been inhabited, unless the narwhal's horn, above alluded to, be considered as such.

The latitude of the place of observation here, which was within a hundred yards of the beach, was 74° 53′, the longitude, by chronometers, 107° 03′ 31″.7, and the variation of the magnetic needle 151° 30′ 03″ easterly. At forty minutes past one P.M., when the boats landed, the tide had fallen a foot by the shore. It continued to fall till seven P.M., and then rose again, the whole fall of tide not exceeding five or five and a half feet. At the time we landed, Lieutenant Beechey tried for a current in the offing, but could find none; at half-past seven, the tide was setting E.N.E., at the rate of a mile and a half an hour; and, at a quarter before ten, after I returned on board, it was still setting slowly to the eastward. By the above observations, the time of high water, at the full and change of the moon, seems to be about three quarters after one o'clock. The direction of the flood-tide does not appear so clear. If it come from the westward, there must be a tide and half tide; but it seems more than probable, on an inspection of the chart, that here, as on the eastern side of Byam Martin Island, it will be found to come from the northward between the islands. At the top of a hill, immediately above the place of observation, and about a mile from the sea, a bottle was buried, containing the usual information. A mound of sand and stones was raised over it, and a boarding-pike fixed in the middle. We returned on board at half past eight, and found that Lieutenant Beechey had, in the mean time, taken a number of useful soundings, and made other hydrographical remarks for carrying on the survey of the coast.

The wind continued light and variable till half-past eight A.M. on the 3d, when a breeze from the northward once more enabled us to make some progress. I was the more anxious to do so, from having perceived that the main ice had, for the last twenty-four hours, been gradually, though slowly, closing on the shore, thereby contracting the scarcely navigable channel in which we were sailing. The land which formed our western extreme was a low point, five miles to the westward of our place of observation the preceding day, and the ice had already approached this point so much, that there was considerable doubt whether any passage could be found between them. As we neared the point, we shoaled the water rather quickly, though regularly, from thirty to seven fathoms; but, by keeping a little farther out, which fortunately the ice just at that time allowed us to do, we avoided getting into shoaler water, and immediately after rounding the point, we increased our soundings to sixteen and seventeen fathoms. We had scarcely cleared the point, however, when the wind failed us, and the boats were immediately sent a-head to tow, but a breeze springing up shortly after from the westward, obliged us to have recourse to another method of gaining ground which we had not hitherto practised: this was by using small anchors and whale-lines as warps, by which means we made great progress, till, at forty minutes after noon, we were favoured by a fresh breeze, which soon took us into an open space of clear water to the northward and westward. While we were thus employed on board, Mr. Ross, after whom I named this point, had been despatched in a boat to sound in-shore near it, where there were a great many large masses of ice aground, in order that we might be prepared to place the ships in the most advantageous position, should the ice unexpectedly close upon the shore. Mr. Ross reported, that he had found good depth of water in-shore, the ice being aground in five to seven fathoms, after which the water shoaled gradually towards the land. A little to the westward of Point Ross, there was a barrier of this kind of ice, composed of heavy masses firmly fixed to the ground at nearly regular intervals for about a mile, in a direction parallel to the beach. At right angles to this, a second tier projected, of the same kind of ice, extending to the shore, so that the two together formed a most complete harbour, within which, I believe, a ship might have been placed in case of necessity, without much danger from the pressure of the external floes of ice. It was natural for us to keep in view the possibility of our being obliged to pass the ensuing winter in such a harbour; and, it must be confessed, that the apparent practicability of finding such tolerable security for the ships as this artificial harbour afforded, should we fail in discovering a more safe and regular anchorage, added not a little to the confidence with which our operations were carried on during the remainder of the present season.

The land immediately to the north-westward of Point Ross forms a considerable bay, named after Mr. Skene, off which there was a large space of clear water, where we had to beat to the northward during the afternoon, as the ice lay in that direction. In standing off-and-on, we shoaled the water in one place very suddenly from nineteen to eleven fathoms, at the distance of one mile from the beach. Having tacked, I sent Mr. Bushnan to sound in-shore, where a shoal was discovered three quarters of a mile from the land, having three and four fathoms upon it, and within it from eight to thirteen fathoms. The sun-set of this evening was extremely beautiful, the weather being clear and frosty, and the sky without a cloud. The moon rising soon after, afforded a spectacle no less pleasing, and far more sublime. Her horizontal diameter appeared to be very much elongated when just above the horizon, owing to the unequal refraction of the upper and lower limbs; but it measured 33′ 20″, being only 6″ more than the true, which difference may have arisen from an error in the observation. The vertical diameter measured 30′ 40″.

On the 4th, having weathered all the ice round which we had to sail, in order to proceed to the westward, we were under the necessity of lying-to, off Skene Bay, for some hours, the weather having become very squally and unsettled, with occasional fog, and the night not being sufficiently light to ascertain whether there was a passage between the ice and a point of land which forms the western extreme of the bay. On its eastern side an inlet, two miles wide at the entrance, was discovered, and named after Mr. Beverly, and at the bottom of this we did not see the land all round. At half-past two A.M., we made sail to the westward, the Griper having been directed by signal to extend her distance; a precaution which was always adopted in cases where shoal-water was to be apprehended, in order to avoid the risk of both ships grounding at the same time. As we approached the point, the soundings decreased gradually from thirty to seven fathoms, in which depth I tacked, and despatched Mr. Palmer in a boat to sound round the point, to which I gave the name of Cape Palmer, after the gentleman intrusted with this service. Having been informed by signal from the boat, that no less than six fathoms' water had been found, we again tacked, and soon after rounded the point in that depth, at the distance of three quarters of a mile from a low sandy beach. We then ran several miles along the shore without much obstruction, till the wind, backing to the north-west, obliged us to make several tacks between the ice and the land, the navigable channel being at this time between three and four miles wide. At noon we observed, in latitude 74° 54′ 49″, the longitude, by chronometers, being 103° 31′ 44″, at which time we were off a low, sandy island, which was named after Mr. Dealy, and which lies near the entrance into a large inlet, to which the name of Bridport Inlet

was given, from regard to the memory of the late Lord Bridport. This inlet runs a considerable distance to the northward, and seemed to afford good shelter for ships; but, as we had no opprtunity of examining it in our boats, I am unable to state any further particulars respecting it. The land to the westward of it, of which the most conspicuous part is a remarkable bluff head-land, is much higher than that about Skene Bay; and we ceased to obtain any soundings with the hand-leads after we had passed the entrance of Bridport Inlet. At a quarter-past nine P.M., we had the satisfaction of crossing the meridian of 110° west from Greenwich, in the latitude of 74° 44′ 20″; by which His Majesty's ships, under my orders, became entitled to the sum of five thousand pounds, being the reward offered by the King's order in council, grounded on a late Act of Parliament, to such of His Majesty's subjects as might succeed in penetrating thus far to the westward within the Arctic Circle. In order to commemorate the success which had hitherto attended our exertions, the bluff headland, which we had just passed, was subsequently called by the men Bounty Cape; by which name I have, therefore, distinguished it on the chart.

As we stood to the westward, we found the extreme of the land in that direction to be a low point, which was named after Samuel Hearne, the well known American traveller, and to the north-eastward of which is a bay of considerable extent, which was perfectly free from ice. We continued our course towards Cape Hearne till midnight, when, the weather being too dark to run any longer with safety, the ships were hove-to with their heads to the eastward. One black whale was seen, in the course of this day's navigation, off Bridport Inlet; and some flocks of snow-buntings were flying about the ship at night.

At a quarter before three A.M., on the 5th, we tacked, and stood to the westward, with the hope of getting past Cape Hearne, the wind being moderate from the northward, and the weather thick with snow; and, shortly after, we shoaled the water quickly from twenty-five to thirteen, and then to nine, fathoms. We tacked in the latter depth, believing that we were approaching a shoal, especially as we were near some heavy ice, which, having a tide-mark upon it, appeared to be aground. We afterwards found, however, that we had at this time been actually within three or four hundred yards of Cape Hearne, which is so surrounded by heavy ice at a sufficient distance from the shore, that it would perhaps be difficult to run a ship aground upon it. The error into which we were here led, as to our distance from the beach, arose from the extreme difficulty of distinguishing, even in broad daylight, between the ice and the land, when the latter is low and shelving, and completely covered with snow; by the uniform whiteness of which, they are so completely blended, as to deceive the best eye. Indeed, I know no circumstance in the navigation

of these seas which renders more necessary a vigilant look-out, and a careful attention to the hand-leads than the deception to which I here allude.

Having stood again to the westward, to take a nearer view of the ice, we perceived that it lay quite close in with Cape Hearne, notwithstanding the fresh northerly wind which, for the last thirty-six hours, had been blowing from the shore, and which had drifted the ice some distance to the southward, in every other part of the coast along which we had lately been sailing. This circumstance struck us very forcibly at the time, as an extraordinary one; and it was a general remark among us, that the ice must either be aground in shoal-water, or that it butted against something to the southward, which prevented its moving in that direction. Appearances being thus discouraging, nothing remained to be done but to stand off-and-on near the point, and carefully to watch for any opening that might occur.

After divine service had been performed, I assembled the officers, seamen, and marines of the Hecla, and announced to them officially, that their exertions had so far been crowned with success, as to entitle them to the first prize in the scale of rewards, granted by His Majesty's order in council above-mentioned. I took this opportunity of impressing upon the minds of the men the necessity of the most strenuous exertions during the short remainder of the present season; assuring them that, if we could penetrate a few degrees farther to the westward, before the ships were laid up for the winter, I had little doubt of our accomplishing the object of our enterprise before the close of the next season. I also addressed a letter to Lieutenant Liddon, to the same effect, and directed a small addition to be made to the usual allowance of meat, and some beer to be served, as a Sunday's dinner, on this occasion.

The wind increasing to a fresh gale from the northward in the afternoon, and the ice still continuing to oppose an impenetrable barrier to our further progress, I determined to beat up to the northern shore of the bay, and, if a tolerable roadstead could be found, to drop our anchors till some change should take place. This was accordingly done at three P.M., in seven fathoms' water, the bottom being excellent holding-ground, composed of mud and sand, from which the lead could with difficulty be extricated. When we veered to half a cable, we had ten fathoms' water under the Hecla's stern, our distance from the northern shore being about a mile and a half. This roadstead, which I called the Bay of the Hecla and Griper, affords very secure shelter with the wind from E.N.E., round by north, to S.W., and we found it more free from ice than any other part of the southern coast of the island.

I had great reason to be satisfied with our having anchored the ships, as the wind shortly after blew a hard gale from the northward.

In the evening I sent Captain Sabine and Messrs. Edwards and Nias on shore to examine the country, and to collect specimens of its natural productions; they returned at ten P. M., having landed on a low point a little to the westward of the ships, which they found to be a very barren and unproductive spot; several flocks of ducks were seen, and some glaucous gulls and tern; the dung and foot-tracks of the deer and musk-ox were also observed in many places; and some addition was made by our gentlemen to our collection of marine insects. The rocks are composed entirely of sandstone, but a few small pieces of granite, flint, and coal, were also among the specimens brought on board. This island, on which our boats had now landed for the second time, and which is much the largest of the group we had lately discovered, I honoured with the name of Melville Island, after Viscount Melville, the First Lord of the Admiralty.

The bay of the Hecla and Griper was the first spot where we had dropped anchor since leaving the coast of Norfolk; a circumstance which was rendered the more striking to us at the moment, as it appeared to mark, in a very decided manner, the completion of one stage of our voyage. The ensigns and pendants were hoisted as soon as we had anchored, and it created in us no ordinary feelings of pleasure to see the British flag waving, for the first time, in these regions, which had hitherto been considered beyond the limits of the habitable part of the world.

CHAPTER IV.

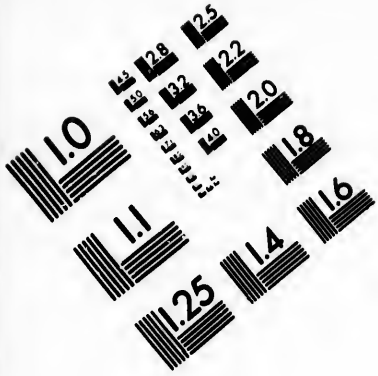
Further examination of Melville Island—Continuation of our progress to the Westward—Long detention by the ice—Party sent on shore to hunt Deer and Musk-oxen—Return in three days, after losing their way—Anxiety on their account—Proceed to the Westward, till finally stopped by the ice—In returning to the Eastward the Griper forced on the beach by the ice—Search for, and discovery of, a Winter Harbour on Melville Island—Operations for securing the Ships in their Winter Quarters.

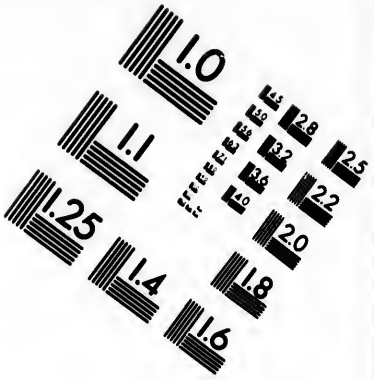
AS the wind still continued to blow strong from the th-ward on the morning of the 6th, without any appearance of ing a passage for us past Cape Hearne, I took the opportunity of sending all our boats from both ships at eight A.M., to bring on board a quantity of moss-peat which our gentlemen reported having found near a small lake at no great distance from the sea, and

which I directed to be substituted for part of our usual allowance of coals. Captain Sabine also went on shore to make the requisite observations, and several of the officers of both ships to sport, and to collect specimens of natural history. The boats rowed round the point on which they had landed the preceding evening, and which Captain Sabine now selected as the most convenient place of observation; and discovered just beyond it to the northward, a small harbour, having a bar at its entrance, upon which Mr. Fife, the Greenland master of the Griper, after whom the harbour was named, found ten feet water at nearly low tide.

The latitude of the point is 74° 46′ 56″, and its longitude, by our chronometers, 110° 33′ 59″. The dip of the magnetic needle was found to be 88° 29′.91, and the variation 126° 17′ 18″ Easterly. It was low water by the shore at half-past nine, and it had risen between two and three feet when the boats came away at half-past twelve. During this time the ships were tending to a tide coming strong from the eastward; from which direction it is therefore probable, that the flood-tide runs on this part of the coast, though we had no satisfactory opportunity of trying its true set in the offing. Near the point where the observations were made, a bottle was buried, containg a paper as usual, and a pile of stones raised over it. The weather was this day unusually cold to the feelings, to a greater degree even than might have been expected from the indication of the thermometer, which, for the first time, had been as low as 25°.

The wind beginning to moderate soon after noon, and there being at length some appearance of motion in the ice near Cape Hearne, the boats were immediately recalled from the shore, and returned at two P.M., bringing some peat, which was found to burn tolerably, but a smaller quantity than I had hoped to procure, owing to a misunderstanding as to the distance at which it was to be found from the sea. At half-past two, as soon as the ship's company had dined, we began to heave at the cable, but so excellent is the holding ground, that it required all the purchase as well as strength we could apply, to start the anchor by half-past four. We then made sail for Cape Hearne, which we rounded at six o'clock, having no soundings with from seventeen to twenty fathoms of line, at the distance of a mile and a quarter from the point. The extreme of the land which now appeared to the westward bore about S.W.b.W., and there was a sufficient space of clear water along the shore to allow us to steer for it. It was impossible, however, not to remark to how short a distance from the shore, not exceeding three or four miles, the ice had been drifted by the late strong gales. We had observed, however, that, in rounding Cape Hearne this evening, the wind had drawn gradually to the eastward as we proceeded, taking nearly the direction of the shore, and we were willing to hope that it had been blowing from





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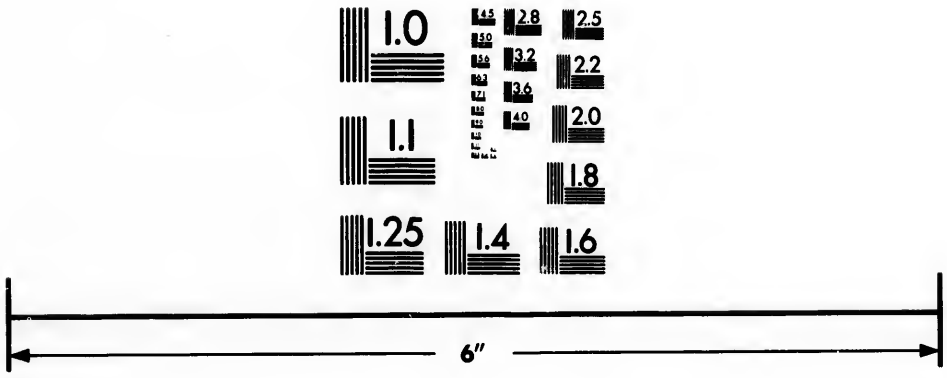

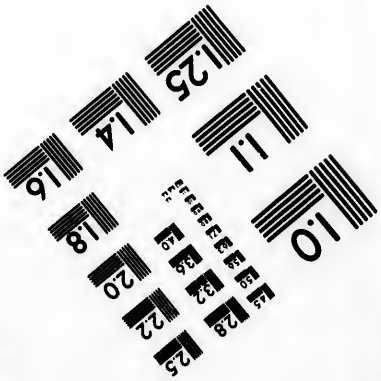

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the same quarter, while we were lying at anchor in the bay; in which case it was not necessary to suppose any such serious obstruction to the southward as that to which we had at first been inclined to attribute these unfavourable appearances.

I was beginning once more to indulge in those flattering hopes, of which often-repeated disappointments cannot altogether deprive us, when I perceived, from the crow's-nest, a compact body of ice, extending completely in to the shore near the point which formed the western extreme. We ran sufficiently close, to be assured that no passage to the westward could at present be effected, the floes being literally upon the beach, and not a drop of clear water being visible beyond them. I then ordered the ships to be made fast to a floe, being in eighty fathoms' water, at the distance of four or five miles from the beach. The season had now so far advanced, as to make it absolutely necessary to secure the ships every night from ten till two o'clock, the weather being too dark during that interval to allow of our keeping under-way in such a navigation as this, deprived as we were of the use of the compasses. But, however anxious the hours of darkness must necessarily be under such circumstances, the experience of the former voyage had given us every reason to believe, that the month of September would prove the most valuable period of the year for prosecuting our discoveries in these regions, on account of the sea being more clear from ice at this time than at any other. Feeling, therefore, as I did, a strong conviction, that the ultimate accomplishment of our object must depend, in a great measure, on the further progress we should make this season, I determined to extend our operations to the latest possible period.

The wind having been fresh from the north-east, during the night, we were on the morning of the 7th, enclosed for a time by a quantity of loose ice drifting down upon us. No change could be perceived in the state of the ice to the westward till one P.M., when it appeared to be moving a little off the point. We therefore warped the ships out, and made sail with a light but favourable breeze. At eight P.M., however, having arrived at the point, and finding no passage open, we made the ships fast in a large bay in a floe, in sixty-five fathoms, at the distance of a mile and a half from the shore. I sent Lieutenant Beechey on shore to look round from the hills for open water to the westward, as well as to sound round some heavy masses of ice which were aground in-shore, and within which it would perhaps become expedient to secure the ships in case of necessity. He reported on his return, at ten P.M., that no clear water whatever could be seen along the land, the ice being compact, and close in to the shore, as far as a bold headland which now formed the western extreme of the island, and which was from four to five leagues distant from us. The ice aground in-shore was very close to the beach, which was steep-to, as our

soundings in the offing indicated. Lieutenant Beechey found, however, a depth of from twelve to four fathoms within many of the masses; but as there was little or no room to swing within them, I preferred keeping the ships in their present situation, while the ice remained quiet. I was the more induced to do so from the boldness of the beach, and the depth of the bay formed by the floe to which we were now secured, which circumstances seemed to render it more than probable, that the latter would take the ground long before the ships could come in contact with it. We saw to-day, for the first time, a herd of eight or nine animals, feeding near the beach, which, from their dark colour, was supposed to be musk-oxen: and the officers of the Griper killed two white hares (*Lepus Variabilis*.) The "young" or "bay" ice formed during the night in all the sheltered places about the floe, and particularly in the bight in which we were lying, to the thickness of three-quarters of an inch; and the pools upon the floe were now almost entirely solid, affording the officers and men, during the time of our unavoidable detention, the usual healthy amusements of skating and sliding.

On the morning of the 8th, there being no prospect of any immediate alteration in the ice, I directed the boats to be sent on shore from both ships, to endeavour to procure some game, as well as to examine the productions of this part of the island. On going to the mast-head, shortly after the boats had been despatched, I found that the bight of ice in which the ships were lying was not one floe, but formed by the close junction of two, so that our situation was by no means so secure as I had supposed; for this bight was so far from being a protection to us, in case of the ice driving on shore, that it would probably be the means of "nipping" us between the floes which formed it. I therefore determined on immediately removing the ships in-shore, and went in a boat to look out for a place for that purpose, there being no alternative between this and our returning some distance to the eastward, into the larger space of clear water which we had there left behind us. I found that a heavy piece of ice aground in twelve fathoms, at the distance of three hundred yards from the beach, would suit our purpose for the Hecla, and another, in ten fathoms, still nearer in-shore, was selected for the Griper. These masses were from twenty to thirty feet above the sea, and each about the length of the respective ships. The beach in this neighbourhood was so lined with ice of this kind, that it would not have been easy for a ship to have gone on shore in any part, there being generally from four to seven fathoms on the outside of it, while the inner part of each mass was literally upon the beach at low water. Some of the detached masses, at a little distance from the shore, must have accumulated very considerably since they grounded, or else must have been forced up into their present situations by an enormous

pressure from without; as some of those now aground in four or five fathoms would have drawn at least ten, if not afloat again*.

At four P.M., the weather being quite calm, the ships were towed in-shore by the boats, and made fast in the places selected for them. Our parties from the shore returned with a white hare, several fine ptarmigans, a few snow-buntings, some skulls of the musk-ox, and several rein-deers' horns; but they were not fortunate enough to meet with either of the two latter animals. The island is here, as in the other parts on which we had landed, principally composed of sandstone, of which some spherical nodules, one of them as large as a nine-pounder shot, were brought on board. Several lumps of coal, which was here more abundant than we had yet found it, were also picked up, and were found to burn with a clear lively flame, like cannel coal, but without splitting and crackling in the same manner.

Impatient and anxious as we were to make the most of the short remainder of the present season, our mortification may be easily be imagined at perceiving, on the morning of the 9th, not only that the ice was as close as ever to the westward, but that the floes in our immediate neighbourhood were sensibly approaching the shore. As there was no chance, therefore, of our being enabled to move, I sent a party on shore at day light to collect what coal they could find, and in the course of the day nearly two-thirds of a bushel, being about equal to the Hecla's daily expenditure, was brought on board. Our sportsmen, who were out for several hours, could only procure us a hare, and a few ducks.

The wind was light from the southward and westward, with foggy weather, which was afterwards succeeded by snow, and the ice continued gradually to close on the shore till at length a floe came in contact with our berg, but with so little violence as to produce no sensible effect upon it. The loose and heavy pieces of ice found their way in, and surrounded the Hecla on all sides, but produced no pressure from which any danger was to be apprehended. considering our present detention so near the shore a good opportunity for observing the time and rise of the tides, I caused a pole to be fixed on the beach for this purpose, by which it was found to be high water at half past four in the morning; and the tide ebbed till half past ten. From this time till three quarters after four P.M., when it was again high water, the tide had risen two feet eight inches; so that, small as this tide is, it seems to be very regular. The direction of the stream of flood was, as usual, not so easy to determine, but I shall give the facts as they occurred. At the time of low water by the shore, and for an hour and a quarter

* For want of some more appropriate name by which these masses of ice might be distinguished, we were always in the habit of calling them bergs, which indeed they exactly resemble, though comparatively of small dimensions, and evidently formed in a very different manner from those enormous ice-islands, which are met with in Baffin's Bay, but of which we saw none to the westward of Barrow's Strait.

before it took place, the current was setting to the eastward, at the rate of three quarters of a mile per hour. It continued to run thus for the greater part of the day, but at times it was observed to set in the opposite direction, and now and then no current whatever was perceptible. From eight till eleven P. M. it was running strong to the westward, after which it stopped, and then began to set the ice the contrary way. I have been thus minute in mentioning the above particulars, not with a hope of throwing any light upon the interesting question of the direction of the tides in this part of the Polar Sea, but to shew how impossible it is, with the land close to us on one side, and on the other innumerable masses of ice in almost constant motion, to arrive at any satisfactory conclusion on this subject.

It was nearly calm on the 10th, with thick snowy weather, which prevented our seeing to any great distance round us. At five A. M., a floe coming from the westward, ran against the berg, within which the Hecla was still secured, turning it round us on a pivot. This occurrence is not an uncommon one in Davis' Strait, with bergs of very large size, when the centre part of them only happens to be upon the ground. We were by this time so surrounded by ice that no clear water was to be seen, except the small pool in which we lay; and all that could be done, under such circumstances, was to watch the motion of the ice, and to be ready to shift the ship quickly round the berg, according as the floes, by setting one way or the other, might endanger her being "nipped." In the afternoon the ice slackened a little near us, when an attempt was made to get the Hecla into a more secure birth in-shore; but, after heaving a heavy strain occasionally for several hours, we could only succeed before dark in getting her into a small nook near the beach, in which, if no very violent pressure occurred, she might be tolerably secure during the night. A party returned in the evening from a shooting-excursion to the western cape, bringing with them only three hares, and reporting that the sea was entirely covered with ice as far as they could see to the westward from the hills.

Mr. Fisher made an experiment on the specific gravity of a piece of ice, taken from the mass to which the ship was secured. Being formed into a cube, whose sides measured one foot three inches and a half, and set to float in the sea, two inches and three quarters of it remained above the surface, the temperature of the water at the time being 31°.

On the 11th there was no alteration in the ice near the ships, and Mr. Bushman, whom I despatched at day-light to the western cape, reported, on his return, that appearances were equally unpromising in that quarter. Mr. Beverly was fortunate enough to kill the first musk-ox that our sportsmen had yet been able to get near; but, as it was at the distance of eight or ten miles from the

ships, our present situation, with regard to the ice, would not allow of my sending a party of men to bring it on board. A piece of the meat which Mr. Dealy brought with him was considered to taste tolerably well, but its smell was by no means tempting. The dip of the magnetic needle, observed here by Captain Sabine today was 88° 36'.95

The wind increased to a fresh gale from the northward during the night, and on the morning of the 12th flew round to the N.N.W. in a very violent gust. Soon after the ice began to drift past us to the eastward, at the rate of a mile an hour, and carried away with it the berg to which the Hecla had been attached on the 9th and 10th; so that we considered ourselves fortunate in having moved to our present birth, which was comparatively a safe one. The Griper remained also tolerably secure, and well sheltered from the drifting ice, which, in the course of the forenoon, had acquired a velocity of more than a mile and a half per hour. In the afternoon the ice began by degrees to drift from the shore to the westward of us, but the wind blowing hard from the wrong quarter, it was impossible to think of moving the ships. A constant and vigilant look-out was also necessary, lest the berg to which our hawsers were secured should be forced off the ground, in which case we must inevitably have been driven back many miles to the eastward, and the labour of the last ten days would have been lost in a few hours. The night was cold and inclement, with a heavy fall of snow, which being blown among the hills, caused great drifts in the ravines, by which this part of the island is intersected.

I must now mention an occurrence which had caused considerable apprehension in our minds for the two last days, and the result of which had nearly proved of very serious importance to the future welfare of the expedition. Early on the morning of the 11th I received a note from Lieutenant Liddon, acquainting me that, at day-light the preceding day, Mr. Fife, with a party of six men, had been despatched from the Griper, with the hope of surprising some rein-deer and musk-oxen, whose tracks had been seen in a ravine to the westward of the ships. As they had not yet returned, in compliance with the instructions given to Mr. Fife, and had only been supplied with a small quantity of provisions, it was natural to apprehend that they had lost their way in pursuit of game, more especially as the night had been too inclement for them to have voluntarily exposed themselves to it. I therefore recommended to Lieutenant Liddon to send a party in search of his people, and Messrs. Reid, Beverly, and Wakeham, who immediately volunteered their services on the occasion, were accordingly despatched for this purpose. Soon after their departure, however, it began to snow, which rendered the atmosphere so extremely thick, especially on the hills along which they had to travel, that this

party also lost their way in spite of every precaution, but fortunately got sight of our rockets after dark, by which they were directed to the ships, and returned at ten o'clock, almost exhausted with cold and fatigue, without any intelligence of the absentees.

At day-light on the following morning I sent Lieutenant Hoppner, with the Hecla's fore-royal-mast rigged as a flag-staff, which he erected on a conspicuous hill four or five miles inland, hoisting upon it a large ensign, which might be seen at a considerable distance in every direction. This expedient occurred to us as a more certain mode of directing our absentees towards the ships than that of sending out a number of parties, which I could not, in common prudence, as well as humanity, permit to go to any great distance from the ships; but the snow fell so thick, and the drift was so great, during the whole of the 12th, that no advantage could at that time be expected from it, and another night came without the absent party appearing.

On the 13th our apprehensions on their account had by this time increased to a most painful degree, and I therefore ordered four parties, under the command of careful officers, to be prepared to set out in search of them the following morning. These parties carried with them a number of pikes, having small flags attached to them, which they were directed to plant at regular intervals, and which were intended to answer the double purpose of guiding themselves on their return, and of directing the absent party, should they meet with them, to the ships. For the latter purpose a bottle was fixed to each pike, containing the necessary directions for their guidance, and acquainting them that provisions would be found at the large flag-staff on the hill. Our searching parties left the ships soon after day-light, the wind still blowing hard from the westward, with incessant snow, and the thermometer at 28°. This weather continued without intermission during the day, and our apprehensions for the safety of our people were excited to a most alarming degree, when the sun began to descend behind the western hills, for the third time since they had left the ship; I will not, therefore, attempt to describe the joyful feelings we suddenly experienced, on the Griper's hoisting the signal appointed, to inform us that her men, or a part of them, were seen on their return. Soon after we observed seven persons coming along the beach from the eastward, who proved to be Mr. Nias and his party, with four out of the seven men belonging to the Griper. From the latter, consisting of the corporal of marines and three seamen, we learned that they had lost their way within a few hours after leaving the ship, and had wandered about without any thing to guide them till about ten o'clock on the following day, when they descried the large flag-staff, at a great distance. At this time the whole party were together; but now, unfortunately, separated, in consequence of a difference of opinion respecting the flag-staff,

which Mr. Fife mistook for a smaller one that had been erected some days before at a considerable distance to the eastward of our present situation; and, with that impression, walked away in a contrary direction, accompanied by two of his men. The other four who had now returned, (of whom two were already much debilitated,) determined to make for the flag-staff. When they had walked some distance and were enabled to ascertain what it was, one of them endeavoured to overtake Mr. Fife, but was too much fatigued, and returned to his comrades. They halted during a part of the night, made a sort of hut of stones and turf to shelter them from the weather, and kindled a little fire with gunpowder and moss to warm their feet; they had never been in actual want of food, having lived upon raw grouse, of which they were enabled to obtain a quantity sufficient for their subsistence. In the morning they once more set forward towards the flag-staff, which they reached within three or four hours after Lieutenant Beechey had left some provisions on the spot: having eaten some bread, and drank a little rum and water, a mixture which they described as appearing to them perfectly tasteless and clammy, they renewed their journey towards the ships, and had not proceeded far when, notwithstanding the snow which was constantly falling, they met with footsteps which directed them to Mr. Nias and his party, by whom they were conducted to the ships.

The account they gave us of Mr. Fife and his two companions, led us to believe that we should find them, if still living, at a considerable distance to the westward, and some parties were just about to set out in that direction, when the trouble and anxiety which this mistake would have occasioned us were prevented by the arrival of another of the searching parties, with the information that Mr. Fife and the two men were on their way to the ships, being about five miles to the eastward. Some fresh hands were immediately sent to bring them in, and they arrived on board at ten P. M., after an absence of ninety-one hours, and having been exposed, during three nights, to the inclemency of the first wintry weather we had experienced. Almost the whole of this party were much exhausted by cold and fatigue, and several of them were severely frost-bitten in their toes and fingers; but, by the skill and unremitted attention of our medical gentlemen, they were in a few days enabled to return to their duty.

Before midnight we had still greater reason than ever to be thankful for the opportune recovery of our people; for the wind increased to a hard gale about half-past eleven, at which time the thermometer had fallen to 15°; making altogether so inclement a night, as it would have been impossible for them, in their already debilitated state, to have survived. In humble gratitude to God for this signal act of mercy, we distinguished the headland to the westward of the ships, by the name of Cape Providence.

Soon after midnight, the land-ice which was interposed between the Hecla and the beach, and to which the ship was partly secured, broke adrift, and floated off the ground; fortunately, however, we were prepared to cut the shore hawsers, by which means we avoided the danger of being carried off the shore, being well secured to the little berg a-head of us, which appeared to be firmly aground in ten fathoms' water. The stream cable was afterwards taken to the beach, and I determined, should the berg go adrift, to cut away our hawsers from it; and, having checked the ship by the stream cable till she swung into five fathoms, at the distance of forty or fifty yards from the shore, to let go a bower anchor, till the wind should moderate. I communicated my intention to Lieutenant Liddon during the day, and directed him, in case of necessity, rather to run the striper on the soft beach near us, than to risk being driven back to the eastward. Fortunately, however, it was not necessary to resort to this measure, as the ice held fast on the ground, notwithstanding the violence of the wind, and some sea which got up from the westward, as the space of open water between the land and the ice increased in that direction. At three A. M. on the morning of the 14th, the thermometer had been as low as 3°, and rose gradually to 17°, at midnight. The sudden and unexpected decrease in the general temperature of the atmosphere about this period was a very striking one; and from this time, the commencement of winter may fairly be dated.

Our flag-staves were brought on board early in the morning of the 15th, and at ten A. M., the wind being somewhat more moderate, the stream-cable was cast off from the shore, in readiness for making sail; but the wind freshened up once more to a strong gale, which rendered it necessary still to hold on by our hawsers. In the evening the stream-cable was taken on shore again, and we landed to make observations for the variation of the needle, which was found to be 117° 52′ 22″ easterly.

It was observed, on the 16th, for the first time, that a strong current was setting to the westward during the whole of the last night, directly against a fresh gale from that quarter. At nine A. M., the wind being much more moderate, as well as more off the land, and the weather fine and clear, we cast off, and made all sail to the westward, running along the land at the distance of two or three miles from it. At a quarter before noon, we were abreast of Cape Providence, beyond which, at the distance of three or four leagues, another headland, still more high and bold in its appearance, was discovered, and named after Mr. Hay, private secretary to the first lord of the admiralty. At the place which we left in the morning, the ice had been driven from the shore to the distance of six or seven miles; but we found, as we proceeded, that the channel became gradually more and more contracted, till at length the ice

was observed to extend, in a solid and impenetrable body, completely in to the very shore, a little to the eastward of Cape Hay. Our latitude, by account at noon, was 74° 26′ 25″, longitude 112° 38′ 30″.

The wind again freshened to a strong gale in the afternoon, reducing us to our close-reefed topsails, which were as much as the ship would bear, the squalls blowing out of the ravines with extreme violence. It became necessary, therefore, to look out for a secure situation for the ships during the ensuing night, which threatened to be a tempestuous one; but no such situation presented itself in this neighbourhood, the whole of the coast to the westward of Cape Providence being so steep, that the heaviest ice can find no ground to rest upon. I was therefore reduced to the disagreeable necessity of running back to the lower shore three miles and a half to the eastward of Cape Providence, where alone the ships could, under present circumstances, be placed in tolerable security during six or seven hours of darkness. We found here twenty-three fathoms at three hundred yards from the shore, and had fifteen under our stern, at the distance of one hundred and fifty yards. As it was nearly dark before the Griper arrived, when it is difficult to secure a ship to the ice, Lieutenant Liddon found it necessary to run into four fathoms, at one hundred yards from the beach, and there to drop his bower anchor. At half past ten P.M., a large mass of ice, which had been aground near us, was set afloat by the swell and drifted off shore. A strong westerly current, which was still running to windward, set this ice across our stern, and occasioned the ship to strike violently several times upon a "tongue" projecting from it under water; the shocks exactly resembled those of a ship striking the ground, and the rudder was forcibly lifted two or three times, but fortunately without receiving any damage. I afterwards learned from Lieutenant Liddon, that a great quantity of the land-ice had been drifting off in large pieces during the night near the spot where the Griper had anchored, keeping her crew employed for several hours in veering and heaving in cable, in order to avoid it.

At nine A.M. on the 17th, the wind being more moderate and the weather fine, we cast off and ran along the land; but had not proceeded far when it was perceived that the ice, in very heavy and compact floes of more than usual dimensions, still extended close into the shore near Cape Hay. We observed, at noon, in latitude 74° 23′ 15″, our longitude, by account, being 112° 51′; and, in the afternoon, stood close in to the high land, which here gives the island a new character, and tacked in forty-three fathoms, at the distance of five hundred yards from the shore. Further out we obtained no soundings; indeed I deemed it so essential to make the most of the day-light in examining the state of the ice to the westward, that I did not choose to heave-to for that

purpose; but the appearance of the land, and the soundings found in-shore, indicate a considerable depth of water on this part of the coast.

The current which, for the last two days, had been setting to the westward, and which could not possibly have escaped our observation, had it existed previous to the late westerly and north-westerly gales, was here found to be running even stronger than we had before remarked it. This was made particularly obvious when, having reached the furthest point westward, to which we could prudently venture to carry the ships, we were obliged to heave-to, in order to watch for any opening that might favour our views. The ships were at this time drifting to leeward through the water at the rate of about a mile and a quarter an hour; in spite of which they went so fast to the westward by the land, that Lieutenant Beechey and myself estimated the current to be running at least two miles per hour in that direction. I must here remark that, besides the current to which I have now alluded, and by which the floes and other heavy masses of ice appeared to be affected, there was, as usual in this navigation, a superficial current also, setting the smaller pieces past the others at a much quicker rate. In the course of this narrative, I shall have frequent occasion to remark, how, immediately after the springing up of a breeze, such a current generally commences running upon the surface, in the Polar seas.

Of the causes which now produced this strong westerly current, at a time when the contrary might rather have been anticipated, it is of course not easy, with our present limited experience of this part of the Polar Sea, to offer any very probable conjecture; but the impression upon our minds at the time was, that it was perhaps caused by the re-action of the water, which had been forced to the eastward in the early part of the late gales, against the ice with which the sea was almost entirely covered in that direction. Be this as it may, however, we did not fail to draw from it one conclusion, which was favourable to the object we had in view; namely, that the drift of so large a body of ice for days together in a westerly direction, indicated a considerable space of open sea somewhere in that quarter. I was, on every account, therefore, desirous to take advantage of a current which was setting us so fast in the desired direction, and, with that view, had come to the determination to anchor the ships to an immense field of ice, over which we could not see from the mast head, and of which the thickness was greater than any I had ever before seen; by which means we were in hopes of making some progress, notwithstanding the unfavourable appearances before us. Ere this could be effected, however, it was perceived that the main body of the ice was not only setting to the westward, but was also rapidly approaching the shore; so that it was impossible to adopt the proposed mea-

sure, without incurring the serious risk of being enclosed between them. Finding that no further progress could possibly be made at present, and the wind again freshening up from the westward, with heavy squalls of snow, I was once more under the necessity of returning to the eastward till some land-ice could be met with, to which the ships might be secured for the night. They were accordingly made fast to a proper floe of this kind, not far from that which we had occupied the preceding night, in fifteen fathoms water, and at a hundred and fifty yards from the beach.

I entertained a hope that our people, and especially the Griper's crew, who were still much reduced by the effects of their late sufferings and fatigues, would have been allowed a good night's rest, of which they stood much in need, in order to prepare them for fresh exertions in the morning; but, at eight P.M., while it was fortunately yet light enough to see about us, it was perceived that a large floe to the south-east had very much neared the shore since we had anchored, rendering it necessary immediately to leave our present situation, where there was not a single mass of grounded ice on the outside to afford the smallest shelter to the ships. I determined, therefore, to stand back to the eastward, and as the night was, for the first time this fortnight past, very fine and moderate, to keep the ships under way, and to regulate our course, in the best manner we could, by the stars. We had at this time a fine working breeze off the land, but it gradually died away towards midnight, after which the "young" ice began to form so rapidly on the surface of the sea, that we could scarcely get the ships to move through the water; and at six A.M. on the 15th, when we were within a quarter of a mile of the shore, their way was altogether stopped. The current was still running so fast to the westward, that we were now swept back along the land at the rate of a mile and a quarter per hour. An attempt was, therefore, made to run a line to the shore, but the "young" ice had become so "tough," that the boats could not succeed in getting through it, while at the same time it was much too weak to allow of their being hauled over it, not exceeding an inch in thickness. As the main body of the ice to the southward of us was now perceived to be in motion towards the shore, it became essential to the safety of the ships that they should be got in to the beach, in order to secure them, if possible, within the land ice; and, as the current was now rather carrying us into deeper water, I directed the ships to be anchored, as the only means of retaining them in their present situation till the lines could be run out to the shore. As soon as we had anchored, a second attempt was made to effect this, but with as little success as before, and we were very glad to get the boats on board again, the young ice having nearly carried them away from us to the westward. As the day advanced, however, this ice became gradually thinner and less continuous; so that,

after much unavailing labour, we at length succeeded in getting a hawser to the beach, by watching the little openings, and taking the opportunity of pushing the boats through them. All the hands which now remained on board the Hecla were occupied in weighing the anchor, a service which we could not possibly have mustered strength enough to perform, but for the cheerfulness and zeal with which the officers volunteered on this, as on various other occasions, to man the capstan. Having at length, with much difficulty, effected this, we were beginning to haul the ship in towards the beach, when the wind shifted to the south-west, which is rather upon this shore, it was uncertain what change this might produce in the motion of the floes, which seemed to be enclosing us rapidly on every side, and as the bay-ice had now nearly disappeared, it was considered advisable to make sail upon the ships, so as to be ready to take advantage of any alteration that might occur. I sent to Lieutenant Liddon to desire, that in case of the ice closing upon us, and of his being unable to find a proper security for the Griper within the grounded ice, he would at once run her bow upon the softest part of the beach, so that the floes might perhaps, force her up without much damage; whereas it would be attended with almost certain destruction to the ships, should they be caught between the floes and the heavy masses of ice with which this beach was, for the most part, lined.

By the time that we had made sail, the ice had completely surrounded us, touching the land to the eastward as well as to the westward, and leaving us only a small pool of open water, in which we were at liberty to beat about. To the eastward, however, we could perceive from the crow's nest, that there was still a considerable channel of clear water, and our only chance of getting into it was by narrowly watching for any opening that might occur in the ice which now opposed a formidable barrier to our escape in that direction. At half past one P.M. it was observed that a floe, which formed the principal obstruction to our progress eastward, and which the current was rapidly carrying along the shore, had at length come violently in contact with a small point of land near us, and was now receding from it by its own re-action. We stood towards this opening, in order to observe it more distinctly, and hailed the Griper to desire Lieutenant Liddon to be in readiness to make sail, should it appear sufficiently broad for our purpose. On approaching this spot, we found the passage about three hundred yards wide between the land and the ice; and as there was no time either for deliberation or for sounding the channel, all the studding-sails were instantly set in both ships, and we pushed through the opening at the distance of a hundred yards from the beach, having no less than ten fathoms' water.

It was impossible not to consider ourselves fortunate in having escaped the danger which had lately threatened the ships; but

another difficulty now presented itself which we had not anticipated. This was occasioned by finding nearly the whole surface of that part of the sea, which at a distance had appeared to us open, covered with a coating of young ice of sufficient thickness to offer a considerable impediment to the ships, when sailing with a strong and favourable breeze. To give some idea of the degree of obstruction occasioned by this ice, whose thickness did not generally exceed half an inch, it may be sufficient to state, that with such a quantity of sail as would certainly have propelled the Hecla six miles and a half an hour, if unimpeded in this way, she did not average more than four miles. This remark must be understood to apply to ice of this kind, when of a single thickness, and in the state in which it is naturally formed upon the surface. But, whenever, by any pressure on either side, the sheet is broken, and the edges of one part forced under those of another, causing them to overlay each other, the whole thickness of the ice is of course augmented, and the impediment to a ship becomes greater in proportion to the frequency with which this occurs. Where this has taken place, the ice being too thick to allow the water to be seen through it, is distinguished by the whiteness of its appearance; the white ice, therefore, is to be avoided in sailing, as much as possible.

It was my intention, as usual with us of late, to sail along the shore till we came to any land-ice calculated to afford shelter to the ships during the night. As we ran along, however, it was soon perceived that the main body of the ice was very rapidly approaching the shore, at the same time that the westerly current was still carrying in that direction; the ships were immediately hauled in-shore, to find the best security against it which circumstances would admit, but the bay ice had in this place become so thickened by the continued pressure of the floes upon it from without, that the ships were shortly arrested in their progress, being about one mile distant from the land. Every expedient to break the ice, usual in such cases, was resorted to, without our being able to move the ships a single foot a-head. The floe continued rapidly closing on the shore, forcing the ships in before it, and bringing with it so much of the bay-ice, that it was needless any longer to employ the people in attempting to break it; to anchor seemed now the only mode we had left to avoid being driven on shore, or, what was much more to be apprehended, being forced by the floes against the heavy ice on the beach. We waited, therefore, till at seven P.M. we had shoaled the water gradually from twenty-nine to nine fathoms, and then dropped the bower-anchor. When the ship swung in-shore by the continued pressure of the ice, we had still seven fathoms under the stern, our distance from the beach being about forty yards. We now seemed to have got rather within the drift of the main body of ice, which passed us to the

westward at the rate of two miles an hour; but, at length, the point of a large field, which had hitherto not approached the shore nearer than two or three hundred yards, was observed to be rapidly nearing us. Immediately to the westward of the spot where the Hecla's anchor had been dropped, some very heavy ice, which, for distinction's sake, we called a berg, projected from the beach to the distance of a hundred and fifty yards. The ships had fortunately been forced by the ice, one on each side of this projecting point; for at eight P.M. the field came in contact with it with a tremendous crash, piling up the enormous fragments of ice in the most awful and terrific manner; this seemed to break, in some degree, the force with which the ice had been driving; a force which may almost be considered incalculable, as we could not see over the field in motion from our mast-head. We were at this time within a hundred yards of the point, and had, therefore, great reason to be thankful for having escaped being carried into a situation in which no human power or skill could have saved the ships from instant destruction.

As the pressure of the bay-ice around the ship continued to increase, she was carried gradually in towards the shore, and as nothing was now to be expected but her being driven on the beach, I ordered the rudder to be lifted, the sails to be furled, and the top-gallant yards to be ready for striking. At half-past eight P.M., the Hecla had tailed into three fathoms and a half, about fifteen yards from the beach. The quantity of bay-ice which was squeezed up between the ship and the shore had by this time become so great, that it would easily bear the boats and the men, the former of which were hauled over the ice to enable us to hoist them up. It seemed also to serve the useful purpose of a fender to keep the ship off the ground, which she did not appear to touch in any part.

In the meantime, the Griper had been carried into a situation nearly similar to ours, on the opposite side of the berg, by which she was partly hidden from our view. We observed her heel over very much at times, but knowing that a very trifling pressure was with her sufficient to produce this effect, little apprehension was entertained on that account. I subsequently learned from Lieutenant Liddon, that when the field of ice closed upon us, a point of it had caught the Griper's chain cable, by which the anchor was immediately started, and the vessel carried towards the shore. The cable was dragged out so swiftly, that it could not be slipped, and, in a few minutes, the space between the two hawse-holes was completely cut through. The cable parted soon after, and the other anchor being let go, brought the ship up in time to prevent her going on shore. The Griper also lost one of her boats on this occasion, but was fortunate in sustaining no material injury.

At nine P.M., the ice moved a few hundred yards off the land, and the opportunity was taken to heave the Hecla into a little nook, formed by the grounded ice, where we lay without disturbance during the night. The officers and men were much fatigued by this day's exertions, and I directed the main brace to be spliced, and an extra allowance of preserved meat to be served.

At day-light, on the 19th, the field-ice had drifted about a mile from the land, the intermediate space being almost entirely occupied by innumerable loose fragments cemented together by harpice, so as to form one connected and impenetrable body. The weather was nearly calm with continued snow, and the ice remained tolerable quiet during the day.

Early on the morning of the 20th, the breeze freshened up from the N.N.E., and soon after four A.M., the ice began to open out from the shore. It did not, however, take a direction immediately off the land, though the wind was nearly so, for there was still a current which carried the floes, to the westward; and some of the projecting points came very near the land. Some of these missed the Hecla by about a hundred yards; but at half-past eight, one of them was observed to be moving directly into the bight where the Griper was lying. In a few minutes after this, we perceived her to heel so much, that no doubt could be entertained of her having been forced on shore by the ice. Having sent Mr. Palmer round by land to inquire what was her situation, I was informed she was aground on the beach, having only seven feet water on the inside, and the ice still continuing to press upon her from without. I therefore consulted my officers as to the measures it would, under these circumstances, be most prudent to adopt, and despatched Lieutenant Beechey round to the Griper, to explain my intentions to Lieutenant Liddon. I proposed, if the Griper required lightening considerably before she could be hove off, an operation which, in her present situation, it would require some time to perform, to get the Hecla, as quickly as possible, into the first place of security we could find, and then to march all hands round to the Griper, for the purpose of getting her afloat.

Shortly after our leaving England, Lieutenant Liddon had been unfortunately attacked with a severe rheumatic complaint, which confined him to his cabin during our passage across the Atlantic, but of which he so far recovered, soon after our making the ice in June, as to be able constantly to attend to his duty on deck during the rest of the summer. The harassing circumstances, however, which had attended our exertions for the last fortnight, and the sensible change which had lately taken place in the temperature of the atmosphere, had combined to produce a serious alteration for the worse; so that at the time of the Griper's being driven on shore, he was again reduced to a very debilitated state. On this

account I proposed to him to allow himself to be removed on board the Hecla, until the Griper should be got afloat again. To this proposal, however, he would by no means listen, assuring me, that he should be the last man, instead of the first, to leave the Griper; and he remained seated against the lee side of the deck during the greater part of the day, giving the necessary orders.

The wind continuing strong from the northward, the ice left the shore very rapidly in the afternoon, so that, by one P.M., there was once more a little clear water about the ships. Before Lieutenant Beechey left the Griper, they had been enabled to get the hand-lead down on the sea-side of the vessel, where they found between fifteen and sixteen feet water; and as the tide was now rising, we began to entertain great hopes of her coming off the shore without difficulty or damage. Soon after noon we perceived that she had righted considerably, and at two P.M., we were informed by telegraph that she was afloat. A party of our hands was sent on board to assist in making her snug, that she might be ready for moving whenever the ice would permit. The wind blew hard from the northward during the night, with a good deal of snow; and the thermometer was at 10½° at midnight. The Aurora Borealis was seen faintly in the S.S.W. quarter of the heavens.

The advanced period of the season, the unpromising appearance of the ice to the westward, and the risk to the ships with which the navigation had been attended for some days past, naturally led me to the conclusion that, under these circumstances, the time had arrived, when it became absolutely necessary to look out for winter-quarters. Among the circumstances which now rendered this navigation more than usually perilous, and the hope of success proportionally less, there was none which gave more reasonable ground for apprehension than the incredible rapidity with which the young ice formed upon the surface of the sea, during the greater part of the twenty-four hours. It had become evident, indeed, that it could only be attributed to the strong winds which had lately prevailed, that the sea was not at this time permanently frozen over; for, whenever, the wind blew less than a gale, that formation took place immediately, and went on with such astonishing rapidity, that had the weather continued calm for more than four-and twenty-hours together, it seemed to be extremely probable, that we must have passed the winter in our present exposed and insecure situation.

From this and various other considerations, which the account of our late proceedings will naturally suggest, I considered it a duty incumbent upon me to call for the opinions of the senior officers of the expedition, as to the expediency of immediately seeking a harbour, in which the ships might securely lie during the ensuing winter. The opinions of the officers entirely concurring

with my own, as to the propriety of immediately resorting to this measure, I determined, whenever the ice and the weather would allow, to run back to the bay of the Hecla and Griper, in which neighbourhood alone we had any reason to believe that a suitable harbour might be found.

It blew a hard gale from the northward during the night, by which means the floes were kept at a distance from the land, and the bay-ice prevented from forming under the lee of it. The sea to the eastward was not, however, sufficiently clear, nor the wind moderate enough during the 21st, to allow us to move the ships. The land was now almost entirely covered with snow, and, as we afterwards found, remained so during the winter. A few coveys of the ptarmigan were seen near the beach during the time that we remained at this station.

At half-past two, on the morning of the 22d, the night-signal was made to weigh, and we began to heave at our cables; but such was the difficulty of raising our anchor, and of hauling in our hawsers, owing to the stiffness of the ropes from frost, and the quantity of ice which had accumulated about them, that it was five o'clock before the ships were under way. Our rudder also was so choked by the ice which had formed about it, that it could not be moved till a boat had been hauled under the stern, and the ice beaten and cut away from it. We ran along to the eastward without any obstruction, in a channel about five miles wide, till we were within four or five miles of Cape Hearne, where the bay-ice, in unbroken sheets of about one-third of an inch in thickness, began to offer considerable impediment to our progress. We were abreast of the point at noon, and here our prospect was rather discouraging; the anchorage in the bay was quite free from any obstruction, but a space of three or four miles to the north-eastward of Cape Hearne, was completely covered with bay-ice, which made it more than probable that we should altogether be excluded from the roadstead. We entered this ice under a press of sail, the wind blowing strong from the northward, and found it to consist principally of that kind which, from its appearance, is technically called "pancake-ice," and which, though it considerably retarded our progress in beating to windward, did not offer so serious an impediment as we had expected. At half-past two P.M., in swinging the main-topsail-yard in stays, it was unfortunately carried away in the slings, but this accident was quickly repaired by the zealous exertions of the officers and men. As I saw that the Griper, which had dropped several miles astern in the course of the day, could not possibly reach the anchorage before dark, and being apprehensive that by a too anxious endeavour to effect that object, she might become frozen up at sea during the night, I made Lieutenant Liddon's signal to secure his ship to the grounded ice off Cape Hearne, which he accordingly did. Soon after the sun had

set, I had reason to entertain the same apprehension for the Hecla; for the young ice began, as usual, to form upon the surface of the water, and in an hour's time offered so considerable a resistance to the ship's motion, though under a press of canvas, and with a fresh breeze, as to make it doubtful for some time whether we should reach the anchorage. We at length, however, struck soundings with twenty-nine fathoms of line, and at eight P.M. anchored in nine fathoms, on a muddy bottom, a little to the eastward of our situation on the 5th.

The wind continued northerly, with a heavy fall of snow during the night. At half-past six A.M. on the 23d, there being fortunately so little bay-ice that a boat could easily pull through it, I left the ship, accompanied by Mr. Nias, to examine Fife's harbour, which had been reported to me as affording good shelter, but having a bar across its entrance. I directed Lieutenant Beechey at the same time to get the Hecla under way, and to anchor wherever I should lay down a buoy for that purpose. My mortification may well be imagined at finding, on my arrival off Fife's harbour, that it was covered with one solid sheet of ice from six to twelve inches in thickness, which had been entirely formed since our last visit to this place. I landed on the west side of the harbour, and being soon after joined by a boat from the Griper, which vessel was beating up from Cape Hearne, I was informed by Mr. Skene, that a second bay or harbour had been seen by the officers on the former occasion, a short distance to the westward of this. We lost no time, therefore, in rowing there, having first laid down a buoy, near which the Hecla was to anchor, and made the necessary signal to Lieutenant Beechey.

In going to the westward, we passed a shoal and open bay, immediately adjacent to the harbour which we were now about to examine, and soon after came to a reef of rocks, in some parts nearly dry, extending about three-quarters of a mile to the southward of a low point on the south-eastern side of the harbour. On rounding the reef, on which a quantity of heavy ice was lying aground, we found that a continuous floe, four or five inches in thickness, was formed over the whole harbour, which, in every other respect, appeared to be fit for our purpose; and that it would be necessary to cut a canal of two miles in length through the ice, in order to get the ships into a secure situation for the winter. We sounded the channel into the harbour for about three-quarters of a mile, by making holes in the ice and dropping the lead through, and found the depth from five to six fathoms.

Having ascertained thus far, it remained for me to sound the bar of Fife's harbour, and then to choose between the two places. I returned on board, therefore, for the boats' crew to dine, and then proceeded in execution of this object. The entrance into Fife's harbour is extremely narrow, which enabled us the sooner

to determine the utter impracticability of getting the ships into it, as we found the depth on the bar to be barely twelve feet at high water and a spring tide. I returned on board therefore, and determined on taking the ships round the reef to the entrance of the westernmost harbour, on the following morning. A good deal of snow fell this evening, and the young ice formed on the surface after sun-set.

The ships weighed at six A.M. on the 24th, the wind being still at north, and the weather moderate and fine. As soon as the Hecla was under sail, I went a-head in a boat to sound, and to select an anchorage for the ships. In running to the westward towards the point of the reef, we had no less than three fathoms and three quarters; and, by keeping farther off shore, we might have had much deeper water, but the wind being scant, it was necessary to keep well to the northward. Near the south-western point of this harbour there is a remarkable block of sandstone, somewhat resembling the roof of a house, on which the ships' names were subsequently engraved by Mr. Fisher. This stone is very conspicuous in coming from the eastward, and when kept open to the southward of the grounded ice at the end of the reef, forms a good leading mark for the channel into the harbour. Off the end of the reef the water deepened to six fathoms, and the Hecla's anchor was dropped in eight fathoms, half a mile within the reef, and close to the edge of the ice through which the canal was to be cut. The Griper arrived soon after, and by half-past eight A.M. both ships were secured in the proper position for commencing the intended operations.

As soon as our people had breakfasted I proceeded with a small party of men, to sound, and to mark with boarding-pikes upon the ice, the most direct channel we could find to the anchorage; having left directions for every other officer and man in both ships to be employed in cutting the canal. This operation was performed by first marking out two parallel lines, distant from each other a little more than the breadth of the larger ship. Along each of these lines a cut was then made with an ice-saw, and others again at right angles to them, at intervals of from ten to twenty feet; thus dividing the ice into a number of rectangular pieces, which it was again necessary to subdivide diagonally, in order to give room for their being floated out of the canal. On returning from the upper part of the harbour, where I had marked out what appeared to be the best situation for our winter-quarters, I found that considerable progress had been made in cutting the canal, and in floating the pieces out of it. To facilitate the latter part of the process, the seamen, who are always fond of doing things in their own way, took advantage of a fresh northerly breeze, by setting some boats' sails upon the pieces of ice, a contrivance which saved both time and labour. This part of the operation, however,

was by far the most troublesome, principally on account of the quantity of young ice which formed in the canal, and especially about the entrance, where, before sun-set, it had become so thick that a passage could no longer be found for the detached pieces, without considerable trouble in breaking it. At half past seven P.M. we weighed our anchors, and began to warp up the canal, but the northerly wind blew so fresh, and the people were so much fatigued, having been almost constantly at work for nineteen hours, that it was midnight before we reached the termination of our first day's labour. While we were thus employed, about nine o'clock a vivid flash of light was observed, exactly like lightning. There was at the same time, and during the greater part of the night, a permanent brightness in the northern quarter of the heavens, which was probably occasioned by the Aurora Borealis. I directed half a pound of fresh meat per man to be issued, as an extra allowance; and this was continued daily till the completion of our present undertaking.

All hands were again set to work on the morning of the 25th, when it was proposed to sink the pieces of ice, as they were cut, under the floe, instead of floating them out, the latter mode having now become impracticable on account of the lower part of the canal, through which the ships had passed, being hard frozen during the night. To effect this, it was necessary for a certain number of men to stand upon one end of the piece of ice which it was intended to sink, while other parties, hauling at the same time upon ropes attached to the opposite end, dragged the block under that part of the floe on which the people stood. The officers of both ships took the lead in this employ, several of them standing up to their knees in water frequently during the day, with the thermometer generally at 12°, and never higher than 16°. At six P.M. we began to move the ships. The Griper was made fast astern of the Hecla, and the two ships' companies being divided on each bank of the canal, with ropes from the Hecla's gangways, soon drew the ships along to the end of our second day's work.

This day, the 26th, being Sunday, I should, on every account, have been glad to make it a day of rest to the officers and men; but the rapidity with which the ice increased in thickness, in proportion as the general temperature of the atmosphere diminished, would have rendered a day's delay of serious importance. I ordered the work, therefore, to be continued at the usual time in the morning; and such was the spirited and cheerful manner in which this order was complied with, as well as the skill which had now been acquired in the art of sawing and sinking the ice, that, although the thermometer was at 6° in the morning, and rose no higher than 9° during the day, we had completed the canal at noon, having effected more in four hours than on either of the two preceding days. The whole length of this canal was four thousand

and eighty-two yards, or nearly two miles and one-third, and the average thickness of the ice was seven inches.

At half past one P.M. we began to track the ships along in the same manner as before, and at a quarter past three we reached our winter-quarters and hailed the event with three loud and hearty cheers from both ships' companies. The ships were in five fathoms' water, a cable's length from the beach on the north-western side of the harbour, to which I gave the name of Winter Harbour; and I called the group of islands which we had discovered in the Polar Sea, New Georgia; but having afterwards recollected that this name is already occupied in another part of the world, I deemed it expedient to change it to that of the North Georgian Islands, in honour of our gracious sovereign, George the third, whose whole reign had been so eminently distinguished by the extension and improvement of geographical and nautical knowledge, and for the prosecution of new and important discoveries in both.

CHAPTER V.

Precautions for securing the Ships and Stores—For promoting good order, cleanliness, health, and good-humour, among the Ships' companies—Establishment of a Theatre, and of the North Georgia Gazette—Erection of an Observatory on Shore—Commence our Winter's Amusements—State of the Temperature and various Meteorological Phenomena—Miscellaneous Occurrences to the close of the Year 1819.

HAVING now reached the station, where, in all probability, we were destined to remain for at least eight or nine months, during three of which we were not to see the face of the sun, my attention was immediately, and imperiously, called to various important duties; many of them of a singular nature, such as had, for the first time, devolved on any officer in His Majesty's navy, and might indeed be considered of rare occurrence in the whole history of navigation. The security of the ships, and the preservation of the various stores, were objects of immediate concern. A regular system to be adopted for the maintenance of good order and cleanliness, as most conducive to the health of the crews during the long, dark, and dreary winter, equally demanded my attention.

Not a moment was lost, therefore, in the commencement of our operations. The whole of the masts were dismantled except the

lower ones, and the Hecla's main-top-mast, the latter being kept fidded for the purpose of occasionally hoisting up the electrometer-chain, to try the effect of atmospherical electricity. The lower yards were lashed fore and aft amidships, at a sufficient height to support the planks of the housing intended to be erected over the ships, the lower ends of which rested on the gunwale; and the whole of this frame-work was afterwards roofed over with a cloth, composed of wadding-tilt, with which wagons are usually covered; and thus was formed a comfortable shelter from the snow and wind. The boats, spars, running rigging, and sails, were removed on shore, in order to give as much room as possible on our upper deck, to enable the people to take exercise on board, whenever the weather should be too inclement for walking on shore. It was absolutely necessary, also, for the preservation of our sails and ropes, all of which were hard-frozen, that they should be kept in that state till the return of spring; for, as it was now impossible to get them dried, owing to the constantly low temperature of the atmosphere, they would, probably, have soon rotted had they been kept in any part of the ships, where the warmth would occasion them to thaw; they were, therefore, placed with the boats on shore, and a covering of canvas fixed over them. This covering, however, as we afterwards found, might better have been dispensed with; for as we had not the means of constructing a roof sufficiently tight to keep out the fine snow which fell during the winter, it only served, by the eddy wind which it created, to make the drift about it greater; and, I have now no doubt, that, with stores in the state in which I have described our sails to be, it would be better simply to lay them on some spars to keep them off the ground, allowing the snow to cover them as it fell. For want of experience in these matters, we also took a great deal of unnecessary trouble in carrying the anchors over the ice to the beach, with an idea of securing the ships to the shore at the breaking up of the ice in the spring; a precaution for which there was not the smallest occasion, and by which the cables suffered unnecessary exposure during the winter.

As soon as the ships were secured and housed over, my undivided attention was in the next place directed to the comfort of the officers and men, and to the preservation of that extraordinary degree of health which we had hitherto enjoyed in both ships. A few brief remarks on this subject by Mr. Edwards, (to whose skill and advice, as well as humane and unremitting attention to the few sick, on all occasions, I am much indebted,) I need make no apology for offering, in his own words;—"On our arrival in our winter-quarters, after a season sufficiently harassing both to officers and men, it was pleasing to reflect on the excellent health they had experienced throughout. On our passage across the Atlantic, indeed, a few ephemeral complaints, arising from wet

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and cold, appeared among the men, but these were so slight as to be scarcely worthy of notice; and, since our arrival within the Polar circle, a period of between two and three months, not a single medical case had been entered on the sick list. To this favourable account, one exception, however, must be made in the case of Lieutenant Liddon, who had suffered severely from an attack of rheumatism shortly after our leaving England, from which he had not yet recovered. With regard to accidents, we had been no less fortunate; a few injuries from frost, and one from a burn by gunpowder, which had not yet recovered, but which proved only of temporary inconvenience, constituting all the cases of this nature which had hitherto occurred. Not the slightest disposition to scurvy, the disease most to be apprehended under our present circumstances, had yet been evinced in either ship. In fact, the whole of the officers and men, with the few exceptions above mentioned, might be said to exhibit the finest aspect of health; and it was no less gratifying to observe, that their spirits were in perfect unison with their corporeal powers; so that it was impossible not to consider them as effective as at the commencement of the voyage. Under these co-existing circumstances, combined with the powerful preventives with which we were furnished, it was not unreasonable to indulge in a confident hope of finding ourselves at the beginning of the next season with our numbers undiminished, and our energies unimpaired."

In order to prolong this healthy state of the crews, and to promote the comfort of all, such arrangements were made for the warmth and dryness of the births and bed-places, as circumstances appeared to require; and in this respect some difficulties were to be overcome, which could not, perhaps, have been anticipated. Soon after our arrival in Winter Harbour, when the temperature of the atmosphere had fallen considerably below zero of Fahrenheit, we found that the steam from the coppers, as well as the breath and other vapour generated in the inhabited parts of the ship, began to condense into drops upon the beams and the sides, to such a degree as to keep them constantly wet. In order to remove this serious evil, it was necessary to adopt such means for producing a sufficient warmth, combined with due ventilation, as might carry off the vapour, and thus prevent its settling on any part of the ship. For this purpose a large stone oven, cased with cast iron, in which all our bread was baked during the winter, was placed on the main-hatchway, and the stove-pipe led fore and aft on one side of the lower deck, the smoke being thus carried up the fore-hatchway. On the opposite side of the deck, an apparatus had been attached to the galley-range, for conveying a current of heated air between decks. This apparatus simply consisted of an iron box or air-vessel about fifteen inches square, through which passed three pipes, of two inches diameter, communicating

from below with the external air, and uniting above in a metal box fixed to the side of the galley-range; to this box a copper stove pipe was attached, and conveyed to the middle part of the lower deck. When a fire was made under the air-vessel, the air became heated in its passage through the three pipes, from which it was conveyed through the stove-pipe to the men's births. While this apparatus was in good order, a moderate fire produced a current of air of the temperature of 87°, at the distance of seventeen feet from the fire-plate; and, with a pipe of wood, or any other imperfect conductor of heat, which would not allow of its escaping by the way, it might undoubtedly be carried to a much greater distance. By these means we were enabled to get rid of the moisture about the births where the people messed; but when the weather became more severely cold, it still accumulated in the bed-places occasionally to a serious and very alarming degree. Among the means employed to prevent the injurious effects arising from this annoyance, one of the most efficacious perhaps was a screen made of tarpaulin fixed to the beams round the galley, and dropping within eighteen inches of the deck, which served to intercept the steam from the coppers, and prevent it as before from curling along the beams, and condensing upon them into drops. This screen was especially useful at the time of drawing off the beer, which we had lately been in the habit of brewing from essence of malt and hops, and which continued to be served for several weeks as a substitute for part of the usual allowance of spirits. We found the steam arising from this process so annoying during the cold weather, that, valuable as the beer must be considered as an anti-scorbutic beverage, it was deemed advisable to discontinue our brewery on that account. While on this subject, I may also add that, when the weather became severely cold, we could not get the beer to ferment, so as to make it palatable.

For the preservation of health, and as a necessary measure of economy, a few alterations were made in the quantity and quality of the provisions issued. I directed the allowance of bread to be permanently reduced to two-thirds, a precaution which, perhaps, it would have been as well to have adopted from the commencement of the voyage. A pound of Donkin's preserved meat, together with one pint of vegetable or concentrated soup per man, was substituted for one pound of salt beef weekly; a proportion of beer and wine was served in lieu of spirits; and a small quantity of sour krout and pickles, with as much vinegar as could be used, was issued at regular intervals. The daily proportion of lime-juice and sugar was mixed together, and, with a proper quantity of water, was drank by each man in presence of an officer appointed to attend to this duty. This latter precaution may appear to have been unnecessary, to those who are not aware how much sailors resemble children in all those points in which their own

health and comfort are connected. Whenever any game was procured, it was directed to be invariably served in lieu of, and not in addition to, the established allowance of other meats, except in a few extraordinary cases, when such an indulgence was allowed; and in no one instance, either in quantity or quality, was the slightest preference given to the officers.

In the article of fuel, which is of such vital importance in so severe a climate, a system of the most rigid economy was adopted, such a quantity of coal only being expended as was barely sufficient for the preservation of health on board the ships. A search was made for turf or moss immediately after our arrival, and a small quantity of the latter was made use of as fuel; but, without a previous drying, which, from the advanced period of the season, we had no means of giving it, it was found to be too wet to produce any saving of coals. We also looked out most anxiously for a vein of coal on shore, but only a few lumps were picked up during our stay in Winter harbour.

Great attention was paid to the clothing of the men, who were put into a certain number of divisions, according to the usual custom of the navy, each division being under the command of an officer, who was responsible for the personal cleanliness of the men intrusted to his charge, as well as for their keeping their clothes at all times mended and in good condition. The men were regularly mustered for inspection morning and evening, at which times I always visited every part of the between-decks, accompanied by Lieut. Beechey and Mr. Edwards; and one day in the week was appointed for the examination of the men's skins and gums by the medical gentlemen, in order that any slight appearance of the scurvy, might at once be detected, and checked by timely and adequate means.

It was my intention to have caused the bedding of the ships' companies to be brought on deck, for the purpose of airing, at least once a week during the winter; but here, also, a difficulty occurred, which, without previous experience, could not perhaps have been easily anticipated. Whenever a blanket was brought on deck, and suffered to remain there for a short time, it of course required the temperature of the atmosphere. When this happened to be rather low, under zero of Fahrenheit for instance, the immediate consequence, on taking the blanket again into the inhabited parts of the ship was, that the vapour settled and condensed upon it, rendering it almost instantly so wet as to be unfit to sleep on, and requiring, therefore, after all, that it should be dried by artificial heat before it could be returned into the bed-place. We were, therefore, under the necessity of hanging the bedding upon lines between decks, as the only mode of airing it; and what was likely to prove still more prejudicial, we were obliged to have recourse to the same unhealthy measure in drying the washed clothes.

Under circumstances of leisure and inactivity, such as we were now placed in, and with every prospect of its continuance for a very large portion of a year, I was desirous of finding some amusement for the men during this long and tedious interval. I proposed, therefore, to the officers to get up a play occasionally on board the Hecla, as the readiest means of preserving among our crew that cheerfulness and good humour which had hitherto subsisted. In this proposal I was readily seconded by the officers of both ships, and Lieutenant Beechey having been duly elected as stage-manager, our first performance was fixed for the 5th of November, to the great delight of the ship's companies. In these amusements I gladly undertook a part myself, considering that an example of cheerfulness, by giving a direct countenance to every thing that could contribute to it, was not the least essential part of my duty, under the peculiar circumstances in which we were placed.

In order still further to promote good-humour among ourselves, as well as to furnish amusing occupation, during the hours of constant darkness, we set on foot a weekly newspaper, which was to be called the *North Georgia Gazette and Winter Chronicle*, and of which Captain Sabine undertook to be the editor, under the promise that it was to be supported by original contributions from the officers of the two ships; and, though some objection may, perhaps, be raised against a paper of this kind being generally resorted to in ships of war, I was too well acquainted with the discretion, as well as the excellent dispositions of my officers, to apprehend any unpleasant consequences from a measure of this kind; instead of which I can safely say, that the weekly contributions had the happy effect of employing the leisure hours of those who furnished them, and of diverting the mind from the gloomy prospect which would sometimes obtrude itself on the stoutest heart.

Immediately on our arrival in harbour, Captain Sabine had employed himself in selecting a place for the observatory, which was erected in a convenient spot, about seven hundred yards to the westward of the ships. It was also considered advisable immediately to set about building a house near the beach, for the reception of the clocks and instruments. For this purpose we made use of a quantity of fir-plank, which was intended for the construction of spare boats, and which was so cut as not injure it for that purpose. The ground was so hard frozen that it required great labour to dig holes for the upright posts which formed the support of the sides. The walls of this house being double, with moss placed between the two, a high temperature could, even in the severest weather which we might be doomed to experience, be kept up in it without difficulty by a single stove.

Among the many fortunate circumstances which had attended us during this first season of our navigation, there was none more

striking than the opportune time at which the ships were securely placed in harbour; for on the very night of our arrival, the 26th of September, the thermometer fell to —1°; and, on the following day, the sea was observed from the hills to be quite frozen over, as far as the eye could reach; nor was any open water seen after this period. During the first three weeks in October, however, we remarked that the young ice, near the mouth of the harbour, was occasionally squeezed up very much by the larger floes, so that the latter must still have had some space left, in which to acquire motion: but after that time the sea was entirely covered with one uniform surface of solid and motionless ice.

After our arrival in port, we saw several rein-deer, and a few coveys of grouse; but the country is so destitute of every thing like cover of any kind, that our sportsmen were not successful in their hunting excursions, and we procured only three rein-deer, previously to the migration of these and the other animals from the island, which took place before the close of the month of October, leaving only the wolves and foxes to bear us company during the winter. The full-grown deer, which we killed in the autumn, gave us from one hundred and twenty to one hundred and seventy pounds of meat each, and a fawn weighed eighty-four pounds.

On the 1st of October, Captain Sabine's servant having been at some distance from the ships, to examine a fox-trap, was pursued by a large white bear, which followed his footsteps the whole way to the ships, where he was wounded by several balls, but made his escape after all. This bear, which was the only one we saw during our stay in Winter Harbour, was observed to be more purely white than any we had before seen, the colour of these animals being generally that of a dirtyish yellow, when contrasted with the whiteness of the ice and snow.

On the night of the 4th, we had a strong gale from the southward, which gave us a satisfactory proof, of the security of the harbour we had chosen, for the main ice was found in the morning to have pressed in very forcibly upon that which was newly formed near the entrance, while within the two points of the harbour, it remained perfectly solid and undisturbed. Some deer being seen near the ships on the 10th, a party was despatched after them, some of whom having wounded a stag, and being led on by the ardour of pursuit, forgot my order that every person should be on board before sun-set, and did not return till late after we had suffered much apprehension on their account. I, therefore, directed that the expense of all rockets and other signals made in such cases, should, in future, be charged against the wages of the offending party. John Pearson, a marine belonging to the Griper, who was the last that returned on board, had his hands severely frost-bitten, having imprudently gone away without mittens, and with a musket in his hand. A party of our people most providentially found him,

although the night was very dark, just as he had fallen down a steep bank of snow, and was beginning to feel that degree of torpor and drowsiness which, if indulged, inevitably proves fatal. When he was brought on board, his fingers were quite stiff, and bent into the shape of that part of the musket which he had been carrying; and the frost had so far destroyed the animation in his fingers on one hand, that it was necessary to amputate three of them a short time after, notwithstanding all the care and attention paid to him by the medical gentlemen. The effect which exposure to severe frost has, in benumbing the mental as well as the corporeal faculties, was very striking in this man, as well as in two of the young gentlemen who returned after dark, and of whom we were anxious to make inquiries respecting Pearson. When I sent for them into my cabin, they looked wild, spoke thick and indistinctly, and it was impossible to draw from them a rational answer to any of our questions. After being on board for a short time, the mental faculties appeared gradually to return with the returning circulation, and it was not till then that a looker-on could easily persuade himself that they had not been drinking too freely. To those who have been much accustomed to cold countries this will be no new remark; but I cannot help thinking (and it is with this view that I speak of it) that many a man may have been punished for intoxication, who was only suffering from the benumbing effects of frost; for I have more than once seen our people in a state so exactly resembling that of the most stupid intoxication, that I should certainly have charged them with that offence, had I not been quite sure that no possible means were afforded them on Melville Island, to procure any thing stronger than snow-water. In order to guard in some measure against the danger of persons losing their way, which was more and more to be apprehended as the days became shorter, and the ground more covered with snow, which gives such a dreary sameness to the country, we erected on all the hills within two or three miles of the harbour, finger-posts pointing towards the ships.

I have before remarked that all the water which we made use of while within the polar circle, was procured from snow, either naturally or artificially dissolved. Soon after the ships were laid up for the winter, it was necessary to have recourse entirely to the latter process, which added materially to the expenditure of fuel during the winter months. The snow for this purpose was dug out of the drifts, which had formed upon the ice round the ships, and dissolved in the coppers. We found it necessary always to strain the water thus procured, on account of the sand which the heavy snow-drifts brought from the island, after which it was quite pure and wholesome.

On the evening of the 13th, the Aurora Borealis was seen very

faintly, consisting of a stationary white light in the south-west quarter, and near the horizon.

On the 15th, we saw the last covey of ptarmigan which were met with this season. On the same day our people fell in with a herd of fifteen deer to the southward; they were all lying down at first, except one large one, probably a stag, which afterwards seemed to guard the rest in their flight, going frequently round them, and sometimes striking them with his horns to make them go on, which otherwise they did not seem much inclined to do.

On the 16th, it blew a strong gale from the northward, accompanied by such a constant snow-drift, that although the weather was quite clear overhead, the boat-house, at the distance of three or four hundred yards, could scarcely be seen from the ships. On such occasions, no person was permitted on any account to leave the ships. Indeed, when this snow-drift occurred, as it frequently did during the winter, with a hard gale, and the thermometer very low, I believe that no human being could have remained alive after an hour's exposure to it. In order, therefore, to secure a communication between the ships, a distance not exceeding half a cable's length, as well as from the ships to the house on shore, a line was kept extended, as a guide from one to the other. About the middle of October the snow began to fall in smaller flakes than during the summer; and soon after this, whenever it fell, it consisted entirely of very minute *spicula*, assuming various forms of crystallization. The meridian altitude of the sun was observed this day by an artificial horizon, which I notice from the circumstance of its being the last time we had an opportunity of observing it for about four months.

On the 17th and 18th, our hunting parties reported that the deer were more numerous than they had been before, which made us conclude, that they were assembling their forces for an immediate departure over the ice to the continent of America, as we only saw one or two on the island after this time. They had been met with, since taking up our quarters, in herds of from eight to twenty, and from forty to fifty were seen in the course of one day. A thermometer placed in the sun at noon, on the 18th, rose only to — 9°, the temperature in the shade being — 16°.

It had for some time past been a matter of serious consideration with me, whether it would be necessary to cut the ice round the ships, which had by this time become so firmly attached to the bends, that they were completely imbedded in it. There happened to be only two or three persons in the expedition, who had ever been frozen up during a whole winter in any of the cold countries, and I consulted these as to the expediency of doing so. This precaution, it would seem, is considered to be necessary, from the possibility of a ship being hung by the ice attached to her bends, and thus prevented from rising and falling with the tide; in conse-

quence of which, a plank might easily be torn out near the water-line, by the weight of the ship hanging entirely on that particular part. I was relieved from any apprehension on this score, however, by knowing how small the rise and fall of the tides were in this place; and also by having observed that a spring-tide caused the whole mass of ice in the harbour to detach itself from the beach, along the whole line of which it split, and was lifted; so that both ships and ice rose and fell in a body with the tide. The only question, therefore, that remained, was, whether the lateral expansion of the ice might not create such a pressure upon the water-line of the ships as to do them some damage. This apprehension was rather increased by Lieutenant Liddon's having reported to me, that his officers had, a night or two before, heard a loud crack about the Griper's heads, which gave them the idea of something straining or giving way. This noise, however, which occurred very frequently afterwards, as the cold became more intense, proved to be nothing more than that which is not unusually heard in houses in cold countries, being occasioned by the freezing and expansion of the juices contained in wood not thoroughly seasoned. To put the matter out of all doubt, however, I deemed it prudent to order the ice to be cut round both ships, an operation which occupied the two crews almost the whole of two days, the ice being now twenty-three inches in thickness; and I determined to continue this operation daily, as long as the weather would permit.

The 20th of October was one of the finest days, which, as experience has since taught us, ever occur in this climate, the weather being clear, with little or no wind; and, though the thermometer remained steadily between — 15° and — 16° during the day, it was rather pleasant to our feelings than otherwise. Our sportsmen were out from both ships the whole day, and returned, for the first time, without having seen any living animal, though they had walked over a very considerable extent of ground; so that the hope we had indulged of obtaining, occasionally, a fresh meal, was now nearly at an end for the rest of the winter. It was observed from the hills, that the ice in the offing had been thrown into higher hummocks than before; and in the morning we saw a number of little vertical streams of vapour rising from the sea, near the mouth of the harbour, which was probably that phenomenon vulgarly called the "barber," in North America, and which is occasioned, I believe, by the vapour arising from the water being condensed into a visible form by the coldness of the atmosphere. It is probable, therefore, from the two circumstances now mentioned, that a motion had taken place among the floes in the offing, producing first the pressure by which the hummocks were thrown up, and then a partial separation leaving, for a time, a small space of unfrozen surface.

Between six and eight P.M., we observed the Aurora Borealis,

forming a broad arch of irregular white light, extending from N.N.W. to S.S.E., the centre of the arch being 10° to the eastward of the zenith. It was most bright near the southern horizon; and frequent, but not vivid, coruscations were seen shooting from its upper side, towards the zenith. The magnetic needle was not sensibly affected by this phenomenon.

Between two and three P.M. on the 21st, the weather being still remarkably clear and fine, and the sun near the horizon, a parhelion strongly prismatic was seen on each side of it, at the distance of 23°, resembling the legs of a rainbow resting upon the land.

On the 26th, the sun afforded us sufficient light for writing and reading in my cabin, the stern-windows exactly facing the south, from half past nine till half past two; for the rest of the four-and-twenty hours we lived, of course, by candle-light. Nothing could exceed the beauty of the sky to the south-east and south-west at sun-rise and sun-set about this period: near the horizon there was generally a rich bluish purple, and a bright arch of deep red above, the one mingling imperceptibly with the other. The weather about this time was remarkably mild, the mercury in the thermometer having stood at or above zero for more than forty-eight hours. By a register of the temperature of the atmosphere, which was kept by Captain Sabine at the observatory, it was found that the thermometer, invariably, stood at least from 2° to 5°, and even on one or two occasions as much as 7° higher on the outside of the ships, than it did on shore, owing probably to a warm atmosphere, created round the former by the constant fires kept up on board.

On the 29th the weather was calm and clear, and we remarked, for the first time, that the smoke from the funnels scarcely rose at all, but skimmed nearly horizontally along the housing, the thermometer having got down to — 24°*, and the mercury in the barometer standing at 29,70 inches. It now became rather a painful experiment to touch any metallic substance in the open air with the naked hand; the feeling produced by it exactly resembling that occasioned by the opposite extreme of intense heat, and taking off the skin from the part affected. We found it necessary, therefore, to use great caution in handling our sextants and other instruments, particularly the eye-pieces of the telescopes, which, if suffered to touch the face, occasioned an intense burning pain; but this was easily remedied by covering them over with soft leather. Another effect, with regard to the use of instruments, began to appear about this time. Whenever any instrument, which had been some time exposed to the atmosphere, so as to be cooled down to the same temperature, was suddenly brought below into the cabins, the vapour was instantly condensed all around it, so as to give the in-

* By a Meteorological Journal in my possession, kept at York Fort, Hudson's Bay, in the year 1795, it appears that this phenomenon did not occur till the thermometer indicated a temperature of about —36°. The height of the barometer is not mentioned.

strument the appearance of smoking, and the glasses were covered almost instantaneously with a thin coating of ice, the removal of which required great caution to prevent the risk of injuring them until it had gradually thawed, as they acquired the temperature of the cabin. When a candle was placed in a certain direction from the instrument, with respect to the observer, a number of very minute *spiculæ* of snow were also seen sparkling around the instrument, at the distance of two or three inches from it, occasioned, as we supposed, by the cold atmosphere produced by the low temperature of the instrument almost instantaneously congealing into that form the vapour which floated in its immediate neighbourhood.

The month of November commenced with mild weather, which continued for the first ten days. It is generally supposed, by those who have not experienced the effects produced upon the feelings by the various alterations in the temperature of the atmosphere, when the thermometer is low, that a change of 10° or 15° makes no sensible difference in the sensation of cold; but this is by no means the case, for it was a remark continually made among us, that our bodies appeared to adapt themselves so readily to the climate, that the scale of our feelings, if I may so express it, was soon reduced to a lower standard than ordinary; so that, after living for some days in a temperature of — 15° or — 20°, it felt quite mild and comfortable when the thermometer rose to zero, and *vice versâ*.

The 4th of November being the last day that the sun would, independently of the effects of refraction, be seen above our horizon till the 8th of February, an interval of ninety-six days, it was a matter of considerable regret to us that the weather about this time was not sufficiently clear to allow us to see and make observations on the disappearance of that luminary, in order that something might be attempted towards determining the amount of the atmospherical refraction at a low temperature. But, though we were not permitted to take a last farewel, for at least three months, of that cheering orb, "of this great world, both eye and soul," we nevertheless felt that this day constituted an important and memorable epoch in our voyage. We had, some time before, set about the preparations for our winter's amusements; and the theatre being ready, we opened on the 5th of November, with the representation of *Miss in her Teens*, which afforded to the men such a fund of amusement as fully to justify the expectations we had formed of the utility of theatrical entertainments under our present circumstances, and to determine me to follow them up at stated periods. I found, indeed, that even the occupation of fitting up the theatre, and taking it to pieces again, which employed a number of the men for a day or two before and after each performance, was a matter of no little importance, when the immediate duties of the ship appeared by no means sufficient for that purpose; for I dread-

ed the want of employment as one of the worst evils that was likely to befal us.

On the 6th we tried the temperature of the sea at the bottom, the depth being five fathoms, and found it to be 30°, whilst that of the surface was 28° and of the air — 16°. On the 9th, the temperature of the bottom was as high as 31°, the surface being still at 28°. The specific gravity of the surface water was 1.0264, at the temperature of 52°, and that of the water brought from the bottom 1.0265, at 50°. On the same evening the weather being fine and clear, the Aurora Borealis was seen for nearly two hours, forming a long, low, irregular arch of light, extending from north to south in the western quarter of the heavens, its altitude in the centre being 3° or 4°. The electrometer-chain was hoisted up to the mast-head, and its lower end brought down to the ice, so as to keep it perfectly clear of all the masts and rigging, which method was used throughout the winter; but no sensible effect was produced on the gold leaf. It was tried a second time, after the sky became full of white fleecy clouds, but with as little success.

On the forenoon of the 11th, the thermometer having again fallen to — 26½°, the smoke, as it escaped from the funnels, scarcely rose at all above the housing. Mr. Ross, having gone to the mast-head at noon, reported that he saw the sun. There was no time for measuring the altitude, but Lieutenant Beechey, who went up to observe it, considered that about twenty-four minutes of its disk appeared above the horizon, according to which the amount of refraction would appear to be 2° 09′ 05″. The temperature of the atmosphere at this time was — 27°, and the mercury in the barometer stood at 30.07 inches. The thermometer having fallen to — 31° on the following day, we expected to have seen the sun again, and looked out from the mast-head for that purpose, but it did not re-appear. At six P.M. the Aurora Borealis was seen in a broken irregular arch, about 6° high in the centre, extending from N.W.b.N. to S.b.W., from whence a few coruscations were now and then faintly emitted towards the zenith. From eight P.M. till midnight on the 13th, it was again seen in a similar manner from S.W. to S.E., the brightest part being in the centre or due south. On the 15th, Lieutenant Beechey informed me that he had seen, in the N.N.W. and S.E. quarters, some light transparent clouds, from which columns of light were thrown upwards, resembling the Aurora Borealis; those to the south-east being opposed to a very light sky, had a light-brown appearance. This phenomenon was again observed on the 16th, consisting of a bright stationary light from S.S.W. to S.b.E., and reaching from the horizon to the height of about 6° above it.

About the time of the sun's leaving us, the wolves began to approach the ships more boldly, howling most piteously on the beach near us, sometimes for hours together, and, on one or two occa-

sions, coming alongside the ships, when every thing was quiet at night; but we seldom saw more than one or two together, and, therefore, could form no idea of their number. These animals were always very shy of coming near our people, and, though evidently suffering much from hunger, never attempted to attack any of them. The white foxes used also to visit the ships at night, and one of these (*Canis Lagopus*) was caught in a trap set under the Griper's bows. The uneasiness displayed by this beautiful little animal during the time of his confinement, whenever he heard the howling of a wolf near the ships, impressed us with an opinion that the latter is in the habit of hunting the fox as his prey.

The rapidity with which the ice formed round the ships had now become so great, as to employ our people for several hours each day in cutting it; and for the last three days our utmost labour, during the time of twilight, could scarcely keep it clear. As it was evident, therefore, that as the frost increased, we could not possibly effect this, and as the men almost always got their feet wet in sawing the ice, from which the most injurious effects upon their health were likely to result, I gave orders to leave off cutting it any more during the severity of the winter. The average formation of ice round the ships, during the time we continued to remove it, was usually from three to five inches in twenty-four hours; and once it froze eight inches in twenty-six hours, the mean temperature of the atmosphere being — 12°. At noon on the 17th, we saw, for the first time at this hour, a star of the first magnitude (*Capella*), and at half an hour past noon, those of the second magnitude in Ursa Major were visible; which circumstance will, perhaps, give the best idea of the weakness of the sun's light at this period. At three P.M. a remarkable variety of the Aurora Borealis was seen by several of the officers. Having about this time been confined for a few days to my cabin by indisposition, I am indebted to Lieutenant Beechy for the following description of it: —"Clouds of a light-brown colour were seen, diverging from a point near the horizon bearing S.W.b.S., and shooting pencils of rays upwards at an angle of about 45° with the horizon. These rays, however, were not stationary as to their position, but were occasionally extended and contracted. From behind these, as it appeared to us, flashes of white light were repeatedly seen, which sometimes streamed across to the opposite horizon, some passing through the zenith, others at a considerable distance on each side of it. This phenomenon continued to display itself brilliantly for half an hour, and then became gradually fainter till it disappeared, about four o'clock. The sun, at the time of the first appearance of this meteor, was on nearly the same bearing, and about five degrees below the horizon."

The temperature of the atmosphere having, about the 18th, become considerably lower than before, the cracking of the timbers

one very frequent and loud for a time; but generally ceased altogether in an hour or two after this fall had taken place in the thermometer, and did not occur again at the same temperature during the winter. The wind blowing fresh from the northward, with a heavy snow-drift, made the ship very cold below; so that the breath and other vapour accumulated during the night in the bed-places and upon the beams, and then immediately froze; hence it often occupied all hands for two or three hours during the day to scrape the ice away, in order to prevent the bedding from becoming wet by the increase of temperature occasioned by the fires. It was therefore found necessary to keep some of the fires in between decks at night, when the thermometer was below — 15° or — 20° in the open air, especially when the wind was high. To assist in keeping the lower decks warm, as well as to retard, in some slight degree, the formation of ice immediately in contact with the ships' sides, we banked the snow up against their sides, as high as the main-chains; and canvas screens were nailed round all the hatchways on the lower deck.

The stars of the second magnitude in Ursa Major were just perceptible to the naked eye a little after noon this day, and the Aurora Borealis appeared faintly in the south-west at night. About this time our medical gentlemen began to remark the extreme difficulty with which sores of every kind healed; a circumstance that rendered it the more necessary to be cautious in exposing the men to frost-bites, lest the long inactivity and want of exercise during the cure of sores in other respects trifling, should produce serious effects upon the general health of the patients.

From midnight, on the 20th, till two o'clock on the following morning, the thermometer rose from — 46° to — 40½°, and at half-past three a gale came on from the northward, which continued to blow, and the thermometer gradually to rise, till the latter had reached — 21° at midnight. This was one of a great many instances which occurred during the winter, of an increase of wind, from whatever quarter, being accompanied by a simultaneous rise in the thermometer. The gale continued strong for the greater part of the two following days, with a tremendous snow-drift, which kept us all on board till the afternoon of the 23d. In the mean time, another play had been prepared, and our second performance, to which the crews had been anxiously looking forward, took place on the evening of the 24th.

The temperature of the ships' holds, at this time, was generally from 27° to 34°, the aftermost being always the warmest, and a considerable quantity of the beer was found frozen in the casks. The thermometer seldom rose higher than 40° on the lower deck, throughout the day. On the 26th in the morning, some vivid coruscations of the Aurora Borealis were observed from S. to N.W.,

commencing at 4° or 5° of altitude, and streaming towards the zenith.

Early in the afternoon of the 28th, Captain Sabine observed a small meteor fall to the ground in the W. by N., not apparently more than a mile distant. It fell slowly, with a faint white light, which increased considerably as it approached the earth. When first seen, its height was about 8° or 10°, and the descent appeared perpendicular, or nearly so. The atmosphere at this time was remarkably clear. Soon after the moon rose this afternoon, it was curiously deformed by refraction, the lower edges of its disk appearing indented with deep notches, and at other times seeming to be cut off square at the bottom. A single ray, or rather a column of light, of the same diameter as the moon, was also observed to descend from it to the top of the hill, like a pillar supporting it. On this and the two following nights, we were occupied from five to seven hours in taking lunar distances in the open air, the thermometer being from — 34° to — 36°. This we did without any material inconvenience, as long as the weather continued calm or nearly so; but with a moderate breeze it soon became too painful to handle the screws of the sextant. The difficulty of making observations in this climate is not, however, confined to the sensation of cold produced by handling the instruments, or by standing still for several hours together at so low a temperature; but it is also necessary to hold the breath very carefully during the time of making the observation; for if the least vapour be suffered to touch the instrument, it is immediately converted into a coat of ice, which dims the glasses, and renders the instrument unserviceable till the ice has been thawed, and the instrument thoroughly cleaned. Our sextants were somewhat injured, in the cold weather, by the cracking of the silver on the horizon and index glasses, arising, as we supposed, from the unequal contraction of the two substances. The mercury of the artificial horizons froze into a solid mass as we were observing the moon's altitude in it, although the thermometer on shore indicated only — 36°. This was probably owing to the mercury having become adulterated by admixture with the lead of the troughs, which disposed it to congeal at a higher temperature than the freezing point of pure mercury.

At half-past six P.M., on the 1st of December, part of a circular halo, whose radius was 22° 58′, was observed round the moon, which was near the full. Part of a well-defined horizontal circle of white light, passing through the moon, extended also for several degrees on each side of her, and in the points where this circle intersected the halo, were two prismatic spots of light, or paraselenæ. In that part of the halo which was immediately over the moon, was another spot much brighter; and opposite to it, in the lower part of the circle, another similar, but much more faint. About the same

time, on the following evening, two concentric circles were observed round the moon, the radius of the smaller being 38°, and of the larger 46°. Upon the inner circle were four parselenæ, strongly prismatic, situated with respect to the moon as on the preceding day; and there was also a faint horizontal circle of white light, passing through the moon as before. The weather was fine in both these instances, but there was still a sort of haziness in the atmosphere which prevented the heavenly bodies being very distinctly seen.

On the 10th, at two P.M., Captain Sabine observed a small meteor fall in the direction of N.N.W. from the ships, similar in character and appearance to that seen on the 28th of November, except that the light was not so vivid, and it was extinguished, instead of burning more fiercely, before it reached the earth. About this time we were a good deal annoyed for some days together by the thermometer continuing higher than usual, the wind being from the E.S.E., which caused a considerable degree of dampness between decks, in consequence of the ice thawing in every crevice where it could not readily be removed in any other way. This annoyance could only be got rid of by constant wiping, and by increasing the fires for the time: but, when the thermometer fell to 15° or 20° below zero, it again became solid, and ceased to be an inconvenience.

On the 14th of December, the day was beautifully serene and clear, and there was more redness in the southern sky about noon, than there had been for many days before; the tints, indeed, might almost be called prismatic. At six P.M., the Aurora Borealis was seen, forming two concentric arches, passing from the western horizon on each side of the zenith to within 20° of the opposite horizon, resting on a dark cloud about seven degrees high, from behind which the light appeared to issue, and partially streaming from the cloud to the zenith. No effect was produced by it on the electrometer or the magnetic needle. The appearance I have just described of the light seeming to issue from behind an obscure cloud, is a very common one; it is not always, however, easy to tell whether any cloud really exists, or whether the appearance is a deception arising from the vivid light of the Aurora being contrasted with the darker colour of the sky near it.

On the 17th, in the morning, this phenomenon was again observed, being a stationary faint light from S.W. to W.S.W. The breeze freshened up strong from the eastward, and the thermometer gradually rose, as usual, till at four P.M. it had reached zero, being the first time that it had stood so high since the 5th of November. The water in the Hecla's pump-well had, by this time, become completely frozen, so that it was no longer possible to work the pumps. In what manner the pumps could be kept free under such circumstances, if it were found necessary, I do not know, as

there would have been a risk of damaging the lower part of them, in detaching the ice from it to make the experiment. The Hecla, however, was so tight as not to require it; as a proof of which it need only be mentioned, that the same twenty inches of ice which was formed about this period, remained without any addition for more than six months, during which time she was never once pumped out; and the only inconvenience that resulted from this, was the accumulation of a small quantity of ice among the coals in the lower part of the fore and main holds.

About this part of the winter, we began to experience a more serious inconvenience from the bursting of the lemon-juice bottles by frost, the whole contents being frequently frozen into a solid mass, except a small portion of highly-concentrated acid in the centre, which, in most instances, was found to have leaked out, so that when the ice was thawed, it was little better than water. This evil increased to a very alarming degree in the course of the winter; some cases being opened in which more than two-thirds of the lemon-juice was thus destroyed, and the remainder rendered nearly inefficient. It was at first supposed that this accident might have been prevented by not quite filling the bottles, but it was afterwards found, that the corks flying out did not save them from breaking. We observed that the greatest damage was done in those cases which were stowed nearest to the ship's side, and we, therefore, removed all the rest amidships, a precaution which, had it been sooner known and adopted, would probably have prevented, at least, a part of the mischief. The vinegar, also, became frozen in the casks in the same manner, and lost a great deal of its acidity when thawed. This circumstances conferred an additional value on a few gallons of very highly concentrated vinegar, which had been sent out on trial, upon this and the preceding voyage, and which, when mixed with six or seven times its own quantity of water, was sufficiently acid for every purpose. This vinegar, when exposed to the temperature of 25° below zero, congealed only into a consistence like that of the thickest honey, but was never sufficiently hard to break any vessel which contained it. There can be no doubt, therefore, that on this account, as well as to save stowage, this kind of vinegar should exclusively be used in these regions; and, for similar reasons, of still greater importance, the lemon-juice should be concentrated.

On the 19th, the weather being fine and clear, the Aurora Borealis appeared frequently at different times of the day, generally from the south to the W.N.W. quarters, and not very vivid. From eight P.M. till midnight, however, it became more brilliant, and broke out in every part of the heavens, being generally most bright from S.S.W. to S.W., where it had the appearance of emerging from behind a dark cloud about five degrees above the horizon. We could not, however, help feeling some disappointment in not having yet witnessed this beautiful phenomenon in any degree of

perfection, which could be compared to that which occurs at Shetland, or in the Atlantic, about the same latitude as these islands. On the morning of the 20th, the Aurora Borealis again made its appearance in the N.W., which was more to the northward than usual; it here resembled two small bright clouds, the one nearly touching the other, and being about seven degrees above the horizon. These remained quite stationary for half an hour, and then broke up into streams shooting rapidly towards the zenith.

We had now reached the shortest day (Dec. 22d), and such was the occupation which we had hitherto contrived to find during the first half of our long and gloomy winter, that the quickness with which it had come upon us was a subject of general remark. So far, indeed, were we from wanting that occupation of which I had been apprehensive, especially among the men, that it accidentally came to my knowledge, about this period, that they complained of not having time to mend their clothes. This complaint I was as glad to hear, as desirous to rectify; and I therefore ordered that, in future, one afternoon in each week should be set aside for that particular purpose.

The circumstances of our situation being such as have never before occurred to the crews of any of his majesty's ships, it may not, perhaps, be considered wholly uninteresting to know in what manner our time was thus so fully occupied throughout the long and severe winter, which it was our lot to experience, and particularly during a three month's interval of nearly total darkness.

The officers and quarter-masters were divided into four watches, which were regularly kept, as at sea, while the remainder of the ship's company were allowed to enjoy their night's rest undisturbed. The hands were turned up at a quarter before six, and both decks were well rubbed with stones and warm sand before eight o'clock, at which time, as usual at sea, both officers and men went to breakfast. Three quarters of an hour being allowed after breakfast for the men to prepare themselves for muster, we then beat to divisions punctually at a quarter past nine, when every person on board attended on the quarter-deck, and a strict inspection of the men took place, as to their personal cleanliness, and the good condition, as well as sufficient warmth, of their clothing. The reports of the officers having been made to me, the people were then allowed to walk about, or, more usually, to run round the upper deck, while I went down to examine the state of that below, accompanied, as I before mentioned, by Lieutenant Beechey and Mr. Edwards. The state of this deck may be said, indeed, to have constituted the chief source of our anxiety, and to have occupied by far the greatest share of our attention at this period. Whenever any dampness appeared, or, what more frequently happened, any accumulation of ice taking place during the preceding night, the necessary means were immediately adopted for removing it;

in the former case usually by rubbing the wood with cloths, and then directing the warm air-pipe towards the place; and in the latter, by scraping off the ice so as to prevent its wetting the deck by any accidental increase of temperature. In this respect the bed-places were particularly troublesome; the inner partition, or that next the ship's side, being almost invariably covered with more or less dampness or ice, according to the temperature of the deck during the preceding night. This inconvenience might to a great degree have been avoided, by a sufficient quantity of fuel to keep up two good fires on the lower deck, throughout the twenty-four hours; but our stock of coals would by no means permit this, bearing in mind the possibility of our spending a second winter within the Arctic circle; and this comfort could only, therefore, be allowed on a few occasions, during the most severe part of the winter.

In the course of my examination of the lower deck, I had always an opportunity of seeing those few men who were on the sick list, and of receiving from Mr. Edwards a report of their respective cases; as also of consulting that gentleman as to the means of improving the warmth, ventilation, and general comfort of the inhabited parts of the ship. Having performed this duty, we returned to the upper deck, where I personally inspected the men; after which they were sent out to walk on shore when the weather would permit, till noon, when they returned on board to their dinner. When the day was too inclement for them to take this exercise, they were ordered to run round and round the deck, keeping step to a tune on the organ, or, not unfrequently, to a song of their own singing. Among the men were a few who did not at first quite like this systematic mode of taking exercise; but when they found that no plea, except that of illness, was admitted as an excuse, they not only willingly and cheerfully complied, but made it the occasion of much humour and frolic among themselves.

The officers, who dined at two o'clock, were also in the habit of occupying one or two hours in the middle of the day in rambling on shore, even in our darkest period, except when a fresh wind and a heavy snow-drift confined them within the housing of the ships. It may be well imagined that at this period there was but little to be met with in our walks on shore, which could either amuse or interest us. The necessity of not exceeding the limited distance of one or two miles, lest a snow-drift, which often rises very suddenly, should prevent our return, added considerably to the dull and tedious monotony which, day after day, presented itself. To the southward was the sea, covered with one unbroken surface of ice, uniform in its dazzling whiteness, except that, in some parts, a few hummocks were seen thrown up somewhat above the general level. Nor did the land offer much greater variety, being almost entirely covered with snow, except here and there a

brown patch of bare ground in some exposed situations, where the wind had not allowed the snow to remain. When viewed from the summit of the neighbouring hills, on one of those calm and clear days, which not unfrequently occurred during the winter, the scene was such as to induce contemplations, which had, perhaps, more of melancholy than of any other feeling. Not an object was to be seen on which the eye could long rest with pleasure, unless when directed to the spot where the ships lay, and where our little colony was planted. The smoke which there issued from the several fires, affording a certain indication of the presence of man, gave a partial cheerfulness to this part of the prospect; and the sound of voices which, during the cold weather, could be heard at a much greater distance than usual, served now and then to break the silence which reigned around us, a silence far different from that peaceable composure which characterises the landscape of a cultivated country; it was the death-like stillness of the most dreary desolation, and the total absence of animated existence. Such, indeed, was the want of objects to afford relief to the eye, or amusement to the mind, that a stone of more than usual size appearing above the snow, in the direction in which we were going, immediately became a mark, on which our eyes were unconsciously fixed, and towards which we mechanically advanced.

Dreary as such a scene must necessarily be, it could not, however, be said to be wholly wanting in interest, especially when associated in the mind with the peculiarity of our situation, the object which had brought us hither, and the hopes which the least sanguine among us sometimes entertained, of spending a part of our next winter in the more genial climate of the South-Sea islands. Perhaps, too, though none of us then ventured to confess it, our thoughts would sometimes involuntarily wander homewards, and institute a comparison between the rugged face of nature in this desolate region, and the livelier aspect of the happy land which we had left behind us.

We had frequent occasion, in our walks on shore, to remark the deception which takes place in estimating the distance and magnitude of objects, when viewed over an unvaried surface of snow. It was not uncommon for us to direct our steps towards what we took to be a large mass of stone, at the distance of half a mile from us, but which we were able to take up in our hands after one minute's walk. This was more particularly the case when ascending the brow of a hill, nor did we find that the deception became less, on account of the frequency with which we experienced its effects.

In the afternoon the men were usually occupied in drawing and knotting yarns, and in making points and gaskets; a never-failing resource, where mere occupation is required, and which it was necessary to perform entirely on the lower deck, the yarns becoming

so hard and brittle, when exposed on deck to the temperature of the atmosphere, as to be too stiff for working, and very easily broken. I may in this place remark, that our lower rigging became extremely slack during the severity of the winter, and gradually tightened again as the spring returned; effects the very reverse of those which we had anticipated, and which I can only account for by the extreme dryness of the atmosphere in the middle of winter, and the subsequent increase of moisture.

At half-past five in the evening, the decks were cleared up, and at six we again beat to divisions, when the same examination of the men and of their births and bed-places took place as in the morning; the people then went to their supper, and the officers to tea. After this time the men were permitted to amuse themselves as they pleased, and games of various kinds, as well as dancing and singing occasionally, went on upon the lower deck till nine o'clock, when they went to bed, and their lights were extinguished. In order to guard against accidents by fire, where so many fires and lights were necessarily in use, the quarter-masters visited the lower deck every half hour during the night, and made their report to the officers of the watches that all was, in this respect, safe below; and to secure a ready supply of water in case of fire, a hole was cut twice a day in the ice, close alongside each ship. It is scarcely necessary to add, that the evening occupations of the officers were of a more rational kind than those which engaged the attention of the men. Of these, reading and writing were the principal employments, to which were occasionally added a game at chess, or a tune on the flute or violin, till half-past ten, about which time we all retired to rest.

Such were the employments which usually occupied us for six days in the week, with such exceptions only as circumstances at the time suggested. On Sundays, divine service was invariably performed, and a sermon read on board both ships; the prayer appointed to be daily used at sea being altered, so as to adapt it to the service in which we were engaged, the success which had hitherto attended our efforts, and the peculiar circumstances under which we were at present placed. The attention paid by the men to the observance of their religious duties, was such as to reflect upon them the highest credit, and tended in no small degree to the preservation of that regularity and good conduct, for which, with very few exceptions, they were invariably distinguished.

Our theatrical entertainments took place regularly once a fortnight, and continued to prove a source of infinite amusement to the men. Our stock of plays was so scanty, consisting only of one or two volumes, which happened accidentally to be on board, that it was with difficulty we could find the means of varying the performances sufficiently; our authors, therefore, set to work, and produced, as a Christmas piece, a musical entertainment, expressly

adapted to our audience, and having such a reference to the service on which we were engaged, and the success we had so far experienced, as at once to afford a high degree of present recreation, and to stimulate, if possible, the sanguine hopes which were entertained by all on board, of the complete accomplishment of our enterprise. We were at one time apprehensive, that the severity of the weather would have prevented the continuance of this amusement, but the perseverance of the officers overcame every difficulty; and, perhaps for the first time since theatrical entertainments were invented, more than one or two plays were performed, on board the Hecla, with the thermometer below zero on the stage.

The *North Georgia Gazette*, which I have already mentioned, was a source of great amusement, not only to the contributors, but to those who, from diffidence of their own talents, or other reasons, could not be prevailed on to add their mite to the little stock of literary composition, which was weekly demanded; for those who declined to write were not unwilling to read, and more ready to criticise than those who wielded the pen; but it was that good-humoured sort of criticism that could not give offence. The subjects handled in this paper were, of course, various, but generally applicable to our own situation. Of its merits or defects it will not be necessary for me to say any thing here, as I find that the officers, who were chiefly concerned in carrying it on, have agreed to print it for the entertainment of their friends; the publisher being at liberty, after supplying each with a certain number of copies, to dispose of the rest.

The return of each successive day had been always very decidedly marked by a considerable twilight for some time about noon, that on the shortest day being sufficient to enable us to walk out very comfortably for nearly two hours. There was usually, in clear weather, a beautiful arch of bright red light, overspreading the southern horizon for an hour or two before and after noon, the light increasing, of course, in strength, as the sun approached the meridian. Short as the day now was, if indeed any part of the twenty-four hours could properly be called by that name, the reflection of light from the snow, aided occasionally by a bright moon, was at all times sufficient to prevent our experiencing, even under the most unfavourable circumstances, any thing like the gloomy night which occurs in more temperate climates. Especial care was taken, during the time the sun was below the horizon, to preserve the strictest regularity in the time of our meals, and in the various occupations which engaged our attention during the day; and this, together with the gradual and imperceptible manner in which the days had shortened, prevented this kind of life, so novel to us in reality, from appearing very inconvenient, or indeed like any thing out of the common way. It must be confessed, however, that we were not sorry to have arrived without any serious

suffering, at the shortest day; and we watched, with no ordinary degree of pleasure, the slow approach of the returning sun.

We had generally found the ice to crack near the shore, as I have already had occasion to observe, about the second day after the new and full moon, in consequence of the highest tides taking place at that time; but this was not the case in the present lunation; the separation of the ice from the beach not having taken place till the 22d, or five days and eight hours after the time of the new moon. This retardation of the tides may, perhaps, have arisen from the circumstance of the moon and sun having both had their greatest south declination about the usual time of the highest spring-tide. It may possibly have been affected also by fresh gales from the eastward, which blew on the 17th and 18th.

On Christmas day the weather was raw and cold, with a considerable snow-drift, though the wind was only moderate from the N.W.; but the snow which falls during the severe winter of this climate is composed of spiculæ so extremely minute, that it requires very little wind to raise and carry it along. To mark the day in the best manner which circumstances would permit, divine service was performed on board the ships; and I directed a small increase in the men's usual proportion of fresh meat as a Christmas-dinner, as well as an additional allowance of grog, to drink the health of their friends in England. The officers also met at a social and friendly dinner, and the day passed with much of the same kind of festivity by which it is usually distinguished at home; and, to the credit of the men be it spoken, without any of that disorder by which it is too often observed by seamen. A piece of English roast-beef, which formed part of the officer's dinner, had been on board since the preceding May, and preserved without salt during that period, merely by the antiseptic properties of a cold atmosphere.

Between eight and nine A.M. on the 26th, the wind freshened up very suddenly to a strong breeze from the northward and westward, and during that hour the thermometer rose from — 20° to — 6°. In the afternoon the wind became moderate and variable in its direction, and the thermometer had again fallen to — 17° at midnight, and continued to fall very gradually for the four following days, till on the 30th it had reached — 43°, being the lowest temperature we had yet experienced. During the whole of that interval the weather was nearly calm, and very fine and clear, and at half past seven A.M. on the 30th, the mercury in the barometer stood at 30.755 inches, being the highest we had yet seen it during the voyage. The colours of the southern sky near the horizon were observed to be remarkably prismatic at noon on that day.

A great many frost-bites occurred about this time, principally in the men's feet, even when they had been walking quickly on shore for exercise. On examining their boots, Mr. Edwards remarked,

that the stiffness of the thick leather, of which they were made, was such as to cramp the feet, and prevent the circulation from going on freely, and that this alone was sufficient to account for their feet having been frost-bitten. Being very desirous of avoiding these accidents, which, from the increased sluggishness with which the sores healed, were more and more likely to affect the general health of the patients by long confinement, I directed a pair of canvas boots, lined with blanketing, or some other woollen stuff, to be made for each man, using raw hide as soles; this completely answered the desired purpose, as scarcely any frost-bites in the feet afterwards occurred, except under circumstances of very severe exposure.

On the 31st of December, another striking instance occurred of the simultaneous rise in the wind and the thermometer. At two A.M. the latter stood at — 28°, but the wind freshening up to a strong breeze from the northward and eastward, and afterwards from the S.S.E. in the course of the day, the thermometer gradually rose at the same time, and stood at + 5° at midnight; thus closing the year with milder weather than we had enjoyed for the eight preceding weeks.

CHAPTER VI.

First Appearance of Scurvy—the Aurora Borealis and other Meteorological Phenomena—Visits of the Wolves—Re-appearance of the Sun—Extreme low Temperature—Destruction of the House on Shore by Fire—severe Frost-bites occasioned by this Accident.

THE mild weather with which the new year commenced was not of long duration; for, as the wind gradually moderated, the thermometer slowly fell once more to the average temperature of the atmosphere at this season. The quantity of snow which had fallen at this time was so small, that its general depth on shore did not exceed one or two inches, except where it had drifted into the ravines and hollows. At ten A.M., on the 1st, a halo, whose radius was 22° 30′, with three paraselenæ, which were very luminous, but not tinged with the prismatic colours, was seen about the moon, similar to that described on the 1st of December; and on the following day the same phenomenon occurred, with the addition of a vertical stripe of white light proceeding from the upper and lower limbs of the moon, and forming, with a part of the hori-

zontal circle seen before, the appearance of a cross. There was also at times an arc of another circle touching the halo, which sometimes reached almost to the zenith, and changed the intensity of its light very frequently, not unlike the Aurora Borealis.

I received this morning the first unpleasant report of the scurvy having made its appearance among us: Mr. Scallon, the gunner of the Hecla, had for some days past been complaining of pains in his legs, which Mr. Edwards at first took to be rheumatic, but which, together with the appearance of his gums, now left no doubt of the symptoms being scorbutic. It is so uncommon a thing for this disease to make its first appearance among the officers, that Mr. Edwards was naturally curious to inquire into the cause of it; and at length discovered that Mr. Scallon's bedding was in so damp a state, in consequence of the deposit of moisture in his bed-place, which I have before mentioned, as to leave no doubt that to this circumstance, as the immediate exciting cause, his illness might justly be attributed. The difficulty of preventing this deposit of moisture, and the consequent accumulation of ice, was much greater in the officers' bed-places than in those of the men, in conquence of the former being necessarily placed in close contact with the ship's sides, and forming an immediate communication, as it were, with the external atmosphere; whereas, in the latter, there was a vacant interval of eighteen inches in width interposed between them. To prevent, as much as possible, therefore, the injurious effects of this evil upon the health of the officers, I appointed certain days for the airing of their bedding by the fires, as well as for that of the ships' companies.

Every attention was paid to Mr. Scallon's case by the medical gentlemen, and all our anti-scorbutics were put in requisition for his recovery: these consisted principally of preserved vegetable soups, lemon-juice, and sugar, pickles, preserved currants and gooseberries, and spruce-beer. I began also about this time to raise a small quantity of mustard and cress in my cabin, in small shallow boxes filled with mould, and placed along the stove-pipe; by these means, even in the severity of the winter, we could generally ensure a crop at the end of the sixth or seventh day after sowing the seed, which, by keeping several boxes at work, would give to two or three scorbutic patients nearly an ounce of salad each daily, even though the necessary economy in our coals did not allow of the fire being kept in at night. Had this been allowable, and a proper apparatus at hand for the purpose, there is no doubt that it might have been raised much more rapidly; and those who are aware how perfect a specific a very small quantity of fresh vegetable substance is for the scurvy, will, perhaps, agree with me in thinking that such an apparatus would form a very valuable appendage to be applied occasionally to the cabin-stove. The mustard and cress thus raised were necessarily colourless, from the

privation of light, but, as far as we could judge, they possessed the same pungent aromatic taste as if grown under ordinary circumstances. So effectual were these remedies in Mr. Scallon's case, that, on the ninth evening from the attack, he was able to walk about on the lower deck for some time, and he assured me that he could then "run a race."

On the morning of the 4th, a cross appeared about the moon, consisting of vertical and horizontal rays of white light, similar to those described on the 2d, but unaccompanied by any halo. The thermometer was at — 44° in the early part of the day; but the wind freshening to a strong breeze from the northward, the temperature of the atmosphere was considerably raised, as usual, the thermometer having got up to — 36° at ten P.M. The temperature of the holds in the fore-part of the ship was now generally as low as 22°, that of the Hecla's lower deck being seldom above 40°, except during the ships companies meals.

The 7th of January was one of the most severe days to the feelings which we experienced during the winter, the wind being strong from the northward with a heavy drift, and the thermometer continuing from — 38° to — 40°. It is impossible to conceive any thing more inclement than such a day, when we could with difficulty pass and repass between the two ships, and were glad to keep every person closely confined on board.

At half past five P.M., on the 8th, the Aurora Borealis was seen forming a broken and irregular arch of white light, 10° or 12° high in the centre, extending from N.b.W., round by W. to S.S.E., with occasional coruscations proceeding from it towards the zenith. It continued thus for an hour, and re-appeared from eight o'clock till midnight in a similar manner, making, however, but a poor display of this beautiful phenomenon. Neither the magnetic needle, nor the gold-leaf of the electrometer were, in either instance, in the slightest degree affected by it.

At eight A.M. on the 11th, faint coruscations of the Aurora Borealis were observed to dart with inconceivable rapidity across the heavens from W.N.W. to E.S.E., from horizon to horizon, and passing about 25° to the south of the zenith. At noon to-day, the temperature of the atmosphere had got down to 49° below zero, being the greatest degree of cold which we had yet experienced; but the weather being quite calm, we walked on shore for an hour without inconvenience, the sensation of cold depending much more on the degree of wind at the time, than on the absolute temperature of the atmosphere, as indicated by the thermometer. In several of the accounts given of those countries in which an intense degree of natural cold is experienced, some effects are attributed to it which certainly did not come under our observation in the course of this winter. The first of these is the dreadful sensation said to be produced on the lungs, causing them to feel as if

torn asunder, when the air is inhaled at a very low temperature. No such sensation was ever experienced by us, though in going from the cabins into the open air, and *vice versâ*, we were constantly in the habit for some months of undergoing a change of from 80° to 100°, and, in several instances, 120° of temperature in less than one minute; and what is still more extraordinary, not a single inflammatory complaint, beyond a slight cold, which was cured by common care in a day or two, occurred during this particular period. The second is, the vapour with which the air of an inhabited room is charged, condensing into a shower of snow, immediately on the opening of a door or window, communicating with the external atmosphere. This goes much beyond any thing that we had an opportunity of observing. What happened with us was simply this: on the opening of the doors at the top and bottom of our hatchway ladders, the vapour was immediately condensed by the sudden admission of the cold air, into a visible form, exactly resembling a very thick smoke, which settled on all the pannels of the doors and bulk-heads, and immediately froze, by which means the latter were covered with a thick coating of ice, which it was necessary frequently to scrape off; but we never, to my knowledge, witnessed the conversion of the vapour into snow, during its fall.

On the evening of the 15th, the atmosphere being clear and serene, we were gratified by a sight of the only very brilliant and diversified display of Aurora Borealis, which occurred during the whole winter; and I believe it to be almost impossible for words to give an idea of the beauty and variety which this magnificent phenomenon displayed; I am at least certain, that no description of mine can convey an adequate conception of it, and I therefore gladly avail myself of the following account, by Captain Sabine, which was furnished by my request at the time for insertion in my Journal.

"Mr. Edwards, from whom we first heard that the Aurora was visible, described it as forming a complete arch, having its legs nearly north and south of each other, and passing a little to the eastward of the zenith. When I went upon the ice, the arch had broken up; towards the southern horizon was the ordinary Aurora, such as we had lately seen on clear nights, being a pale light, apparently issuing from behind an obscure cloud, at from six to twelve degrees of altitude, extending more or less towards the east or west on different nights, and at different times of the same night, having no determined centre or point of bisection, the greater part, and even at times the whole of the luminous appearance being sometimes to the east, and sometimes to the west of south, but rarely seen in the northern horizon, or beyond the east and west points of the heavens. This corresponds with the Aurora most commonly noticed in Britain, except that it is there as pecu-

liar to the northern as here to the southern horizon, occasionally shooting upwards in rays and gleams of light. It was not distinguished by any unusual brilliancy or extent on this occasion, the splendid part of the phenomenon being detached and apparently quite distinct.

"The luminous arch had broken into irregular masses, streaming with much rapidity in different directions, varying continually in shape and intensity, and extending themselves from north, by the east, to south. If the surface of the heavens be supposed to be divided by a plane passing through the meridian, the Aurora was confined, during the time I saw it, to the eastern side of the plane, and was usually most vivid and in larger masses in the E.S.E. than elsewhere. Mr. Parry and I noticed to each other, that where the Aurora was very brilliant, the stars seen through it were somewhat dimmed, though this remark is contrary to former experience.

"The distribution of light has been described as irregular and in constent change; the various masses, however, seemed to have a tendency to arrange themselves into two arches, one passing near the zenith, and a second about midway between the zenith and horizon, both having generally a north and south direction, but curving towards each other, so that their legs produced would complete an ellipse; these arches were as quickly dispersed as formed. At one time a part of the arch near the zenith was bent into convolutions, resembling those of a snake in motion, and undulating rapidly, an appearance which we had not before observed. The end towards the north was also bent like a shepherd's crook, which is not uncommon. It is difficult to compare the light produced by an Aurora with that of the moon, because the shadows are rendered faint and indistinct by reason of the general diffusion of the Aurora; but I should think the effect of the one now described, scarcely equal to that of the moon when a week old. The usual pale light of the Aurora strongly resembles that produced by the combustion of phosphorus: a very slight tinge of red was noticed on this occasion, when the Aurora was most vivid, but no other colours were visible. Soon after we returned on board, the splendid part wholly disappeared, leaving only the ordinary light near the horizon; in other respects, the night remained unchanged, but on the following day it blew a fresh gale from the north and N.N.W." This Aurora had the appearance of being very near us, and we listened attentively for the sound which is said sometimes to accompany brilliant displays of this phenomenon, but neither on this nor on any other occasion, could any be distinguished. On the following day, the Aurora was repeatedly seen for an hour or two together, assuming the shape of a long low arch, from 3° to 12° high in the centre, extending from south to N.W..

About this time it had been remarked, that a white setter dog belonging to Mr. Beverly had left the Griper for several nights past at the same time, and had regularly returned after some hours' absence. As the day-light increased, we had frequent opportunities of seeing him in company with a she-wolf, with whom he kept up an almost daily intercourse for several weeks, till at length he returned no more to the ships; having either lost his way by rambling to too great a distance, or what is more likely, perhaps, been destroyed by the male wolves. Some time after, a large dog of mine, which was also getting into the habit of occasionally remaining absent for some time, returned on board a good deal lacerated and covered with blood, having, no doubt, maintained a severe encounter with a male wolf, whom we traced to a considerable distance by the tracks on the snow. An old dog, of the Newfoundland breed, that we had on board the Hecla, was also in the habit of remaining out with the wolves for a day or two together; and we frequently watched them keeping company on the most friendly terms.

A wolf, which crossed the harbour close to the ships on the 25th, was observed to be almost entirely white, his body long and extremely lean, standing higher on his legs than any of the Esquimaux dogs, but otherwise much resembling them; his tail was long and bushy, and always hanging between his legs, and he kept his head very low in running. It is extraordinary that we could never succeed in killing or catching one of these animals, though we were, for months, almost constantly endeavouring to do so.

As the time was now near at hand when the sun was to reappear above our horizon, we began this day to look out for it from the mast-head, in order that some observations might be made, as to the amount of the atmospherical refraction, which might render it visible to us sooner than under ordinary circumstances. For this purpose, and at the same time to avoid the frost-bites which might have occurred from keeping any individual at the mast-head for too long a space, every man in the ship was sent up in succession, so as to occupy the time for ten minutes before and after noon; and this practice was continued till the sun appeared above the horizon from the deck, which it did not do till nine days after the commencement of it.

The loss of lemon-juice, of which I have before had occasion to speak, in consequence of the breaking of the bottles by frost, continued still to take place to so great a degree, that it now became absolutely necessary to adopt some measures for providing against similar contingencies in future, and to preserve the remainder. I, therefore, consulted Mr. Edwards as to the propriety of reducing the daily allowance of that essential article to three-quarters of the usual portion, being three-quarters of an ounce per man: this, he was of opinion, under all circumstances, it was ex-

pedient to do, in order to ensure a supply in those cases of a scorbutic nature which might hereafter occur; and this reduction was accordingly ordered in both ships.

At half-past ten P.M., a complete halo of pale light was observed round the moon, its radius being 22° 40′ and a similar phenomenon occurred on the following night, about the same time. These phenomena almost always began to make their appearance about the time of full moon.

The weather was remarkably clear and fine on the 28th, and the sky beautifully red to the southward; but we looked for the sun from the mast-head without success. Captain Sabine remarked at noon, that none of the fixed stars, even of the first magnitude, could be seen by the naked eye; Mars, however, was plainly visible, by which some judgment may be formed of the power of the sun's light at this period. Towards the end of January we began to open some of our ports, in order to admit sufficient light for the carpenters and armourer to work by, and these were employed in repairing the main-topsail-yard, that we might at least make some shew of commencing our re-equipment for sea.

On the 1st and 2d of February the weather was rather hazy, so that the sun could not have been seen had it been above the horizon, but the 3d was a beautifully clear and calm day. At eight A.M., a cross, consisting of the usual vertical and horizontal rays, was seen about the moon. At twenty minutes before meridian noon, the sun was seen from the Hecla's main-top, at the height of fifty-one feet above the sea, being the first time that any luminary had been visible to us since the 11th of November, a period of eighty-four days, being twelve days less than the time of its remaining actually beneath the horizon, independently of the effects of atmospherical refraction. On ascending the main-top, I found the sun to be plainly visible over the land to the south, but at sea there was a dusky sort of cloud hanging about the horizon, which prevented our seeing any thing like a defined limb, so as to measure or estimate its altitude correctly. The sun appeared, however, to be about half its diameter above the land, and the top of the land was 4′ 30″ above the horizon of the sea, by which the whole amount of refraction would appear to have been 5′ 0″; in which there is nothing very extraordinary in this latitude and low temperature; that of the atmosphere at this time was — 32°, and the mercury in the barometer stood at 29.90 inches, the smoke from the fires on board rising quite perpendicularly, which usually is the case under similar circumstances. A vertical column of pale red light extended from the upper part of the sun's disc to about 3° of altitude; its intensity was observed to be extremely varying, being at times very bright, at others scarcely perceptible. In these changes, which were exceedingly rapid, it was not unlike the Aurora Borealis, the light always appearing to shoot upwards,

as is most usual in that phenomenon. The breadth of this column, which was visible for about three-quarters of an hour before and after noon, was equal to that of the sun's diameter, and it was much the brightest next the sun. A similar column of light had also been observed by Captain Sabine, at ten A.M., immediately over the spot where the sun was.

On several occasions, in the course of the winter, there was an appearance in the southern horizon very much resembling land at a great distance. This appearance was to-day unusually well defined, and seemed to terminate in a very abrupt and decided manner, on a S. b. E. bearing from Winter Harbour.

At six P.M. the Aurora Borealis appeared very faintly in a horizontal line of white light, extending from S. to S.S.W., and about 5° above the horizon. From nine till eleven, it was again seen quite stationary, and very faint, from S.S.W. to W.N.W., at three or four degrees of altitude.

Captain Sabine had, for some time past, kept one of the needles used for determining the intensity of the magnetic force, suspended by a silk thread in the observatory, for the purpose of remarking more satisfactorily than it could be done on board the ships, whether any effect was produced upon it by the Aurora Borealis. It might be supposed that, in these regions, where the directive power of the needle had almost entirely ceased, it would be more easily disturbed by any adventitious cause, than in those parts of the globe where the directive energy was greater; but we never could perceive the slightest derangement to be produced in it by the Aurora.

On the 6th we had another sight of the sun, which was so distorted by refraction, that nothing like a circular disc could at any time be distinguished. At noon a thermometer, plunged into a bank of snow to the depth of two feet, indicated the temperature of —42°, that of the atmosphere being —38°. The temperature of the sea-water was 29° in the fire-hole alongside the Hecla, and that of the ice-hole varied from 25° to 22°, the afternoon being progressively the warmest. There was to-day an unusual kind of mist in the lower part of the atmosphere, which was at times so thick, that the ships could scarcely be seen at the distance of two miles. It was a matter of frequent remark with us, that, even on the clearest winter days of this climate, there was usually a considerable deposit of very light snow, which was scarcely perceptible, except when interposed between the eye and any dark object, or by the quantity of it which settled on any instrument left to stand in the open air; nor do I think that the heavenly bodies were ever so clearly visible as they are on a winter's night in England.

At noon on the 7th, we had the first clear view of the sun which we had yet enjoyed since its re-appearance above our horizon, and an indistinct parhelion, or mock-sun, slightly prismatic, was seen on the eastern side of it, at the distance of 22°.

There was now sufficient day-light, from eight o'clock till four, to enable us to perform, with great facility, any work outside the ships. I was not sorry, therefore, to commence upon some of the occupations more immediately connected with the equipment of the ships for sea, than those to which we had hitherto been obliged to have recourse as mere employment. We, therefore, began this day to collect stones for ballast, of which it was calculated that the Hecla would require, in the spring, nearly seventy tons, besides twenty tons of additional water, to make up for the loss of weight by the expenditure of provisions and stores. These stones were brought down on sledges about half a mile to the beach, where they were broken into a convenient size for stowage, and then weighed in scales, erected on the beach for the purpose; thus affording to the men a considerable quantity of bodily exercise, whenever the weather would permit them to be so employed.

As we were now, however, approaching the coldest part of the season, it became more essential than ever to use the utmost caution in allowing the men to remain for any length of time in the open air, on account of the injury to their general health, which was likely to result from the inactivity requisite to the cure of some of the most trifling frost-bites. Mr. Edwards has favoured me with the following brief account of such cases of this nature as occurred on board the Hecla:—"The majority of the men who came into the sick-list, in consequence of frost-injuries during the severity of the winter, suffered mostly in their face, and especially in their great toes; and, although none of them were so unfortunate as to lose a toe, yet few cures were effected without the loss of the nail and cuticle, in which the vital power was invariably destroyed. The exfoliation of these dead parts was always slow, and often attended with small ulcerations at the extremity of the toe. The comparatively languid action which is always going on in the feet, owing to their dependent situation, and their remoteness from the centre of circulation, is much increased by the rigour of so severe a climate, and also by the state of inactivity in which it is necessary to keep the patient; so that these trifling sores were found to heal with extreme difficulty. Occasional negligence and irregularities in the patient also served at times to protract the cure. It may further be observed, that the ulcerations alluded to seldom took place, even in some of the more severe cases, when circumstances would allow of timely attention being paid to them."

On the 8th, at noon, and for half an hour after, an appearance presented itself in the heavens, which we had not before observed. A thin fleecy cloud of a pale-red colour, and shaped like part of an arch, commenced pretty strongly from the top of the land in the N.W., and ran more and more faintly to N.b.W., beyond which it could no longer be traced: It was here fifteen degrees above the northern horizon. On looking for a continuation of it in the oppo-

site quarter of the heavens, we perceived a larger portion of another and fainter arch, of pale red, or orange, commencing at the horizon in the E.b.N., and extending to 60° of altitude in the N.N.E., so as evidently not to form a part of the western arch. Captain Sabine afterwards observed the whole phenomenon to alter its position, the leg of the eastern arch shifting considerably more to the southward. In the evening the Aurora Borealis was seen, forming a confused and irregular arch of white light, continually varying in brightness, about 8° high in the centre, and extending from S.b.E., round by the west, to N.N.W. From the upper part of this arch, coruscations occasionally shot upwards, and a few streamers now and then burst forth also from the horizon in the S.S.E.; these latter went nearly up to the zenith, while the rest were more faint, and did not reach so high. I am confident, that Aldebaran and the Pleiades were very sensibly dimmed by the most vivid of the coruscations, which appeared, in this respect, not to differ from any thin vapour or cloud floating in the atmosphere. The gold leaf of the electrometer, as well as the magnetic needle suspended in the observatory, was carefully attended to, but neither of them suffered any sensible disturbance.

Early on the following morning, the wind increased from the N.N.W., and continued to blow a strong breeze from that quarter, with a heavy snow-drift, till towards noon, on the 10th. At a quarter past six P.M., on that day, the Aurora began to appear in the south and S.W., in detached, and not very brilliant pencils of rays darting upwards from near the horizon. Soon after, an arch of the usual broken and irregular kind appeared in the western quarter of the heavens, extending from N.W. to south, and being from 5° to 8° high in the centre. From the upper part of the arch proceeded a few faint coruscations reaching to no great height. At a quarter before seven, a second and better-defined arch crossed over from S.E. to N.W.b.N., passing on the northern side of the zenith, from which it was distant from 10° to 15° in the centre. This arch was very narrow, and seemed to be formed of two parts, each shooting with great rapidity from those parts where the legs stood, and joining in the centre. In a short time this second arch entirely disappeared, and the first became less brilliant. The phenomenon was then for some minutes confined to some bright pencils of rays in the south and S.S.E., which were generally parallel to each other, but sometimes also diverged at an angle of about 15°. At a quarter past seven, two long and narrow streams of light crossed over at 35° to 40° of altitude, on the western side of the zenith, from the N.W.b.N., and south points of the horizon; their upper ends did not quite meet in the centre, so as to complete an arch, but inclined to the shape of shepherds' crooks, as described on the 15th of January, and often remarked by former observers; but they were neither so brilliant nor so well-

defined as when we saw them before. About a quarter before eight, as we were returning on board from the observatory, the low arch to the westward first described, and which had never altogether disappeared, increased considerably in brilliancy. It was still, however, so irregular as to appear in detached roundish clouds or blotches, from which the pencils, which shot upwards, appeared immediately to proceed. These pencils, which were infinitely varied both in length and breadth, were observed to have also a slow, though very sensible lateral motion from north to south, and *vice versâ*; and we remarked on one occasion that, when two of them met, and had the appearance of overlapping, they produced, for about fifteen seconds, the most intense degree of light we had yet seen from the Aurora. The pencils appeared generally to travel bodily in one direction, but sometimes to widen out in both at the same time. We were all decidedly of opinion, that the fixed stars were very perceptibly dimmed by this phenomenon, which gradually disappeared by nine o'clock.

It was a source of much satisfaction to find, at noon on the 11th, that the sun, even with one degree of meridian altitude, had some power to affect the mercury in the thermometer, which rose from — 40° to — 35° when exposed to its rays; and, as the sun gradually declined, it fell again to — 40° in an hour or two.

The distance at which sounds were heard in the open air, during the continuance of intense cold, was so great as constantly to afford matter of surprise to us, notwithstanding the frequency with which we had occasion to remark it. We have, for instance, often heard people distinctly conversing, in a common tone of voice, at the distance of a mile; and to day I heard a man singing to himself as he walked along the beach at even a greater distance than this. Another circumstance also occurred to-day, which may perhaps be considered worthy of notice. Lieutenant Beechey, and Messrs. Beverly and Fisher, in the course of a walk which led them to a part of the harbour, about two miles directly to leeward of the ships, were surprised by suddenly perceiving a smell of smoke, so strong as even to impede their breathing, till, by walking on a little farther, they got rid of it. This circumstance shews to what a distance the smoke from the ships was carried horizontally, owing to the difficulty with which it rises at a very low temperature of the atmosphere. The appearance which had often been taken for the loom of distant and much refracted land in the south and S.b.E., was again seen to-day, having the same abrupt termination at the latter bearing as before. At half-past eight P.M., the Aurora Borealis made its appearance for a short time, in an arch, very irregular, but at times very bright, from S.W. to S.S.E., at 4° or 5° above the horizon in the centre.

It may perhaps be attributed to the long absence of the sun which we had lately experienced, and which may have disqualified

us from forming a correct judgment, that we considered the orange and lake tints with which the sky was painted about this period, for two hours before and after noon, to be more rich and beautiful than any thing of the kind we had ever before seen. The few fleecy clouds which at any time make their appearance in the heavens during the winter months of this climate, had on the 12th, as before observed on the 8th, a tendency to form arches both in the northern and southern quarters, extending from east to west, at 10° of altitude in the north, and 5° or 6° in the south. A thermometer placed in the sun at noon rose quickly from — 42° to — 30½° on board, the temperature of the atmosphere at the house being — 45°, and the weather calm and clear.

At three A.M., on the 13th, on a light breeze springing up from the southward, the thermometer was observed to rise immediately from — 40° to — 37°. For a short time before and after noon, a parhelion was seen at the angular distance of 22° 30′ on each side of the sun, at the same altitude with the latter; these parhelia were of a confused shape, but strongly prismatic. There was at the same time, also, a column of bright yellow light proceeding from the sun to the horizon, of the same diameter as that object.

I have before remarked, that, in consequence of a comparatively warm atmosphere which was always floating around the ships, the thermometer on board, by which the temperature was noted every two hours, usually stood from 2° to 5° higher than that fixed on shore. The temperature of the atmosphere having now fallen below the usual standard, it became interesting to watch this difference more minutely, and at six A.M. on the 14th, the thermometer at the house was at — 52°, that on board being at — 48°, at which time the smoke from the funnels rose very freely, with the mercury in the barometer standing at 29.58 inches. This additional decrease in the temperature of the atmosphere caused a repetition of that cracking of the ship's timbers which had before occurred, but which had ceased for some time past. At noon the thermometer in the shade rose one degree, and at two P.M. fell again to — 52°.

Two of the Hecla's marines having been guilty of drunkenness the preceding night, an offence which, under any circumstances, it was my duty to prevent, but which, if permitted to pass unnoticed, might, in our present situation, have been attended with the most serious consequences to our health as well as our discipline, I was under the necessity of punishing them this morning with thirty-six lashes each; being the first occasion on which I had considered it necessary to inflict corporal punishment during thirteen months that the Hecla had been in commission, a fact which I have much satisfaction in recording, as extremely creditable to her crew.

From four P.M. on the 14th, till half-past seven on the following morning, being an interval of fifteen hours and a half, during which time the weather was clear and nearly calm, a thermometer fixed on a pole, between the ships and the shore, never rose above —54°, and was once during that interval, namely, at six in the morning, as low as —55°. This low temperature might, perhaps, have continued much longer, but for a light breeze which sprung up from the northward, immediately on which the thermometer rose to —49°, and continued still to rise during the day, till at midnight it had reached —34°. During the lowest temperature above mentioned, which was the most intense degree of cold, marked by the spirit thermometer, during our stay in Winter Harbour, not the slightest inconvenience was suffered from exposure to the open air, by a person well clothed, as long as the weather was perfectly calm; but in walking against a very light air of wind, a smarting sensation was experienced all over the face, accompanied by a pain in the middle of the forehead, which soon became rather severe. We amused ourselves in freezing some mercury during the continuance of this cold weather, and by beating it out on an anvil previously reduced to the temperature of the atmosphere; it did not appear to be very malleable when in this state, usually breaking after two or three blows from the hammer.

The increased length of the day, and the cheering presence of the sun for several hours above the horizon, induced me, notwithstanding the severity of the weather, to open the dead-lights of my stern-windows, in order to admit the daylight, of which, in our occupations below, we had entirely been deprived for more than four months. I had soon, however, occasion to find that this change was rather premature, and that I had not rightly calculated on the length of the winter in Melville Island. The Hecla was fitted with double windows in her stern, the interval between the two sashes being about two feet; and within these some curtains of baize had been nailed close, in the early part of the winter. On endeavouring now to remove the curtains, they were found to be so strongly cemented to the windows by the frozen vapour collected between them, that it was necessary to cut them off, in order to open the windows; and from the space between the double sashes we removed more than twelve large buckets full of ice, or frozen vapour, which had accumulated in the same manner.

About noon, on the 16th, a parhelion faintly prismatic, appeared on each side of the sun, continuing only for half an hour. Notwithstanding the low temperature of the external atmosphere, the officers contrived to act, as usual, the play announced for this evening; but it must be confessed that it was almost too cold for either the actors or the audience to enjoy it, especially for those of the former, who undertook to appear in female dresses. We were fortunate, however, in having the weather moderate as to wind,

during our performance; for, on its freshening up soon after to a strong gale from the N.W., which, together with a heavy snow-drift, continued the whole of the following day, the thermometer did not rise higher than — 36°; a change that made the Hecla colder in every part below than she had ever been before. The temperature of the lower deck now fell to + 34° for the greater part of the day, that of the coal-hole to + 15°, that of the spirit room to + 23°, and of my cabin as low as + 7° during the night, by which the chronometers, Nos. 25 and 369, of Arnold, were stopped. Much as I regretted this circumstance, it was impossible to prevent it without such an increase in the quantity of fuel as our resources, when calculating upon the chances of spending another winter in these regions, would by no means admit. Captain Sabine and myself, therefore, agreed, that it was better to let these watches remain down, during the continuance of the severe cold, which was accordingly done.

The intense cold now experienced on board the Hecla, seems to have arisen principally from my having prematurely uncovered the stern windows, which I had been induced to do, not less from the impatience which I felt to enjoy the cheering rays of the sun for eight hours of the day, than on account of the saving of candles, the expenditure of which had hitherto been much greater than we could well afford. In the constant hope that each succeeding day would produce some amendment in the weather, we endeavoured contentedly to put up with the cold, which, however, continued to be so intense in the cabin for several weeks after this, that it was impossible to sit there without being warmly wrapped up; and it was not uncommon for us, at this period, to reverse the usual order of things, by throwing off our great coats when we went on deck to warm ourselves by exercise (the only mode we had of doing so), and immediately resuming them on coming below. On many of these occasions I have seen a thermometer placed at our feet, standing the whole day under + 19°, and sometimes lower, while another, suspended in the upper part of the cabin would, at the same time, indicate 32° or 34°, but seldom higher than this. We had, about this time, two cases of lumbago and one of diarrhœa added to the sick list, which Mr. Edwards considered to have been brought on by the coldness of the decks below; in one of these cases, some scorbutic symptoms subsequently appeared, which yielded without much difficulty to the usual remedies. Mr. Scallon had, before this time, completely recovered. The bed-places continuing very troublesome, from the accumulation of ice in them, several of the men were ordered to sleep in hammocks, which are much more warm and comfortable; but they had been so long accustomed to the bed-places, that there was, in this respect, a good deal of prejudice to overcome among them.

At half-past ten P.M., on the 19th, the Aurora Borealis was

seen, as described by Lieutenant Beechy, "in bright coruscations, shooting principally from the S.b.W. quarter across the zenith to N.N.E., and partially in every part of the heavens. The light, when most vivid, was of a pale yellow, at other times white, excepting to the southward, in which direction a dull red tinge was now and then perceptible. The coruscations had a tremulous waving motion, and most of them were crooked towards the E.N.E. The fresh gale which blew at the time from the N.N.E., appeared to have no effect on the Aurora, which, as before observed, streamed directly to windward, and this with great velocity. The brighter part of this meteor dimmed whatever stars it passed over, even those of the first magnitude; and those of the second and third magnitude, so much as to render them scarcely visible. The wind blew too strong for the electrometer to be used, but Kater's compass was not in the slightest degree affected. The whole of the phenomenon disappeared in about three quarters of an hour."

On the 22d, the weather was fine and clear, and though the thermometer continued from — 34° to —36° in the shade, and only rose to — 23½° in the sun at two P.M., the walking was unusually pleasant to our feelings. With our present temperature, the breath of a person, at a little distance, looked exactly like the smoke of a musket just fired, and that of a party of men employed upon the ice to-day resembled a thick white cloud.

The weather was still fine and clear overhead on the 24th, but there being a moderate breeze from the northward which raised a little snow-drift, with the thermometer from — 43° to — 44° during the day, it was very severe in the open air. At a quarter past ten, while the men were running round the decks for exercise, and were on that account fortunately well clothed, the house on shore was discovered to be on fire. All the officers, and men of both ships, instantly ran up to extinguish it; and having, by great exertion, pulled off the roof with ropes, and knocked down a part of the sides, so as to allow snow to be thrown upon the flames, we succeeded in getting it under, after three-quarters of an hour, and fortunately before the fire had reached that end of the house where the two clocks, together with the transit, and other valuable instruments, were standing in their cases. Having removed these, and covered the ruins with snow, to prevent any remains of fire from breaking out again, we returned on board till more temperate weather should enable us to dig out the rest of the things, among which nothing of any material consequence was subsequently found to have suffered injury; and, having mustered the ships' companies to see that they had put on dry clothes before going to dinner, they were employed during the rest of the day in drying those which had been wet. The appearance which our faces presented at the fire was a curious one, almost every nose

and cheek having become quite white with frost-bites in five minutes after being exposed to the weather; so that it was deemed necessary for the medical gentlemen, together with some others appointed to assist them, to go constantly round, while the men were working at the fire, and to rub with snow the parts affected, in order to restore animation. Notwithstanding this precaution, which, however, saved many frost-bites, we had an addition of no less than sixteen men to the sick-lists of both ships in consequence of this accident. Among these there were four or five cases which kept the patients confined for several weeks; but John Smith, of the artillery, who was Captain Sabine's servant, and who, together with sergeant Martin, happened to be in the house at the time the fire broke out, was unfortunate enough to suffer much more severely. In their anxiety to save the dipping-needle, which was standing close to the stove, and of which they knew the value, they immediately ran out with it; and Smith, not having time to put on his gloves, had his fingers in half an hour so benumbed, and the animation so completely suspended, that, on his being taken on board by Mr. Edwards, and having his hands plunged into a basin of cold water, the surface of the water was immediately frozen by the intense cold thus suddenly communicated to it; and, notwithstanding the most humane and unremitting attention paid to them by the medical gentlemen, it was found necessary, some time after, to resort to the amputation of a part of four fingers on one hand, and three on the other.

CHAPTER VII.

More temperate Weather—House Re-built—Quantity of Ice collected on the Hecla's lower deck—Meteorological Phenomena—Conclusion of Theatrical Entertainments—Increased Sickness on board the Griper—Clothes first dried in the open Air—Remarkable Halos and Parhelia—Snow-blindness—Cutting the Ice round the Ships, and other Occurrences to the close of May.

BEFORE sun-rise, on the morning of the 1st of March, Lieutenant Beechey remarked so much bright red light near the south-eastern horizon, that he constantly thought the sun was rising, nearly half an hour before it actually appeared; there was a column of light above the sun, similar to those which we had before seen. The day being clear and moderate, a party of men was employed

in digging out the things which were buried in the ruins; the clocks were removed on board for examination, and preparations were made to rebuild the house for their reception. Some of our gentlemen who walked to the south-west during the day, observed the snow, in certain parts which were exposed to the sun, to be glazed, so as to be very slippery, as if a partial thaw had taken place. It is, perhaps, requisite to have experienced the anxiety with which we were now beginning to look for some favourable change in the temperature of the atmosphere, to conceive the eagerness with which this information was received, and the importance attached to it in our minds, as the first faint indication of the dissolution of the winter's snow. In the evening the wind freshened from the southward, and before midnight had increased to a strong gale, which is very unusual from that quarter.

The thermometer rose very gradually with the wind, which blew strong for several hours during the night, but entirely died away between eight and nine A.M. on the 2d. At nine o'clock a parhelion appeared on each side of the sun, at the angular distance of 21° 38', that on the eastern side being bright and prismatic, the other indistinct at first, but becoming as clear as the other as the sun rose higher. They were not seen after ten o'clock until half past one P.M., when they re-appeared for a short time, at the distance of 22°. About two P.M. a very thick kind of haze, or fog, came on, which obscured objects at a mile's distance, and at times much nearer. By us, who anxiously caught at any thing which could be construed into a favorable indication, this fog was hailed with pleasure, as a symptom of returning moisture in the atmosphere.

On the 4th there were more clouds in the atmosphere, and they were harder and better defined about the edges, than they had been before during the winter: a thermometer in the shade seemed now also to be more affected by the general influence of the sun's rays upon the atmosphere, rising from — 30° to — 24° at noon. At half-past eleven A.M, a halo appeared round the sun, at the distance of 22°.17 from it, consisting of a circle nearly complete, and strongly prismatic. Three parhelia, or mock suns, were distinctly seen upon this circle; the first being directly over the sun, and one on each side of it, at its own altitude. The prismatic tints were much more brilliant in the parhelia than in any other part of the circle; but red, yellow, and blue, were the only colours which could be traced, the first of these being invariably next the sun in all the phenomena of this kind which came under our observation. From the sun itself several rays of white light, contiguous but not very brilliant, extended in various directions beyond the halo, and these rays were more bright after they had passed through the circle, than they were in the part within it: this phenomenon continued for nearly two hours. The Aurora Borealis was seen

faintly near the S.S.W. horizon, for three or four hours before midnight.

The 5th of March was the most mild and pleasant day we had experienced for several weeks, a light breeze springing up from the southward and eastward, having raised the thermometer gradually from — 26° at four A.M., to — 15° at noon; and, after divine service had been performed, almost all the officers and men in both ships were glad to take advantage of it, by enjoying a long walk upon the neighbouring hills. The weather had been hazy, with light snow and some clouds in the morning; but the latter gradually dispersed after noon, affording us the first day to which we could attach the idea of spring. As soon as the clouds had allowed the sun to come out, a parhelion appeared on each side of it at the same altitude; that to the westward, which was seen on a thick dark cloud, being bright and prismatic; the other, appearing on the blue sky, being scarcely preceptible. A ray of bright yellow light extended horizontally about 3° or 4° on each side of the parhelia, and also a stripe of prismatic colours from each of them to the horizon. Both these were probably parts of the circles which are frequently seen to accompany these phenomena, and at the intersection of which the parhelia usually appear.

On the 6th, at eight A.M., the thermometer had got up to zero, being the first time we had registered so high a temperature since the 17th of the preceding December. The wind veered gradually from S.S.E., round by west, to north, and at night was remarkably variable and squally, frequently changing, almost instantly, from north to west, and *vice versâ*; sometimes being so light as not to extinguish a naked candle at the gangway, and at others blowing a strong breeze. Squalls of this kind we had not observed before, nor did they occur on any other occasion; we could not perceive any alteration in the thermometer while they lasted.

We continued to enjoy the same temperate and enlivening weather on the 7th, and now began to flatter ourselves in earnest, that the season had taken that favourable change for which we had so long been looking with extreme anxiety and impatience. This hope was much strengthened by a circumstance which occurred today, and which, trifling as it would have appeared in any other situation than ours, was to us a matter of no small interest and satisfaction. This was no other than the thawing of a small quantity of snow in a favourable situation upon the black paint work of the ship's stern, which exactly faced the south, being the first time that such an event had occurred for more than five months. The thermometer at this time stood at + 35° in the sun, but no appearance of thawing took place, except in the situation described, and even there, upon the *yellow* paint the snow remained as hard as before. We could perceive, from the top of the north-eastern hill of the harbour, from which we had the most extensive view to the south

and east, that a line of hummocks had been thrown up to a considerable height upon the ice, at the distance of six or seven miles from the land, and in a direction nearly parallel to it. It was here probably that the junction of the old and "young" floes had taken place in the autumn, the space between the line of hummocks and the land being occupied by the ice which this winter had produced, and by the breaking up or dissolution of which we could alone hope to proceed on our voyage.

Advantage was taken of the present mild and pleasant weather, to rebuild the house on shore, which was completed in a few days, when the clocks were replaced in it, in readiness for Captain Sabine to begin his experiments on the pendulum, whenever the season would permit. The observations which we had been enabled to make during the winter were principally confined to lunar distances, and to the altitudes of stars for reducing the apparent time. It was our earnest desire to have obtained a series of observations on the zenith distances of certain stars, in order to determine the amount of atmospherical refraction in these latitudes during the winter season. The only instrument in our possession, however, which was adapted to this purpose was the repeating circle, of which we were unfortunately precluded the use by a number of circumstances not previously anticipated, and which indeed could not easily have occurred to the minds of those accustomed only to make observations in more temperate climates. A particular account of these difficulties being given in another place by Captain Sabine whose unremitted attention was for some time devoted to the means of overcoming them, I shall only here mention generally, that the principal of them arose from the unequal contraction of the brass and iron, and from the freezing of the oil, by which the instrument was so set fast as to make it impossible to turn it in azimuth; also, from the extreme contraction of the spirits, leaving no bubble by which the level could be read. With respect to the experiments on the pendulum, it was on every account considered advisable to wait for the return of spring, rather than to attempt observations requiring such minuteness, and so uniform a temperature, at a time when the very touch of instruments was painful, and when no observation could be made in the open air, without carefully holding the breath.

The severe weather which, until the last two or three days, we had experienced for a length of time, had been the means of keeping in a solid state all the vapour which had accumulated and frozen upon the ships' sides on the lower deck. As long as it continued in this state, it did not prove a source of annoyance, especially as it had no communication with the bed-places. On the contrary, indeed, I had imagined, whether justly or otherwise I know not, that a lining of this kind rather did good than harm, by preventing the escape of a certain portion of the warmth through

the ships' sides. The late mildness of the weather, however, having caused a thaw to take place below, it now became necessary immediately to scrape off the coating of ice; and it will, perhaps, be scarcely credited that we this day removed above one hundred buckets full, each containing from five to six gallons, being the accumulation which had taken place in an interval of less than four weeks. It may be observed, that this vapour must principally have been produced from the men's breath, and from the steam of their victuals during meals, that from the coppers being effectually carried on deck by the screen which I have before mentioned.

James Richardson, a seaman of the Hecla, one of the men who had been attacked by lumbago a short time before, now evinced some symptoms of scurvy, and was, therefore, immediately put on the anti-scorbutic diet. About this time, also, John Ludlow, boatswain's-mate of the Griper, and William Wright, seaman of the Hecla, were attacked in a similar manner; and these two cases subsequently proved the worst of this nature on board the ships. Immediately on the appearance of any complaint among the men, and especially when the symptoms were in the slightest degree scorbutic, the patients were removed to the sick-bay, where the bedplaces were larger and more convenient, and where a separate stove was fixed when necessary, so as to make it a warm and comfortable place, apart from the rest of the ship's company.

From ten till eleven A.M. this day, a halo and three parhelia were seen about the sun, in every respect similar to those described on the 4th. About one P.M., there being a fresh breeze from the northward, with some snow-drift, the parhelia re-appeared, being much more bright and prismatic than in the forenoon, and accompanied by the usual halo, which was nearly complete, and whose radius measured 22½°. The parhelia on each side of the sun, were at times so bright as to be painful to the eye in looking steadfastly at them. When they were brightest, the light was nearly white, and this generally occurred when the wind was most moderate, and when there was consequently less snow-drift. When, on the other, hand, the wind and drift increased, they became of a deeper tint, but the red and a pale yellow were the only distinguishable colours, and former being as usual, next the sun. These parhelia were much better resemblances of the sun than any we had seen before, being smaller, more compact and circular, and better defined about their edges than usual, approaching, in every respect, nearer to that appearance of the sun's disk, which has obtained for them the name of mock-suns. The parhelion over the sun was never very bright, and the circle of the halo was but faintly tinged with the prismatic colours. Part of a horizontal circle of pale white light passed through the sun's disk, and across the two lower parhelia, being much more bright without than within them. By looking at the sun through a coloured glass, a column

of light was seen under it, as often observed before. The brightness of the whole phenomenon varied every instant, on account of the snow-drift.

When this phenomenon had continued about an hour and a half, we perceived a segment of another circle above the first, and inverted with regard to it, its centre being somewhere near the zenith. The distance from the sun to this segment was about 54°, as nearly as the indistinctness of the latter would allow of its being measured. The whole disappeared in two hours and a half from its commencement, during which time, the thermometer was from — 16° to — 20°, and the weather fine and clear over head. From nine P.M., till midnight, the Aurora Borealis appeared faintly in the horizon to the south, occasionally streaming towards the zenith in corusections of pale white light.

On the 9th, it blew a hard gale from the northward and westward, raising a snow-drift which made the day almost as inclement as in the midst of winter. The wind very suddenly ceased in the evening, and while the atmosphere near the ships was so serene and undisturbed that the smoke rose quite perpendicularly, we saw the snow-drift on the hills at one or two miles' distance whirled up into the air, in columns several hundred feet high, and carried along by the wind, sometimes to the north, and at others in the opposite direction. The snow, thus raised, at times resembled water-spouts, but more frequently appeared like smoke issuing from the tops of the hills, and, as such, was at first represented to me.

On the 12th, Lieutenant Liddon reported another of his seamen to be affected with scurvy, making two in each ship labouring, more or less, under this disease; Mr. Scallon also complained again a little, of feeling, according to his own account, "as if tired with walking;" by attention, however, to the warmth and dryness of his clothing, he gradually recovered his former strength as the season advanced.

It blew a strong breeze from the N.b.W., with a heavy snow-drift, on the 12th, which continued, with little intermission, till near noon on the 14th; affording us a convincing proof that the hopes with which we had flattered ourselves of the speedy return of spring were not yet to be accomplished. During this time the thermometer had once more fallen as low as — 26°, a change which, after the late mild weather, we felt much in the same manner as we should have done any of those alterations which occur in a more temperate climate, at a higher part of the scale. I have before had occasion to observe that this remark is equally applicable to all the changes we experienced in the course of the winter, either from cold to warm, or the contrary.

At one P.M., on the 14th, the weather being nearly calm, and the thermometer at + 33° in the sun, there was a second partial

melting of the snow upon the ships' stern. Immediately on the springing up of a light breeze, however, the thermometer in the sun fell to + 11°, and at half-past two was at + 6°, the temperature of the air in the shade remaining steadily from — 16° to — 17°. At five P.M., a parhelion was observed on each side of the sun, at its own altitude, and distant from it 22° 10′, with a part of the usual horizontal circle, extending 2° or 3° from the outer edge of each parhelion.

On the 16th, there being little wind, the weather was again pleasant and comfortable, though the thermometer remained very low. While it continued nearly calm, we observed the following differences in the temperature of the air in the shade and in the sun; the latter, were, however, noted by a thermometer placed under the ship's stern, which situation was a warm one, for the reasons before assigned.

A.M. 9	SHADE — 24°	SUN	+ 24°
10	— 23°		+ 27°
11	— 22°		+ 28½°
Noon	— 21°		+ 29°
P.M. 3	— 13°		+ 19°.

This evening, the officers performed the farces of the *Citizen* and the *Mayor of Garratt*, being the last of our theatrical amusements for this winter, the season having now arrived when there would no longer be a want of occupation for the men, and when it became necessary also to remove a part of the roofing to admit light to the officers' cabins. Our poets were again set to work on this occasion, and an appropriate address was this evening spoken on the closing of the North Georgia Theatre, than which we may, without vanity, be permitted to say, none had ever done more real service to the community for whose benefit it was intended.

Two of the Hecla's seamen, who were employed on shore in digging stones for ballast, reported on the 20th, that they had seen a glaucous gull, or one of that species known to sailors by the name of "burgomaster." On being questioned respecting this bird, they strongly insisted on the impossibility of their having mistaken its kind, having been within twenty yards of it. As, however, these gulls cannot well subsist without open water, of which there was certainly none in the neighbourhood at that period, we conjectured that it might have been an owl; a bird that may, perhaps, remain on the island, even during the whole winter, as the abundance of mice (*Mus Hudsonius*,) of which we constantly saw the tracks upon the snow, would furnish them with an ample supply of food. It was a novelty to us, however, to see any living animal in this desolate spot; for even the wolves and foxes, our occasional visitors during the winter, had almost entirely deserted us for several weeks past.

The sick report of the Griper this day contained no less than ten cases, of which four were scorbutic, while the number of sick, or rather of convalescent, on board the Hecla, did not amount to half that number. On inquiring into the probable cause of this extraordinary proportion of sick on board the Griper, which, just at this period, when their services began to be necessary to our re-equipment, was likely to prove of serious importance, I found, from Lieutenant Liddon, that the beams and bed-places on the Griper's lower-deck had lately been in so damp a state, in consequence of the condensation of the vapour upon them, and in spite of every endeavour to prevent it, that there could be little doubt of the cause to which the present unhealthiness of the crew was to be chiefly attributed. I, therefore, directed a survey to be held by the three medical officers, and a report to be made of their opinions, as to the expediency of altogether removing the bed-places, or of adopting any other means for obviating the evil in question. These gentlemen were of opinion that the extreme dampness was "occasioned by the necessary proximity of the bed-places to the vessels' sides, and the smallness of the lower-deck, in consequence of which the vapours formed were deposited in so great abundance, particularly during meal-times, that the heat of the fires was inadequate to remove the evil before the cause was again renewed." They therefore recommended taking down the bed-places, in order to admit a more free ventilation, as well as a more equal distribution of the warmth, and that hammocks should be substituted in their place; an alteration which was immediately adopted. While on this subject, which is so intimately connected with the health of seamen in the Arctic regions, it may be proper for me to remark that, although the bed-places, which were fitted on board the Hecla and Griper, give a neat and comfortable appearance to the lower deck, and are in reality a great convenience to the men in many respects, yet that our winter's experience plainly shews them to be so favourable to the accumulation of dampness or ice within them, that there can remain little doubt of their unfitness for this service; and, I believe, that hammocks will be found warmer, and in every respect more comfortable to the men, than any other kind of sleeping-place that could be adopted. To the officers' cabins, which are necessarily closer to the ship's side, the same remark applies still more strongly; and with this difference only, that, on account of the want of length, cots must be used instead of hammocks. The advantage of thus removing from the ship's side was remarkably proved in the case of Lieutenant Liddon, whose state of health was so bad during the winter, that we at one time entertained very serious apprehensions respecting him. It was proposed, therefore, about the end of February, that he should sleep in a cot, at some distance from the side; and, from that period, his recovery was so rapid and so decided, that in a few weeks he

was enabled to walk out every fine day in the open air for exercise, with the thermometer at twenty degrees below zero, and without the slightest degree of inconvenience.

On the 23d we found, by digging a hole in the ice, in the middle of the harbour, where the depth of water was four fathoms and a quarter, that its thickness was six feet and a half, and the snow on the surface of it eight inches deep. This may be considered a fair specimen of the average formation of ice in this neighbourhood since the middle of the preceding September; and as the freezing process did not stop for more than six weeks after this, the produce of the whole winter may, perhaps, be reasonably taken at seven, or seven and a half feet. In chopping this ice with an axe, the men found it very hard and brittle till they arrived within a foot of the lower surface, where it became soft and spongy.

At noon, on the 25th, two thermometers stood

in the shade at	— 25°,	and in the sun at + 30°
at 1 P.M.	— 22°,	+ 17°
2	— 22°,	+ 25°
3	— 22°,	+ 21°,

the thermometer in the sun being placed at a distance from the ship, and the weather very calm and fine. The length of the day had now so much increased, that at midnight on the 26th, there was a very sensible twilight in the northern quarter of the heavens; and such was the rapidity with which this part of the season appeared to us to have come round, that we could, with difficulty, picture to ourselves the total darkness from which we had so lately emerged.

On the 28th, Lieutenant Beechey reported, on his return from a walk over the hills to the westward, that he had seen, even more plainly than before, that refracted appearance in the southern horizon, which bore a strong resemblance to distant land in that direction; and, what is most worthy of notice, still seeming to terminate abruptly about a S.b.E. bearing from Winter Harbour. The thermometer was at this time at — 20°, and the mercury in the barometer standing at 30.22 inches.

On one of the fine days in the early part of March, in taking a longer walk than usual on the north side of the harbour, we accidentally met with a small flat stone, on which the letter P was plainly engraved. As there seemed little doubt that this had been artificially done, and as, since our arrival in Winter Harbour, the weather had been too cold to induce any of our people to sit down on the ground for the purpose of exercising their talent in this way, we were entirely at a loss to conjecture how it came there, and various amusing speculations were resorted to, in order to account for it. Since that time, the weather had not permitted our sending for it till the 1st of April, when it was brought on board; and on inquiry among the men, we found that Peter Fisher, a seaman

belonging to the Griper, who was one of the party under Mr. Fife, respecting whom we had felt so much anxiety in the preceding September, had, on that occasion, amused himself by beginning to scratch upon the stone in question, the initials of his name.* This circumstance is only worthy of notice, from its proving to how considerable a distance this party had rambled, and how completely they were in error as to the direction in which they had been travelling; the distance between the two places being twenty-five miles. I was in hopes, also, of finding out by this means, the situation of a large lake which Mr. Fife reported having seen, and from which he brought a small fish of the trout kind; but the more I questioned him and his party, the more I was convinced of the little dependance to be placed on the account of persons circumstanced as they were, and of their utter ignorance as to the part of the island in which the lake was to be found.

In the evening a parhelion was seen on each side of the sun, and a third above it, as usual, at the angular distance of 22° 20′, the two first being strongly marked by the prismatic colours, and the other very indistinctly.

Early on the morning of the 3d, we observed an effect of refraction very common in seas having much ice. It consists in the images of hummocks of ice, reflected and inverted, in which case, from the apparent shape of these images, the ice is technically said to "tree." This appearance is considered by the Greenland sailors, as an indication of clear water in the direction in which it is seen, which was certainly not the case this morning.

At nine A.M., on the 5th, the weather being very fine, and the thermometer at — 18°, we observed a halo round the sun, which was at times nearly complete. There was, as usual, a parhelion on each side of the sun, at the same altitude, and distinctly prismatic. There was also a third parhelion in that part of the circle immediately above the sun, and this had a peculiarity attending it which we had never before observed. Although the weather was remarkably fine and clear, the atmosphere was full of innumerable minute *spiculæ* of snow glittering in the sun, which we had never before seen on a bright sun-shiny day, though we had constant occasion to remark such a deposit, at times when the weather could by no means be called hazy, and when the heavenly bodies were distinctly visible. The parhelion above the sun appeared to be evidently formed by the reflection of the sun's rays to the eye, by an infinite number of these spiculæ, commencing close to the ob-

* When Mr. Fife and his party returned from that excursion, it was a matter of surprise to us to see how fresh Fisher was, and how little he seemed to regard what had happened, as any thing out of the common way, of which, indeed, the circumstance just related, is also a proof. When asked, on his first arrival on board on that occasion, what they had lived upon, "Lived upon," said Fisher, dryly, "the Duke of Wellington never lived so well. We had grouse for breakfast, grouse for dinner, and grouse for supper, to be sure!"

server, and continuing so as to be easily distinguishable for at least one or two hundred yards from the eye. This parhelion might at times be easily seen to consist of the intersection, or rather the touching, of two circles turning opposite ways, of which the plainest was generally the upper one, or that which had its convex side downwards. At about 22° above the parhelion, being nearly the same distance that the latter was above the sun, a streak of glittering spicule was permanently seen in a horizontal direction; but there was so little of it, that it was difficult to say of what regular figure it formed a part. This phenomenon continued above an hour.

Being extremely anxious to get rid, as early as possible, of the drying of our washed clothes upon the lower deck, I had to-day a silk handkerchief washed, and hung up under the stern, in order to try the effect of the sun's rays upon it. In four hours it became thoroughly dry, the thermometer in the shade being from — 18° to — 6°, at the time. This was the first article that had been dried without artificial heat for six months, and it was yet another month before flannel could be dried in the open air. When this is considered, as well as that during the same period, the airing of the bedding, the drying of the bed-places, and the ventilation of the inhabited parts of the ship, were wholly dependent on the same means, and this with a very limited supply of fuel, it may, perhaps, be conceived in some degree, what unremitting attention was necessary to the preservation of health, under circumstances so unfavourable and even prejudicial.

At midnight, on the 7th, there was light enough to read the thermometer with great ease. On the 8th the weather was serene and clear, the southern horizon being much raised by refraction, and presenting very strongly the same appearance of land which had so often before been observed in that quarter. A few thin white clouds which were floating in the atmosphere to-day, had much of that tendency to arch, which has before been described on one or two occasions. Two distinct arches were thus formed this morning, one in the northern, the other in the southern hemisphere of the heavens, their altitude in the centre being from 20° to 45°, and joining at each end in the E.N.E. and W.S.W. points of the horizon.

From half-past six till eight A.M., on the 9th, a halo, with parhelia, was observed about the sun, similar in every respect to those described on the 5th. At one P.M. these phenomena re-appeared, together with several others of the same nature.

The protracted length of the winter began now to make us more than usually impatient, and to create in us reasonable apprehensions lest our escape from Winter Harbour should unavoidably be postponed to a period too late for the accomplishment of those sanguine hopes, with which the last year's success had induced us to flatter

ourselves. The extraordinary degree of cold which continued day after day was such as we had certainly not anticipated; and when, at this period, with the sun above the horizon for seventeen hours out of the four and twenty, the thermometer was still occasionally falling as low as — 31°, which it did at four this morning, it must be confessed that our future prospects of advancement began to wear a very unpromising aspect. It may be imagined, also, with what anxiety we watched for the first appearance of a thaw, both on shore and upon the ice round the ships, in neither of which had any such appearances yet become perceptible, except that here and there, where the snow happened to lie very thin upon the ground, allowing the sun's rays to penetrate to the earth, a sufficient degree of heat had been radiated partially to thaw the snow, forming it into a thin transparent cake, like a plate of glass. Indeed, the cloudless sky, and the uniformly white surface of sea and land which characterize the climate of Melville Island at this period, are ill calculated to impart warmth to the atmosphere; and it was not till the clouds became gradually more dense and frequent, and the earth had, by slow degrees, become uncovered in parts, so as to admit the absorption and radiation of heat, that the dissolution of the snow could go on to any considerable extent.

In the afternoon of the 16th, the weather being clear and nearly calm, Mr. Hooper and myself observed a colouring in some light fleecy clouds, which formed one of the most beautiful phenomena that I had ever seen. These clouds, which were small and white, and almost the only ones in the heavens, assumed, as they approached and passed under the sun, the most soft and exquisite tints of light lake, bluish green, and yellow about their edges, that can possibly be imagined. These tints appeared only when the clouds were within 15° or 20° of the sun, were brightest as they passed under it, which they did as close as 2°, and began to be again indistinct at 10° from it. Some of the clouds remained coloured in this way for upwards of a quarter of an hour; there did not seem to be any regular arrangement of tints, as in the prismatic spectrum, but the lake was always next the sun.

It was a source of extreme satisfaction to me to find that the health of both ships' companies were daily improving as the season advanced; so that by the middle of April, the Griper's sick list was reduced to four, all of whom were convalescent; and on board the Hecla, Mr. Edwards had but a single patient, William Scott, boatswain's-mate, who first complained of pneumonia about this time, and whose case subsequently assumed a more dangerous character.

On the 19th and 20th, the thermometer kept up nearly to zero, in consequence of the wind blowing from the E.S.E., and continued snow, of which we remarked, when walking on shore on the 21st, that as much had fallen in the last two days as during the whole

of the winter. The spiculæ were also much less minute than before, though the snow could not as yet be said to fall in flakes.

The wind, which had blown fresh from the eastward for several hours, moderated at half past two A.M. on the 25th, and the thermometer fell from + 4° to — 1° at four o'clock. As the wind freshened again, the thermometer once more rose, and by eight A.M. stood at + 10°. On the two following days Captain Sabine made some observations on the difference in the temperature of the atmosphere in the sun, and in the shade; which shew the effect of the sun's rays much more correctly than those made on board, as it is almost impossible to prevent the thermometer from being affected by the radiation of heat from the ship. "Two posts having been fixed in the snow, at a short distance apart, and connected by a line passing through the shadow cast, by the observatory, about the middle of the day, two mercurial thermometers, being an exact pair, and having their bulbs unprotected, were suspended from the line, one being exposed to the sun, and the other in the shade of the observatory; the bulbs of both were six or eight inches from the snow."

	h. m.	SUN.	SHADE.	
		° ′	° ′	
April 26.	1 30 P.M.	+ 17	+ 6 5	
	2 —	22	7	Calm.
	2 13	23	7	
	2 18	24 5	7 6	
	2 35	20 5	6 5	A gentle air.
	2 50	21	6 7	
	6 —	9 5	4 5	
April 27.	11 20 A.M.	15	5	
	11 30	20	7	
	11 40	34	9	
	11 45	23 5	8 5	Almost calm.
	11 55	24	8 5	
	0 25 P.M.	21	7	
	1 —	20	7 5	
	2 20	25	7 7	
	2 45	10	4 5	A breeze sprung up.

The morning of the 27th being very fine, and the thermometer at + 6°, the ships' company's bedding was hung up to air, between the fore and main rigging, being the first time we had ventured to bring it from the lower deck for nearly eight months. While it was out, the births and bed-places were fumigated with a composition of powder mixed with vinegar, and known familiarly by the name of *devils*; an operation which had been regularly gone through once a week during the winter.

This evening, and during the whole night, we experienced, for the first time this season, a fog, such as occurs in more temperate climates, and which the sun dispersed on the following morning; the same thing again occurred the next day.

At half past two P.M. on the 29th, Mr. Edwards and myself observed the clouds coloured in the same beautiful and delicate manner as on the 16th; except that the tints were now not so vivid, the clouds passing farther from the sun. A parhelion was also seen on each side of the sun horizontally; both were faint and quite white.

I have before mentioned the circumstance of our lower rigging having been very slack during the severity of the winter, and again become tight as the warmer weather came on. Even now this had taken place so effectually, that the rigging was full as tight as when we left the river Thames twelve months before. I have been the more particular in mentioning this fact, because the circumstance of its becoming slack by the cold is at variance with the accounts of other navigators*.

For the last three or four days of April, the snow on the black cloth of our housing had begun to thaw a little during a few hours in the middle of the day, and on the 30th so rapid a change took place in the temperature of the atmosphere, that the thermometer stood at the freezing, or, as it may more properly be termed in this climate, the thawing point, being the first time that such an event had occurred for nearly eight months, or since the 9th of the preceding September. This temperature was, to our feelings, so much like that of summer, that I was under the necessity of using my authority to prevent the men from making such an alteration in their clothing as might have been attended with very dangerous consequences. The change of temperature during the month of April, was so rapid, that the thermometer ranged from — 32° to + 32° in the course of twenty days. There was, at this period, more snow upon the ground than at any other time of the year, the average depth on the lower parts of the land being four or five inches, but much less upon the hills; while in the ravines a very large quantity had been collected. The snow at this time became so soft, from the influence of the sun upon it, as to make walking very laborious and unpleasant.

This rapid change in the temperature of the atmosphere again revived our hopes of a speedy departure from Melville Island; and such were the sanguine expectations which animated us at this period, that I believe there was not an officer or man, on board either

* "On the morning of the 5th, (November), it was discovered that almost all the shrouds on the starboard side of the ship were broken, which happened from contraction and tenseness, caused by frost."—*Account of Bering's Voyage*, A.D. 1741, BURNEY's *North-Eastern Voyages of Discovery*, p. 171.

of the ships, who had not made up his mind to the probability of our leaving Winter Harbour by the middle or latter part of June.

The fine and temperate weather with which the month of April had concluded, induced Captain Sabine to set the clocks going, in order to commence his observations for the pendulum, and he now took up his quarters entirely on shore for that purpose. On the first of May, however, it blew a strong gale from the northward, which made it impossible to keep up the desired temperature in the house; and so heavy was the snow-drift, that in a few hours the house was nearly covered, and we were obliged to communicate with Captain Sabine and his attendants through a small window, from which the snow was, with much labour, cleared away, the door being quite inaccessible. We saw the sun at midnight for the first time this season.

The gale and snow-drift continued on the following day, when we had literally to dig out the sentries, who attended the fire at the house, in order to have them relieved. I feel it right to mention these circumstances, that the difficulties with which Captain Sabine had to contend, may be duly appreciated in the making of observations that require, even under every favourable circumstance of weather and climate, no ordinary share of skill and attention.

The day being moderate and fine on the 3d, we perceived that the late gale had almost entirely uncovered the higher parts of the land, the snow being blown into the ravines and hollows. We remarked, in the forenoon, that the clouds had a tendency to form two distinct arches across the heavens from N.N.E. to S.S.W., joining at the horizon, but separating gradually on each side of the zenith to the distance of 8° or 10° from each other. At ten P.M. a parhelion was seen on each side of the sun, at the usual distance, and slightly tinged with the prismatic colours.

Being desirous of making some observations on the height and time of the tides, I directed a hole to be cut through the ice under the ship's stern, and a pole, graduated in the upper part to feet and inches, dropped through it, and securely moored by a heavy weight to the bottom. Our observations commenced the afternoon of the 4th, and the height indicated by the pole was registered every hour in the Hecla's log-book. The snow which we had in the autumn banked up against the ships' sides was now cleared away, in readiness for cutting the ice round them, an operation which I was anxious to perform previously to our making any alterations in the quantity or distribution of the weight in our holds, lest the ships should receive any injury from doing so, in their present confined situation. It is of course not easy to judge in what degree the banking up of the snow had been serviceable, in retaining the warmth within the ships, but there can be little doubt that it produced a considerable

effect in this way, as well perhaps as in lessening, in some measure, the thickness of the ice which formed around them.

On the 5th Mr. Edwards reported that Mr. Crawford, the Greenland mate, who had, for several days past, been complaining of pains which appeared to be rheumatic, shewed some symptoms of the scurvy, which made it necessary to resort to the antiscorbutic diet. It was worthy of notice, that Mr. Crawford was one of the most clean, temperate, and cheerful men in the expedition, and, as such, was one of the least likely to be thus affected. The washed clothes of the ships' company were this day dried entirely in the open air.

On the 6th, the thermometer rose no higher than + 8½° during the day; but, as the wind was moderate, and it was high time to endeavour to get the ships once more fairly afloat, we commenced the operation of cutting the ice about them. In order to prevent the men suffering from wet and cold feet, a pair of strong boots and boot-stockings were on this occasion served to each, being part of a complete suit of warm clothing, with which I had been supplied for the purpose of issuing them to the ship's companies gratis, whenever I should see occasion. As the sun became low towards midnight, the usual parhelia appeared about this luminary.

At half-past nine A.M., on the 10th, Lieutenant Beechey observed a halo round the sun, consisting of a complete circle, and an arch of another, touching the first in the part immediately above the sun, and having its centre apparently from 40° to 50° from that object. There were two parhelia faintly prismatic as usual, but about 3° without the circle.

This phenomenon was remarkable, on account of the parhelia not being situated upon the halo, as was usually the case. It now occurred to me, that on the preceding day, when the same phenomenon had been faintly seen, Mr. Nias, whom I directed to measure the angular distance between the parhelia and the sun, had reported it to be 24° 40', the radius of the halo being 22½° as usual. This I considered to have been an unavoidable error in the measurement of an ill-defined object; but, on repeating it, his first report was found to be correct. On the present occasion, Lieutenant Beechey saw it for so short a time as not to allow him to measure the distance.

The expedition having, at its departure from England, been victualled for no more than two years, of which one had now expired, I considered it expedient, as a matter of precaution, to reduce the daily allowance of all the kinds of provision to two-thirds of the established proportion, which regulation accordingly took place from this day. The cheerfulness with which this reduction was received by both officers and men, was to me an additional and highly-gratifying proof of that firm and zealous principle of duty by which their conduct was at all times regulated.

On the 12th, one of the men, employed in digging turf on shore, reported that he had seen a ptarmigan, an event which, trifling as it was, created no small degree of interest among us, who had now been deprived of fresh meat for nearly six months; it was also hailed as a sure omen of returning summer. This was further confirmed by Mr. Beverly having on the 13th killed a male ptarmigan, and by another being seen on the following day, as well as the first tracks of rein-deer and musk-oxen, which indicated their route to be directly to the northward. The time of the return of these animals to Melville Island, from the continent, is thus satisfactorily ascertained; and it was suggested by Captain Sabine, as a circumstance worthy of remark, that the period of their migration had occurred with the first fine weather which took place after the commencement of constant day-light. In examining the seeds and small buds contained in the maw of the bird killed by Mr. Beverly, they were found to consist entirely of the native plants of the island, and principally those of the dwarf-willow, so that the bird had perhaps arrived a day or two before that time. On the 15th, two or three coveys of ptarmigan were seen, after which they became more and more numerous, and a brace or two were almost daily procured for the sick, for whose use they were exclusively reserved. As it was of the utmost importance, under our present circumstances, that every ounce of game which we might thus procure, should be served in lieu of the other meat, I now renewed the orders formerly given, and which afterwards obtained among us the name of "game-laws," that every animal killed was to be considered as public property; and, as such, to be regularly issued like any other kind of provision, without the slightest distinction between the messes of the officers and those of the ships' companies.

Some of our men having, in the course of their shooting excursions, been exposed for several hours to the glare of the sun and snow, returned at night, much affected with that painful inflammation in the eyes, occasioned by the reflection of intense light from the snow, aided by the warmth of the sun, and called in America "snow-blindness." This complaint, of which the sensation exactly resembles that produced by large particles of sand or dust in the eyes, is cured by some tribes of American Indians, by holding them over the steam of water; but we found a cooling wash, made of a small quantity of acetate of lead mixed with cold water, more efficacious in relieving the irritation, which was always done in three or four days, even in the most severe cases, provided the eyes were carefully guarded from the light. As a preventive of this complaint, a piece of black crape was given to each man, to be worn as a kind of short veil attached to the hat, which we found to be very serviceable; a still more convenient mode, adopted by some of the officers, was found equally efficacious; this consisted in taking the glasses out of a pair of spectacles, and substi-

nuting black or green crape, the glass having been found to heat the eyes, and increase the irritation.

The exhalations arising from the earth were about this time observed to be very abundant, producing, during the day-time, much of that appearance of waving tremulous motion in distant objects, which the French call *mirage*, and which was usually succeeded by a fog at night, as soon as the atmosphere had become cool.

During one of these fogs, at four A.M., on the 16th, the sky being perfectly clear in the zenith to 30° of altitude, whilst a dense haze rested on the land and ice, Captain Sabine observed "a haze-bow of distinct and dazzling light, having its edges softened off, and without any appearance of prismatic colouring. The legs of the bow rose out of a bluish haze, the colour of which somewhat resembled that of weak starch; not quite half a circle was complete; the middle of the arch was between 22° and 23° above the land, which is of little elevation, and the legs were 71° apart. The weather was nearly calm, and there had been a considerable deposition of frozen dew throughout the night. Similar phenomena were observed on the mornings of the 20th and 23d, about the same hour."

On the 17th, we completed the operation of cutting the ice round the Hecla, which was performed in the following manner: The ice alongside the ships was found to be six feet thick, being about eighteen inches less than the average thickness of it in Winter Harbour, owing principally to our having continued to cut it round the ships for some time after the commencement of the winter, and in part, perhaps, to the snow with which it had there been thickly covered. We began by digging a large hole under the stern, being the same as that in which the tide-pole was placed, in order to enter the saw, which occupied us nearly two days, only a small number of men being able to work at it. In the mean time, all the snow and rubbish was cleared away from the ship's side, leaving only the solid ice to work upon; and a trench, two feet wide, was cut the whole length of the starboard side, from the stem to the rudder, keeping within an inch or two of the bends, and taking care here and there to leave a dike, to prevent the water which might ooze into one part from filling up the others in which the men were working. In this manner was the trench cut with axes, to the depth of about four feet and a half, leaving only eighteen inches for the saws to cut, except in those places where the dikes remained. The saw being then entered in the hole under the stern, was worked in the usual manner, being suspended by a triangle made of three spars; one cut being made on the outer part of the trench, and a second within an inch or two of the bends, in order to avoid injuring the planks. A small portion of ice being broken off now and then by bars, handspikes, and ice-chisels, floated to the surface, and was hooked out by piecemeal. This operation was a cold and

tedious one, and required nine days to complete it. When the workmen had this morning completed the trench within ten or twelve feet of the stern, the ship suddenly disenguged herself from the ice to which she had before been firmly adhering on the larboard side, and rose in the water about ten inches abaft, and nearly eighteen inches forward, with a considerable surge. This disengagement, to which the sailors naturally applied the term "launching," confirmed my supposition, that the ship was held so fast by the ice, as to make it dangerous to alter materially the stowage of the holds, but in a manner the very reverse of what I had apprehended. This circumstance, however, on consideration, it was not difficult to explain. In the course of the winter, the strong eddy winds about the ships had formed round them a drift of snow, seven or eight feet deep in some parts, and, perhaps, weighing a hundred tons; by which the ice, and the ships with it, were carried down much below the natural level at which they would otherwise have floated. In the mean time the ships had become considerably lighter, from the expenditure of several months provisions; so that, on both these accounts, they had naturally a tendency to rise in the water as soon as they were set at liberty.

The ships being now once more fairly afloat, I directed a strict and careful survey to be commenced of all the provisions and stores of every kind remaining on board each ship, and at the same time the Griper to be supplied with the quantity which the Hecla had stowed for her, amounting nearly to the proportion of every kind for twelve months. In the mean time, a party of hands were occupied in breaking and weighing the stones for ballast, while others were getting out the sails and boats, and our carpenters, armourers, coopers, and sail-makers, having each their respective employments, our little colony now presented the most busy and bustling scene that can be imagined. It was found necessary to caulk every part of the upperworks, as well as all the decks, the seams having been so much opened by the frost, as to require at least one, and in many parts two threads of oakum, though the ship had scarcely ever laboured at all since she was last caulked. I also at this time laid out a small garden, planting it with radishes, onions, mustard and cress; and a similar attempt was made by Lieutenant Liddon: but, notwithstanding every care and attention which could be paid to it, this experiment may be said to have wholly failed, the radishes not exceeding an inch in length by the latter end of July, and the other seeds being altogether thrown away. Not even a single crop of mustard and cress could be thus raised in the open air; and our horticulture was, therefore, once more confined to my cabin, where, at the present mild temperature of the atmosphere, those two vegetables could be raised without any difficulty, and in considerable abundance. I may remark, however, that some common ships' peas, which were sown by our

people for their amusement, were found to thrive so well, that, had I been sooner aware of it, a great quantity of the leaves at least of this vegetable might have been grown, which, when boiled, and eaten as greens, would have been no small treat to persons deprived of fresh vegetable substance for more than ten months. It is not improbable also, that, by the assistance of glass, the want of which deprived us of the opportunity of making the experiment, a great deal more might have been done in this way, notwithstanding the miserable climate with which we had to contend.

About the 21st, we began to perceive a daily diminution of the snow upon the land, the brown soil appearing in patches, where hitherto the snow had completely covered it; and on the 22d, in the course of a walk which we took to the Table-hill, to the westward of the ships, we had the satisfaction of being able to fill a pint bottle with water from a small pool of melted snow, having a quantity of sand mixed with it, a circumstance which we always found to favour the thawing process. There cannot, perhaps, be a more striking proof of the extreme severity of the climate of Melville Island than the fact, that this was the first instance we had known of water, naturally in a fluid state when exposed to the atmosphere, and unassisted by artificial means, such as those which I have already described as having occurred in one or two instances under the ship's stern, since the middle of the preceding September, being an interval of more than eight months. The Table-hill, which is seen at a great distance on the coast, in coming from the eastward, and which forms a conspicuous object in this country, where there is so little to vary the scene, lies at the distance of five or six miles to the westward of the station of the ships in Winter Harbour. It rises about a hundred feet above the level of the plane on which it stands, the top of it not exceeding in extent a quarter of an acre of ground. The surface of it consists generally of sand, on which are lying numerous masses of limestone, nearly the whole of which, though varying in colour from white to dark-brown, have a fetid smell when broken; and many of the specimens contained madrepore. We found here also a quantity of clay iron-stone, which is common in this part of Melville island, together with pieces of flint, granite, and other substances. During this excursion, too, we discovered, with pleasure, that the sorrel (*Rumex digynus, Linn.*) was extremely abundant in the neighbourhood of the ships, a root or two of this valuable antiscorbutic plant occurring in almost every tuft of moss which we met with. No appearance of its beginning to vegetate could yet, however, be perceived; and we began to look with impatience for the sprouting of its leaves, from which we hoped to obtain a supply of fresh vegetable matter, of which, perhaps, in reality, we all began to stand in need. About two hundred yards to the westward of this hill is another rather smaller, but very similar in appearance,

and composed of the same mineral substances as that just described; in coming from the eastward, the second hill is not seen, being hid behind the other.

Having considered that an examination of the extent and productions of the island might be conducive to the improvement of the geography and natural history of these regions; and the good state of health enjoyed by the crews, permitting a certain number of men to be spared from each ship during their equipment for sea, I now determined to undertake a journey into the interior, for this purpose, accompanied by a certain number of officers and men who volunteered their services on the occasion; and the 1st of June was fixed for our departure. The Griper's sick-list had now been reduced to one person, whose only complaint was debility from a late attack of scurvy; and William Scott, whom I have before had occasion to mention, was the only patient on board the Hecla. The case of this man had been such as, for some time past, to baffle Mr. Edwards's endeavours to produce a favourable change, his complaint appearing to be more mental than corporeal, and, therefore, one which no medicine could be expected to cure.

Previously to my intended departure, I was occupied in measuring a base upon the ice across the mouth of the harbour, and in taking the necessary angles for the survey, which was carried to the eastward beyond Fife's Harbour, principally for the purpose of connecting our observations here with those obtained by Captain Sabine on the 6th of the preceding September, on which the correction of the longitudes observed during the navigation of 1819, in part depended.

Early on the morning of the 24th, Mr. Allison reported that he had felt a few drops of rain fall upon his face, an event which we had scarcely dared to anticipate so soon, but which was hailed with much satisfaction, as nothing appears to be so effectual as rain in producing the dissolution of the ice. The clouds had a watery appearance throughout the day, and at half-past eight in the evening, we were agreeably surprised by a smart shower of rain, which was shortly after succeeded by several others. We had been so unaccustomed to see water naturally in a fluid state at all, and much less to see it fall from the heavens, that such an occurrence became a matter of considerable curiosity, and I believe every person on board hastened on deck to witness so interesting as well as novel a phenomenon. The rain which fell in the course of the evening, made several little pools upon the ice, which now remained unfrozen for twelve or fourteen hours in the day, as did also the sea-water around the ships. Two ivory gulls *(Larus Eburneus)* were reported to have been seen in the course of this day by a party employed in cutting turf on shore.

I am now to mention an occurrence which took place at this period, and on which I should gladly be silent, but that it is inti-

mately connected with the important subject of the health of seamen in this and in every other climate. It was reported to me, through one or two of the Hecla's petty-officers, that one of our seamen, whose name I am unwilling to record, and who had lately been cured, by the greatest care and attention, of a rather severe attack of the scurvy, had been in the frequent habit of eating with his bread a quantity of the skimmings of the water in which salt meat is boiled, called by the sailors "slush." This kind of fat or grease, which is always understood to be a perquisite of the cooks in his majesty's navy, and the use of which is well known to be in the highest degree productive of scurvy, had always been a source of considerable anxiety and apprehension to me during the voyage. Soon after our leaving England, when the issuing of salt meat commenced, I sent for the cook of the Hecla, and, in presence of the officers, warned him on no account ever to permit a particle of this slush to be used by the ship's company; and, on condition of his faithfully complying with this injunction, I permitted him, under certain restrictions, to preserve it in casks, for his own future benefit. With these directions the cook had, I believe, punctually complied till the middle of the winter; when he had been gradually led into a practice of furnishing the people occasionally with a small quantity of fat to burn in their lamps; of this, the man alluded to, had, it seems, taken advantage, and used it as an article of diet in the manner described. Being determined immediately to check so pernicious a practice, I charged him with his offence in presence of the officers and ship's company, pointing out to them, at the same time, the ingratitude with which he had repaid the care taken of him during his late illness. It gave me great satisfaction to find that the men were disposed to view this act with a degree of indignation little short of that which I felt it my duty to express on this occasion, some of them, as I found, having repeatedly spoken to him before upon the subject. Having, therefore, directed that the offender should be punished by wearing upon his back a badge, which would expose him for a time to the contempt and derision of his shipmates, I felt satisfied that no future instance would occur of an offence which might prove so fatal to the cause in which we were engaged.

Early on the morning of the 29th, the wind increased to a fresh gale from the northward and westward, which continued during the day, with a heavy fall of snow and a tremendous drift that prevented our seeing to the distance of more than twenty yards around the ships. The following day being fine, I took my travelling party to the top of the north-east hill, in order to try the cart, which had been constructed for carrying the tents and baggage, and which appeared to answer very well. The view from this hill was not such as to offer much encouragement to our hopes of future advancement to the westward. The sea still presented the same un-

broken and continuous surface of solid and impenetrable ice, and this ice could not be less than from six to seven feet in thickness, as we knew it to be about the ships. When to this circumstance was added the consideration, that scarcely the slightest symptoms of thawing had yet appeared, and that in three weeks from this period the sun would again begin to decline to the southward, it must be confessed, that the most sanguine and enthusiastic among us had some reason to be staggered in the expectations they had formed of the complete accomplishment of our enterprise.

CHAPTER VIII.

Journey across Melville Island to the Northern Shore, and return to the Ships by a different Route.

THE weather being favourable on the morning of the 1st of June, I made such arrangements as were necessary, previous to my departure on our intended journey. I directed Lieutenants Liddon and Beechey to proceed with all possible despatch in the equipment of the ships for sea, having them ready to sail by the end of June, in order that we might be able to take advantage of any favourable alteration in the state of the ice at an earlier period than present appearances allowed us to anticipate.

The party selected to accompany me, out of the numerous volunteers on this occasion, consisted of Captain Sabine, Messrs. Fisher, Nias, and Reid, serjeant M'Mahon, of the marines, serjeant Martin, of the artillery, and three seamen and two marines belonging to both ships, making a total of twelve, including myself. We were supplied with provisions for three weeks, according to the daily proportion of one pound of biscuit, two-thirds of a pound of Donkin's preserved meat, one ounce of salep powder, one ounce of sugar, and half a pint of spirits, for each man. Two tents, of the kind called in the army horsemen's tents, were made of blankets, with two boarding-pikes, fixed across at each end, and a ridge-rope along the top, which, with stones laid upon the foot of the blankets, made a very comfortable and portable shelter. These tents, with the whole of the provisions, together with a *conjuror* or cooking apparatus, and a small quantity of wood for fuel, amounting in the whole to eight hundred pounds, were carried upon a strong but light cart, constructed for the purpose; this method having been decided on as the most convenient for the country in which we were about to travel.

Each officer and man was also furnished with a blanket made into a bag, with a drawing-string at each end, a pair of spare shoes and stockings, a flannel shirt, and a cap to sleep in. The clothing and blankets were carried on our backs in knapsacks, those of the officers weighing from seventeen to twenty-four pounds each, and one between every two men weighing twenty-four pounds, to be carried for half a day alternately. Mr. Dealey, with a party of three men, was appointed to attend us for the first day's journey, to assist in carrying our baggage, and then to return to the ships. It was my intention to proceed as directly north as possible, and if we came to the sea in that direction, to turn to the westward, making such a circuit in returning to Winter Harbour as might occupy from one to three weeks, according to circumstances. It was proposed to travel entirely at night, if any part of the twenty-four hours could properly now be so called, when the sun was constantly above the horizon. This plan was considered to be advantageous, both for the sake of sleeping during the warmth of the day, and to avoid, as much as possible, the glare of the sun upon the snow while travelling.

At five P.M. we left the ships, accompanied by a large party of officers and men from each, who were desirous of relieving us from the weight of our knapsacks for an hour or two; and, having been cheered by the ships on our departure, we went round the head of the harbour, and ascended the north-east hill. This route was chosen on account of the ground being clear of snow only on the ridges and higher parts of the land. Our companions left us at eight P.M., and we proceeded across a level plain almost entirely covered with snow, which, however, was so hard as to make the travelling very good; and the cart was dragged along without difficulty. At eleven P.M., we came to three remarkable round hills, composed entirely of sand and masses of sandstone, and halted to dine close to the northward of them. Those parts of the land which were clear of snow, appeared to be more productive than those in the immediate neighbourhood of Winter Harbour, the dwarf-willow, sorrel, and poppy (*Papaver Nudicaule*), being more abundant, and the moss more luxuriant; we could not, however, collect a sufficient quantity of the slender wood of the willow in a dry state, for the purpose of dissolving snow for water, and were, therefore, obliged to use a part of the fuel which we had provided for that purpose. The thermometer stood at 31° at midnight.

Having set off soon after midnight, at the distance of half a mile in a N.b.E. direction, we came to a piece of frozen water half a mile in length, and two hundred yards wide, situated on the south side of the range of hills which bound the prospect from Winter Harbour. The ice, on the surface of this lake or pond, was in some parts nearly dissolved, and in all too soft to allow us to cross it. We here saw a pair of ducks, one of which being white and the

other brown, we supposed them to be of that species called king ducks (*Anas Spectabilis*). We soon after came in sight of an extensive level space to the north-westward, upon which not a single dark spot could be distinguished, even with a glass, to break the uniformity of the snow with which it was covered, till it appeared to terminate in a range of lofty hills which we had occasionally seen from the southward, and which, from the appearance given them by their distance, we had called the Blue Hills. We had, for some time past, entertained an idea, from their bold and precipitous appearante in some parts, that water would be found at the foot of them; and had we not been certain that we had now ascended three or four hundred feet above the level of Winter Harbour, the appearance of the plain before us, which resembled a branch of the sea covered with ice, would have confirmed us in this idea. We halted at half-past six A.M., on the 2d, and pitched the tents on the hardest ground we could find, but it became quite swampy in the course of the day. We killed seven ptarmigan, and saw two plovers (*Charadrius pluvialis*), and two deer, being the first we had met with this season, with a fawn, so small, as to leave no doubt of its having been dropped since the arrival of the female upon the island. They were so wild as not to allow us to approach them within a quarter of a mile. The day was fine with light and variable airs; the thermometer stood at 34°, in the shade, at seven A.M., at which time it was unfortunately broken.

At five P.M. we struck the tents, and having detained one of Mr. Dealey's party to accompany us, I despatched him to the ships with the others, and then continued our journey to the northward, having first made the necessary observations for determining our position. These and the rest of our observations for latitude and longitude, obtained during this journey, were made with a sextant and artificial horizon, and the longitudes are by the chronometer, No. 2109 of Arnold, which I carried in my pocket.

As we proceeded to the northward, the delusion respecting the level plain to the westward, began to wear off, some brown spots being here and there perceptible with a glass, which left no doubt of its being principally, if not entirely, land. Beyond this plain, however, there was a piece of bold land in the distance, having every appearance of an island, lying between the Blue Hills on the north, and some high land to the south. There was a bright and dazzling ice-blink over the plane of snow, and exactly corresponding with it, as to extent and position.

Having halted three hours to dine and rest, we again set forward at two A.M., on the 3d, crossing one or two ravines, running E.N.E. and W.S.W., in which there was a large collection of snow, but as yet no appearance of water in the bottom of them. Captain Sabine and myself being considerably a-head of the rest of the party, had sat down to wait for them, when a fine rein-deer

came trotting up, and played round us for a quarter of an hour, within thirty yards. We had no gun, nor do I know that we should have killed it if we had, there being already as much weight upon the cart as the men could well drag; and having no fuel to spare for cooking; besides, we felt it would have been but an ill return for the confidence which he seemed willing to place in us. On hearing our people talking on the opposite side of the ravine, the deer immediately crossed over, and went directly up to them, with very little caution; and, they being less scrupulous than we were, one or two shots were immediately fired at him, but without effect; on which he again crossed over to where we were sitting, approaching us nearer than before. As soon as we rose up and walked on, he accompanied us like a dog, sometimes trotting a-head of us, and then returning within forty or fifty yards. When we halted, at six A.M., to make the usual observations, he remained by us till the rest of the party came up, and then trotted off. The rein-deer is by no means a graceful animal; its high shoulders and an awkward stoop in its head, giving it rather a deformed appearance. Our new acquaintance had no horns; he was of a brownish colour with a black saddle, a broad, black rim round the eyes, and very white about the tail. We observed that, whenever he was about to set off, he made a sort of playful gambol, by rearing on his hind legs.

The latitude observed here was 75° 06′ 58″, the longitude 110° 30′ 32″, and the variation of the magnetic needle 128° 30′ 14″ easterly. We had passed, during our last march, a good deal of rich soil, consisting principally of decayed moss, and other vegetable substance mixed with sand; and the sorrel and saxifrage (*Saxifraga oppositifolia*) were more abundant than before.

A fog, which had prevailed during the early part of the day, having cleared away in the afternoon, we struck the tents at five P.M., and having travelled three quarters of a mile, came to a ravine not less than a hundred feet deep, and in most parts nearly perpendicular. A place was at length found in which the cart could be got across, which we succeeded in effecting, through very deep snow, after an hour's labour. On the north side of this ravine large masses of sand-stone were lying on the surface of the ground, over which the cart could with difficulty be dragged; and we remarked on this and several other occasions, that the stones which were bruised by the wheels emitted a strong smell, like that of fetid limestone when broken, though we could never discover any of that substance. In some of the sand-stone we found pieces of coal embedded; and some large pieces of a slaty kind of that mineral, which burned indifferently, were also picked up in the ravine.

We had hitherto, as we judged, rather ascended than otherwise since leaving the north-east-hill of Winter Harbour, and the height of this part of the island may be estimated at three or four hun-

dred feet above the level of the sea. At two miles and a quarter to the northward of the ravine, we entered upon a snowy plain, of which we could not see the termination to the northward. Here and there only we came to a small patch of uncovered land, on one of which we observed the sand and sand-stone to be tinged of a light brick colour. We halted to dine before midnight, having made good, by our account, a distance of only five miles, and that with difficulty, the snow being soft, which made travelling very laborious. We found here nothing but two small pools of dirty water, but, as it was of importance to save our wood in case of accidents, we went on an allowance of half a pint of this water each, rather than expend any of it in melting snow, a process requiring more fuel than perhaps those who have never made the experiment are aware of. There was no vegetation in this place, even the poppy having now forsaken us.

At two o'clock on the morning of the 4th we continued our journey to the northward, over the same snowy and level plain as before, than which it is impossible to conceive any thing more dreary and uninteresting. It frequently happened that, for an hour together, not a single spot of uncovered ground could be seen. The few patches of this kind forcibly reminded one of the description given of the *oases* in the deserts of Africa, not only because they relieved us for a time from the intense glare of the sun upon the snow, which was extremely oppressive to the eyes, but because it was on these alone that we could pitch our tents to rest, or that we could expect to meet with any water. The breeze freshened up to a gale from the S.S.E. as we proceeded, and the men, as if determined not to forget that they were sailors, set a large blanket upon the cart as a sail, which, upon the present level ground, was found to be of material assistance. The snow was deep, and rather soft, which made the travelling heavy, and as the wind produced a good deal of snow-drift, most of the bare patches of ground became covered up, so that when our time for halting had arrived, not a piece of ground could be seen on which to pitch the tents. Captain Sabine and myself went forward to look out for a spot, and at length were fortunate to meet with one, on which there was just room for our little encampment. It was with some difficulty, by building a wall with stones and our knapsacks, that we prevented its being covered with snow before the party came up, which they did at half-past seven A.M., having travelled ten miles in a N.W.b.N. direction. We saw a few fox-tracks, but no animals, nor the smallest symptom of vegetation, during this march. It is not improbable, however, that these snowy plains, when uncovered by the warmth of summer, may present a more luxuriant vegetation than is elsewhere to be met with on this island.

By the time we had secured the tents the wind blew hard, with a continued fall as well as drift of snow, so that we could not but

consider ourselves fortunate in having met with a spot of ground in good time. Notwithstanding the inclemency of the weather, we found the tents afford us very comfortable and sufficient shelter, the cart being tilted up to windward of them, so as to break in some measure the violence of the wind; and when wrapped up, or rather enclosed in our blanket-bags, we were generally quite warm enough to enjoy the most sound and refreshing repose. I may here notice, once for all, that the moment the tents were pitched, however short the time for which it was proposed to halt, every man was directed immediately to change his shoes and stockings, and at the same time had his feet examined by Mr. Fisher. As it froze hard every night, we used only to get our things dried during the noon halting, so that we were always under the necessity of putting on the same wet boots and stockings after resting at midnight. This was the only way to make certain of dry stockings for sleeping in, and as we were sure to be wet in half an hour after starting, our putting on wet ones to walk in was of little consequence. I insist the more on this circumstance, because it is to our attention to these precautions that I attribute the good health we enjoyed during the journey. To this, indeed, we had one exception, Captain Sabine having suffered some uneasiness from indigestion, in consequence of having eaten some of the salep-powder badly mixed; but by attention to his diet, together with a little medicine, the complaint was soon removed. It is scarcely possible perhaps to imagine the comfort which was afforded in this instance by the small quantity of fuel we were provided with, as it enabled us to furnish Captain Sabine with one or two warm messes which chiefly contributed to his recovery; and we, therefore, determined to use no more of our wood except under similar circumstances.

It continued to blow and snow till seven P.M., when the wind having veered to the S.W., and become more moderate, we struck the tents; and having now placed the men's knapsacks on the cart to enable them to drag with greater facility, we proceeded on our journey to the northward. We passed a narrow but deep ravine lying across our course, in some parts of which the snow reached nearly to a level with the banks, forming a kind of bridges or causeways, on one of which we crossed without difficulty. The men had hoisted one sail upon the cart at first setting off; but the wind being now, as they expressed it, "on the larboard quarter," a second blanket was rigged as a main-sail, to their great amusement as well as relief.

After crossing a second ravine, on the north side of which the ground rose considerably, we entered upon another snowy plain, where there was nothing to be seen in any direction but snow and sky. To make it the more dreary, a thick fog came on as the night advanced, and as this prevented our taking any mark more

than fifty or a hundred yards a-head, we had to place the compass, by which we were now entirely travelling, upon the ground every five minutes; and as it traversed with great sluggishness, we made a very crooked and uncertain course. For more than two hours we did not pass a single spot of uncovered ground, nor even a stone projecting above the snow.

The weather being at length too foggy to proceed, we sat down on our knapsacks for a short time, and then continued our journey, the fog being somewhat less thick. At one A.M. on the 5th, we came to a few large stones sticking up above the snow, and as the people were a good deal fatigued, and I was at the same time desirous not to run the risk which might be incurred by suffering them to lie upon the snow, we determined to try what could be done in picking out the stones, one by one, and paving a spot for the tents over it. This plan succeeded, and after an hour's work we completed a dry, though hard flooring for our encampment. This being properly our dinner-time for the 4th of June, though our meal had been unavoidably delayed beyond that day, we did not forget to drink His Majesty's health in both tents, not aware at the time that our venerable Monarch had many months before paid the debt of nature.

The fog continued too thick to allow us to move still six A.M., at which time we resumed our journey. There was a broad and distinct haze-bow of very white and dazzling light directly opposite the sun. The weather being still too foggy to see more than a quarter of a mile a-head, it was with considerable difficulty that we could proceed on a tolerably straight course. To effect this, it was necessary to determine the point on which we were walking by the bearing of the sun, which was still visible, and the apparent time, and then to take a mark a-head by which our course was to be directed. From the thickness of the weather, however, it was necessary to repeat this operation every five or ten minutes, which, together with the uniform whiteness and intense glare of the snow, became so extremely painful to the eyes, that Mr. Fisher and myself, who went a-head as guides, soon became affected with snow-blindness, and the headmost man at the cart, whose business it was constantly to watch our motions, began to suffer in a similar manner, and from the same cause. We had now also frequent occasion to experience—what had so often occurred to us during the winter,—the deception occasioned in judging of the magnitudes, and consequently the distances of objects, by seeing them over an unvaried surface of snow; this deception was now so much increased by the thickness of the fog, that it frequently happened that, just, as we had congratulated ourselves on having pitched upon a mark at a sufficient distance to relieve us from the necessity of straining our eyes for a quarter of an hour, we suddenly came up

to it; and were obliged to search, and often in vain, for another mark, at no great distance, and subject to the same delusion.

It may, perhaps, be conceived, then, under these circumstances, how pleasing was the relief afforded by our seeing, at eight A.M., a stripe of black or uncovered land ahead, which proved to be the bank of a ravine fifty or sixty feet deep, and three hundred yards wide, on the north side of which we pitched the tents, having made good only one mile and a half, the snow being so soft and deep as to make it difficult to drag the cart through it. This ravine was full of innumerable masses of sand-stone, besides which we could not find a single mineral substance of any other kind. By removing any of these, we found abundance of pure water, which tempted us to take this opportunity of cooking the grouse we had killed, on which we made a most sumptuous meal before we retired to rest.

The latitude observed here was 75° 22′ 43″, and the longitude, by the chronometer, 111° 14′ 26″, in which situation a cylinder of tin, containing an account of our visit, was deposited under a pile of stones eight feet high, and seven feet broad at the base. At half past five P.M. we continued our march in a north-easterly direction, the wind being moderate from the S.S.E., with fine weather. Another of our party complained of snow-blindness, which always continued to be very painful during the time we were walking, but was generally relieved by the usual cool bathing and a few hours' rest. Our people were all supplied with crape veils, which, I believe, saved us a good deal of uneasiness from this complaint.

On leaving the ravine, where we had last halted, we had entered on another snowy plain similar to those I have before described; and, after travelling several miles over it without a single object to produce variety, or to excite interest, came at length to a rising ground at half past eleven, from which we descried some dark-coloured ground to the north-eastward, and shortly after some higher land at a considerable distance beyond it, in the same direction. The intermediate space looked like a sea covered with ice, or a very level snowy plain, and we were once more puzzled to know which of these two it would prove. Having reached a good dry spot for the tents, with plenty of water in the neighbourhood, we halted at midnight, having marched seven miles and a half in a N.b.E. direction by account, but much more easterly by subsequent observations. I cannot help remarking in this place how extremely liable to error any account must necessarily be of the course and distance made good during even a single day on a journey of this nature. We had long been in the habit of deducing all our bearings and courses on board the ships astronomically, that is, by the azimuth of the sun and the apparent time; and when I set out on this journey I had conceived that this habit would have enabled me to make tolerably certain at least of the direction in which

our daily journey had been performed, whenever the sun should be visible. That this was by no means the case, though every possible attention was paid to it, will appear clear from an inspection of our track upon the map, which is laid down by the actual observations of two separate persons from day to day, and in which no material error could have occurred. My reason for dwelling upon this circumstance is to point out the extreme liability to error in laying down by account the position of any point at which a traveller may arrive after a journey of several hundred miles. This remark I cannot but consider to be peculiarly applicable to the journey of Hearne from the Hudson's bay settlements to the shores of the Polar Sea, on the northern coast of America, in many hundred miles of which, and particularly in the most interesting part, not a single observation for latitude and longitude, or the variation of the magnetic needle, was obtained, whereby his daily estimate could be corrected. Should, therefore, the geographical position assigned by Hearne to the Copper mine River be found at all near the truth, more especially in longitude, it will prove an extraordinary instance of the tendency of errors to correct each other; such as, I believe, does not often occur, when the distance gone over is so considerable, either by sea or land.

The wind increased to a fresh breeze from the S.S.E, with a sharp frost, making it very cold in the tents, which we therefore struck at four A.M., on the 6th, and at the distance of half a mile came to the summit of a hill overlooking what appeared to be a frozen sea before us. The distant high land beyond it to the north-east, now appeared a separate island, which it afterwards proved to be, and which I named after my friend and fellow-traveller, Captain Edward Sabine, of the Royal Artillery. The brow of this hill, which, from the best estimate I could form, appeared to be from four to five hundred feet above the level of the sea, was covered with large masses of sandstone, over which we could scarcely get the wheels of the cart. We then descended the hill, with the intention of pushing forward to determine whether the white and level space before us was the sea or not. We had not proceeded far, however, when the clouds began to gather heavily in the south-east, and shortly after snow and sleet began to fall. Being unwilling, therefore, to allow the men's clothes to be wet, when there was no absolute occasion for it, we halted on a piece of dry ground, and, having built a wall six feet high to shelter us from the weather, pitched the tents very comfortably under the lee of it, till the weather should allow us to proceed.

We have saw one or two flocks of geese, which, to judge from those which we afterwards killed, were probably brent-geese (*Anas Bernicla*), and were the first living animals we had met with for two or three days. We had occasionally, during that time, seen upon the snow the tracks of a solitary deer, but even these seemed

now to have deserted a place so totally devoid of vegetation, that for miles together we scarcely met with a tuft of moss or a single poney on which they could have fed. The tracks of foxes and mice were also occasionally seen, but we did not meet with any of these animals in this dreary and uninteresting part of our journey.

At six P.M., the wind having gradually got round to the N.N.E., and the weather being more clear and cold, I set out, accompanied by Messrs. Nias and Reid, and a quarter-master of the Griper, with the intention of examining the situation and appearance of the sea to the northward; leaving the rest of the party, several of whom were suffering from snow-blindness, though otherwise in good health, to remain quietly in the tents till our return. Having travelled N.N.W. a mile and a half through much deep snow, of which a good deal had fallen during the day, we came to some ice thrown up on the beach, having cracks in it parallel to the line of the shore, which we immediately recognised to be of the same kind as those to which we had so long been accustomed in Winter Harbour, and which are occasioned by the rise and fall of the tide. Such, however, was the sameness in the appearance of the sea and of the low shelving shore interposed for two or three miles between it and the hill we had descended in the morning, that, had it not been for the circumstance I have just mentioned, we should still have been in great doubt respecting the nature of the level space to the northward. The place where we came to the sea happened to be near the outlet of a ravine, and the upper surface of the ice was here covered with pools of fresh water, which had probably been formed by the streams from the ravine, and which at a little distance appeared, as usual, of a beautiful blue colour. We turned to the westward along the beach, and at the distance of two miles ascended a point of land in that direction, from whence we had a commanding view of the objects around us. As soon as we had gained the summit of this point, which is about eighty feet above the sea, and was named after Mr. Nias, we had an additional confirmation that it was the sea which we had now reached, the ice being thrown up on the beach under the point, and as far as we could see to the westward, in large high irregular masses, exactly similar to those which had so often afforded us anchorage and shelter upon the southern shores of the island. Being desirous, however, of leaving nothing uncertain respecting it, we walked out a few hundred yards upon the ice, and began with a boarding-pike and our knives, which were all the tools we had, to dig a hole in it, in order to taste the water beneath. After nearly two hours' labour, however, we could only get down as many feet, the ice being very hard, brittle, and transparent; more so, as we imagined, than salt-water ice usually is, which made us the more desirous to get through it. I, therefore, determined to return to our people, and to remove our encampment to Point Nias, for the purpose of

completing the hole through the ice with all our hands, while we were obtaining the necessary observations on shore.

On our return to the tents, we dined, and rested till one o'clock on the morning of the 7th, when we set out for the Point, at which we did not arrive till half-past four, the snow being here so deep as to make the cart an improper, and, indeed, almost impracticable, mode of conveying our baggage. It froze all day in the shade, with a fresh breeze from the north, and though the tents were pitched under the lee of the grounded ice upon the beach, we found it extremely cold; all the pools of water were frozen hard during the night, and some of our canteens burst from the same cause. The people were allowed to rest after their supper till four P.M., and were then set to work upon the ice, and in building a monument on the top of the Point.

The latitude observed here was 75° 34′ 47″, the longitude 110° 35′ 52″, and the variation of the magnetic needle 235° 03′ 55″ easterly. A series of angles and astronomical bearings was here obtained for the survey of the coast, and for determining the position of Sabine Island, the north-western point of which, being a bluff headland, was, by Captain Sabine's desire, named after Colonel Mudge, of the royal artillery, one of the commissioners of longitude. The land to the westward of Point Nias, sweeps round into a large bay, terminating to the north-westward, in a bold cape bearing N. 43° W., and distant from six to eight leagues, which I named after Mr. Fisher. The easternmost point of Melville Island, here visible, was a low projecting point bearing S. 77° E., and distant eight or nine miles, which was called Point Reid, after the gentleman of that name, who accompanied us.

A continuous line of very large hummocks of ice extended from Point Nias, about two miles and a half in a N.N.E. direction; they were the kind of hummocks which always indicate the ice having met with resistance by grounding; and I have little doubt that a reef is clearly marked out by them. What makes this more probable is, that in the whole space between Points Nias and Reid, the ice near the shore seemed never to have been disturbed by any pressure upon it, being, perhaps, defended by the reef from the floes coming in from the north-west; while the whole of the shore, as far as I could see with a glass, to the westward of Point Nias, bore evident marks of that tremendous pressure which is produced by fields of ice when set in motion.

The floe of ice proved to be fourteen feet four inches in thickness, and it was ten at night before our people got through it, so as to admit the water; it then flowed up within fifteen inches of the upper surface of the ice, by which some idea may be formed of the specific gravity of the latter. The water was not very salt, owing probably to its acquiring a degree of freshness, in forcing itself through an aperture so small as to require three quarters of an

hour to fill up the hole to its proper level; a small quantity of it, however, was sufficient to convince each of us, that it was the sea upon which we were standing, and a canteen was filled in order to try its specific gravity on our return to the ships. The thickness of the ice on this coast, as compared with that in Winter Harbour, the former being double that of the other, may at first sight appear to be an indication of a more severe climate on this than on the southern coast of Melville Island; but this circumstance is easily accounted for by observing, that the ice of a harbour is, as we know by experience, the formation of a single winter; whereas, on an open and exposed beach, like that of Point Nias, the last year's, or sea-ice, is at liberty to fix itself in the autumn, forcing up the masses which we see aground in all such situations, and increasing, in the course of the ensuing winter, to the thickness which we here found it to be. Had we accidentally come to any bay or harbour, secure from the access of the floes from without, and of the same depth as Winter Harbour, I doubt not we should have found the ice in it of nearly the same thickness.

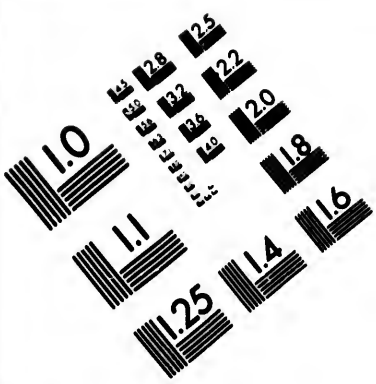
We saw nothing living in this spot except a flock of five or six ducks, none of which were killed. There was scarcely any thing except a little stunted moss and some lichens, which deserved the name of vegetation; and the only exception to the tiresome monotony of sandstone which had occurred for many days past, consisted in two or three pieces of red granite, and of red and white feldspar, which several hours' search enabled us to find. Two pieces of drift-wood were also found upon the beach, from ten to twenty feet above the present level of the sea; they were both pine, one of them being seven feet and a half long, and three inches in diameter, and the other much smaller. They were both partly buried in the sand, and the fibres were so much decayed and separated, as to fall to pieces upon being taken hold of.

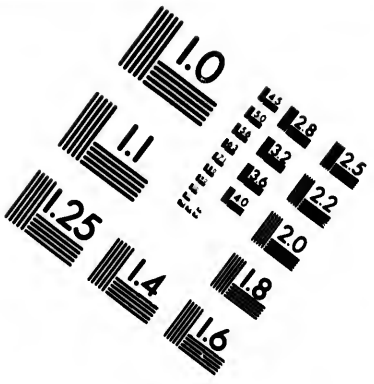
We dined at midnight; and at half-past one A.M., on the 8th, struck the tents, and drew the cart to the higher part of the Point, where we occupied two hours in completing our monument, which is of a conical form, twelve feet broad at the base, and as many in height. Within it were deposited a tin cylinder, containing an account of the party who had left it, and one or two silver and copper English coins. This monument may be seen at several miles' distance from the sea or land side; and, as great pains were taken by Mr. Fisher in constructing it, it may probably last for a long period of years.

Having now satisfactorily determin[illegible] the extent of Melville Island to the northward upon this m[illegible]n, which corresponds very nearly with that of Winter Harbour, and finished all the requisite observations, I proposed pursuing our journey towards the Blue Hills, which were still in sight at the distance of several leagues to the westward; and having advanced to the south-west

as long as circumstances should appear to make it interesting or practicable, to return by a circuitous route to the ships. We travelled in a W. ½ S. direction, in order to keep on a ridge along the coast, which afforded the only tolerable walking, the snow being very deep on the lower parts of the land. We had to-day frequent occasion again to notice a strong smell produced by the wheels of the cart going over the blocks of sandstone, similar to that of fetid limestone when recently fractured. We halted at half past seven A.M. on a fine sandy ground, which gave us the softest, as well as the driest, bed which we had yet experienced on our journey, and which was situated close to a little hillock of earth and moss, so full of the burrows of hares as to resemble a warren. We tried to smoke them out by burning port-fire, but none appeared; and it is remarkable that, though we constantly met with the dung of these animals, especially in this place, where it occurred very abundantly, we never saw one of them during the journey. As soon as we had halted, we found that Mr. Reid's knapsack had dropped off the cart; he had, therefore, to go back to look for it, and did not return till eleven o'clock, being so much affected by snow-blindness as to be scarcely able to see his way to the tents. This circumstance was sufficient to shew the advantage, and even the necessity, of travelling entirely by night under these circumstances, the intense glare of light from the snow during the day inevitably producing this painful irritation in the eyes. Our present station, which was about half a mile distant from the sea, commanding an open view of Sabine Island and Cape Fisher, and the weather being very clear for observations, a short base was obtained for the survey, between this and point Nias. The only birds we saw here were a pair of ptarmigans, which were killed by Mr. Fisher. There was some moss, and a few short tufts of grass; and we found, for the first time this season, the *Saxifraga oppositifolia* coming out in flower, a remark which I afterwards found to occur in the Hecla's Meteorological Journal at Winter Harbour on the following day.

At a quarter past five P.M. we resumed our journey to the south-west, and soon after crossed a snowy plain a mile and a quarter in breadth, extending to the sea to the north, and as far as the eye could reach to the south. When we had travelled five miles, we began to ascend considerably, and were now entering upon the Blue Hills, the higher parts of which, however, were three or four leagues distant to the westward of us. Having travelled S.W.b.W. seven miles, we halted, at half an hour before midnight, at the distance of three or four miles from the sea, the weather being very clear and fine, with a moderate breeze from the S.S.W. During the last march we passed over much uneven ground, of which a great deal was extremely wet; moss, saxifrage, and short tufts of grass here became more abundant, and, interspersed among the former, some sorrel began to make its appearance. One or





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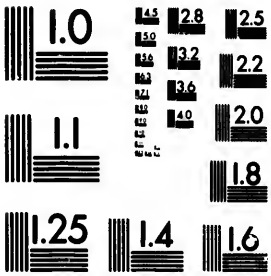

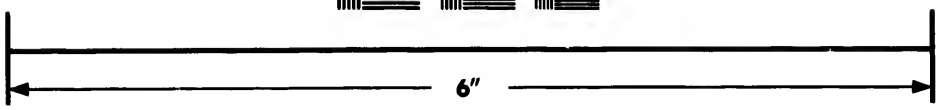

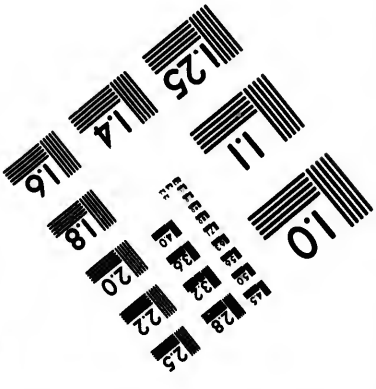

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bled them to set on the cart. Two other ravines occurred within three quarters of a mile, apparently connected with the large one, and which it required our utmost exertion to cross, the water being higher than our knees in the middle, and the whole of the sides of the ravine covered with deep and soft snow, into which the wheels of the cart sunk nearly to the axle, so that we could only get it across by what sailors call "a standing pull." The men having got their trowsers wet, we continued our journey till half past eleven, to give them a chance of drying, and then halted, having only travelled four miles in a S.W. direction. We met with abundance of sorrel in some parts of this journey; its leaves were as yet scarcely the size of a sixpence, and almost entirely red. A few ptarmigans and a couple of geese were all the living animals seen, but we passed several tracks and horns of deer.

At half past two A.M., on the 10th, we struck the tents, and proceeded to the S.W., the wind having got round to the S.E., with continued snow. At the distance of two miles we entered upon a level plain three miles wide, which, with the exception of a patch here and there, was entirely covered with snow. The uncovered parts of this plain were so wet as to be almost impassable for the cart; and we were now as desirous of keeping on the snow as, at the beginning of our journey from Winter Harbour, we had been anxious to avoid it. The plain terminated by a ravine, on the south bank of which, finding good ground for the tents, and plenty of water, we halted at a quarter past seven, being in latitude by observation 75° 20′ 54″, the longitude by account 111° 48′ 15″.

The weather continued hazy, with snow occasionally, but our clothes dried in the sun towards noon; soon after which, however, the snow became more thick and constant, so that we could scarcely see a hundred yards around the tents. We waited for some time in hope of the weather clearing, and then, at a quarter past five, continued our journey; as we were under the necessity, however, of directing our course entirely by compass, which is here a very uncertain and deceitful guide, we made but a slow and tedious progress. The wind freshened up to a gale from the S.E. soon after we had set out, which made it impossible for us any longer to pursue our journey, and we began to look out for a spot on which the tents could be pitched, so as to afford us a dry flooring, if not shelter, during the gale. Having crossed three ravines within a mile and a quarter, we at length came to a very deep one, which was nearly perpendicular on each side, with the snow overhanging in some parts, so as to make it dangerous to go near the edge of the bank. We were at length fortunate in finding a narrow, sloping [illegible] of snow, leading down to the bottom of the ravine, and having descended this with some difficulty, we found such good [illegible] to determine me to halt here for the night, which now [illegible] more and more inclement. The bottom of the ravine, [illegible]

[illegible] not much water, abounded with schistose sandstone, with which a dry and comfortable flooring was soon paved for the tents, taking care to pitch them at a sufficient distance from the north bank of the ravine, under which a number of large masses of snow were lying, which had lately fallen from the over-hanging part of the cliff, not less than eighty or a hundred feet perpendicular in this place.

The weather continued very inclement during the night, but we were so well sheltered as to be very comfortable in the tents, which answered every purpose for which they were intended, and without which no warmth could have been obtained while resting. I may also here remark, that the mode we had adopted with the blankets, by making them into bags, appeared the warmest, and in every respect the most comfortable as well as convenient which could have been devised. The wind gradually veered to the N.N.W. on the morning of the 11th, and the weather having cleared up about half past four we struck the tents, and set off to the southward. The south bank of the ravine being nearly as steep, and much higher than the other, it was with considerable labour and difficulty that we were able to get the cart up it, in which, however, we succeeded by six o'clock, when we found that we were travelling on much higher ground than before, overlooking that which we had left the preceding evening. Having proceeded four miles over a level country, with [illegible] snow upon it, we suddenly and unexpectedly came in sight of [illegible] or a lake, at the distance of two or three miles before us, [illegible] appearing between two high and steep hills which terminated a [illegible] broad ravine. In a short time, we opened out an island, [illegible] soon recognised to be the same which we had seen to [illegible] of us, on our journey to the north, and which we [illegible] to be situated in this lake or gulf. We hastened for- [illegible] point of the nearest hill, from whence the prospect was [illegible] grand and picturesque. We were looking down nearly [illegible] from a height of eight or nine hundred feet, on an [illegible] plain of ice, of which, to the westward, we could perceive [illegible] for a distance of five or six leagues, the prospect to the eastward being obstructed by other hills. A thick mist or vapour was at times carried rapidly along by the wind over this ice, to which it was entirely confined, occasionally covering the top of the island with a dense cloud. The impression made upon our minds at the time was, that it was a frozen lake on which we were now looking, but this conjecture, as it afterwards appeared, proved erroneous. The ravine at which we had arrived discharges its [illegible] a snug cove two or three miles deep, which was named [illegible] and at the head of which we now proposed [illegible] a place could be found at which our descent into the ra- [illegible] be effected. The sides of the ravine, which were very [illegible] covered with innumerable blocks of sandstone of every

size and shape, over which alone any road could be formed to the cove below. It was necessary, therefore, to make the attempt, but it was impossible for the best built carriage to travel long on such a road; and when we had half descended the bank, which led into the ravine on its north side, the axle-tree broke short in the middle. The baggage was therefore taken off, and carried down to the bottom, where the tents were pitched at eleven A.M., the wheels being left where the cart broke down, as soon as we arrived.

The latitude observed here was 78° 12′ 50″, the longitude by chronometer, 111° 50′ 05″, and the variation of the magnetic needle 125° 12′ 29″ easterly. The wind being fresh from the N.N.E., and the weather being cold and raw, we built a wall to windward of the tents, as a substitute for the usual shelter afforded by the cart; after supper, the people being a good deal fatigued, were allowed to rest till near midnight, and then employed in arranging the baggage, so as to carry it on our shoulders for the rest of the journey. We saw here a great number of brent-geese, some ptarmigan, and many snow-buntings; the constant and cheerful note of the latter reminded us of a better country. The wood which composed the light frame-work of the cart being now disposable as fuel, we were glad to make use of it in cooking a few ptarmigan, which afforded us another sumptuous meal. It is not perhaps easy for those who have never experienced it to imagine how great a luxury any thing warm in this way becomes, after living entirely upon cold provisions for some time in this rigid climate. This change was occasionally the more pleasant to us, from the circumstance of the preserved meats, on which we principally lived, being generally at this time hard frozen, when taken out of the canisters.

Having finished our arrangements with respect to the baggage, which made it necessary that each of the men should carry between sixty and seventy pounds, and the officers from forty to fifty, we struck the tents at half past two on the morning of the 12th, and proceeded along the eastern shore of the Cove, towards a point which forms the entrance on that side. The rocks in this place, which here approach the sea within fifty yards, were composed of slate-stone in horizontal strata; and, in many parts of the cliffs which overlook the Cove, their appearance resembled more the ruins of buildings than the work of nature. Large fragments of stone, which had fallen from above, were strewed about at the base of these precipices, filling up nearly the whole space between them and the beach. The head of Bushnan Cove is one of the pleasantest and most habitable spots we had yet seen in the arctic regions, the vegetation being more abundant and forward than in any other place, and the situation sheltered and favourable for game. We found here a good deal of moss, grass, dwarf-willow, and saxifrage, and Captain Sabine met with a ranunculus in full flower.

We arrived at the Point at five o'clock, and as we could now

perceive that the lake or gulf extended a considerable distance to the eastward, as well as to the westward, and that it would require a long time to go round in the former direction, I determined to cross it on the ice; and as the distance to the opposite shore seemed too great for one journey, the snow being soft upon the ice, first to visit the island, and having rested there, to proceed to the southward. Having walked five miles in a S.S.W. direction, we landed at seven A.M., near the south-east part of the island, which I named after my friend Mr. Hooper. We had now little doubt that we had been travelling over a gulf of the sea, as we had not seen any land enclosing it to the westward, for more than two points of the compass, the weather being very clear; but as nothing could make this absolutely certain but tasting the salt water, I had just signified my intention of occupying the rest of the day in digging a hole through the ice for this purpose, when one of the party having gone to a pool on the floe for some water to drink, found it to be quite salt, and thus saved us any further trouble or doubt respecting it. The wind was fresh from the westward, and the tents were pitched near the beach, under the lee of the high part of the island. Captain Sabine and myself, having ascended to the top, which is on the east side from five to six, and on the west, about seven hundred feet above the sea, and in many parts nearly perpendicular, we had a commanding view of this fine gulf, which I named after my much-esteemed friend and brother-officer, Lieutenant Liddon. The entrance of the gulf to the westward was now very apparent, the head-lands which appeared to terminate its north and south shores, being distant from us from five to seven leagues. I named them after Lieutenants Beechey and Hoppner, and their astronomical bearings were S. 86° W., and S. 65° W. respectively.

The northern shore of Liddon's Gulf, being the termination of the Table-hills to the south-west, is high, bold, and precipitous as far to the eastward as Bushnan Cove, and its formation appeared, with Sabine, to be the same as in that neighbourhood; beyond this, to the westward, the land becomes low, and the gulf takes a bend to the north-east. In this direction we could not distinguish its extent, but we must have passed at no great distance from the head of it on the 4th. A bluff cape on this shore, which is seen very conspicuously on a clear day from the Table-hill of Winter Harbour, was named after Mr. Edwards, who had been the first among us to conjecture from its appearance, that water would be found at its foot. Immediately to the westward of Cape Edwards the land recedes, forming a bay, called Barry's Bay, of which our situation and distance did not allow us to see the extent. We found that the nearest land to us on the opposite shore was not on the south coast of the gulf, as we had supposed, but a point to the E.S.E., for which it was, therefore, proposed that we should next cross the

ice: the south shore is all high and steep, but [illegible] the north; its nearest part was seven or eight [illegible].

Hooper's Island is principally composed of the [illegible] sand-stone as the adjacent shores; on the [illegible] ever, we also found a great deal of clay [illegible] lour from fine chocolate to dark blue, [illegible] bly compact and heavy; and several lumps [illegible] crystallised carbonate of lime, were [illegible] met with little or no vegetation, a few [illegible] I believe, all that occurred in that [illegible] brent-geese on the beach, of which [illegible] four pounds each when shot, and [illegible] dressing. We saw also several grouse, a [illegible] large, whose lively note still saluted us [illegible] and an ivory gull. The latitude, observed [illegible] 05′ 13″; the longitude, by chronometer [illegible] tion of the magnetic needle 123° 47′ 58″ [illegible].

We rested till six P.M., and then set off [illegible] point. The snow had now become so [illegible] the day, that, loaded as we were, we [illegible] which made travelling very laborious, [illegible] sorry to get on shore by half-past eight [illegible] account, three miles and a half. [illegible] but they were too shy to allow our [illegible]. We directed our course to the sou[illegible] land interposed between the sea and [illegible] appearance at the back, and which is [illegible] long in a north-east direction, and a quarter of a mile [illegible] communicates with the gulf by a narrow [illegible] yards across, which, as well as the lagoon, was [illegible] ice over. In this neighbourhood we passed [illegible] feet of the trunk of a small pine-tree, [illegible] present level of the sea. We passed [illegible] a musk-ox, frozen hard into the ground [illegible] very rich, and abounded with the [illegible] deal of grass, saxifrage and poppy [illegible] covered the ground shewed it to [illegible] musk-oxen, and hares: the tracks [illegible] and recent. We halted at half-past eleven, [illegible] distant from us five miles and a half in a W. [illegible] night was remarkably clear and fine, with a [illegible] westward.

The spot on which we encamped appeared so favourable [illegible] taining specimens of the different animals which freq[illegible] that I determined to remain here one day for the pur[illegible] ing and examining its natural productions. The lat[illegible] of the tents was 75° 08′ 29″, the longitude, by the [illegible],

[illegible] variation 126° 01′ 48″ easterly; from this [illegible] were obtained for the survey of the [illegible]

[illegible] went out early in the morning, and [illegible] feeding on a spot of luxuriant pasture [illegible] dung of these animals, as well as of deer, [illegible] considerable distance, without wounding [illegible] quick pace over the hills. The musk- [illegible] very ill-proportioned little animal, its [illegible] feet appear only two or three inches [illegible] to be treading upon it at every step, [illegible] actually did so in some instances, [illegible] of the foot-tracks. When dis- [illegible] tore up the ground with their [illegible] to look at their pursuers, but [illegible] any of them. Our gentlemen also [illegible] deer, three only of which had horns, [illegible] of the herd, and constantly drove [illegible] attempted to stop. The birds seen by [illegible] geese and ptarmigans, several golden [illegible] "boatswains" (*Lestris Parasiticus*), and abun- [illegible] One or two mice (*Mus Hudsonius*) were [illegible] we had seen, these were turning brown [illegible] the back was of a dark grey colour [illegible] which we travelled, the holes and [illegible] occasionally seen; one of them [illegible] finding no hole near, and that he [illegible] against a stone, as if endeavouring to [illegible] finger when he took hold of [illegible]

[illegible] of three-quarters of a mile to [illegible] in a hundred yards of the sea, the [illegible] huts were discovered; they consisted [illegible] in diameter, constructed irregularly [illegible] and raised to the height of two [illegible] paved with large slabs of white [illegible] re abundant; the moss had spread [illegible] the growth of three or four years, [illegible] was a small separate compartment [illegible] which had probably been their [illegible] distant from one of the huts was a [illegible] had composed the fire-place, the [illegible] upon them. The huts which we [illegible], as well as those which [illegible] in 1818, had each one of [illegible] there was also a separate [illegible] which the ptarmigan [illegible]

had lately taken up their abode, and which [illegible] fire-place. If the Esquimaux derive any part [illegible] from the land, and are under the necessity of [illegible] latitude in quest of it, they will, perhaps, [illegible] for a month or six weeks than in this [illegible] no doubt that, in the months of July and A[illegible] in great plenty. It is scarcely possible, [illegible] that these people could long subsist on [illegible] the summer season being much too short [illegible] sufficient stock of provisions for a long [illegible] remarked by Captain Sabine and Mr. [illegible] on Byam Martin Island, that the huts we [illegible] peared to be more recently deserted than [illegible]

The day was fine and clear, with a [illegible] westward till four P.M., when it died away, and [illegible] succeeded by a breeze from the southward, with a [illegible] When we were setting off to the southward, a [illegible] came towards the tents, but we did not succeed [illegible] them. We now travelled due south with the [illegible] sight of the Table-hills, and returning by that [illegible] as there appeared to be nothing more within our [illegible] interest to detain us any longer from them. At [illegible] ing that the people's clothes were [illegible] wet [illegible] sleet which fell, we halted and pitched the tents [illegible] freshened up to a strong breeze from S.E.b.S. [illegible] very inclement. There was here a great deal [illegible] the soil, and the sandstone began to be almost [illegible] ish colour.

Early in the morning of the 14th, the wind [illegible] ward, and the weather became gradually more [illegible] continued our journey to the southward, and [illegible] several ridges of high ground lying across [illegible] some ravines lying in a N.E. and S.W. [illegible] of the Table-hills bearing S.E. of [illegible] the tents on some dry ground [illegible] the men complained of [illegible] occasioned, as I supposed, [illegible] of very cold water [illegible] relieved, however, by a [illegible] had now completely [illegible] seen, were [illegible] day like [illegible] P.M., and [illegible] running generally [illegible] lately, [illegible] of [illegible] was almost [illegible] sandstone, we [illegible] had hitherto met [illegible]

change when the former would be found to commence, but we met with none of it till within a few hundred yards of the hills, when it began to occur in small pieces lying on the surface, with a little granite and feldspar, the soil being still quite sandy. We halted between the Table-hills at ten o'clock, having travelled eight miles over very swampy ground, and with the snow up to our knees in some of the hollows. We met with no living animals during this part of the journey, and it may be remarked, generally, that we found the game of every kind more abundant near the sea than inland, except on the north coast of Melville Island, which is supposed to afford them subsistence.

We had the misfortune of remaining here till after noon on the 15th, to obtain observations for determining the situation of the Table-hills, the easternmost of which is the most conspicuous object on this part of the coast, as well as a mark for the anchorage in the Bay of Mercy. Hecla and Griper, the people were employed early in the morning in carrying stones to the top of it, where a monument ten feet high, and the same in breadth at its base, was erected by Mr. Fisher, and a copper cylinder, containing a full account of our visit, deposited beside it. In the meantime, Captain Sabine and myself were employed in obtaining the necessary observations, by which the latitude of the hill was found to be 74° 48′ 33″, its longitude 113° 11′ 49″, and the variation of the magnetic needle 123° 05′ 30″ Easterly. Having before given some account of the minerals found in the neighbourhood, I shall only add on this subject, that, among the mineralogical specimens now added to our collection, was a piece of fossil wood, found at the foot of the westernmost of the two hills, lying loosely and separately upon the sand. It may be imagined that we looked anxiously towards the sea for any appearance of ships in the offing, but nothing of this kind was visible. The prospect was a commanding one, as far to the westward as N.W. bearing.

As soon as the observations were completed, we set off for Winter Harbour, and having passed over much rich and wet ground, abounding with sorrel, which now began to put forth its leaves with more vigour, arrived on board at seven P.M., having been met, and welcomed most heartily, by almost every officer and man belonging to the ships; and it is was no small satisfaction to me to hear it remarked, that the whole of our travelling party appeared in more robust health than when we left them.

CHAPTER IX.

Occurrences at Winter Harbour in the early Part of June—Gradual Dissolution of the Ice upon the Sea, and of the Snow upon the Land—Hunting Parties sent out to procure Game—Decease and Burial of William Scott—Equipment of the Ships completed—Temperate Weather during the Month of July—Breaking up of the Ice near the Ships—Move to the Lower Part of the Harbour—Separation of the Ice at the Entrance—Prepare to Sail—Abstract of Observations made in Winter Harbour.

I HAD the happiness to find, on my return, that the officers and men in both ships continued to enjoy the same good health as before, with the exception of Scott, who was still the only man in the Hecla's sick-list, and whose complaint seemed such as to baffle every attempt that had been made to produce an amendment. A constant disposition to fainting and a languid sort of despondency had been, for some time past, the only symptoms which induced Mr. Edwards to continue the anti-scorbutic treatment, and this it was sometimes absolutely necessary to discontinue for a day or two together, on account of the weak state of his bowels. During my absence he had been much worse than before, notwithstanding the greatest care and attention paid to him, but he was now quite more better. He had lived almost entirely on the ptarmigan and ducks, of which a sufficient quantity had been procured to serve the sick and convalescent in both ships abundantly, and none had at this time been issued to any other officer or man in the expedition.

The equipment of the ships had gone on satisfactorily during my absence, the Griper being nearly ready for sea, the Hecla not quite so forward, on account of the heavy work with the ballast, of which sixty-five tons had been brought on board to supply the deficiency of weight in her holds. The survey of the provisions, fuel, and other stores was completed, and the quantity and condition of them, with the exception of the lemon-juice and vinegar before mentioned, were found to be satisfactory. Indeed, the whole of the provision was ascertained to be as good as when it came out of store, more than twelve months before, except a small quantity of bread and of sugar on the outside part of a few casks, on which a little moisture appeared, and which made it expedient to use those articles first. This excellent state of our provisions must, independently of the antiseptic properties of a cold climate, which is unfavourable to the process of putrefaction or the accumu-

lation of vermin, be mainly attributed to the care which had been taken to supply us with every article of the best quality, and to pack the whole in strong, tight casks, which were at once impervious to water, and less liable to damage by accidents in the hold. With respect to vermin, I may here mention, that not a mouse, or rat, or maggot of any kind, ever appeared on board, to my knowledge, during this voyage.

A very perceptible change had taken place in the ice of the harbour on its upper surface, it being covered with innumerable pools of water, chiefly brackish, except close in-shore, where the tides had lifted the ice considerably above the level of the sea.

Previously to the continuance of the narrative of occurrences subsequently to my return from the land-journey, it may be proper to give some account of the observations made on board the ships by Lieutenants Liddon and Beechey, during my absence from Winter Harbour.

From these it appears, that the first red phalarope, (*Phalaropus Platyrinchos*), and also the first flock of snow-buntings which had been observed at Winter Harbour this season, were seen on the 2d of June. It is perhaps worthy of remark that, from eight P.M. on the 1st, till midnight on the 2d, being an interval of twenty-eight hours, the mercury in the barometer remained steadily at thirty inches, without varying a single hundredth. The weather was cloudy, and the wind rather variable, though moderate from the northward and westward during that time, and two or three fine days succeeded it, though with some appearance occasionally of rain or snow.

A flock of twelve king-ducks, flying to the north-east, together with a single raven and an arctic gull, made their appearance on the 3d, and a golden plover was also killed, and a few others seen on that day. The thermometer rose in the shade from 29° at 4 A.M., to 43° at noon, which is one of the greatest changes that was experienced in the course of one day at this part of the scale.

On the 4th, Lieutenant Liddon caused His Majesty's birth-day to be commemorated in the best manner that the situation of the ships would permit, by hoisting the ensigns and pendants, and directing full allowance of provisions to be served to the crews. It is remarkable that, at Winter Harbour, the weather was fine, and the wind moderate from the S.S.W., during the 4th, while, at a few leagues' distance to the northward, we experienced a hard gale from the southward, with continued snow and a heavy drift. On the 5th, the officers remarked a more perceptible thaw than before, both on shore and on the ice, many pools of water having appeared in new places on the latter, and the snow disappearing fast from the land, though no streams of water were yet seen in the neighbourhood of Winter Harbour. Flocks of ducks and geese were from this time seen almost daily for the next six weeks, except im-

mediately about the ships, from which the game of every kind was scared soon after their arrival from the southward.

On the 7th, Lieutenant Liddon walked over the ice to the entrance of the harbour, where there was not even so much alteration perceptible as about the ships; indeed, every thing remained exactly the same, to all appearance, as in the middle of winter. At five P.M., the weather being hazy, and a light shower of snow falling, a strongly prismatic rainbow appeared, a phenomenon of rare occurrence in these regions; it had, I believe, nothing about it different from those observed in other climates. On the 9th, the first seal was seen, lying upon the ice, near the mouth of the harbour, and having a hole close to him, as usual; as we never saw more than one of these animals here at a time, and that very rarely, it was common for us, whenever this did occur, to remark that *the* seal had been seen, and the same mode of expression was as naturally and more justly applied to the bear seen in the autumn soon after our arrival here. So few, indeed, are the animals in this neighbourhood, which either live in the sea, or derive their subsistence from it, that it is scarcely possible that the Esquimaux, who depend chiefly, if not entirely, upon them for provision, could long exist on the shores of Melville Island. About this time several mosquitoes (*Culex Pipiens*) were caught, but they were never of the least annoyance to us, as is the case on the shores of Hudson's Bay, and in other cold countries; nor, indeed, did I hear of any of our people having once been bit by them. The buds of the *Saxifraga Oppositifolia*, and of the dwarf-willow, were observed to be opening out on the 9th, and some of the sorrel to be in flower; a plant with a flower of a lilac colour, having a very sweet smell, and which we supposed to be a *Draba*, was also observed to be pushing out its blossoms about this time; but none of these plants were so forward as the saxifrage.

On the 11th, another instance occurred of a remarkable difference in the weather in Winter Harbour, and at no great distance to the northward of it, the weather being described in the Meteorological Journals of the ships, as very inclement, with a gale of wind from the westward, while, near Bushnan Cove we enjoyed a clear and moderate day. Some hares were seen, for the first time, to the eastward of the ships.

Some of the officers returned on the 14th, after an excursion of two days to the eastward, bringing with them three brent-geese, six brace of ptarmigan, and a golden plover, and having seen several hares. Mr. Beverly describes the soil upon the hills to be composed of clay, and the large masses of sandstone which are found on the surface as much impregnated with iron. The first rein-deer were seen from the ships this day; and it was conjectured by the officers, from the situation in which they were observed, and

from their setting off directly to the northward, that they had just landed upon the island.

Being desirous of procuring as much game as possible during the remainder of the time we might be destined still to remain in our present inactive state, and finding that the short daily excursions which our sportsmen were enabled to make in the usual way, did not take them to a sufficient distance from the ships for this purpose, I directed a party of officers and men to be prepared from each ship, under Lieutenants Beechey and Hoppner, to remain a few days out, at the distance of ten or twelve miles to the eastward and westward of the harbour, and to send in their game whenever any should be procured. They accordingly left the ships on the evening of the 16th, carrying with them tents, blankets, fuel, and the same allowance of provisions as was issued on board. Lieutenant Hoppner, who commanded the party which went to the south-west, was directed carefully to watch the ice, that any appearance of its breaking up might immediately be made known to me. Captain Sabine and his men were indefatigably employed during the day in pitching a laboratory-tent, having a marquee within it, for the reception of the clocks, it being his wish, now that the weather was more favourable for the purpose, to occupy the whole of the time which might elapse previously to the sailing of the expedition, in making a fresh series of observations for the pendulums. At half an hour before midnight, a triple rainbow appeared, the outer arch being quite complete, and strongly tinged with the prismatic colours; the second nearly perfect; and the inner one being only perceptible near its eastern leg.

A fog in the early part of the morning of the 17th, being dispersed by the warmth of the sun, the weather became fine and pleasant. Having observed that the sorrel was now so far advanced in foliage as to be easily gathered in sufficient quantity for eating, I gave orders that two afternoons in each week should be occupied by all hands in collecting the leaves of this plant; each man being required to bring in, for the present, one ounce, to be served in lieu of the lemon-juice, pickles, and dried herbs which had been hitherto issued. The growth of the sorrel was from this time so quick, and the quantity of it so great on every part of the ground about the harbour, that we shortly after sent the men out every afternoon for an hour or two; in which time, besides the advantage of a healthy walk, they could without difficulty pick nearly a pound each of this valuable antiscorbutic, of which they were all extremely fond. A part of the leaves thus daily collected was served to the messes, both of officers and men, and eaten in various ways, both as pickles, salad, in puddings, or boiled as greens; in all of which modes it was constantly and abundantly used till we sailed from Winter Harbour, and for three weeks after, whenever an opportunity offered of sending on shore to procure it. Of the good

effects produced upon our health by the unlimited use of fresh vegetable substances, thus bountifully supplied by the hand of nature, even where least to be expected, little doubt can be entertained, as it is well known to be a never-failing specific for scorbutic affections, to which all persons deprived of it for a length of time are probably more or less pre-disposed. It is reasonable, therefore, to attribute in a great degree to the use of the sorrel, the efficient state of our crews at the time of our re-commencing our operations at sea. We found also a few roots of scurvy-grass (*Cochlearia Fenestrata*), but they were too rare and the leaves too small to be of any service to us.

Mr. Wakeham, with a party from the S.W., returned in the evening from a shooting excursion, having killed the first deer that we had procured this season, which gave us sixty pounds of meat. A second, sent in by Lieutenant Beechey on the 19th, weighed only fifty-two pounds, when cleaned, though not of a very small size; but these animals are extremely lean on their first arrival from the south, and appear to improve in this respect very rapidly by the good feeding they find upon this island.

By the 20th of June the land, in the immediate neighbourhood of the ships, and especially in low and sheltered situations, was much covered with the handsome purple flower of the *Saxifraga oppositifolia*, which was at this time in great perfection, and gave something like cheerfulness and animation to a scene hitherto indescribably dreary in its appearance. The poppy (*Papaver Nudicaule*) and some other plants, most of which appeared in flower during the month of July, afforded us a degree of enjoyment that made us for a while forget the rigour of this severe climate.

The wind increased to a fresh gale from the north on the night of the 20th, and continued to do so during the following day; so that Captain Sabine had great difficulty in keeping his tents secure, and in spite of every exertion the canvas came in upon one of them, and put it out of its place. The ravines, which had no water in them a week before, were now discharging such deep and rapid torrents into the sea, as to render them quite impassable. The suddenness with which the changes take place during the short season, which may be called summer in this climate, must appear very striking when it is remembered that, for a part of the first week in June, we were under the necessity of thawing artificially the snow which we made use of for water during the early part of our journey to the northward; that, during the second week, the ground was in some parts so wet and swampy that we could with difficulty travel; and that, had we not returned before the end of the third week, we should probably have been prevented doing so for some time by the impossibility of crossing the ravines without great danger of being carried away by the torrents, an accident that happened to our hunting parties on one or two occasions, in

endeavouring to return with their game to the ships. Lieutenant Hoppner sent in another deer, being the largest of a herd of fifteen, notwithstanding which it only furnished us with seventy-eight pounds of venison. Lieutenant Hoppner reported that the pools upon the upper surface of the ice to the south-west were rapidly increasing in size and number, but that no indication of its breaking up had yet appeared.

On the 22d, at four P.M., a thermometer, in the shade on board the Hecla, stood at 51°, being the highest temperature we had yet registered this season. A swan was seen by Mr. Scallon on a pond to the S.W.; this was, I believe, the only bird of the kind seen during our stay here, except a dead one which was picked up on our first arrival.

On the 24th we had frequent showers of snow which occur in this climate more or less at all times of the year; at this season, however, when the earth is warm, it seldom or never lies on the ground for a whole day together.

Captain Sabine, among the numerous difficulties he had to overcome in completing his series of observations for the pendulum, was now annoyed by the constant thawing and sinking of the ground, though much pains had been taken to lay a solid foundation for the clocks to stand upon; fortunately, however, no serious inconvenience arose from this new annoyance. Lieutenant Beechey and his people procured another deer, and several hares and birds, which, added to the game already received, afforded a supply sufficient to substitute for three days' regular allowance, while near the ships scarcely a single bird could now be procured. Not doubting, therefore, of the advantage of this plan, I determined to continue it till near the time of our sailing, by relieving the parties after a certain number of day's absence. The men were, in general, particularly fond of these excursions, from which they invariably returned in the best possible health, though generally a little thinner than when they went out. As a matter of good policy, it was our custom to consider the heads and hearts of the deer as the lawful perquisites of those who killed them, which regulation served to increase their keenness in hunting, while it gave the people thus employed rather a larger share of fresh meat than those who remained on board.

Lieutenant Beechey, on his return from the eastward at midnight on the 26th, reported that the ice along shore in that direction appeared in a more forward state of dissolution than near Winter Harbour, there being almost water enough in some places to allow a boat to pass, with several large cracks in the ice extending from the land some distance to seaward. The deer had now become much more wild near the tents, and it was therefore necessary to shift the ground a little. Lieutenant Beechey succeeded in killing one of these animals, by lying down quietly, and imitating the

voice of a fawn, when the deer immediately came up to him within gun-shot. The horns of the deer, killed at this season, as Mr. Fisher remarks, were "covered with a soft skin, having a downy pile or hair upon it; the horns themselves were soft, and at the tips flexible and easily broken." The foxes, of which they saw several, "had a black spot, or patch, on each side of the hind-quarters or hams." Lieutenant Beechey reported also, that one of the Hecla's quarter-masters, who belonged to his party, had met with the crown-bone of a whale at the distance of a mile from the sea, and considerably above its present level. Another was subsequently found in a similar situation, more than a mile to the north of the barbour, and nearly buried in the earth, which was there frozen around it. Two headlands, to the eastward of the ships, near the station which Lieutenant Beechey had chosen for the tents, and for the position of which he had obtained angles during his late excursion, were named after Messrs. Halse and Wareham.

On the 29th, one of the men, in returning on board, from the daily occupation of gathering sorrel, found in a hole upon the ice a small fish, which appeared to be of the whiting species, and on going to examine the place where it was picked up, Mr. Edwards and myself found two others exactly similar. As there was as yet no communication between the sea and the upper surface of the ice, sufficiently large to admit these fish, it became a matter of question in what manner they had got into the situation in which we found them. It appeared most likely that they were frozen on the surface of the water at the beginning of winter when the frost first commenced, and perhaps, therefore, had been floating there dead. We remarked that whenever any hard substance is laid upon the ice in small quantities, it soon makes a deep hole for itself, by the heat it absorbs and radiates, by which the ice around it is melted. There were at this time upon the ice innumerable holes of this kind, some forming small, and others large pools of water; and in every one of these, without exception, some extraneous substance, such as sea-weed, sand, and not unfrequently a number of small putrid shrimps were found. In one of these holes the fish alluded to were found. It was curious to see how directly contrary was the effect produced upon the ice by a quantity of straw which was put out upon it in the early part of May, and which, by preventing the access of warmth, had now become raised above the general surface more than two feet; affording a strong practical example of the principle on which straw is made use of in ice-houses, and what was at that time of more importance to us, a proof how much the upper surface of the ice had been insensibly wasted by dissolution.

Lieutenant Hoppner returned, on the evening of the 30th, from his hunting excursion to the south-west, bringing with him some game, and what was to us much more acceptable, the welcome in-

formation that the ice had been observed in motion in the offing on the 22d. This circumstance was first observed by Messrs. Skene and Fife, who were of Lieutenant Hoppner's party, and who were awakened by a loud grinding noise, which, as they had soon the satisfaction to find, was occasioned by the heavy field-ice setting rapidly to the eastward, at the distance of five miles from the land, and apparently at the rate of a mile an hour. The wind was at this time moderate, but on the preceding day it had blown a fresh northerly gale.

Lieutenant Hoppner likewise reported that he had, in the course of his late excursion, met with a lake between four and five miles in circumference, situated at the distance of twelve or fourteen miles to the westward of the entrance of Winter Harbour, and four miles from the sea. This lake was still frozen over, but, from the steepness of its banks, had the appearance of being deep; and it is, probably, the same which Mr. Fife had fallen in with, at the time he first lay up in September 1819, and of the situation of which he had not been able to give any satisfactory account.

On the 24th of June, William Scott, of whose complaint I have before had occasion to speak, had become quite delirious, and could only be kept in bed by force. Mr. Edwards was at first in hopes that this was the effect of some temporary cause, but was afterwards of opinion that it resembled, in every respect, a state of absolute and permanent derangement, and this opinion was subsequently strengthened by some circumstances which only now came to our knowledge, and of which an account will be given in another place.

For some days past Scott had been gradually growing worse, and on the evening of the 29th, he was so far exhausted, that Mr. Edwards did not expect him to survive through the night. At two o'clock on the 30th, I was informed by that gentleman that Scott was dying, and before I could get my clothes on, he had breathed his last, without any apparent pain. As it was proper and desirable, in every respect, that his body should be opened, notwithstanding the prejudice which seamen entertain against this practice, and which it would, perhaps, be as well to overcome by more frequently insisting upon it, I willingly complied with Mr. Edwards's request to be allowed to perform the dissection. The result was satisfactory to the medical gentlemen in whose charge this unfortunate man had been placed: and, I may be permitted to add to myself also, inasmuch as it proved his death to have been immediately occasioned by a disease which, perhaps, no skill nor attention could have cured in any climate, or under any circumstances, and having no immediate connexion with our present peculiar situation, or with the nature of the service in which we were engaged. As this case has proved the only fatal one during a voyage, differing in many respects from any before undertaken, a more particular account of it may not, perhaps, be considered uninteresting; with this view,

therefore, as well as from an anxious desire to do justice to the skill and humane attention displayed by the medical officers during the whole course of this poor man's illness, I have requested Mr. Edwards to furnish me with a detailed statement of his case, and of the treatment adopted, which will be found in the Appendix.

For the last two or three days, the spring-tides, which had been unusually high, overflowed the ice near the beach, so as to make it difficult to land near high water. In the general appearance of the ice of the harbour, there was no very perceptible alteration from day to day, though the thawing process was certainly going on with great rapidity at this period. The officer who relieved Lieutenant Hoppner, in command of the hunting party to the south-west, received strict injunctions to watch the ice constantly, and to make an immediate report of any appearance of open water in any direction. For the last four or five days in June, we had experienced more of southerly winds than usual, the weather being generally cloudy, with a good deal of small rain, and now and then a little snow; the general temperature of the atmosphere, however, was pleasant and comfortable to our feelings, as well as favourable to the dissolution of the ice, for which we were so anxiously looking.

One of Mr. Nias's party arrived from the eastward on the morning of the 1st of July, with a good supply of hares, ducks, and ptarmigans; he had seen above fifty deer in three days, but they were too wild to allow the party to get near them, in a country without the smallest cover of any kind. Another fish was picked up to-day in a hole on the ice, of the same kind as those before found.

On Sunday the 2d of July, after divine service had been performed, the body of the deceased was committed to the earth, on a level piece of ground about a hundred yards from the beach, with every solemnity which the occasion demanded, and the circumstances of our situation would permit. The ensigns and pendants were lowered half-mast during the procession, and the remains of our unfortunate shipmate were attended to the grave by every officer and man in both ships. To the performance of this last melancholy duty, under any circumstances sufficiently impressive, the peculiarity of the scene around us, and of the circumstances in which we were placed, could not fail to impart an additional feeling of awful solemnity, which it is more easy to imagine than to describe. A neat tomb-stone was afterwards placed at the head of the grave by Mr. Fisher, who carved upon it the name of the deceased with the other usual information.

A herd of fourteen deer being seen near the ships, a party was despatched in pursuit of them, with our customary want of success, it being almost impossible to approach them in so open and exposed a country, so that these excursions generally ended in a chase

between the men and the deer; some good dogs would, perhaps, have been serviceable to us on these occasions.

On the 3d, having taken on board our bower anchors and cables from the beach, on account of the difficulty we should have found in removing them after the ice began to break up, each ship placed two stream anchors on shore with hawsers from the bow and quarter, to hold them in case of any sudden motion of the ice, the pools upon which now increased very perceptibly both in depth and extent from day to day. In looking into these pools, it always appeared, during the day, as if drops of rain were falling into them; this was caused by the continual extrication of air from the ice which was thawing below, and by the rising of the bubbles to the surface. At six P.M., the atmosphere being clear and serene, the thermometer rose to 53° in the shade, but immediately on a moderate breeze springing up from the northward it fell to 45°. On the 5th and 6th, however, it stood for three hours from 50° to 52°, with a fresh breeze from the northward, accompanied by cloudy weather; and on the afternoons of the two following days, the wind being still northerly, the atmosphere continued for some time at the temperature of 55°.

The dissolution of the ice of the habour went on so rapidly in the early part of July, that we were greatly surprised, on the 6th, in finding, that in several of the pools of water, on its upper surface, holes were washed quite through to the sea beneath. On examining several of these, we found that the average thickness of the ice, in the upper part of the harbour where the ships were lying, did not exceed two feet, which was much less than we had any idea of. Towards the mouth of the harbour, however, where the water was deeper, no such holes made their appearance for some days after this. It must here be remarked, that in all cases we found the ice to be first thawed and broken up in the shoalest water, in consequence, I suppose, of the greater facility with which the ground, at a small depth below the surface of the sea, absorbed and radiated the heat of the sun's rays; and, as it is in such situations that water generally freezes the first, this circumstance seems a remarkable instance of the provision of nature for maintaining such a balance in the quantity of ice annually formed and dissolved, as shall prevent any undue or extraordinary accumulation of it in any part of the Polar regions of the earth. In consequence of this circumstance, we were now enabled, for the first time, to bring our boats down to the beach, so as to allow them to float about high water, in order to prevent their being split by the sun, while in every other part of the harbour, except thus near the shore, we had not the means of doing so till some days afterwards. Among the means, also, which nature employs in these regions to dissolve, during the short summer, the ice which has been formed upon the sea by the cold of winter, there appears to be none more

efficacious than the numerous streams of water produced by the melting of the snow upon the land, and which, for a period of at least six or seven weeks, even in the climate of Melville Island, are constantly discharging themselves into the ocean. On this account, it would appear probable, that high land is more favourable to the dissolution and dispersion of the ice near its shores than that which is lower, because it supplies a never-ceasing flow of water during the whole of the thawing season. For instance, on the 1st of September, 1818, we found the stream in Possession Bay discharging a torrent of water into the sea, and there was still snow enough remaining on the land to keep up an abundant stream, till it should be arrested by the frost of winter; whereas, on these islands, which are very low, comparatively with the land about Possession Bay, or in Sir James Lancaster's Sound, we found, at the same season, in 1819, and much before the thawing had finished, that they were completely free from snow, the ravines entirely dry, and the whole face of the islands parched and cracked with drought, as if there had been no moisture upon the surface of the ground for some time.

On unhanging the rudders, and hauling them up on the ice for examination, we found them a good deal shaken and grazed by the blows they had received during the time the ships were beset at the entrance of Davis' Strait. We found, also, that the rudder-cases in both ships had been fitted too small, occasioning considerable difficulty in getting the rudders down when working, a circumstance by no means disadvantageous (perhaps, indeed, rather the contrary,) on ordinary service at sea, but which should be carefully avoided in ships intended for the navigation among ice, as it is frequently necessary to unship the rudder at a short notice, in order to preserve it from injury, as our future experience was soon to teach us. This fault was, however, soon remedied, and the rudders again hung, in readiness for sea. About this time, a few flocks of looma occasionally made their appearance, invariably flying quite round the harbour, exactly over the narrow and only strip of water which I have before described as occurring next the beach, as if looking out for food.

From the 7th to the 10th, a good deal of rain fell at intervals, which produced a very sensible alteration in the ice, making it look of a blue colour all over the surface, and increasing the size and number of the holes in a much greater degree than during the same interval at any other period. Mr. Reid, who returned on the 10th from his hunting-excursion to the south-west, reported, however, that he had not, during his absence, perceived the ice to be in motion, nor was there any perceptible alteration in the general mass upon the coast, except in the increase of the number of pools upon it, and in the breadth of the little channel between the ice and the land. This channel, if so it may be called, when the depth was

not yet sufficient to float one of our whale-boats, was from forty to fifty yards wide in the part of the harbour next us, but much more on the northern and eastern sides, where the shoal-water extends to a greater distance from the shore. We were in hopes that the spring tides, which took place about the 11th, would have been serviceable in breaking up the ice, which now began to approach that state of rottenness, as the sailors term it, which made it dangerous to walk across the pools, as we had hitherto been accustomed to do, to avoid the trouble of going round. No sensible alteration was produced, however, by the highest tide; probably in consequence of the ice being already so completely detached from the shore, as to allow it to rise freely, and without resistance of any kind, like any other floating body; the height and velocity of the tides are here, indeed, so small, that it was not reasonable to expect much from them in this way.

On the 14th a boat passed, for the first time, between the ships and the shore, in consequence of the junction of a number of the pools and holes in the ice, and on the following day the same kind of communication was practicable between the ships. It now became necessary, therefore, to provide against the possibility of the ships being forced on shore by the total disruption of the ice between them and the beach, and the pressure of that without, by letting go a bower-anchor underfoot, which was accordingly done as soon as there was a hole in the ice under the bows of each, sufficiently large to allow the anchors to pass through. We had now been quite ready for sea for some days; and a regular and anxious look-out was kept from the crow's nest for any alteration in the state of the ice, which might favour our departure from Winter Harbour, in which it now became more than probable that we were destined to be detained thus inactively for a part of each month in the whole year, as we had reached it in the latter part of September, and were likely to be prevented leaving it till after the commencement of August.

On the 16th of July the streams of water in the ravines were once more passable with great ease, and the snow had entirely disappeared, except on the sides of those ravines, and in other hollows where it had formed considerable drifts; so that the appearance of the land was much the same now as when we first made the islands in the latter part of August the preceding year. The walks which our people were enabled to take at this period, when the weather was really mild and pleasant, and to our feelings quite as warm as the summer of any other climate, together with the luxurious living afforded by our hunting parties, and by the abundant supply of sorrel which was always at command, were the means of completely eradicating any seeds of scurvy which might have been lurking in the constitutions of the officers and men, who were now, I believe, in as good health, and certainly in as good

spirits, as when the Expedition left England. Gratifying as this fact could not but be to me, it was impossible to contemplate without pain the probability, now too evident, that the shortness of the approaching season of operations would not admit of that degree of success in the prosecution of the main object of our enterprise, which might otherwise have been reasonably anticipated in setting out from our present advanced station with two ships in such perfect condition, and with crews so zealous in the cause in which we were engaged.

From six A.M. till six P.M. on the 17th, the thermometer stood generally from 55° to 60°; the latter temperature being the highest which appeared in the Hecla's Meteorological Journal during this summer. It will readily be conceived how pleasant such a temperature must have been to our feelings after the severe winter which immediately preceded it. The month of July is, indeed, the only one which can be called at all comfortable in the climate of Melville Island.

On the 18th I rowed round the harbour in a boat, in order to take the soundings as far as the ice would permit; when it was worthy of remark how exactly the extent of the clear water between the ice and the shore corresponded with its depth, it being nearly a quarter of a mile wide on the north-eastern side of the harbour, where the deepest water was from eight to ten feet; while on the western side, where we found two fathoms, the passage for the boat did not exceed forty or fifty yards in width. This channel was almost daily becoming wider, especially after a strong breeze from any quarter causing a ripple on the sea, by which the edge of the ice was constantly washed and rapidly dissolved. My intention, therefore, at this time was, carefully to watch the increasing breadth of this open water; and, whenever a depth of three fathoms could be found, to warp the ships through it along-shore, as the only means which appeared likely to be allowed us of commencing our summer's navigation.

On the 20th, there being a strong breeze from the N.N.E., with fog and rain, all favourable to the dispersion of the ice, that part of it which was immediately around the Hecla, and from which she had been artificially detached so long before, at length separated into pieces, and floated away; carrying with it the collection of ashes and other rubbish which had been accumulating for the last ten months; so that the ship was now once more fairly riding at anchor, but with the ice still occupying the whole of the centre of the harbour, and within a few yards of her bows: the Griper had been set free in a similar manner a few days before. But it was only in that part of the harbour where the ships were lying that the ice had yet separated in this manner at so great a distance from the shore; a circumstance probably occasioned by the greater radiation of heat from the ships, and from the materials of various

kinds which we had occasion to deposit upon the ice during the time of our equipment.

Lieutenant Liddon accompanied me in a boat down the west shore of the harbour, to the southern point of the entrance, in order to sound along the edge of the ice, where we found from seven to fifteen feet water: the ice about the entrance appeared still very solid and compact, and not a single hole was at this time noticed through any of the pools upon its surface, except one which was made by a seal, and which discovered the thickness of the ice to be there between two and three feet.

Mr. Dealey, with a hunting party, returned late at night without success, having lost his way in a thick fog, that hung over the land at intervals during the day, a circumstance which did not often occur while the ships remained in harbour: we frequently, however, especially in the month of July, perceived heavy fog-banks covering the horizon in the offing, while the weather was perfectly clear near the shore.

On the 21st, Mr. Fife returned from our hunting station twelve or fourteen miles to the south-west, and reported that the appearance of the ice in that quarter was much the same as in Winter Harbour, except that the space between the ice and the land was in most parts not so broad.

There was a fresh breeze from the north-eastward, with fine clear weather, on the 22d, which made the Hecla swing round into twenty feet water astern; and the ice, being now moveable in the harbour, came home towards the shore with this wind, but not so much as to put any considerable strain on the cable of either ship; and the holding-ground being excellent, there was nothing to apprehend for their security.

During a walk which I took to the southward this day for the purpose of examining the ice near the mouth of the harbour, I was glad to find that a quantity of it had lately been forced up on the reef, by the pressure of the external ice, a proof that it had some room in which to acquire motion, and which encouraged a hope that when the wind should blow directly off the land, it might drift the ice sufficiently from the shore to afford us a navigable channel to the westward. I, therefore, went down in a boat in the afternoon, to see if any thing could be done, but found the shore so loaded with broken ice which a north-east wind had first separated and then drifted upon the beach, that I could not get so far as the south point of the entrance.

A fresh gale which blew from the northward, on the morning of the 23d, caused a great alteration in the appearance of the ice near the ships, but none whatever in that in the offing, or at the mouth of the harbour, except that the shores were there more encumbered than before, owing to the quantity of pieces which were separated and driven down from the northward, so that our small

boat could not succeed in getting along the shore. The north shore of the harbour was now, however, so clear as to induce me to send Lieutenant Beechey with two boats to haul the seine, in the hope of catching some such fish as we had some time ago found upon the ice. Our fishermen, however, had little success, having brought on board only three small fish, which were all that were found in the net.

On the 24th, the sails were bent, in readiness for our starting at a moment's notice, though, it must be confessed, that the motive for doing so was to make some show of moving, rather than any expectation which I dared to entertain of soon escaping from our long and tedious confinement; for it was impossible to conceal from the men the painful fact, that, in eight or nine weeks from this period, the navigable season must unavoidably come to a conclusion.

I went away in a boat early on the morning of the 25th, in order to sound the harbour, in those parts where the ice would admit the boat, with a view to take advantage of the first favourable change which might present itself. The wind having come round to the southward in the afternoon, caused the separation of a large portion of ice on the northern side of that which now occupied the harbour, and the detached pieces drifting down towards us, rendered it necessary to be on our guard lest the ships should be forced from their anchorage. On this account, as well as from an anxious and impatient desire to make a move, however trifling, from a spot in which we had now unwillingly but unavoidably passed nearly ten months, and of which we had long been heartily tired, I directed lines to be run out for the purpose of warping the ships along the ice in the centre of the harbour, and at half-past two P.M., the anchors were weighed. As soon as a strain was put upon the lines, however, we found that the ice to which they were attached came home upon us, instead of the ships being drawn out to the southward, and we were, therefore, obliged to have recourse to the kedge-anchors, which we could scarcely find room to drop, on account of the closeness of the ice. Having warped a little way out from the shore, into five fathoms and a half, it was found impossible to proceed any farther without a change of wind, and the anchors were, therefore, dropped till such a change should take place. In the course of the evening all the loose ice drifted past us to the northward, loading that shore of the harbour with innumerable fragments of it, and leaving a considerable space of clear water along shore to the southward. Our hunting parties were now recalled, and returned on board in good health in the course of this and the following day; having supplied us, during the whole time which this mode had been adopted, with a quantity of game sufficient to substitute for more than one month's established proportion of meat on board both ships. Their success had of

late, however, become very indifferent, as they had not seen a deer for several days, and the birds were grown extremely shy. A herd of seven musk-oxen had lately been met with to the south-west.

On the morning of the 26th, it was nearly calm, with continued rain and thick weather; and there being now a space of clear water for nearly three-quarters of a mile to the southward of us, we took advantage of a breeze which sprung up from the northward to weigh, at nine A.M., and run down as far as the ice would permit, and then dropped our anchors in the best births we could select, close to the edge of it, with the intention of advancing step by step, as it continued to separate by piece-meal. The ice across the entrance of the harbour as far as this spot, and the whole of that in the offing, of which we had here a commanding view from the Hecla's crow's-nest, was still quite continuous and unbroken, with the same appearance of solidity as it had during the middle of winter, except that the pools of water were numerous upon its surface.

On the 27th, the weather was clear and fine with a strong and rather cold wind from the W.N.W., the thermometer not being higher than 37° during the day. The general temperature of the atmosphere had, indeed, before this time, begun very sensibly to decrease, and from this period the thermometer seldom stood so high as 40° in the shade during the rest of the summer. Some showers of sleet and snow prevented our sending the people on shore to pick sorrel, as they had been accustomed to do for some weeks past; this valuable plant was now on the decline, the leaves beginning to wither, and having much less of that acid taste, which constitutes its principal value.

On the morning of the 28th, the wind, having shifted to the southward, was found to set the ice (close to the edge of which the Hecla had anchored) against the cable, putting some strain upon it in addition to that of the ship. We veered, therefore, to thirty fathoms, to enable the anchor to hold the better, and ranged the other cable. At half-past eight A.M. I rowed along-shore to the southward in a boat as far as the ice would allow us to go, which, however, was not a single yard beyond where Lieutenant Liddon and myself had gone, with almost equal facility, eight days before. I then landed, and walked about two miles to the southward, where I had a clear view for several miles in that direction. The space between the ice and the land between the entrance of Winter Harbour and Cape Hearne was so small that a boat could not possibly have gone that distance, even if the passage out of the harbour had been clear. The only appearance of the breaking up of the ice consisted in a quantity of it having been recently pressed up into hummocks in some places near the beach: but, upon the whole, I was compelled to admit, in my own mind, that there never was a

sea which appeared less navigable. On my return, I perceived that our people were busy in the boats, and found when I got on board, that the Hecla had been forced by the ice into thirteen feet water abaft, the whole body having come home upon the cable, so as to drag the anchor. Lieutenant Beechey had, with great promptness, cut a bight or dock in the ice, and dropped the kedge in the middle of it, by which means he had, before my return on board, succeeded in getting the ship once more into four fathoms; and the small bower being then hove up, she was hauled out into seven fathoms, and the other anchor let go, after which we lay quite securely, the wind freshening up strong from the westward at night, which kept the ice at a sufficient distance from us.

On the 29th, Lieutenant Liddon had sent me word that the Griper, which had taken her birth to the southward of ours, was not in a much more secure situation than that from which the Hecla had just escaped, the ice pressing forcibly upon her cable at times, so as to endanger her being forced on shore by it. Lieutenant Liddon very prudently, therefore, unshipped his rudder, and otherwise prepared his ship in the best manner he could for taking the beach, which is here tolerably bold, and quite soft and muddy. Happily, however, the westerly wind, which shortly after sprung up, prevented any accident of this nature.

Many of the pools of water upon the ice were slightly frozen over during the night of the 30th, which had seldom been the case for several weeks before, but which now took place almost every night for the rest of the season, as soon as the sun had become low. At three P.M. another large portion of the ice near us detached itself from the main-body, and floated away to the eastward, leaving us a space of three or four hundred yards in extent clear all round the ship, of which circumstance we immediately took advantage to weigh the anchor, and shift our birth further from the shore.

The wind continued fresh from the W.S.W., and at half-past seven P.M. I was informed by Mr. Palmer that a separation of the ice had just taken place in the offing, which, on going into the crow's nest, I found to consist of a lane of clear water, narrow and not altogether continuous, lying in a direction nearly parallel to that of the coast, and about three miles distant from it, being probably the boundary of the last winter's ice. From the outer point of the reef of Winter Harbour a crack commenced, and could be traced, at intervals, till it appeared to join the line of separation before described; the ice across the mouth of the harbour remained perfectly compact and unbroken, so that we could still do nothing but watch the progress of the operation which seemed at length to have commenced in earnest.

The wind being from the S.S.W. during the night of the 31st, served to close the lane of water which had appeared in the offing the

preceding day, which we considered a favourable circumstance, as shewing that the external mass of ice was in motion. In the course of the day, the wind shifting to the W.N.W., we once more discovered a small opening between the old and young floes, and at eleven P.M., the whole body of the ice in the harbour was perceived to be moving slowly out to the south-eastward, breaking away, for the first time, at the points which form the entrance of the harbour. This sudden and unexpected change rendering it probable that we should at length be released, I sent to Captain Sabine, who had been desirous of continuing his observations on the pendulum to the last moment, to request he would have the clocks ready for embarkation at an early hour in the morning.

I furnished Lieutenant Liddon with instructions for his future guidance during the ensuing season of operations, appointing also certain places of rendezvous, to facilitate our meeting, in case of unavoidable separation during that period. I sent also on board the Griper, in compliance with my Instructions on that head, a chart of our late discoveries, together with a duplicate copy of every document of interest relating to the Expedition.

The latitude of the anchorage in Winter Harbour, by the mean of thirty-nine meridian altitudes, is - - 74° 47′ 19″.36 N.

The longitude, by the mean of six hundred and ninety-two sets of observations, consisting of six thousand eight hundred and sixty-two lunar distances - - - - - - - - - 110° 48′ 29″.2 W.

The dip of the magnetic needle - - - 88° 43′ N.

The variation - - - - - - - - - - 127° 47′ 50″ E.

The mean time of high water, on the full and change days of the moon, - - - - - - - - - - - - 1 hour 29 minutes.

The mean rise of the tides - { May - - 2 feet 6¼ inches.
June - - 2 „ 7
July - - 2 „ 8¼

CHAPTER X.

Leave Winter Harbour—Flattering Appearance of the Sea to the Westward—Stopped by the Ice near Cape Hay—Further Progress to the Longitude of 113° 48′ 22″.5, being the Westernmost Meridian hitherto reached in the Polar Sea, to the North of America—Banks's Land discovered—Increased Extent and Dimensions of the Ice—Return to the Eastward, to endeavour to penetrate the Ice to the Southward—Discovery of several Islands—Re-enter Barrow's Strait, and Survey its South Coast—Pass through Sir James Lancaster's Sound, on our Return to England.

THE wind still blowing fresh from the northward and westward, the ice continued to drift out slowly from the harbour, till, at eight A.M., on the 1st of August, it had left the whole space between the ships and Cape Hearne completely clear, and at eleven o'clock there appeared to be water round the hummocks of ice which lie aground off that point. In the mean time, our boats were employed in embarking the clocks, tents, and observatory, while I sounded the entrance of the harbour, in order to complete the survey, which no opportunity had offered of doing before this time. At one P.M., having got every thing on board, and the ice appearing to be still leaving the shore, we weighed, and ran out of Winter Harbour, in which we had actually, as had some time before been predicted, passed ten whole months, and a part of the two remaining ones, September and August. The mind is always anxious, however, to find some ground of encouragement and hope for attaining the object of its pursuit, and we did not fail to remember, on this occasion, that short as our season of navigation must of necessity be, we were about to begin that season on the anniversary of the day on which we had commenced our discoveries from the entrance of Sir James Lancaster's Sound westward, in the preceding year; and that if we were favoured with the same degree of success during the same period as before, there could be little doubt of the eventual accomplishment of our enterprise.

In running along shore towards Cape Hearne, generally at the distance of half a mile from the land, we had from ten to sixteen fathoms' water, and rounded the hummocks off the point in six and a half fathoms by three P.M. As we opened the point, it was pleasing to see that the coast to the westward of it was more clear of ice, (excepting the loose pieces which lay scattered about in every direction, but which would not very materially have imped-

ed the navigation with a fair wind,) than it had been when we first arrived off it, a month later in the foregoing year; the main ice having been blown off by the late westerly and north-westerly winds, to the distance of four or five miles from the shore, which, from all we have seen on this part of the coast, appears to be its utmost limit. The navigable channel, with a beating wind between the ice and the land, was here from one to two, or two miles and a half in width, and this seemed, from the mast-head, to continue as far as the eye could reach along-shore to the westward.

We found the wind much more westerly after we rounded the point, which made our progress slow and tedious; the more so, as we had every minute to luff for one piece of ice, and to bear up for another, by which much ground was unavoidably lost. We also found the ships to be considerably impeded by a tide or current setting to the eastward, which, as it slackened about seven in the evening, I considered to be the flood, the time of high water at Winter Harbour this day being about half-past seven. After a very few tacks, we had the mortification to perceive, that the Griper sailed and worked much worse than before, notwithstanding every endeavour which Lieutenant Liddon had been anxiously making during her re-equipment, to improve those qualities in which she had been found deficient. She missed stays several times in the course of the evening, with smooth water, and a fine working breeze; and, by midnight, the Hecla had gained eight miles to windward of her, which obliged me to heave-to, notwithstanding the increased width of the navigable channel, the weather having become hazy, so as to endanger our parting company.

At three A.M., on the 2d, the Griper having joined us, we again made sail to the westward. As, however, I could not but consider that her bad sailing had already lost us a distance of at least seven miles in the first day after our leaving harbour; and, as it was evident that such detention must, if continued, absolutely preclude the possibility of accomplishing the main object of the expedition, I addressed a letter to Lieutenant Liddon, desiring to be made acquainted with all the circumstances of the Griper's incapacity, that immediate steps might be taken, either for improving her trim by any means in our power, or, in the event of failing to do so, for removing her crew and provisions to the Hecla, and prosecuting the voyage in that ship singly.

During the whole forenoon of the 2d, we observed a well-defined line of ripple, at the distance of two or three miles from the land, and a few hundred yards from the edge of the ice, running parallel to the shore. We tried the current about noon, by the small boat moored to the bottom, on each side of this ripple; and found that outside, or to the southward of it, it was running to the eastward at the rate of one mile per hour, while within it no current was

perceptible. Our latitude, at noon, by an indifferent observation, was 74° 36′ 33″, and the longitude by account 110° 59′, being in forty-nine fathoms water, on a bottom of blue clay.

Soon after noon, a breeze sprung up from the S.S.W., which being rather upon the shore, made it likely that the ice would soon begin to close it; we, therefore, began to look out for a situation where the ships might be secured in-shore, behind some of the heavy-grounded ice, which had so often before afforded us shelter under similar circumstances. At one o'clock, we perceived that a heavy floe had already closed completely in with the land, at a point a little to the westward of us, preventing all hope of further progress for the present in that direction. A boat was, therefore, sent to examine the ice in-shore, and a favourable place having been found for our purpose, the ships were hauled in, and secured there, the Griper's bow resting on the beach, in order to allow the Hecla to lie in security without her. This place was so completely sheltered from the access of the main body of the ice, that I began to think seriously of taking advantage of this situation to remove the Griper's crew on board the Hecla, and had consulted the officers upon the subject. The circumstances, however, which subsequently occurred, rendering such a measure inexpedient, because no longer necessary to the accomplishment of the object in view, by which alone it could be justified, I was induced to give it up, adopting the best means in our power to remedy the evil in question.

The beach near which we were lying is so bold, that in standing off-and-on in the afternoon, in more than one part, we had from seven to ten fathoms at two hundred yards from the shore, to which distance, from the confidence we had acquired in the regularity of the soundings, we had no hesitation in standing as often as there was occasion to do so, and always without any apparent risk. So perfectly free from danger, indeed, is the whole of this coast, as long as the hand-leads are kept going, that it has often occurred to me as not improbable, that the annual motion of large and heavy masses of ice may in some degree prevent the accumulation of sandy shoals near the shore, where local circumstances might otherwise tend to produce them, as in other seas.

Shortly after our anchoring, the Griper's people heard the growling of a bear among the ice near them, but the animal did not appear; and this was the only instance of our meeting with a bear, during our stay at Melville Island, except that which followed one of our men to the ships, soon after our arrival in Winter Harbour. Both crews were sent on shore to pick sorrel, which was here not less abundant than at our old quarters, but it was now almost too old to be palatable, having nearly lost its acidity and juice. We were here a mile or two to the westward of Lieutenant Hoppner's hunting-station, and the wall which he had built round his tents,

with a boarding-pike in the middle of it, was visible from the ships. The only game we obtained here consisted of a few king-ducks, some of the young of which were also procured.

The snow which fell in the night was, in the morning of the 3d, succeeded by a thick fog, which continued during the day, preventing our seeing the state of the ice to the westward. I, therefore, despatched Mr. Palmer in a boat to the point, for the purpose of ascertaining whether it was still close there. On his return in an hour, Mr. Palmer reported that no alteration had taken place since the preceding day, there not being sufficient room for the smallest boat to pass between the ice and the point, close to which he found a depth of nine fathoms. At night the wind got round to W.N.W., and afterwards to north, which made the weather clear, and gave us hopes of the ice drifting off the land.

At one A.M. on the 4th, the loose ice was observed to be drifting in upon us, the wind having veered to the eastward of north; and soon after a floe, of not less than five miles in length, and a mile and a half across, was found to be approaching the shore at a quick rate. The ships were immediately hauled as near the shore as possible, and preparation made for unshipping the rudders, if necessary. The floe was brought up, however, by the masses of ice aground outside of us, with which it successively came in contact, and the ships remained in perfect security; the floe, as usual after the first violence is over, moved off again to a little distance from the shore. The meridian altitude of the sun gave the latitude of this station 74° 36′ 06″, and the longitude by the chronometers was 111° 16′ 39″.

At noon the heavy floe at the point near us began to quit the land, and at half-past one P.M., there being a narrow passage between them, the breadth of which the breeze was constantly increasing, we cast off and stretched to the westward. The channel which opened to us as we proceeded, varied in its general breadth from one to two miles; in some places it was not more than half a mile. The soundings were very regular, and sufficiently deep close to the shore; in one place we found twenty-three fathoms at one hundred yards from the beach, in another fourteen at sixty or seventy yards. At seven P.M., we passed the place where we had been detained so long during the preceding September, and where Mr. Fife and his party had been lost. We here seemed to be among our old acquaintance; and among these, the berg to which we had been anchored during so many days of anxiety and fruitless labour, was easily recognised, as well as the pile of stones which had been erected on the hill above it. The wind was variable and squally, but we made great progress along the land to the S.W.b.W., and the Griper, by keeping up tolerably with the Hecla, in some measure redeemed her character with us. Having arrived off Cape Providence at eleven P.M., the wind became light and

baffling, so that we had just got far enough to see that there was a free and open channel, beyond the westernmost point visible of Melville Island, when our progress was almost entirely stopped for want of a breeze to enable us to take advantage of it. The anxiety which such a detention occasions, in a sea where, without any apparent cause, the ice frequently closes the shore in the most sudden manner, can perhaps only be conceived by those who have experienced it. We had now, also, arrived off that part of the coast which, from Cape Providence westward, is high and steep near the sea, having no beach or shelving shore on which the heavy masses of ice can fix themselves, so as to afford security to a ship when the floes approach the land, which circumstance increased the anxiety we felt to push on, while the present opportunity offered, with all rapidity to the westward. We remarked, in sailing near the ice this evening, while the wind was blowing a fresh breeze off the land, and therefore directly towards the ice, that it remained constantly calm within three or four hundred yards of the latter; this effect I never remember to have witnessed before, upon the windward side of any collection of ice, though it invariably happens in a remarkable degree to leeward of it. I may here mention, as a striking proof of the accuracy with which astronomical bearings of objects may be taken from marine surveys, that the relative bearing of Capes Providence and Hay, as obtained this evening when the two headlands were opening, (being N. or S. 82° 38′ E. or W.) differed only one minute from that entered in the surveying-book, and found in the same manner, the preceding year.

We had this evening occasion to observe once more that darkness in the horizon to the southward, and as far as a S.S.W. bearing, which had been noticed from this station in 1819, and more frequently since that time, during our detention in Winter Harbour, as bearing a great resemblance to the loom of land in that quarter. We were the more inclined to the belief that there was land at no very great distance to the southward, from the conviction that there must be something which prevented the ice being drifted off the shore of Melville island in this place more than five or six miles, with any direction or force of wind.

There was a very light air on the morning of the 5th, which died away an hour before noon, when the opportunity was taken to bring up some water from the depth of one hundred and five fathoms. Its temperature on coming to the surface was 32°, that of the surface water being 31½°, and of the air 34°. The depth of water here was two hundred and twenty-five fathoms, on a bottom of dark brown clay, at the distance of four miles from the land; the latitude observed being 74° 21′ 49″ and the longitude by chronometers 112° 48′ 18″.

At one P.M., the weather continuing quite calm, and being de-

sirous of examining the ice in-shore, that we might be ready for the floes closing upon us, I left the ship, accompanied by Captain Sabine and Mr. Edwards, and landed near one of the numerous deep and broad ravines, with which the whole of this part of the island is indented. All the ice which was here fixed to the ground was literally upon the beach, with very deep water close alongside of it, and none of the masses projected to a sufficient distance from the shore, to afford the smallest shelter to the ships in case of accidents. We saw several white hares here, and on this and many subsequent occasions found them frequent the slopes of the high banks which face the south, and where there is usually a plentiful vegetation for them to feed upon. We were ascending the hill, which was found by trigonometrical measurement to be eight hundred and forty-seven feet above the level of the sea, and on which we found no mineral production but sandstone and clay iron-stone, when a breeze sprung up from the eastward, bringing up the Griper, which had been left several miles astern. We only stopped, therefore, to obtain observations for the longitude and the variation of the magnetic needle; the former of which was 112° 53′ 32″, and the latter 110° 56′ 11′′ easterly, and then immediately returned on board, and made all sail to the westward. After running for two hours without obstruction, we were once more mortified in perceiving that the ice, in very extensive and unusually heavy floes, closed in with the land a little to the westward of Cape Hay, and our channel of clear water between the ice and the land gradually diminished in breadth till at length it became necessary to take in the studding sails, and to haul to the wind, to look about us. I immediately left the ship, and went in a boat to examine the grounded ice off a small point of land, such as always occurs on this coast at the outlet of each ravine. I found that this point offered the only possible shelter which could be obtained, in case of the ice coming in; and I, therefore, determined to take the Hecla in-shore immediately, and to pick out the best birth which circumstances would admit. As I was returning on board with this intention I found that the ice was already rapidly approaching the shore; no time was to be lost, therefore, in getting the Hecla to her intended station, which was effected by half-past eight P.M., being in nine to seven fathoms water, at the distance of twenty yards from the beach, which was lined all round the point with very heavy masses of ice, that had been forced by some tremendous pressure into the ground. Our situation was a dangerous one, having no shelter from ice coming from the westward, the whole of which, being distant from us less than half a mile, was composed of floes infinitely more heavy than any we had else-where met with during the voyage. The Griper was three or four miles astern of us at the time the ice began to close, and I therefore directed Lieutenant Liddon by signal to secure his ship in the best manner he could, without

attempting to join the Hecla; he accordingly made her fast at eleven P.M., near a point like that at which we were lying, and two or three miles to the eastward.

At the time of making the Hecla fast, a current was setting to the westward, at the rate of a mile and a half an hour, with a strong eddy running into the bight where we lay; at ten P.M. it took a sudden turn, all the loose ice near us running past the ship out of the bight, and the floes outside beginning to set to the eastward, and towards the land withal. We, therefore, hauled the ship still more into the bight formed by the point, getting her into four fathoms abaft and six forward, and abreast a part of the beach where there was not quite so much heavy ice within us, to endanger the ship being crushed. This was done from a belief that, if the floes came in, the ship must inevitably be "nipped," and in this case it was better to be lying in six fathoms than nine; besides, the masses of ice now inside of us, not being so large as the rest, might possibly be forced up on the shore before the ship, instead of offering so great a resistance as to expose her to all the force of the squeeze. On the whole of this steep coast, wherever we approached the shore, we found a thick stratum of blue and solid ice, firmly embedded in the beach, at the depth of from six to ten feet under the surface of the water. This ice has probably been the lower part of heavy masses forced aground by the pressure of the floes from without, and still adhering to the viscous mud of which the beach is composed, after the upper part has, in course of time, dissolved. Captain Sabine suggested, that the under-ground ice found in cold countries, and to which I have before alluded, might thus have been deposited. The land gains upon the sea, as it is called, in process of time, as it has certainly done here, from the situation in which we found drift-wood and the skeletons of whales; the ice which fixes itself upon the beach is annually covered over in part by alluvial deposit, and thus may a connected stratum of it be buried for ages several feet below the surface of the earth. From the tops of the hills in this part of Melville Island a continuous line of this sub-marine ice could be distinctly traced for miles along the coast.

In running along the shore this evening, we had noticed near the sea what at a distance had every appearance of a high wall artificially built, and which was the resort of numerous birds. Captain Sabine, being desirous to examine it, as well as to procure some specimens of the birds, set out, as soon as we anchored, for that purpose, accompanied by his servant and Sergeant Martin. The wall proved to be composed of sand-stone in horizontal strata from twenty to thirty feet in height, which had been left standing, so as to exhibit its present artificial appearance, by the decomposition of the rock and earth about it. Large flocks of glaucous gulls had chosen this as a secure retreat from the foxes, and every other

enemy but man; and when our people first went into the ravine in which it stands, they were so fierce in defence of their young, that it was scarcely safe to approach them till a few shots had been fired.

On the 6th, besides a number of gulls, Captain Sabine and his party brought with them ten hares, which, together with what we had obtained as we came along the land, furnished us with a fresh meal for the whole crew. Captain Sabine also brought me word from Lieutenant Liddon that the Griper was in a situation exactly similar to that of the Hecla, where "nipping" appeared unavoidable if the floes should come in. The ice remained quiet, however, about the Hecla during the day, even though a strong breeze freshened up from the E.S.E., with continued snow; a circumstance which, while it added to our present security, did not give us very flattering hopes that there could be any room for the ice to drift to the westward. In the course of the evening I heard again from the Griper, Lieutenant Liddon informing me that the floes had once come in towards her, so as to lift her two feet out of the water, and then retired without doing any damage. I acquainted Lieutenant Liddon with the similarity of our situation to his, and desired him not to join us at present, even should the ice open sufficiently to allow him to do so; for there was not room for the two ships where the Hecla was lying, and the chances of saving one of them from the catastrophe we had reason to apprehend, were greater by their being separate. At eleven P.M. a narrow lane of water opened near the Griper, extending about three miles to the S.S.W.; near us it had also slackened a little about midnight, but it would have been difficult to find a "hole" of water in which a boat could have floated, more than three hundred yards beyond the ship.

On the morning of the 7th, a black whale (*Balæna Mysticetus*), came up close to the Hecla, being the first we had seen since the 22d of August the preceding year, about the longitude of 91½° W.; it therefore acquired among us the distinctive appellation of *the* whale. Since leaving Winter Harbour, we had also, on two or three occasions, seen a solitary seal. The wind continued fresh from the east and E.N.E. in the morning, and the loose ice came close in upon us, but the main body remained stationary at the distance of nearly half a mile. Considering that it might be of service to know the state of the ice further to the south and west than the view from the Hecla's mast-head would allow us, I despatched Lieutenant Beechey with one of the marines, along the top of the hills to the westward, for that purpose. At two P.M., he returned with a fawn, which gave us thirty-eight pounds of venison, and with the information of having discovered land from W.S.W. to S.S.W. at a great distance, and the loom of it also extending as far round to the eastward as a S.E. bearing. Lieutenant Beechey considered the general distance of the land to be from forty to fifty

miles, the nearest being about a S.S.W. bearing, and three capes could be plainly distinguished with a glass. The report of the state of the ice was by no means favourable to our hopes, the sea being covered with floes as far as the eye could reach, and the space between them so filled with broken ice, or the floes so closely joined, that scarcely a "hole" of water was to be seen.

In the afternoon, a man from each mess was sent on shore to pick sorrel, which was here remarkably fine and large, as well as more acid than any we had lately met with. The shelter from the northerly winds, afforded by the high land on this part of the coast, together with its southern aspect, renders the vegetation here immediately next the sea much more luxuriant than in most parts of Melville Island which we visited; and a considerable addition was made to our collection of plants.

The easterly breeze died away in the course of the day, and at three P.M., was succeeded by a light air from the opposite quarter; and as this freshened up a little, the loose ice began to drift into our bight, and that on the eastern side of the point to drive off. It became expedient, therefore, immediately to shift the ship round the point, where she was made fast in four fathoms abaft, and seventeen feet forward, close alongside the usual ledge of submarine ice, which touched her about seven feet under water, and which, having few of the heavy masses aground upon it, would, probably, have allowed her to be pushed over it, had a heavy pressure occurred from without. It was the more necessary to moor the ship in some such situation, as we found from six to seven fathoms' water, by dropping the hand-lead down close to her bow and quarter on the outer side.

We had scarcely secured the ship, when the wind once more shifted to the eastward, and the loose ice almost immediately began to move back in the opposite direction. The wind being, however, rather off the land than otherwise, I preferred remaining in our present situation, on account of the safer beach which we found here; and as there was, in other respects, little or no choice betwixt the two places, unless the wind came more on the land. At half-past ten P.M., the loose ice began to fill up the small space which had hitherto been clear about the ship, although the wind was at N.E., which is more off the land than we had before experienced it. Several heavy pieces of floes drove close past us, not less than ten or fifteen feet in thickness, but they were fortunately stopped by the point of land without coming in upon us. At eleven o'clock, however, a mass of this kind, being about half an acre in extent, drove in, and gave the ship a considerable "nip" between it and the land-ice, and then grazed past her to the westward. I now directed the rudder to be unhung, and the ship to be swung with her head to the eastward, so that the bow, being the strongest part, might receive the first and heaviest pressure.

The ice did not disturb us again till five A.M. on the 8th, when another floe-piece came in, and gave the ship a heavy rub, and then went past, after which it continued slack about us for several hours. Every thing was so quiet at nine o'clock, as to induce me to venture up the hill abreast of us, in order to have a view of the newly-discovered land to the south-west, which, indeed, I had seen indistinctly and much refracted from the Hecla's deck in the morning. The weather being rather unfavourable, I had not so clear a view as Lieutenant Beechey, but I distinctly saw high and bold land from S. 75° W. to 30° W., the part most plainly visible, and appearing the nearest, being at a S. 55° W. bearing. The general distance of this land, I considered to be somewhat greater than that at which Lieutenant Beechey had estimated it, and it is placed on the chart at from sixteen to eighteen leagues from the station at which the ships were lying. This land, which extends beyond the 117th degree of west longitude, and is the most western yet discovered in the Polar Sea, to the northward of the American Continent, was honoured with the name of Banks's Land, out of respect to the late venerable and worthy President of the Royal Society, whose long life was actively engaged in the encouragement and promotion of discovery and general science.

The loom of land was frequently seen as far as a south-east bearing from the present station of the ships, which corresponds with the appearances often observed during our stay in Winter Harbour; as I have scarcely a doubt, therefore, that this forms a continuation of Banks's Land, which is, in all probability, another island of the North Georgian group, I have marked it on the chart by an unshaded line as far as the above bearing.

From the top of the hill, not a "hole" could be seen in the ice in any direction; the wind being extremely variable during the day, kept us in a constant state of anxiety, lest the ice should come in, but it gave us no disturbance. A few hares were brought in by our sportsmen, and a dovekey was seen, being the first for this season.

On the morning of the 9th, a musk-ox came down to graze on the beach, near the ships. A party was despatched in pursuit, and having hemmed him in under the hill, which was too steep for him to ascend, succeeded in killing him. When first brought on board, the inside of this animal, which was a male, smelt very strongly of musk, of which the whole of the meat also tasted, more or less, and especially the heart. It furnished us with four hundred and twenty-one pounds of beef, which was served to the crews as usual, in lieu of their salt provisions, and was very much relished by us, notwithstanding the peculiarity of its flavour*. The meat

* Some pieces of this meat, which we brought to England, were found to have acquired a much more disagreeable flavour than when first killed, though they had not undergone putrefaction in the slightest degree.

was remarkably fat, and, as it hung up in quarters, looked as fine as any beef in an English market. A small seal, (*Phoca Vitulina*), killed by the Griper's people, was also eaten by them; and it was generally allowed to be very tender and palatable, though not very sightly in its appearance, being of a disagreeable red colour.

In the morning-watch, a breeze sprung up from the westward, which we were always ready to welcome, having found that it invariably served to open the ice, while an easterly wind as constantly made it closer. This was, however, of short duration, being succeeeded soon after noon by a light air from the south-east, which brought all the loose ice into our bight. At half-past three P.M., a large piece of a very heavy floe came close to us, and would have given us a "nip" against the shore, had we not avoided it by heaving the ship a few yards a-head in good time. It was then brought up by the point of land, and remained quietly half a cable's length astern of us, there not being room for it to drift farther to the westward between the point and an enormous floe which blocked up the passage to the southward and westward.

At ten P.M., the whole body of ice which was then a quarter of a mile from us, was found to be drifting in upon the land, and the ship was warped back a little way to the westward, towards that part of the shore, which was most favourable for allowing her to be forced up on the beach. At eleven o'clock, the piece of a floe, which came near us in the afternoon, and which had since drifted back a few hundred yards to the eastward, received the pressure of the whole body of ice, as it came in. It split across in various directions, with a considerable crash, and presently after we saw a part, several hundred tons in weight, raised slowly and majestically, as if by the application of a screw, and deposited on another part of the floe from which it had broken, presenting towards us the surface that had split, which was of a fine blue colour, and very solid and transparent. The violence with which the ice was coming in being thus broken, it remained quiet during the night, which was calm, with a heavy fall of snow.

The mass of ice which had been lifted up the preceding day, being drifted close to us on the morning of the 10th, I sent Lieutenant Beechey, to measure its thickness, which proved to be forty-two feet; and, as it was a piece of a regular floe, this measurement may serve to give some idea of the general thickness of the ice in this neighbourhood. There were some however, which were of much larger dimensions; an immense floe which formed the principal, or at least the nearest, obstruction to the westward, was covered with large hummocks, giving to its upper surface the appearance of hill and dale.

The thickness of this floe at its nearest edge was six or seven feet above the sea and as about six-sevenths are usually immersed,

the whole thickness would appear, in the common way of reckoning it, to have been from forty to fifty feet, which corresponds with that actually measured by Lieutenant Beechey. But the hummocks were many of them at least from fifteen to twenty-five feet above the sea; so that the solidity and thickness of this enormous floe must have been infinitely greater than any thing we had seen before. It was the opinion of Lieutenant Beechey, and of Messrs. Allison and Fife, that it very much resembled the ice met with at Spitzbergen; but, according to the account of the two latter, was much heavier than any which they had seen there: Lieutenant Beechey considered that there was much more snow upon the surface of the Spitzbergen ice. It is here of some importance to notice, that the "loose ice" in this neighbourhood was on the same increased scale as the floes, so that the danger to be apprehended from the violent contact of one of these pieces was little less than that from a floe of ordinary size, such as occurs in Baffin's Bay. This circumstance, also, very materially altered the character of the navigation on that part of the coast, for the loose pieces being most of them of infinitely greater bulk and weight in the water than either of our ships, the latter could no longer turn them out of their way, as usual, in sailing among this kind of ice, but were invariably stopped short in their progress, with a violent concussion, which nothing but their extraordinary strength could have enabled them to withstand.

It now became evident, from the combined experience of this and the preceding year, that there was something peculiar about the south-west extremity of Melville Island, which made the icy sea there extremely unfavourable to navigation, and which seemed likely to bid defiance to all our efforts to proceed much farther to the westward in this parallel of latitude. We had arrived off it on the 17th of September, 1819, after long and heavy gales from the north-westward, by which alone the ice is ever opened on this coast, and found it, in unusually heavy and extensive fields, completely closing in with the land, a mile or two to the eastward of where we were now lying. We again arrived here in the early part of August, and though the rest of the navigation had been remarkably clear for the fifty miles between this and Winter Harbour, seeming to afford a presumptive proof, that the season was rather a favourable one than otherwise, the same obstruction presented itself as before; nor did there appear, from our late experience, a reasonable ground of hope, that any fortuitous circumstance, such as an alteration in winds or currents, was likely to remove the formidable impediments which we had now to encounter. The increased dimensions of the ice hereabouts would not alone have created an insurmountable difficulty in the navigation, but that it was very naturally accompanied by a degree of closeness which seldom or never admitted an open space of clear water

of sufficient size for a ship, or even a boat, to sail in. We had been lying near our present station with an easterly wind blowing fresh for thirty-six hours together; and although this was considerably off the land, beyond the western point of the island now in sight, the ice had not, during the whole of that time, moved a single yard from the shore; affording a proof that there was no space in which the ice was at liberty to move to the westward, and offering a single and a striking exception to our former experience.

Under these circumstances, I began to consider whether it would not be advisable, whenever the ice would allow us to move, to sacrifice a few miles of the westing we had already made, and to run along the margin of the floes, in order to endeavour to find an opening leading to the southward, by taking advantage of which we might be enabled to prosecute the voyage to the westward in a lower latitude. I was the more inclined to make this attempt, from its having long become evident to us, that the navigation of this part of the Polar Sea is only to be performed by watching the occasional openings between the ice and the shore; and that, therefore, a continuity of land is essential, if not absolutely necessary, for this purpose. Such a continuity of land, which was here about to fail us, must necessarily be furnished by the northern coast of America, in whatsoever latitude it may be found; and, as a large portion of our short season had already been occupied in fruitless attempts to penetrate further to the westward in our present parallel, under circumstances of more than ordinary risk to the ships, I determined, whenever the ice should open sufficiently, to put into execution the plan I had proposed.

The westerly wind cleared us by slow degrees of the loose masses of ice about the ship, and in the afternoon the main body went off about three hundred yards, drifting also a little to the eastward. It may always be expected, in icy seas, that a breeze of wind, however light, will set the ice in motion, if there be any room for it to move; in such cases, the smaller pieces of course begin to drift the first, and the heavier ones soon follow, though at a slower rate: among loose ice, therefore, almost every separate piece is seen to move with a different velocity, proportioned to its depth under water.

Having gone on shore in the evening to make some observations for the variation, I afterwards ascended the hill, in order to take a view of the state of the ice in the offing. The breeze had now begun to open several "holes," particularly in the west and south-east quarters; it was most loose in the latter direction, except close along the land to the eastward, where a ship might possibly have been got, had this been our immediate object. The ice, however, looked just as promising to the westward as in any other quarter, and I found, before I returned on board, that it continued

to drift to the eastward, and to leave more and more space of clear water in the required direction. I, therefore, communicated to Lieutenant Liddon my intention of pushing on to the westward the instant the sea became clear enough for the ships to make any progress with a beating wind; but, in the event of failing to do so, that I should next try what could be done by attempting a passage considerably to the southward of our present parallel.

At seven P.M., we shipped the rudder, and crossed the top-gallant yards, in readiness for moving; and I then again ascended the hill, and walked a mile to the westward, along the brow of it, that not a moment might be lost, after the ice to the westward, should give us the slightest hope of making any progress by getting under-way. Although the holes had certainly increased in size and extent, there was still not sufficient room even for one of our boats to have worked to windward; and the impossibility of the ships' doing so was rendered more apparent, on account of the current which, as I have before had occasion to remark, is always produced in these seas, soon after the springing up of a breeze, and which was now running to the eastward, at the rate of at least one mile per hour. It was evident, that any attempt to get the ships to the westward must, under circumstances so unfavourable, be attended with the certain consequence of their being drifted the contrary way; and nothing could, therefore, be done but still to watch, which we did most anxiously, every alteration in the state of the ice. The wind, however, decreasing as the night came on, served to diminish the hopes with which we had flattered ourselves of being speedily extricated from our present confined and dangerous situation. At half-past ten P.M., Lieutenant Beechey, at my request, ascended the hill; and, on his return at eleven o'clock, reported that, "the ice was slack from W.b.N. to W.S.W., but that, without a leading wind, it did not appear that a ship could make any way among it."

At one A.M., on the 11th, I despatched Mr. Ross to the top of the hill, from whence he observed, that "the ice had slackened considerably from W.b.S. to south, but was still too close for a ship to work among it." At this time the wind was dying away gradually; and, at four A.M., when Mr. Ross again ascended the hill, it had fallen quite calm. The ice immediately ceased to drift to the eastward, and at half past five, a light breeze springing up from the south-east, caused it at once to return in the opposite direction. Being desirous, if possible, to take advantage of this breeze, Lieutenant Beechey and myself again went on shore, in order to form a judgment whether there was room for the ships to sail among the ice, should it appear otherwise expedient to get them under-way. We agreed that it was by no means practicable with the present light wind, which would scarcely have given them steerage way, even in a clear and unincumbered sea, and much less, there-

fere, could have enabled them to force their way through the numberless heavy masses which lay in our way to the westward. So close, indeed, did the ice about us still continue, that it was necessary to shift the Hecla once more round to the westward of the point of land, to secure her from that which the change of wind was once more bringing back in great abundance, and at the rate of nearly a mile per hour. In an hour after we had effected this, I had reason to be satisfied with the determination to which I had come, of not getting the ships under-way, for there was literally not a single "hole" of open water visible from the mast-head, in which a boat would have floated, except immediately under the ice of the point where we were lying, and within one hundred yards of the ship.

The latitude observed at our present station was 74° 25′ 35″, the longitude, by chronometers, 113° 43′ 01″, and the variation of the magnetic needle, 106° 00′ 38″ easterly, each of these being the mean of several observations taken on different days. There was nothing in the appearance or productions of this part of the island different from those which had been found elsewhere, except that the ravines were more strikingly grand and picturesque, in consequence of the greater height of the land upon this part of the coast: this, as I have before remarked, was found, in one instance, to exceed eight hundred feet above the level of the sea; and the hills, immediately at the back of this, at the distance of nine or ten miles, appeared to be at least one or two hundred feet higher; so that the extreme height of Melville Island, as far as we had an opportunity of seeing it, may, perhaps, be fairly estimated at about one thousand feet. The rocks consisted entirely of sandstone in horizontal strata, and the soil of same, intermixed occasionally with decayed plants, forming here and there a sort of vegetable mould, on which the other plants, and a few tufts of very luxuriant moss, were growing: we remarked that almost the whole of the plants had a part of their flowers cropped by the hares, and other animals which are fond of feeding in the sheltered and warm situations afforded by the banks near the sea.

The weather was foggy for some hours in the morning, but cleared up in the afternoon, as the sun acquired power. The wind increased to a fresh gale from the eastward, at nine P.M., being the second time that it had done so, while we had been lying at this station; a circumstance which we were the more inclined to notice, as the easterly winds had hitherto been more faint and less frequent than those from the westward. In this respect, therefore, we considered ourselves unfortunate, as experience had already shewn us, that none but a westerly wind ever produced upon this coast, or, indeed, on the southern coast of any of the North Georgian Islands, the desired effect of clearing the shores of ice.

At nine P.M., Lieutenant Beechey could discover from the top

of the hill no clear water in any direction. After ten o'clock the wind blew much harder, which obliged us to strike the top-gallant yards, and to brace the yards to the wind; the ice had by this time ceased moving to the westward, having, apparently, as before, reached its *ne plus ultra* in that direction. The electrometer was tried in the course of the evening, in the usual manner, the sky being full of hard dense clouds, and the wind blowing strong, but no sensible effect was produced upon the gold leaf.

The gale continued strong during the night, and the ice quite stationary. Not a pool of clear water could be seen in any direction, except just under the lee of our point, where there was a space large enough to contain half a dozen sail of ships, till about noon, on the 12th, when the whole closed in upon us without any apparent cause, except that the wind blew in irregular puffs about that time, and at one P.M. it was alongside. The ship was placed in the most advantageous manner for taking the beach, or rather the shelf of submarine ice, and the rudder again unshipped and hung across the stem. The ice which came in contact with the ship's side consisted of very heavy loose pieces, drawing twelve or fourteen feet water, which, however, we considered as good "fenders," comparatively with the enormous fields which covered the sea just without them. So much, indeed, do we judge at all times by comparison, that this kind of ice, which in Davis' Strait we should not like to have had so near us, was now considered of infinite service, when interposed between the ship and the heavier floes. Every thing remained quiet for the rest of the day, without producing any pressure of consequence; the wind came round to N.b.E. at night, but without moving the ice off the land.

Early in the morning of the 13th I received, by Mr. Griffiths, a message from Lieutenant Liddon, acquainting me that at eleven o'clock on the preceding night the ice had been setting slowly to the westward, and had at the same time closed in upon the land where the Griper was lying, by which means she was forced against the submarine ice, and her stern lifted two feet out of the water. This pressure, Lieutenant Liddon remarked, had given her a twist which made her crack a good deal, but apparently without suffering any material injury in her hull, though the ice was still pressing upon her when Mr. Griffiths came away. She had at first heeled inwards, but on being lifted higher, fell over towards the deep water. Under these circumstances, Lieutenant Liddon had very properly landed all the journals and other documents of importance, and made every arrangement in his power for saving the provisions and stores, in case of shipwreck, which he had now every reason to anticipate. Convinced as I was that no human art or power could, in our present situation, prevent such a catastrophe, whenever the pressure of the ice became sufficient, I was more than ever satisfied with the determination to which I had previously come, of keeping the ships apart, during the continuance of these

untoward circumstances, in order to increase the chance of saving one of them from accidents of this nature. I, therefore, thought it right merely to direct Lieutenant Liddon's attention to the necessity of saving the provisions and fuel, in preference to any other species of stores, and established signals to be made upon the point of land which intervened between the ships, in case of any thing occurring. In the mean time, the ice remained so close about the Hecla, that the slightest pressure producing in it a motion towards the shore, must have placed us in a situation similar to that of the Griper; and our attention was, therefore, diverted to the more important object of providing, by every means in our power, for the security of the larger ship, as being the principal depôt of provisions and other resources.

At five P.M. Lieutenant Liddon acquainted me by letter, that the Griper had at length righted, the ice having slackened a little around her, and that all the damage she appeared to have sustained was in her rudder, which was badly split, and would require some hours' labour to repair it, whenever the ice should allow him to get it on shore. He also stated that, from the particular situation into which the Griper had been forced, and of the masses of ice immediately about her, a westerly wind, though it might eventually clear the shore, would in the first place subject her to another squeeze like that from which she had just been so opportunely released. Lieutenant Beechey observed from the hill, in the course of the day, that the ice was so compact as not to leave an opening in any direction, and that it was set so close against the shore, that nothing could have passed between them. It had moved off a few yards from the Hecla for two or three hours, and in the evening closed again, so as to press her firmly against the land, though without any material strain. This pressure arose principally from the approach of the large block of ice which I have described as having been raised up on the 9th, and which, having been frequently drifted backwards and forwards past the ship since that time, had once more stationed itself rather nearer to us than we could have wished. I may here remark that this mass, of which we knew the dimensions by actual measurement, served, when driving among the heavy floes in the offing, as a standard of comparison, by which the height of the latter above the sea, and thence their whole bulk, could be estimated with tolerable accuracy; and it was principally in this manner that a judgment was formed of those enormous fields with which this part of the sea was incumbered. There was a very light air from the southward and eastward for the greater part of the evening, and a fog came on as the atmosphere cooled at night.

Soon after midnight the ice pressed closer in upon the Hecla than before, giving her a heel of eighteen inches towards the shore, but without appearing to strain her in the slightest degree. Most of

the boats had been lowered down, and securely moored upon the beach, to prevent their being damaged, should the ship be forced upon her broadside, and the rest were now placed in a similar situation. By four P.M. on the 14th, the pressure had gradually decreased, and the ship had only three or four inches heel, in an hour after she had perfectly righted, and the ice remained quiet for the rest of the day. A light easterly wind, with small snow at times, continued till six A.M., when it died away, and was soon after succeeded by a gentle air from the westward.

Mr. Fisher tried an experiment on the specific gravity of a piece of floe-ice taken up from alongside the ship, by which it appeared to be heavier than that we had hitherto weighed in the same manner. Being formed into a cube, whose sides measured one foot two inches and seven-tenths, and placed to float in the sea, only one inch and eight-tenths of it remained above the surface. The temperature of the sea-water at the time, was 34°, and its specific gravity 1.0105.

The weather became foggy, with small rain in the afternoon; before the fog came on, however, Mr. Ross observed from the hill that the same unvaried surface of impenetrable ice, as before, presented itself in every direction; and a note from Lieutenant Liddon acquainted me that no alteration had lately taken place in the neighbourl ood of the Griper.

Every moment's additional detention now served to confirm me in the opinion I had formed, as to the expediency of trying, at all risks, to penetrate to the southward, whenever the ice would allow us to move at all, rather than persevere any longer in the attempts we had been lately making with so little success, to push on directly to the westward. I, therefore, gave Lieutenant Liddon an order to run back a certain distance to the eastward, whenever he could do so, without waiting for the Hecla, should that ship be still detained; and to look out for any opening in the ice to the southward, which might seem likely to favour the object I had in view, waiting for me to join him, should any such opening occur.

The westerly breeze freshened up, with continued snow, the ice about the ship began to move at seven P.M. The usual superficial current was soon observed to make, carrying with it to the eastward the loose and broken fragments of ice. At eight o'clock the heavier masses had also acquired motion, and it became necessary to shelter the Hecla from their approach by shifting her once more to the eastward of the point. In doing this, we found the current at the extreme point running at the rate of two, or two and a half miles an hour, so as to require great caution in laying out our warps to prevent the ship being carried back to the eastward; and this not three hours after it had first begun to make. The frequent experience we had of the quickness with which currents are thus formed, in consequence merely of the wind setting

the various bodies of ice in motion, naturally leads to this useful caution, that one or two trials of the set of the stream in icy seas must not be too hastily assumed in drawing any conclusion as to its constant or periodical direction. I am convinced, indeed, that, of all the circumstances which render the navigation among ice so precarious and uncertain, there is none so liable to constant alteration, and on which, therefore, so little dependence can be placed, as an indication of the existence of a passage in this or that direction, as the set and velocity of the superficial currents.

The breeze died away in the course of the night, just as the ice was beginning to separate, and to drift away from the shore; and, being succeeded by a wind off the land, which is here very unusual, Lieutenant Liddon was enabled to make sail upon the Griper at two A.M. on the 15th, in execution of the orders I had given him. As I soon perceived, however, that she made little or no way, the wind drawing more to the eastward, on that part of the coast, and as the clear water was increasing along the shore to the westward, much further than we had yet seen it, I made the signal of recal to the Griper, with the intention of making another attempt, which the present favourable appearances seemed to justify, to push forward without delay in the desired direction. At five A.M., therefore, as soon as the snow had cleared away sufficiently to allow the signal to be distinguished, we cast off, and ran along shore, the wind having by this time veered to the E.b.N., and blowing in strong puffs out of the ravines as we passed them. We sailed along, generally at the distance of a hundred or a hundred and fifty yards from the beach, our soundings being from ten to seventeen fathoms; and, after running a mile and a half in a N.W.b.W. direction, once more found the ice offering an impracticable obstacle to our progress westward, at a small projecting point of land just beyond us. We, therefore, hauled the ship into a bight which we were at this moment fortunate in finding abreast of us, and where we were enabled to place the Hecla within a number of heavy masses of grounded ice, such as do not often occur on this steep coast, and which, comparatively with the situation we had lately left, appeared a perfect harbour. In the mean time, the wind had failed our consort when she was a mile and a half short of this place; and Lieutenant Liddon, after endeavouring in vain to warp up to us, was obliged, by the ice suddenly closing upon him, to place her in-shore in the first situation he could find, which proved to be in very deep water, as well as otherwise so insecure, as not to admit a hope of saving the ship, should the ice continue to press as upon her. It now became of essential importance to endeavour to get the Hecla so far into security in her present situation, as to allow of assistance being sent to the Griper in case of accidents. With this view, I assembled the officers and ship's company, and having acquainted them with my intention, caused

such arrangements to be made for sending parties round, accompanied by proper officers, as might prevent confusion whenever that measure became necessary. The plan proposed was, to cut large scuttles or holes in the decks, if time were allowed for doing so, whenever the wreck of the ship should appear to be unavoidable, in order to allow the casks of provision to float up out of the hold, as in any other case they must have sunk with the ship, in deep water. The Hecla's crew were set to work to saw off some thick tongues of ice, which prevented her going into a sort of "natural dock," as the sailors term it, formed by the masses of grounded ice; a tedious and cold operation, which they performed with their usual alacrity, and thus placed the ship in complete security. I then walked round to the Griper, to acquaint Lieutenant Liddon with the arrangements that had been made, and to consult with him as to the other means to be adopted for her safety, and the preservation of the stores. We were, shortly afterwards, however, relieved from any further apprehension on this account, by the ice gradually receding from the shore, in consequence of a westerly breeze springing up, and allowing the Griper to warp up near the Hecla, where, though she was by no means so safe as that ship, she was at least placed in a situation, with which the extraordinary nature of our late navigation taught us to be satisfied.

Mr. Fisher found very good sport in our new station, having returned in the evening, after a few hours' excursion, with nine hares; the birds had, of late, almost entirely deserted us, a flock or two of ptarmigan and snow-buntings, a few glaucous gulls, a raven, and an owl, being all that had been met with for several days.

A fog which had prevailed during the night, cleared away in the morning of the 16th, and a very fine day succeeded with a moderate breeze from the westward. In order to have a clear and distinct view of the state of the ice, after twenty-four hours' wind from that quarter, Captain Sabine, Mr. Edwards, and myself, walked about two miles to the westward, along the high part of the land next the sea, from whence it appeared but too evident that no passage in this direction was yet to be expected. The only clear water in sight was a channel of about three-quarters of a mile wide in some places, between the ice and the land, extending as far as a bold headland, bearing W. 52° W., distant two miles and a quarter, which formed the western extreme in sight, and was called Cape Dundas, as appropriate to the name which the island had received. The ice to the west and south-west was as solid and compact, to all appearance, as so much land; to which, indeed, the surface of many of the fields, from the kind of hill and dale I have before endeavoured to describe, bore no imperfect resemblance. I have no doubt that, had it been our object to circumnavigate Melville Island, or, on the other hand, had the coast

continued its westerly direction instead of turning to the northward, we should still have contrived to proceed a little occasionally, as opportunities offered, notwithstanding the increased obstruction which here presented itself; but as neither of these was the case, there seemed little or nothing to hope for from any further attempts to prosecute the main object of the voyage in this place. I determined, therefore, no longer to delay the execution of my former intentions, and to make trial, if possible, of a more southern latitude, in which I might follow up the success that had hitherto attended our exertions.

The place to which we had now walked, was the eastern bank of the largest ravine we had ever seen upon the island, its width at the part next the sea being above half a mile, and its sides, which are nearly perpendicular, not less than eight hundred feet in height. In watching the little stream, not more than a yard or two wide and a few inches in depth, now trickling along the bottom of this immense water-course, it was impossible not to be forcibly struck with the consideration of the time which must have been required, with means apparently so inadequate, to hew out so vast a bed for the annual discharge of the winter's snow into the ocean. We here met with no other mineral than sandstone; the formation of the rocks, as far as we could see them in the ravines, here and there resembled large upright masses, or square pillars, standing amidst the *débris* which surrounded them; in other places, a range of sandstone, in thin horizontal strata, was left in the same manner, having all the appearance of a wall artificially constructed, and on these a square part sometimes occurred, higher than the rest, not unlike chimneys, for which, in an inhabited country, they might easily have been taken at a little distance. In some of the higher parts of the land, upon the brink of the precipice which overlooks the sea, we remarked almost the first commencement of ravines, consisting of small channels a yard or two in depth, and which, as we then amused ourselves by reflecting, may one day resemble those immense beds which constitute the most sublime and picturesque feature that this island can boast. I have before remarked that, at the outlet of these ravines, there is always a small point of land, formed by the soil and stones, which are there carried into the ocean; I repeat this observation, for the sake of adding that, in cases of danger from the sudden closing of the ice, a ship may always be sure of meeting with one of these points, which are too small to be seen at a distance, or to be delineated on the chart, by steering for one of the ravines; the latter being easily distinguishable when several miles from the land.

The station at which the ships were now lying, and which is the westernmost point to which the navigation of the Polar Sea to the northward of the American continent has yet been carried, is

in latitude 74° 32′ 25″, and longitude, by chronometers, 113° 46′ 42″.5. Cape Dundas is in latitude 74° 28′ 50″, longitude 112° 57′ 45″, by which the length of Melville Island, in an E.N.E. and W.S.W. direction, appears to be about one hundred and thirty-five miles, and its breadth, about the meridian of Winter Harbour, from forty to fifty miles.

At two P.M. we cast off from the shore, and ran close along the edge of the ice to the eastward, the general distance from the land being a mile and a half for the first four or five miles, and then gradually much closer. I acquainted the officers with the object I had now in view, and directed a vigilant look-out to be constantly kept for any opening in the ice that might favour our getting to the southward. The wind died away after five P.M., and then became extremely variable, shifting in "cat's paws" from one point to another as quickly as we could trim the sails. At nine P.M. we were abreast the place where we had landed on the 5th, and here we perceived that the ice closed in with the land a little to the eastward. There was no security to be found for the ships without getting past one of the smaller points at the mouth of a ravine, against which a fine was seeing the smaller pieces of ice, and had blocked up the passage before we arrived at it. After two hours' labour in heaving with hawsers, during which the Hecla narrowly escaped a severe "nip" by the sudden closing of the ice, we succeeded in getting through, and, soon after midnight, made the ships fast to some very heavy grounded ice near the beach. We observed a number of hares feeding on the sides of the hills, as we sailed along in the afternoon, and also a few ptarmigan.

The place where the Hecla was now secured, being the only one of the kind which could be found, was a little harbour formed, as usual, by the grounded ice, some of which was fixed to the bottom in ten or twelve fathoms. One side of the entrance to this harbour consisted of masses of floes, very regular in their shape, placed quite horizontally, and broken off to exactly perpendicular, as to resemble a handsome well-built wharf. On the opposite side, however, the masses to which we looked for security were themselves rather terrific objects, as they leaned over so much towards the ship, as to give the appearance of their being in the act of falling upon her deck; and as a very trifling concussion often produced the fall of much heavier masses of ice, when in appearance very firmly fixed to the ground, I gave orders that no guns should be fired near the ship during her continuance in this situation. The Griper was of necessity made fast near the beach, in rather an exposed situation, and her rudder unshipped, in readiness for the ice coming in; it remained quiet, however, though quite close, during the day, the weather being calm and fine. The latitude observed here on the 17th, was 74° 34′ 50″, the longitude

115° 38' 55", and the variation of the magnetic needle 11° 19' 15" easterly.

The weather became foggy at night; the young ice, which had, for several evenings past, begun to form upon the surface of the sea, as the sun became low, did not thaw during the whole of the day. Mr. Fisher was again successful in his sporting excursion, bringing in nine hares, the greater part of which were still beautifully white, about a dozen young ptarmigan were also killed in each ship. The vegetation in this neighbourhood was much the same as in our last station; the sorrel had now become too insipid to be at all palatable.

On the 16th the weather was alternately clear and cloudy, with a slight air of wind from the S.W. The ice continued close to the land as far as we could see in both directions, and without the smallest perceptible motion till the evening, when it slackened a little along the shore. I immediately despatched Mr. Nias to Cape Providence, which was still two miles and a half to the eastward of us, to examine the appearance of the ice beyond it. He reported, on his return, that it was slack at the distance of two hundred yards from the shore, as far as the Cape, but that to the eastward there was no appearance of clear water. As there was not the smallest security for the ships for the next three or four miles along the shore, it was necessary still to continue in our present place of refuge.

It was again nearly calm on the 17th, and that weather was foggy for some hours in the morning. In the evening, having walked to Cape Providence, to see if there was any possibility of moving the ships, I found the ice so close that a boat could not have passed beyond the Cape; but a light air drifting the ice slowly to the eastward at this time, gave me some hopes of soon being enabled to make our escape from this tedious as well as vexatious confinement. At a quarter past eight it was high-water by the shore; about this time the ice ceased driving to the eastward, and shortly after returned in the opposite direction. This coincidence, if it be only such, seemed in some degree to confirm what I had hitherto considered to be the case with respect to the flood-tide coming from the westward upon this coast; but it may, perhaps, have been occasioned only by the most superficial current, as a light air sprung up from the eastward about that time.

At half-past eleven P.M., some heavy pieces of the grounded ice, to which our bow-haser was secured, fell off into the water, snapping the rope in two, without injuring the ship. As, however, every alteration of this kind must materially change the centre of gravity of the whole mass, which already appeared in a tottering state, I thought it prudent to move the Hecla out of her harbour to the place where the Griper was lying, considering that a ship might easily be forced on shore by the ice without suffering any

serious damage; but that one of those enormous masses falling upon her deck must inevitable crush or sink her.

The weather being again calm on the 20th and 21st allowed the "young ice" to form upon the surface to such a degree as firmly to cement together the loose pieces which hung about the ships; and it did not thaw during those days, though the sun was shining clearly upon it for several hours. Although this alone was sufficient to deter me from moving the ships, without a fresh breeze of wind, I was anxious to know the state of the ice to the eastward, and I, therefore, sent Mr. Nias to the Cape on the evening of the 21st, to examine it with a glass. On his return he acquainted me that no alteration had taken place, the whole body of the ice remaining still close in with the shore, and perfectly compact and impenetrable to the eastward, as well as to the south.

On the 22d, the ice still remained as close as before, more so indeed as, on the failure of a light breeze which had been blowing from the westward for an hour or two, and had amused us with hopes of getting away, the loose ice surrounded us completely, so that we were immoveably beset. Calm weather is observed always to make ice open out, and occupy more space than it had done before, as if the previous breeze had been acting on an elastic substance, which springs back as soon as the force of the wind is removed from it.

The "young ice" had increased to the thickness of an inch and a half on the morning of the 23d, and some snow which had fallen in the night served to cement the whole more firmly together. On a breeze springing up from the westward, however, it soon began to acquire a motion to leeward, and, at half an hour before noon, had slackened about the ships sufficiently to allow us to warp them out, which was accordingly done, and all sail made upon them. The wind having freshened up from the W.N.W., the ships' heads were got the right way, and by great attention to the sails, kept so till they had got abreast of Cape Providence, after which they were no longer manageable, the ice being more close than before. I have before remarked that the loose ice in this neighbourhood was heavy in proportion to the floes from which it had been broken; and the impossibility of sailing among such ice, most of which drew more water than the Hecla, and could not therefore be turned by her weight, was this day rendered very apparent, the ships having received by far the heaviest shocks which they experienced during the voyage. They continued, however, to drive till they were about three miles to the eastward of Cape Providence, where the low land commences; when finding that there was not any appearance of open water to the eastward or southward, and that we were now incurring the risk of being beset at sea, without a chance of making any farther progress, we hauled in for the largest piece of grounded ice we could see upon the beach, which we

reached at six P.M., having performed six miles of the most difficult navigation I have ever known among ice. The Hecla was made fast in from eighteen to twenty feet water close to the beach, and the Griper in four fathoms, about half a mile to the westward of us.

The situation in which the ships were now placed, when viewed in combination with the shortness of the remaining part of the season, and the period to which our resources of every kind could be extended, was such as to require a more than ordinary consideration, in order to determine upon the measures most proper to be pursued, for the advancement of the public service and the security of the ships and people committed to my charge. Judging from the close of the summer of 1819, it was reasonable to consider the 7th of September as the limit beyond which the navigation of this part of the Polar Sea could not be performed, with tolerable safety to the ships, or with any hope of further success. Impressed, however, with a strong sense of the efforts which it became us to make in the prosecution of our enterprise, I was induced to extend this limit to the 14th of September, before which day, on the preceding year, the winter might fairly be said to have set in. But even with this extension our prospect was not very encouraging; the direct distance to Icy Cape was between eight and nine hundred miles, while that which we had advanced towards it this season, fell short of sixty miles.

I have already detailed the reasons which inclined me to believe, that there was little hope of making further progress to the westward in this latitude, and the grounds upon which I had determined to run along the edge of the ice to the eastward. Such, however, was the extreme difficulty with which we were enabled to navigate the ships in this, or in any other direction, that it had for many days been equally out of our power to effect this object. Indeed, we had experienced, during the first half of the navigable season, such a continued series of vexations, disappointments and delays, accompanied by such a constant state of danger to the ships, that I felt it would no longer be deemed justifiable in me to persevere in a fruitless attempt to get to the westward.

By Mr. Hooper's report of the remains of provisions, it appeared that, at the present reduced allowance, (namely, two-thirds of the established proportion for the navy) they would last until the 30th of November, 1821; and that an immediate reduction to half allowance, which must, however, tend materially to impair the health and vigour of the officers and men, would only extend our resources till the 30th of April, 1822; it therefore became a matter of evident and imperious necessity, that the ships should be cleared from the ice before the close of the season of 1821, so as to reach some station where supplies might be obtained by the end of that or early in the following year.

By the same report, it appeared that the fuel with which we were furnished, could only be made to extend to a period of two years and seven months, or to the end of November, 1821; and this only by resorting to the unhealthy measure of both crews living on board the Hecla, during six of the ensuing winter months. The above calculation was made according to the proportion of fuel hitherto consumed on board each ship, varying at different periods of the year, from one and a half to three bushels of coal per day,—a quantity which, far from affording the officers and men comfort in so rigorous a climate, was found barely sufficient to preserve their health.

The ships might be considered almost as effective as when the expedition left England; the wear and tear having been trifling, and the quantity of stores remaining on board being amply sufficient, in all probability, for a much longer period than the provisions and fuel. The health of the officers and men continued also as good, or nearly so, as at the commencement of the voyage. Considering, however, the serious loss we had sustained in the lemon-juice, the only effectual anti-scorbutic on which we could depend, during at least nine months of the year in these regions, as well as the effects likely to result from crowding nearly one hundred persons into the accommodation intended only for fifty-eight, whereby the difficulty of keeping the inhabited parts of the ship in a dry and wholesome state would have been so much increased, there certainly seemed some reason to apprehend, that a second winter would not leave us in possession of the same excellent health which we now happily enjoyed, while it is possible that the difficulty and danger of either proceeding or returning might have been increased.

These considerations, together with some others of minor importance, induced me, at this time, to call for the opinions of the principal officers of the expedition, being desirous of profiting by their united judgment and experience, previous to forming my ultimate decision as to the measures most proper to be pursued. I therefore addressed a letter to Lieutenants Liddon, Beechey and Hoppner, Captain Sabine, and Messrs. Edwards and Hooper, respectively, directing their attention to the different points connected with our situation which I have just detailed, and requesting their advice upon the subject within thirty-six hours after the receipt of my letter.

Early in the morning of the 24th, the wind shifted to north, and soon after increased to a fresh breeze, which made the ice stream off the land, but so slowly, that it was not till ten A.M., that we had a channel wide enough to move the ships to a point a mile and a half to the eastward, which we reached by short tacks at noon; and, beyond which, as well as to the south and west, nothing but ice could be seen. So quickly, indeed, was the narrow channel

closed, in which we had been sailing, that when we made fast to the ice at the point, it would have been impossible to have returned even to the spot we had just before left.

A herd of musk-oxen being seen at a little distance from the ships, a party was despatched in pursuit; and Messrs. Fisher and Bushnan were fortunate in killing a fine bull, which separated from the rest of the herd, being too unwieldy to make such good way as the others. He was, however, by no means caught by our people in fair chase, for though these animals run with a hobbling sort of canter that makes them appear as if every now and then about to fall, yet the slowest of them can far outstrip a man. In this herd were two calves, much whiter than the rest, the older ones having only the white saddle. In the evening, Sergeant Martin succeeded in killing another bull; these two animals afforded a very welcome supply of fresh meat, the first giving us three hundred and sixty-nine, and the other three hundred and fifty-two pounds of beef, which was served in the same manner as before.*

The wind died away soon after we reached the point, affording no hope of making, for the present, any further progress by the drifting of the ice from the land; we, therefore, hauled the ships into the best births we could find, in doing which the Hecla's fore-foot rested on the ground for a short time, but she was afterwards secured in four fathoms. It was low water by the shore at eight P.M.

The ice closed in upon us in the course of the night, leaving not a single pool of open water in sight in any direction. It was high-water at half past two A.M., and low-water at three-quarters past eight, on the 25th, so that the tides appeared to continue very regular on this part of the coast. The Griper, being very near the beach, grounded as the tide fell, so that the water left her between two and three feet; Lieutenant Liddon, therefore, warped out nearer to the Hecla in the afternoon, for fear of not getting off when it might be necessary.

Immediately under the hills, which here, for the first time, in sailing from Cape Providence to the eastward, recede about two miles from the sea, was the most luxuriant pasture ground we had yet met with on Melville Island. It consisted of about a dozen acres of short thick grass, intermixed with moss, which gave it almost the same lively appearance as that of an English meadow. It was covered with the dung and foot-tracks of musk-oxen, of

* The total quantity of game obtained for the use of the expedition, during our stay upon the shores of Melville Island, being a period of nearly twelve months, was as follows:

3 Musk-oxen		Affording 3,766 pounds of meat.
26 Bears		
62 Hares		
53 Geese		
69 Ducks		
144 Ptarmigans		

which twelve or fourteen skulls were picked up near it; and it was here that the herd before-mentioned was feeding. When walking over this spot, on which there were many small ponds of water, our surprise in some degree ceased at the immense distance which these animals must travel in the course of their annual visits to these dreary and desolate regions; as such a pasture affording undisturbed and luxuriant feeding during the summer months, may, in spite of the general dreary appearance of the island, hold out sufficient inducement for their annual emigration.

A thermometer in the sun about two P.M. stood at 52° for a short time, the weather being quite calm and fine. Mr. Fisher tried an experiment on the specific gravity of a piece of floe-ice found lying on the top of one of the grounded masses near the beach. Being formed into a cube, whose sides measured two feet, and put into the sea, at the temperature of 33°, with that side up which was lying uppermost when first found, three inches and a half of it remained above the surface; but when the opposite side was turned up, only three inches appeared above water. The latitude observed at this station was 74° 27′ 19″, the longitude 112° 11′ 32″, and the variation of the magnetic needle 114° 34′ 45″ easterly.

We here obtained our last supply of sorrel, the leaves of which had now become so shrivelled, as well as insipid, as to be no longer worth gathering. We saw no birds here but one or two flocks of king-ducks, a speckled owl, which was killed, and now and then a solitary glaucous gull.

An air of wind having sprung up from the westward in the evening, the ice had slackened about us a little by eight P.M., which induced me to cast off soon after, though with little prospect of making any progress. After two hours, during which the breeze deserted us, we had gained about three-quarters of a mile to the eastward, and then made fast to the land-ice to wait for an opening, which might enable us to proceed.

The wind remained light and variable till five A.M. on the 25th, when a westerly breeze began to open the ice a little; at seven we cast off, and made all sail to the eastward, through loose but heavy pieces of ice, between which there seemed sufficient room for the ships to sail. We soon found, however, that the young ice, which at a distance appeared like open water, had so completely occupied the space between the heavier masses, that when the ship had entered it, it was impossible to keep way upon her, or to get her head in the right direction. Such, indeed, was the difficulty of doing this, that we were incessantly labouring from eight till half-past eleven, without gaining a single yard, during which the ship drifted with the ice. Having at length, however, got out of the scrape into which the young ice had unavoidably brought us, and the breeze freshening up strong from the westward, all sail was

made along the land, generally within half a mile of the beach, where a channel of clear water had now opened. In the course of the morning, the Hecla received some very severe shocks, one of which we were apprehensive had damaged the rudder, the ship having run with fresh sternway against a heavy piece of ice, but fortunately no material injury was sustained.

Soon after noon, the weather became thick, with heavy snow, so that we were obliged to run entirely by the lead, on which we had every reason confidently to rely, as a safe and sure guide. We kept close along the edge of the ice, which was quite compact to the southward of us, without the smallest appearance of an opening to encourage a hope of penetrating in that direction.

Having now received the answers of the officers to my letter addressed to them on the 23d, and given the matter my most serious and mature consideration, it was necessary that I should make up my mind as to the future conduct of the Expedition. It was gratifying to me to find that the officers unanimously agreed with me in opinion that any further attempt to penetrate to the westward in our present parallel would be altogether fruitless, and attended with a considerable loss of time, which might be more usefully employed. They also agreed with me in thinking, that the plan which I had adopted, of running back along the edge of the ice to the eastward, in order to look out for an opening that might lead us towards the American continent, was, in every respect, the most advisable; and that, in the event of failing to find any such opening, after a reasonable time spent in the search, it would be expedient to return to England rather than to risk the passing another winter in these seas, without the prospect of attaining any adequate object; namely, that of being able to start from an advanced station at the commencement of the following season.

Under all the circumstances of the case, therefore, I could not but admit the propriety of immediately returning to England, should our attempt to penetrate to the southward prove unsuccessful in any part of the navigation between the position we now occupied and Barrow's Strait; as it would, in that case, be impossible to make so much progress either to the southward or the westward during the short remainder of the present season, as to bring the accomplishment of the passage through Behring's Strait within the scope of our remaining resources.

At three P.M. we were abreast of Cape Hearne; and, as we opened the bay of the Hecla and Griper, the wind, as usual on this part of the coast, came directly out from the northward; but as soon as we had stretched over to Bounty Cape, of which we were abreast at eight P.M., it drew once more along the land from the westward. We found a large quantity of loose and broken ice off Cape Hearne, and not far from the same place we came to a floe of young ice, of nearly a mile in length, and about two inches and

a half in thickness, which had undoubtedly been formed this summer, probably in some of the bays and inlets in the neighbourhood of Bounty Cape. The distance between the ice and the land increased as we proceeded, and at midnight the channel appeared to be four or five miles wide, as far as the darkness of the night would allow of our judging; for we could at this period scarcely see to read in the cabin at ten o'clock. The snow which fell during the day was observed, for the first time, to remain upon the land without dissolving; thus affording a proof of the temperature of the earth's surface having again fallen below that of freezing; and giving notice of the near approach of another long and dreary winter. One or two fulmar petrels, some tern, and numerous flocks of snow-buntings, were seen about the ships in the course of the day.

The navigable channel increased so much in breadth, as we ran to the eastward with a fresh and favourable breeze, that at eight A.M., on the morning of the 27th, when we had advanced beyond the east end of Melville Island, it was not less than ten miles wide. We kept near the ice, running at such a distance from it as not to get the ships embayed between the points, which often occasions a long and useless delay in afterwards beating round them with a scant wind. A constant look-out was kept from the crow's-nest for an opening to the southward, but not a single break could be perceived in the mass of ice which still covered the sea in that direction. We were at noon in latitude 73° 02′ 15″, and longitude 105° 14′ 30″, the soundings being ninety-four fathoms, on a muddy bottom. Some water brought up from that depth in Dr. Marcet's bottle was at the temperature of 31¼°, that at the surface being 30°, and of the air 31°.

At seven P.M., a fog coming on, we hauled up close to the edge of the ice, both as a guide to us in sailing during the continuance of the thick weather, and to avoid passing any opening that might occur in it to the southward. We were, in the course of the evening, within four or five miles of the same spot where we had been on the same day and at the same hour the preceding year; and by a coincidence perhaps still more remarkable, we were here once more reduced to the same necessity as before, of steering the ships by one another for an hour or two; the Griper keeping the Hecla aboard, and our quarter-master being directed to keep the Griper right astern, for want of some better mode of knowing in what direction we were running. The fog froze hard as it fell upon the rigging, making it difficult to handle the ropes in working the ships, and the night was rather dark for three or four hours.

A fresh breeze continued from the S.W.b.W., with some swell, to which we had long been unaccustomed, and which, together with the extreme thickness of the weather, and the uncertainty of our course, made great caution necessary in running along the ice.

We had for some time been steering principally by soundings, but when she became obscured, we were under the necessity of making our wind to the northward and westward, which led us from the ice, till the weather should become more favourable. The fog began to clear away at half-past five A.M. on the 28th, and immediately after we saw land from N.E.b.E. to N.N.W. The ship's heads were now put to the S.S.E., in order to take up the ice where we had last seen it, but at six o'clock, in approaching some heavy detached masses, which appeared to be aground, and therefore made us very cautious with the hand-lead, we shoaled the water rather more suddenly than usual from thirty-five to ten and then to seven fathoms, and tacked in five and three quarters at the distance of half a mile to the westward of the grounded ice. There is certainly no land within two or three leagues of this shoal, on which, however, I have little doubt, from the appearance of the ice aground upon it, there is water enough for any ship, and which will probably be at all times clearly pointed out by the never-failing beacons of these seas. It is customary to judge by the tide-mark upon the ice whether it be aground or not, and by its dimensions whether it may be boldly approached.

Having hauled to the N.N.E., and then gradually more to the eastward, we deepened our water till no soundings could be obtained with forty fathoms of line, and then steered again to the S.E., in order to make the main ice. The impossibility of keeping any thing like an accurate reckoning during the last night's run, and the difficulty of recognising the land in consequence of the snow which now almost entirely covered it, left us for some time at a loss to ascertain our position, till we found ourselves at noon off Cape Cockburn, our latitude by observation being 74° 53′ 30″. We were now enabled to determine the continuity of the land from that point to Graham Moore's Bay, which, on its first discovery, we could not exactly ascertain on account of the distance at which we sailed from it.

The ice to the southward, along which we continued to sail this day, was composed of floes remarkable for their extraordinary length and continuity, some of them not having a single break or crack for miles together, though their height above the sea was not generally more than twelve inches, and their surface as smooth and even as a bowling-green, forming, in both these respects, a striking contrast to the ice to which we had lately been accustomed more westerly. The outer edge of these floes, however, for about one hundred yards, was broken by the sea into innumerable small pieces, remaining so close that a boat would not penetrate them; a circumstance which I notice because it prevented my putting into execution a plan I had proposed of making some observations on the variation of the magnetic needle in this neighbourhood, there being every reason to suppose that we should have found it to be

180°, or the south point of the needle turned directly to the North Pole of the earth, about the meridian of 100° west of Greenwich. The wind being to the southward of west, which made this shore a lee one, did not allow me to land on Bathurst Island for this purpose.

The weather was again so thick with snow in the afternoon, that we were once more obliged to sail round all the bays in the ice, instead of running from point to point, in order to leave no part of it unexamined; and, on its clearing up in the evening, we found that the ice was leading us to the northward of Garrett Island, the passage to the southward of it, through which we had sailed to the westward the preceding year, being now completely blocked up by floes, which did did not appear to have been detached from the island during this season. We had here occasion to notice, in a very striking degree, the deception occasioned by snow lying upon the land, in judging of its distance; this, indeed, is much more remarkable in these seas than in any other, when any part of the intermediate space is occupied by floes of ice, the whiteness of which mingles so imperceptibly with that of the snow upon the land, that it is impossible, from the total absence of any shadow, to tell where one ends and the other commences. Such, indeed, was the illusion this evening, with respect to Garrett Island, which was completely covered with snow, that, although we were sailing at the distance of only four or five miles from it, we should scarcely have been aware that any land was in that direction, had we not previously surveyed these islands, and been running with the chart before us.

In passing between Garrett and Bathurst Islands, at the distance of five miles from the former, we could find no bottom with thirty-five to fifty fathoms of line; and when its centre bore S.b.W. ½W. at the same distance, another island was discovered to the northward, which had not before been seen, and which I named after my friend and former commander, Captain Thomas Baker, of the Royal Navy. The eastern part of Bathurst Island was now observed to extend further to the N.N.E. than we had before been enabled to see it, terminating by a point of land, called Cape Capel, out of respect to the Honourable Captain Thomas Bladen Capel, of the Royal Navy.

We continued to run along the edge of the ice to the eastward, till half past six P.M., when more land being discovered a-head, of the extent and position of which we had no previous knowledge, and the night growing dark, the ships were hove-to with their heads to the northward and westward, in which direction there was a space of clear water several miles in extent, being in ninety fathoms, on a bottom of soft mud.

Having again got sight of the land at half past two A.M., on the 29th, we bore up for it, along the edge of the ice, which con-

plainly surrounded Lowther Island, but left us a free passage to the eastward. The land, discovered the preceding evening, proved to be an island, about a mile and a half in length, and tolerably high, and remarkably bluff in every view, appearing to have deep water all round it. We were abreast of it at half-past five, and I named it Browne Island, out of respect to my much-esteemed friend, Mr. Henry Browne, of Portland-Place. The ice then led us in a S.E. by E. direction, towards another island, distant from the first three miles and a half, bearing S.S.E. It was named after my friend Dr. Somerville, and is low at both ends like Barrett Island. When we first bore up in the morning, we had Institution-Island in sight from N.N.E. to E.N.E., at the distance of four or five leagues. As we advanced, and the sky became more clear, we found it to extend much farther to the eastward, and afterwards ascertained that it formed a part of Cornwallis Island, as before mentioned. About o'clock we made Griffith Island, between which and the ice we found the navigable channel narrowed to one-half, or a mile, at which distance from the shore, we could obtain no soundings with forty or fifty fathoms of line. The whole of the shore of Griffith Island seemed to be bold, the land being steep and bluff, especially towards its south-east end, where the strata, which appeared to be of sandstone, were observed to dip at a considerable angle to the S.E.

At half an hour before noon, the weather being abominably thick and sleety, from occasional showers of snow, a deeper blink than usual was perceived in the ice, which had hitherto been nearly as compact as if it were composed of a single floe. As I had always entertained an idea that there was no part of this sea, in which we were more likely to get to the southward, than immediately to the westward of Cape Bunny, I was desirous of thoroughly examining the state of things in this neighbourhood, and bore up to the eastward, under all sail for that purpose. After running two or three miles, however, we were again stopped, at twenty minutes past noon, and the weather having now cleared up, we perceived that the ice was as compact as before, except that there was one or two belts of water about a third of a mile wide just within its margin, but beyond these was quite close and impenetrable. We were, therefore, under the necessity of again hauling to the eastward, along the edge of the floes, which lay in a direction nearly parallel to the southern shore, and at the distance of seven or eight miles from it, being much nearer than we had been able to approach it, only six days earlier the preceding season. It is remarkable that we here found a strong rippling on the surface of the water, in the same place where we had before noticed it, and as we could discover nothing like shoal-water, or unevenness in the bottom, we concluded it must have been occasioned by some particular set, or meeting of the tides in this place. The space between us and

Cornwallis Island was entirely free from ice, and Wellington channel presented the same broad navigable passage as on the former occasion.

The continuity, or otherwise, of a large portion of the land now to the westward of us having before remained undetermined, on account of the hazy weather we had experienced on our passage to the westward, I was glad to have an opportunity of filling up the deficiencies which had unavoidably been left in the chart, upon this part of the coast. Immediately to the eastward of Cunningham Inlet is a bold headland, which formed the extreme of the land visible in this direction, in 1819, and which now being clearly distinguished, I named after Major Rennell, a gentleman well known as the ablest geographer of the age. At the back of Cape Rennell the land recedes considerably, forming a large bay, which I called Garnier Bay, and which, as we did not distinctly see the bottom of it in one part, may not improperly be found to communicate with Cunningham Inlet, making the intermediate land, on which Cape Rennell stands, an island. Before night came on, we had traced the land to the eastward nearly as far as Cape Clarence; but being desirous of leaving no part of this coast unexamined, by running past it in the night, I hove to at half past ten, with the ships' heads to the northward, and found no soundings with a hundred and thirty fathoms of line. The whole of the land we passed this day was much covered with snow, and perhaps permanently so, as the mean temperature of the atmosphere had, for some time past, fallen rather below the freezing point. If this conclusion be just, it would appear that the present season was about to close in somewhat earlier than it had done the preceding year. A flock of brent geese, some fulmar petrels, a dowkey, and one or two ivory gulls, were all the birds seen in the course of this day's run.

To the land along which we had now been sailing, I gave the name of North Somerset, in honour of my native county; and the northern shore of Barrow's Strait was called North Devon, after that of Lieutenant Liddon.

At a quarter past three o'clock in the morning of the 20th, we bore up to the eastward, the wind [illegible] blowing fresh directly down [illegible] Strait, except just after passing Prince Leopold's Islands, when it drew into Prince Regent's Inlet, and as soon as we had passed this, again assumed its former westerly direction, affording a remarkable instance of the manner in which the wind is acted upon by the particular position of the land, even at a considerable distance from it. The islands were incumbered with ice to the distance of four or five miles all round them, but the Strait was generally as clear and navigable as any part of the Atlantic.

Having now traced the ice the whole way from the longitude of 114° to that of 90° without discovering any opening to encourage

a hope of penetrating it to the southward, I could entertain the slightest doubt that there no longer remained a possibility of effecting our object with the present resources of the expedition; and that it was, therefore, my duty to return to England with the account of our late proceedings, that no time might be lost in following up the success with which we had been favoured, should His Majesty's government consider it expedient to do so. Having informed the officers and men in both ships of my intentions, I directed the full allowance of provisions to be, in future, issued, with such a proportion of fuel as might contribute to their comfort, a luxury which, on account of the necessity that existed for the strictest economy in this article, it must be confessed, we had not often enjoyed since we entered Sir James Lancaster's Sound. We had been on two-thirds allowance of bread between ten and eleven months, and on the same reduced proportion of the other species of provisions, between three and four; and, although this quantity is scarcely enough for working men for any length of time, I believe the reduction of fuel was generally considered by far the greater privation of the two.

We ran along the south shore, at the distance of four or five leagues, with a fresh westerly wind, and fine clear weather; a bay on that coast, a little to the westward of Cape York, was named after my friend the Honourable Mr. Eardley. We noticed a striking similarity in the geological character of this part of the coast, as far as we could judge at a distance, to that on the opposite shore of Barrow's Strait, both being remarkable for that buttress-like structure, which has before been observed to resemble the works of art, and which gives this land a magnificent and imposing appearance, such as it is impossible to describe. The shores were covered with ice to the distance of four or five miles, and the first solitary iceberg was seen in the course of the afternoon; but the strait was, in other respects, perfectly free from obstruction. At eleven P.M., we were abreast of a bluff and remarkable headland, which I named after my much-esteemed friend, Mr. William Petrie Craufurd, and to the eastward of which the land appeared to recede, forming a large bay. I continued to run during the night, however, being desirous of taking advantage of the westerly breeze which was still blowing, to run out of Sir James Lancaster's Sound.

It was not light enough till half-past three on the morning of the 31st, to enable us to perceive that the land immediately to the eastward of Cape Craufurd was not continuous, there being a space subtending an angle of 21° 42′ in the middle of the supposed bay, where none was visible, though the weather was perfectly clear.

As the wind drew almost directly out of this opening, to which I gave the name of Admiralty Inlet, and, as it was entirely occu-

pied by them. I did not think its further examination of sufficient importance to detain the expedition, and therefore continued our course to the eastward. The headland, which forms the eastern point of the entrance, I named after the Right Honourable Charles Yorke, late first lord of the Admiralty; and to another within the inlet, I gave the name of Cape Franklin, after my friend Captain John Franklin, of the Royal navy, now employed in investigating the northern shore of North America. On an inspection of this chart, it will appear more than probable, that the Admiralty Inlet may one day be found to communicate to the southward with Prince Regent's Inlet, making the land between them an island.

At half-past eight A.M., we were abreast of the Navy-Board Inlet, round the bottom of which the continuity of the land was still by no means clear to us; in fact, it receded so far to the southward, as rather to strengthen the opinion we had before formed of the existence of a passage in that direction; the quantity of ice which occupied this inlet, however, prevented our ascertaining this satisfactorily. Immediately off Cape Castlereagh we discovered two low islands, which had not been seen on the preceding voyage, and which I named after Dr. William Wollaston, a gentleman well known in the scientific world, and one of the Commissioners of Longitude. To the eastward of the Cape, there is some comparatively low land next the sea, from which abruptly rise the lofty Byam Martin Mountains, whose summits are covered with perpetual snow. One of the highest of these, immediately at the back of Catherine's Bay, of which we were abreast at noon, was found trigonometrically to be three thousand three hundred and eighty-two feet above the level of the sea. It may be remarked that the castellated appearance of the land is very much less on the eastern than on the western side of Admiralty Inlet. Towards the west side of Navy-Board Inlet, the land next the sea becomes comparatively low, but rises at the back into high hills, which are round at the top, in this respect forming a striking contrast with the Martin Mountains, the latter being peaked, though not so sharply as those of Spitsbergen.

Our horizon being obstructed at noon by the closeness of the land, I was desirous of going on shore to observe the meridian altitude; but, on hauling the ships to the wind with that intention, I found the beach so lined with ice for about half a mile out, that it was no where practicable to land, and the ice itself was too unsteady for the artificial horizons; we, therefore, continued to run to the eastward. A large bear was seen swimming, and our boats despatched in pursuit of him; but before the ships could be rounded to, we had run too far to keep sight of him, and the boats returned without success. We here passed several large icebergs, and a few narrow streams of ice, of the same thickness as those which usually

occurs in Baffin's Bay, and which appeared very light in us, in comparison with that to which we had lately been accustomed. Being off Cape Liverpool, which headland is formed by a projecting point of the same comparatively low land that I have mentioned above, the water became of a very light green colour, and was filled with innumerable shoals of the *Argonauta Arctica*: we found no bottom with eighty fathoms of line, at the distance of two or three miles from the shore. In the course of this day's run we saw two threshers, one black whale, a seal, some doves, a few gulls, phalaropes, and fulmar petrels. Considering the extraordinary number of whales we had met with in our passage up Sir James Lancaster's Sound in 1818, it could not but be a matter of surprise to us that we had now seen so few; but this circumstance was afterwards satisfactorily accounted for in a manner we least expected. In the evening being off Cape Fanshawe, we observed a long low iceberg, between that headland and Possession Bay, not less than three-quarters of a mile in length, and quite flat and even at the top; this kind of iceberg appears to be almost entirely confined to the western coast of Baffin's Bay and Davis' Straits, as we never met with them in any other part; they are probably formed upon the low strips of land which occur between the foot of the hills and the sea in many parts of this coast.

As it appeared to me that considerable service might be rendered by a general survey of the western coast of Baffin's Bay, which, from Sir James Lancaster's Sound southwards, might one day become an important station for our whalers, I determined to keep as close to that shore, during our passage down, as the ice and the wind would permit; and as the experience of the former voyage had led us to suppose that this coast would be almost clear of ice during the whole of September, I thought that this month could not be better employed than in the examination of its numerous bays and inlets. Such an examination appeared to me the more desirable, from the hope of finding some new outlet into the Polar Sea in a lower latitude than that of Sir James Lancaster's Sound, a discovery which would be of infinite importance towards the accomplishment of the North-West Passage.

Previously to commencing this survey, it was my wish to have landed at Possession Bay, of which the longitude had been accurately determined on two former occasions, in order to compare our chronometers with the time found there, as an intermediate station between Winter Harbour and England; but, as this would have detained us a whole night, with a fair wind, and with the chance of the following day being after all unfavourable for observations, I gave up my intention, and made all sail along shore to the southward. This was, however, the less to be regretted, as the few observations obtained during our quick return from

Melville Island, had confirmed the accuracy of the rates assigned to the chronometers on leaving Winter Harbour.

Annexed is an abstract of the Meteorological Observations made on board the ships during the twelve calendar months that the expedition remained between the parallels of 74° and 75° north latitude.

ABSTRACT of the METEOROLOGICAL JOURNAL kept on board His Majesty's Ships Hecla and Fury during twelve calendar months, during which period the ships were between the parallels of 74° and 75° North Latitude.

Months.	Temperature of Air in Shade.				Barometer.		
	Maximum.	Minimum.	Range.	Mean.	Maximum.	Minimum.	Mean.
	°	°	°	°	inches.	inches.	inches.
1819. September	+37	+1	36	+32.54	30.42	29.36	29.905
October	+17.5	−26	43.5	− 3.46	30.32	28.10	29.21
November	−6	−47	53	−20.60	30.32	29.63	29.945
December	−6	−43	49	−21.79	30.755	29.10	29.868
1820. January	−2	−47	45	−20.09	30.77	29.59	30.078
February	−17	−50	33	−32.19	30.13	29.32	29.769
March	−6	−40	46	−18.10	30.26	29.00	29.609
April	+32	−32	64	− 8.37	30.36	29.40	29.978
May	+47	− 4	51	+16.66	30.48	29.25	30.109
June	+51	+28	23	+36.24	30.13	29.50	29.823
July	+60	+32	28	+42.41	30.01	29.13	29.668
August	+46	+20	23	+33.59	30.03	29.46	29.734
	+60	−50	110	+ 1.33	30.80	28.00	29.674

REMARKS.

The thermometer when placed on shore, or on the ice at a distance from the ship, invariably stood from 3° to 4° or 5°, and even, on some occasions, 7° lower than that registered on board: the mean temperature for the year may therefore be fairly considered as −3°. The lowest temperature registered on the ice was −54°; it did not rise above −54°, for seventeen hours, on the 14th and 15th of February, 1820.

CHAPTER XI.

Progress down the Western Coast of Baffin's Bay—Meet with the Whalers—Account of some Esquimaux in the Inlet called the River Clyde—Continue the Survey of the Coast, till stopped by Ice in the Latitude of 68½°—Obliged to run to the Eastward—Fruitless Attempts to regain the Land, and Final Departure from the Ice—Remarks upon the Probable Existence and Practicability of a North-West Passage, and upon the Whale-Fishery—Boisterous Weather in crossing the Atlantic—Loss of the Hecla's Bowsprit and Foremast—Arrival in England.

THE wind continuing fresh from the northward, on the morning of the 1st of September, we bore up and ran along the land, taking our departure from the flag-staff in Possession Bay, bearing W.S.W. five miles, at half-past four A.M. Having passed two small bays in the course of the morning, we were abreast of Cape Graham Moore towards noon, where the ice led us off to the distance of six or seven miles from the land. Some water brought up in Dr. Marcet's bottle from the depth of one hundred and ten fathoms was at the temperature of 30½°, that of the surface being 30½°, and of the air 31°. The specific gravity of the surface-water at noon was 1.0246, at the temperature of 29°.

When abreast of the inlet, which had been called Pond's Bay on the former expedition, the opening of the two shores, as far as the eye could reach, appeared so large as to excite considerable interest. We, therefore, hauled in with the intention of examining it, but found the ice so close, that the ship was stopped almost in the entrance. The weather, however, was at this time remarkably clear, and it was the opinion of the officers, as well as my own, that the two shores did not unite, there being nearly a whole point of the compass in which no land was visible; and it was the general belief that this opening would be found to communicate with the Navy-Board or Admiralty Inlet.

The ice led us off very much to the eastward after leaving Pond's Bay; and the weather became calm, with small snow, towards midnight. In this day's run, the compass-courses were occasionally inserted in the log-book, being the first time that the magnetic needle had been made use of on board the Hecla, for the purposes of navigation, for more than twelve months. A few rotges (*Alca Alle*) were seen, being the first this season.

There being some swell upon the ice, which extended generally

to the distance of three or four leagues from the land, we were under the necessity of heaving-to for a few hours at night, a precaution which was always hence-forward adopted in running down this coast. At nine A.M., on the 2d, we were abreast an inlet having every appearance of a well-sheltered harbour, with an island near the middle of its entrance. Soon after passing this inlet, we came to a number of icebergs aground in forty-five fathoms, on a sandy bottom, afterwards deepening to seventy-eight fathoms; a tide-mark of four or five feet was observed upon each of the icebergs. Some water brought up in Dr. Marcet's bottle from the depth of seventy-five fathoms, was at the temperature of 32½°, that of the surface being 32°, and of the air 38°. We again commenced throwing bottles overboard, containing papers with the usual information, which practice was continued daily till the Expedition reached England. We saw no ice to the eastward of us in the course of this day's run, nor any blink in that direction.

On the morning of the 3d, we passed some of the highest icebergs I have ever seen, one of them being not less than one hundred and fifty to two hundred feet above the sea, judging from the height of the Griper's masts, when near it. At half-past seven A.M., being off a point of land, which is comparatively low near the sea, with hills rising at the height of more than a thousand feet above the sea, we observed to the southward a remarkable dark perpendicular cliff, forming the most singular and conspicuous object we had seen upon this coast. This cliff, which, in coming from the northward has the appearance of being detached, and is not unlike the Bass Rock in the Frith of Forth, is situated, as we afterwards discovered, upon an island, lying in the entrance of one of the numerous inlets, or *fiords*, with which this coast is indented. The wind becoming light and variable in the forenoon, I took the opportunity of landing near this inlet, accompanied by Captain Sabine, and some of the other officers. The latitude observed on board at noon was 71° 24′ 20″, being only two miles and three quarters to the southward of the dead reckoning in three days, by which we considered that there could be no current of any importance setting in that direction on this part of the coast. The soundings were eighty-eight fathoms on a muddy bottom; the temperature of the sea at that depth was 33°, at the surface 35½°, that of the atmosphere being 38°.

We landed on a bold sandy beach, two or three miles to the northward of a low point, at the entrance of the inlet, towards which we walked, and ascended a hill at the back of the point, in order to obtain a view of this large opening. We now found that the perpendicular cliff formed the north-eastern point of a remarkably steep and precipitous island, on each side of which there is a wide and bold entrance. Above the island, the inlet branches off in at least two different directions, which our situation would not

allow us to trace to any great distance, but we saw no termination to either of them.

The mineral productions were found to consist principally of granite and gneiss; but there was also abundance of limestone and quartz, the latter beautifully white. The vegetation was tolerably luxuriant in some places upon the low land which bordere the sea, consisting principally of the dwarf-willow, sorrel, saxifrage, (*Saxifraga Cernua*), and poppy, with a few roots of scurvy-grass. There was still a great deal of snow remaining even on the lower parts of the land, on which were numerous ponds of water; on one of these, a pair of young red-throated divers which could not rise, were killed; and two flocks of geese, one of them consisting of not less than sixty or seventy, were seen by Mr. Hooper, who described them as being very tame, running along the beach before our people, without rising, for a considerable distance. Some glaucous gulls and plovers were killed, and we met with several tracks of bears, deer, wolves, foxes, and mice. The coxswain of the boat found upon the beach part of the bone of a whale, which had been cut at one end by a sharp instrument, like an axe, with a quantity of chips lying about it, affording undoubted proof of this part of the coast having been visited at no distant period by Esquimaux; it is more than probable, indeed, that they may inhabit the shores of this inlet, which time would not now permit us to examine. More than sixty ice-bergs of very large dimensions were in sight from the top of the hill, together with a number of extensive floes to the north-east and south-east, at the distance of four or five leagues from the land.

The latitude of the place of observation on shore was 71° 15′ 34″, its longitude 71° 17′ 23″.6, and the variation of the magnetic needle 91° 28′ 32″ westerly. The tide was falling when we landed; it was low water by the shore at three o'clock, and at half-past five, when we left the beach, it had risen only twelve inches. The tide set to the southward in the offing during the afternoon, especially about three o'clock, at which time the Hecla was observed by Lieutenant Beechey to be drifting fast against the wind in that direction.

On our return on board, I found that a piece of whale-blubber, cut into a square shape, had been picked up on the water, which we then considered as a confirmation of this part of the coast being inhabited, but which was afterwards more satisfactorily accounted for.

The wind, which had been light from the southward during the night, shifted to the north-west early in the morning, which induced me to give up the intention I had formed of further examining the inlet, and we, therefore, continued our course along shore to the southward. At seven A.M., on the 4th, we passed another

inlet, similar to that of the preceding day, though much smaller, the land being of the same steep and precipitous character, and the water, apparently, deep near it.

The latitude observed was 71° 02′ 42″, agreeing within a mile of the account, so that no current could well have existed since the preceding day's observation. In sounding as usual, at noon, we were not a little surprised in striking bottom in thirteen fathoms, the appearance of the shore, from which we were three or four leagues distant, indicating very deep water. A boat was sent a-head to sound, the wind having again broke us off from the southward; at two o'clock we suddenly deepened the water to thirty-five, and soon after to fifty-six fathoms. At four P. M., we again dropped into fifteen fathoms, and the boats a-head found as little as eleven, on which several masses of ice were aground, pointing out, as usual, the extent of the shoal water. These two banks, which consist of coarse sand with broken shells, were named after the Hecla and Griper; they form a striking exception to the general rule of judging of the boldness of a coast by the appearance of the shores.

While occupied in attending to the soundings, soon after noon, our astonishment may readily be conceived, on seeing, from the mast-head, a ship, and soon after, two others, in the offing, which were soon ascertained to be whalers, standing in towards the land. They afterwards bore up to the northward along the edge of the ice which intervened betwixt us, and we lost sight of them at night. It was now evident that this coast, which had hitherto been considered, by the whalers, as wholly inaccessible in so high a latitude, had become a fishing station like that on the opposite or Greenland shore, and the circumstance of our meeting so few whales in Sir James Lancaster's Sound this season, was at once accounted for by supposing what, indeed, we afterwards found to be the case, that the fishing-ships had been there before us, and had, for a time, scared them from that ground. The piece of blubber we had picked up was also sufficiently accounted for in a similar manner.

In standing in-shore at night, we got into deep water, between the banks and the land, having no soundings with sixty to ninety fathoms of line, where we lay-to till day-light.

It was so squally on the morning of the 5th, that we could scarcely carry our double reefed topsails, while, as we afterwards learned from the fishing-ships, which were in sight at day-light, there was scarcely a breath of wind at a few leagues' distance from the land. In running to the southward, we passed, in the course of the forenoon, a headland, which is remarkable as appearing from the northward exactly like three round-topped islands, for which they had been taken on the voyage of 1818; but they are only small hills situated on comparatively low land, which commences from

hence to the southward next the sea. We coasted this low shore, as we had done in the preceding voyage, at the distance of two or three miles, having from twenty-three to twenty-nine fathoms' water. We here met with another of our fishing-ships, which proved to be the Lee, of Hull, Mr. Williamson master; from whom we learned, among other events of a public nature which were altogether new to us, the public calamity which England had sustained in the death of our late venerable and beloved Sovereign, and also the death of His Royal Highness the Duke of Kent. Mr. Williamson, among others, had succeeded in getting across the ice to this coast as high as the latitude of 73°, and had come down to this part in pursuit of the fish. One or two of the ships had endeavoured to return home by running down this coast, but had found the ice so close about the latitude of 69½°, as to induce most of the others to sail to the northward, in order to get back in the same way that they came. Mr. Williamson also reported his having, a day or two before, met with some Esquimaux in the inlet named the River Clyde in 1818, which was just to the southward of us. Considering it a matter of some interest to communicate with these people, who had, probably, not been before visited by Europeans, and that it might, at the same time, be useful to examine the inlet, I bore up, as soon as I had sent our despatches and letters on board the Lee, and stood in towards the rocky islet called Agnes' Monument, passing between it and the low point which forms the entrance to the inlet on the northern side. This channel, which is two miles wide, appears bold in every part. As soon as we had opened the inlet, we dropped off at once from twenty into no bottom with thirty fathoms of line; we then hauled over to the Monument, and, passing at the distance of one hundred and fifty yards from it, had twenty-seven fathoms, on a bottom of coarse sand.

The north shore of the entrance to this inlet has a sandy beach, along which we stood for three or four miles towards some low islands, near which we were directed to look for the Esquimaux huts. Night came on, however, before we could discover them; and we, therefore, stood out till day-light. We saw, in the course of this day, more than a dozen large black whales, principally near the inlet, and the Friendship, of Hull, Mr. Macbride master, was in sight to the eastward, with a fish alongside.

The weather was too thick, with snow, on the morning of the 6th, to allow us to stand in for the land. We spoke the Friendship, and Mr. Bell, one of the owners, kindly offered us any assistance in his power. The weather having cleared before noon, we bore up for the inlet, being near an immense iceberg, which, from its situation and dimensions, we recognised to be the same that had been measured in September, 1818, and found to be upwards of two miles in length. It was aground in precisely the same spot

as before, where it will probably remain year after year, till gradually wasted by dissolution.

At six in the evening, being near the outermost of the islands, with which we afterwards found this inlet to be studded, we observed four canoes paddling towards the ship; they approached with great confidence, and came alongside without the least appearance of fear or suspicion. While paddling towards us, and indeed before we could plainly perceive their canoes, they continued to vociferate loudly; but nothing like a song, nor even any articulate sound, which can be expressed by words, could be distinguished. Their canoes were taken on board by their own desire, plainly intimated by signs, and with their assistance, and they at once came up the side without hesitation. These people consisted of an old man, apparently much above sixty, and three younger, from nineteen to thirty years of age. As soon as they came on deck, their vociferations seemed to increase with their astonishment, and, I may add, their pleasure; for the reception they met with seemed to create no less joy than surprise. Whenever they received a present, or were shewn any thing which excited fresh admiration, they expressed their delight by loud and repeated ejaculations, which they sometimes continued till they were quite hoarse, and out of breath, with the exertion. This noisy mode of expressing their satisfaction was accompanied by a jumping, which continued for a minute or more, according to the degree of the passion which excited it, and the bodily powers of the person who exercised it, the old man being rather too infirm, but still doing his utmost, to go through the performance.

After some time passed on deck, during which a few skins and ivory knives were bought from them, they were taken down into the cabin. The younger ones received the proposal to descend somewhat reluctantly, till they saw that their old companion was willing to shew them the example, and they then followed without fear. We had soon occasion to remark that they were much better behaved people than the Esquimaux, who had visited our ships in 1818, on the north-eastern coast of Baffin's Bay. Although we were much at a loss for an interpreter, we had no great difficulty in making the old man understand, by shewing him an engraved portrait of an Esquimaux, that Lieutenant Beechey was desirous of making a similar drawing of him. He was accordingly placed on a stool near the fire, and sat for more than an hour with very considerable composure and steadiness, considering that a barter for their clothes, spears, and whalebone, was going on at the same time near him. He was, indeed, kept quiet by the presents which were given him from time to time; and when this failed, and he became impatient to move, I endeavoured to remind him that we wished him to keep his position, by placing my hands before me, holding up my head, and assuming a grave and demure look. We now found that the old gentleman was a mimic, as well as a very good-

natured and obliging man; for, whenever I did this, he always imitated me in such a manner as to create considerable diversion among his own people, as well as ours, and then very quietly kept his seat. While he was sitting for his picture, the other three stood behind him, bartering their commodities with great honesty, but in a manner which shewed them to be no strangers to trade. If, for instance, a knife was offered for any article, they would hesitate for a short time, till they saw we were determined to give no higher price, and then at once consented to the exchange. In this case, as well as when any thing was presented to them, they immediately licked it twice with their tongues, after which they seemed to consider the bargain satisfactorily concluded. The youngest of the party very modestly kept behind the others, and, before he was observed to have done so, missed several presents, which his less diffident, though not importunate, companions had received. As the night closed in, they became desirous to depart, and they left us before dark, highly delighted with their visit. As I had purchased one of their canoes, a boat was sent to land its late owner, as only one person can sit in each. Mr. Palmer informed me, that, in going on shore, the canoes could beat our boat very much in rowing, whenever the Esquimaux chose to exert themselves, but they kept close to her the whole way. During the time that they were on board, we had observed in them a great aptness for imitating certain of our words; and, while going on shore, they took a particular liking to the expression of "Hark, give way!" which they heard Mr. Palmer use to the boat's crew, and which they frequently imitated to the great amusement of all parties.

Being desirous of seeing more of these people, of whom the first interview had given us a favourable impression, I determined to lie-to during the night, and to take the ships higher up the inlet on the following day. Mr. Bell came on board from the Friendship in the evening, and, after repeating his offers of assistance, communicated to us many events of a public nature, which could not but be extremely interesting to us, after a complete seclusion from the rest of the world for a period of seventeen months. The temperature of the sea at the bottom, in one hundred and ninety-five fathoms, was 31½°, and at the depth of seventy-six fathoms 31°,3; that of the surface water being 33°, and of the atmosphere 32°.

The calm weather which prevailed during the night was succeeded by a breeze from the westward on the morning of the 7th, of which advantage was immediately taken to beat up the inlet, which proved a very extensive one. The sun did not break through the clouds till half after seven, when the expected eclipse was found to have commenced, and I determined to land, with Captain Sabine, upon the nearest island, in order to observe the end of it, as well as to obtain the other usual observations, together with

angles for the survey. At ten minutes past eight, the sun became again obscured, and was not visible till twenty minutes past nine, when we had landed, and were prepared with our glasses, but were disappointed, in finding that the eclipse was over.

Soon after we had landed, the old Esquimaux and one of his younger companions, paddled over from the main land, and joined us upon the island. They brought with them, as before, some pieces of whalebone and seal-skin dresses, which were soon disposed of, great care being taken by them not to produce more than one article at a time, returning to their canoes, which were at a little distance from our boat, after the purchase of each of their commodities, till their little stock was exhausted. Considering it desirable to keep up among them the idea of fair and honest exchange, which they already seemed to possess in no ordinary degree, I did not permit them to receive any thing as presents, till all their commodities had been regularly bought. While we were waiting to obtain the sun's meridian altitude, they amused themselves in the most good-natured and cheerful manner with the boat's crew; and Lieutenant Hoppner, who, with Mr. Beverly, had joined us in the Griper's boat, took this opportunity of making a drawing of the young man. It required, however, some shew of authority, as well as some occasional rewards, to keep him quietly seated on the rock for a time sufficient for this purpose; the inclination they have to jump about, when much pleased, rendering it a penalty of no trifling nature for them to sit still for half an hour together. To shew their disposition to do us what little service was in their power, he afterwards employed himself in sharpening the seamen's knives, which he did with great expertness on any flat smooth stone, returning each as soon as finished, to its proper owner, and then making signs for another, which he sharpened and returned in the same way, without any attempt, and apparently without the smallest desire, to detain it. The old man was extremely inquisitive, and directed his attention to those things which appeared useful, rather than to those which were merely amusing. An instance of this occurred on my ordering a tin canister of preserved meat to be opened for the boats' crews' dinner. The old man was sitting on the rock, attentively watching the operation, which was performed with an axe struck by a mallet, when one of the men came up to us with a looking-glass. I held it up to each of the Esquimaux, who had also seen one the preceding evening, and then gave it into each of their hands successively. The younger one was quite in raptures, and literally jumped for joy for nearly a quarter of an hour: but the old man having had one smile at his own queer face, immediately resumed his former gravity, and returning me the glass, directed his whole attention to the opening of the canister, and when this was effected, begged very hard for the mallet which had performed so useful an office, with-

out expressing the least wish to partake of the meat, even when he saw us eating it with good appetites. Being prevailed on, however, to taste a little of it, with some biscuit, they did not seem at all to relish it, but eat a small quantity from an evident desire not to offend us, and then deposited the rest safely in their canoes. They could not be persuaded to taste any rum, after once smelling it, even when much diluted with water. I do not know whether it be a circumstance worthy of notice, that, when a kaleidoscope or a telescope was given them to look into, they immediately shut one eye, and one of them used the right, and the other the left eye.

In getting out of their canoes as well as into them, great care is required to preserve the balance of these frail and unsteady coracles, and in this they generally assist each other. As we were leaving the island, and they were about to follow us, we lay on our oars to observe how they would manage this, and it was gratifying to see that the young man launched the canoe of his aged companion, and having carefully steadied it alongside the rock, till he had safely embarked, carried his own down, and contrived, though with some difficulty, to get into it without assistance. They seem to take especial care in launching their canoes, not to rub them against the rocks, by placing one end gently in the water, and holding the other up high, till it can be deposited without risk of injury. As soon as we commenced rowing, the Esquimaux began to vociferate their newly-acquired expression of "Hurra, give way," which they continued at intervals, accompanied by the most good-humoured merriment, as we crossed over to the main land. There being now a little sea, occasioned by a weather tide, we found that our boats could easily beat their canoes in rowing, notwithstanding their utmost endeavours to keep up with us.

The two Esquimaux tents, which we were now going to visit, were situated just within a low point of land, forming the eastern side of the entrance to a considerable branch of the inlet, extending some distance to the northward. The situation is warm and pleasant, having a south-westerly aspect, and being in every respect well adapted for the convenient residence of these poor people. We landed outside the point, and walked over to the tents, sending our boats, accompanied by the two canoes, round the point to meet us. As soon as we came in sight of the tents, every living animal there, men, women, children, and dogs, were in motion, the latter to the top of the hill out of our way, and the rest to meet us with loud and continued shouting; the word "*pilletay*" [give me] being the only articulate sound we could distinguish amidst the general uproar. Besides the four men whom we had already seen, there were four women, one of which being about the same age as the old man, was probably his wife; the others were about thirty, twenty-two, and eighteen years of age. The first two of these, whom we supposed to be married to the two oldest of the young

men, had infants slung in a kind of bag at their backs, much in the same way as gipsies are accustomed to carry their children. There were also seven children, from twelve to three years of age, besides the two infants in arms, or rather behind their mothers' backs; and the woman of thirty was with child.

We began, as before, by buying whatever they had to dispose of, giving in exchange knives, axes, brass kettles, needles, and other useful articles, and then added such presents as might be further serviceable to them. From the first moment of our arrival until we left them, or rather until we had nothing left to give, the females were particularly importunate with us, and "pilletay," resounded from the whole troop, wherever we went: they were extremely anxious to obtain our buttons, apparently more on account of the ornament of the crown and anchor which they observed upon them, than from any value they set upon their use; and several of these were cut off our jackets to please their fancy. When I first endeavoured to bargain for a sledge, the persons I addressed gave me distinctly to understand by signs, that it was not their property, and pointed towards the woman who owned it; though my ignorance in this respect offered a good opportunity of defrauding me, had they been so inclined, by receiving an equivalent for that which did not belong to them: on the owner's coming forward, the bargain was quickly concluded. The pikes which I gave in exchange underwent the usual ceremony of licking, and the sledge was carried to our boat with the most perfect understanding on both sides. In another instance, an axe was offered by some of the Griper's gentlemen, as the price of a dog, to which the woman who owned the animal consented. To shew that we placed full confidence in them, the axe was given to her before the dog was caught, and she immediately went away with a kind of halter or harness of thongs, which they use for this purpose, and honestly brought one of the finest among them, though nothing would have been easier than to have evaded the performance of her contract. The readiness, however, with which they generally parted with their commodities, was by no means the effect of fear, nor did it always depend on the value of the articles offered in exchange; for, having, as I thought, concluded a bargain for a second canoe belonging to the old woman, I desired the men to hand it down to the boat; but I soon perceived that I had misunderstood her, for she clung fast to the canoe, and cried most piteously till it was set down: I then offered a larger price than before, but she could not be induced to part with it.

The stature of these people, like that of Esquimaux in general, is much below the usual standard. The height of the old man, who was rather bent by age, was four feet eleven inches, and that of the other men from five feet four and a half to five feet six inches. Their faces are round and plump in the younger individ-

dials; skin smooth; complexion not very dark, except that of the old man; teeth very white; eyes small; nose broad, but not very flat; hair black, straight, and glossy; and their hands and feet extremely diminutive. The old man had a grey beard in which the black hairs predominated, and wore the hair rather long upon his upper lip, which was also the case with the eldest of the three others. One of these, we thought, bore a striking resemblance to our poor friend John Sackhuse, well-known as the Esquimaux who accompanied the former expedition, the want of whose services we particularly felt on this occasion, and whose premature death had been sincerely lamented by all who knew him, as an intelligent and amiable man, and a valuable member of society.

The grown-up females measured from four feet ten to four feet eleven inches. The features of the two youngest were regular; their complexions clear, and by no means dark; their eyes small, black, and piercing; teeth beautifully white and perfect; and although the form of their faces is round and chubby, and their noses rather flat than otherwise, their countenances might, perhaps, be considered pleasing even according to the ideas of beauty which habit has taught us to entertain. Their hair, which is jet black, hangs down long and loose about their shoulders, a part of it on each side being carelessly plaited, and sometimes rolled up into an awkward lump, instead of being neatly tied on the top of the head, as the Esquimaux women in most other parts are accustomed to wear it. The youngest female had much natural bashfulness and timidity, and we considered her to be the only unmarried one, as she differed from the other three in not being tattooed upon the face. Two of them had their hands tattooed also, and the old woman had a few marks of the same kind about each wrist. None of the men or children were thus distinguished.

The children were generally good-looking, and the eldest boy, about twelve years of age, was a remarkably fine and even handsome lad. They were rather scared at us at first; but kind treatment, and a few trifling presents, soon removed their fears, and made them almost as importunate as the rest.

The dress of the men consists of a seal-skin jacket, with a hood which is occasionally drawn over the head, of which it forms the only covering. The breeches are also generally of seal-skin, and are made to reach below the knee, and their boots which meet the breeches are made of the same material. In this dress we perceived no difference from that of the other Esquimaux, except that the jacket, instead of having a pointed flap before and behind, as usual, was quite straight behind, and had a sort of scollop before in the centre. In the dress of the women there was not so much regard to decency as in that of the men. The jacket is of seal-skin, with a short, pointed flap before, and a long one behind, reaching almost to the ground. They had on a kind of drawers, similar to those

described by Crantz, as the summer-dress of the Greenland women, and no breeches. The drawers cover the middle part of the body, from the hips to one-third down the thigh, the rest of which is entirely naked nearly as far as the knee. The boots are like those of the men, and besides these they have a pair of very loose leggins, as they may be called, which hang down carelessly upon the top of the boots, suffering their thighs to be exposed in the manner before described, but which may be intended occasionally to fasten up, so as to complete the covering of the whole body. The children are all remarkably well clothed; their dress, both in male and female, being in every respect the same as that of the men, and composed entirely of seal-skin, very neatly sewed.

The tents which compose their summer-habitations, are principally supported by a long pole or whalebone, fourteen feet high, standing perpendicularly, with four or five feet of it projecting above the skins which form the roof and sides. The length of the tent is seventeen, and its breadth from seven to nine feet, the narrowest part being next the door, and widening towards the inner part, where the bed, composed of a quantity of the small shrubby plant, the *Andromeda Tetragona*, occupies about one-third of the whole apartment. The pole of the tent is fixed where the bed commences, and the latter is kept separate by some pieces of bone laid across the tent from side to side. The door which faces the south-west, is also formed of two pieces of bone, with the upper ends fastened together, and the skins are made to overlap in that part of the tent, which is much lower than the inner end. The covering is fastened to the ground by curved pieces of bone, being generally parts of the whale; the tents were ten or fifteen yards apart, and about the same distance from the beach.

The canoe which I purchased, and which was one of the best of the five that we saw, is sixteen feet eleven inches in length, and its extreme breadth two feet one inch and a half; two feet of its fore-end are out of the water when floating. It differs from the canoe of Greenland, in being somewhat lower at each end, and also in having a higher rim or gun-wale, as it may be termed, round the circular hole where the man sits, which may make them somewhat safer at sea. Their construction is, in other respects, much the same; the timbers, or ribs, which are five or six inches apart, as well as the fore and aft connecting pieces, being of whale-bone or drift-wood, and the skins with which they were covered, those of the seal and walrus. When the canoes are taken on shore, they are carefully placed on two upright piles or pillars of stones, four feet high from the ground, in order to allow the air to pass under to dry them, and prevent their rotting. The paddle is double and made of fir, the edges of the blade being covered with hard bone to secure them from wearing.

The spears or darts which they use in killing seals and other sea

animals, consist, like the harpoons of our fishermen, of two parts, a staff, and the spear itself; the former is usually of wood, when so scarce and valuable a commodity can be obtained, from three and a half to five feet in length, and the latter of bone, about eighteen inches long, sometimes tipped with iron, but more commonly ground to a blunt point at one end, while the other fits into a socket in the staff, to which it is firmly secured by thongs. The lines which they attach to their spears are very neatly cut out of seal-skins, and when in a state of preparation, are left to stretch till dry, between the tents, and then made up into coils for use. They make use of a bladder fastened to the end of the line, in the same manner as the other Esquimaux. Besides the spears, we purchased an instrument having a rude hook of iron let into a piece of bone, and secured by thongs to a staff, the hook being sharply pointed, but not barbed. While we were on the island (to which I had applied the name of Observation Island), it happened that a small bird flew near us, when one of the Esquimaux made the sign of shooting it with a bow and arrow, in a manner which could not be misunderstood. It is remarkable, therefore, that we could not find about their tents any of these weapons, except a little one five or six inches long, the bow being made of whalebone, and the arrow of fir, with a feather at one end and a blunt point of bone at the other, evidently appearing to be a child's toy, and intended, perhaps, to teach the use of it at an early age.

The runners of the only sledge we saw were composed of the right and left jaw-bones of a young whale, being nine feet nine inches long, one foot seven inches apart, and seven inches high from the ground. They are connected by a number of parallel pieces, made out of the ribs of the whale, and secured transversely with seizings of whale-bone, so as to form the bottom of the sledge, and the back is made of two deer's horns placed in an upright position. The lower part of the runners is shod with a harder kind of bone, to resist the friction against the ground. The whole vehicle is rudely executed, and, being nearly twice the weight of the sledges we saw among the northern Esquimaux, is probably intended for carrying heavy burdens. The dogs were not less than fifty or sixty in number, and had nothing about them different from those on the eastern coast of Baffin's Bay, except that they do not stand near so high as those of the latitude of 76°. They are very shy and wild, and the natives had great difficulty in catching them while we were by, as well as holding them in when caught. Some of them have much more of the wolf in their appearance than others, having very long heads and sharp noses, with a bushy tail, almost always carried between the legs; while the bodies of others are less lank, as well as their noses less sharp, and they carry their tails handsomely curled over their backs: their colour varied from quite dark to brindled. The ravenous manner in which they devour

their food is almost incredible. Both the old and young ones, when a bird is given them, generally swallow feathers and all; and an old dog that I purchased, though regularly fed while on board by a person appointed for that purpose, eat up, with great avidity, a large piece of canvas, a cotton handkerchief, which one of the men had just washed and laid down by his side, and part of a check shirt. The young dogs will at any time kill themselves by over-eating, if permitted. The children appeared to have some right of property in the smaller puppies, or else their parents are very indulgent to them, for several bargains of this kind were made with them, without any objection or interference on the part of the parents, who were standing by at the time.

Within a few steps, irregularly placed in a corner of each tent, was a lamp of oil and moss, and over each of these was suspended a small stone vessel of an oblong shape, and broader at the top than at the bottom, containing a large piece of sea-horse flesh, with a great quantity of thick gravy. Some ribs of this meat were by no means bad-looking, and but for the blood mixed with the gravy, and the dirt which accompanied the cooking, might perhaps be palatable enough. I bargained with a woman for one of the stone vessels, giving her a brass kettle in exchange. Before she gave it into my possession, she emptied the meat into another vessel, and then, with the flap of her jacket, wiped out the remains of the gravy; thus combining with what our notions of cleanliness taught us to consider a filthy act, an intention of decency and a desire to oblige us, which, however inconsistent, it was still pleasing to observe. Some of their vessels are made of whale-bone, in a circular form, one piece being kept into the proper shape for the sides, and another flat piece of the same material, sewn to it for a bottom, so closely as to make it perfectly water-tight. Their knives are made of the tusks of the walrus, cut or ground sufficiently thin for the purpose, and retaining the original curve of the tusk, so as to resemble the little swords which children have as toys in England. As they do not appear to have any instrument like a saw, great time and labour must be required in making one of these knives, which seem to answer most of the purposes to which they have occasion to apply them.

From the description given to us by Mr. Williamson, we found that these were the same persons who had been seen by the Lee's people; but we had several proofs of their having had some previous communication, directly or indirectly, with the civilised world; such as some light blue beads, strung by themselves on thin leathern threads; and an instrument for chopping, very much resembling a cooper's adze, which had evidently been secured to a handle of bone for some time past, and of which the iron was part of an old file.

The short time which we were among them, as well as the want

of an interpreter, prevented our obtaining much of the information which would have been interesting, respecting the language, manners, and number of this tribe of Esquimaux. They call the bear, *nennook*; the deer, *tooktook*; and the hare, *ookatik*, being nearly the same words as those used on the eastern coast of Baffin's Bay. As it was considered a matter of some interest to ascertain whether they were acquainted with the musk-ox, a drawing of that animal was put before the men who were on board. The small size of it seemed, at first sight, to astound them; but, as soon as a real head and horns were produced, they immediately recognised them, and eagerly repeated the word *oomingmak*, which at once satisfied us, that they knew the musk-ox, and that this was the animal spoken of by the Esquimaux of Greenland, under the same name, somewhat differently pronounced.

To judge by their appearance, and what is perhaps a better criterion, the number of their children, there could be little doubt that the means of subsistence which they possess are very abundant; but of this we had more direct proof, by the quantity of sea-horses and seals which we found concealed under stones, along the shore of the north branch, as well as on Observation Island. Mr. Fife reported that, in sounding the north branch, he met with their winter-huts, about two miles above the tents on the same shore, and that they were partly excavated from a bank facing the sea, and the rest built round with stones.

We saw no appearance of disease among the seventeen persons who inhabited the tents, except that the eyes of the old couple were rather bleer, and a very young infant looked pale and sickly. The old man had a large scar on one side of his head, which he explained to us very clearly to be a wound he had received from a *nennook* (bear). Upon the whole, these people may be considered in possession of every necessary of life, as well as of most of the comforts and conveniences which can be enjoyed in so rude a state of society. In the situation and circumstances in which the Esquimaux of North Greenland are placed, there is much to excite compassion for the low state to which human nature appears to be there reduced; a state in few respects superior to that of the bear or the seal, which they kill for their subsistence. But, with these, it was impossible not to experience a feeling of a more pleasing kind: there was a respectful decency in their general behaviour which at once struck us as very different from that of the other untutored Esquimaux, and in their persons there was less of that intolerable filth by which these people are so generally distinguished. But the superiority for which they are the most remarkable is, the perfect honesty which characterised all their dealings with us. During the two hours that the men were on board, and for four or five hours that we were subsequently among them on shore, on both which occasions the temptation to steal from us was perhaps

stronger than we can well imagine, and the opportunity of doing so by no means wanting, not a single instance occurred, to my knowledge, of their pilfering the most trifling article. It is pleasing to record a fact, no less singular in itself, than honourable to these simple people.

Having made the necessary observations, we went to the tents to take leave of our new acquaintance. The old man seemed quite fatigued with the day's exertions, but his eyes sparkled with delight, and we thought with gratitude too, on being presented with another brass kettle, to add to the stores with which we had already enriched him. He seemed to understand us when we shook him by the hand; the whole group watched us in silence, as we went into the boat, and, as soon as we had rowed a few hundred yards from the beach, quietly retired to their tents.

The latitude observed upon Observation Island was 70° 21′ 57″, its longitude by chronometers being 68° 28′ 33, and the variation of the magnetic needle 30° 59′ 17″ westerly. The tide rose two feet from half past nine till half past twelve. In crossing over to the main land, we then found a considerable ripple on the water, as if occasioned by a tide setting against the wind to the westward, which was, therefore, probably the flood. During the time that we were on shore at the tents, the tide was falling, so that the time of high-water this day (being new moon) would appear to be between half past twelve and half past one o'clock. Having walked some distance up the shore of the north branch, we thought that the water did not taste very salt; the specific gravity of that taken up near the ship at noon was 1.0283 at the temperature of 54°, and in the evening a second experiment gave precisely the same result. In stretching across from side to side of this fine inlet, the water was found so deep close to the shores, that no anchorage could be discovered, and in the middle was a depth of one hundred and fifty to two hundred fathoms; nothing like a rock or danger of any kind could be perceived, as far as the ships proceeded.

We bore up to run out of the inlet, at six P.M., passing between Observation Island and another immediately to the northward of it, and having no bottom with the hand-leads in mid-channel; off the north end of Observation Island, however, I found the water to shoal for about a hundred yards, and then deepen at once. Soon after we had cleared the inlet, the wind backed to the southward; we therefore, stood off to the eastward, and hove-to till day-light. The land to the southward of this inlet becomes low next the sea, in the same manner as that to the northward of it, and a similar regularity in the decrease of the soundings is observed in standing in-shore; we had from fifty-seven to thirty-nine fathoms in the course of the night, in which depth we met with a number of ice-bergs aground.

The wind being contrary on the 8th, we made very little pro-

gress to the southward. The soundings continuing as regular as before, we stood in-shore to eleven fathoms, and put the trawl overboard for an hour or two in the afternoon, bringing up a great quantity of sea-eggs (*Echini*), a few very small oysters, and some marine insects, but nothing that could furnish us with a fresh meal. The net was much broken by the roughness of the bottom, which consisted of very coarse sand and small stones; we tried it again in the evening, but with no better success. The weather was at this time remarkably fine and pleasant, and it was impossible for us not to contrast our present climate with that against which we had to contend about the same period of the preceding year.

In proceeding to the southward on the 9th, we passed a headland which, like another I have before mentioned, has exactly the appearance of three islands, when seen from the northward; a deception occasioned by three small hills near the point, situated upon comparatively low land. Having passed this headland, we discovered immediately to the southward of it a spacious bay or inlet, at least five or six leagues deep in the north-west part of it. The land at the bottom of this bay is high and mountainous, with every appearance of deep water near the shore; but in proceeding along shore to the southward, it again becomes low next the sea, with hills at the back, and with the same safe and regular soundings as before.

We hove-to at noon to observe the meridian altitude upon a floe of ice, the land being too near to obtain it by the natural horizon. The latitude was 69° 24′ 37″, and the longitude 67° 05′ 43″.6, being in thirty-five fathoms at five or six miles from the land. The water from the bottom was at the temperature of 31°, that of the surface being 32½°, and of the air 34°. The wind dying away soon after noon gave us an opportunity of trying the current by a boat moored to the bottom in nineteen fathoms, when it was found to be running somewhat less than a mile an hour in a S.¼E. direction. At forty minutes past four P.M., it was again tried in a similar manner, when it was setting to the S.E., at the rate of three-quarters of a mile per hour; and at seven o'clock, when we hove-to near Cape Kater, for the Griper to join us, we found it to be slack water. We stood off and on during the night, having from thirteen to twenty fathoms' water, with the intention of examining the large inlet which opens to the southward of Cape Kater. It now became obvious, that what had been mistaken for banks near Cape Kater on the preceding voyage were, in reality, only the regular shore soundings, which are in no respect different from those which occur in the whole space between this inlet and the river Clyde, at the same distance from the land. These soundings had appeared to indicate banks in 1818, because we came into them from an offing of several leagues; whereas, had we been running along shore, as in the present instance, we should have found a similar depth for

near a hundred miles to the northward of Cape Kater, except at the mouths of the inlets, where the water is always very deep.

There was a great deal of loose ice, and many bergs on this part of the coast; but we did not meet with the same obstruction off Cape Kater as on the former voyage. Several young black whales and a seal were seen in the course of the day.

The wind being fresh and equally down the inlet, on the morning of the 10th, a press of sail was carried for the purpose of examining it; but in the course of the forenoon we were obliged to close-reef the topsails, and send down the top-gallant yards. We found this immense bay crowded with islands which, together with its numerous openings, would require a considerable time to survey them accurately. Towards noon, a haze, which had been resting over the western horizon, cleared away, and we saw the land nearly all round the bay; but the distance at which we were was too great to enable us to ascertain satisfactorily its absolute continuity. Such, indeed, was the appearance of this magnificent inlet, of which the width of the entrance is not less than fifteen leagues, that it is highly probable some outlet may be found through it from Baffin's Bay into the Polar Sea; the strong westerly wind, and the intention I had formed of exploring this coast in a lower latitude, particularly about Cumberland Strait, prevented any further examination of it on this occasion. We crossed over, therefore, to the south shore, where we stood off and on till day-light should enable us to proceed to the southward. We passed, in the course of the day, the carcass of a dead whale, on which the fulmar petrels and ivory-gulls were feeding, in great numbers.

As soon as day-light appeared on the 11th, we took advantage of a light westerly breeze to stand to the south-east under all sail, but had soon the mortification to perceive that a compact body of floe-ice obstructed our passage to the southward, stretching close in to the land a few miles a-head of us. At noon we were in latitude, by observation, 68° 19′ 45″, and longitude, by chronometers, 66° 05′ 45″, in two hundred and seventy five fathoms, muddy bottom. The temperature of the sea at the depth of one hundred and forty-six fathoms, was 34°, the surface being at 32°, and the air 34°. This experiment differing from those which we had lately made as to the comparative temperature, we tried again in one hundred and sixty-five fathoms, and found it exactly the same as before. It must be remarked that, for each of the last three days, and for these only, we had found the ship between seven and eight miles to the southward of the reckoning.

The wind having fallen, we made little progress to the south-east, till the morning of the 12th, when a light breeze springing up from the south-west, all sail was made to examine the state of the ice. On approaching the floes, however, we found such a quantity of bay ice, the formation of which upon the surface, had been favour-

ed by the late calm weather, that the Hecla was soon stopped altogether, a circumstance which gave us, as usual, much trouble in extricating ourselves from it, but not very material as regarded our further progress to the southward, the floes being found to stretch quite close in to the land, leaving no passage whatever between them. At noon we were still no farther to the southward than 68° 15′ 20″, and in longitude 65° 48′ 38″, the former agreeing very well with the reckoning. I was desirous of taking advantage of our present unavoidable detention, to make a set of observations on the irregularities of the magnetic needle on board the Hecla; but the young ice remained so tough during the day, notwithstanding the weather was calm and clear, with the thermometer at 55° in the sun in the course of the afternoon, that it was found impracticable to turn the ship's head in the desired direction for that purpose. The compasses now traversed very freely, and were made use of for the purposes of navigation, in the ordinary way.

Soon after ten P.M., the Aurora Borealis made its appearance; I am indebted to Captain Sabine for the following description of this phenomenon: "The Aurora was visible for upwards of half an hour, its appearance being comprised within about twelve points of the heavens, from S.E.b.E. to W.b.N., the magnetic north being about N. 76° W. The character of this phenomenon was peculiar, being distinguished from those which we were accustomed to see at Melville Island, by the far greater rapidity with which it spread and shifted from one part of the heavens to another; by the depth and vividness of the colours, both of red and green, with which its coruscations were tinted; and by its streamers breaking out unexpectedly in places previously obscure, and extending indifferently downwards as well as upwards. The latter distinction was contrasted with the more usual appearance of rays streaming towards the zenith, from an arch of faintly brilliant light. An Aurora of similar appearance was observed in the Atlantic during the return of the Isabella, in October 1818, from Davis' Strait to Shetland. The peculiarities of the present phenomenon were more marked in the commencement than towards the conclusion of its appearance."

On the 13th, which was nearly calm, the bay-ice had so much increased in thickness that the Hecla could not be moved through it, with the assistance of the boats, two of which were rendered unserviceable by the ice cutting their planks.

On the 14th, having been set at liberty from the bay-ice by a breeze springing up, I determined to occupy no more time in the endeavour to get immediately along shore to the south-east, where the obstructions remained as before, but to run back a short distance along the ice to the northward, in order to endeavour to get round it if possible, and then to stretch in again towards the land. The ice had closed so much all round us, however, that we had

some difficulty in finding a passage out of our present confined situation, which we at length effected before noon, passing by a chain of ice-bergs which were found to be aground in thirty-five to fifty fathoms, and which extending four or five leagues from the shore, sufficiently account for the obstruction offered by the floes in this place.

The temperature of the water at the bottom in thirty-five fathoms was 31½°, on the surface 32°, that of the air being 34°. A small fish, apparently of the whiting kind, was seen upon a piece of ice, and a great many black whales were near us in the course of this and the preceding day.

The extraordinary fine and clear weather which we experienced in the first fortnight of September is a circumstance worthy of remark: during that period, we had very little snow, and not one whole day's foggy weather. The fog was, perhaps, in some measure, avoided by keeping close in shore, as we occasionally perceived fog-banks in the offing, while we were enjoying clear weather near the land.

In attempting to sail to the eastward, on the 15th, we found the ice become more and more close, and a fog with sleet coming on obliged me to make the ships fast to a floe of considerable extent, and five or six feet in thickness, being in latitude, by account, 68° 24′ 18″, and longitude 63° 32′ 42″. We had here no bottom with six hundred and ten fathoms of line; the temparature of the sea at one hundred and seventy fathoms was 30½°, that of the surface being the same, and of the air 31°.

As the sun was occasionally visible, notwithstanding the fog, a set of observations was begun for ascertaining the variation of the magnetic needle on board the Hecla; but these could with difficulty be obtained on ten points of the compass, after which the sun became again obscured. The thermometer fell to 23° at night, which was lower than we had before experienced it in the course of this month, and the fog froze hard upon the rigging.

The fog continued so thick on the 16th, as to oblige us to keep the ships fast to the floe. In the afternoon the deep-sea clamms were sent down to the bottom with two thousand and ten fathoms of line, which were fifty-eight minutes in running out, during which time no perceptible check could be observed, nor even any alteration in the velocity with which the line ran out. In hauling it in again, however, which occupied both ships' companies above an hour and a half, we found such a quantity of the line covered with mud as to prove that the whole depth of water was only eight hundred and nine fathoms, the rest of the line having continued to run out by its own weight, after the instrument had struck the ground. I have before had occasion to remark that, on this account, it is not easy to ascertain the actual depth of the sea in the usual manner, when it exceeds five or six hundred fathoms. A self-registering

thermometer, which remained at the bottom for two hours and three-quarters, indicated a temperature of 27°*, that of the surface being 31°, and of the air 34°. Some cubes of wood, whose sides measured two inches, were also attached to the clamms, in order to try what increase of weight each kind would acquire by the pressure of the water at a great depth; the result, as ascertained by Mr. Edwards, is shewn in the following table :—

	Original weight in grains.	Weight on coming to the surface	Increase of weight	Weight three hours afterwards.	Decrease in those three hours
Ash	1425	2324	899	2291	33
Fir	863	2112	1249	1964	148
Oak	1421	2252	831	2201	51
Elm	1220	2299	1079	2201	98

The wind shifting to the south-west on the morning of the 17th, we were nearly beset by the loose ice closing upon us, the ships being now on the windward side of the floe. After four hours' labour we succeeded in getting clear, and made sail among loose ice to the south-east. This course, however, we were not able to continue long, as the ice led us, in the course of the day, considerably to the northward; and, in the evening, an iceberg was selected, out of the numerous ones in sight, to which the ships were made fast before dark, it being impossible to keep them under-way during the night. We were not sorry to find some swell affecting the ships, such as we had not before experienced for more than twelve months, affording an indication of an open sea at no great distance from us. The loose and heavy pieces of ice which drifted-in under the lee of the berg, and on which the ships occasionally struck with some force, kept the people constantly employed during the night, in veering and heaving in to avoid coming in contact with them. Some bears were heard growling upon the berg, and some seals, ivory-gulls, and little auks, the latter in small flocks, were seen in the course of the day.

On the 18th, the weather continued too foggy to move the ships in the forenoon. We tried for soundings with eight hundred and ninety-seven fathoms of line, without finding bottom; our latitude, by account, being 68° 24′ 03″; longitude 63° 08′ 12″. The temperature of the sea at the depth of three hundred and eighteen fathoms, was 30°, that of the surface being the same, and of the air 29°.

* The instrument with which this experiment was made had been a good deal used for the same purpose, and did not, perhaps, indicate the temperature with very great accuracy.

Soon after noon, the weather being somewhat less foggy, we cast off and made sail to the eastward. The ice here consisted generally of loose but heavy pieces, among which there was scarcely room to sail, and here and there a floe which obliged us to make several tacks. We also passed several square pieces of floe-ice, which had evidently been cut out of a dock by some of the whalers in the course of the present season. The ships were secured to a berg at six P.M., and the wind having freshened up to a gale from the N.W.b.N., with some swell, we were much annoyed during the night by the ice which drifted under the lee of it, and on which the ships were constantly striking with a heavy shock, such as no others could long have withstood. This danger is avoided by ships lying very close under the lee of a berg, but a much greater is thereby incurred from the risk of the berg's upsetting; a circumstance which is always to be apprehended in a swell, and which must be attended with certain destruction to a ship moored very near to it.

At day-light on the 19th, we cast off from the berg, and occupied the whole of the day in unsuccessful attempts to get through the ice in to the land, of which we could only obtain a very distant glimpse, bearing from S. 24° W. to S. 69° W. By hauling to the north-eastward, we got into sufficiently clear water to enable me to keep the ships under way during the night; but, the wind falling light, great attention was requisite in avoiding the ice-bergs, which were numerous, and of large dimensions.

The weather was so thick with snow on the 20th, that we could make no progress. At noon, being in latitude 68° 12′ 11″, and longitude 60° 50′ 19″, no soundings could be obtained with seven hundred and seventy fathoms of line. The temperature of the sea, at the depth of three hundred and eighteen fathoms, was 33°, that of the surface being 32°, and of the air 31½°. On the following day we sounded in two hundred fathoms, on a bottom of very fine sand and broken shells, and found the temperature of some water brought up from that depth in Dr. Marcet's bottle, to be 33½°; that of the air at the same time was 30°, and of the surface-water 34½°, being the warmest we had observed for a considerable time.

On the 23d, having run to the southward nearly as far as the latitude of Mount Raleigh, without being able to approach the land, the trending of the ice flattered us for some time with the hope of getting in with the coast; but at two P.M. we came to a compact and impenetrable body of it, over which we could not see any clear water from the mast-head, and which obliged us to haul off to the south-eastward.

On the 24th and 25th we continued our progress to the southward, but without any better success in approaching, or even getting sight of, the land; the ice being as close and compact as when we sailed along the margin of it in July of the preceding year. Soon after noon on the 24th, we crossed the Arctic Circle, having

been within it fourteen months and three weeks; and at noon on the 25th had reached the latitude of 66° 13′ 14″, being two miles and three-quarters to the southward of the dead reckoning, which difference had occurred on each of the twelve preceding days.

On the morning of the 26th we again stood to the westward as much as the ice would allow, but were soon obliged by it to keep away to the southward, precluding every hope of making the land on that part of the coast which it would have been most interesting to have explored. At noon we were in latitude 65° 41′ 09″, and longitude, by chronometer, 59° 09′ 54″. In the afternoon, after various attempts to get to the westward, appearances became more unpromising than ever, the packed ice extending from N.b.E. round to S.W. There were, indeed, parts of this ice which, with constant day-light, a ship might have entered with some probability of success; but, with twelve hours' night, the attempt must have been attended with a degree of risk, which nothing but a very important object could justify. The wind had now freshened up from the N.N.W., and the mercury in the barometer fell with unusual rapidity, with every other appearance of an approaching gale. I was, therefore, under the necessity of admitting the conclusion that, under existing circumstances, the season was now too far advanced, and the state of the ice too unfavourable to allow of any further examination of the coast; and I determined, therefore, to make the best of my way to England. The boats were accordingly hoisted in, and the ships made snug, while in smooth water, under the lee of the ice, and a course was then shaped to the E.S.E., in order to obtain an offing, before we bore away to the southward.

Having now finally taken leave of the ice, it may be proper to offer a few brief remarks as to the probable existence and accomplishment of a North-West Passage into the Pacific Ocean. Of the existence of such a passage, and that the outlet will be found at Behring's Strait, it is scarcely possible, on an inspection of the map, with the addition of our late discoveries, and in conjunction with those of Cook and Mackenzie, any longer to entertain a reasonable doubt. In discovering one outlet from Baffin's Bay into the Polar Sea, and finding that sea studded with numerous islands, another link has at least been added to the chain of evidence upon which geographers have long ventured to delineate the northern coast of America, by a dotted line from Icy Cape westward, to the rivers of Mackenzie, and Hearne, and thence to the known part of the coast to the north of Hudson's Bay, in the neighbourhood of Wager River; while, at the same time, considerable progress has been made towards the actual accomplishment of the desired

passage, which has for nearly three centuries engaged the attention of the maritime nations of Europe.

The success which attended our efforts during the season of 1819, after passing through Sir James Lancaster's Sound, was such as to inspire even the least sanguine among us with a reasonable hope of the complete accomplishment of our enterprise, before the close of the next season. In entertaining such a hope, however, we had not rightly calculated on the severity of the climate with which we had to contend, and on the consequent shortness of the season, (not exceeding seven weeks), in which it is possible to perform the navigation of that part of the Polar Sea. Although it must be admitted, that there is something peculiar about the south-west end of Melville Island, extremely unfavourable to navigation, yet it is also certain that the obstructions we met with from ice, both as to its thickness and extent, were found generally to increase, as we proceeded westward, after passing through Barrow's Strait. That we should find this to be the case, might perhaps have been reasonably anticipated, because the proximity to a permanently open sea appears to be the circumstance which, of all others, tends the most to temper the severity of the Polar regions, in any given parallel of latitude. On this account I should always expect to meet with the most serious impediments about mid-way, between the Atlantic and Pacific Oceans; and having once passed that barrier, I should as confidently hope to find the difficulties lessen in proportion as we advanced towards the latter sea; especially as it is well known, that the climate of any given parallel on that side of America is, no matter from what cause, very many degrees more temperate than on the eastern coast.

But, although it is evident, that climate does not wholly depend on latitude, but on other circumstances also, (principally, perhaps, those of locality above mentioned,) yet it can scarcely be doubted that, on any meridian to the north of America, for instance, 114° west where we were stopped, the general climate would be found somewhat better, and the navigable season longer, in the latitude of 69° than in that of 75° near which we wintered. For this reason, it would perhaps be desirable, that ships endeavouring to reach the Pacific by this route, should keep, if possible, on the coast of America, and the lower in latitude that coast may be found, the more favourable will it prove for this purpose.

Our experience, I think, has clearly shewn that the navigation of the Polar Seas can never be performed with any degree of certainty, without a continuity of land. It was only by watching the occasional openings between the ice and the shore, that our late progress to the westward was effected; and had the land continued in the desired direction, there can be no question that we should have continued to advance, however slowly, towards the completion of our enterprise. In this respect, therefore, as well as in

the improvement to be expected in the climate, there would be a manifest advantage in making the attempt on the coast of America, where we are sure that the land will not fail us. The probability of obtaining occasional supplies of wood, game, and anti-scorbutic plants; the chance of being enabled to send information by means of the natives; and the comparative facility with which the lives of the people might be saved, in case of serious and irreparable accidents happening to the ships, are also important considerations, which naturally serve to recommend this route. Should the sea on the coast of America be found moderately deep, and shelving towards the shore, (which, from the geological character of the known parts of the continent to the south, and of the Georgian Islands to the north, there is reason to believe would be the case for a considerable distance to the westward), the facility of navigation would be much increased, on account of the grounding of the heavy masses of ice in water sufficiently deep to allow the ships to take shelter behind them, at such time as the floes close in upon the land. Farther to the westward, where the primitive formation, and perhaps even a continuation of the Rocky Mountains, is to be expected, a steep and precipitous shore would probably occur, a circumstance which the foregoing narrative has shewn to be attended with much comparative uncertainty and risk.

The question which naturally arises, in the next place, relates to the most likely means of getting to the coast of America, so as to sail along its shores. It would, in this respect, be desirable to find an outlet from the Atlantic into the Polar Sea, as nearly as possible in the parallel of latitude in which the northern coast of America may be supposed to lie; as, however, we do not know of any such outlet from Baffin's Bay, about the parallels of 69° to 70°, the attempt is, perhaps, to be made with better chance of success in a still lower latitude, especially as there is a considerable portion of coast that may reasonably be supposed to offer the desired communication, which yet remains unexplored. Cumberland Strait, the passage called Sir Thomas Rowe's Welcome, lying between Southampton Island and the coast of America, and Repulse Bay, appear to be the points most worthy of attention: and, considering the state of uncertainty in which the attempts of former navigators have left us, with regard to the extent and communication of these openings, one cannot but entertain a reasonable hope, that one, or perhaps each of them, may afford a practicable passage into the Polar Sea.

So little indeed is known of the whole of the northern shore of Hudson's Strait, which appears, from the best information, to consist chiefly of islands, that the geography of that part of the world may be considered altogether undetermined; so that an expedition which should be sent to examine those parts, would soon arrive upon ground never before visited, and in which, from an inspection

of the map in its present state, there certainly does seem more than an equal chance of finding the desired passage. It must be admitted, however, that any notions we may form upon this question, amount after all to no more than conjecture. As far as regards the discovery of another outlet into the Polar Sea, to the southward of Sir James Lancaster's Sound, it is evident that the enterprise is to be begun again; and we should be cautious, therefore, in entertaining too sanguine a hope of finding such a passage, the existence of which is still nearly as uncertain as it was two hundred years ago, and which possibly may not exist at all.

In the course of the foregoing narrative, it may have been remarked, that the westerly and north-westerly winds were always found to produce the effect of clearing the southern shores of the North Georgian islands of ice, while they always brought with them clear weather, which is essentially necessary in prosecuting discoveries in such a navigation. This circumstance, together with the fact of our having sailed back in six days from the meridian of Winter Harbour to the entrance of Sir James Lancaster's Sound, a distance which it required five weeks to traverse when going in the opposite direction, seems to offer a reasonable ground for concluding, that an attempt to effect the north-west passage might be made, with a better chance of success, from Behring's Strait, than from this side of America. There are some circumstances, however, which, in my opinion, render this mode of proceeding altogether impracticable, at least for British ships. The principal of these arises from the length of the voyage which must first be performed, in order to arrive at the point where the work is to be begun. After such a voyage, admitting that no serious wear and tear have been experienced, the most important part of a ship's resources, namely, the provisions and fuel, must be very materially reduced, and this without the possibility of renewing them to the extent necessary for such a service, and which can alone give confidence in the performance of an enterprise of which the nature is so precarious and uncertain.

Nor should it be forgotten how injurious to the health of the crews, so sudden and extreme a change of climate would in all probability prove, as that which they must necessarily experience in going at once from the heat of the torrid zone into the intense cold of a long winter upon the northern shores of America. Upon the whole, therefore, I cannot but consider that any expedition, equipped by Great Britain with this view, will act with greater advantage, by at once employing its best energies in the attempt to penetrate from the eastern coast of America along its northern shore.

Whatever may be the result of any future attempt to decide this great geographical question, experience has shewn that, independently of any benefit which science may derive from such attempts,

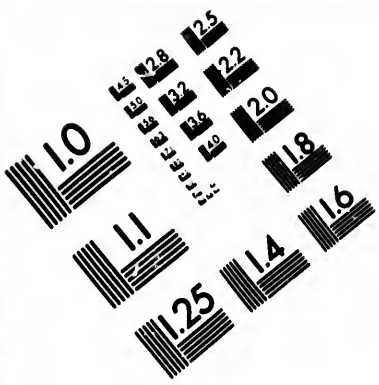
those already made have not been altogether without their use also in a commercial point of view. Previously to the return of the Expedition of 1818 from Baffin's Bay, the whale-fishery in that sea was almost entirely confined, during the best part of the summer-season, to the eastern or Greenland shores, where at no very distant period, the number of whales was found sufficient to afford abundant employment for the numerous fleet of ships which are annually employed in this trade. For some years past, however, it has been observed, that it requires a much greater share of exertion than formerly, to procure the same supply of whales, these animals having been scared from South-East and North-East Bays, and the other southern parts of the coast of Greenland, which only a few years ago were considered a sure and abundant fishery, and retired to the northern and western parts of Baffin's Bay, where they have hitherto been but little molested. Such, indeed, is the general want of success on the old ground, that it is a common complaint among our whalers, that this fishery appears to be well nigh worn out. Above forty sail of ships accompanied the Expedition of 1818 up the coast of Greenland, nearly as high as the latitude of 76°, where the whales were found to be so abundant, as amply to repay the labour and exertions, by which our fishermen had succeeded in penetrating thus far through more than ordinary obstructions from ice. Encouraged by this success, and by the knowledge of our having subsequently crossed to the western coast of Baffin's Bay without much difficulty, the whalers began to extend their views beyond what had formerly been considered the utmost limits of the fishery, and accordingly in 1819, succeeded in penetrating the barrier of ice which occupies the centre of Baffin's Bay, and for the first time sailed over into Sir James Lancaster's Sound, and some of the other bays and inlets upon the same coast. In the course of that year's navigation, no less than fourteen ships were wrecked among the ice, but fortunately only one or two lives were lost. Not discouraged, however, by this disaster, the enterprising spirit of our fishermen led them, again, in 1820, to make the attempt to range over the whole of the northern and western part of the bay in quest of whales. Such was the well-earned success which attended their efforts, that, in the course of that season, scarcely a nook or corner of this extensive bay remained unvisited by them. Mr. Bell in the Friendship, of Hull, whom I have before had occasion to mention, and one or two other of the ships sailed up to its very northernmost limits, entered Whale Sound, and were close off the entrance of Sir Thomas Smith's Sound; an exploit which has never before been performed since Baffin first discovered these inlets, above two hundred years ago. It has been seen, in the course of the foregoing narrative, in what situation we met with several of the ships on our return down the western coast in the autumn of 1820. The success which they met

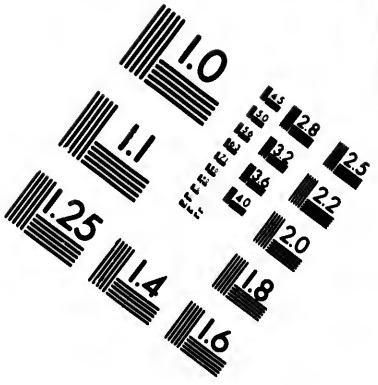
with on this occasion was such as has seldom occurred in the Davis' Strait fishery on any former season; and thus has a new and extensive field been opened for one of the most lucrative branches of our commerce, and what is of scarcely less importance, one of the most valuable nurseries for seamen which Great Britain possesses. Nothing, indeed, can exceed the bold and enterprising spirit displayed by our fishermen in the capture of the whale. At whatever time of night or day, a whale is announced by the look-out man in the crow's-nest, the men instantly jump into the boats, frequently with their cloathes in their hand, and with an alacrity scarcely equalled even in the most highly-disciplined fleet, push on in pursuit of the whale, regardless of cold and wet, and hunger, for hours, and sometimes days together. Nor is it solely on occasions where their immediate interest is concerned, that this activity is displayed by them. It happened, on the voyage of 1818, that in endeavouring to pass between the land and a body of ice which was rapidly closing the shore, the Alexander, then under my command, touched the ground just at the critical moment when it was necessary to push through the narrow and uncertain passage. It being nearly calm, the boats were sent a-head to tow, but the little way which they could give the ship was not sufficient to have rescued us in time from the approaching danger, and nothing less than the wreck of the ship was every moment to be expected. Several sail of whalers were following astern; but seeing the dangerous situation in which the Alexander was placed, and the impossibility of getting through themselves, they instantly put about into the clear water which we had just left, and, before we had time to ask for assistance, no less than fourteen boats, many of them with the masters of the ships themselves attending in them, placed themselves promptly a-head of the Alexander, and by dint of the greatest exertion towed her off into clear water, at the rate of three or four miles an hour, not one minute too soon to prevent the catastrophe we had anticipated.

The opening of a new whale-fishery on the western coast of Baffin's Bay, which constitutes an important era in the history of that trade, and for which the country is indebted to the researches of the expedition of 1818, under the command of Captain Ross, will, perhaps, render expedient a new mode of proceeding in the annual visits of our ships to this part of the Polar regions. It has hitherto been customary for a certain number of those intended for the Davis' Strait fishery, to occupy the early part of the season in what is called "the south-wes[illegible] which is that part of the sea immediately to the eastward of [illegible]olution Island, and in that neighbourhood. The ships frequently appear on this ground as early as the first of April, when the nights are long, the weather extremely cold and inclement, and with a heavy sea occasionally rolling in upon them from the Atlantic, making this, perhaps, upon

the whole, the most severe fishery which is any where used by our whalers. They generally remain upon this coast, as near as the ice will permit them, till about the first or second week in June, not without considerable wear and tear to the ships, and the most harassing fatigue to the men, but [illegible]m with a proportionate degree of success to repay their toil. After this, they strike over to the eastern or Greenland side, and prosecute the fishery on that coast in the usual way. I cannot but consider, that this "south-west" fishery might now be advantageously dispensed with altogether, and the expense of wages, provisions, and wear and tear, for the months of April, May, and June, entirely saved to the owners, or employed in some more beneficial manner. By entering Davis' Strait no earlier than the first week in July, I feel confident, that a ship may ensure a "payable" cargo of fish before the end of the season, without incurring half the anxiety or risk which must always attend the navigation of that sea at an earlier period of the season. By doing this, a ship may, as I have before had occasion to remark, perhaps, reach the latitude of 73° or 74°, about the 20th or 25th of July, with very little obstruction from ice. In the course of this passage, it is, indeed, more than probable, that not a single whale will be met with, even though the ship should keep the whole way along the eastern margin of the ice. Not discouraged, however, by this circumstance, let her, on her arrival about the parallel of 73°, boldly enter the ice wherever it seems the most promising for getting through it to the western coast. In adopting this measure, there is doubtless much risk to encounter, but not more than in pushing on to the northward into Prince Regent's Bay, where, from the peculiar conformation of the land, which is extremely favourable for the retention of the ice, a serious obstruction may always be expected.

In effecting a passage through the central barrier of ice in Baffin's Bay, it is possible that one, two, or in some seasons, even three weeks may be occupied; while in others, as in the year 1820, nothing but "sailing ice" may be found in a high latitude, through which a ship makes her way without difficulty. Having once effected this passage, however, there will, I apprehend, be still more than sufficient time for the accomplishment of their object, except in very unfavourable seasons, for we have the experience of three following years for asserting that an open sea will be found at that period to the westward, while the number of whales which we met with on that side of the bay seems likely to ensure to them, at least for some time to come, an easy and abundant fishery. For this purpose, however, the ships should be directed not to be in a hurry to leave the coast until the latter end of September, that month being by far the best in the year for the navigation of Davis' Strait and Baffin's Bay, and consequently affording greater facility, and much less risk, in the capture of whales. The apprehension





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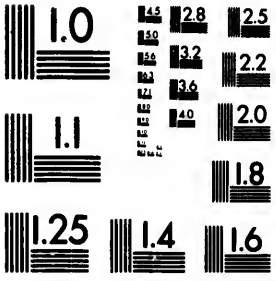

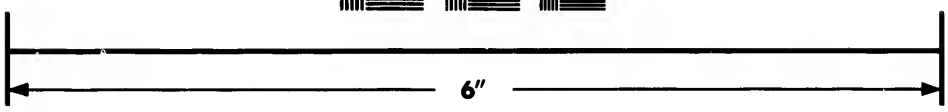

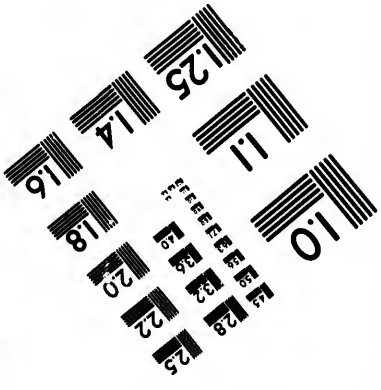

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which has, I believe, been entertained by some of the ship-owners, of their vessels being caught in the ice, so as to prevent their return, in consequence of remaining too late, is, as far as I have had an opportunity of judging, altogether without foundation, unless their stay be extended considerably beyond the period I have mentioned.

How far the plan suggested above may be considered advantageous, as regards a late or an early market for the oil, or whether more profit may be expected by employing the ships in making a Baltic voyage, as is sometimes the case, after that from Davis' Strait is completed, than is likely to result from a full cargo of blubber at the end of the season, are circumstances of which I am not competent to form a judgment, and which must be left to the consideration of the ship-owners themselves. I shall only, therefore, add on this subject, that it has been suggested to me by one of those gentlemen, that a ship might, perhaps, be employed to great advantage, by occupying the early part of the season (till the middle of June, for instance,) at Spitzbergen, and then running down into Davis' Strait, to complete her fishery in the way I have proposed.

On the 27th of September we ran to the southward and eastward, with a fresh and favourable breeze, and without meeting with any ice after leaving its main body, except one or two icebergs, and a few straggling pieces which, however, make it necessary to be very cautious in running at night, especially when there is any sea, the breaking of which cannot easily be distinguished from a mass of ice. On some occasions, therefore, it was necessary to heave-to for a few hours at night, a precaution which I should always recommend in the latter part of the season, till a ship has passed well to the eastward of Cape Farewell. It is remarked by the whalers, that they usually have a gale of wind to encounter off this headland in returning home from their fishery, which has also occurred on the two occasions on which I have passed it at this season. On the 30th of September, in the evening, there was every appearance of unfavourable weather, and the ships were made snug before dark. Soon after this, a gale came on from the northward and westward, which continued to blow hard, with little intermission, during the 1st and 2d of October. The fall of the mercury in the barometer was, on this occasion, very gradual, and scarcely such, perhaps, as to be considered a fair warning of an approaching gale, being only from 29.49 at noon on the 30th, to 29.38 at six P.M., and 29.31 at midnight. On the morning of the 2d, it had fallen to 28.66, at which time the gale had been blowing hard for more than twenty-four hours. The wind had somewhat moderated

on the 3d, when the barometer had fallen as low as 29.14. In the gale which we experienced off Cape Farewell in 1818, the barometer was also much lower for two days after it had ceased to blow than while it lasted. During the time that we were in the Polar Sea, and especially while we were frozen up in Winter Harbour, we also remarked that a gale was accompanied, rather than preceded, by a fall of the mercury in the barometer; in moderate weather, it almost invariably rose with northerly and westerly winds, and fell with those from the south and east.

On the 2d of October, in scudding before the wind, under the main-top-sail, a heavy sea struck the Hecla on the larboard quarter, rendering it necessary to press her forward under more canvas, by which we lost sight of the Griper in the course of the morning. As soon as the weather moderated, we hove-to for her; but, as she did not make her appearance, having, as we afterwards learned, been obliged to lie-to during the height of the gale, we continued our course out of the Straits, and did not again meet with the Griper till our return to England. After ten P.M. this night, the Aurora Borealis appeared at times in almost every part of the heavens, but most constantly in the southern quarter. It consisted of no distinct figure, either arch or pencils, but of a generally diffused white light, illuminating the atmosphere at times quite as much as the moon when six or seven days old. This phenomenon occurred almost every night during our passage across the Atlantic, rendering them extremely light, even when the weather was cloudy, just in the same manner that the moon does although her disk is not visible. When the weather was clear, it most frequently resembled the light of that luminary when issuing from behind a dark cloud.

On the 3d we observed a more brilliant display than usual of this phenomenon. It appeared at nine P.M. in various parts of the heavens, from E.N.E., round by south, to W.b.N., principally consisting at first of many detached luminous patches like clouds, irregularly scattered about, and shifting frequently, though not very rapidly, from place to place. From the W.b.N. over to the S.S.E., and passing a few degrees to the southward of the zenith, there soon appeared a broad band of light, having a tendency to arch; and the light of which this consisted appeared to come from the west towards the east. In the E.N.E. quarter, there was a luminous appearance distinct from the rest, at about 15° or 20° of altitude, exactly resembling the light of the moon behind a dusky cloud, except that at times vivid coruscations shot upwards from it towards the zenith. At a quarter past ten the phenomenon suddenly became much more brilliant, its general position and character remaining, however, nearly as before. It still appeared chiefly to the southward of the zenith, the arch-like appearance continuing with increased splendour, and accompanied for about a quarter of an hour by a beautifully waving light, of the rapidity and mag-

nificence of which it is impossible to convey any adequate idea. The motion of this light reminded one of the contortions of a snake, except that its velocity was often so great that the eye could with difficulty follow it. The most intense part was a pale greenish colour; the rest nearly white. The arch, which before had been stationary, at one time shifted its position, by appearing, as it were, to turn up its legs so as to form a part of a circle seen in perspective in the south, parallel to the horizon. The luminous patch, or cloud, in the E.N.E. increased also very much in brightness at the same time, emitting more vivid coruscations, but continuing, as before, quite distinct from the rest of the phenomenon. This Aurora, when brightest, gave nearly as much light as that of a full moon. There could not be the smallest doubt that it dimmed, and even sometimes altogether obscured, the stars over which it passed. We particularly remarked, that wherever there was a broad stream of its light stationary for some time in any part of the heavens, it produced exactly the effect of a curtain; for we could only distinguish stars of the first and second magnitudes *through* it, while those of inferior brilliancy were visible in great numbers by the side of it. In this, as in several previous instances, the Aurora appeared very near us, though it was evidently higher than some clouds which were passing, as might readily be distinguished by the latter intercepting a part of its light. The electrometer was tried during the most brilliant part of the phenomenon, but neither on this or on any other occasion, in crossing the Atlantic, did the gold leaf give any indication of electricity; nor was the magnetic needle in the slightest degree affected. The arch-like appearance above described was not bisected by the magnetic meridian, but by the magnetic N.E. and S.W. At a quarter before eleven the light became less brilliant, and spread more to the northward, and then gradually disappeared before midnight.

On the 11th, being in lat. 61° 11′, longitude 31° 12′, some water brought up from a depth of three hundred and twenty fathoms, in Dr. Marcet's bottle, was at the temperature of 44½°, the surface water being at 47½°, and the air 48°.

At seven P.M., on the 13th, the wind being equally from the N.N.W., the Aurora Borealis began to display itself in a bright luminous patch in the north-east, resembling, as usual, the light of the moon behind a dark cloud. From this point faint and narrow coruscations shot upwards, passing a little to the north-westward of the zenith, and appearing to come down in the W.b.S. The blue sky between these streams of light, looked at first like so many dark streaks or clouds, until the eye had become accustomed to it, and the clearness of the stars in them explained the deception. In half an hour after, a bright arch, 34′ high in the centre, and about 2° in breadth, extended from the luminous patch in the N.E. over to the W.S.W., so that the magnetic meridian would nearly bisect it. This part of the phenomenon remained about an hour, and then

became faint, but the Aurora continued to give a considerable light, as usual, during the rest of the night.

The mercury in the barometer fell gradually, but very steadily from midnight on the 11th, (when it was at 30.34 inches), till nine A.M., on the 14th, at which time it stood at 29.32 inches, and a hard gale of wind came on so suddenly as scarcely to give us time to save the masts and yards. It is remarkable that, immediately after this the mercury in the barometer rose to 29.36 inches, and continued so very steadily till nine P.M., when it once more gradually descended till it had reached 28.83 on the morning of the 16th. The gale continued to blow almost without intermission for four successive days.

On the afternoon of the 16th, the sea being very high and irregular, and the ship pitching with considerable violence, the bowsprit was carried away close to the gammoning, and the foremast and main-top-mast immediately followed it over the side. The wreck was quickly cleared; and, by the greatest activity and energy on the part of the officers and men, the main-yard and main-mast were saved, the latter having been endangered by the foremast falling across the stay, and the former by the wreck of the main-top-mast and top-sail-yard lying upon it. Notwithstanding the continuance of the gale, and the uneasy motion of the ship for the next two days, we succeeded in getting up our jury-masts, so as to make sail on the evening of the 18th.

Nothing material occurred till the afternoon of the 26th, when we struck soundings in seventy fathoms, on a bottom of coarse sand and broken shells, being in latitude 59° 55′, longitude 3° 17′ west. The weather being calm, some fishing-lines were put over, and several fine cod and torsk were caught, being the first we had met with since leaving Fair Island, at the commencement of the voyage. On the following day, we made Foul Island, bearing S. 54° E., distant eleven leagues. Previously to our parting company with the Griper, I had given Lieutenant Liddon an order, in case of separation, to repair to Lerwick in the Shetland Islands, and to wait a week there for our arrival. On the morning of the 28th, however, being [illegible] Fair Island and the Orkneys at daylight, and the wind being favourable for proceeding to the northward, I determined to proceed at once to Leith, where the necessary repairs of the Hecla's rigging could be more quickly and effectually completed, previously to her venturing upon the English coast; and I should have an earlier opportunity of reporting to Lords [illegible] agreeably to my Instructions, or by letter may [illegible] sioners of the Admiralty a full account [illegible]

On the 29th, we made Buchanness, and [illegible] wind having come to the southward, so as to [illegible] very slow, I landed at Peterhead, accompanied by [illegible] and Mr. Hooper; having first, in compliance [illegible]

directions, demanded from the officers, petty-officers, and all other persons on board the Hecla, the logs, journals, charts, drawings, and other documents which the voyage had furnished, and directed Lieutenant Beechey to proceed with all possible dispatch to Leith. Having left Mr. Hooper at Leith, to report the Hecla's arrival to Rear-Admiral Otway, the commander-in-chief at that port, and to provide fresh beef and vegetables for our people, Captain Sabine and myself proceeded without delay to London, where we arrived on the morning of the 3d of November.

Such was the excellent state of health which we at this time continued to enjoy on board the Hecla, that, during the whole season of our late navigation from Winter Harbour to the coast of Scotland, being a period of thirteen weeks, not a single case had been entered on our sick-list, except from one or two accidents of a trifling nature; and I had the happiness of seeing every officer and man on board both ships, (with only one exception out of ninety-four persons), return to their native country in as robust health as when they left it, after an absence of nearly eighteen months, during which time we had been living entirely on our own resources.

The Griper arrived at Shetland on the 1st of November, and the Hecla at Leith on the 3d. Both ships came into the River Thames about the middle of November, and were paid off at Deptford on the 21st of the following month.

END OF THE NARRATIVE.

APPENDIX.

No. I.

AN ACCOUNT OF THE EXPERIMENTS TO DETERMINE THE ACCELERATION OF THE PENDULUM IN DIFFERENT LATITUDES.

A full and detailed report of these experiments has been presented to the Royal Society, at whose desire they were undertaken, and will be published in the *Philosophical Transactions*; the present statement is, therefore, confined to a brief notice of their object, nature, and results.

Were the figure of the earth truly spherical, a pendulum would make the same number of vibrations in a given time, under the same circumstances of temperature, and of atmospherical pressure, if placed at equal heights above the level of the sea, in every part of the globe, because the force of gravity which governs the vibrations would be always the same, being at equal distances from the centre of the earth.

The accidental discovery that a pendulum, on being removed from Paris to the neighbourhood of the equator, increased its time of vibration, gave the first step to our present knowledge, that the Polar axis of the globe is less than the equatorial, and that the force of gravity at the surface of the earth increases progressively from the equator towards the poles.

It has been deemed an important object to science, to determine by experiment the precise amount of the deviation of the figure of the earth from a perfect sphere. This purpose has been attempted either by the actual measurement and comparison of distant degrees of latitude on a terrestrial meridian, or by ascertaining the variation in the force of gravity in different latitudes by means of a pendulum, and thence inferring, by certain known methods, the diminution of gravity from the Pole to the Equator, and the consequent ratio of the Equatorial to the Polar axis.

Such was the object of the present experiments. Their nature may be briefly described, to consist in ascertaining with the greatest possible accuracy, at different stations, the latitudes of places correctly known, the number of vibrations which would be made by a certain pendulum in a given time, were it placed at the level

of the sea, *in vacuo*, and at a certain temperature. This purpose is effected by setting up a clock containing the pendulum in a convenient and protected situation, and by observing the number of vibrations which it makes on an average of several intervals of 24 hours each, accurately determined; the actual circumstances of the temperature, pressure of the atmosphere, arcs in which the vibrations are performed, and the elevation above the sea, being carefully noted, and their effects in retarding or accelerating the vibrations calculated and allowed for.

This operation, which is sufficiently simple in description, proves less so in the performance, by reason of the extreme accuracy which is required in the results, and of the many causes whereby slight errors may be introduced, which demand the utmost precaution and watchfulness to guard against.

The squares of the number of vibrations in 24 hours in the different latitudes, are to each other, as the force of gravitation in such latitudes; and the difference between the Polar and Equatorial diameters is deduced from the acceleration, obtained by comparing the observations at each station successively with those at all the others.

Two clocks were used in these experiments, being the property of the Royal Society, and the same which accompanied Captain Cook round the world.

The pendulums were prepared by Captain Kater; being each cast in one piece of solid brass, and vibrating on a knife-edge of hard steel, on agate plates ground into portions of hollow cylinders.

The experiments were made in the present Voyage, and in the preceding one in 1818; one only of the clocks was employed in the first voyage, but both in the second.

The stations at which the experiments in 1818 were made, were as follow:

At Brassa, one of the Shetland Islands,	Lat. 60° 09′ 42″ N,
At Hare, or Waygat Island, in Davis Strait,	Lat. 70° 26′ 15″ N,
And in London, - - -	Lat. 51° 31′ 08.4″ N;

The stations of the present voyage were,

In London, latitude as before,

At Melville Island, in the Polar Sea, Lat. 74° 47′ 14.36″ N,

And again, in London, on the return of the Expedition.

The observations of the second voyage are deserving of principal consideration for the following reasons:

1st. The arc of intercepted latitude was greater than between any two of the stations of 1818; the possible errors of observation have consequently had a less influence on the accuracy of the deductions.

2dly. The employment of two clocks afforded a means of procuring double and corresponding results; indeed, as it happened fortunately that each pendulum would fit into either clock, four

corresponding results were obtained for the acceleration between London and Melville Island.

3dly. The number of vibrations made by the clocks in London was ascertained by two distinct series of experiments, one before the departure, and a second after the return of the Expedition; the very near agreement of the results on these occasions proving that neither of the clocks nor any part of their apparatus, had sustained an injury during the voyage, affecting their rate of going; as well as affording a satisfactory inference of the confidence which is due to the mode of experiment; the number of vibrations in 24 hours in London was as follows:

Clock 1	January, 1819	86392.5673	86392.4513	Vibrations in a mean solar day.
	December, 1820	86392.3353		
Clock 2	March, 1819	86496.997	86496.9855	
	December, 1820	86496.9741		

4thly. From the time which was allowed for the experiments at Melville Island being fully sufficient for their completion, the rate of each clock being determined by a mean of 85 intervals of 24 hours each.

And lastly, From the correspondence in the results obtained by the two clocks; the daily acceleration of the one, on a mean of the experiments with both pendulums, being 74.8151 vibrations, and by the other 74.6525 vibrations. The mean of the two, therefore, 74.734, is considered as the true acceleration of a pendulum between the latitudes of 51° 31′ 08.4″ and 74° 47′ 14.36″ N.

By comparing, in a similar manner, the experiments made in the Voyage of 1818 with each other, the acceleration of the pendulum between the several stations at which it was tried, has been obtained as follows:

Between London and Brassa -	33.107	vibrations in a mean solar day.
London and Hare Island	65.2386	
Brassa and Hare Island	32.1316	

The following table contains the deductions which have been obtained by calculation from these several results.

From the acceleration between	Diminution of Gravity from the Pole to the Equator.	Ellipticity of the Earth.
London and Brassa -	.0055066	$\frac{1}{311.3}$
London and Hare Island	.0055139	$\frac{1}{311.4}$
Brassa and Hare Island	.0055082	$\frac{1}{311.2}$
London and Melville Island	.0055258	$\frac{1}{311.7}$

NO. II.

REMARKS ON THE STATE OF HEALTH AND DISEASE ON BOARD THE HECLA AND GRIPER.

A VOYAGE distinguished as this has been by a state of salubrity exceeding the most sanguine expectations, may perhaps render interesting a few remarks on the character of the casualties and diseases that did occur; together with a brief view of those circumstances inimical to health, which were so successfully counteracted during the voyage.

The experience of the former voyage had taught us, that, during the summer months, disease of any kind was almost a stranger to the arctic regions, and this voyage confirmed the experience of the last. On securing ourselves in winter quarters in September 1819, there was not a person inefficient from disease on board either ship, excepting one officer, who was suffering under an attack of rheumatism.

At that time the winter was setting in rapidly; the cold had already become severe, and the men began to feel its effects in their extremities, but more particularly in their toes. Among a few of them the injury amounted to no more than the common chilblain, whilst in others it was more severe. In the latter cases, after suffering a short time from the pain of cold, the toes became gelid, colourless, and insensible, until acted on by the stimulus of a warmer atmosphere, when pain ensued, which acquired a degree of almost intolerable acuteness. To prevent an excessive excitement which followed when these cases were not immediately attended to, we adopted the practice found most useful in cold countries, that of immediately emerging the injured parts in snow, or water kept, by the continual addition of snow, at 32° of Fahrenheit. They were directed to continue this application until some time after the pliability of the part had been restored.

In most of these cases, this plan of treatment did not secure the patient against an accession of inflammation, which although in general superficial, usually terminated in peciation of the whole surface, followed by an exfoliation of the cuticle and epidermis. After this, the milder cases quickly healed, while in the more severe ones, corrosive ulcerations into the cutis vera ensued, which proved troublesome and tedious in the cure.

A case occurred on board the Hecla which, as it may serve to illustrate the effects of severe cold, I shall particularize.

A house, erected on shore for scientific purposes, caught fire by

accident during the winter. A servant of Captain Sabine, in his endeavours to extinguish it, exposed his hands in the first instance to the operation of [illegible]; he afterwards remained in the open air in such distraction of mind, at having been in some measure the involuntary cause of the accident, and was almost unconscious of the effects of a temperature of 43° to 44° below zero of Fahrenheit, upon his naked hands. He was at length noticed in this situation, and sent on board.

His hands presented a strange appearance; they were perfectly hard, inflexible, colourless, presenting a degree of [illegible], exhibiting more the external character of pieces of sculptured marble, than those of animated matter. They were immediately plunged into the cold bath, where they continued for upwards of two hours ere their flexibility was completely recovered; the abstraction of heat had been so great, that the water in contact with the fingers congealed upon them, even half an hour after they had been immersed. During the cold application, a considerable degree of [illegible] took place, attended by acute pain, from which the patient became so faint and exhausted as to necessitate his being conveyed to bed. In less than three hours, very active inflammation had supervened, extending high up the arm, and [illegible] wards each hand, from the wrist downward, was [illegible] bladder, [illegible] of a [illegible] of [illegible]. There were [illegible] of the [illegible] the other, [illegible] cold, and [illegible]; [illegible] ful, as far as the [illegible] joints of these [illegible] vessels of [illegible] transition [illegible] perfect state of [illegible]. [illegible] ployment of [illegible] remedies, to reduce the [illegible] [illegible] were used [illegible], to [illegible]; when the [illegible] to subside, [illegible] the dead and the living parts, and [illegible] became necessary.

A [illegible] zen [illegible] one of his hands fro- [illegible]. Mr. Beverly had [illegible]

The [illegible] of [illegible] place in the early part [illegible] learnt the absolute necessity [illegible] which they wore, were ill [illegible] the [illegible] being formed of hard [illegible] often made too small [illegible] to counteract the pro- [illegible] was [illegible] being too good conductors of heat. It [illegible] see the toes, stockings, and boots cemented together merely by the freezing of the cutaneous exudations of the feet. By a little care, these accidents became less frequent, and

subsequently, after Captain Parry had substituted canvas boots in lieu of the leathern, not one case of the kind appeared.

Such were the casualties that formed the sick list for the first three months of the winter; casualties which, from the experience gained by the officers and seamen in the late voyage, may be expected to be totally avoided in any succeeding one; in fact, the preventive means are so completely within control, that it is only in the event of some contingency similar to that which happened in the case of Captain Sabine's servant, that such an accident ought to occur.

Although the winter was commenced with full confidence in the abundance and efficacy of our resources, we could not be quite indifferent to the many examples on record of the fatality that had attended most of those adventurers, who either by accident or in hopes of commercial profit, had wintered in those climates. With these facts before us, it would have been too much, however sanguine we might have been, to have expected a total exemption from scurvy, and many evils arose during the winter favourable to its production, requiring unceasing vigilance to watch and oppose.

Among the causes which have been considered most active in generating this destructive disease, are to be noticed the following, *viz.*, a diet deficient in quantity or quality; a cold, damp, and impure air; uncleanliness, habits of idleness; mental disquietude; and in short, whatever is capable of producing debility. The absence of a due quantity of accescent vegetable food is always the exciting cause.

In the sea-scurvy, the salted provisions used by the seamen have been held by many to be the most constant cause predisposing to the disease, depending, as some think, on the nutritive parts of the meat being dissolved, and lost in the brine; or, according to others, owing to a chemical combination between the salt and the animal fibre, destructive of its nutritious properties. The present unfrequency of the disease in His Majesty's service may induce a doubt whether the rations of the seamen, modified as they are at at this time, are capable of producing such a predisposition, without the co-operation of some other powerful remote cause.

In the equipment of the Expedition, however, every measure that appeared conducive to the improvement of the antiscorbutic qualities of the provisions was adopted. A large quantity of the meats preserved by Messrs. Donkin and Co. without salt, as well as of their vegetable and concentrated soups, was embarked, and placed at the discretion of Captain Parry, who, by the substitution of them in lieu of proportional quantities of salt beef, greatly improved the diet of the men. Another deviation from the usual allowance was the employment of good flour instead of biscuit, by which the crews were furnished with a daily supply of well-fer-

[illegible] boiled. When to this was added a liberal allowance of lemon-juice, pickles, vinegar, &c., it was reasonable to hope that the exciting cause would not acquire any considerable activity, unless a very strong predisposition prevailed.

Of the remote predisposing causes to which we were exposed from the peculiarity of our situation, a cold and vitiated atmosphere was the most to be dreaded. It is true there was little to be apprehended from the effects of the external air, for during the winter months, which constitute three-fourths of the year, the atmosphere is pure, clear and dry; its mean temperature considerably below zero of Fahrenheit, and rarely undergoing any very sudden change. The clothing of the men was found adequately warm to protect them from the severest cold experienced, which they were enabled to confront not only with impunity, but with a degree of profit and pleasure.

In the interior of the vessels the state of the air was necessarily very different. To economise and preserve a tolerable degree of heat below, it was necessary to keep the hatchways continually covered; the rarefied air which escaped by the funnels being replaced through the crevices, and by the occasional opening of the hatchways. In this way, although the renewal of pure air was abundantly frequent to maintain healthy respiration, the air was seldom of sufficient temperature to carry off the vapours which floated between-decks. These were deposited upon the cold sides of the ships, overhead, and in the bed-places, in icicles, which, by alternately thawing and freezing, kept up a dampness that for some time proved a source of danger, demanding continued attention to obviate its pernicious influence on the health of the crews.

Personal uncleanliness was another evil against which it was difficult to guard. The smoke with which the air was loaded attached itself to the persons and clothing of the men in such quantity as to cause great inconvenience; tolerable comfort was only to be obtained by frequent ablutions, but the time and the fuel necessary to procure enough water for this and other purposes, created a tendency to neglect the duties of cleanliness, an object that required the constant superintendence of the officers to effect. The greatest difficulty, however, in this respect, arose from the obstacles which opposed the drying of the clothes when washed; for many months there was no other mode of effecting this than by suspending them in the neighbourhood of the stoves and funnels, and it was fortunate if by these means a clean shirt was procured once a week.

Various were the modes of occupation, the exercises and recreations, put in practice to counteract a disposition to idleness, the prolific source of discontent and its consequences. The dull monotony of the scene was favourable to habits of sloth, particularly among seamen whose mental resources are too feeble, in general,

to enable them effectually to withstand the temptation. As the means employed to obviate these several evils constitute a part of the general system of economy and discipline practised by Captain Parry during the voyage, it is not necessary for me to detail them; the best commentary on the subject is the comparative freedom from disease that prevailed throughout.

Nearly four months had elapsed when the first symptoms of scurvy were observed; this was early in the month of January, one of the severest in the year. The patient was Gunner of the Hecla, a spare man of temperate habits, but with a constitution somewhat worn by servitude in warm climates. This morbid predisposition was increased by circumstances connected with the locality of his cabin, which was situated in the vicinity of a large stove, from which emanated a degree of heat not sufficient to expel the moisture, but quite adequate to keep it in a most comfortless condition; during the day the air was charged with vapour, which at night froze to every adjacent substance. On examining his bed, one side was found to be literally drenched in water, and the other frozen to the bed-place. Under such circumstances it was not astonishing that scorbutic symptoms should have appeared. Their character, nevertheless, was remarkably mild. The removal of the patient from his damp cabin, into a hammock in a dry part of the vessel, the substitution of fresh meat and vegetable soup, instead of the salted portion of his diet, and a small additional allowance of lemon-juice sufficed to subdue every symptom in three weeks after the attack, and he braved the rest of the voyage on the diet of the ships' company without any recurrence of the complaint.

Early in March two more cases appeared almost stimultaneously, one corresponding closely to the foregoing in its origin and result; the other differing, inasmuch as the subject was a man who had occupied one of the most comfortable beds in the ship; but he had been more than once, while in the service of the East India Company, a sufferer from scurvy; his predisposition was also increased by a pernicious habit of eating pork slush. This substance is the more oily part of the fat, which has so great an affinity for the salt, that during the boiling they are discharged together, leaving the meat in a relative state of freshness. The use of this briny fat is strictly prohibited; but this man was detected by the crew in the act of purloining and eating it, and they, with a praise-worthy zeal for the welfare of the Expedition, reported his delinquency.

A fourth case shewed itself in April; the patient was the Greenland mate, employed as a pilot. He had occupied a part of the gunner's cabin, and had, consequently, been exposed to the more steady operation of the same morbific agents. The remedies used in the first case, were equally successful in the others; but I omit-

ted to notice some auxiliary articles of food which, [illegible] much accelerated their recovery. These were occasional puddings of preserved fruits, and frequent small salads of mustard and cress forced, with some difficulty, by Captain Parry, in his exhibit.

A solitary case of diseased lungs occurred during the voyage, which, in its progress, was combined with scorbutic symptoms. As this case eventually proved fatal, I shall, at the request of Captain Parry, subjoin an abstract of it.

William Scott was entered on the sick list on the 13th of April, having an attack of inflammation of the lungs, which had been ushered in by the usual symptoms of fever. Copious bleedings and abstinence relieved him, but on the 14th he had a relapse, which also yielded to similar treatment. On the 24th he arose in an advanced state of convalescence, when a diarrhœa supervened which arrested his progress towards recovery. The symptoms were mild, and seemed to arise rather from the irritation produced by acrid matter in the intestinal canal, than from any organic derangement. Medicine suitable to each view of the case was administered with considerable, though not perfect, relief. At this time also some symptoms of a scorbutic character [illegible] which in the beginning of May were no longer equivocal, [illegible] ing of aversion to motion, lassitude, depression of spirits, pale countenance, fetid breath, livid, spongy bleeding gums. An anti-scorbutic and farinaceous regimen was prescribed, with such occasional laxatives and anodynes as were dictated by the state of his bowels. By the 25th the decided symptoms of scurvy had given way; the paleness, debility, and mental anxiety, remaining. The last affection had clung to him throughout, diverted at times by such light occupations as were found to suit him. He had also suffered two or three relapses of the diarrhœa. The acescent portion of his diet was now discontinued, and the bitter tonics, substituted; in addition to his farinaceous food, he had daily a nutritious broth of the ptarmigan, of which a few were shot. Under this treatment he appeared to be improving, until the 29th, when he had a recurrence of diarrhœa. The appearance of the alvine fœculæ, and a sense of uneasiness, felt by percussion, in the region of the liver, indicated a derangement of the hepatic system. Five grains of the blue pill were prescribed daily until the 7th of June, when the salivary glands becoming excited, it was omitted. While under its influence, which continued a fortnight, the uneasiness in the right hypochondrium ceased, but the bowels continued at intervals disordered. On the 10th he began to feel his respiration hurried, on exposure to the cold; general lassitude and debility, increasing pallidity of countenance, and livid lips, with extraordinary depression of spirits. These symptoms were suspicious, but the principal diagnostic signs of scurvy were wanting; his pulse

was small and frequent, skin cold; his appetite for food under these circumstances was, nevertheless, tolerable. His treatment had now for its main object the restoration of strength, and to soothe the occasional intestinal irritability. On the 19th he for the first time experienced an indescribable sensation of præcordial anxiety, and on the same night he had a short fit of dyspnœa and cough, increased rapidity and weakness of pulse, without pain or fever indicative of inflammatory action. This state of anxiety continued until the 26th, when a stupor supervened, from which he was roused by the irritation of a vesicatory; a degree of incoherence was perceptible during the day, which increased in the evening, and by midnight had become furious delirium. In spite of his debility, he was with difficulty held in his bed, anxious to escape imaginary dangers, and attempts upon his life. It was said him is a rational state, but exhausted by his struggles, and evidently sinking apace. On the 28th he relapsed again into a stupor, almost unconscious of surrounding objects, and on the morning of the 30th he breathed his last.

On opening the body after death, about two pints of serum were found in the cavity of the abdomen, the liver was preternaturally enlarged, but in other respects sound; a few of the mesenteric glands were indurated; the rest of the abdominal viscera offering no morbid appearance.

In the thorax, the pericardium contained three or four ounces of fluid. The heart was small, its parietes attenuated, flaccid, and pale, and its cavities filled with firm coagulated lymph.

Both lungs were collapsed and shrunk to half their natural bulk, externally firm and livid, on making incision into them. The parenchymatous substance appeared condensed, and converted into a liver-like substance of a livid hue. There was no sign of tubercle or abscess, nor was there any exudation into the cavity of the chest, or adhesion of the pleura.

The morbid state of the thoracic viscera, discovered by the dissection, elucidated many of the distressing symptoms, the cause of which was involved in so much obscurity, but it leaves the pathology of the disease very imperfect.

The diseased condition of mind under which this poor man laboured, had been much aggravated by circumstances which only transpired a short time before his death. He had unfortunately a propensity to liquors, and it appeared that he had been in the habit of gratifying his desire by means of those illicit barterings among seamen, which it is so difficult to detect. A nocturnal incontinence of urine was the consequence, which had been a source of annoyance to his messmates, ending in a powerful antipathy to him, manifested in their unwillingness to assist him even in his sickness.

The consciousness of this had evidently been long preying upon his mind.

The above cases comprehended all in which scorbutic symptoms were manifest; no other of the crew evinced the slightest disposition thereto; although in the early part of April, in consequence of the serious loss of lemon-juice by the bursting of the bottles by the frost, it had been deemed necessary to reduce the consumption of it one-third; and in the middle of June to discontinue it entirely. At this period the sorrel (*Rumex Digynus*, *Linn.*) began to vegetate, and the men were enjoined to gather daily a prescribed quantity, during the whole of July it increased almost to exuberance, proving a most valuable antiscorbutic.

In May two or three cases of pulmonic inflammation entered the sick-list, and in June two of diarrhœa, among the parties employed in procuring game. Among the sportsmen, and also among the party which travelled across the island in June, a few cases occurred of that species of ophthalmia called snow-blindness, produced by the reverberation of the solar rays from the surface of the snow. The inflammation is not excessive, but the irritation is for many hours very distressing. Refrigerent applications, and in severe cases alternated with warm fomentations, generally allayed the irritation in twenty or thirty hours, and in three or four days the patient was fit for service.

The foregoing remarks apply more particularly to the state of health on board the Hecla. In the Griper the scorbutic symptoms were of a more aggravated character, obviously resulting from the objects attacked being men of more debilitated constitutions. The remote causes depending on the condition of the atmosphere, were almost more powerful in this vessel than in the Hecla: for, in consequence of the contracted space in which they lived, the air was charged with moisture which was deposited so plentifully upon the walls and bed-places, that every effort to preserve dryness was fruitless. In this extremity it at length became necessary to put all the men into hammocks, and to break down the bulk-heads and bed-places, thereby throwing open the whole deck to the influence of the fires. This measure proved effectual in removing the nuisance, and with it the disposition to disease.

NO. III.

GENERAL REMARKS ON THE HEIGHT OF THE TIDES IN WINTER HARBOUR.

In the Month of	Minimum	Minimum	Mean
	Feet Inches	Feet Inches	Feet Inches
May	4 2	0 10	2 6½
June	3 7	1 4	2 7
July	3 9	1 5	2 8½

Times of High Water on Full and Change Days of the Moon.

New Moon,	May 12th	H.	M.
		1	13
Full	27th	1	45
New	June 10th	1	15
New	July 10th	1	40
Mean Time of High Water on Full and Change Days		1	30

THE

NORTH GEORGIA GAZETTE,

AND

WINTER CHRONICLE;

A NEWSPAPER,

ESTABLISHED ON BOARD THE SHIPS EMPLOYED IN THE DISCOVERY OF A NORTH-WEST PASSAGE,

IN 1819-20.

BY CAPTAIN EDWARD SABINE, R. A.

ADVERTISEMENT.

THE Editor of the following Sheets feels it incumbent on him to state, that at the time they were composed, not the remotest idea was entertained of their fulfilling any other purpose than that of relieving the tedium of an Arctic Winter; and perhaps of afterwards affording amusement to a few private friends at home. On the return of the Expedition, the interest which the Public took in all that had passed during the voyage, induced applications for the perusal of the manuscript, which could only be gratified by its publication. In consenting to this measure, the contributors to the North Georgia Gazette are fully aware, that its principal recommendation to the public notice will be considered to arise from the peculiarities of circumstances and of situation under which it was composed; and they trust that they may be allowed to claim from the general reader the same indulgence, which they would have received, had the perusal of the Chronicle been confined to the partial circle to which they originally intended it should have been limited: with this impression, no alteration has been attempted in the respective papers, in preparing them for the press.

EDWARD SABINE.

London, April 20th, 1821.

PROPOSALS,

FOR THE ESTABLISHMENT OF A NEWSPAPER,

On board the Ships employed in the Discovery of a North West Passage.

It has been suggested that the establishment of a Weekly Newspaper may assist in enlivening the tedious and inactive months of winter. It is in contemplation, therefore, to try the experiment, by circulating the first Number of the "Winter Chronicle" amongst the Officers of the Expedition, on Monday, the 1st of November.

As the design of this Paper is solely to promote good-humour and amusement, Captain Sabine, who has undertaken to be the Editor, will consider himself responsible, that no article whatsoever shall be admitted which, to his knowledge, will give a moment's uneasiness to any individual. He reserves to himself, therefore, a discretionary power of omitting any contributions which may appear to him objectionable, either on that or any other account; and, of either briefly assigning his reasons, or otherwise, as he may think proper.

He begs it, however, to be distinctly understood, that he will be wholly dependent on the Gentlemen of the Expedition for the support of the Paper; and, he suggests to those who are well-wishers to the undertaking, that their assistance and exertions will be especially required at its commencement.

Original contributions on any subject will be acceptable. The Sportsman and the Essayist, the Philosopher and the Wit, the Poet and the Plain Matter-of-Fact Man, will each find their respective places. It is recommended that an anonymous signature be affixed to each communication, and the hand-writing effectually disguised, to ensure the most rigid impartiality in judging and selecting the articles for insertion. A box will be placed on the Capstan of the Hecla to receive them, the key of which will be kept by the Editor; and it is requested that communications, designed to appear in the first Number, may be deposited in the box by the Thursday evening preceding the publication.

WINTER HARBOUR,
October 20th, 1819.

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THE NORTH GEORGIA GAZETTE;

AND

WINTER CHRONICLE.

No. I.—MONDAY, NOVEMBER 1, 1819.

WE feel great pleasure in being enabled to commence our Editorial Office, by acknowledgments of the lively interest with which the proposals for the establishment of our Paper have been so generally received; of the support with which the demand for the early exertions of our well-wishers has been met; and of the encouragement which we derive from the communications with which we have been already favoured. The proposals having announced a first Number as an experiment, we should feel ourselves wanting in the confidence which the number and respectability of our correspondents so justly inspire, were we to hesitate in declaring our conviction, that the experiment has succeeded; and in venturing, in the name of its supporters, to promise the continuation of the *North Georgia Gazette and Winter Chronicle*.

Having premised thus much, we proceed to lay before our readers the contents of the Editor's box.

TO THE EDITOR OF THE WINTER CHRONICLE.

Mr. Editor—It was with real pleasure I saw in circulation among us, your proposals for a Weekly Newspaper, to be supported by original contributions from the Gentlemen of the Expedition. I am confident that such a paper will, under your censorship, be productive of much amusement, and serve to relieve the *tædium* of our hundred days of darkness*; and, in this view, we cannot but consider you entitled to our best thanks for having undertaken so troublesome an office for the public good.

Having before known more than one *press* of this kind established on board ships, I may take the liberty of warning you not to be discouraged by the slender contributions which the first or second week may be expected to pour into your box. True wit may (for aught you or I know, Mr. Editor,) be as modest as true worth of any other kind, and we must not mistake that for incapacity which may proceed only from diffidence.

The interest which I take in your present plan has, however, enabled me to do more than speculate upon the probable support which your publication will receive at our hands; for you must know, that, soon after I met with your proposals, I took such a liking to them, that I immediately set to work to find out what effect they would have upon our community at large; and I have now much pleasure in assuring you, in the language of our London journals, "that they have produced a great sensation in the public mind."

The very day after your Prospectus appeared, as my reporters inform me, there was a greater demand for ink than has been known during the whole voyage; the green baize of our mess tables has been ever since covered with innumerable pen-parings, to the great detriment, by-the-by, of one of our servants, whose finger has been terribly festered by a prick he received in sweeping them off; and I have it from authority, on which you may rely, that Serjeant Martin† has, within the last week, sharpened no less than nine penknives.

It has been remarked that our tables absolutely groan under the weight of writing desks, which for months past have not seen "the blessed light;" and it is well known that the holds have been more than once opened of late, for the express, though not professed, purpose of getting up fresh packages of paper, originally intended for next

* The sun was ninety-six days below the horizon.

† The serjeant of the Royal Artillery who accompanied Captain Sabine.

year's consumption, but which is now destined to grace your file.

"One gentleman," says my correspondent, "more sly than the rest, thought he had eluded our vigilance; his cheat lay in the hatchway to be opened, he took the opportunity, while he thought nobody was looking, to wrap some old clothes round the square package of paper, before he lifted it out. But as he was walking off with them into his cabin, I saw one of the corners of the tin box shining bright through an unfortunate hole in an old flannel waistcoat. When I taxed him with it, he coloured deeply, (strong symptoms, Mr. Editor!) and ran off, declaring most vehemently, that it was only a canister of gingerbread nuts! 'Nuts, indeed, they were,' adds my facetious friend, 'nuts for the editor!'"

Nor is the information, of which I am in possession, confined simply to this; for I have pried more deeply into the business, and have before me secret intelligence of no less than seven literary contributions in embryo, with which the brains of as many youthful compositors have been teeming ever since your Prospectus appeared. I could tell you, if I chose, to which department, among those you have enumerated, each of these belongs; but as I have no doubt that they will all appear in your pages in their proper time and place, I shall say no more at present about them.

For my own part, Mr. Editor, such is the opinion I entertain of your plan, that I have resolved, unless you lay upon me an absolute prohibition, to make a copy of each paper while it is in circulation. For, I confess, that I anticipate from your pages a fund of rational amusement, not only for the evenings of this our arctic winter, but for those of many a future one, which we all hope to spend happily in Old England; and I cannot help looking forward to the time when a paragraph of the *Winter Chronicle*, read aloud round some cheerful fire-side, may draw a tear of pride and pleasure from the eye of an aged parent, an affectionate wife, or a beloved sister.

I remain, Mr. Editor,
Your friend and well-wisher,
PHILO COMUS.

P. S. I forgot to mention to you, that I have some reason to suspect an attempt will occasionally be made to slide into your box communications which are not *quite* original, and therefore not quite corresponding with your plan; for a gentleman was seen at his desk late the other night, with a volume of the *Spectator* before him, while he was thawing his ink over a lamp. With all due deference to your extensive reading, I think it right to put you on your guard against such attempts; for I have no idea, Mr. Editor, of being obliged to read in the *Winter Chronicle* what our great grandfathers conned over at their breakfast tables more than a century ago.

For the Winter Chronicle.

THE travels of the renowned Baron Munchausen, which I recollect reading when a boy, furnish strong proofs of the very singular effects resulting from extreme cold; and as it seems probable we may have to encounter a greater severity of weather than even that illustrious personage experienced, I think any idea conducive to the general or individual good of our companions, should not be hoarded in selfish concealment, but liberally given to this little world.

After the frost shall have exhausted all its usual effects of fixing the brandy bottle to the lips, freezing the water in the tea-kettle on the fire, congealing sounds, converting sighs into showers of snow, and briny tears into icicles, is it not probable that it may reduce the temperature of the human body so low, as to interfere with the internal economy, compelling the blood to roll through the veins and arteries in the form of peas, dropping one by one into the proper cavities of the heart, and being again discharged from thence like small shot? Now, when matters shall have arrived at such a pitch as this, there is something in the heart, stomach, or bowels, (I think the former,) of many young men called *love*, which though very hot in its nature, must at length acknowledge the frigorific influence. What then will be the result? We know that, even in the comparatively warm climate of Russia, some sorts of liquor are frozen to such a degree, that the whole strength is concentrated, perhaps, into one five-hundredth part of its original space. Now, should this be the case with love, fierce and burning in its present state, to what a deplorable situation must it reduce the unfortunate victim?—if he attempts to breathe, emitting flames like a fabled dragon, while the dissolving blood rushes along in copious streams, and after each respiration as suddenly congeals. But, oh horror! horror! should he have accustomed himself to the use of spirits—on the first kindling of the flame, up he goes like a shell, a mine, a rocket! Think of this in time, gentle youths, whose sensibility may have betrayed you into love, who "have drank the soft poison of a speaking eye." Root it from your bosoms ere the catastrophe arrives with persevering fortitude and resolution, and deposit this soft delusive something where it may be at hand for use in a milder clime; there only can it avail:—then, when the moment arrives which shews you the other terrific symptoms I have mentioned, you will hail me as your friend, your guardian, your benefactor.

FROSTICUS.

Should my conjectures prove correct, would it not be a national benefit to make a turnpike-road from Hudson's Bay to this dreary region? How many married pairs might here revive the almost extinct sparks of regard, and as soon as their bosoms were sufficiently warmed, set off and avoid the dangers of combustion!

For the Winter Chronicle.

ARCTIC MISERIES.

GOING out in a winter morning for the purpose of taking a walk, and before you have proceeded ten yards from the ship, geting a cold bath in the cook's steep hole*.

When on a hunting excursion, and being close to a fine deer, after several attempts to fire, discovering that your piece is neither primed nor loaded, while the animal's four legs are employed in carrying away the body.

Setting out with a piece of new bread in your pocket on a shooting party, and when you feel inclined to eat it, having occasion to observe that it is so frozen that your teeth will not penetrate it.

Being called from table by intelligence that a wolf is approaching the vessels, which, on closer inspection, proves to be a dog; on going again below, detecting the cat in running off with your dinner.

Returning on board your ship after an evening visit in a contemplative humour, and being roused from a pleasing reverie by the close embrace of a bear.

Sitting down in anticipation of a comfortable breakfast, and finding that the tea, by mistake, is made of salt water.

OLD COMICAL.

On the Commencement of the Winter Chronicle.

TO enliven the moments, while Winter steals on
With a too tardy pace, be the care of each one;
Let rancour and malice be banish'd afar,
Unworthy the pen or the heart of a tar!
The fire of true wit may shine vivid and bright,
Untinctured with satire—unprompted by spite;
We are few, and immured in a desolate spot,
Then let envy, resentment, and pride be forgot;
And while Fate may keep us so near one another,
Let each one consider his friend as a brother;
We shall still find enough to enlarge on, no doubt,
Tho' we have not the charms of a ball or a rout.
The mind philosophic may often impart
Some instruction from nature, some process of art;
Morality too may embellish the page,
And by soft winning precepts attention engage;
The sportsman with pleasure may lead us to view
The toils and the triumphs he oft has gone through;
And each daily occurrence may somewhat afford,
Not unworthy to offer at Dame Reason's board:
And thus each unfolding the gifts of his mind,
While diffusing his knowledge, yet haply may find,
That though what he gives ne'er reduces his store,
He oft by this intercourse adds something more.
Then let me solicit a part of your leisure
To be weekly devoted to giving us pleasure;
And thus I conclude with good wishes most fervent,
And beg to subscribe, your obsequious servant,

ALBERT.

For the Winter Chronicle.

TO chase the dull inactive hours away,
Resolved *nem. con.*, that we should have a play;
The play is fix'd on—characters all cast,
Parts learnt, and lo! the first rehearsal past!
Glum cried—"'Twill do, but to ensure success,
"You'll ask some friend to write you an address."

* A hole in the ice for steeping salt meat, &c.

"Eh?" quoth the Manager—"adzooks, you're right,
"Without a *dress* we're in a pretty plight;
"But who shall write it? Marry, there's the rub!
"We have no commerce with that street called Grub."
Strut seem'd perplex'd—look'd thoughtful—took his snuff,
"Egad, I have it—let us send for Puff*!
"Puff is our man—he'll spin us his heroics,
"And melt the audience, if they are not stoics."
"You want a *Puff*," cries Glum—"that's very true,
"But, Mr. Puff, I tell you, will not do;
"He'd write, no doubt, a mighty pretty story,
"Tell you of England's pride, of England's glory;
"How that her sons silvent'rous sailied forth,
"And what's been done in regions thus far north:
"But this, I take it, is too fine by half,
"We want, my friends, something to make us laugh;
"Something to help a lame dog o'er the stile,
"And make our play a tedious hour beguile."
"Still Puff's our man," cried Strut, "I have no doubt
"He'll do the thing, and bring all this about;
"For tho' he dabbles high in epic lore,
"He can descend and make the boxes roar;—
"Aye, Pit and Gallery too—for he is a poet
"Of more than common stamp, and you shall know it."
Thus, Mr Editor, the affair was settled,
Strut was well pleased, and Glum appear'd half nettled;
While we look forward to the eventful night,
To prove Glum wrong—the manager quite right.

Theatre Royal, North Georgia.

The Public are respectfully informed, that the Theatre will open, for the first time,
ON FRIDAY NEXT, NOVEMBER 5, 1819,
When will be performed Garrick's celebrated Farce of

MISS IN HER TEENS;

OR,

THE MEDLEY OF LOVERS.

MEN.

Sir Simon Loveit, Mr. NIAS. Captain Loveit, Mr. GRIFFITHS.
Captain Flash, Mr. BUSHNAN. Fribble, Mr. PARRY.
Jasper, Mr. HOFFNER. Puff, Mr. WAKEHAM.

WOMEN.

Miss Biddy, Mr. BEECHEY. Aunt, Mr. BEVERLEY. Tag, Mr. HOOPER.

SONGS, by Messrs. SKENE, PALMER, and BUSHNAN, will be introduced between the Acts

Previous to the Performance,

AN APPROPRIATE ADDRESS,

Written expressly for the Occasion, will be spoken by Mr. WAKEHAM.

Doors will open at Half-past Six, and the Curtain will rise precisely at Seven.

TO CORRESPONDENTS.

ALBERT's Enigma in our next.

AMICUS's "Prologue to *Miss in her Teens*, to be spoken after the opening Address," has been received. The Editor takes the liberty of suggesting, that the Manager of the Theatre is the person to whom it should have been sent. It is not yet too late to be so sent; and when spoken, it would appear in due course in our Theatrical Report.

We are requested to state, that a humorous Epilogue to *Miss in her Teens* would add considerably to the amusements of Friday evening.

* The part of *Puff*, in *Miss in her Teens*, was to be performed by Mr. Wakeham, who wrote the opening address.

NAUTICUS's communication, entitled "A Problem," has been received. We take this opportunity to remark, that we consider that it falls within the plan of our Paper, to admit questions which may exercise the ingenuity of our Readers, and furnish occupation in their solution; but it is necessary, in order to render such questions worthy the occasion, that they should possess a certain degree of originality, and require more than a *very ordinary* knowledge to resolve them. If our friend Nauticus will refer to any of the Elementary Treatises on Arithmetic or Algebra, he will find under the Rules of Position, or of Simple Equations, many very similar examples to his, proposed for the student's instruction, and the mode of their resolution explained.

No. II.—MONDAY, NOVEMBER 8, 1819.

SINCE our first Number has been in circulation, we have received various communications of encouragement, and assurances of support, confirming the persuasion which we ventured to avow in our last Number, that the Winter Chronicle is no longer an experiment. As in the days of unconquered Rome, it was deemed no less than a capital offence to entertain doubts of the safety of the commonwealth; so we certainly will not set the example of bad citizenship, by permitting a suspicion to take possession of our minds, that the united talents and exertions of our little community will prove inadequate to support a design which is deemed conducive to the public good.

From the above-mentioned communications we have selected the one which we present to our readers, from a correspondent who signs himself "A plain Matter-of-Fact Man," because it coincides with our own sentiments on the subject.

Mr. EDITOR—I hope you will not think me behind-hand in assuring you of the pleasure I received on reading your proposals circulated amongst us—a pleasure not less sincere than that of those who have been before me in expressing it. I felt also the propriety of your appeal to your well-wishers for their timely support, and counting myself in that number, I was very desirous to have complied with your request; but, Mr. Editor, I will freely confess, that after puzzling my head a long time to no purpose, I was forced to give the matter up, in utter despair of finding a subject upon which "A plain Matter-of-Fact Man," as I profess myself to be, could address you with any prospect of entertainment to your readers. Yet, as day passed after day, I felt less and less satisfied to rest without making an attempt, at least, to contribute my portion to the general fund.

The object of your Paper being our amusement, I consider it alike the interest and business of every individual who is pleased with such an establishment amongst us, to do something towards its support; for, if we do not furnish you with communications, Mr. Editor, nothing is more plain than that you cannot furnish us with papers: and, if during the winter, a Monday shall arise without a *Winter Chronicle* to grace our breakfast-tables, we shall, indeed, by our backwardness have deprived ourselves (in words so justly and feelingly used by your correspondent Philo-Comus, and which I repeat to impress them more strongly on your readers) of "A source of rational amusement not only for the evenings of this our Arctic Winter, but of many a future one, when a paragraph of the *Winter Chronicle*, read aloud around some cheerful fireside, may draw a tear of pride and pleasure from the eye of an aged parent, an affectionate wife, or a beloved sister."

You will readily conceive, then, Mr. Editor, that I was not a little cheered at the satisfaction which you expressed in your first Number, and at the confident manner in which you announced your persuasion of further and sufficient aid. But, do not suppose that your correspondents hitherto have borne any proportion, in point of number, to that of your well-wishers, or of those who will eventually assist in filling your columns. I have reason to know, that I was not singular in the embarrassment which deprived me of the gratification of seeing my signature in the list of your earliest contributors: and, that there are not a few persons who are only waiting to form their judgment on the sort of communication which will be acceptable, and who will fall into your ranks, one by one.

I would, therefore, add my voice to that of your more experienced correspondent, Philo-Comus, that you be not discouraged by the slender contributions of the first few weeks.

I would also remind those who are yet silent from the cause which has been just assigned, that *now* is the time when support is most needed: when, if every person will put his shoulder to the wheel in earnest, (and each individual may command his own exertions,) there can be no doubt that your Paper will go on with spirit.

Permit me to subscribe myself,

Your occasional Correspondent,

A PLAIN MATTER-OF-FACT MAN.

THEATRICAL REPORT.

The theatre opened on Friday evening with the farce of "Miss in her Teens," preceded by an address, written and spoken by Mr. Wakeham.

We have been favoured with a copy of this production, with which we shall present our readers in one of our subsequent columns. We have only to express our persuasion that there can be but one opinion of its merit, and shall only add, that we think the *Actor* scarcely did justice to the *Author*; probably from the diffidence natural to a man in reciting his own verses.

Two appropriate songs were introduced between the acts, by Messrs. Skene and Palmer, and were received with much applause.

Having been obligingly furnished with copies of them, we shall offer no apology to our readers for inserting them for their perusal. We understand that these are also from the pen of Mr. Wakeham; nor have we yet stated, if we are rightly informed, the extent of our obligation to his Muse, since we derived much amusement from an epilogue said to be written by him for the occasion, at a few hours' notice, and spoken with great spirit by Mrs. Tag and Jasper, in character: we regret that our limits do not allow us to give this production a place in our pages.

Persons who are not familiar with the expedients which are resorted to, to produce effect with very deficient means, would have been astonished at the manner in which this entertainment was got up, under circumstances the most disadvantageous that can be conceived; for, we know that not an article of scenery, decorations, or dresses, was embarked in either ship for this purpose, and yet we venture to assert, that few provincial theatres in England would have excelled ours in either of these respects.

The scenery was painted under the direction of Lieutenant Beechey, who has also obligingly undertaken the management of the theatre.

The characters were supported throughout with great spirit and propriety, and we consider that our thanks are especially due to the gentlemen who took the female parts, which were performed with no inconsiderable share of animation, and feminine delicacy.

At the conclusion of the epilogue, the street scene rising, discovered the whole of the Dramatis Personæ, who struck up "God save the King," in which they were joined by many of the audience with great enthusiasm, and the curtain fell amid loud and repeated applause.

We congratulate the performers, as well as the rest of our community, upon this successful commencement of our theatrical entertainments. Amusement was the sole object for which they were undertaken—that object has thus far been completely accomplished, and we sincerely trust that nothing will occur to prevent their regular continuance.

We are aware that to effect this, there are many difficulties to overcome. We understand that one of the most serious of these, and which proves how little expectation was formed of our having leisure or inclination to attempt a play during the voyage, is the very small collection of dramatic works which the manager has been able to muster in both ships: so that it becomes a matter not of choice, but of necessity, to act those only which happen to be on board.

A considerable proportion of these must of course, be unfit for the limited means which our theatre possesses; but we feel persuaded that nothing will be left undone to give them all the effect which these means afford.

We cannot conclude our report without indulging for a moment one pleasing consideration, which the occasion naturally suggests.

What delight would not our friends in England experience, could they be informed of our present situation, and of the means we are thus employing to render it, not merely tolerable, but cheerful and happy! If any incitement were wanting to make each of us persevere in contributing his share towards the general amusement, this consideration would amply furnish it: nor should we fail to remark, that cheerfulness, which is always amiable as a *private* virtue, becomes in *our* case, almost a *public* duty; and, that he who uses his best endeavours to encourage it, takes at once the most effectual method to promote his own comfort, and to benefit the public service.

ADDRESS

ON THE OPENING OF THE THEATRE ROYAL, NORTH GEORGIA,

Written and Spoken by Mr. WAKEHAM.

Repos'd from war—triumphant in the field
Where rescu'd Europe's destiny was seal'd;
No foe to combat on the rolling wave,
No injur'd monarch that her sword might save,
'Twas still our much lov'd country's glorious claim
To stand pre-eminent, unmatch'd in fame,
And in the paths of Science yet to find
The liberal plan to benefit mankind.
Far in the North an unknown region lay,
Where growing ice congeal'd the liquid way,
Yet here it seem'd Columbia's bending shore,
Stretch'd westward, heard Pacific Ocean's roar.

Full oft in earlier days, had Britons tried
To force a passage through the arrested tide,
But tried in vain, tho' with intrepid skill
Persisting long, in spite of ev'ry ill.
By happier fortune led, 'twas ours to prove
Thus far, uncheck'd by land, the waters rove,
And ice-encumber'd here to win our way
'Mid the long sunshine of an arctic day.
But now for coming storms and frigid air
Approaching Winter bids us well prepare,
The Sun retiring* scarce illumes the sky,
Swift driving snows in circling eddies fly,
And soon no gladd'ning ray shall gild our noon,
But from the radiant stars, or changing moon.
While thus inactive we are doom'd to stay,
To cheer the ling'ring hours—behold a play.
And tho' we boast not power by scenic art
To warm the passions, or affect the heart;
Yet here secure we tread—no critic's eye
Is bent, with eager gaze, each fault to spy;
Amusement all our aim, if that succeed,
Our wish is gain'd—nor ask we other meed.
But, when emerging from stern Winter's tomb,
Reviving Spring shall chase the dreary gloom,
And genial warmth, expanding o'er the plain,
Pour melting snows in torrents to the main,
When rustling winds, with all resistless sweep,
Unlock the fetter'd surface of the deep—
Then with new ardour will we onward hie
To seek a passage 'neath this Polar sky;
Firm in our Leaders' care, who still have shown
The great resolve, the daring deed their own.
Nor—if that Power, whose providential sway
The burning suns and meaner orbs obey,
Approving smile—will we the task give o'er
Till southern surges round our vessels roar;
Then with glad sails we'll plough the foaming seas,
Delighted, list'ning to the swelling breeze
That swift impels us to Britannia's shore,
To love, to friendship, and our homes once more.

* The day preceding that on which this Address was spoken was the last that we had seen the sun above the horizon for an interval of ninety-six days.

For the Winter Chronicle.

ENIGMA.

I owe my birth to every clime
Found in the spacious rolls of time,
Proud cities have I overthrown,
Yet am subservient to a clown;
Nor, if he wishes, can refuse
To dress his food, or clean his shoes.
Oft when some pedlar in the street
Has tried too long the practis'd cheat,
To me the rogue they quickly draw,
To punish without form of law.
In ladies' rooms each morn I'm found,
Preparing for the toilet's round;
I wanton o'er the fragrant breast,
The pouting lips by me are press'd;
Nor does the veriest prude disdain
To use me thus, or e'er complain;
Yet oft, when visits they would make,
If I the fair ones overtake,
They quickly fly me in despair,
And seek a couch, a house, a chair.
The warrior, ere he meets a foe,
Woos me assistance to bestow.
Oft have I kept him from the fight,
Oft check'd at once his hasty flight,
And closed his eyes in endless night.
Britannia owes to me her pow'r,
I keep the Gaul from coming o'er,
And oft have borne her gallant fleet,
To where the foemen they might meet.
My absence has been known to foil
Her sailors' skill and utmost toil;
But when I came their toil was o'er,
And vict'ry theirs, as oft before.
Among the clouds I'm known to dwell,
And frequent from that height I've fell;
Yet sometimes in the ambient air
I float, in form extremely fair;
At others, not the strongest race
Of men could lift me from my place.
I'm near you now, and ev'ry day,
Can you not yet my name display?
Full sure I am, when next you dine,
You 'll swallow me before your wine.

ALBERT.

TO CORRESPONDENTS.

One of our Correspondents requests to be informed, whether the lame dog which appeared on the Stage*, when the Address was spoken, be *the lame dog* alluded to by Q in the lines inserted in our last Number.

At the suggestion of another Correspondent, the Editor takes the opportunity of stating, for general information, that the contents of his box will be subject to his inspection alone, and that should the hand-writing create any suspicion of the author, it will be confined to himself.

Unacknowledged communications stand over for insertion.

The Songs by Messrs. SKENE and PALMER in our next.

* A dog that had been lamed some time before, and happened to come limping on the Stage immediately after Mr. Wakeham.

No. III.—MONDAY, NOVEMBER 15, 1819.

Since the publication of Frosticus's letter in our first Number, we have received various communications on the subject which he has treated in so experienced and feeling a manner. Several of our correspondents (and especially so far as we can judge by their style, the *younger* ones,) seem to have become already sensible of the sensations which are there so ably described, although the thermometer has not yet fallen below —85°. The earlier symptoms seem, indeed, to be much the same in all cases, and are expressed with a fluency which persuades us that the writers have them continually at their fingers' ends.

We feel, therefore, that we may be conferring a benefit on the public by inserting, for the perusal of our youthful correspondents in general, the following letter, in which a remedy (vainly sought for in Frosticus's communication, on which account heavy and grievous are the complaints) is proposed for one of the symptoms of this disease, which, without some effort being made to eradicate it, bids fair to become epidemic amongst us: as the author signs himself *Philosophicus*, and writes very unintelligibly about "marrowy succulency, aculeate points," &c., at least to those "whose propensities" have not led them with him to the study of "Phar-ma-co lo-gi-cal works," we conclude that he considers himself well qualified to offer advice in such desperate cases.

Mr. Editor.—Having recovered a little from the alarm excited by Frosticus's interesting and scientific letter, I began to ruminate upon the other wonderful phenomena, which the intensity of the cold might produce upon our system. An evil shortly occurred to me, which, although of minor importance in itself, would be productive (if not immediately warded off,) of the dire catastrophe so ably described in the communication alluded to.

As no doubt you are impatient to learn the fruits of my meditations, I shall, without further preamble, proceed to lay them before you.

Having gathered from the medical writers I have perused, (which by-the-by have been very numerous, as I have a propensity for Pharmacological works,) that hair, like the horn of a bull, goat, or ram, is filled with a marrowy succulency; and, as a very trifling degree of cold more than what we have experienced, will cause congelation in these exposed parts, the heads and bodies of our little community will be covered with innumerable aculeate points, which, if brought in contact with their own or other people's flesh, will make so many orifices, through which the external air will find an easy access to the inmost recesses of the veins, and immediately produce that extraordinary globosity of the blood, which is so philosophically and prophetically treated by Frosticus.

Now, Mr. Editor, I have no doubt you will concur with me in seeing the necessity (as one mode of guarding against this alarming phenomenon,) of striking at the root of every evil that may produce it; for which purpose, I propose that every individual cranium, whiskers, &c., be submitted to the tonsorial operator, and that all the instruments which can be mustered, be instantly put in order for the purpose, before the cold renders this step impracticable.

As I am fully aware of the interest you take in the public weal, I trust you will consider my anxiety to avert the impending danger, a sufficient apology for trespassing so long upon your valuable time.

I remain, &c.

Philosophicus.

We hope our correspondents may derive some relief from this learned communication; but as the proposed operation is rather an uncomfortable one, and if not attended by the effects which the writer anticipates, may be a dangerous one in this bleak climate, we take the liberty of suggesting that Philosophicus should first try the experiment upon himself, especially as shaving the head is well known to be efficacious in more cases than one! If after he has submitted his head to the "tonsorial operator," he will favour us with a further communication, and it shall appear that he has himself materially benefited, we are confident that even the most desperate cases will find relief in following his example.

SPEECH
OF
COUNSELLOR PUZZLEWELL,

In the Court of Common Sense, in Arctic Lund, before Chief Justice Opinion *and a Special Jury.*

In the Cause Editor *v.* Non-Contributors.

"My Lords, and Gentlemen of the Jury,

"After the very able and perspicuous address of my learned friend, Philo-Comus, I should have submitted the cause of my client to your candid and impartial judgment without a remark, had not Mr. Serjeant 'Plain Matter-of-Fact Man,' besides following my learned brother through almost every point of his statement, charged my clients with

neglecting their 'interest and business;' because, forsooth, they were unable or unwilling to 'do something,' just at the time he thinks they ought to do it. Now, my Lord and Gentlemen, as the learned Serjeant has set out with declaring himself equally guilty for a considerable time, and there being no law which fixes a determinate period for the production of 'these somethings,' I conceive the delay will appear to be caused by the tardy operation of nature, which we have frequently seen spreading the useless weed in rank luxuriance, while the delicious fruit and beauteous flower slowly attain perfection.

"Having stated this much in vindication of my clients, I shall await your verdict, in full confidence that it will establish their character as innocent of any transgression against the 'laws of honour, propriety, and good sense.'"

After a verdict for the defendants had been pronounced, and received with loud acclamations, the Counsellor informed the Court, that he had been instructed to express the intention of his clients, not to be "behind-hand" in affording the Editor that support to which his strenuous and liberal exertions for the public amusement so justly entitle him.

Mr. Editor.—The anticipation so pleasingly expressed in your first Number, by your able Correspondent, Philo-Comus, and repeated in the second by the "Plain Matter-of-fact Man," of a source of rational amusement, &c. &c. &c., had taken such full possession of my mind, that after having idly tortured my invention for something to assist in filling your columns, slumber supplied what my waking thoughts were incapable of producing. I fancied myself vested with the power of removing, at a wish, from place to place, and being troubled with a considerable share of curiosity, as well as a slender portion of taste for science, I was immediately, on reaching England, (of course my first wish,) set down in the midst of an assemblage of beauty, fashion, and talent, at Mrs. ——'s in —— street. As I was unknown I had an opportunity of contemplating, at leisure, the objects by which I was surrounded; the blaze of loveliness before me, occupied my eyes, and my attention for some time; at length I turned to notice the collection of pictures, china vases, &c., ranged around, and pursued them in succession, until the mistress of the mansion attracted my views. A young lady, the image of her mamma, was engaged in conversation with a naval officer; feeling some little anxiety on account of an absent friend, I drew near enough to overhear them, though they spoke low. "And which did you seriously think the safest ship?" were the first words that met my ear, when he named the H——; her eyes sparkled with unusual vivacity, and a blush diffused itself over her lovely cheek; a sigh, no less sudden, succeeded. A valued friend in one perhaps, thought I, a dearer lover in the other. Wanton Cupid, what tricks are you playing with us? The sound had scarcely passed my lips before the scene was changed, and I beheld a young and charming widow, reclining on a sofa, her eyes suffused with tears. She knew me, and passionately cried, "Where is my ——? (secrets must not be told, Mr. Editor), is he returned to bless these fond expecting arms? For pity's sake keep me no longer in suspense—does he live?" "He does," I tried to say; but a wish rising in my bosom to be acquainted with more secrets, I was hurried away, and in a moment found myself at a fashionable party in —— square. No sooner was my name mentioned, than a crowd of the sweetest creatures I ever beheld surrounded me; in short, they were women, young and beautiful; a deluge of inquiries poured upon me; "How is Mr. ——?" "How does my friend ——?" "I hope Mr. —— is well!" "All well," said I, overcome with such a torrent of prattle, and a smile repaid my intelligence, which equally defied the painter's and the poet's art.

"'Twas then I saw
The soft language of the soul
Beam from the never silent eye."

A young lady now tripped softly up to inquire after Mr. ——: her air was pensive, and in gentle embarrassment; she lisped something very like "dear," or some such word; then recovering herself, carelessly inquired, "Is he grown?" "I think him rather taller, still sprightly, and charming as ever." She pressed my hand, and thanked me. A swelling sigh escaped. "Could you give him this?" She offered it, and then timidly withdrew her hand! 'Twas a miniature. My own heart had been irretrievably lost in another moment, had I not called reason to my aid, and wished myself away, though I could not determine whither. During this interval of indecision with every varying thought, I flew up and down the street, till unluckily a drowsy watchman crossing my path, was instantly, with lantern and rattle, stretched at full length in the gutter. As I stopped to assist him, his brethren came up and seized me. Burning with indignation at their rude treatment, the desire of revenge fixed me to the spot; and, after surveying some time, as I nimbly withdrew my head from the blow of a descending cudgel, it came so furiously in contact with the side of my bed-place, that I was at once recalled to wakefulness and stupidity.

Believe me, Mr. Editor,
your sincere well-wisher,
Philo-Somnus.

THEATRICAL.

We are requested to insert the following notice from the managers of the theatre: we desire to add that the Editor's box is at all times at the service of the manager and his correspondents, as the medium of their communications.

The manager having no reason to "Simon Degrellieus," except through the public papers, makes an apology for not having acknowledged his communication before. He begs leave to thank him for his song, which being humorous, and likely to afford amusement, will be sung between the acts of the next play. The manager takes the opportunity of informing Simon Degrellieus, and other Grub-street authors, Philo-Comus, Albert, Q, &c., and the public in general, that plays, prologues, epilogues, songs, ridiculous recitations, &c., will greatly contribute to the general amusement. The theatrical library at present consists of six or seven pieces only, and some of these but badly adapted to our stage. It is, therefore, evident that the house must shut up before the season is over, for few persons, notwithstanding the characters be ever so well supported, will sit out the 199th representation of any one performance; and the manager foresees a lack of applause; a dry significant snuff at an old joke, for which the audience had been lying in wait for a quarter of an hour, discontented countenances, empty boxes, and finally the fall of the green curtain, to rise no more, unless some one start forth amongst the crowd, invoke the muse, and bid our curtain rise again. The manager has dwelt thus long on the subject, under a conviction that there is no want of ability, would the gentlemen exert themselves.

Theatre Royal, North Georgia.

POETRY.

WHEN Denmark's Prince appears upon the stage,
(At least we learn so from great Shakspeare's page,)
He steals with slow and solemn majesty,
And thus exclaims—"to be or not to be?"
But when the Baker,* poor lame dog appear'd
Upon North Georgia's boards, no voice was heard
From him: he innocently look'd around,
And scarcely put his fourth foot to the ground;
The audience smiled—the address was not suspended,
And here, I surely thought, th' affair had ended,
Until your Paper's second number came,
Stating, a correspondent mark'd how lame
The dog appear'd: and straight desires to be
Inform'd—"If this dog was, or was not he
That Glum forsaw would come with limping vile,
And need a friend to help him o'er the stile."
I like your papers—therefore do I read 'em;
I like your Correspondents—'cause you need 'em.
But give me leave, friend Editor, a word,
The man that asks a question so absurd,
Proves that he has a monstrous lack of brains;
Yet, not to give offence, I took the pains
To search out Glum, and in a friendly way
Ask him what I in answer now could say.
"Say," replied Glum, "I do not think it fit
"To answer one who shews so little wit."
"In truth, in some respects," I said, "you're right,
"But still you must acknowledge, on that night
"None of the lameness you so justly fear'd,
"Throughout the play or rather song appear'd."
"Why, to be plain, I scarcely could espy
"A fault, though searched for with a critic's eye;
"Humph—to be thinks to puzzle me, the rogue,
"But I'll have at him in the epilogue.
"Tell him the Manager, as well as me,
"Saw how much mischief there would surely be,
"Unless great care was ta'en to keep away
"The intruder which I spoke of t'other day;

* The dog having belonged to a baker at Deptford, was so called by the men.

"Placed Mr. Prompter,* whom he thought a host,
"To guard the door, nor e'er desert his post.
"True to his post the prompter did a wonder,
"He made the Play pass off without a blunder.
"But when for the Epilogue the curtain rose,
"Wearied with watching, or some other cause,
"He left his post, when, shocking to relate,
"The limper came, and stopped the lady's prate,
"Which so confused her, off she would have gone,
"Had not the gallantry of every one
"Been put in force to spare her maiden blushes,
"And drive the dog to beat about the bushes.
"Thus I shall prove my forethought was not wrong,
"And now good morning—I have staid too long."
In words like these did Glum himself express;
They're little to the purpose, I confess;
But when your Correspondents send a query,
They must not blame the answer tho' it weary,
And as you think 'twill tire 'em or divert 'em,
You either may omit or else insert 'em. Q.

* The prompter whose absence from his post during the epilogue is thus commented upon, was suspected of being the author of the query to which these lines are the reply.

TO CORRESPONDENTS.

We are obliged to postpone the Songs promised in our last.
TIMOTHY SEE-THROUGH-IT has not hit the solution of ALBERT'S Enigma.
LAZARUS LACKBRAIN'S letter has reached its destination.

No. IV.—MONDAY, NOVEMBER 22, 1819.

WE owe an apology to Peter Trial, for having delayed the insertion of his letter, until so long a time after the performance to which he alludes. The fact, however, was, that so much of our Second Number had been occupied by the affairs of the theatre, that we had barely room in our last to insert the manager's circular address; and we found ourselves obliged, in justice to our correspondents on other subjects, to postpone the letter which we now submit to our readers, as well as the songs which were sung by Messrs. Skene and Pulham, and which will be found in the present number.

TO THE EDITOR OF THE WINTER CHRONICLE.

SIR,—I cannot help expressing the infinite delight I felt in witnessing the entertaining performance of Friday evening, which few would hesitate to pronounce as superior to every thing of the kind which has preceded it in this country, and which will never be surpassed by future strollers towards this mild and genial climate.

The North Georgia Theatre, though reared in much less time, and in a greater hurry than Covent Garden or Drury Lane, possesses an advantage over those magnificent structures, which, even their internal decorations and dazzling charms* cannot equal; for, in spite of all their endeavours to procure a free ventilation and a cool atmosphere, they have never yet succeeded like our able architect, Mr. Frost, in this very essential and particular point.

Before I conclude, let me recommend to those performers who have any distance to return home after the doors are shut, and who may have taken as much refreshment as the house affords, that they be on their guard against the prowling wolf, and the more ferocious bear; and above all the iron hand of Winter; or, when we would speak of them aptly, they may become fitter subjects for epitaphs, than to furnish us with the more pleasurable employment of recording their meritorious exploits.

I remain, &c. &c.

PETER TRIAL.

We would willingly submit to the consideration of our correspondents, both philosophical and otherwise, whether there be any connexion in the way of cause and effect, between the increased severity of the cold in the last week, and the empty state of the

* The gas-lights we presume.—*Ed.*

Editor's box. We are aware that much may be said very learnedly and hypothetically, from whence the probability of such a connexion may be inferred; though perhaps on this as on many other points, the less said the stronger may be the inference. Having hinted thus much, we willingly leave the subject to them, in full confidence that it is in their power to cause it by Thursday next to be no longer a question. We wish also with the permission and by the means of our friend *Twin*, to remind the counsellor Pumlewell that an engagement made in open court, is so far binding on the party making it, that its due performance may be claimed, and the claim enforced by the authority of the court, in whose presence it was made. Now, as the learned counsellor was instructed by his clients "The Non-Contributors," to express in open court their intention of being no longer "behind-hand" in affording "that support to the Editor," &c. &c.; and, as "that support," &c. &c., has not yet been afforded, we have thought, that if Mr. Serjeant Plain, Matter-of-Fact-Man can be prevailed on to be again our advocate, we would employ him to move in the court of Common Sense, that counsellor Pumlewell be required to shew cause why the fulfilment of the instructions so expressed as above, has been, and still is, delayed.

A very ingenious answer to Albert's enigma having been circulated in manuscript during the past week, it remains with us to publish the author's solution as we originally received it.

In ev'ry clime, remote or near,
Where'er the eye of man can peer,
Of general use to human kind
Prolific *water* you will find.

Theatre Royal, North Georgia.

ON WEDNESDAY NEXT, the 24th instant,
Will be performed Foote's much admired Comedy of

THE LIAR.

With the usual accompaniment of SONGS between the Acts.

Doors will open at Half past Six, and the Performance will begin at Seven precisely.

The Manager has received F. R. S.'s Prologue, and will submit it for consideration at the first meeting of the Committee.

SONGS

WRITTEN FOR THE NORTH GEORGIA THEATRE,

BY MR. WAKEHAM,

And Sung at the Performance on Friday the 5th of November,

SONG, MR. SKENE.

TUNE, *Jessy of Dumblane.*

OH! what can compare with the beams of the morn,
When the bright sparkling dew-drops bespangle the thorn,
When Aurora's young blushes tint deeper the sky,
Ere the Sun's flaming orb is yet mounted on high?
'Tis the soft smile of beauty, that beams from the eyes
Of thy daughters, fair Albion! the land that we prize.

When distant, far distant, from all that's held dear,
From the happy fire-side, and the friend that's sincere;
What nerves for the battle the arm of the brave,
Or bid's us encounter the storm-beaten wave?
'Tis the soft smile of beauty, that beams from the eyes
Of thy daughters, fair Albion! the land that we prize.

Tho' thy sons in the field are undaunted in war,
And the fame of thy chieftains resound from afar;
Tho' nature each charm in thine island combines,
One ray of thy glory all others outshines.
'Tis the soft smile of beauty, that beams from the eyes
Of thy daughters, fair Albion! the land that we prize.

What leads us to traverse these regions unknown,
And explore each recess of this dark frozen zone?
Tho' with thirst of renown every bosom may burn,
What reward do we hope when again we return?
'Tis the soft smile of Beauty, that beams from the eyes
Of thy daughters, fair Albion! the land that we prize.

SONG, MR. PALMER.

TUNE, *Sprig of Shillelah.*

SAY, who but has heard that a true British tar
Is kind to his lass, and regards not a scar,
With a heart firm in danger, and constant in love?
If assail'd by the tempest, or toss'd on the wave,
Each nerve is exerted his vessel to save.
He repairs to the helm to direct her aright,
Or stands at his quarters, expecting the fight,
With a heart firm in danger, and constant in love.

When duty is o'er 'mongst his messmates below,
His mirth and good humour unceasingly flow,
From a heart firm in danger, and constant in love,
He pledges his girl in full bumpers of grog,
Sings his song, for good fellowship ever a-gog,
Enjoys ev'ry hour, as it passes him by,
Unwilling the moments more swiftly should fly,
With a heart firm in danger, and constant in love.

When call'd by his country, he lingers no more,
But leaving the joys of his dear native shore,
With a heart firm in danger, and constant in love.
Embarks to explore Hyperborean coasts
Surrounded by ice, and enfetter'd by frosts,
Regardless of Winter's perpetual reign,
And prepared to encounter the boisterous main,
With a heart firm in danger, and constant in love.

No toil can subdue him, no horrors appal,
A true British tar meets whate'er may befal,
With a heart firm in danger, and constant in love.
Again he shall visit the land of his birth,
Press his girl to his heart, and indulging his mirth,
His travels recounted—his perils told o'er,
Await the high call of his country once more,
With a heart firm in danger, and constant in love.

And well shall old England remember her son,
Who has added new glories to those she has won,
With a heart firm in danger, and constant in love;
Whose keel ever daring, disparts the proud sea,
That had ne'er borne a ship since the world 'gan to be;
And guided by Providence still shall press on,
Till he rounds the bleak Cape* that has yet stopped each one,
With a heart firm in danger, and constant in love.

Let Britons on shore, then, the bright flowing bowl
Fill high to the Sailor undaunted in soul,
With a heart firm in danger, and constant in love;
And may he, when return'd from the toils of the wave,
Find that Honour and Love still await on the brave,
Who dares for his country, his friends, and his home,
By Freedom inspired, o'er the wide ocean roam,
With a heart firm in danger, and constant in love.

* Icy Cape.

This song was received with every demonstration of interest by the audience, and rapturously encored.

No. V.—MONDAY, NOVEMBER 29, 1819.

To the Editor of the Winter Chronicle.

Sir,—AS I was indulging the other evening in profound cogitation, whilst enjoying my segar by the fire-side, the following lines, which I do not exactly remember where first to have seen, struck across my mind as the fitting subject of the moment:

"The Indian leaf doth briefly burn,
"So doth man's strength to weakness turn;
"The fire of youth extinguished quite,
"Comes age, like embers dry and white:
"Think of this as you take tobacco."

Seeing a vast deal of truth in the above quotation, and an excellent picture of the mutability of our nature, I trust, Mr. Editor, to be excused in requesting you to give it publicity; though I recollect something about not inserting things which are borrowed. I only request, then, to be informed, ere it be rejected, in what book these lines are to be found, and from whom they are copied. Or, if you should think fit, in the multiplicity of your concerns, to submit it to your correspondents, and leave it to some one or other of them, in their general acquaintance with every topic minute, learned, scientific or otherwise, to detect the copyist, and make an exposé of him in the following week's Gazette,

You would oblige,
Mr. Editor, &c. &c.
PETER FUME.

We have inserted Peter Fume's letter, in the hope that some of our correspondents may know the original author of the lines he has quoted; probably Peter Fume's acquaintance with them is derived from the same source as our own, namely, from Rob Roy, where they are very aptly introduced, Vol. I. page 20.

LAW REPORT.

COURT OF COMMON SENSE,

In the Cause of Editor *v.* Non-Contributors.

His lordship being seated, Counsellor Puzzlewell rose, and addressed the Court as follows:

My Lord—I shall not occupy your lordship's time by following my learned brother, the counsel for the plaintiff, through the matter-of-fact reasoning, wherein he considers himself to have proved that, by the custom of this court, it is incumbent on my clients, "The Non-Contributors," to afford that support, &c. &c., the delay of which is the subject now before your lordship; nor shall I question the right which he has claimed to the fulfilment of the promise which I was instructed to make, and did make, in their name. No, my lord, however ready and able I may feel myself to controvert these points, and I doubt not to your lordship's satisfaction, yet as my clients have thought fit rather to concede them, I shall content myself with moving your lordship and the court, that certain affidavits be read, with which I am furnished by my clients, and which I have no doubt will be accounted by your lordship most satisfactory reasons for the delay; and will be deemed sufficient to entitle them to such further indulgence as your lordship shall be pleased to grant, and for which I am instructed to solicit.

The affidavits were then read as follows:

The Affidavit of David Drowsy.

This deponent maketh oath and saith, that want of leisure hath hitherto prevented his offering that assistance to the Editor, which his good wishes for the support of the said paper would otherwise have prompted him to afford; that what with the time necessarily occupied in three regular meals, and two little ones per day, a two hours' nap after dinner, and another after coffee, with an occasional doze in the forenoon, together with the duties of his profession in these times of constant activity, he most positively deposeth, that he hath scarcely been able to snatch his ten hours rest at night, much less to employ any portion of his time in contributing to the general amusement. This deponent, however, further saith, that notwithstanding his numerous and indispensable avocations, he hath actually managed to copy each of the said papers, as they have appeared; and in thus having given it his countenance and patronage, he considers himself as entitled to the further indulgence of the court.

The Affidavit of Gregory Gripes.

This deponent maketh oath and saith, that ever since the proposals for a newspaper appeared, he has been so grievously afflicted with a pain in his stomach, (which pain doth still continue,) that he has been utterly incapable of contributing any thing towards the support of the said paper; of all which he is ready, if required, to bring into court certificates from the medical men who have attended him. This deponent trusteth that the court will take into its gracious consideration, how impossible it is for a man to attempt to amuse other people, while he him-

self is labouring under a bodily inconvenience of this peculiar nature.

The Affidavit of Little-care Leave-about.

This deponent maketh oath and saith, that after having more than half-written two or three papers for the Editor's box, some evil-disposed person or persons did, as he believes, during his absence on a walk, steal away from him the said papers, and that he hath never since been able to gain any intelligence of the same.

This deponent furthermore declareth, that such thefts or tricks have been so often practised upon him and his effects, that he doth no longer consider any part of his property safe out of his hands for one moment; nor is his complaint confined to the loss of property alone, but of time also, which is wholly taken up in seeking one stray article after another.

This deponent therefore prayeth the court to take into its most serious consideration the inconvenience both to himself and the public, which results from these proceedings; and that it will be pleased to take such steps as it may, in its wisdom, deem most effectual to prevent the recurrence of the said annoyance.

The Affidavit of Simon Sidrophel.

This deponent maketh oath and saith, that being from the beginning extremely desirous to contribute towards the support of *The Winter Chronicle*, he was determined to search the heavens and the earth for a subject; and therefore betook himself to the study of the globes, in hopes of there stumbling upon something suitable to his purpose. The deponent devoted his first attention to the celestial globe, and earnestly invoked the assistance of every constellation thereupon delineated, but without success. The Great Bear treated him in a manner too rude to be repeated, and the Little Bear (like a dutiful cub,) followed his example. Taurus tossed him, Aries butted him, and he was thus left sprawling between Castor and Pollux. This malicious pair of rogues pretending friendship, led the deponent on imperceptibly, till he found himself in the claws of Cancer, who pinched him most unmercifully, and determined him to have nothing more to do with the constellations of the Zodiac. Pegasus was the next which appeared, and the deponent, without more ado, resolved to mount him, and at once to enrich the Chronicle by a ride to Parnassus—but this attempt had near cost him his life, for he had scarcely mounted, when Pegasus threw him clean over his head, and dislocated his right shoulder. The deponent being thus scurvily treated in his flight among the stars, had nothing left for it but to return to the Earth. Here he may be said to have traversed the terraqueous globe in search of a subject, but none has yet offered itself. The deponent having made this declaration, leaveth his case to the justice and clemency of the court, conscious that though his name has never yet appeared in the paper, not one of the Contributors has ever gone further than himself, in search of matter for its support.

The court having latterly testified symptoms of impatience, his lordship motioned the clerk to suspend his reading, and asked the counsellor if he considered the remaining affidavits as containing better reasons than those which the court had already heard. The counsellor answering, "Not perhaps better, but some which I trust the court will think equal to the preceding," his lordship directed that the time and patience of the court should no longer be so unnecessarily taken up, and proceeded to give the following judgment:

"That the application for further indulgence be refused, and that the defendants be allowed another week wherein to fulfil the promise made in their name; after which, any further delay was forbidden on pain of the displeasure of the court."

THE.

THEATRICAL REPORT.

On Wednesday evening was performed Foote's celebrated comedy of the *Liar*, preceded by a very humorous description of a sea-fight by Mr. Beechey, in the character of a sailor, and which afforded great amusement.

As the Dramatis Personæ have not yet appeared in our paper, we now insert them.

MEN.

Old Wilding,	Mr. Nias.
Young Wilding,	Captain Sabine.
Papillion,	Mr. Beechey.
Sir James Elliot,	Mr. Wakeham.

WOMEN.

Miss Grantham,	Mr. Ross.
Miss Godfrey,	Mr. Beverley.
Kitty,	Mr. Horsnell.

SERVANTS.

Messrs. Halse and Buckman.

As far as we have been able to learn, this evening's entertainment went off even better than that with which our theatre opened, and was, if possible, received with more rapturous applause.

The *Liar* is a play which requires considerable quickness and animation in the performance; and in this respect so much did the performers appear at home, that we feel confident they may now attempt any play which the theatrical library affords.

It is particularly pleasing to observe the interest which the ships' company take in these performances; the very preparation of the dresses and scenery in the intervals between them, and of the stage, for the two days previous to each play, gives occupation to many: and the looking forward to

a repetition of this amusement once a fortnight during the winter, is sure to produce a relaxation and variety which their minds essentially require, and which it might have been difficult to effect in any other way.

A song by Mr. Palmer, between the acts, being the original production of an author who signs himself "Simon Dogrellious," was well received and encored. We shall content ourselves with repeating our congratulations on the ability, spirit, and good humour, with which our theatrical amusements have hitherto been conducted, and our hearty good wishes for their long and successful continuance.

To the Editor of the Winter Chronicle.

SIR—In going from the ships towards the observatory the other day, I chanced to stumble on a bundle of papers. On examination, I found them to consist of a number of fragments of letters and other scraps, some in prose, and some in verse, evidently intended to fill some of your future pages, but which want of leisure or inclination had prevented the author from finishing.* As I consider this accident likely to prove a serious loss to your columns, and therefore to the public, unless the papers be returned to the owner in proper time; and, as I know no method of giving them publicity, so effectually as through the medium of your paper for which they were intended, I send you copies of two or three of the fragments, as they lie before me, for insertion if you think proper. Should the lawful owner of the said papers make application to you for them, I will endeavour to stuff the whole bundle by piece-meal into your box, on the first notice you are pleased to give to your constant reader, RICHARD ROAM-ABOUT.

FRAGMENT, No. I.

SIR—Having puzzled the little brains I have, to no purpose, for a fortnight, I did at length attempt the other day to scramble unperceived a note into your box; but, after attempting for some minutes to make it fall into the slit, I found, to my utter astonishment, that it refused to drop through, and actually rose again as often as I attempted to thrust it in; so that, after repeated endeavours, I had the mortification to be obliged to withdraw my maiden contribution, on hearing a footstep approaching. I am much at a loss to account for this extraordinary, and to me alarming phenomenon, unless it be, that in the present cold, and therefore dense, state of the atmosphere, it must, according to the laws of floating bodies, require something of considerable weight to fall into your box; whereas, my production being, as I confess, one of the lightest things imaginable, rose in spite of my endeavours, and would probably, had it not been stopped by the housing, have soared into its own native region, among the clouds. Being much discouraged by this first attempt, I wish any of your learned correspondents, who have instructed us so much on the subject of intense cold and its effects, would give me a hint whether the phenomenon I have alluded to might not have proceeded from some other cause than mere lightness. At all events, should my first apprehensions prove correct, I will endeavour to take example from Philosophicus, Philo-Comus, Philo-Somnus, and the rest of your Philo-correspondents; and have no doubt I shall in time be able to produce something heavy enough to gain admission into your box, and perhaps even to deserve insertion in your pages.

FRAGMENT, No. II.

Advertisement.—In preparation, and shortly will be circulated gratis, for the benefit of all contributors to *The Weekly Chronicle*, and completely the younger ones, a complete list alphabetically arranged, of the most approved anonymous signatures, adapted to every subject that is likely to employ the pens of the said contributors, by

* * * * * * *

(As the author could not find a signature for this advertisement, I am afraid this promised list is in no very forward state.)

E. R.

* May not this be the identical packet which Mr. Little-care Leave-about conceives to have been stolen from him, (see his affidavit,) but which may in reality have dropped out of his pocket during his walk? —ED.

Theatre Royal, North Georgia.

ON WEDNESDAY, DECEMBER 8, 1819, will be Performed the Farce of

THE CITIZEN.

MEN.

Old Philpot, Mr. PARRY. Sir Jasper Wilding, Mr. NIAS.
Beaufort, Mr. WAKEHAM. Young Philpot, Mr. BERKELEY. Young Wilding, Mr. HOPPNER.
Dapper, Mr. GRIFFITHS. Quildrive, Mr. BURNHAM. Will, Mr. HALES.

WOMEN.

Maria, Mr. HOOKEN. Corinna, Mr. ROSS.

The usual Accompaniment of Songs between the Acts.

Doors to be opened at Half-past Six, and the Curtain will rise precisely at Seven o'clock.

No. VI.—MONDAY, DECEMBER 9, 1819.

To the Editor of the Winter Chronicle.

SIR—A remark which appeared in your first Number, that you were willing to "admit questions which may exercise the ingenuity of your readers," &c., has encouraged me to propose one, which, perhaps, may be considered as answering that description. It is said that instances have occurred of the sinking of ice, and this in seas (for example, those of Spitzbergen and Davis' Straits) nearly as salt as the main ocean, and of which the temperature is seldom or never more than ten degrees above the freezing point of salt-water. It is evident that the ice cannot sink till its specific gravity exceed that of the fluid in which it is immersed. I should be glad to be informed by any of your correspondents, by what possible combination of circumstances so unusual a condition might be brought about.

I am, Mr. Editor,
&c. &c. &c.,
SCEPTICUS.

To the Editor of the Winter Chronicle.

Mr. EDITOR—I wish you well—indeed I do—but the more I try to compose any thing for the paper, the more stupid I find myself. Being desirous, however, to offer my humble services in some way or other, this is to inform you, that I am a tolerable hand at making pens, though but an indifferent one at using them; and I cannot help thinking, that I might be of use to several of your Correspondents, for I judge by their style, that some of them write with too hard a pen, and some with a very soft one. I could mention three or four, whose crimped manner indicates a devlish stiff nib, Mr. Editor, and as many whose pens have certainly no point at all. I confess that the pens of most of your Correspondents require little or no mending, but even the best of them would not be the worst for a fresh nib, which might, perhaps, set them a-going with fresh vigour—so if you choose to employ me in this way, you shall be welcome to the humble services of

TIMOTHY QUILL-SPLITTER.

For the Winter Chronicle.

To the Right Honourable, the Lord Chief Justice, and the Worshipful Court of Common Sense, the Memorial of Marmaduke Trim, Reporter of Pleadings, &c. &c.

Humbly sheweth,

THAT by the exercise of the said calling, your memorialist hath lived, in good credit and report, until the last week, when your memorialist discovered, in the public papers a statement of your lordship's decision, purporting to have been taken by himself, in a cause recently pending, before your lordship and this honorable court; whereas, on the day aforesaid, your memorialist was confined at home by urgent business. Your memorialist hath since discovered the decision above-mentioned to have been erroneously stated, as your lordship then declared that defendants were entitled to indulgence; and, in your goodness, were accordingly pleased to grant them such further delay as they might themselves think requisite:

That the said incorrectness, arising, as your memorialist believes, from the reporter leaving the court before the decision was given, is most unjustly attributed to your memorialist; and he finds it, therefore, impossible to vend particular speeches of celebrated counsellors, confessions of prisoners, &c. &c., as heretofore, among his friends, the hawkers, ballad-singers, &c., those gentlemen having taken offence at his supposed want of veracity, and he is, in fact, entirely thrown out of employment.

That these disasters having befallen your memorialist, in consequence of the fictitious use of his name by the said reporter; your memorialist humbly solicits that your lordship will be pleased to affix to the following bill of damages, such sums as your lordship shall consider a sufficient remuneration, and compel the said fictitious Mr. Trim to pay the same, or else to take your memorialist's wife, and six hungry brats, off his hands.

And your Memorialist will ever pray,
&c. &c. &c.

TRIM.

Bill of Damages referred to in the foregoing Memorial.

To a severe fit of head-ach, on receiving news of the sad affair.

To a two hours' lecture from my wife, for daring to be sick without her leave.

To pay off six strong-lunged hawkers, for crying about the "Defence of Reporter Trim," for two days.

To the hire of two female ballad-singers, a bankrupt bellows-mender, and a dog without a tail, roaring a song, called *Trim and Trim's Ghost*, through various streets, lanes, and alleys.

To the loss of forty-eight hours' sleep already, and the probable loss of as many more.

To the cure of a broken nose, two black eyes, and a scratched face, received from my wife for letting her and the children starve.

To total loss of business, impediments, obstructions, &c. &c. caused by the said fraud.

ADVERTISEMENTS.

WANTED, a middle aged Woman, not above thirty, of good character, to assist in dressing the ladies at the theatre. Her salary will be handsome; and she will be allowed tea and small beer into the bargain. None need apply but such as are perfectly acquainted with the business, and can produce undeniable references.—A line addressed to the Committee will be duly attended to.—N. B. A widow will be preferred.

WANTED immediately, a few BALES of READY WIT, done up in small parcels for the *Winter Chronicle*. This article being scarce in the market, a good price may be depended on. Samples will be received by A.B., agent to the Editor.

Please to apply on or before Thursday evening next.

LOST, on Monday evening last, between the two Ships, a PART of a LETTER, giving an account of the proceedings of the Expedition, with other matters of a private nature, and beginning "My dearest Susan."—Whoever has found the same, is requested to address it, L.A. Editor's box.

N.B. The letter is of no use to any body but the owner.

FOR SALE BY AUCTION,
By NICHOLAS KNOCKDOWN, at the Observatory, on the coldest day in January next,
A QUANTITY of NANKEEN, the property of a gentleman, who expected to get into the Pacific in September last.

* * Flannels and furs will be gladly taken as part payment.

ACCIDENTS, OFFENCES, &c.

Saturday—This morning *Canis Vulpes**, a state prisoner, who had been confined in the Barrel succeeded in effecting his escape, by breaking the chain with which it had been found necessary to secure him, and went off with it appended to his neck. An immediate, though fruitless, pursuit was made, but it is hoped he will not long escape the vigilant eye of our police.

Two P.M.—One of our scouts, Don Carlo†, who has just returned, saw the prisoner in close conference with the proscribed traitor, *Canis Lupus**, and his wife; but he so carefully avoided surprise, that the Don had no opportunity of serving the warrant with which he was charged. He gained, however, some important intelligence, having overheard the late prisoner disclosing to his companions the various scenes which he had lately witnessed. He described the cave in which he was confined as inhabited by animals standing upright on their hind legs, who were almost always eating; that notwithstanding their formidable appearance, he believed them to be a very timid race; for that, every morning, he saw a great many of these creatures meet together, and all at once, upon hearing a sharp shrill noise,‡ which he thought was made by some other animal they stood in great terror of, they ran away and hid themselves in another cave they had under the first; and he strongly insisted on it that this noise was not half so terrific as that of *Canis Lupus*. His spleen was, however, more particularly directed against one which he supposed was a cub, who had not yet learned to walk upright, as he always went on all fours; his spite arose, he said, from this little creature making faces and growling, and doing all he could to annoy him, whenever he put his head out of the hole in the side of his cave. The conference ended by a mutual agreement to seize this unfortunate animal, as soon as opportunity offered, from whom they expected to learn more of the prowess and habits of their new foes; and for this purpose a variety of stratagems were proposed, which will probably be put in execution.

* A fox escaped from the Griper on that day.

† A dog named Carlo.

For the Winter Chronicle.

A THOUGHT OF HOME.

LOVELY woman's the pride of our Isle,
With Beauty's soft image impress,
Fondly raptured we gaze on her smile,
To harmony soothing the breast!
The rose-bud's young opening dye,
And the lily's pure vesture she wears;
But the love-beaming glance of her eye,
With lilies nor roses compares.

Bounteous Nature her flow'rets may paint
With tinctures of azure and gold,
Yet their lustre shines dimly and faint,
Till sun-beams their splendour unfold:
So the mild dawning virtues that dwell
In a bosom enchantingly fair,
Bid that bosom more beauteously swell
The woes of another to share.

In those virtues we happiness feel;
The source of our transport below,
Not the charms of the sex can reveal;
From the mind, soul-enchantment must flow.

* Wolves were often seen about the ships during the winter.

‡ The boatswain piping to breakfast.

When sorrows intrude on our peace,
When wrung by anxiety's wound,
Her endearments procure us release;
How sweet is her tenderness found!

Man is gifted with firmness of mind,
In dangers and triumphs to share,
But each beauty and softness combined,
Distinguish the lovely and fair;
All the soul-winning graces and loves
On Britain's fair footsteps attend;
And when Beauty too transient removes
With the Virtues, above, they shall blend.

For the Winter Chronicle.

"Come write for the paper," the Editor cries,
"'Tis Thursday—my box has no stuffing."
Egad then your box, as at present it lies,
Is just like my head, a mere puffin!
I have not one jot, or one atom of brain,
At this present moment of writing;
And whilst I so dreadfully stupid remain,
'Tis nonsense to think of inditing.
Should a smart witty thought ever happen to light,
By design or by chance on my skull,
You, then, may rely on't I'll instantly write,
And just give you the subject in full.

LITTLE-BRAIN LACK-WIT.

Reflections on seeing the Sun set for a Period of three Months. *November*, 1819.

Behold yon glorious orb, whose feeble ray
Mocks the proud glare of Summer's livelier day!
His noon-tide beam shot upward thro' the sky,
Scarce gilds the vault of Heaven's blue canopy—
A fainter yet, and yet a fainter light—
And lo! he leaves us now to one long cheerless night!

And is his glorious course for ever o'er!
And has he set indeed—to rise no more?
To us no more shall Spring's enlivening beam,
Unlock the fountains of the fetter'd stream—
No more the wild bird carol through the sky,
And cheer you mountains with rude melody!
* * * * * * * * *

Once more shall Spring her energy resume,
And chase the horrors of this wintry gloom—
Once more shall Summer's animating ray
Enliven Nature with perpetual day—
You radiant orb, with self-inherent light
Shall rise, and dissipate the shades of night,
In peerless splendour re-possess the sky,
And shine in renovated majesty.

In you departing orb methinks I see
A counterpart of frail mortality.
Emblem of man! when life's declining sun
Proclaims this awful truth, "Thy race is run!"
His sun once set—its bright effulgence gone,
All, all is darkness—as it ne'er had shone!

Yet not *for ever* is man's glory fled,
His name for ever 'numbered with the dead'—
Like you bright orb, th' immortal part of man
Shall end in glory, as it first began,—
Like Him, encircled in celestial light,
Shall rise triumphant 'midst the shades of night,
Her native energies again resume,
Dispel the dreary winter of the tomb,
And, bidding death with all its terrors fly,
Bloom in perpetual Spring thro' all eternity!

No. VII.—MONDAY, DECEMBER 13, 1819.

Mr. Editor—Though I have not the pleasure of your personal acquaintance, yet the favourable impression I have received of your humanity when you interfered to save me from the tonsorial operation recommended by Philosophicus, emboldens me to apply to you for advice in a case where not only my hair, but skin, carcass and all are in danger, amidst the horrors of Winter, of being reduced to ashes.

You must know then, Sir, that a certain gentleman, (whom I will not describe to you as a sedate looking sort of a man, with a thin face, and so on, because that might seem to result from ill-nature,)—this gentleman I say, Sir, takes particular delight, when I am sleeping before the fire, in putting a hot cinder under my thigh, and then laughs most heartily to see me run away, holding it fast, from the sense of pain, until I am fully awake. Now, Sir, I have endured this and similar tricks for some time, and, though often meditating retaliation, I dare not execute it, as the result of biting his legs, besides perhaps breaking my teeth against the bones, would be banishment from the fire-side, and I would submit to any indignity rather than forfeit so great an advantage.

I dare say you participate somewhat in my feelings; but to put the case more strongly, suppose, Mr. Editor, some night, when you were sunk in sound repose, should clap a hot coal under you! Now, this was just my case the other night; and, as I am a poor helpless innocent, if you can inform me how I can obtain revenge, consistently with my interest, or escape the future persecution of my tormentor, you will confer a deep obligation on

Pincher.

Theatre Royal North Georgia.

On Wednesday evening, the Farce of *The Citizen* was played with a spirit and success fully equalling the expectations to which the former performances at this theatre had given rise. We cannot omit to notice especially the animation and effect with which the very difficult scene was carried through, in which Old Philpot is discovered under the table in Corinna's lodgings; during all this scene the house was kept in continual laughter.

Two songs were introduced at intervals—the well-known one of "Arthur O'Bradley," by Mr. Beechey, and a new song written for the occasion, and sung by Mr. Palmer, to the tune of "The Bay of Biscay O."

Theatre Royal, North Georgia.

ON THURSDAY, DECEMBER 29, 1819.

Will be performed Garrick's celebrated Farce of

THE MAYOR OF GARRATT.

MEN.

Sir Jacob Jollup,	Mr. Nias.	Major Sturgeon,	Mr. Bushman.
Jerry Sneak,	Mr. Beechey.	Bruin,	Mr. Wakeham.
Crispin Heeltap,	Mr. Hulse.	Matthew Mug,	Mr. Parry.
Lint,	Mr. Beverley.	Snuffle,	Mr. Griffiths.

WOMEN.

Mrs. Sneak,	Mr. Hooper.	Mrs. Bruin,	Mr. Ross.

Mob, &c. &c.

After which will be represented, an entire new Musical Entertainment, written expressly for the occasion, called

THE NORTH-WEST PASSAGE;

OR,

THE VOYAGE FINISHED.

MEN.

Seamen of the Hecla.

Tom, Mr. Nias. Harry, Mr. Griffiths. Bill, Mr. Palmer.

Seamen of the Griper.

Jack, Mr. Hoffner, Dick, Mr. Wakeham.

Landlord, Mr. Bushman. Brother to Susan, Mr. Hulse. An Esquimaux, Mr. Hulse.

WOMEN.

Susan, Mr. Hooper. Poll, Mr. Ross.

Doors will be opened at Half past Six, and the Curtain will rise at Seven o'clock precisely.

ADVERTISEMENTS.

WANTS A PLACE, a Gentleman, who will undertake to write DOGGREL VERSES for the THEATRE or NEWSPAPER. Will contract to write by the foot, yard, or fathom.

Please to apply to O. P., next door to C——'s Printing Office. No connexion with Simon Doggrellicus, Albert, or Q.

WANTED, for the use of the Performers, a considerable PORTION of ASSURANCE; also a quantity of sound retentive memory, (for repairs) at per yard. Any gentleman possessing a superabundance of these requisites will be treated with on liberal terms.

Apply to the Committee.

AN Amateur is desirous of procuring a GOOD VOICE, with instructions for its management.

Application to be made at the Club Room, Pipe-street, prior to Christmas Eve.

A CELEBRATED Literary Character has procured, during an excursion among the Stars, some very BRIGHT IDEAS, which he means to submit to the inspection of his friends and the public, in the course of the ensuing week.

A GENTLEMAN, labouring under the inconvenience of an increasing corporation, would give his VOTE and INTEREST at the next CITY ELECTION to any person removing the complaint without a reduction of diet.

Particulars may be obtained at the Pump Room, Bath.

LOST, Stolen, or Strayed, a WHITE FOX, with a long tail and a longer chain; answers to the name of *Jack*. As he must be somewhere on the island, or on the ice in its immediate neighbourhood, he may easily be found.

Address to G. R. No. 2, North Georgia.

A GENTLEMAN, who has endeavoured to beguile the tedious wintry hours in practising some pieces of music, presented to him by a fair and much esteemed friend, having been peculiarly unfortunate in breaking the strings of his violin, wishes to purchase ONE of the FELINE SPECIES, in order to replace them.

Inquiry to be made at the Academy of Arts and Sciences.

LEFT, behind the scenes, after the performance, on Wednesday evening, a BOX, containing a parcel of comfits, two bottles of lavender water, a small packet of rouge, some white powder, five artificial teeth, one pair of eye-brows, three large mustachios, with whiskers to correspond; sixteen papers of court plaster, a silver thimble, marked E. R., a pair of ladies' garters, seven gold rings, with various stones, one having the device of two hearts transfixed with an arrow, three smelling bottles, a pincushion, a pair of curling-irons, several bottles of rose-water, and various other perfumes; with a number of smaller articles, among which is a recipe for promoting the growth of a beard.

The owner may have it again, by describing the box, on application at the Green-room of the Theatre.

To the Editor of the Winter Chronicle.

SIR—I beg to correct an error which has crept into the third page of your last Number, under the head of accidents, offences, &c. The prison from which the state prisoner therein mentioned made his escape, was not the *Barrel*, but the *Fleet*.

Yours, &c.

PITIFUL PUNSTER, *Bart.*

For the Winter Chronicle.

THE GREEN-ROOM, OR A PEEP BEHIND THE CURTAIN.

I.

Come list to a story my Muse would relate,
A story she long will remember,
To tell it in verse, she has puzzled her pate;
'Tis a scene that occurred in North Georgia—late
One evening in gloomy December.

II.

'Twas night, and the moon had illumined the hill,
Not a leaf on the mountain-top trembled,
The wolf ceased his howling, and each purling rill
Had forgotten to murmur, as frozen streams will,
Not a sound could be heard, for all nature stood still,
While the players in the green-room assembled.

III.

First old Daddy Philpot* came tottering in,
As tall and as stiff as a hop-stick,
With wo-begone visage, lank shape and long chin,
He for all the world look'd like the picture of Sin,
Or like a Death's head on a mop-stick!

IV.

"Adsooks!" quoth Maria,* "this body won't meet;
"How the deuce shall I e'er get my sash on?
"These shoes are too clumsy by half for my feet—
"So do what I will I shall never look neat,
"It's enough to put Job in a passion!"

V.

Then comes the young Cit,* in his coat of light green,
(*Nota bene*, 'twas made of a curtain,)
Like a true city counting-house dandy, I ween:
Such a medley of finery never was seen,
At this end of the town, I am certain.

VI.

"You Tom," cries Corinna, "come lace up my stays,
"But tuck my shirt carefully first in."
Tom pull'd till Corinna look'd red in the face,
But she bore it, sweet soul, with a very good grace,
When, bounce! went an eye-let hole, crack went the lace,
'Twas like a ripe gooseberry bursting!

VII.

Then enter poor Beaufort, with look so profound,
You'd have sworn he was troubled with phthisic;
"You look, sir," quoth Moll, "like a sheep in a pound,
"Or a soldier afloat, or a sailor aground,
"Or a monkey about to take physic!"†

VIII.

And here my poor Muse is in utter despair,
To record half the pother unable,
Such bustle and racket, and uproar were there,
She cannot find aught that may with it compare;
Yet, stay—was you ever at Bart'lemy fair?
'Twas a downright theatrical Babel.

IX.

"You've laced me so tight, I declare I'm half dead,"
"Pooh, nonsense, make haste, put your shoes on.
"Where the devil's my wig?"—"Why, a top of your head."
"Who can lend me a pin, or a needle and thread?
"I wish it was over, and I snug in bed."
Happy scene of theatric confusion!

X.

But see! the confusion draws near to a close,
And the Muse has near done her inditing.
The painter his art on each visage bestows;
By skilful arrangement on many a nose
The lily now blooms, where before blush'd the rose.
Good luck to vermilion and whiting!

* Characters in the *Citizen*, which was preparing for representation.
† "I like a simile half a mile long."—*Maria* in the *Citizen*.

XI.

Hark! hark! 'tis the prompter, whose magical bell
Makes the stoutest heart feel palpitation!
I shall not detain you, kind reader, to tell
How *this* one played passably, *that* very well,
With other important events that befel
The *Dram. Pers.* on this merry occasion!

XII.

Yet lest you should fancy my Muse meant to tease,
Be this the last verse of her story!
Long, long, may their efforts continue to please,
And long may Old England have actors like these,
And ships to conduct them across the proud seas,
To add a new wreath to her glory.

PEEPING TOM.

No. VIII.—MONDAY, DECEMBER 20, 1819.

To the Editor of the Winter Chronicle.

SIR—

In looking over some old manuscript sea-journals which were bequeathed to me by my grand-father, and which I had never till now leisure or curiosity to examine, I find an imperfect one which seems to relate to an attempt very similar to that in which we are now engaged. The date is uncertain, the second and most material figure of the year being unfortunately erased thus "A. D. 1-19." Thinking, however, that it may amuse some of your readers if inserted in your paper, I transcribe all that is legible:

"————So seeing wee might make no more progresse this yeare, wee did counselle to come to lande if a haven there might be found for winter-securitie; and having searched diligentlie for ye same, by God's goodnesse, and our pilot's skille in marine affaires, we came to anchor in a goodlie bay, where by divers goode observations we did find the height of ye Northern Pole near seventie-and-five degrees.

Here wee did abide about nine months, and having good store of provisions (beside deere and other meate that wee did kille) we wanted for nothing but employment in this our ley prisonne, and that our companie might not runne into mischief, for lack of hilaritie, wee did contrive sundrie joocse plans for our merrie-making, insomuch that his Highnesse the devil could never gaine the ascendancie. But there were three or foure amongst our companie (who as wee did conceive did entertaine secret communication with his Worshippe) who willed not to joyne with us in this our hilaritie, albeit they did not fail to benefitte thereby wee without any paine by them taken. Thereupon, our captaine, observing the same, did justlie order them to be shortlie provisioned, like men in a garrisonne who will not fight the enemie, 'for' said he 'those which do not benefitte the communitie, the communitie is not bounden to benefitte *them*.' So they're shoppes grew more leane than ordinairie, and likewise theyre legges which caused *them* to wax exceeding wrath, and ye exceeding merrie. Albeit, our companie nothing heeding theyre indignation, did cause theyre cheekes to be singed with a red-hotte ironne, fashioned after the letters N. C. (whose meaning, being no scholar, I could not fathome) by which our friendes in old Englande might aske and know theyre historie. After this fashion wee did turne theyre inactivitie to our own merrimente, and did so compasse the Devil and his Impes, by turning theyre own weapones against them————"

It is much to be regretted that no more of this curious manuscript is legible; for, the old navigator seem to have been placed in a situation so exactly similar to ours, that I doubt not we might have received many useful hints from their experience, in addition to those I have transcribed.

I am, Mr. Editor,
Your obedient Servant,
T.

To the Editor of the Winter Chronicle.

SIR—I regret to acquaint you, that in consequence of the chief justice having ruptured a blood-vessel in a violent fit of laughter, occasioned by seeing Counsellor Puzzlewell enter the hall with a conical paper cap on, fantastically ornamented with small bells, the Court of Common Sense is at present closed. The period of its re-opening has not yet been determined on.

OBSERVER.

To the Manager and Committee of the Theatre Royal, North Georgia.

Gentlemen—I am a widow, twenty-six years of age, and can produce undeniable testimonials of my character and qualifications; but before I undertake the business of dressing the ladies at the theatre, I wish to be informed whether it is customary for them to keep on their breeches; also, if I may be allowed two or three of the stoutest able-seamen or marines, to lace their stays. So no more at present from,

Gentlemen, yours as may be,

Abigail Handicraft.

P. S. Could you allow hollands instead of beer? As for tea, that is no object.

To the Editor of the North Georgia Gazette.

Sir—As I was yesterday indulging in a fit of somnolency, or in other words, dozing before the fire-side, a sort of waking dream presented itself to my fancy, which I beg the liberty of detailing. I thought I was in one of the cabins, observing the operations of a gentleman in the next to it, through a chink in the bulk-head. He was sitting at a table facing me, and I soon discovered "the poet's eye in a fine frenzy rolling." He had a sheet of paper before him, on which his hand unconsciously wandered with a slower or more rapid motion, as the bright ideas seemed to float on his intellectual sight. After a pause of a few moments he began, but I must ever regret that the tone, the energy of the voice, the expression of the dark eye, the fierce animation of the countenance, cannot be conveyed by words. He began as follows:

"The moon, resplendent orb, I ween,
"Shone brilliant, like————————
"Like, like, let me see—I have it
"————————like our soup tureen;
"The shaggy wolf stalked on the shore
"Like,
"Like what? for I must have another simile—boatswains—no, no, he's too dark—stop I can remedy that—
"Like boatswain daub'd with lime or flour.
"The stars half quench'd, seem scattered there.
"Like bristles on————'s chin.
"While in the hollow ships we lie."

"That line's good, but useless; unless I get some lofty shining touch every two or three lines, these epics go for nothing. One's comparisons should be natural, striking, easily flowing into the verse. Such a one has just popped into my head, and I'll go over it once again.

"While in the hollow ships we lie,
"Like pears or blackbirds in a pie;
"Or like that fish so much renown'd,
"That on the Cornish coast is found
"A Pilchard hight—who same as we
"Peeps through the crust, the stars to see."

Judge my disappointment, Mr. Editor, when the dinner-bell ringing, started the poet from his reverie! But, if before his features glowed with Achillean fire, they now assumed the glare of the hungry tiger; and, I doubt if the latter would have outdone his speed in reaching the dinner-table. I need hardly add, that the same bell which called my friend away, put an end to the delusion, by awaking me.

I am, Sir, your sincere well-wisher,

Philo-Somnus.

Philo-Somnus's letter reached us last week, but our columns did not admit of its insertion; since which, a circumstance has occurred, which makes us consider the delay as especially fortunate. We regarded his communication simply as a *jeu-d'esprit*, without a suspicion that it had its foundation in reality. We were most agreeably surprised, therefore, on receiving during the present week the effusions of the poet whom Philo-Somnus overheard in the act of composition, completed for our pages such as we now subjoin them. Philo-Somnus's letter, however, is not the less interesting; it may remind some of our readers of the pleasure with which they have read the original draft of Mr. Pope's translation of the *Iliad*, as compared with the finished and published copy.

To the Editor of the Winter Chronicle.

Mr. Editor—If the following efforts of my Muse should be deemed worthy a place in your valuable columns, their insertion will afford much gratification to,

A Young Beginner.

The moon, resplendent orb, shines bright I ween,
Its brilliance is just like our soup tureen.
The snow-drift, wafted by the passing breeze,
Looks like that vessel fill'd with boiling peas,
That thrice each week smokes fragrant on our board
In shape of soup, pea-soup, to feed the horde,
The shaggy wolf stalks slowly on the shore,
Like boatswain when with hoar-frost cover'd o'er.

The stars shine dimly, and seem scatter'd thin
Just like the bristles seen on————'s chin,
Like leaves in spring, when trees begin their budding,
Or like the plums stuck in our Sunday's pudding,
While in the hollow ships we snugly lie
Like blackbirds—or black-berries in a pie;
Or like that fish so long, so much renown'd,
That on the Cornish coast in swarms abound,
A pilchard hight, who, quite as snug as we,
Peeps through the crust, the moon and stars to see;
And hence, by people, keen and sharp as razors,
Have they, as we, been oft-times call'd star-gazers.
We muster twice on each revolving day,
Like shepherds who take care their flocks don't stray,
We keep a watch by night, I'd have you know,
But then 'tis like a watch that does not go.
We take each meal at its accustom'd hour,
What hunger once made sweet, but now tastes sour.
Our appetites have left us, much like those
From whom pale sickness steals away health's rose:
But not like these we sleep—for, know, we snore
Like men who knew not how to sleep before.
Thus do we watch, eat, drink, and sleep amain,
And then, we watch, eat, drink, and sleep again.

—To drive this dull monotony away,
Once every fortnight we get up a play;
Delightful bustle, each face wears a smile,
There's nought like plays dull *tedium* to beguile;
With Spring's return, I trust they'll still be found
A record how good humour may abound;
And shew that men, who take the proper course,
May always in themselves find such resource,
As to ensure of care the banishment,
And shew how much depends on management.
With Spring's return, like the industrious bee,
Behold all bustle, all activity!
At Spring's return, when Phœbus shews his head,
Like Sluggard rising from his feather-bed,
We'll shake dull sloth and indolence away,
And give our minds no longer to a play.
Fired with fresh ardour, and with bold intent,
Our minds shall, like our prows, be westward bent,
Until Pasiha's waves pour forth sweet sounds,
Chiming to us like—*Twenty thousand pounds!*

To the Editor of the Winter Chronicle.

SIR—At first sight of your correspondent P's rebus inserted in your fifth number, I gave myself credit for having at once discovered the solution; but the *two-fifths* of the first article destroyed my airy hope, until by chance a day or two since I met with a seaman's letter, wherein his dear Sally expresses an earnest hope that her letter will reach him in the enjoyment of good *Helth*. Now, Sir, as I consider Mr. P. has possibly learned to spell out of the same dictionary with Sally, I shall no longer hesitate in laying before you the score of lines which I have eked out, in elucidation of the author's meaning.

I am, &c. &c.

CASTIGATOR.

SOLUTION.

On the wave or on the shore,
Nobly born or humbly poor,
Blest with competence or wealth
Man's first wish must still be *helth;*
What on monarch's thrones can shine,
Fair as *Clemency* divine?
Who could with *Adonis* vie,
Peerless in a Goddess' eye?
If the parts of these you join,
In the word you thus combine,
You'll a vessel's name disclose,
Dreaded oft by Britain's foes;*

* The Hecla's last service, as a ship of war, was as one of Lord Exmouth's fleet, at the attack on Algiers.

Now commissioned to explore
Unknown seas to Asia's shore;
And in this unpeopled Isle,
Tho' the fast may make you smile,
Doubtless *all* their ship admire,
Seated round her winter fire.
Loudly sound thy trumpet, Fame,
Say, the *Hecla* is her name.

No. IX.—MONDAY, DECEMBER 27, 1819.

To the Editor of the Winter Chronicle.

"He snuffs far off the anticipated joy,
"Turtle and venison all his thoughts employ,
"Prepares for meals! as jockeys take a sweat,
"Oh, nauseous! an emetic for a whet!"

Mr. Editor—Happening to stumble a day or two ago upon the above lines, they brought to my recollection an advertisement that I read in your Chronicle last week, dated from the Pump-room, Bath. Notwithstanding the address, however, I suspect from the style of the gentleman, that he is better acquainted in a well-known city somewhat to the eastward; but that is a matter of little import to me, my aim not being so much to gain the no common reward which he holds forth, as to give a freedom to the overflowings of the milk of human kindness, with which my nature (with modesty be it spoken,) is too full. I cannot, however, proceed without making a strong protest against those fine and squeamish feelings of the poet, which prompt him to nauseate, or affect to nauseate, the really harmless means which the subject of his rhymes adopted for the attainment of a praise-worthy and voluptuous end; a means too so innocent as to have been practised for time immemorial by many a worthy citizen, without so much as a wry face, still less dreaming of the least indelicacy, in a practice that administered so much delightful sensation. But these poets, Mr. Editor, have been so pampered with high-seasoned viands, that it is almost impossible to find food or physic of a material nature sufficiently refined to suit the exquisite sensibility of their appetites. Instead of feeding like other good souls upon turtle or venison, they have fed on ambrosia with the gods. Instead of good old port, they must have nectar, and rejecting Calvert's fine brown-stout, and Meux's entire, nothing forsooth will serve them but gulping down whole streams at the foot of Parnassus. Setting aside, therefore, any attempt to please such dainty gentlemen, I shall leave them to their prejudices, and proceed to offer my advice to the gentleman of the Pump-room. In the first place let him set the poets at defiance; and in the next commence a course of what the latter has been pleased to call "nauseous," but which the alderman found so useful as a preparative; he however sat

"Abdominous and wan,
"Like a fat squab upon a Chinese fan,"

Now, I presume it is the idea of this picture that haunts the imagination of our citizen of the Pump-room, the evils of which he foresaw and justly deprecates. Certainly it seems a melancholy prospect, but happily for him, I can place within his grasp the means of contravening such a calamity. I shall endeavour to imitate the skilful physician, and point out how that which was a bane to the one, may be rendered an antidote to the other. My plan, Mr. Editor, has simplicity to recommend it, a quality by which it is distinguished from regular medical practice in general; it consists merely in the trifling inversion of the order of meals and medicines. The alderman took his dose as a preparative, always *before* his meals: let the pump-room citizen then, whose object is so different, only get his food first, and take his dose regularly an hour afterwards. And, so long as he shall persevere in the plan, I will readily stake all my credit upon its efficacy.

I remain, Sir, &c. &c.

Philanthropus.

Theatrical Report.

Thursday evening's entertainment commenced with *The Mayor of Garratt*; a farce which, notwithstanding its characters are drawn from low and vulgar life, has ever maintained its popularity by its abundant humour, and by its pointed satire of extensive application. We are of opinion that in none of the preceding performances at this theatre have the characters generally been so well sustained; a circumstance which we are pleased in ascribing to the increased acquaintance of the dramatis personæ with the manners and customs of the stage.

The Mayor of Garratt was followed by a new musical after-piece, the joint production of our principal bards and wits, entitled *The North-west Passage*, or the *Voyage Finished*. The characters having been already announced in the advertisement of last Monday se'nnight, and the subject of the piece being obvious from its title, we proceed to give a short account of it. It is divided into five acts for the sake of convenience. The

scene of the first is laid at Winter Harbour, and the time is that period to which we so anxiously look forward, viz., when the season of active exertion is recommencing; the Hecla's boat lands, and meets the Griper's sailors on shore; they speak of their future prospects, and many jokes are passed on the transactions of the winter. The act concludes with an appropriate song, and three cheers on leaving Winter Harbour. The second act is supposed to take place early in the summer of 1820, when the ships have succeeded in passing the meridian of Mackenzie's River. Here the same crews meet on the ice, congratulate each other on having gained the second prize, and cheer on to Behring's Straits. During the conversation a bear which is supposed to have been seen in the morning, being allured by the burning of some whales' flesh, appears in the distance chased by a bear, which is observed to fire at it. The bears secrete themselves, and the bear re-appears in the distance, but a little nearer, and at length comes on the stage, where the kettle containing the fish had been left for the purpose of attracting him; after a short encounter, in which one of the Hecla's sailors receives a hug, the bear is killed and carried off.

During this act the ships are seen in the distance under sail, and at the conclusion of a song, on a signal of recal being hoisted and a gun fired, the boat pushes off. In the third act the scene changes to Deptford, where Poll and Susan, the sweethearts of Tom and Dick, are discovered sitting at work, and expressing their anxious alarms for the safety of their lovers, of whom no tidings have as yet been received. They are joined by their brother, who produces a newspaper, containing information which the government had obtained from the master of the Brunswick whaler, from the particulars of which, and the circumstance that this was the only vessel by whom the Discovery Ships had been seen in the summer of 1819, the best hopes are augured of their safety and success. In act the fourth we return to the expedition having now (*i. e.*, in the autumn of 1820,) reached the so anxiously-desired Behring's Strait. Here nautical congratulations, and the prospects of the *Voyage Finished* occupy them, until their attention is called off by an Esquimaux sledge seen in the distance, and subsequently by the Esquimaux himself, where a scene occurs which brought to our recollection the most interesting event of the expedition of discovery which preceded the present. After making friends with him, by presents and a song, the sailors induce him to accompany them on board. In the fifth and concluding act the scene shifts again to Deptford; the voyage being now finished, the sailors are met at the Prince of Wales, where heartily welcomed by the landlord and joined by their sweethearts, they talk over the difficulties they have passed through, and the good fortune they have enjoyed, and the act concludes with "God save the King" and three cheers, in which the audience most heartily joined.

We shall only add, that the piece produced in its fullest extent the interest and entertainment which were designed. We are all witnesses how much the ship's company participated in these feelings, but it is not easy perhaps fully to appreciate the permanent impression which such representations as these are calculated to establish in their minds.

Theatre Royal, North Georgia.

ON THURSDAY, JANUARY 6, 1820,

When will be Performed the celebrated Farce of

BON TON;

OR HIGH LIFE ABOVE STAIRS.

MEN.

Lord Minnikin, Captain Sabine, Sir John Trotley, Mr. Parry.
Colonel Tivy, Mr. Ross. Jessamy, Mr. Griffiths.
Davy, Mr. Neal. Mignon, Mr. Buchnan.

WOMEN.

Lady Minnikin, Mr. Beecher. Miss Tittup, Mr. Hooper. Gymp, Mr. Beverly.

Songs will be introduced between the Acts.

The doors to be opened at Half-past Six, and the Curtain will rise precisely at Seven o'clock.

To the Editor of the Winter Chronicle.

SIR.—The Committee beg you to insert the enclosed in your Paper, for which they will feel greatly obliged.

I am, Sir, *&c.*,
SNIP QUILL-DRIVE,
Secretary to the Committee.

To Mrs. Abigail Handicraft.

MY DEAR MADAM.—The Committee having sat for a considerably time upon your letter, published in last week's Paper, beg me to acquaint you, that the contents have penetrated each member *au fond*; that they feel sore at the prospect of losing your services at the theatre, which they fear will be the case, when you are informed that the gentlemen say that they can't perform their ladies' parts properly with their can't mention-ums on. The Committee, however, hope that this will not prevent you from accepting the offer.

They desire me to add, that two stout able seamen shall attend you with marling-spikes, levers, and white-line; and that gin, instead of beer, at your request, will be allowed, upon promise that you give not a drop to the actresses, as the consequences you must be aware, may greatly retard the performances of the piece.

I have the honour to be, Madam, *&c.*,
S. QUILL-DRIVE, *Sec.*

ADVERTISEMENTS.

LOST, either in the Pit or Lobby of the Theatre, on Thursday last, a SMALL MEMORANDUM BOOK, containing notes and strictures on the new entertainment; also remarks, on the merits of the respective performers, made on the spot, and calculated to afford hints for an elaborate criticism on the above subjects, intended to form an Appendix to the Writer's Journal, which will be published on the return of the Expedition.—Whoever has found the same, and will return it to No. 3, Link-lane, will be handsomely rewarded for their trouble.

—

AN Amateur, who has generally had female characters assigned to him, is desirous of receiving a FEW HINTS on the most becoming attitudes, actions, and articulations, for a Woman of Fashion; also, on the most approved method of obtaining the fashionable stoop, without appearing round-shouldered.

Application to be made at No. 2, Ordnance-square.

—

THIS to to give Notice, that a couple of FINE CALVES have, within the last week, been grazed by Deal Board, Carpenter, who resides at the foot of Hatelway Passage, and that they were carried away from thence by a stout man, to be dressed: but it was supposed that they would produce more woo than wool to the thief, as they were thought to be the identical Calves that had strayed from No. 1, Bell-lane.

SONG FROM THE NORTH-WEST PASSAGE.

WRITTEN BY MR. WAKEHAM.
AND SUNG BY MR. PALMER.

I.

WHEN a ship boy at first on the ocean's rude wave,
I was taught to disdain ev'ry thought of a slave,
Bold freedom to nurture, that valour inspires,
And proves England's tars still are worthy their sires.

II.

As to manhood I grew, and a sailor became,
Ev'ry hope, ev'ry wish of my heart was the same;
My Susan, my parents, but strengthened the claim,
I knew that their bliss must depend on my fame.

III.

Stern war was gone by, and our ensigns no more
Waved proudly triumphant o'er each hostile shore;
But I heard of two ships that were fitting to seek
For new lands in the North, where the winds bellow bleak.

IV.

My bosom was fired, and I soon was enroll'd
In the fortunate band, for adventure so bold,
Whom I now see before me resolved to maintain
That their country shall never call on them in vain.

V.

And say if privations or perils should rise,
Why what would they weigh in a true seaman's eyes?
He'd scorn the base thought of e'er turning his back,
His hand ever ready—his heart never slack.

VI.

If one dastard like this!—no—such one there can't be
In these ships that have dash'd thro' this ice-fetter'd sea!
Then may those who act nobly—as all of you will,
Safe return'd, have of love and of pleasure their fill.

VII.

May the Butcher and Bull, Prince of Wales, and each port
Where the Hecla's and Griper's incline to resort,
Abound with good liquor, with fiddles and song,
And plenty of lasses to cheer up the throng.

For the Winter Chronicle.

Reflections on the morning of Christmas Day, 1819, *North Georgia*

Rise from the blushing East no glory darts
To chase the shadowy night;—but all is gloom,
Save where the moon's young crescent o'er the snows
Emits a trembling radiance, faintly seen
Through mists obscure;—or sparkling seen on high
The countless myriads of the stars diffuse
Their distant, glimmering, scarce-enlightening rays!
Behind you cloud a steam of paly light,* *
Shoots up its pointed spires—again immerged,
Sweeps forth with sudden start, and waving round
In changeful forms, assumes the brighter glow
Of orient topaz—then as sudden sinks
In deeper russet, and at once expires!

Here then we view, in Northern Isle immured
Midst ceaseless drifts and long-enduring ice
The wonder of His pow'r, whose awful voice
Spoke earth into existence, and the sun
That now, Britannia! o'er thy favour'd land
Lights up the day thro' winter's cheerless reign.

Hail, sacred hours! that to my mind recal
His wondrous goodness. His, the Great Supreme!
Once was thy morn in other splendour dress'd,
When to the shepherd-train's astonish'd eyes
Celestial glory shone, and angel choirs
Hymn'd the Messiah's birth in songs divine!
And shall not man prolong the wondrous strain,
For whom this mightiest, greatest work was done?
Yes, whether bord'ring on the Icy Pole,
Or where the genial ray with fruits and flow'rs
Bedecks the pendant bough, or paints the vale,
Still let the hymn of triumph rise on high,
The hymn of grateful joy incessant rise
To Jesu's name, our Saviour and our God!
Who laid his glory by, and wrapt in flesh
Our natures shared, exempt alone from sin,
For purposes of love; to save mankind,
To raise us to a higher state of bliss
Than in primeval innocence enjoy'd
Our great progenitor—fruition pure,
Eternal, full, unmeasurable joy!

* Aurora Borealis.

Still as expiring years shall roll along
Be this our theme, when wintry skies proclaim
This sacred day's return: and higher thoughts
Than sordid pleasures fill our tongues with praise,
Our hearts with love, our bosoms with desire
To live to Him who gave his life for us,
While yet we are on Earth; and when at length
The hour that frees th' imprison'd soul shall come,
Calm may we view the stern approach of Death
But parting from a world of painful toil
To dwell for ever near Jehovah's throne!
To whom be glory, pow'r, dominion, praise,
Ascribed for ever, and for evermore!

No. X.—MONDAY, JANUARY 3, 1820.

To the Editor of the Winter Chronicle.

Winter Harbour, North Georgia.
Saturday, Jan. 1, 1820.

Sir—It has always appeared to me, that the frequent recurrence of the various holy-days and festivals ordained by the Church, independently of the important events which they are intended to commemorate, may be considered as contributing essentially to the welfare and happiness of mankind. Each of these may be said to constitute a kind of era, which marks the progress of time in a very decided manner, forces upon the notice of even the most giddy and thoughtless, the recollection that another week, of month, or year, has passed by, and involves in this recollection the awful certainty, that the stream of time is flowing fast away, and must speedily be swallowed up in the ocean of eternity. With a very large portion of mankind, the smoothness with which time glides away resembles the travelling of an easy carriage: its progress would be often forgotten, were it not for certain occasional stoppages which remind them that it has been in motion, and that it is carrying them forward with a rapid, though insensible pace, "towards that bourne from whence no traveller returns."

There is no season which may more aptly be compared to one of these stages in the great journey of life, and which induces more serious reflection in a considerate mind, than that at which we have just arrived. The period when one year finishes, and another commences, forms an epoch in our lives, which is perhaps more strongly marked than any other. At this season, too, our minds are in an especial manner prepared for serious contemplation, by the recent commemoration of one of the most important events that the world has ever known—the birth of the Redeemer of mankind—an event which should fill our minds with the most solemn awe, and our hearts with the most lively sensations of gratitude and devotion.

At this period, it is natural as well as profitable, to look back on past events. When we recal to mind the road we have travelled, and the scenes we have witnessed, how chequered is the prospect which memory presents to our view! the sports of childhood, the hopes of youth, the opening prospects of manhood rise in review before us, with their accompanying train of fears, anxieties, and disappointments. It has, however, been justly remarked, that "we have many days of pleasure for one of pain, many hours of health for one of sickness;" and to a mind not jaundiced by prejudice, nor distempered by vice, the retrospect of life will afford a thousand recollections we shall fondly cherish, and ten thousand mercies which demand our warmest gratitude.

If the above remarks are found to hold good with mankind in general, *to us* they must apply with peculiar force and energy: for surely, Sir, few human creatures have more cause for serious contemplation, or for sincere and lively thankfulness than ourselves! Let us but look back for one year, and consider what our situation and prospects were. The greater part of us had just returned from a similar enterprise, vexed and mortified at the ill success which we had met with. Our own hopes, and those of our country, disappointed, nothing appeared left for us, but a long season of inactivity, and leisure to brood over the past!

How different is the prospect we have now before us! Selected once more for this interesting service—placed in a situation of credit and honour, which the sons of noblemen may reasonably envy, and which thousands of our own profession and rank would gladly fill—with the eyes of our country and of all Europe fixed upon us—how highly should we value these proud distinctions? If we further consider the extraordinary success which has attended our labours, what heart is there among us that does not beat high with exultation and hope? Could it have been predicted to us before we left

England, that we should winter comfortably in a secure harbour of our own finding, near the 111th degree of longitude, who that is accustomed to the navigation of icy seas, would not have declared this to be success beyond his most sanguine expectations? And yet it is even so—we have succeeded in breaking the spell, which made the sea of Baffin a *bay*, have advanced near five hundred miles directly towards Behring's Strait, and found a secure port just when the season unexpectedly closed upon us, and obliged us to relinquish further operations.

Nor have we, in accomplishing this much of our enterprise, suffered privation or want of any kind. We have been abundantly supplied with all the necessaries, and many of the luxuries of life—we have most of us enjoyed our health—our ships have been preserved [illegible], under circumstances of frequent and formidable danger; and being furnished with resources which will enable us to renew the attempt with the same vigour as at first, we seem destined by Providence to decide a great geographical question, which, for centuries past, has been an object of curiosity to every nation in Europe.

Perhaps no expedition which England has ever equipped, has been regarded with a more hearty feeling of national interest, than those in which we have been employed. Persons of every rank, and age, and sex, flocked to our ships—the philosopher approved a scheme whose object was the promotion of science—statesmen and prelates condescended to visit those, whose names might perhaps grace the page of future history—the merchant hoped that we might find a shorter way to China—the patriot, that we might add new lustre to old England's glory—and to crown all, the smile of beauty beamed upon us from every quarter, to inspire us with fresh ardour in the accomplishment of our glorious enterprise! The remembrance of these visits should long be cherished in our breasts; they were cordial and unequivocal expressions of regard from a warm-hearted and affectionate nation!

We cannot, perhaps, expect that this general interest should continue still to operate in the same degree as at first; for the public feeling is seldom very long fixed to one point—but how strongly would that interest be re-excited, could information of our present situation and prospects be at this time conveyed to England! A new field would be opened to speculation—the northern boundary of America would assume a more decided character upon the maps—the sanguine would be confirmed in their expectations, and even the most cautious sceptic would be forced to admit—not only the great probability of the existence of a north-west passage, but that there is some chance of its being at length actually effected.

But highly as it becomes us to appreciate the warm interest which the country at large has evinced for the success of our enterprise, there is another feeling, which, even in a still greater degree, must come home to the bosom of every one among us—I mean the anxious solicitude which must now be entertained by our relations and friends. Happy as we should undoubtedly be to remove some part of their anxiety, by making them acquainted with the comforts of our present situation; yet by a certain feeling inseparable from human nature, and no doubt implanted in our breasts for wise and benevolent purposes, there is, perhaps, nothing which produces a more exquisite degree of gratification than the certainty of our being the objects of that very solicitude to those we love. Whatever contradiction this may at first appear to involve, and whatever perverseness it may seem to argue in the constitution of our nature, yet it would be hard to call that selfishness, which leaves upon the most tender conscience no impression of wrong, and which is, in fact, the source of one of the purest and most refined pleasures of which we are capable.

At the season of Christmas, when it is customary for all the branches of a family to assemble around the same social fire-side, it is natural for them to think much of those who are wanting, to complete the circle. All expectation of our return this winter will now be at an end, and a severe conflict of contending emotions will succeed—the hope that our absence indicates success—the apprehension that some untoward accident has befallen us—at one moment, perhaps, exulting at the thoughts of our success, and firmly suppressing every wish but for our eventual benefit, they anticipate with proud and eager delight the time when we shall return to them with credit and honour, to reap the rewards of our labours—at another, imagination presents us to their view, suffering under privation or disease, and exposed to all the rigour of this inhospitable climate—then will nature break forth, in spite of every exertion—the tear of silent anguish will be shed—the fervent prayer of pious devotion be offered to Heaven for our safety!

The considerations which I have now urged, and in which I have endeavoured to set forth some of the circumstances by which our situation is distinguished, should make us especially careful that our conduct be such as to justify the expectations which our country and our friends have formed of us. They have performed their part by placing us in our present station;—it remains for us to prove ourselves deserving of that station—not, merely by the ardour which, as young men, we have all naturally felt at the beginning of a great and honourable enterprise—not by occasional sallies of zeal and exertion, which relapse into carelessness and inactivity as soon as the occasion ceases—but by a steady, uniform, and honest principle of duty, unmoved by circumstances, unshaken

by difficulty, unaltered by time. We should reflect that our station can, in itself, confer no real dignity or honour: it is only the medium through which our good or bad conduct will be made the more conspicuous; it is the hinge on which our future hopes and prospects in the world must inevitably turn.

Above all—amidst the bustle of active life, and the discharge of our public duties, let us never forget what we owe to God and to our neighbour. Immured as we are together for a certain period, and secluded from the rest of the civilised world, it is no less our interest than our duty to keep a constant guard over our conduct towards each other. We should be particularly careful to restrain the natural irritability of temper, to which all are more or less subject; to check the risings of peevishness and ill-humour; to forgive others, as we ourselves hope to be forgiven. Let us ever be ready to assist each other in all the kindly offices which smooth the rugged path of life; and discarding all those petty animosities, those little passions, which serve but to disturb the tranquillity of society, and to disgrace us as Christians and as men, let us cordially unite with heart and hand in the great work we have undertaken.

By whatever distance we may be separated from our country and our friends; let us remember that we are ever mutually present with God! His all-seeing eye beholds us at one glance, his arm is ever stretched out to protect us—the mercy and beneficence of the Almighty are equally extended to us, whether we traverse the frozen regions of the north, or bask in the sunshine of our native plains.

I am, Sir,
Yours, &c.,
AMICUS.

For the Winter Chronicle.

THOUGHTS ON NEW YEAR'S DAY, A. D. 1820.

The moments of chasten'd delight are gone by,
When we left our loved homes o'er new regions to rove,
When the firm manly grasp, and the soft female sigh,
Mark'd the mingled sensations of friendship and love.
That season of pleasure has hurried away,
When through far-stretching ice a safe passage we found*,
That led us again to the dark rolling sea,
And the signal was seen "on for Lancaster's sound†."

The joys that we felt when we pass'd by the shore,
Where no footstep of man had e'er yet been impress,
When rose in the distance no mountain-tops hoar,
As the sun of the evening bright gilded the west; ‡
Full swiftly they fled—and that hour too is gone
When we gain'd the meridian assign'd as a bound§,
To entitle our crews to their country's first boon,
Hail'd by all as an omen the passage was found.

And past with our pleasures, are moments of pain;
Of anxious suspense, and of eager alarm—
Environ'd by ice, skill and ardour were vain
The swift moving mass of its force to disarm;
Tho' dash'd on the beach, and our boats torn away,
No anchors could hold us, nor cable secure;
The dread and the peril expired with the day,
When none but high Heaven could our safety ensure.

Involved with the ages existent before
Is the year that has brought us thus far on our way,
And gratitude calls us, our God to adore
For the oft-renew'd mercies its annals display;

* Our ships were the first that succeeded in effecting a passage to the westward, through the ice which occupies the middle of Baffin's Bay in the early part of the summer.

† Telegraphic signal made by the Hecla, after breaking through the first barrier of ice.

‡ The evening was beautifully clear when we sailed over the spot assigned to CROKER'S MOUNTAINS.

§ The meridian of 110° west, which entitled us to the first reward of 5,000*l.*

The gloomy meridian of darkness is past,
And ere long shall gay Spring and her herbage revive,
O'er the wide waste of ice shall re-echo the blast,
And the firm prison'd ocean its fetters shall rive.
Now dawns the New Year! but what mind can explore
The events that await us before it expires!
In the lands of the south to remember its glory,
Or in regions of frost mourn our frustrate desires!
Yet hope points the track that our vessels shall trace
Till Pacific's wide ocean around us we view;
Bright Hope shall expand as we follow our course,
And the dangers we meet but our courage renew.
The friends we have left, at this season of mirth
Do their bosoms or pleasure or anguish contain?
Do they deem us yet safe in these wilds of the earth,
Or whelm'd in the surges that whiten the main?
No longer they now can expect our return,
No longer they mark ev'ry change of the breeze;
But the thought of despair fond affection will spurn,
And confident rest on Almighty decrees!
With them we but share the proud hope of success,
And look forward with joy to the days yet to come;
When, the heart overflowing, warm tears shall express
How sincere is the welcome that greets us at home;
Be happiness theirs while we severed remain!—
Be fortitude firm, and exertion our own!
Till the shores of Old Albion once more we regain,
Once more to enjoy every bliss we have known.

No. XI.—MONDAY, JANUARY 10, 1820.

To the Editor of the Winter Chronicle.

SIR—Sheltered under the indolent plea of inability, I have never taken any other part in our theatrical amusements than that of a spectator. I have, however, been a constant attendant, and witnessing the strenuous efforts made by each amateur, I have felt no small degree of concern at the loss of time, and the immensity of trouble, which these exertions occasion; the time which is necessarily occupied in studying new, and sometimes long parts, and the trouble and expense, (if I may be allowed to apply the word to the sacrifice of sleeps, curtains, and various other articles,) of preparing new dresses on every occasion, must be a very serious tax, particularly to those gentlemen who have other and more pleasing pursuits to occupy the leisure which this season of inactivity affords.

Moreover, it is well known how very limited the theatrical library is, and, judging from the representation on Thursday evening, I am inclined to think, the small stock of pieces that contained humour suited to the audience, has been exhausted.

The good effects produced by the plays are too obvious to be questioned; and I should be the first to lament their discontinuance, until our labours recommence; but considering the very great amusement and gratification which the men have derived from the former representations, why, let me ask, might not some of them be repeated? Far be it from me to impute the slightest blame either to the manager or committee, who are entitled, (especially the manager,) to our best and warmest thanks for the pains which they have taken; but is it not possible that in their zeal for the public welfare, they may overlook the best means of accomplishing the object in view?

If their aim is, as I believe, the amusement of the men, surely the most effectual way of obtaining this, would be to repeat those pieces from which they have already derived the greatest share; why not not again the amusing farce with which the theatre so successfully opened? Why should not Jack again enjoy the humours of Jerry Sneak? But, above all, why is not the *Maid of the Mill* again repeated? This piece, which cost so much in preparation, was got up so successfully, and which not only gave the most ecstatic delight to the men during representation, but afforded them in the recollection a fund of amusement even to this day;—why, I say, should it be thrown by, as if it had wholly failed? Surely, Sir, this is an oversight that only needs to be pointed out to be remedied. Permit me then, through the medium of your valuable columns, to offer these remarks to the con-

mittee, which nothing but a strong conviction of their truth would have dictated; and at the same time to make the best apology I can to your readers, by assuring them that the general good of our community has been my first and only purpose in this communication.

I am, Mr. Editor, &c. &c. &c.

A Looker-on.

To the Editor of the Winter Chronicle.

Sir—Understanding that it is in the contemplation of several gentlemen to establish a new weekly paper, for the purpose of affording greater scope to the exuberance of genius, which I am sure, from your well-known liberality of sentiment, will meet with your most cordial support, I am emboldened, humble as my pretensions are, to solicit the public patronage, and offer myself as the Editor.

To discharge the duties of this office satisfactorily, it is not requisite that I should possess an extraordinary degree of intellect; for, unlike editors in general, who have to insert their own lucubrations to fill a vacant page, I am doubly assured by the very high opinion I entertain of the talents of its intended supporters, and by their own repeated professions of strenuously exerting them, that the only difficulty in my way will be the selection of such strokes of satire, or flashes of wit, as may best accord with the taste of the moment.

I am positive that nothing flat, low, or insipid, will ever be found on my files—a few touches beyond the sublimity of Milton; a style more easy and elegant than Addison; powers more splendid and versatile than Shakspeare's may occasionally be met with; but no paucity of materials, (except it be of paper,) to perpetuate the literary fame of the independent and highly-gifted youths, whose chosen servant I am anxious to become.

I think I can command every requisite for immediate publication; pens and ink I have no objection to furnish, and paper for the early numbers, provided they do not require more than three sheets each. One [illegible] driving (not printers') devil, I am prepared with, and a second is in training. The liberality of a friend has furnished me with an empty puncheon, in one of the heads of which I intend having a slit cut for the reception of contributions. These particulars are enumerated to demonstrate the very great interest I take in the cause, and I hope the reasons which have been adduced will be deemed sufficient to prove, that an editor for a work which promises to establish an era in the annals of literature may be found in one possessing only the feeble judgment, contracted mind, and circumscribed invention of,

Sir, your most obedient Servant,

Henry Harmless.

To the Editor of the Winter Chronicle.

Mr. Editor.—Will any of your correspondents assign a reason, or hazard a conjecture, why the freshening of the wind should be accompanied by a considerable rise in the temperature of the air; which we have found, I believe, invariably the case, from whatever direction the wind blows.

I am Sir, &c. &c. &c.,

A Constant Reader.

THEATRICAL REPORT.

On Thursday evening the officers of the Expedition performed the farce of *Ben Ton*, or *High Life above Stairs*. It happened unfortunately that the weather, which promised fair in the morning became inclement in the afternoon, and continued so much so during the performance, as materially to inconvenience the performers, and to lessen the gratification which the audience would otherwise have received from their exertions.

We are informed that the thermometer was at twelve degrees below zero on the stage, a degree of cold ill suited to the dresses of the fair sex especially.

Whilst on the subject of our theatrical entertainments, we beg leave to return our thanks to the contributor of the first article of the present number. We are persuaded that many of our readers will join with us, in the hope that its subject will not be deemed beneath the consideration of the committee of stage-management.

Theatre Royal, North Georgia.

MEN.

Colonel Feignwell, Mr. Parry.
Freeman, Captain Sabine. Sir Philip Modelove, Mr. Griffiths.
Obadiah Prim, Mr. Wakeham. Tradelove, Mr. Hoffner.
Periwinkle, Mr. Nias. Snakbut, Mr. Bowman.
Simon Pure, Mr. Beverley. Amminadab, Mr. Hulse.

WOMEN.

Mrs. Prim, Mr. Hooper. Ann Lovely, Mr. Ross.

SONGS as usual will be interspersed.

Doors to be opened at Half past Six, and the Performance to commence at Seven o'clock.

☞ In writing the fair copy of this number for circulation on board, the date and title of the play were accidentally for[illegible] the following lines were subjoined to supply the omission.

You're the characters all, and now guess at the [illegible]
But wait! I'll endeavour to shew you the way;
The play that's to steal a dull hour of your life,
By the author was named—*A Bold Stroke for a Wife.*
The day that's appointed is next Wednesday week,
Should it not be too cold for the Actors to speak.

The Committee of the Theatre request the Editor will give publicity to their disavowal of any participation in Snip Quill-driver's Letter, which appeared in the 9th Number of the *Winter Chronicle*.

The following communication reached us on Friday night, but just in time to save the press. On reading it, we perceived that the writer is suffering under a grievance, which so far as we understand him, makes him urgent for the immediate insertion of his letter. We have, therefore, been induced to waive the consideration which it is our custom to give to the articles with which we fill our columns, and have submitted his letter, without delay, to our readers.

To the Editor of the Winter Chronicle.

—

I am rather surprised, Mr. Editor, since I believe the original intention of the *Winter Chronicle* was exceedingly foreign to what appears, by degrees, to have crept into it, and which is far on the climax to decided personality; I mean the various attacks made on the several members of our community. Mine, Mr. Editor, is a case in which a pair of calves were declared to have strayed from their owner's, No. 1, Bell-lane, next door to the Club-room. Now, as I am confident you are a man who values a respectable reputation in an infinitely higher degree than the advantages derived from your weekly numbers, I consider it my duty to warn you against a person who, at this time, I am aware, constitutes a small part of the little society who contribute to its weekly existence; for I understand, and that from the most respectable authority, that the said person is in the habit of, what I suppose he would call revising, but from the accounts I have of the matter, absolutely altering and re-modelling it, according to his own fancy. Since this is the case, I am strongly led to imagine that the advertisement alluded to was intended for a neighbour of mine, residing in Ordnance-square, next door to Apothecaries' Hall, whose calves, I know, strayed some time ago, and I hear have now entirely left him; not mine, Mr. Editor; on the contrary, mine, indeed, are at this time in an exceedingly forward state. I am naturally fond of the picturesque, and therefore have them in front of my premises. I take as much delight in them as I do in my very self, and shall for ever have them before me. This, Mr. Editor, is not the whole of my complaint. I was the other day absolutely insulted to my face!! As I was sitting at my table, studying in happy quiet, who should pop in but one of your devils: the impudent fellow, regardless of my age and infirmities, commenced his insinuations, and by degrees told me I was the identical little man alluded to in your gazette. I have, Mr. Editor, patronised it from its commencement, and, as my residence in some degree excommunicates me from society, no part of it falls to excite my strictest scrutiny. But I shall proceed with my grievance, he explained to me, as I said before, that "I was the little man stated to have risen from the band-box, and that I also, one day or the other, would be subject to a hen-pecking." —It would have been as well for the scribbler had he kept this part of his article in his inkstand—for here I have him—I have often expressed my intention never to marry; and suppose I should? I well remember the opinion of a friend of mine, who was kind enough to sympathise and condole with me, on a similar occasion; and as he is a man who has lived longer, and I am sure, knows more of the world than I do, I consider his first-rate authority. He said—"That little men were usually marked with extraordinary talents—that they were so polite, so kind, so every thing a lady could wish; and therefore, I am almost confident they are subject to less purgatory than persons of a contrary description. And suppose the conclusion here drawn to be perfect, I may rely, Mr. Editor, on leading a most quiet and peaceable life, were I to venture to-morrow to the matrimonial shrine. Trusting you will be convinced of the perfect fiction of the one case, and in some degree, if not altogether, coinciding with my hypothesis in the other, which appears to me to be tolerably well founded, I conclude, trusting you will in future, for the sake of your reputation, examine your paper immediately previous to its appearance in public, that such alterations which your printers may have taken upon them to make, may, by your timely scrutiny, result in

originality, and thereby rescue your chronicle from impending defamation, which will await it, if this, my prescription, be not enforced. I am, Mr. Editor

Your sincere well-wisher, M. C.

P.S. You will pardon the shocking state, Mr. Editor, in which I put this to your hand, not being Friday night; and strongly at this moment provoked, I send this rough as it is, in order if any case relative to No. 1, Bell-lane, be intended for insertion in your next number, you may have an opportunity of preventing it.

ADVERTISEMENTS, &c.

A NEW WEEKLY PAPER!

On Saturday, the first Day of April, 1820, Will be published the first Number of a new Weekly Paper, to be called,

THE NON-CONTRIBUTOR'S POST; or, OPPOSITION JOURNAL.

Prospectus.

As the design of this paper is solely to act in opposition to the *Winter Chronicle*, Sir Stephen Stingall, who has undertaken to be the editor, will consider himself responsible that no article whatever shall be omitted, which to his knowledge contains an attack upon any individual of the chroniclers, reserving to himself, however, the discretionary power of adding to or altering any contributions, which may appear to him to admit of more pointed satire, or on any other similar account, and of either briefly assigning his reasons, or otherwise, as he may think proper.

Original contributions on this subject, consistent with the plan of the paper, will be acceptable. The Editor begs it, however, to be distinctly understood, that he is wholly independent of the gentlemen of the Expedition for its support, having laid in, on his own account, a sufficient stock of the necessary ingredients to answer all the purposes of [illegible] C.P. Orders and communications, if post-paid, will meet with immediate attention, on being addressed to the Editor at the O.P. library, Fleet-market, where may be obtained all the periodical pamphlets of the day.

*** Stationary supplied.

Book-binding in all its branches.

No. XII.—MONDAY, JANUARY 17, 1820.

To the Editor of the Winter Chronicle.

Sir,

It is not to be wondered at, that our having observed, on Wednesday last, the greatest degree of natural cold ever before recorded,* should have excited a considerable interest in the minds of your correspondents; for, independently of its being an interesting fact in the history of our voyage, it seems to have served the useful purpose of relieving us from that dull monotony, with which, for some weeks past, one day has succeeded another. Nor can any thing be more natural, and I may justly add, more praiseworthy, than the eagerness with which it has been debated at our tables, whether the thermometer stood at 50 1-2, or 50 3-4, that is, whether we beat the rest of the world by half, or by three quarters of a degree! I have even heard it asserted by one gentleman, who seems determined to hand our names down to posterity with all the honour which extreme heat can confer, that the thermometer actually and fairly, and without any lodging, or winking of an eye, stood at — 51 for upwards of half an hour! In order to decide the matter, I beg to make your readers acquainted with the result of some very careful and minute observations made by myself on the only two thermometers used on that eventful day. They were made with one of Dolland's eight feet achromatic telescopes, of great magnifying power, with a micrometer-scale applied to it by myself in a very ingenious manner, by which I found thermometer. No. 1 to intimate — 50°.645, and No. 2 — 50°.845. The mean of these, viz., 50°.730 say, I think, be fairly stated as the actual degree of cold to be registered. I trust, Sir, that the care with which these observations were conducted, the excellence of the instruments employed, and my well-known skill in these matters, will be sufficient to set this most interesting and important question at rest for ever; and that your readers will be satisfied that they have as yet *out-shivered* the rest of the habitable globe only by 730 thousandth parts of a single degree of Fahrenheit's scale.

I am, Mr. Editor,

Your modest, humble Servant,

SIMON SET-NIGHT.

* Fifty degrees and a half below Zero; this, however, is not the greatest degree of natural cold on record. —87 is said to have been observed by Mr. Von Ettelein, at Vytegra, in the Russian dominions, on the 5th of January 1780.—Ed.

P. S. Being desirous to add all in my power to our frigorific fame, it is my intention to renew my observations whenever the thermometer again falls below par, and I doubt not I shall be able, by means of some improvements now in hand, to screw out another quarter of a degree of cold, for the benefit of our meteorological journals.

Since writing the above, I have re-examined my instruments, and think I have discovered an index-error of two thousandth parts nearly. I cannot refuse myself the gratification of assuring your readers that this error is additive, and therefore all in our favour.

Before we give publicity to the subsequent letters, occasioned by an article which we inserted in our last Number bearing the signature of N. C., we beg to offer a few remarks to the consideration of our correspondents and of our readers, but especially of the former.

From the commencement of our undertaking we have been aware of the delicate ground on which we suffered ourselves to be placed, in admitting articles containing personal allusions, however inoffensive. We were induced, however, to take upon ourselves this responsibility, requiring a more than ordinary caution, by the following considerations; first, the difficulty which our Correspondents represented, of finding other subjects productive of equal amusement, with which to fill our columns;—second, from our experience of the care so assiduously maintained on the one side, to keep strictly within the bounds of playful and harmless raillery, and of the thorough good-humour with which it was met on the other—third, from witnessing the entertainment which our readers received from these communications; and, finally, perhaps, from feeling that we had it in our power to put a period to them, whenever they should approach the limits which had been hitherto respected. We were not, indeed, without a hope, that in the course of time, such subjects would give place to others of more intrinsic merit, and useful as well as entertaining. This consideration augmented the gratification with which we received the excellent letter which forms the greater part of our tenth Number; and we are happy in believing, that were this letter viewed in no other light than as an experiment, to ascertain how far matters of useful, and even of serious, tendency, would be appreciated by the readers of the *Winter Chronicle* at their just value, the result was most highly satisfactory and encouraging.

We should have preferred awaiting the ordinary progress of this change in the subjects chosen by our contributors, without endeavouring to hasten it by any remarks of our own, had we not been constrained to the present notice by the letter of N. C. above-mentioned; not merely in consequence of his advice, for which we return him our acknowledgments, but because he has himself indulged, even beyond his predecessors, in the practice which it was his especial object to caution us against.

We have availed ourselves of the occasion, to express thus much of our sentiments, persuaded that our correspondents will ever remember with ourselves, that it is of far more importance to avoid giving pain, than to amuse; and that self-love will frequently point a shaft, which is designed to be, and is in itself, entirely harmless.

To the Editor of the Winter Chronicle.

MR. BUTTON—I have ever considered cheerfulness as a duty we owe to society; and regarding your papers as a means of promoting good humour among us, I have always felt disposed to receive entertainment from the lively sallies of wit which have occasionally filled its columns, notwithstanding they have sometimes approached that "climax of decided personality," which N. C. complains of, and towards which he certainly advances some few steps beyond any of his competitors.

Nor should I now, Mr. Editor, feel any disposition to complain of the liberty taken with my person, had your Correspondent clothed the words, which he has thought proper to put into my mouth, in good honest English dress; but when, on Monday morning last, I heard read from your columns, a letter, purporting to come from my residence, No. 1, Bell-lane, I own that I felt a strong desire to detect the author. After the butchery that had been committed, I had no hopes of seeing the strayed *calves*, but I thought it possible a mangled limb might be detected; and on looking minutely around the table, I am sure I espied a solitary head served up without the usual garniture of brains: but this was not sufficient evidence, and I had recourse to a second reading of the letter; but the difficulty of comprehending it gave me little hopes of success. I fancied, however, that in the writer's extreme fondness for the "picturesque," and his determination to have calves in the front of his premises, instead of the usual ornaments of Mercury's, Hercules's, &c. &c., I could discover a strong smell of the citizen; and I was the more inclined to this opinion, when I found the quotation of "so kind, so polite," &c.; because this is well known to be the language of the city only, and used by the fair admirers of the Major Sturgeons of the day.

But all this, Mr. Editor, amounts only to suspicion; and as I am fond of plain-dealing, I resolved to request you to give publicity to my disavowal of the letter written in

my name, and to my desire that the gentleman, whoever he may be, will not again choose me for the father of his wit.

I am, Mr. Editor,
Your humble Servant,
JOSEPHUS NOR-PAR-OY.

To the Editor of the Winter Chronicle.

SIR—I remember having once read, in *Gulliver's Travels*, of a machine, the motion of which formed letters into words, and words into sentences; and it is to a similar mechanical source that I ascribe the letter of N. C. in your last number.

It appears, however, to be the effort of a novice in the management of the book-making apparatus; for had the instrument usually produced such effects, not even the sages of Laputa had tolerated its use. I would advise your Correspondent to try another turn, and if this fails another yet; but should he still find himself unsuccessful, he may try what it will avail to write the sentences produced in two columns, when, perhaps, the cross-readings may be a nearer approximation to sense. Beginners are ever in a hurry for the completion of their scheme, and I think it probable such a feeling may have induced the artist, instead of waiting for the production of syllables from their elements, (letters,) to throw in ready-made words of so hard a nature, as to cause the injury of the mechanism. But I may be wrong in my conclusion; and, therefore, confessing my own total inability to discover the secret, request that you will inform me what meaning, if there be any at all, attaches to the paper in question.

I remain, Sir,
Your constant reader,
JOHN SCRIBBLE-BRAIN.

To the Editor of the Winter Chronicle

MR. EDITOR—The perusal of an article in your last week's Number, has strangely puzzled me: that much labour had been expended in its composition was sufficiently obvious; but after repeated readings, or attempts to read it through, I had well nigh despaired of discovering the object of so much pains; when a surmise suggested itself to me, which, amongst the many conjectures which I have heard in the course of the week, is the only one that supplies any satisfactory method of accounting for it.

It is well known, Mr. Editor, that the Non-Contributors to your columns, anxious to prove that inability has not kept them silent, have been of late making a strong canvass to establish an opposition paper. Now, as in all warfare, stratagems are resorted to, may it not be as important to weaken an enemy's position as to strengthen one's own? Consider then this extraordinary letter, as the joint production of the junto of opposition, written with the insidious design of raising a laugh at the expense of the paper which should insert it; wearing the semblance of grievance and complaint, to secure a reception which it might not otherwise have found; intended, moreover, perhaps, as a subject for the first essay of opposition-criticism on the 1st of April; and it cannot fail to strike you as so well adapted for the purpose, as to give considerable probability to my surmise.

It may then be deemed a fair sample of the talent and ingenuity, perverted, perhaps, in this one instance, with which you will have to contend; exerted here most successfully in producing a laboured composition which shall appear at first sight perfectly *natural*.

Should the master-hand that directs this knot of oppositionists possess, in an equal degree, the skill of producing the reverse effect to the present; should he, in other words, be able to extract a meaning, and remodel in an intelligible form, such a heterogeneous composition as the letter of N. C., I fear his success against you will be inevitable.

My purpose, Mr. Editor, has been to put you on your guard against attempts of this kind in future; perhaps, also, in ascribing the letter of N. C. to the quarter I have pointed out, you may partake of the advantage which I have found, in being able to join heartily in the frequent laughs which it has occasioned, unembarrassed by the fear that the mirth of some one unfortunate wight of the laughers around me was assumed, to shield him from a quiz which he had brought on himself.

I am, Mr. Editor,
Your humble Servant,
SHELL-RAT SMOKE'EM.

OBITUARY.

On Monday, the 9th instant, between the hours of six and eight in the morning, died, in the prime of life, John Gull,* a youth of

* One of a pair of glaucous gulls, which had been taken from a nest on one of the North Georgian Islands in the summer, and brought up on board; when full grown they shewed no disposition to quit the ship.

very promising talents, and extraordinary endowments. He was descended from an ancient and respectable family in the north, and was on his travels to see the world, accompanied by his twin-sister, when he was suddenly snatched away, leaving her to deplore his irreparable loss. It is supposed that had he lived to reach England, he would have obtained one of the first situations vacant in the British Museum.

ADVERTISEMENTS.

TWO GUINEAS REWARD.

LOST, within the last month, a LINDLEY MURRAY'S GRAMMAR and BROWN'S FOLIO DICTIONARY. The owner having much occasion for them, and labouring under serious inconveniences from their loss, is induced to offer the above reward to any person or persons, who may have found, and will return the same to his residence, Rudder-Head-House, near After-Hold, within the ensuing week.

Early in May will be published, in One Volume Octavo, neatly bound in Calf,

CLAVIS CHRONICLANIA;

OR,

A Key to the Winter Chronicle.

Containing a full and correct account of the Author of each article in that paper, with fac-similes of several of the head-writings.

BY PETER PRY-ABOUT.

This Work is also designed to contain criticisms on many of the learned communications, both in prose and verse, which are found in the columns of the Gazette, with copious annotations, elucidations, and illustrations, of several obscure, and apparently unintelligible, passages. The author has spared neither time nor labour to merit the public patronage and encouragement; and will feel extremely obliged by any communications which may assist in rendering his work more complete. He will be particularly thankful for all hints which may tend to elucidate any part of N. C.'s letter, in the Eleventh number of the Chronicle, as the author freely confesses himself at a loss either to discover the writer, to unravel the mysterious intricacies of his plot, or even in some parts to trace the language to that of any known nation, in ancient or modern times.

No. XIII.—MONDAY, JANUARY 20, 1820.

To the Editor of the Winter Chronicle.

Mr. Editor—I will not endeavour to conceal from you or your readers, the mortification I felt at hearing your last week's paper read at the breakfast table on Monday morning. You must indeed confess, that a paper almost exclusively devoted to lampoons upon one unfortunate wight, was sufficient to appal an author much more accustomed than myself to the free and unrestrained attacks of public criticism. But, as soon as the roar of merriment, which the contents of your columns had raised at my expense, had subsided, and I had leisure only to reflect on what had passed, I felt convinced that however severe a roasting your correspondents had thought proper to give me, I had certainly brought it upon my own shoulders, and that any attack which might be made on my letter was only a return in kind, of which I had no right to complain. It has always been my wish to contribute my mite to the support of your paper, because I consider it the duty of every member of a community to do his best to promote the public welfare. And, that your paper tends to promote that object, no sensible man will, of course, doubt. But something or other, Mr. Editor, has always come in the way, to prevent my putting my intention in execution, till Old Nick in an evil hour, persuaded me to drop into your box the letter of the unfortunate N. C., which letter, as all your readers know, might as well, to use my own expression, have been "kept in my ink-stand." Having heard it hinted, however, by several persons whose good taste and judgment I highly respect, that the subject of my letter and not its style was the real occasion of the general attack made upon it, I am induced to flatter myself that it was not quite so badly written as some of your witty and facetious friends pretended; and, I have even some hopes that by giving my compositions another turn in the machine, as recommended by John Slenderbrain, I may perhaps produce something more worthy a place in one of your future numbers. Be this as it may, I have derived great satisfaction from the perfect good humour with which every shaft has been pointed against my first literary effort, and I beg to assure you, that no other feeling exists on my part towards the individual who has justly taxed me with "choosing him for the father of my wit," or towards any of those who, in espousing the cause of my friend Josephus

Not-far-off, have handled poor N. C. thus severely.

Before I conclude my letter, I must notice the mistake into which the Non-contributors to your paper have fallen, in supposing my initials to have a reference to them, of all people under the sun! a mistake which has subjected me for this week past to a torrent of the most affectionate sympathy from some members of this now slender tribe. Now, Sir, I do think it rather hard, that I cannot be allowed to select any two letters from the alphabet for my anonymous signature, without having a little word tacked on to the first, and a confounded long one to the second, by any of those tender, sympathetic friends of mine who choose to try this method of enlisting me under their standard! As you are a military man, Mr. Editor, you must surely be aware that this is a most unwarrantable manner of making a man *take the shilling*.

As I am anxious to make known these my candid and undisguised sentiments without delay, I beg you will insert them, if you have room, in your next week's paper; both as a proof that I can take a joke as well as give one, and, as an earnest of the sincerity with which I remain, Mr. Editor,

Your friend and well-wisher,
N. C., *i. e.*, No Cheat.

To the Editor of the Winter Chronicle.

Mr. Editor—I was agreeably surprised on reading in your last Number, the candid manner in which you suggested to your correspondents, the subjects you would prefer for the pages of the Winter Chronicle; I say, *agreeably surprised*, because I had been confidently assured your sentiments were widely different, and that "men of scientific knowledge were withheld from writing, because it was understood that nothing but the trifling nonsense that had lately appeared would be acceptable to the editor."

As I have a great regard for your paper, Mr. Editor, you will readily believe the satisfaction I felt on discovering the whole of this to be without foundation, and this satisfaction was considerably increased by the hope that another piece of scandal which had reached my ears might be equally untrue. This is no less a charge than that the original communications of your correspondents are altered, at the caprice, not of yourself indeed, but of those employed under your direction! When I first heard this, Mr. Editor, I could not help exclaiming it was impossible; but my informant assured me it was true. "Nay," says he, "the Editor has himself declared that he has no longer any control over the paper, and that his devils, in spite of all he can say, take upon themselves to alter the articles in such a manner, that when he again sees them in his columns, he is scarcely able to recognize them."

Now, Mr. Editor, if this be true, I have done; your paper must fall to the ground; and if it be not true, it is imperative upon you to contradict it, and a "word to the wise" is sufficient, I shall only add, that I am

Your sincere well-wisher,
Veritas.

We have not been able wholly to make up our minds whether we should consider the letter of "Veritas" as a squib; or, in a more serious light, and according to its ostensible purport. Were we to judge by the contents alone, we should incline to the first opinion; and as such should unhesitatingly deem it worthy of insertion; but its style and signature wear the appearance at least of one who is no jester.

As we are always ready to give a reasonable explanation to those who ask it in a reasonable manner, we purpose a reply; and we devote the necessary space with the less reluctance, because we have not often intruded ourselves on the attention of our readers, preferring at all times that they should be amused by our correspondents rather than by ourselves.

We notice, first, Veritas's principal alarm, that "original communications are altered at the caprice, not of the Editor indeed, but of those under his direction." Veritas professes to disbelieve "this piece of scandal," as he terms it; we shall, nevertheless, consider him in our reply as the person who made the observation, leaving it to the individual who really did so, if such one there was, to substitute his own name for that of Veritas, and he will find his answer.

Veritas must either be a contributor or a non-contributor; if the first, then has he not dealt fairly with us, since truth should have obliged him to acknowledge, that whatever others might say they had experienced, his papers had never been so improperly treated; if, on the contrary, the objector be a non-contributor; if, when others are employing their time, and using their best exertions for the public amusement, he has withheld, under the plea of inability or any other which he may wish to substitute in preference, the attempt to assist in promoting a public good, we should conceive that the matter of his objection is no concern of his; that even if it had a foundation, it would be wholly between the writers and the Editor; that those who do not write, certainly can have no title to find fault.

But a moment's thought might have satisfied Veritas, that if original communications had been so abused, we should have heard long since an outcry from the writers themselves. No person would see his composition altered without appealing to the

Editor, who well knows, that if redress were refused, he would soon find that individual case, (and not the [illegible] surmise that such things may be) the subject of general remark.

The Editor pays but a small portion of the acknowledgments due from the public to the gentlemen, facetiously termed by Veritas the "Editor's Devils," who have so kindly devoted a large portion of their weekly time to the task of transcribing the paper for their companions' perusal, when he takes the occasion to remark, that such is their habitual accuracy, that scarcely a single instance has come to his knowledge of even an accidental mistake having occurred in copying from the original documents; and these are sometimes not a little difficult to decipher. Verbal alterations are occasionally made by the Editor himself, though very sparingly; for, he considers himself in no way responsible for the style, any more than for the arguments, sentiments, or consistency of the articles which pass through his hands, beyond his original engagement, to insert nothing which he thinks will give offence. Except such verbal alterations, none have been made, but with the knowledge and consent of the contributors themselves; and for such and for every alteration, whether accidental or otherwise, the Editor has been always aware of his responsibility to the authors, but to them alone; and as he has been careful heretofore, so he will continue to maintain his responsibility, and to be able to return an answer whenever he may see it expedient to do so.

We proceed to notice the other matter which Veritas has heard alleged against us, viz. "that men of scientific knowledge are withheld from writing, because it has been understood that nothing but the trifling nonsense which had lately appeared would be acceptable to the Editor." Veritas must pardon us if we hesitate to consider this otherwise than as a jest; as such, some one may have said it, but surely no one in earnest; for a moment's reflection would have reminded him, that our prospectus invited communications from writers of various descriptions, the *philosopher* amongst others; and that, in our first number we took occasion to make known expressly, our desire to promote objects of scientific inquiry generally; we have also subsequently inserted letters at different times, requesting information on particular points of science; it is true these letters are unanswered, but we have not heard that any complaint has been made of answers having been sent, and not admitted. We can, therefore very confidently affirm, that if "men of scientific knowledge" have been indeed "withheld from writing," alas! alas! some other cause must be sought to account for this backwardness on the part of these scientific gentlemen, than the fear lest their contributions should not be acceptable to the Editor. The fact is obviously on the other side, but we scarcely suppose any person could seriously commit himself in so gross an error as that which the words quoted by Veritas convey.

But we would address a few words to any person who is disposed to cavil at the *Winter Chronicle*, on the score of deficiency; who finds fault because such and such subjects do not occupy so much of its columns as he thinks they might with advantage. We would ask such a person, whether he has endeavoured to remedy the fault by writing an article himself on such subjects; and whether it has been refused admittance? If not we would ask him, does he know that any other person has tried and been unsuccessful? If he cannot answer these questions in the affirmative, he is evidently without ground of complaint against the Editor, or the paper; and, if he is still disposed to censure, we recommend him to count up the number of officers in both ships, when he will know precisely how much of his censure falls to his own share, as well as be able to distribute to his friends around him, the exact amount of their proportions.

THEATRICAL REPORT.

On Wednesday evening was performed the Comedy of *A Bold Stroke for a Wife*. It gave us [illegible] more sincere pleasure to perceive that the audience appeared to derive [illegible] performance more general amusement and delight than from any of the preceding representations. We are inclined of opinion that none of them have been kept up with more spirit and success throughout, than the present; and this will be considered as no mean praise by those who have been accustomed to private theatricals, and who are aware of the difficulty with which a five-act play is usually supported by amateur performers.

The thermometer in the air was at 29° below zero; but [illegible]. The thermometer inside in the [illegible] of the [illegible] that they know upon [illegible] which a [illegible] of [illegible] of much to [illegible] performers. [illegible] of [illegible] theatrical [illegible] express our hope [illegible] they may continue to [illegible] the same masterly manner which has hitherto ensured their success.

Theatre Royal, North Georgia.

On Wednesday, February 2, 1820, will be performed, for the second time this Season, the Farce of

MISS IN HER TEENS.

After which, the new Musical Entertainment of

THE NORTH-WEST PASSAGE;

OR,

THE VOYAGE FINISHED.

HYPERBOREAN BONNETS.

Miss Betsy Scraggles begs leave to solicit the patronage of her country-women, in favour of the above elegant and tasteful article, to the improvement of which she has exclusively devoted her time since the commencement of winter; and is now extremely happy in being enabled to offer to the ladies, in this season of carol and hilarity, this *sine qua non* of the millinery world.

Miss Scraggles also flatters herself with the approbation of her patriotic country-women, for breaking the trammels of Parisian fashions, so long and unworthily borne.

Specimens of the above incomparable!! may be viewed by the fashionable dashers of the west end, at her bazaar, No. 2, Capstan-square; and for the accommodation of the fair citizens, at the manufactory, No. 10, Cheese-market, Pump-lane, City-road.

For the Winter Chronicle.

Wild scenes of winter! what can ye disclose
To feast the sight or give the eye repose?
Can frozen grandeur, snows, or solid floods
Compete with Britain's fields, or waving woods?
Stern awe and horror ye may well inspire,
But not one pleasing thought, one fond desire.
No lover wand'ring thro' the leafy shade
In blissful converse with his charming maid,
Breathes to his ear the ardent vow of truth,
While she delighted hears the favour'd youth.
No warbling bird attunes the vocal lay,
If o'er you rugged hills we chance to stray;
No distant light proclaims the social dome,
No loved relations wait us at our home.
What pleasures then, from scenes so dear apart,
Have power with us to soothe the swelling heart?
Where shall we deem the source of happiness
When Nature wears no more her lovely dress?
While, exiled from society we roam
Where tempests roar and sparkling surges foam?

The mind, unaway'd by circumstance or time,
Contrasts still its bright sublime!
Not lavish Nature, or the charms of Art,
Contentment or repentance e'er impart,
If stings of horror wound the feeling breast,
By conscience unrelenting deep impress'd.
True happiness in virtue must be sought,
Exert'd at once, performing what we ought;
To others doing, what we would receive;
The grief too poignant seeking to relieve,
To heal the wound that sorrow's shaft has made
With point more anguish'd than the reeking blade.

Each passion's sway restraining from excess,
And making thus our daily errors less;
Led by His word, who made and still sustains
This pendant orb, and o'er Creation reigns.

Roll on, ye wintry hours! no real wo
Can all your stormy horrors yet bestow;
A transient gloom ye may awhile impose,
Like yonder cloud before the moon-beam rose;
But when the lamp of life shall feebly shine,
When youth's and manhood's fires alike decline:
And when the last loud trump shall bid us soar
To hear our doom, when "time shall be no more,"
The soul relying on the Saviour's power,
Shall stand undaunted in that awful hour.—
His will on earth perform'd—our God shall bless
And clothe the sinner with his righteousness!

C.

NOTICE TO CORRESPONDENTS.

The Editor wishes that a practice, which has prevailed of late, among some of his Correspondents, of personally delivering their contributions, may be discontinued. The box is always to be found on the Gun-room sky-light.

No. XIV.—MONDAY, JANUARY 31, 1820.

To the Editor of the Winter Chronicle.

Sir—I cannot refrain from expressing to you my feelings, on hearing the keen, yet good-humoured, raillery, with which, in your last Number, you handled the subjects contained in the letter of Verites. Methought every fresh sentence added fresh zest to the tea I was sipping, and I do not know when I have so much relished my bread and butter as on Monday morning last. You must know that I have been a constant, though perhaps unknown, admirer of your Paper, and have laboured through many dull lines in some of your columns, for the sake of the wit and ingenuity contained in others; and still more so for the general tendency of your plan. I have even scribbled hard to copy your Papers; and mean, when we get home, to have the King's arms nicely printed at the head of each; and if you will consent to sit for your picture, I have no objection to make you the frontispiece to the handsome little volume they will compose.

But your remarks upon Verites' letter I mean to have neatly bordered with gold leaf, and surmounted with a King Arms-case on one side, and a Congreve's rocket on the other; as emblems of the same thing of your military profession, that of the skill with which you can *fire a shot* when occasion requires.

Before the appearance of your last Number, Mr. Editor, you had been very long silent, or, at best, had but mumbled out, now and then, a formal demi-official remark or two, or a theatrical puff, at proper intervals, as to editorial duty bound; the consequence was, that some of your readers began to forget that you were not in the receipt of more than a thousand a-year by your labours! They apparently forgot, till you properly reminded them of it, that you cared not a straw whether they were pleased by the subjects chosen by your Correspondents or not; that you were one, among many other gentlemen, whose amusement you were endeavouring to promote, at the expense of a considerable portion of time and attention; which, as far as regarded yourself alone, might always be better employed; and that it was only just, that those who did not write should not be amused by those who did.

One thing, however, is evident, that the number of your Correspondents is weekly increasing; and that your paper never stood on more firm footing as at present. The M. C. S.—nat also, the very name is now almost extinct; and serves but to remind one of that beautiful and expressive line of the Arabian MSS., which may thus be paraphrased—"I looked into the Editor's box, and cried 'the Non-Contributors, where are they?' and Echo answered—'Where are they?'"

I am, Mr. Editor,
Your constant reader,
Peter Plainway.

To the Editor of the Winter Chronicle.

Mr. Editor.—You made a fine palaver in your last paper about the accuracy of your devils: but this is to inform you that, even in my own communications, which are not numerous, I have discovered no less than seven *errata*, consisting of three dashes altogether overlooked, one comma and two semicolons omitted; and once you and your devils with a plague to you, made me come to a *full stop* when I had no such meaning. You must know very well that there is often more latent sense concealed under a single mysterious dash,—or a well-applied note of admiration! than in all the rest of a letter put together; and, as an instance of the serious mistakes which have occurred for want of attention to correct punctuation, permit me to relate the following story: The day after a sailor went to sea, his wife called upon the parson, to desire the prayers of the parish for his safety; the clergyman consented, and wrote his memorandum accordingly as follows: "A man going to sea, his wife desires the prayers of the congregation:" but having unfortunately put the comma in the wrong place, he read it from the pulpit thus: "A man going to see his wife, desires the prayers of the congregation."

Now, Sir, it is, I suppose, by some such accident as this, that one or two of my best productions have been made absolute nonsense, when read at the breakfast-table; and, as I am sure you must commiserate the case of an unfortunate author, who is obliged to hear his productions thus tattered and torn, I trust you will take this hint as it is intended, and make your devils mind their p's and q's in future.

I remain, Mr. Editor,
Your well-wisher,
Stephen Stop-well.

HOSTILITIES IN THE NORTH.

General Frost continues to prosecute the siege of Fort Nature with every demonstration of vigour. The approaches have been pushed to the *foot* of the Glacis and some *horn-works* which covered it destroyed, but the defences of the *body* of the place are yet so numerous, that it is considered impossible to effect a breach, and the unremitting vigilance of the garrison precludes all hope of starving them; but various sallies have taken place, and many of the defenders have *fallen*. On the other hand, masses of the general's troops are almost daily captured, and those who escape the steel, are given over to the *flames*.*

The *Army of Observation*,† has been a particular object of attack, but the only advantages which have as yet resulted, are the burning of one or two of the *bridges of communication*, whose defence had not been properly attended to. The general's opponents are, however, not idle, and his posts are incessantly annoyed by *red hot shot*.‡ Skirmishes happen every day, and frequent enterprises are attempted by the besiegers, but they are generally defeated with *loss*, although it is said that affairs have occurred, in which they have actually *surprised* their foes *in bed*.

Stratagem forms, apparently, a favourite part of the general's system, as a relation of his, with several adherents, were lately found concealed in the water-casks, and at present remain in "durance-vile."

On a recent occasion, this officer is reported to have displayed a *degree of coolness* never before witnessed, which had the effect of imparting *surprising firmness* to his troops. It is truly remarkable, that though these troops await the charge perfectly immoveable, they *drop off* with great celerity when exposed to a *lively fire*. The general's forces are expected to be entirely broken early in the summer, and preparations are making for a vigorous pursuit; of the entire success of which the most sanguine hopes are entertained.

Philo-Caloric.

A *Baker*§ belonging to one of his Majesty's ships, who has long groaned under the tyranny of the *Boatswain*,§ having by a hurt in his leg, become incapacitated for active duty, solicits the subscription of the charitable and humane, with a view to forming an establishment of his own; and being no *Pincher*,§ hopes to ensure the favour of a generous public, which will make him as happy as a *Prince*§.

* An allusion to the masses of snow which were melted in the coppers for a supply of water.

† The individuals engaged in celestial observations, whose noses were frequently frost-bitten by coming in contact with the telescopes.

‡ [illegible] that were employed to warm the officers' cabins.

§ Names of the dogs on board the Hecla.

ADVERTISEMENT.

NEW PUBLICATIONS.

"He woke from slumbers, soar'd aloft for fame,"
And "lisp'd in numbers, for the numbers came."

In the Press, and speedily will be published, handsomely printed in one neat pocket volume, 12mo. price 4s. 6d., half bound,

THE NORTHERN MALLEMUKE;*
or,
HYPERBOREAN SONGSTER.

Being a choice collection of the most approved songs that have been sung at the Theatre Royal, North Georgia, during the winter of 1819-20; to which many valuable additions will be made by the Editor, Carolus Compositor, who will be obliged by any communications that may be addressed to his Office, Hatchway House, Squeeze-lane, Brigg's Town.

Come, stir the fire, and make a cheerful blaze,
Let mirth and jokes and humour now abound;
Now banish care, and each dull thought erase,
Here wit for all may ready-made be found.

About the same time will be published, in one volume, printed and bound uniformly with the above,

THE NORTH GEORGIA NUT-CRACKER; or,
ESSENCE OF ARCTIC WIT.

Being a selection, containing upwards of five hundred puns, bon-mots, repartees, &c. &c. &c., never yet heard without the arctic circle. Any hints, or contributions, being original, will be thankfully received by Mons. Le Savant, at the Winter Chronicle Office, No. 4, Bomb-lane, Artillery ground, not far from Ordnance-square.

* The mallemuke, or fulmar petrel, a bird very common in the Polar Sea.

To the Editor of the Winter Chronicle.

Sir,—I send you the following lines, which were picked up the other evening, between the two ships. Although I cannot claim them as my own, I hope nevertheless to be permitted to sign myself

A Contributor.

Sick of the dulness of the times
I sat me down to write some rhymes;
T' avert the shaft ironical
Of writers in the Chronicle
'Gainst every sinning, luckless wight,
Who, tho' they can, yet will not write;
But, lack-a-day! my muse is dumb,
And "dinner" calls!—I come! I come!

Our correspondent, with whose contribution we have been much amused, will pardon the alteration of a single word which we have been compelled to make in the lines which he has picked up. We are quite aware how much we have sacrificed to a sense of propriety.

For the Winter Chronicle.

LINES SUGGESTED BY THE BRILLIANT AURORA, JAN. 15, 1820.

Now quiv'ring in the air, as shadows fly,
The northern lights adorn the azure sky.
Dimm'd by superior blaze, the stars retire,
And heav'n's vast concave gleams with sportive fire.
Soft blushing in the east the orange hue,
The crimson, purple, and ethereal blue,
Form a rich arch, by floating clouds upheld
High poised in air, with awful mystery swell'd;
From whose dark centre, with unceasing roll
Rich coruscations gild the glowing pole.
Their varied hues, slow waving o'er the bay,
Eclipse the splendour of the dawning day.
Streamers in quick succession o'er the sky
From the Arc's centre far diverging fly;
Pencils of rays, pure as the heaven's own light,
Dart rapid upward to the zenith's height.

Transfix'd with wonder on the frozen flood,
The blaze of grandeur fired my youthful blood;
Deep in the o'erwhelming maze of Nature's laws,
'Midst her mysterious gloom, I sought the cause;
But vain the search! inscrutable to man
Thy works have been, O God! since time began,
And still shall be.—Then let the thought expire;
As late the splendours of Aurora's fire
To dark oblivion sank, in wasting flame;
Like the dim shadows of departed fame!

J.

The Editor having presented a box of Bramah's pens to several gentlemen who have been called his "Devils," presumes that the following lines are designed as a return:

To the Editor of the Winter Chronicle.

I.

Dear Sir, your generosity
Display'd without pomposity,
Impels with new velocity
Of gratitude the strain.

II.

Such kindness in replenishing
The pens, your paper's finishing
Is ev'ry week diminishing,
Enhances my esteem.

III.

Philosopher's profundity,
Or sparkling wit's fecundity,
Or citizen's rotundity,
Whey cash may yet record.

IV.

North Georgian geology,
Improvements in conchology,
Or touches of dog-ology,
Or more upon my word.

V.

Nay, fond attempts poetical,
Opinions hypothetical,
And systems theoretical,
May by their nibs be traced.

VI.

I'm prouder in possessing them,
When on the paper pressing them,
Than was the goose when dressing them,
Whose buoyant wings they graced.

VII.

Mr. Editor, adieu!
Believe me very true
And faithfully your friend,
Until your pens shall end;
And now of rhyme
Enough this time,—
At wit's nibbler,
I am A Scribbler.

It has given us great pleasure to perceive a considerable increase in the number of our correspondents during the last week. To all of these our acknowledgments are due, but particularly to the author of the "Lines suggested by the Aurora Borealis." This production we do not hesitate to pronounce at once extremely descriptive and highly poetical; we congratulate our readers on such an acquisition to our Poet's Corner.

No. XV.—MONDAY, FEBRUARY 7, 1820.

To the Editor of the Winter Chronicle.

Mr. Editor,—The promptness with which the Committee of Management attended to the suggestions contained in my last letter, touching our theatrical amusements, afforded me much gratification and pleasure, and has produced a full conviction on my mind that they are actuated by no other motive than a sincere desire to do their best for the public amusement. Having, in some degree, staked my credit on the success which should attend the reproduction of some of the former pieces, you may readily suppose I took my station among the audience at our theatre, on Wednesday evening last, with no little share of anxiety for the result; and you will as readily enter into the lively and pleasurable sensations which arose on seeing my most sanguine expectations exceeded. The generality of our audiences, Mr. Editor, are not blessed with very quick comprehensions, or clear understandings; and many of the most amusing speeches in a play pass unnoticed on a first representation: the general plot, however, impresses itself on their minds, and prepares them to enter more fully into the spirit of the piece on a second performance, when nearly all the sly jokes, that before escaped their notice, burst upon them, and the entertainment afforded is consequently much greater than before. I was also much pleased, Mr. Editor, in remarking that the characters, without a single exception, were supported with much greater animation than before, and that the whole piece was conducted with more propriety and spirit than any former representation on our stage.

The gentlemen were evidently actuated by one common feeling, the desire to afford amusement, and in this they succeeded. The conviction that such were their motives, caused me to blush for my own want of exertion, and made me resolve that, in the event of our being called upon to beguile the dull hours of another winter in these regions, I would be amongst the first, in endeavouring to promote so laudable a design; and, that after this season, Mr. Editor, I would no longer remain

A Looker-on.

To the Editor of the Winter Chronicle.

Mr. Editor.—After a very short absence, on Monday morning last I met with one of

my younger children; but to my surprise and grief, its features were so much altered and mutilated, (in consequence of unskilful treatment,) by the small-pox, or some other dreadful malady, that I could scarcely recognise the poor little innocent. My feelings were so shocked by the appalling sight, that it was some time before I regained my usual serenity.

On recovering a little from my confusion, I determined on laying my case before your readers, through the medium of your paper, that they might adopt proper measures for guarding against a similar misfortune.

Don't you think, Mr. Editor, there is a defect in our legislature, and there might, and ought to be, some law enacted for punishing the miscreants, who, under pretence of mending the constitutions of their patients, torture and mangle them to death?

I am, Sir,
Your most obedient servant,
ANNE ANTY-SCALP.

Had our fair correspondent omitted her signature, and concealed her sex, we might have been so much misled as to suppose her letter alluded to an alteration which we felt ourselves compelled to make in the lines inserted in our last paper, and which were sent to us as having been found between the two ships.

But as the alteration was then acknowledged, and as the result of necessity, not as a supposed improvement; as it was, in fact, the correction of a slip of such a nature, that we are persuaded no female pen would have made, we are driven from this interpretation; however much we might desire to avoid the alternative, of being wholly at a loss to discover the lady's meaning; perhaps our readers may be more successful, and as we have already had experience of their ingenuity in solving enigmas, we solicit their assistance.

THEATRICAL REPORT.

We feel, if it be possible, even more satisfaction in noticing the effect which the second representation of *Adine in her Teens* has produced, than when we had the pleasure of congratulating our readers on its success, as the opening piece of our Theatre.

If we were (then of opinion that it was desirable to establish such sources of amusement, experience of their beneficial tendency has since far more fully convinced us how important it is that they should be continued. We were early apprised by the manager that his stock of plays was very limited, and when we saw the indifferent piece of *Ben Tom* given out for representation, it was too evident that but little choice remained; we viewed, therefore, the repetition of a piece already acted as an experiment, on the success of which the continuance of our Theatrical Entertainments essentially depended. As such we could not but feel anxious during the performance, and although we were amongst those who anticipated that several plays would gain, rather than lose, by repetition (chiefly for reasons which are assigned by our correspondent, "A Looker-on,") we were highly pleased to find that the interest of the audience exceeded rather than fell short of our expectations. Of the attractions and fascinations of novelty none can be unaware; and did we possess the means of bringing out a succession of new and suitable pieces, it is probable that there would be no question as to the expediency of doing so; and that the additional trouble that they would occasion, would be but little regarded by the gentlemen who have so cheerfully and diligently exerted themselves to lighten the tediousness of our winter. Repetition might then (if it ever took place) have been confined to plays which had given a more than ordinary pleasure on their first performance.

But if we have been rightly informed that the choice of the managing committee has been divided between the measure which they ultimately adopted, and the desire to undertake one of the three remaining plays, *The Beaux Stratagem*, *The Suspicious Husband*, or *The World*,—that in their zeal to attempt whatever it might be possible to effect, they did actually for a time contemplate the performance of one of these plays, until experience of the absolute inadequacy of their means obliged them to relinquish it; if such be indeed the case, we do not hesitate to consider them entitled to the public thanks for adhering to the principle of novelty as long as it could well be maintained. We express this opinion in the perfect recollection that the resources of the theatre have been found competent to do full justice to the only five-act play which has been attempted. But the *Gold Stroke for a Wife*, differs essentially from the three plays above-mentioned; it depends upon the skill and exertions of a single actor, and in this respect we are not deficient; whereas the other plays, independently of much difficulty in scenery and decorations, would require a greater number of competent actors, much above par, both for the male, as well as female parts, than our theatre can produce. We do not fear censure in making this avowal; we are persuaded that we do no more than justice to the majority, at least, of the performers, in believing that they do not overrate their own qualifications; that they are aware, not from choice, but from a sense of duty, a consideration, which would alone have induced many amongst them to place themselves in situations, in which it can be no possible discredit to them to say, Nature did not design them to excel, nor would imitation have ever prompted them to make the attempt.

Theatre Royal, North Georgia.

ON WEDNESDAY, FEBRUARY 16, 1820,

Will be repeated the much-admired Comedy of

THE LIAR;

With the usual accompaniments of SONGS between the Acts.

Fashionable Arrival in North Georgia.

On Thursday last, about noon, after an absence of three months, arrived at his seat, Snow Hill, in the Isle of Wales, the Earl of Sol, Viscount Lucern, well known as one of those distinguished luminaries which seem born to enlighten and adorn the world. His lordship has been on his travels in the south during the winter, accompanied by a numerous train of [illegible], who could not bear the thought of being separated for so long a period from their illustrious benefactor. Many of these are such fine looking in their appearance, and have such fawning manners, that into whatever country they go, they are generally made game of; and yet, in spite of this, they are always dear to those who know them.

It is said that his lordship's protracted absence has been severely felt in the neighbourhood, and that it has even [illegible] a considerable degree of coolness [illegible] and his tenants in the [illegible] well known that his [illegible] peculiar quality of [illegible] of heart and smiling [illegible] are fortunate enough [illegible] sphere of his genial [illegible] can be entertained of a [illegible]

His lordship is [illegible] metropolis, but [illegible] journey, not exceeding [illegible] day. His noble sister, Lady [illegible], has set out to meet him.

FASHIONABLE INTELLIGENCE.

We understand the Earl and Countess of Musk-ox, Lord and Lady Deer, with their families, are shortly expected from the continent. It is supposed they will not stay long in the metropolis, as they [illegible] the summer on their estates in the country. We also hear several other [illegible] to arrive early in the spring. [illegible] are the [illegible] Lord [illegible] Goose, [illegible] will soon be able to venture out.

We are concerned to state that the Prince has been suffering severely from the toothach, and that all the fine teeth which added so much to his expressive countenance are in a rapid state of decay.

The celebrated Mr. Fox, we are informed, has offered to dispose of the valuable chain and collar which he brought away with him on his recent escape from the enemy.

It is with infinite pain we announce the sad accident which befel Lady Georgiana de Loup, after her return the other night from Don Carlo's concert.* Her ladyship was just going to sit down to a light supper, when she placed her foot upon something which severely lacerated it. Doctor Nature was immediately called in, whose eminent skill is, we are happy to hear, likely soon to restore her ladyship to the fashionable world.

Great apprehensions are entertained for that amiable and distinguished nobleman Don Carlo, who has for some time absented himself from his disconsolate friends. His spirits were observed to decline very much ever since the affair mentioned in our last, and it is greatly feared that the malignant aspersions of his enemies have induced him to elope.

For the Winter Chronicle.

AN INVITATION TO THE FEATHERED RACE.

Come, ye northern fly-aways,
[illegible] the sun's returning rays;
[illegible] and [illegible] too,
[illegible] you do;
[illegible] and stormy [illegible]
[illegible] of young and [illegible]
[illegible] for the [illegible]
[illegible]!
[illegible]
[illegible] we eat!
[illegible]
Of the [illegible].†

* An allusion to a wolf which about this time was caught by the foot in a trap, but succeeded in getting away, although severely hurt.

† The glaucous gull, little inferior in size to an eagle.

Down whose throat, when wanting prey,
Hapless ducklings find their way;
Well I know, when nicely drest
You can please a city guest.
Come! for happy are their fates
Who are smoking on our plates,
Tomb'd your well-pick'd bones shall lie
Deep beneath your native sky,
And your royal skin we'll stuff,
These are glories great enough!
Next advance, ye stately geese,
How I long to break the peace,
And my appetite to pall
With your breast, legs, wings, and all!
Come, my wishes realise,
Feast my palate and my eyes.
Dull and formal owls, away,
You, as useless things, may stay:
Yet your skins I won't refuse,
Men of science to amuse.
Come! but only two or three,
That will surely plenty be!
All the rest of feather'd race,
Prone to flight or rapid chase,
'Midst the Arctic icy sea,
Come or stay—your will is free.
Boatswains who can't pipe to grog,
'Long with us shall never jog.
And those little squealing brats,
Tern, are only fit for bats;
Kittiwakes and ice-gulls too,
I'll no powder waste on you.
Go among the whalers' prey,
Full you're pleased—and so are they.
Puffins, ugly, useless things,
Ne'er among us ply your wings.
But, ye sav'ry land-birds, haste,
Tit-bits for a pamper'd taste!
Partridges, delicious food!
And snow-buntings, small, but good,
Dotterels, and all the lot
Which I've omitted or forgot;
Plume your wings, and seek once more
Northern Georgia's barren shore,
Now become the haunt of man,
And we'll shoot you—if we can.

QUINTILIAN QUERULOUS.

For the Winter Chronicle.

LINES ON THE RE-APPEARANCE OF THE SUN.

The splendid sun, with re-ascending ray,
Sheds o'er the northern world the flood of day,
Lost in the blazing radiance, sable night
Resigns her empire to the kindling light.
Serenely clear the heaven's blue concave glows,
And glitt'ring sunshine gilds the mountain snows.
Precursive of the general fire, a stream
Of reddish light shoots up its beauteous gleam,
The conscious skies the blushing tint extend,
Till with their azure dye its glories blend.

Such was the infant orb's primeval ray
That rose o'er fair Creation's early day;
Such was the beam that saw the deluge pour
O'er all the guilty world an ocean's roar;
And such shall be its blaze thro' lasting time,
Till o'er the earth consuming fires shall climb,
Till that Almighty Voice that bade it rise,
Shall blot its glory from the burning skies!

When day's returning light illumes the pole,
Life's crimson streams in swifter currents roll.
Nor man alone the cheerful joy partakes,
The shaggy bear his savage den forsakes;
The various beasts that haunt the piny wood—
The hardy people of the northern flood—
The sportive birds that skim along in air,
Or on the liquid surface seek their fare,
Return from milder climes, by instinct taught,
Where shelter from the wintry blast they sought;
All nature feels the life-inspiring ray,
The herbs revive—the ice dissolves away.
Its wonted spring the active mind regains,
No gloomy scene its energy restrains;

[illegible], as the renovated solar light
Impels the ling'ring shades to rapid flight,
More clearly shine the intellectual pow'rs,
To loftier thoughts the soul aspiring towers.

Man with the sun his upward course pursues
While vig'rous youth his daily force renews;
Like him, when wasting age those fires consume,
Declining, sinks to death's untravell'd gloom!
May we, like him, before the final scene,
Enlarge our lustre, splendid, yet serene;
And, as his glowing disc with soften'd light
Still paints the skies when sunk beneath our sight,
In bright remembrance long unfading shine,
By Sovereign Mercy saved, and Love Divine.

No. XVI.—MONDAY, FEBRUARY 14, 1820.

To the Editor of the Winter Chronicle.

Sir—I do not know whether you take cognizance of such matters as I am now to address you upon; but if you do, I hope you will endeavour to remedy the grievance I complain of. However improbable it may seem to you, in these times of [illegible] I like to read for an hour or two [illegible] and even to write a little [illegible] the daily repetition of "[illegible] and cloudy," and the [illegible] we have been "employed [illegible]."

Under these [illegible] great scarcity of light in our [illegible] this season, you will, I am certain, [illegible] my feelings of annoyance, at the [illegible] ble disturbances to which our tables are subject; I allude to the habits which some members of our community have acquired in earlier life, and which they continue to practise daily, to the interruption of the more industrious, and to the absolute prevention of all serious occupation. I have endeavoured to class these annoyances, or rather those who practise them, under separate heads, of which the first are the *Whistlers*, who, having a tolerable ear themselves, seem to forget that the rest of us have any ears at all, and are continually serenading us with "Molly, put the Kettle on," or the "Duke of York's March," with variations, to the utter discomfiture of every reader within hearing. Of the whistlers there are frequently more than one, and in that case the process is as follows: whistler the first (whom I shall call A,) commences a tune: whistler the second (B,) takes it up about the third or fourth bar, and accompanies him to the end of the stave, by which A has exhausted his wind, and stopt to replenish his lungs. In the meantime B continues, and just as you are flattering yourself with a hope that he also will soon be winded, and allow you to pursue your employments, a third whistler (C) at the other end of the table unexpectedly opens his pipes, and takes a spell at the bellows; soon after which A once more joins the concert with renewed vigour,—and so on *ad libitum*.

Second are the *Hummers*, who are closely allied to the first class, and are distinguished by employing the greater part of the day in humming songs, which they usually do out of tune, and always out of time. They are in general more sentimental than the whistlers in their selection of tunes, confining themselves to the Irish melodies, or some plaintive Scotch ditty. Of these they will hum you a detached bar or two occasionally, in the most pathetic strain imaginable, and are particularly fond of filling up in this manner all the little intervals of time, which are not easily disposed of in any other way, such as while the ink is drying on one side of the paper, or while they are mending their pens, or warming their fingers: perhaps, Mr. Editor, you can recommend some mode of proceeding, by which it shall necessarily fall out that all our pens want mending, and all our fingers warming, exactly at the same instant. We could then all have our hum at the same time, and no disturbance would result, as at present, to any individual of the party.

The third class are the *Drummers*, who, to borrow a well-known joke from Joe Miller, were certainly born to make a great noise in the world. They have, like the whistlers, a tolerable ear for music, and be-

cupy a great deal of their time in drumming most musically with both hands upon the table; they usually join the whistlers, to whom they may, indeed, be considered as an accompaniment. They have been lately practising a new mode of drumming, which is performed by placing the wrist upon the table, and then bringing the nails of each finger, beginning with the little one, in quick succession, one after the other, upon the wood, or what is considered more sonorous and musical, upon a hard-covered book, which they keep by them shut for the purpose. I beg leave strongly to recommend this mode, as infinitely more neat and gentleman-like than the other, which consists in merely thumping the table unmercifully with both hands, like a common drummer, and making the candlesticks and inkstands dance a horn-pipe. Perhaps these first three classes might be employed with advantage for a couple of hours daily, in whistling, humming, and drumming to the ships' companies, when they take exercise; and a convenient spot for practising their arts might be selected in the neighbourhood of the boat-house, or the green ravine.

Fourth in order are the *Bangers*, who never bring a book or a desk, or any thing else to the table, without banging it down with all their might and main, to the sad derangement of all weak nerves, and the production of many an unintentional pot-hook in their neighbour's writing. This practice would seem intended to announce the arrival of the said Bangers, as if they had exclaimed, "Behold, I say! I am actually going to write!" Such an event which, it must be confessed, is singular enough in itself, and of vital importance to us all, might, I should think, be announced with full as much effect, and with much less disturbance to others, by all the bangers being furnished with a conical cap and bells, such as is described to have been worn by Counsellor Puzzlewell on a certain occasion: the jingle of the bells would give ample notice of their approach, and save our table many a lusty thump, which even the strongest of them cannot stand without shaking.

The fifth class consists of the *Blowers*, so called from the frequency with which they blow their noses, when nature requires no such operation. By constant practice they have attained such perfection in that noisy art, that it is now really a public nuisance. It resembles the sound of a [illegible] cough, or a news-boy's horn, and being repeated at regular and mechanical intervals, completely distracts your attention. There is a custom on board some of our ships, of sending bugle-men to practise at the bowsprit end, that they may not disturb any body else. The same situation would be an eligible one for them, [illegible] and [illegible] nose-blowers, who might there be indulged in their propensity to pull their own noses, without annoying their neighbour's ears. Having already exceeded the limits of a letter, I am under the necessity of concluding, without having half finished my list, and shall, perhaps, resume the subject at some future time, should I see occasion to do so. In the meanwhile I remain, Mr. Editor,

Your obedient Servant,

Z.

BIRTHS.

On Sunday morning last, at her residence near Culinary Range, Bed-place square, the lady of Sir Thomas Mousewell, of a son and daughter. Surprising as it may appear, it is nevertheless an undoubted fact, that these infants were endowed with the power of walking immediately on their birth, while both were totally unable to see. We are concerned to state, that a fatal accident occurred in consequence, as the former having rambled to the entrance of the apartment, was so severely bruised by an attendant shutting the door hastily, that it expired the same evening. Lady M. and her daughter are doing well, and great hopes are indulged, that in a few days the latter will enjoy perfect sight.

DOMESTIC INTELLIGENCE, &c.

On Monday last, that well-known many-headed monster, the *Encea Borealis*, vulgarly called N. C., was caught in a trap, and firmly tied down with strong lashings. This animal is not described by Linnæus, nor by any other naturalist, and is now generally supposed to be peculiar to North Georgia. The attempts which, for at least fifteen weeks past, have been made to secure him, have, we are happy to find, at length succeeded, and the public may congratulate themselves on their deliverance from this monster, whose attacks at one time seemed to threaten serious injury to the community. The first accounts concerning him, state him to have had seven or eight heads, and as many tongues; some of these were very venomous, while others only snarled and growled, and were perfectly harmless.

The manner in which these heads, &c. have been gradually got rid of, is remarkable enough: it was accidentally discovered that a certain composition, with which it was customary to bait the traps every Monday morning, had the extraordinary effect of destroying animation, in a short time, in one or more of the heads; so that, by repeated doses of the same nature, they have nearly all dropped off, one by one, and the animal may now be considered perfectly harmless and inoffensive.

STANZAS

ON THE DEATH OF A FAVOURITE SETTER DOG.

I.

Farewel, poor Carlo! hapless dog, adieu!
We mourn thy fate unknown;* but fate too sure;
For fled is ev'ry hope that Fancy drew,
Nor could thy frame the piercing frost endure.

II.

A wildered wanderer in the midnight shade,
Sagacious dog, thou wert not wont to stray;
And long thy wish'd return, though still delay'd,
We vainly look'd for each revolving day.

III.

On these drear plains, exposed to ev'ry blast,
Thy bones shall whiten in the wintry wind:
For ah! thy generous confidence at last,
Betray'd thee friendless to the savage kind!

IV.

Lured 'mid the rabid wolf's ferocious train,
Thy guiltless blood distain'd the fleecy snow;
Indignant courage fired thy heart in vain,
Yet wert thou not in fight a feeble foe.

V.

Long shall thy mem'ry in each bosom dwell
That beats to Nature's warm emotions true;
Oft too for thee the rising sigh shall swell,
And fond regret thy timeless fate pursue.

VI.

For animation fired thy sparkling eye,
And gentle pleasure every look express'd,
When home [illegible] heard approaching nigh,
Inspired with joy thy almost reasoning breast.

VII.

Farewel, poor Carlo! tho' no tablet rise
The final memorial of thy fatal doom,
Thy faithful worth the generous mind will prize,
While Winter's gather'd snows adorn thy tomb!

For the Winter Chronicle.

HYPERBOREAN PRIVILEGE.

Young Cupid! fond of unity
Our Boreal community
Defy you with impunity;
Your arrows and your bow.

This day of [illegible]
And Valentine's festivity,
Displays [illegible]
Adding the northern snow.

* Poor Carlo continued his daily rambles with the she-wolf, until, at length, he went and returned no more. His fate was never ascertained; but there can be little doubt that he fell a victim in an encounter with the male, as [illegible], another of our dogs, who was decoyed away in the same manner a few days afterwards, returned to us after [illegible], in which it was evident he had hardly escaped with life.

Your daring [illegible]
Imparts a tremulosity,
And winds its sinuosity
Around each beating heart;

That beauty, smiling graciously
Altho' perhaps fallaciously,
But catching one incautiously,
Will make it sorely smart.

But no universality
Attends on this formality,
Without congeniality
Of sun-beams, groves, and bowers.

Here Sol obliquely glittering,
Prevents the bosom's twittering,
That pert young ladies tittering
Attribute to your powers.

Blest with inflexibility
To bright eyes and gentility,
We owe no liability
Of being hurt by you.

'Tis pity man so spirited
Should bear such ill unmerited,
And be so sadly ferretted
By passion strong and true,

Almost devoid of covering,
In southern climes stay hovering,
The cold would set you shivering,
So urchin boy, adieu!

For o'er our hearts you must your pow'r resign,
Till we returning bow at Beauty's shrine.

TO CORRESPONDENTS.

The communications from A. T. and Constantine Cataplasm have been received.

Peter Pastoral is too lofty for our comprehension.

The Lady who quarrels with her husband must excuse us if we decline interfering in a case so delicate.

Peter Query is under consideration.

The hint given by our friend M. will be attended to.

No. XVII.—MONDAY, FEBRUARY 21, 1820.

To the Editor of the Winter Chronicle.

Sir,

The melancholy event which happened on Friday on board the Hecla, I mean the non-cookery of our pies in proper time for dinner, has given rise to some reflections, which, as the matter concerns us all alike, may not be uninteresting to your readers.

It was truly distressing to see the long and wo-begone faces to which this unusual and unexpected occurrence gave rise. One member had just washed and rubbed his hands, and then declared that he was "quite ready," when it was announced on authority that could not be disputed, that the pies were not quite so ready; in short, that a whole hour at least must elapse before the said pies, or any substitute for them, could possibly be brought to table.

It often, I believe, happens that the half hour which precedes the announcement of dinner is an insipid one rather than otherwise; but how would it be possible to give an adequate idea of the horror of the whole hour, which preceded dinner on Friday last! Innumerable schemes were resorted to, to while away the tedious interval; the Hummers, Drummers, and Whistlers went to work in their respective branches of discord, and this for the first quarter of an hour seemed to succeed to admiration. Then the dog was plagued and the fire poked; and then the dog plagued again, but all in vain! Neither poking, nor plaguing, nor humming, nor drumming, were ever known to satisfy the cravings of hunger such as ours. At length an expedient was happily hit upon. "Tir'd Nature's sweet restorer, balmy sleep," as the poet has it, stept in to our relief, and hunger and thirst were in an instant forgotten.

I doubt whether history can produce another such instance as this of cheerful resignation, and heroic fortitude! Amidst all the hardships which we have been called upon to suffer, none, Mr. Editor, has equalled this. And how did our gallant comrades conduct themselves under this affliction? Let it ever be recorded to their immortal renown, that they patiently bowed down their heads under the stroke, and instead of murmurs and complaints, nothing but—snores were heard till dinner arrived.

Little do they think at home, Mr. Editor, what we have been, and are still, undergoing for our country's sake! Little do they think that we have only as much to eat as we can conveniently stuff into our maws, and that as one of your early correspondents remarks, we can only "snatch our ten hours' rest at night!" How would their heart sink within them, could they be told, that once in nine months we have been reduced to the heart-breaking alternative of going without our dinner, or of roughing it

upon half a pound of fresh meat, ditto bread, with all the little supplementary clatterus of cheese, brandy, lemon-juice and wine, with which his Majesty has been graciously pleased to supply us!

Snore on, ye adventurous youths, ye "marine worthies!" continue to display this magnanimous self-devotion, and you will not fail to meet a rich reward from a generous and grateful country!

I am, Sir,
Your most obedient Servant,
A [illegible].

To the Author of the Letter signed Z in last Week's Chronicle.

My dear Mr. Z—As you gave us to understand in the last Chronicle, that you intended to continue your account of the different annoyances to which our tables are exposed, I write to beg you will not forget the "Door-slammers," who have been for months past a daily and hourly inconvenience to

Your obedient Servant,
X.

To the Editor of the Winter Chronicle.

Sir—Being encouraged by the manner in which my last meteorological communication was received by you and your readers, I venture once more to intrude myself upon your columns, and trust I shall, on this occasion, receive credit for the same public-spirited intentions by which my former letter was dictated. My present purpose is somewhat similar, it being my desire to correct an error which has somehow or other crept into the heads of some members of our community, respecting the actual temperature of the atmosphere on the 15th of this month. My observations on this important subject were carried on with the same instruments, and the same care, as before; and I do assure your readers that 54 degrees and 964 thousandth parts below zero was all I could conscientiously screw out by hook or by crook. I hope, therefore, that those who have marked 57°, in their journals, will immediately cause so gross a mistake to be rectified, especially as my extensive reading on philosophical subjects has enabled me to ascertain, since I last addressed you, that a natural temperature of —57° has actually been before registered; so that unless the sticklers for our frigorific fame can manage to suggest some mode of escaping such eternal infamy, we must rest content under the dreadful certainty of having been outshivered by others, the enormous quantity of two degrees and forty-six thousandth parts. I am sorry that I cannot assist these gentlemen in their laudable designs, and remain as before,

Your obedient Servant,
Simon Set-right.

THEATRICAL REPORT.

On Wednesday last was performed for the second time this season, the comedy of *The Liar*.

The extreme coldness of the night, and the impossibility of keeping the theatre at a comfortable temperature, deprived the audience of much of the gratification which they have hitherto received from our theatrical amusements, and which the unremitted exertions of the performers would otherwise have ensured.

Theatre Royal, North Georgia.

On Wednesday, March 1, 1820, will be repeated the much admired Farce of

THE CITIZEN.

After which

THE MAYOR OF GARRATT.

The Doors will open at Half past Six, and the Performance commence precisely at Seven o'clock.

For the Winter Chronicle.

I sat me down with firm intent
To write for the Gazette,
But soon the cold my fingers bent,
And made me fume and fret.

My [illegible]
Put my night-cap on my head,
Of coffee took another cup,
And [illegible].

Then with the [illegible]
Which [illegible]

Put on some coals to make it higher,
And drew my chair in nearer.

My fingers still were cold as lead,
My toes with pain were smarting,
My teeth kept chattering in my head,
And life seem'd fast departing.

When, notwithstanding this sad plight,
My subject I had chosen,
Produced my paper fair and white,
Behold! my ink was frozen!

Adzooks, quoth I, this no'er will do,
The matter's very clear,
One cannot write with any gout,
In such an atmosphere.

I therefore beg, good Mr. B.,
You will excuse a letter,
And publish my apology
For want of something better.

Q.

To the Editor of the Winter Chronicle.

Sir, having met
In your Gazette
Some lines that plainly shew,
That all should write
And send their mite,
No matter sense or no.

I muster'd strength,
And strove at length
To jingle words together,
But 'twas no joke
For my frail folk
To write in such cold weather.

So thought my Muse,
Who did not choose
T'impart ideas clear,
But did uphold
That 'twas too cold
For her to carry here.

In truth I said,
My gentle maid
The case is clear you see,
If I don't write,
And that this night,
They'll clear me with N. C.

Why, that's no matter,
Hold your chatter,
I'm not now in the vein:
When it grows mild
I'll help you, child,
Till then I bid adieu.

MARMADUKE MAKEMEND.

No. XVIII.—MONDAY, FEBRUARY 28, 1820.

To the Editor of the Winter Chronicle.

Sir,—In performance of the promise made to you and your readers in your last Number but one, I continue my account of the several annoyances by which our tables have been long visited; and I beg at the same time to offer you my acknowledgments for the part you have taken towards their eradication, by inserting a letter of such unconscionable length in my last, in your Gazette. The class standing next upon my list is that of the Snorers, who are upon the whole, so inoffensive a set, that it almost rose to my heart to hold them up to public notice. There is, moreover, some danger, lest by doing any thing to break them of snoring, they might also be prevented from sleeping; and this would be an irreparable injury to our community, because, whilst in this state, they are certainly much less annoyances to us than when wide awake, for you must know, Mr. Editor, that these same snorers, as soon as they open their eyes, are generally converted, as if by magic, into hummers or drummers, or some other of the noisy classes I have before described. Rather, therefore, than be the means of robbing our tables of one hour's quiet during the day, by finding fault with so laudable a practice as that of sleeping, I shall dismiss this part of the subject with expressing a hope that some means may be suggested of teaching these gentlemen to sleep without snoring. Perhaps it might be of some service to have attached to each of them a flapper, such as we are told by Gulliver, the great people in Laputa have. I dare say the marines could easily be trained to this: they should be instructed to give them a good smart box on the ear at every snore, and then to smooth them down, to re-compose them to sleep, taking particular care, which a few days' practice would enable them to do, to make them feel the blow pretty sharply, but by no means to run the risk of absolutely awakening them.

I now come to the Sniffers, who, by some means or other, have got out of their place

in my catalogue, as they ought to have followed the Blowers; because, like these, the offence they give is chiefly by the nose.

They are, however, in one essential point, the very reverse of the blowers; because, whereas these last are always using their pocket-handkerchiefs, the Sniffers never use any, but perform the same office more economically, more frequently, and I must in justice add, with less disturbance to others than those tremendous Conch-Blowers. The Sniffers have been observed to increase very much since the last cold weather set in, and there is, perhaps, some excuse for them; but I do hereby give notice that all Sniffing, after the 10th of March, must be considered absolutely inadmissible; and the Sniffers are hereby required, in the mean time, to provide themselves with a proper number of handkerchiefs, and to blow their noses like gentlemen, after that date, on pain of being posted for the non-performance of the same in the succeeding week's newspaper.

Next in order on my list I find the Slammers, or as my correspondent X. has denominated them, the Door-Slammers. These, Mr. Editor, are indeed as Mr. X. has expressed it, "a daily and hourly inconvenience." But alas! what chance can any effort of mine have of correcting this noisy practice, when even a civil request publicly made by the commander of the expedition to have mercy on his own door, and the adjoining bulk-heads, has not yet had any perceptible effect? It is not necessary for me to explain in what the art of the Slammers consists, for the word must at once convey to our minds, what our ears are so constantly in the habit of experiencing. But there are some circumstances attending the practice of this art, which my constant observation has made me acquainted with, and which your readers will, upon trial, find to be correct.

It may be relied on as an incontrovertible fact, that the force with which the Slammers shut the doors, is intended by them, as by the Rangers, to announce their arrival; for, without some such means, so important an event might possibly remain unnoticed, and for this they would never forgive themselves. Some of the more inveterate of this class, after they have slammed the door with becoming energy, on entering stand awhile to assure themselves that all hands are made aware of their coming; and then, and not till then, complacently take their seats. It has often been remarked, Mr. Editor, that little people are more consequential than those who are taller. Whether this be the case or not, I will not pretend to determine; but certain I am that, with very few exceptions, the great people of our community slam the doors the hardest, and the little-great people the hardest of all. Indeed so exactly proportional have I generally found the slam of the door to be to the size of the person, and according to the popular notion, to his consequence also, that I would be bound to guess a man's height within an inch or so, by the manner in which he shuts the door. Perhaps, if you knew my own size, you would allow that I have, in the following description, sacrificed all personal feeling to a sense of justice and truth. Your King-John's man, commonly said to measure four feet nothing, enters with a tremendous slam,—like Jove he carries his thunder about with him? A neat dapper little fellow of five feet three or four inches makes the bulkheads quake again, and what is even worse, by his ill-managed violence, causes the door to re-open, so that he stuns and freezes you at the same time. As we get to five feet six, and from that to five feet ten, the doors are shut more moderately; and a decent sized fellow, of near six feet or upwards, even of considerable consequence, may go in and out of an apartment and scarcely be heard. I know of one way, and only one, in which the Slammers can possibly be cured of their habit. I have heard of a dog having been broke of worrying a cat by muzzling him, and then letting pussey scratch his nose in security. My recipe for the Slammers is of the same kind. Let their heads be securely and closely tied to the most rattling door in either ship, then let two stout men, one on each side, be employed for an hour in opening and shutting the door, as often and as hard as they are able. If this dose, taken three times a day, for one week, does not cure the most inveterate case in the history of this disease, the Slammers may indeed be pronounced absolutely incorrigible.

I now come to the Growlers, a very teasing class, of whom I had a good deal to say, but I find I have been anticipated by a more satirical writer in your last gazette, who took occasion to descant on this subject, when, lamentable to relate! the pies on board the Hecla, were not cooked in proper time for dinner. As your correspondent "A Spectator," may have it in contemplation to resume this fertile subject at a future time, I shall very willingly leave it in his hands, and as I fancy you and your readers will begin to think I am again growing tedious, I shall reserve the remainder of my list to some other time; and I assure you I have yet a choice collection. By way of reporting progress on my last communication, I shall only at present add that one nose-blower has been reclaimed; but another is as bad as ever. I have heard two whistlers alter their tunes in the middle, and they may therefore be said to be half corrected in their habit.

The Rangers all laugh at my joke; but one of the principal of them does not put the cap on his own head, for which it was chiefly intended. No amendment is yet perceived in the Hummers or Drummers, and I therefore give notice to the said Hummers and

Drummers, that as they are unanimously declared to be the greatest pest, except the Slammers, which our tables have, they must either mend their manners, or expect to be handled more severely in some future communication,

From your obedient servant,
Z.

To the Editor of the Winter Chronicle.

Mr. Editor—As I was passing one of the cabins the other day, my ears were saluted by such an extraordinary medley of murmuring sounds, that I could not for the life of me, although averse to such practices, refrain from peeping in. If my wonder was before excited, how much greater was it upon finding the cabin, except its usual furniture and a *red hot shot*, perfectly empty.

After reflecting a few moments on this curious phenomenon, the enigma was at length solved by my recollecting to have read of some travellers whose voices froze during the winter, and on the return of milder weather formed a similar concert. Being now satisfied that the sounds were caused by the influence of the red-hot shot on the surrounding atmosphere, I entered the cabin, and enjoyed one of the most delightful half hours you can possibly imagine.

The words were uttered, if I may be allowed the expression, in a soft musical cadence, and being lengthened out very much by the gradual process of thawing, and occasionally interspersed with sighs and interjections, produced such wild and soothing harmony, that my senses were soon lulled into a most delicious torpor. The tunes, to be sure, were sometimes broken by harsh and dissonant notes, but for the most part their melody abundantly compensated for those trifling annoyances.

I wish it was in my power to give you an adequate idea of this aërial concert; but as it would be vain to attempt such a task, I shall content myself with subjoining a short specimen of the language, leaving the rest to your imagination.

Resplendent orb!—in shady groves—heigh ho!—bright progeny of Jove—nine times 6 is 54—The hero fired—fatal charms—Heavens vast concave—bound in firm ice the fettered stream—pshaw!—flour and suet for 491 days—Mr. Editor—

Soft was the lustre of her heavenly eye,
Like the mild splendour of an arctic sky—

Coals two chaldrons—alas! wo is me—candles—after—hold—Non—Contri—do—face." At the shot cooled, the words gradually lengthened, and became incoherent; then were only half expressed; and at length the sound finally ceasing, all was hushed in silence.

It has frequently been the subject of regret with me since, that from the want of talent, I lost so fine an opportunity of furnishing something for the last week's paper; it is, indeed, a pity some others of your correspondents were not present who, by exerting a little of their wonted ingenuity, might soon have collected materials enough for either poetry or prose, and rendered their apologies unnecessary, besides filling the half sheet which the disappointed community was deprived of by the frigidity of the weather.

However, should their wits fail them upon any future occasion, a glowing loggerhead placed in any of the cabins, which probably you can point out, will not fail of supplying abundant store of elegant, witty, and brilliant ideas.

I remain, Mr. Editor,
Your most obedient,
Peeping Tom.

For the Winter Chronicle.

REFLECTIONS

OCCASIONED BY THE FIRE AT THE OBSERVATORY HOUSE, AT WINTER HARBOUR, FEBRUARY 24, 1820.

Thy mercies, O Eternal King!
Still guard the creatures of thy pow'r,
Thy glories wond'ring angels sing,
Thy goodness marks the passing hour.

Dark, formless chaos at thy word
Submissive into order roll'd,
Thy hand the new creation stored,
And deck'd the skies with living gold.

Each fleeting moment speaks thy love,
Our ev'ry pulse proclaims thy grace;
To distant lands if we remove,
We still thy loving-kindness trace.

When borne upon the northern blast
Was heard the dismal cry of fire,
A chill thro' ev'ry bosom pass'd,
A nameless horror, deep and dire.

But hope again each eye illumed,
'Twas not our ships involved in flame;
The labours of our hands consumed,
Yet we survive, to praise thy name.

At such a time the scene how dread!
Keen frost pervading all the air,
Had quickly number'd with the dead
The few the elements might spare.

Thou Great Supreme, Almighty Lord,
Preserve us safe from ev'ry ill,
Thy guardian presence still afford,
And let us taste thy bounty still!

When, at thy nod, the doom-born flame,
Shall burst the womb of ending time,
May Jesu's merit give us claim
To dwell with Thee in worlds sublime.

LINES SUGGESTED BY THE DEATH OF A GULL,

WHO WAS BURNT IN THE FIRE WHICH BROKE OUT IN THE OBSERVATORY HOUSE.

Unhappy gull, thy luckless end
May almost claim a tear;
And thus to all that will attend
I'll make the matter clear.

Thy parents on the sea-wash'd beach
Fell, pierced by fatal lead;
In vain from swift pursuer's reach
Thyself and brother fled.

What tho' denied aloft to soar,
Or skim the waters round;
You both upon North Georgia's shore
Pea-soup in plenty found.

Yet food affords but small delight
When squabbles break our rest;
And John and you would often fight,
The cause yourselves knew best.

But Johnny died—and this last source
Of pleasure with him fell,
When dire ennui's all-fretful force
Did in your bosom swell.

At length the fatal morn arrives,
Unusual flames ascend:
Had you possess'd an hundred lives,
They all had found an end.

I feel, 'tis true, some sense of pain
Your suff'rings to review;
But such regrets are ever vain,—
Miss Jenny Gull—adieu!

For the Winter Chronicle.

A PHILOSOPHIC REVERIE.

Poor tatter'd remnants of my wash,
Tho' you no more my shoulders grace;
Vexation would appear so rash,
I must put on a smiling face.

Some tail-less—frill-less some, I find,
Some collar-less and arm-less too,
Some quite to tinder scorch'd behind,
And all will mending want, with new.

'Tis very true the shirts are gone,
But what are they, if safe the skin!
Some skins I've lost, but there is one
Yet safe and sound—and that I'm in!

I view'd the blaze, and bit my thumbs,
Then heaved a scientific sigh;
But since the clicking pendulums
Are saved—I'll now to dinner fly.

No. XIX.—MONDAY, MARCH 6, 1820.

To the Editor of the Winter Chronicle.

The cry of Reform having reached even to North Georgia, I shall request of you to exert your interest with Z. in my behalf, trusting that the commiseration which my case must excite, will induce him to adopt measures for effecting its speedy amendment. You must know then, that I am very fond of telling a good story, or what is technically called "spinning a yarn;" have doubled the Cape, been at Pulo Penang, Palambang, Tanjong, Goonting, Mangalore, Cannanore, and most of the pulo's, bangs and ores in the Indian and China seas.

What I have to complain of is this—having finished what I believe to be a very marvellous story, up rises one of these gentlemen, whom I shall distinguish by the appellation of a walking phenomenon, who, not having doubled the Cape, is not a privileged man, and relates something similar, but three times more extraordinary, and immediately robs me of that awe and admiration which we Cape men are alone entitled to.

Now, Mr. Editor, I'll leave it to your impartial judgment, whether my case does not deserve notice. Pray, do all you can for me with Z, and use your editorial influence and authority to lay these unqualified wonder-mongers.

I am, Sir,
Your obedient Servant,
Nathan Long-bow.

To the Editor of the Winter Chronicle.

My Dear Sir—Captivated by the delicacy, the exquisite sentiment, and the tenderness for the feelings of others, displayed by the charming Mr. Z., I beg, through your means, to implore the publication of his essays in a separate form, and that my name may be placed at the head of the list of subscribers, to ensure me the estimation of the public, which he has so liberally endeavoured to procure for his companions.

I remain, my dear Sir, Your ever-obliged
Emily.

To the Editor of the Winter Chronicle.

Mr. Editor—Lest you or your readers should think I have any thing to do with your correspondent who has thought proper

to assume my signature in your last Number, and who seems to be so well versed in the art of extracting, not only sense, but "abundant store of elegant, witty, and brilliant ideas," from loggerheads, I beg to disclaim all knowledge of or connexion with him, and to subscribe myself as before,

Your obedient Servant,

PEEPING-TOM THE FIRST.

To the Editor of the Winter Chronicle.

SIR—Being one of those who have felt it my duty to contribute my mite occasionally towards filling the columns of your Gazette, I have been desirous for these two or three weeks past, to drop something into your box, and have therefore essayed to write an article, but in vain; the severe cold weather which called forth the apologies of your more constant correspondents, in the last Number but one, has so cramped the few ideas which I possess, that I have been rendered totally incapable of producing any thing. Under these circumstances, I became apprehensive lest the same cause producing similar effects upon our community in general, should leave your pages blank, and deprive us of our usual Monday morning's entertainment. Guess, then, the relief which my anxiety felt on finding this dreaded vacuum so ably filled up by the effusions of "a glowing loggerhead!"

I confess, Mr. Editor, that since my residence in North Georgia, I have been mightily taken with the society of those self-same loggerheads, and have used my best endeavours to obtain them as guests in my cabin as frequently as possible. It is true, they are in general much addicted to *irony*, but when warmed into a proper temper by the neighbourhood of a good coal-fire, they become the most agreeable companions that can be conceived, and I boldly venture to affirm, there is not a man of sense in our whole community who does not feel pleasure in receiving a visit from one of the loggerhead tribe, when their noddles are thus heated to a glowing temperature.

But, Mr. Editor, highly as I appreciate their talents in diffusing warmth and cheerfulness to all who come within the sphere of their genial influence, I could not help expressing the most agreeable surprise on finding that one of them had not only surpassed the rest, but actually outstripped all others of our community by producing "such wild and soothing harmony," as tended to "lull the senses into a most delicious torpor!" Although the cooling process, I presume, caused much of the *irony* I have before spoken of, to be mixed up with the wit and good-humour contained in the disjointed sentences which "Peeping Tom" has transcribed, they are nevertheless, so amusing, that I equally regret with himself, the cause by which he was prevented from giving us more of them. As, however, the ice is broken, the thawing process will, in all probability, continue; and as Peeping Tom's acquaintance with the Loggerheads who afforded us this aërial concert, will enable him to keep a watch upon them, I hope to see many of your future columns filled by effusions of the same kind, in which (contrary to what might have been reasonably expected,) there is neither perversion of sense, nor inversion of sound, but an excellent substitute for the themes which were "nipp'd i' the bud" by the frigidity of the weather, and which rendered necessary the apologies of so many of your Correspondents, among which I beg may be included

Your obedient Servant,

TOM PEEPED-AT.

For the Winter Chronicle.

HYPERBOREAN SOPORIFICS.

No sylvan scenes around me lie,
That can my Muse incite
From famed Parnassian regions high,
To wing her hasty flight.

But in my cabin's snug recess,
She sometimes deigns to sit,
Descant upon dame Winter's dress,
Or sharpen up my wit.

And now I feel the wish inspire
The contents of my head,
Creating in my brain a fire,
To sing an Arctic Sed.

When from the flagging hours of day
I hasten to repose,
The cold admits of no delay,
In taking off my clothes.

Prepared at length, a shiv'ring wight,
Quick into bed I leap,
And 'neath six blankets' cumbrous weight,
Compose myself to sleep.

O'er all to guard from frosty air
Is stretch'd a wolf's warm hide,
Which I, with more than common care
Tuck in on either side.

In woollen wrapt o'er head and ears
I snore till morning-light,
While dreaming fancy often rears
A scene of past delight.

But at my door the servant stops,
"Sir, 'tis almost seven bells;"
Then in a light he quickly pops,
Which every fancy quells.

The drowsy yawn which still precedes
Ere off our sleep we shake,
Against the ice my elbow leads,
And shivers me awake.

A moment then in state I lie,
All thoughts of slumber lost;
While beauteous crystals meet my eye
In varied works of frost.

Illumined by the candle's rays
They deck my cabin's top,
But feeling soon the heated blaze
They liquefy and drop.

O! more than eastern luxury,
Without the artist's aid,
In shower-bath to mollify,
At ease so haply laid!

But hark! that noise! each clanging cup
And saucer rattles round;
The signal heard, I'm quickly up,
And soon at breakfast found.

PHILO-SOMNUS.

NOTICE TO CORRESPONDENTS.

We have to apologise to our Correspondent Z for the accidental omission in our last week's Paper, of an acknowledgment which we had designed to make, in consequence of having felt ourselves under the necessity of omitting a section of his second communication.

We hope he will favour the Public with his promised continuation.

No. XX.—MONDAY, MARCH 18, 1820.

To the Editor of the Winter Chronicle.

SIR—The very flattering encouragement which I met with in your last Number, not only from yourself but from two or three of your Correspondents, has made me venture another letter into your box. Authors are naturally as proud of their productions as a mother is of her children; but nobody but authors can conceive the rapture experienced on hearing their works praised by the public, and especially by the softer sex.

Such was the rapture your humble servant Z experienced on reading Emily's short but sweet epistle in your last Gazette. Publish my essays in a separate volume! Dear creature, to be sure I will! What can Z refuse his Emily? Pray, Mr. Editor, endeavour to fish her residence out for me, and she shall have the two first copies that come from the press! But I had almost forgotten my purpose—perhaps woman, charming woman—will be a sufficient apology.

I do not quite understand whether you received a note from me on the subject of the omission of a part of one of my communications, to which omission you have alluded in your last week's paper. In that note, I think, I said that perhaps my communications were too long for your purpose; and, as you have not taken any notice of this, I conclude that you have glanced it over with your usual courtesy, and shall take your hint accordingly, by making this letter of a more moderate length than my former ones. If I do not mistake, some of your readers will be much obliged to me for this new arrangement, by which I shall be obliged to confine myself to a brief description of the *Stampers*, a class of people who are distinguished by the loudness and frequency of their stamping when they first enter our apartments, and for some time afterwards. The Stampers may say their toes are cold, but it is no such thing, Mr. Editor, take my word for it. Ten times in eleven that they thus disturb us, their toes are warm enough; besides, if we admit this excuse for the Stampers, I suppose the Drummers will tell us their fingers are cold, and the Snorers that they sleep to keep their eyes warm; at all events I think, the least the Stampers can do, is to have their stamping out on deck, where, during the cold weather, they are certainly privileged to exercise their art to the full extent of their wishes, as long as they keep before the main-mast.

I rather think, however, that if this practice could be banished from our apartments, the sum total of stamping would be much reduced; for, you must know, Mr. Editor, I have reason to suspect that the motive is generally the same as that by which the Bangers, Slammers, *&c.*, are actuated. In short, that it is only another ingenious expedient for announcing to us, in a way which cannot possibly escape notice, the actual arrival of the party concerned.

But it is time for me to report progress. Alas! what progress have I to report! I see no improvement excepting a slight amendment in the *Whistlers*, who, by-the-by, I am sorry to hear, are gaining the languishing sentimental style of the Hummers.

The Drummers indeed, have shewn some signs of a new pest which they are preparing for us; not satisfied with what their fingers can perform upon the tables, I have heard a foot or two at work under them for some time past, by which a sort of tattoo has been produced, almost as melodious as the other. If the Drummers mean to continue this, they ought in common decency, to sit without shoes, that their tapping may not disturb us. The Slammers are worse than ever, but until my remedy has been fairly tried, they must not be pronounced incorrigible. The Snorers snore less, but I fear I have done mischief, for they *sleep* less also.

My compliments to "Nathan Long-bow," and I will take his case into consideration, respecting the *Wonder-mongers*.

If my friend "A Spectator," does not give the *Growlers* a hint or two, it will be a great pity; for, our late *hardships* have

brought them out, as a warm sun does the flies in spring.

Best love to Emily, from her constant slave, and Your obedient Servant,

Z.

To the Editor of the Winter Chronicle.

Mr. Editor—I have to request you will allow me a short space in your columns, to make the apology to *Peeping-Tom the First*, which the grossness of my offence demands; and I beg to assure him, that when I assumed his title, my secondary right to it was omitted purely from inadverteney, and not from the slightest wish to claim any connexion with him. To tell you the truth, (between ourselves, for I would not have it generally known,) I quite forgot the existence of that pre-eminent personage. *Sic transit gloria mundi.* I am, Sir,

Your most obedient Servant,

Peeping-Tom the Second.

To the Editor of the Winter Chronicle.

Sir—Having accidentally heard it rumoured, that it is in contemplation to send off a certain number of balloons, with letters containing an account of our situation, *&c.*, it has occurred to me, that it would be a good opportunity of conveying also to England a copy of the *Winter Chronicle*, by which our friends might be informed before-hand, in what manner we have endeavoured to drive away the *ennui* of a winter in North Georgia. Indeed, I know no mode of conveyance so exactly suited to most of the productions which fill the pages of your Journal. There are many which being, as the writers confess, "the lightest things imaginable," are peculiarly fit for this kind of travelling: and, I think it is not impossible, that some of your correspondents, if requested, might furnish an article or two light enough to assist the balloons in their aërial voyage, so as to economise the inflammable gas, which, with the heavier productions, must, as you will readily allow, be used in profuse abundance. Even the heaviest of them, however, might perhaps, with good management, and a little clipping and curtailing, be made to rise much above the level which has hitherto been assigned to them by your readers; but whether this is expecting too much of the inflammable air, I leave to your more scientific correspondents to determine.

Such communications as consist of high-flown language, lofty conceptions, elevated sentiments, *&c.*, will find themselves quite at home when thus conveyed among the clouds: and our poets who kindly furnish their weekly quota of rhymes for our amusement, and who have hitherto had the mortification to see their works confined to earth, like mere vulgar prose, may now hope to behold the efforts of their respective muses, keep pace with the most poetical imagination, and soaring aloft into "Heaven's vast concave," take a higher flight than even Pegasus himself ever attempted. In pursuance of the plan which I have here proposed, it would be adding much to the obligation you have already conferred upon the public as Editor of the Gazette, if you would employ a few of your leisure moments, in selecting such articles from your columns as appear to you best qualified for the respective purposes of carrying or being carried; and it will naturally occur to you, that the fairest way of executing this useful project will be to tack a light and a heavy one in the same parcel, and thus to consign them to the atmosphere. For example, if the letter of Z, in your last Number but one which was universally allowed to be a heavy one,, and that of "N. C.", in a former one, were pinned into one bundle, there would, perhaps, be little left for the gas to do. And so of many others, which your ingenuity will easily enable you to couple in a similar manner.

I am, Sir,

Your most obedient,

Hilary High-flyer.

To the Editor of the Winter Chronicle.

Mr. Editor—If I was gratified by the visits which were paid to our ships this time last year, when in the river, how much more so was I in this desolate place, to meet my friend Sir Partial Thaw, under the stern on Tuesday last. I gave him an invitation to stay, but he said that he regretted his visit must be short, for he was obliged to attend in other places; and, while he assured me that it was with great reluctance he left us, he was so deeply affected, that the natural warmth and goodness of his heart overflowed, and trickled down upon the snow. He had been upon the lower deck, he said, but finding his near relation, General Thaw, engaged the attention of every body, he had taken his leave for a short time.

I was going to pay the General a visit, when a desperate contest arose between Sir Partial and General Frost. It appeared that the latter had so long occupied the space under the stern, that he deemed Sir Partial's visit an infringement on his prerogative, and that Sir Partial, from dictates of humanity, was desirous of expelling him from his post, and ridding the ships of a very disagreeable and intruding visitor, who, he said, was not contented with remaining on the upper deck, but, on finding a difficulty in getting down the hatchways, had had the impudence to creep in at the cabin window. The General was obdurate, and Sir Partial finding knock-down arguments did not succeed, endeavoured by gentle means to soften the General into compliance, and was so successful, that he was content to sculk behind a cask for a considerable time, until Sir Partial was gone, when he stole out by degrees.

N.

For *the Winter Chronicle.*

*Deus nos ducat**.

To lie in bed and meditate,
And then a-nearer anticipate,
Until my heart did palpitate,
Has been my greatest pleasure.

When cold has set me shaking,
And sleep has even forsaking,
Our glorious maid taking
[illegible] me beyond measure.

When pain has set me whining,
And health has been declining,
What kept me from repining?
'Twas hope, and trust above!

God is our shield defensive
Throughout the world extensive,
His mercy comprehensive,
Deserves our warmest love.

Should hardships overtake us,
Let them nor danger shake us,
Our God will ne'er forsake us,
Who worketh all for good!

When perils bid defiance
To human skill and science,
On *Him* be our reliance
Who died for us his blood!

SONG FROM THE NORTH-WEST PASSAGE.

WRITTEN BY MR. WAKEHAM,

AND SUNG BY MR. PALMER.

I.

Farewel to the land where the winter we've past,
The ships all a-taunt-to, we leave it at last,
While our bosoms are swelling
For deeds of renown;
Beneath their snug housing the cold we've defied,
We've tripp'd for our health o'er the firm frozen tide,
And merrily keeping up cheerfulness still,
Eat our grub, drank our grog, with a hearty good will,
While our bosoms were swelling
For deeds of renown.

II.

'Tis said, when the sun in this region sinks low,
The bears take a long nap—but we did not so,
While our bosoms were swelling
For deeds of renown;
We had snow to be melted, ere dinner was drest,
We had bears to be hew'd, and 'twas some of the best:
But what most I admired, while we wanted the light,
Were the plays that amused us once a fort-night,
While our bosoms were swelling
For deeds of renown.

II.

Before it was dark in this desolate spot,
The deer came around us, and died by our shot,
While our bosoms were swelling
For deeds of renown.
With venison and beef, we cared not the least
For the famed turtle soup of an alderman's feast;
A sailor lives well, if he gets but enough
Of something substantial, or tender or tough,
While our bosoms are swelling
For deeds of renown.

IV.

Now the day-light's return'd, we'll push on without fear,
And prove to our country that while lying here,
Still our bosoms were swelling
For deeds of renown.

* The motto upon the binnacle of the Hecla.

If ice should impede us, our progress tho' slow,
We'll advance all we can; if winds fail us we'll tow;
If channels are opened, our ships track'd along
Shall follow us close, and we'll tune up a song,
While our bosoms are swelling
For deeds of renown.

V.

The voyage completed, and doubled Cape Hope,
How joyful we'll hail the bright birth of the morn,
While our bosoms are swelling
For deeds of renown;
That shews us again that loved rock of our isle,
Where around us our wives and our little ones smile.
And rewards that await us return'd from afar,
Prove how warmly Old England remembers the tar,
While our bosoms are swelling
For deeds of renown.

SONG FROM THE NORTH-WEST PASSAGE.

WRITTEN BY MR. WAKEHAM,

AND SUNG BY MR. HOPPNER.

TUNE—"*Come cheer up, my lads.*"

I.

At last brother tars here we are at the strait,
And the famed North-west Passage is traversed complete;
O'er the wide rolling waves to the southward we'll steer,
And quickly arrive at the land of good cheer.
In the ice of the north British hearts were our own,
Still seeking for glory,
Famous in story,
We've gain'd for Old England new ways of renown.

II.

'Mid darkness and storms a longer winter we stay'd,
While the crystallised ocean our efforts delay'd,
Till summer returning again set us free,
And open'd the way to that far western sea.
In the ice of the north British hearts were our own,
Still seeking for glory,
Famous in story,
We've gain'd for Old England new ways of renown.

III.

What feelings of pleasure, what joys shall expand,
When once more we're nearing, fair Albion, thy strand;
Delighted our bosoms with transport shall swell,
And fondly each tongue of its happiness tell.
In the ice of the north British hearts were our own,
Still seeking for glory,
Famous in story,
We've gain'd for Old England new ways of renown.

IV.

Our country shall hail our emprise with acclaim,
Attempted for seas by chieftains of fame;
For firm perseverance evinced in her cause,
Has ever met meed with true Britons' applause.
In the ice of the north British hearts were our own,
Still seeking for glory,
Famous in story,
We've gained for Old England new ways of renown.

No. XXI.—MONDAY, MARCH 20, 1820.

To the Editor of the Winter Chronicle.

Sir,—I hear it said that the North Georgia Gazette is soon to die a natural death, and I am sorry for it; for then must your correspondent Z leave half his purpose unfinished. —"Othello's occupation's gone!"

I had prepared a letter in pursuance of my former plan; but as I am informed that this is the last communication which I shall have an opportunity of laying before your readers, during this season, I suppose I must change my note, and be upon my good behaviour.

It has been very amusing, and I must add very flattering to me, to hear the conjectures which have been formed concerning the author of Z's letters, and the remarks which have been made upon them by the individuals of our community; and I am not altogether without hope that I have done something towards removing, at least in part, the annoyances of which I complained.

A friend of mine in London, who has a share in a patent-shot manufactory, once explained to me the manner in which the round or perfect shot are separated from those which are oval, and therefore unfit for use. Being all made to roll down an inclined plane, the round ones roll straight forward to the lower end, while the oval ones are found to waddle to the edge of the plane, and fall over before they can reach the bottom. I have often been reminded of this contrivance, in observing that the *Whistlers*, *Slammers*, &c. &c. &c. have waddled on one side when applied to the inclined plane afforded by Z's communications, and have immediately fallen into the ranks, under the several heads to which, according to their respective qualifications, they know themselves to belong. Some of them have not much relished being made to waddle in this manner, and would rather have been allowed to roll on straight forward to the end of the chapter. This is all very natural, but it is no fault of mine; they are no shot of my making. I think I have done them some service in pointing out their deformity; and if they will get their oval ends rounded off before the re-commencement of the news-papers, I promise them they shall hear no more from Z.

But, to be serious, if the annoyances to which my letters allude are real, they ought to be remedied;—if imaginary, if nobody practises them, then is there no "galled jade to wince,"—all our "withers are unwrung,"—in short, if the cap fits nobody, let nobody wear it!

But since the game is up for the present, I have no hesitation in assuring you and your readers, that the classes described in my first letter are as completely the creatures of imagination, as ever entered into the head of a poet. I had at that time no intention of continuing my correspondence, much less had I conceived any thing like a regular series of such descriptions. It was your readers themselves who first put this into my head, and made me look about me for such subjects, as well by the hints with which their remarks daily furnished me, as by the earnest applications made to me, through the medium of your paper. It was then, and then only, that I began to be really in earnest, and to copy from life. For instance, the public are wholly indebted for the description I have endeavoured to give of the *Snorers*, to the unconscious suggestions of one of that dozing fraternity; and the same is true of the more innocent *Stampers*. As for the *Slammers*, it is more than probable that they would have remained altogether unknown to Z., unless they had been pointed out to his notice by his correspondent X.; and so of one or two other classes.

So much for the account I purpose to give of my letters; may I be permitted to say a word or two of myself, as it is a subject which has afforded me much entertainment. There is scarcely one among us who has not hazarded a conjecture who Z is. One I find "knows me well;" a second has found me out by the shortness of my sentences; another "detects me at first sight," by a certain fault in my grammar, of which he has observed I am often guilty in conversation; a fourth declares it "impossible to mistake me," though he does not say why, "and wonders at the want of discernment in those who are at a loss about me;" and a fifth is "quite positive" who I am, on account of a particular turn of expression which always was, is still, and ever will be mine, and mine exclusively.

A messmate took me aside the other day, and with a look full of mysterious importance, told me in confidence that he knew who Z. was. "Do you really?" said I; "Yes, it is so and so." "No! is it indeed?" "Yes," replied my cunning messmate, with a knowing shake of the head, "I had it from good authority." Thinks I to myself, you know nothing at all about it; but I promised to keep his secret, and so I will.

The truth is, Mr. Editor, that having for the first ten weeks of the publication of your paper, openly avowed my incapacity or unwillingness to write for it, and, to my shame be it recorded, even spoke disrespectfully of a scheme of amusement to which I was my-

self too indolent to contribute, I have found myself securely sheltered of late under my former declaration, and have thus been induced to join in the general laugh, or to put up with any occasional expression of displeasure with as much apparent unconcern as any Lord about me. It is no great wonder that others do not easily find *him* out, who has hardly been able to persuade *himself* that he has written.

When children play at hide and seek, they are told that they "burn" when they come near the hiding-place; but I can assure those who have searched for Z., that they have never been warm, no not within a mile of the fire; they are all equally knowing, and all equally wrong.

Adieu, Mr. Editor, for the present. I trust my next communication may be the growth of a more genial climate; may it spring up amidst the rich luxuriance of the South Sea Islands! Believe me, there are none of your correspondents or readers who entertain this hope more confidently, and who are willing to do more towards its completion, than your

Unknown and obedient Servant,
Z.

Sir—As I was one of the first among your correspondents to address you at the commencement of your editorial labours, and to express my good wishes for the success of your undertaking, so I am equally desirous, now that I understand your paper is shortly to be discontinued, to express to you the gratification I have derived from the spirit with which the Winter Chronicle has been supported for one-and-twenty weeks, and the amusement I have received from many of its pages, during that tedious interval.

As an individual of that community to whose amusement you have, during the winter, devoted a certain weekly portion of your time, I am anxious to convey to you my share of the acknowledgment which is so justly your due. Nor can I omit to express my obligation to the two gentlemen whose zeal in the cause of good humour and cheerfulness has induced them to copy, with unceasing punctuality, for our perusal, the various communications with which your box has been furnished. It will be generally allowed that the original purpose of the Winter Chronicle has been completely answered. It has certainly served to "exercise the ingenuity" of several of our community; and we have seen it raise many a laugh, and many a hearty one too, at a time when in the ordinary course of our affairs, there was little or nothing to make us smile; and besides the amusement it has afforded at the time of reading it, I have observed that some of the articles in each paper, have usually furnished subject for good-humoured conversation during the ensuing week, at the expiration of which a fresh supply has been brought forward to fulfil the same end. It will, perhaps, be objected by some of your more serious readers, that the time thus spent might have been better employed; to which I may reply, that it might also have been worse employed, or even not employed *at all*. "Better do mischief than do nothing," says the proverb, and the spirit, if not the letter of this maxim, is right.

But it is said that there are one or two of your readers who have not derived so much amusement from the perusal of your papers, as the rest of us, and who are even said to be rather offended at some of the waggish communications contained in them. If this be the case, which, however, I can scarcely believe, there is now no remedy for it: but I will venture to assert that no one article has been penned with any intention of giving offence to an individual of our party.

We are now, Mr. Editor, to enter on a different occupation, in which all your readers, whether contributors, or non-contributors, will, I am sure, most cordially join; and I hope yet to see those at whose expense a laugh has occasionally been raised in the Winter Chronicle, laugh in their turn when they shall see their names occupying a more honourable place in the London Gazette.

I am, Mr. Editor,
Your obliged and obedient Servant,
Philo-Comus.

To the Editor of the Winter Chronicle.

Mr. Editor—Before your papers cease for this season, allow me to insert some wishes which I most fervently entertain, and in which I doubt not that many of your readers will join with me.

First, then, I wish your entertaining papers may appear at our breakfast-table with the very first Monday after our housing is put over the ships the next winter—should such again be the case.

Next, I wish an early summer to such as want to go westward, and eternal frost to those whose minds are bent the other way—if any such there be.

I wish a safe passage to the rein-deer, a southerly wind to the ducks, and success to the sportsmen.

I wish an idle birth to our doctors for the remainder of the voyage, and a day's sickness to those who lightly treat the complaints of others.

I wish a speedy sight of Behring's Straits to the sanguine, disappointment to the desponders, and moderation to boasters.

To advocates for cold, I wish frost-bitten fingers; and to complainers of it a vertical sun.

I wish to husbands patience, to their wives constancy, and to lovers fidelity.

Lastly, I wish perfect health to every one; the pleasure of revisiting our native country

to all; reformation to Smokers, Skimmers, Bankers, &c.; success to our voyage, and pleasure to my readers.

I am, Mr. Editor,
Your well-wisher
T.

THEATRICAL REPORT.

On Thursday evening was performed the farce of the *Citizen*; to which was added the *Mayor of Garratt*; being the last of our Theatrical entertainments for the season. At the end of the last scene an appropriate and animated *Farewel Address*, from the pen of Mr. Wakeham, was spoken by that gentleman in the character of a sailor, and received with the most rapturous applause. The whole concluded with *God save the King*, in which all the performers, as well as most of the audience joined; and the curtain fell, amidst the loud and hearty cheers of the whole house. Our readers will find a copy of the Address, with which we have been favoured, in the subsequent pages of this Number.

Thus has ended a series of dramatic entertainments, which have served to beguile the tedious season of a long and cheerless winter. In the progress of these entertainments, we have taken frequent occasion to express our conviction of the good effect which this kind of amusement has produced among those for whose diversion they were chiefly, if not exclusively intended; and we may now add, that each successive representation has tended to confirm the conviction.

The promotion of cheerfulness among the men was an object which, in our present situation, called for our best exertions. To persons possessing no sources of amusement within themselves, some such means were more than usually necessary, especially in a climate where the ragged aspect of nature has little to enliven the mind, or to dissipate the gloom of despondency.

The good consequences resulting from the unremitted exertions that have been made to attain this desirable end, cannot, perhaps, be sufficiently apprehended at present; their influence may be expected to extend to the latest period of our voyage, and may, perhaps, be hereafter considered as having materially, though indirectly, contributed to the ultimate success of our enterprise.

Theatre Royal, North Georgia.

The Manager and Committee take this public method of returning their best thanks to the gentlemen who have so liberally contributed towards the support of the theatre.

Nor can they let the opportunity pass without expressing the high gratification they have received in the discharge of their duty as committee-men, from the willingness with which each gentleman has endeavoured to support the characters which have been assigned to him, and from the good humour and unanimity which have prevailed throughout the season.

For the last Number of the Winter Chronicle.

Come Muse, and attend to my last invocation,
Come mourn with your pupil the Chronicle's close!
No more shall we hear Monday morn's titteration,
That welcomed its pages in verse or in prose.

What wonders perform'd by its two sheets per week!
How strain'd our invention and faculties all!
If half the bulkheads of the cabins could speak,
They'd shew that invention, nor feeble, nor small.

Fair Dames it has brought to North Georgia's shore,
Manufactured a ghost and an animal strange;
That (named the *Encea*) you'll hear of no more
In forests or floods through all nature's wide range.

Here you and your sisters inspired our gay youth,
Till "Heaven's vast concave" resounded their songs:—
Much nonsense we've read, and a great deal of truth,
Well founded complaints, and some fanciful wrongs.

Ev'n loggerheads well could contribute their shares
To the weekly contents of the Editor's box;
The world was soon told of our weighty affairs,
The death of a gull, or escape of a fox.

There's Q in the corner, with X, Y, and P,
Philu-Coleus and Albert, and Simon Set-right,
Maria and Emily, fair maids I see,
And Anti-scalp Anne, not in charms quite so bright.

There's a posse besides, but by naming them all
I patience and paper should equally waste;
The meanings of some would a counsellor pall
But now to lament their misfortunes I haste.

The Plays and the Papers together expire,
And Poets, and Actors, and Dames breathe their last;
To soothe parting moments I'll say that their fire
Has not, in this region, been ever surpass'd.

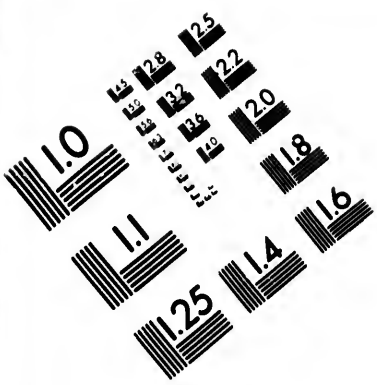
Wintry wits of the North! who have scribbled away
To shave or amuse us, accept a sad sigh
From one who has sometimes attempted a lay;
And thus, Brother-Scribblers, I bid you good-bye! A.

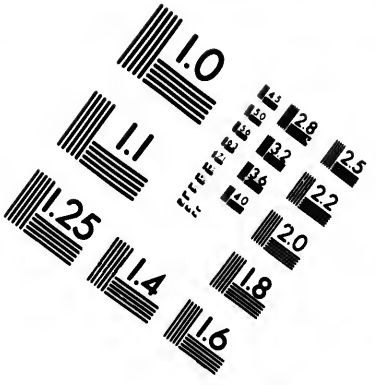
A FAREWELL ADDRESS

Written and spoken by Mr. Wakelin, in the character of a Sailor, at the final close of the Performances at the North Georgia Theatre.

DREAR was the night that Nature's face o'erspread,
When light's last gleam this sadden'd region fled;
No active scenes disarm'd its torpid power,
Nor soft society beguiled the hour;
The dark dull season call'd for other aid,
Our comic talents then we each essay'd—
Here Garrick's heroes mimic passions move,
And list'ning ladies melt at tales of love;
For woman's semblance graced our Georgian stage,
The strangest medley of the present age;—
A paper bonnet oft her head embraced,
Her canvas stays were by a sailor laced,
The dress in which her beauty sought to shine
Form'd and arranged by fingers masculine!—
Her ribbons, painted—tin, her glitt'ring fan—
Bright beads her diamonds, and herself—a man!
The Drama's beaux were not to be undone,—
Fox-hunting squires in paper boot-tops shone,—
And the plump landlord, when he took a swig,
Conceal'd his blushes by an Oakum wig,—
Tin spurs, and paper frills for Dandies made,
And bear-skin whiskers help'd the gay parade:
But jesting o'er—to night the plays we close,
For passing winter asks no more repose.

As the brave soldier, on the martial field
O'erborne by tenfold odds and forced to yield,
Press'd by the captive chain feels not its weight,
When on the thunders of the nearer fight
His fate suspended hangs, till Victory's tide
Proclaims the conquer'd now the conqu'ring side;
Then freed once more he shines in radiant arms,
And mingling eager in the war's alarms
Feels the new wrong within his bosom glow,
And bursts indignant on th' embattled foe.
So we, secured by Winter's icy chain,
Awhile the pris'ners of its gloomy reign,
Hear in the blast that sweeps the frozen sea
The friendly sound that soon shall set us free,
When hasting forward with impatient force
Hope's cheering ray shall gild our Western course.





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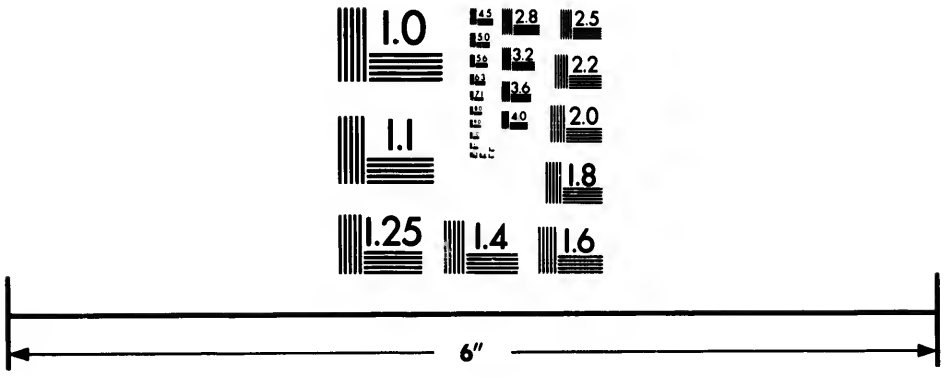

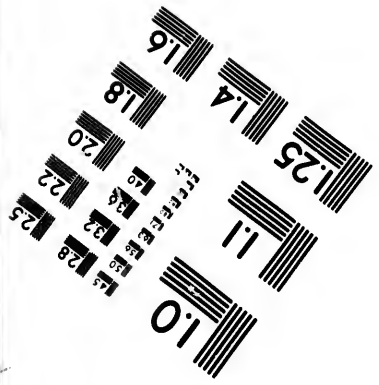

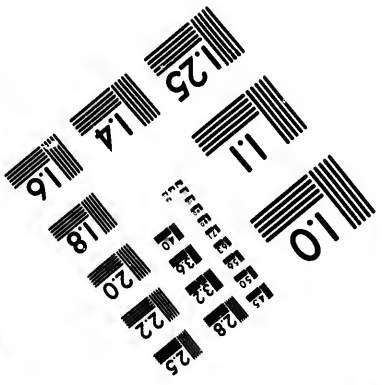

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If from the past our future augury we take,
The prospect wears an animating face,
For providential mercies open wide,
And show that fav'ring Heaven has been our guide.
When in our front the ice opposing lay,
Still thro' the maze we found a devious way,—
If humid fogs obscured the mid-day sun
From ev'ry danger safe, we still have run:—
Unfaithful here the guiding needle flies,
Now points to Northern, now to Southern skies;
But ever here we kept the path design'd,
And left the distant Eastern shores behind.
What breast unconscious of the heav'nly Hand
That saved our vessels from the fatal strand,
When far extended floes with headlong sway
Drove fiercely shoreward in yon Western bay?—
Yet morning's light, tho' human help was vain,
Behold us riding on the liquid main:
And still, I trust, that Hand, which rules o'er all,
Which guides the motions of this whirling ball,
Will lead us onward thro' the icy road
To where the southern joins the polar flood,
Until at length that happy morn appears
When Behring's Strait shall echo British cheers.

Sons of my country! in her cause allied,
A sailor's feelings are my bosom's pride,—
Those feelings tell me that each brother tar
Exults in cherish'd hope,—advanced thus far—
The hope that soon success shall crown our toil,
And honours greet us on our native soil.
Britannia's hopes are centred in our deeds—
To this emprize the path of glory leads!—
Her ancient chiefs of ever-honour'd name,
Call on us now to emulate their fame:—
Each tender tie that deep infixes *here*,
Bids us our country and ourselves revere:
Then, sailors, thus I'll your resolve express,
"We *can't command*, but *will deserve* success."

The Editor would be ill satisfied with himself were he to permit the *Winter Chronicle* to conclude without expressing his thanks to his Correspondents *generally*, for the courtesy with which they have addressed him; and to those gentlemen *particularly*, who have principally supported the Paper, for the readiness with which they have at all times attended to his request of contributions, and frequently at a very short notice.

His more than thanks are due and are felt to his two *friends* who have so cheerfully and kindly taken on themselves, even from the commencement, the manual duties of the editorial office; leaving to the Editor himself little more than the honour of the name.

Winter Harbour, *March* 18, 1820.

END.