

*The eventful voyage of H. M.
discovery ship "Resolute" to the ...*

George Frederick M'Dougall

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THE GIFT OF
HENRY GARDNER DENNY,
Of Boston, Mass.
(Class of 1852.)

Received 14 Feb,
1804.

THE EVENTFUL VOYAGE
OF
H. M. DISCOVERY SHIP "RESOLUTE"
TO THE
ARCTIC REGIONS.

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THE EVENTFUL VOYAGE
OF
H. M. DISCOVERY SHIP "RESOLUTE"
TO THE
ARCTIC REGIONS
IN SEARCH OF SIR JOHN FRANKLIN
AND THE
MISSING CREWS OF H. M. DISCOVERY SHIPS "EREBUS" AND "TERROR,"
1852, 1853, 1854.

TO WHICH IS ADDED
AN ACCOUNT OF HER BEING FALLEN IN WITH BY AN AMERICAN WHALER
AFTER HER ABANDONMENT IN BARROW STRAITS,
AND OF
HER PRESENTATION TO QUEEN VICTORIA
BY THE GOVERNMENT OF THE UNITED STATES.

BY
GEORGE F. M'DOUGALL,
MASTER.

LONDON :
LONGMAN, BROWN, GREEN, LONGMANS, & ROBERTS.
1857.

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1854 July 1st
1854
Henry S. Dennis
(1854-1855)

Dedication.

TO

COMMODORE HENRY KELLETT, C.B.

LATE CAPTAIN OF H.M. DISCOVERY SHIP "RESOLUTE,"

THE FOLLOWING PAGES,

DESCRIPTIVE OF THE EVENTFUL VOYAGE, ABANDONMENT, RECOVERY, AND RESTORATION
OF THAT SHIP TO THE QUEEN OF ENGLAND BY THE UNITED STATES OF AMERICA,

ARE RESPECTFULLY DEDICATED,

AS A SLIGHT MARK OF THE HIGH ESTEEM IN WHICH HE WILL EVER BE HELD

BY

HIS DEVOTED FRIEND,

THE AUTHOR.

OFFICERS OF H.M.S. "RESOLUTE" AND TENDER
"INTREPID."

Captain	-	-	-	Henry Kellett, C.B.
Lieutenant	-	-	-	George Frederick Meham.
"	-	-	-	Bedford C. T. Pim.
"	-	-	-	Richard Vesey Hamilton.
Master	-	-	-	George Frederick M'Dougall.
Surgeon	-	-	-	William T. Donville, M.D.
Mate	-	-	-	Richard Roche.
"	-	-	-	George S. Nares.
Clerk in charge	-	-	-	William H. Richards.
Enseigne de Vaisseau	-	-	-	Emile de Bray (Imperial Navy of France.)

FOR SERVICE IN "INTREPID."

Commander	-	-	-	-	Francis Leopold M'Clintock
Master	-	-	-	-	Frederick J. Krabbé.
Assistant-Surgeon	-	-	-	-	Robert C. Scott.
Engineer	-	-	-	-	Thomas Purchase.
"	-	-	-	-	William Ibbets.

P R E F A C E .

THE following pages, descriptive of the eventful voyage of Her Majesty's Discovery ship "Resolute," are simply what they profess to be ; viz. a journal kept by me on board that ship, up to the time of her abandonment in the ice, on the 15th of May, 1854. It was, however,—in common with similar records of other voyages in various parts of the world,—intended to be essentially private, as nothing was further from my thoughts than its publication ; but in this I have been overruled by the wishes of numerous influential friends, who deemed it requisite to have the narrative of the voyage of a ship, which has lately been brought so prominently before the public ; the more so, as Sir Edward Belcher's expedition, being divided, the "Resolute" and her steam tender "Intrepid," under Captain Kellett, formed as it were a distinct service. An additional reason for

its appearing was the wish to connect the chain of events in the Arctic regions, during the present century; in which no gap has occurred save the voyage of Sir James Ross in 1848-49; this, it is much to be regretted, has not appeared, for the sledge journeys* then performed opened out a new era in Arctic exploration, greatly to the credit of Captain (now Admiral) Sir James Ross, Captains Austin and Ommanney, and Lieut. (now Captain) Francis L. M'Clintock, who, with Captain Sherard Osborn, Captain Penny, and others, have brought the equipments necessary for travelling to a marvellous state of perfection; so that any portion of the Arctic regions may be traced by means of sledges, with as little risk, and more certainty, than generally attends the exploration of countries, in any other quarter of the globe.

The time, trouble, and valuable advice which has been so freely given me by Mr. Barrow, is another proof of the unremitting kindness he has ever dis-

* *Vide Parliamentary Papers, 1851. "Additional Papers—Sledge Journeys of Captains Austin and Penny," and Further Papers, 1855, relative to the recent Arctic Expeditions in search of Sir John Franklin and the Crews of H.M.S.S. "Erebus" and "Terror." Presented to both Houses of Parliament, by command of Her Majesty.*

played towards those who have in any way been connected with Arctic exploration, and the sincere thanks I now tender, not only in my own name, but on the part of all who have served in the North, will, I feel confident, be echoed by every "Arctic," whether officer or man.

In conclusion I may be allowed to observe, that no one can be more fully aware of the many imperfections that exist in the style of the following narrative than I am myself, and I cannot but feel that it has no claim to the indulgence of the public, save its truthfulness in every respect.

Perhaps I ought to explain that the word "party," so frequently used in this Journal, is the term by which, in the Arctic squadron, any body of travellers was designated.

G. F. M·DOUGALL.

Denny Street, Tralee.
July, 1857.

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INTRODUCTORY REMARKS.

PERHAPS of all the various duties to which a naval man finds himself subjected, throughout a necessarily adventurous career in every quarter of the known world, that of Arctic exploration, such as was adopted by the late searching expeditions, may fairly be considered unequalled in point of novelty, labour, and privation.

With but few resources beyond what the stores of ordinary men-of-war afford, vast tracts of land have been discovered, and our geographical knowledge of one of the most interesting — because so little known — quarters of the globe, extended by thousands of leagues, whilst to the scientific and inquiring mind has been opened out a boundless field of instruction and study.

But the above advantages, great as they are, fall into the shade, when compared with the solution of the long-pending problem of a North-west

passage, which for centuries past has engaged the attention of the maritime world.

During the early voyages, mercantile enterprise (often of an individual character,) induced the risk of capital, to discover a shorter, and, as was hoped, a safer passage to the Pacific, than the long, tedious, and often disastrous voyage by the way of Cape Horn: where their little barks inefficiently equipped, too frequently foundered beneath the overwhelming seas of that still much dreaded neighbourhood.

It must not, however, be imagined that either of the above advantages were supposed likely to accrue, from the discovery of this much desired passage by the more modern voyagers, or their supporters; as no merchant of the present day would be insane enough to embark capital by such a route, for, setting aside the physical obstacles, in themselves sufficient to preclude the hope of success, the perfection that naval architecture, combined with steam, has now attained, enables the merchant to transmit his goods to a central position between the two Pacific Oceans in little more than a month from the principal ports of Western Europe.

Science alone of late years has laboured with a zeal and perseverance almost unparalleled, to determine this great geographical question, but without success.

Providence had ordained that the little band engaged in the glorious cause of humanity, should solve what past generations attempted in vain.

Until within the last thirty-nine years, Baffin's Bay, properly so called, was a sealed book to the vessels engaged in the whale fishery, although Baffin during his last voyage in 1616 (241 years since), completed the circuit of Baffin's Bay, discovering also Wolstenholme, Booth, Whale, Smith, Jones, and Lancaster Sounds. Of this voyage, one of the most interesting on record, nothing save a skeleton chart, and a brief letter to Sir John Wolstenholme, has been preserved.

However, the year 1818 saw the portals of the hitherto unknown sea, opened by Captain (the late Admiral Sir John) Ross, who, notwithstanding his voyage was unsuccessful in many respects, has, nevertheless, the merit of being the immediate cause of inducing the whalers to push on to the northward of their usual fishing-grounds, where, if

the risk was increased, so also was the success attending their labours.

Captain Ross returned to England the same year, and reported Smith's Sound a bay, and entirely closed Jones' and Lancaster Sounds.

But in consequence of some misunderstanding relative to closing the above sounds, another expedition was instigated by Sir John Barrow and determined on by Lord Melville, and fitted out the following year, 1819, the command being entrusted to Lieut. (the late Admiral Sir Edward) Parry, who, as second to Captain Ross, commanded the "Alexander" the previous year.

The 1st of August saw Parry enter Lancaster Sound, the existence of which was thus verified. Prince Regent's Inlet and Barrow's Straits were discovered and passed, and Melville Island, the "*ultima thule*" of Arctic navigators attained.

Melville Island was discovered by Parry on the 1st of September, 1819, and on the 26th the ships reached Winter Harbour, where they remained frozen in for a period of eleven months.

It is not a little singular, considering the many impediments in Arctic navigation, that the ship to which I was attached, viz. the "Resolute," should

have sighted the same island, at the same hour, on the same day of the week and month, thirty-three years after its discovery by Sir Edward Parry.

Here let us pause awhile, in admiration of Baffin, who, in an age when nautical science was quite in its infancy,—instruments rude and imperfect, —chronometers unknown, in a crazy bark of fifty-five tons, was by dint of perseverance enabled to “lay down” (*i. e.* survey) the whole of the immense Bay that bears his name, in such an admirable manner, as to require little or no correction, after the lapse of two centuries and a half.

As I have before mentioned, three Sounds, viz. Smith's, Jones', and Lancaster Sounds, were closed by Captain John Ross in 1818, but since that date, all three have been proved to exist beyond a doubt, viz. Lancaster Sound, by Parry in 1819; Jones' Sound, by Captain Austin in 1851; and Smith's Sound, by Captain Inglefield in 1852; verified subsequently by the distinguished Dr. Kane. Such proofs as these of Baffin's truthfulness, cannot fail to excite admiration.

In 1820, Parry attempted to push to the westward, but found it impossible to penetrate through the “stupendous polar pack;” he therefore re-

traced his steps, and arrived in England, the crews of the ships lessened by one man only, and he fell a victim to a disease contracted prior to his departure from England.

His remains were interred in Winter Harbour, and as in 1853, after a lapse of thirty-three years, I stood over his unpretending and solitary grave, I could not but reflect that the board which points out the last resting-place of the deceased mariner, serves also as a lasting monument of what, under the blessing of God, can be accomplished by British zeal, fortitude, and ability.

It is not within my province to touch on the various voyages and explorations by Parry, Franklin, Ross, Lyon, and others *, though all would well repay perusal, for each and all abound in perilous adventure, daring hardihood, and striking incidents.

After the fearful voyage of the "Terror" † in 1836, Arctic discovery was considered a tale of the

* *Vide* Sir John Barrow's Arctic Voyages.

† The same ship, notwithstanding her rough handling, was afterwards, as will be observed, employed in the Antarctic voyages, and, being still found a sound ship, was equipped for Sir John Franklin's expedition.

past, and an interregnum of no less than eight years took place, ere the subject was renewed.

But in the month of March 1845, the "Erebus" and "Terror," then lately returned from the Antarctic seas, were fitted with screw propellers, and commissioned by Captains Sir John Franklin, K.H., and Richard Crozier, accompanied by Captain James Fitzjames, with the old purpose in view, viz. that of attempting to accomplish a North-west passage to the Pacific Ocean. The two ships were fully provisioned for three years, and numbered in all 138 souls.

On the 26th of May, the ships left the Thames to prosecute their voyage to the northward. It is unnecessary to follow their track across the Atlantic, suffice it to state that they arrived in safety at the Whale-fish Islands, from whence, after taking the requisite stores from a transport, they steered to the northward; all in health and high spirits, in full anticipation of effecting the objects of their voyage.

The last communication with the ships was on the 22nd of July, by Captain Martin, of the "Enterprise" whaler. They were then secured to an iceberg in Baffin's Bay, in lat. $75^{\circ} 10' N.$, long. $66^{\circ} W.$

From this period, years passed without any tidings of the absent explorers, until at length the nation became anxious respecting their safety, and early in the year 1848, the "Enterprise" and "Investigator" were purchased into Her Majesty's service for the purpose of prosecuting a search ; the supreme command devolved on Captain (now Admiral) Sir James Ross, an officer well known as an active labourer in the field of science, as well as an eminent Arctic and Antarctic navigator.

This expedition left the Thames on the 12th of May 1848, and after a boisterous passage across the Atlantic, arrived at the Whale-fish Islands on the 22nd of June, from thence they pushed on for Uppernavik, off which settlement they arrived on the 6th of July ; they were then compelled to "bring to," in common with the whalers, at the edge of the Pack ice.

Little or no progress was made until the 20th of July when the exciting, though wearisome navigation of Baffin's Bay commenced, and they were kept battling with the ice till the 20th of August, a sufficient proof that the season was backward. After visiting Possession Bay the ships entered Lancaster Sound, but were prevented by the rapid advance

of winter, and increasing thickness of "young ice," from penetrating beyond Port Leopold where they anchored on the 11th of September. The ships however were not considered in winter quarters until October, when the solidity of the ice, set the matter beyond a doubt, and the necessary preparations were made, to render the crews comfortable during the approaching inclement season.

In this expedition, travelling on foot was again revived, but on a much more extensive scale than that carried out by Sir Edward Parry in 1820; this is to be attributed to the observant character of Sir James Ross, who, in addition to the experience he obtained under the above distinguished officer, had considerably increased his knowledge of Arctic travelling, during his long sojourn in the Polar seas, with his uncle the late Sir John Ross 1829-33; and he may fairly be considered as the distinguished pioneer of sledge travelling, now brought to such wonderful perfection.

The travelling or searching parties from the "Enterprise" and "Investigator" were distributed as follows: viz. one to the westward along the coast of North Somerset, led by Sir James Ross in person, accompanied by Lieut. (now Capt.) M'Clin-

tock—a second by Lieut. Robinson to the southward—a third across Prince Regent's Inlet by Lieut. Browne—whilst a fourth in charge of Lieut. Barnard proceeded across Barrow's Straits to Cape Hurd. This latter was a bold attempt (though frequently accomplished afterwards).

I shall content myself by briefly alluding to the important journey commanded by Sir James Ross, and accompanied by the present Captain M'Clintock (then a Lieut.), and a party of twelve men and two sledges.

The daily allowance of provisions consisted of

	lb.	oz.
Preserved beef, or boiled pork* - -	1	0
Biscuit - - - - -	1	0
Chocolate - - - - -	0	1
Sugar - - - - -	0	1
Rum - - - - -		1 gill

Those experienced in Arctic travelling are well aware that the above quantities are not sufficient to support the stamina of men for such a service, nor would they be surprised to hear that the whole returned in a most pitiable condition; their attenuated forms being convincing evidence of excessive fatigue, combined with biting hunger for a period of thirty-nine days, during which time

they accomplished a distance of 460 miles, having discovered no less than 200 miles of new coast line.

To this journey, — under privations of no ordinary nature — Arctic explorers of later dates owe more than perhaps many of them are aware. Sir Edward Parry was indeed actually the pioneer of Arctic travelling; but whilst conceding the well-earned and honourable title, let us not forget that pedestrian exploration in those regions, was almost as novel to naval expeditions in 1849 as in 1820, and an absence of forty days was never contemplated, where the explorers were compelled to rely solely on their own resources.

Upon the equipments* used on the above journey, all those subsequently made have been modelled, and the travellers in the more recent voyages have enjoyed comparative comfort, with a sufficiency of food, and clothing; regular meals and a well organised system, when contrasted with the privations experienced by the immediate authors of these improvements.

* The sledges, tents, and indeed all the equipments were manufactured on board, — no provision (as in later years) being made previous to leaving England.

Scurvy in a malignant form broke out amongst the crews, of whom no fewer than six found a last resting place on the desolate shore of Port Leopold, and a seventh in the depths of the sea shortly after the extrication of the ships from their winter quarters.

The first movements of the ships from their icy prison occurred on the 18th day of August 1849, but the 29th arrived ere they were under sail; when their icy antagonist the pack surrounded the ships, and in a short time they were again closely beset. To be brief, they were drifted in this position 250 miles, fortunately for them in the right direction, and were not released until the 24th September, when both vessels made the best of their way to England.

The return of Sir James Ross, after an unsuccessful search for the missing ships, created an overwhelming sensation of deep interest and sorrow throughout the entire kingdom. Until then, the actual loss of the little band of explorers had scarcely been contemplated, but now all the horrors of their fate were canvassed in every circle, from the princely mansion to the peasant's cot.

Sufficient proofs — if any were wanting — of

the heartfelt solicitude that every Englishman possessed in their welfare, were the expressions of regret that prevailed in every community, as well as the rewards voted by Parliament for their relief, or the knowledge of their fate. The most energetic measures were immediately put in requisition, nor were the feelings of sympathy confined to our own country, but extended over the whole civilised world. America, in the person of a noble-minded citizen, Henry Grinnell, actuated by a spirit of glorious rivalry, entered the lists by fitting out two vessels, to succour and rescue our missing countrymen.

In January, 1850, the "Enterprise" and "Investigator" were again despatched on their mission of humanity, under their respective chiefs, Captain Collinson, and Commander (now Captain Sir Robert) M'Clure. The ships, however, were to enter on a new field of search, as many savants supported the idea of Sir John Franklin having pushed beyond Melville Island, and was therefore likely to be found between that island and the N.W. point of America.

The Government, to whom all praise is due for the perfect manner in which the views of the

nation were carried out, determined on fitting out *yet another* expedition, consisting of the two sailing ships "Resolute" and "Assistance," and two screw tenders "Pioneer" and "Intrepid." Captain Horatio T. Austin, C.B., was nominated to the chief command, with Captain Ommanney as second. The tenders were respectively commanded by Lieuts. Sherard Osborn, and Bertie Cator. These were the first screw steamers which had ever entered the Arctic seas, one steam vessel only (with paddles), the "Victory,"—Sir John Ross having led the way. This year, 1857, one or more Iron Screw Whale Ships have followed in their wake.

On the 4th of May, 1850, the squadron left Greenhithe to follow up the supposed track of the missing ships, through Lancaster Sound, as it was justly supposed the season would be more favourable than those experienced by Sir James Ross, who, by a series of unfortunate circumstances over which he had no control, was prevented from penetrating beyond what may be termed the threshold of exploring ground.

Another government expedition under Captain Penny of the Mercantile Marine, consisting of the

brigs "Lady Franklin" and "Sophia," were equipped at Aberdeen, and sailed thence on the 15th April, to explore Jones' Sound if practicable.

Sir John Ross also, the veteran Arctic navigator, after some little difficulty in collecting the necessary funds, wended his way once again to the northward, at the advanced age of seventy-two, being imbued with the conviction that traces of his old friend Sir John Franklin were to be found at Cape Hotham, in the Wellington Channel; and lastly, the "Prince Albert,"* equipped by Lady Franklin, aided by a few friends, was placed under the command of Captain Forsyth, R.N., and despatched to Prince Regent's Inlet, to prosecute a search from her intended winter quarters in Brentford Bay towards the very spot where traces have subsequently been found by Dr. Rae.

It is not necessary to give even an outline of these voyages, as all necessary information connected with their proceedings is embodied in Captain Sherard Osborn's *Stray Leaves from an Arctic Journal*.

The number of ships employed during the year

* An account of the voyage was written by Mr. W. P. Snow first mate of the ship.

1850, within the Arctic Circle, in search of the missing ships "Erebus" and "Terror," amounted to no fewer than 16, with 689 men; they were as follows, viz.: —

Baffin's Bay.

H. M. Ship	"Resolute"	-	-	-	60 men
"	"Assistance"	-	-	-	60 "
"	"Pioneer"	-	-	-	30 "
"	"Intrepid"	-	-	-	30 "
"	"North Star"	-	-	-	40 "
"	"Lady Franklin"	-	-	-	26 "
"	"Sophia"	-	-	-	20 "
Private	"Prince Albert"	-	-	-	15 "
	"Felix"	-	-	-	17 "
American	{ "Advance"	-	-	-	19 "
		"Rescue"	-	-	17 "
					Eleven ships with <u>334</u> "

Behring's Straits.

H. M. Ship	"Herald"	-	-	-	150 men
"	"Plover"	-	-	-	43 "
"	"Enterprise"	-	-	-	66 "
"	"Investigator"	-	-	-	66 "
Yacht	"Nancy Dawson"	-	-	-	30 ,
					Five ships with <u>355</u> "

		Ships.	Men.
Baffin's Bay	-	- 11	334
Behring's Strait	-	- 5	355
Total	16	<u>689</u>	

On the return of Captain Austin's expedition, an Arctic committee was appointed to inquire into the many conflicting statements which were made relative to the disposal of the forces under Captains Austin and Penny; the result was that another expedition was determined on. The same vessels, viz., "Resolute," "Assistance," "Pioneer," and "Intrepid," with the addition of the "North Star" as a depôt ship, were again equipped; the commands — for there were two distinct branches — being entrusted to Captains Sir Edward Belcher, C.B., and Henry Kellett, C.B.; the tenders were in charge of Commander F. L. M'Clintock and Lieut. (now Captain) Osborn; the latter officer was made a Companion of the Bath for his distinguished services in the Sea of Azov.

Even now, whilst I write, Captain M'Clintock is again preparing to prosecute another voyage, in hopes of clearing up the mystery of the fate of the crews of the "Erebus" and "Terror." A screw steam yacht — the "Fox" — has been pronounced admirably adapted for the service, the *beau-ideal* of an Arctic vessel of the present day, with a bow as sharp as a knife, the very reverse of the old school, and is now fitting out at Aberdeen at the

expense of Lady Franklin and other promoters of her noble undertaking.

May her unparalleled efforts to obtain tidings of her brave husband and his gallant companions be attended with the results so ardently desired ; and if success can be obtained, Captain M'Clintock is, under Providence, the man to command it.

The good wishes of every civilised nation will attend the expedition now setting forth from our shores ; and may all who comprise it be restored to their homes in unimpaired health, and successfully accomplish the object of their glorious mission.

G. F. M'DOUGALL.

Denny Street, Tralee.
July, 1857.

175 170 165 160

CHART TO ILLUSTRATE THE NARRATIVE of the VOYAGE OF H.M. SHIP RESOLUTE *Capt. Henry Kellett C.B.*

Actual track _____
Doubtful track of the Resolute
after being abandoned - - - - -

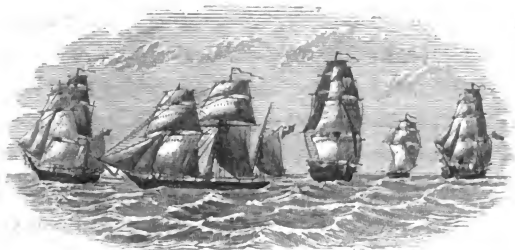


PRIVATE JOURNAL

KEPT ON BOARD

H. M. DISCOVERY SHIP "RESOLUTE."

B



Resolute.

Pioneer.

Assistance.

Intrepid.

North Star.

ARCTIC SQUADRON, 1852.

CHAPTER I.

Leave the Nore.—Proceed through North Sea.—Cross the Pentland Firth.—Arrive at Stromness.—Leave Stromness.—Letter of Sir E. Belcher.—Complete Arrangements for Towing.—Pass Cape Wrath.—Fishing Boats off the Butt of Lewis.—Last Letters written.—Commencement of Gale.—Gale in the North Atlantic.—A few Remarks thereon.—“Basilisk” and “Desperate” part Company.—The sunken Land of Bus.—Remarks on the Current.—Off Cape Farewell.—Danger of “Washing or Stragglng Pieces.”—Loss of the “Shannon,” of Hull.—Loss of the “Shannon,” continued.

WEDNESDAY, April 21st, 1852, at 5 A.M. the Arctic Searching Expedition, consisting of H.M. Ships “Assistance,” “Resolute,” “North Star,” “Intrepid” and “Pioneer,” under the command of Captain Sir Edward Belcher, C.B., left Greenhithe

and proceeded down the River; the three first in tow of the "Monkey," "African," and "Lightning;" the tenders were under steam.

A bright morning, an unclouded sky, a keen frost, and an easterly wind reminded many of us of those glorious daysprings which are only to be met with in Melville Bay. The Thames, as usual, was studded with vessels of every size and nation. On passing, their crews mechanically ceased their ordinary occupations, to gaze on us with an interest, expressive of the feelings which the peculiar nature of the service, on which we were about to be employed, would naturally suggest to the reflective mind.

As some of the vessels were in want of a few articles from the Dockyard to complete their equipment, we anchored at the Nore, where we found the "Basilisk" and "Desperate" (steamers) awaiting our arrival for the purpose of towing the squadron through the North Sea.

At 3·20 P.M. the squadron weighed and proceeded in the same order as before,—with the "Basilisk" and "Desperate" in company,—and anchored at 10 P.M. in the East Swin to await the change of tide.

Thursday, 22nd, at 5 A.M., wind moderate from S.E., weighed and proceeded in tow of the "Light-

ning,"—squadron in company. During the forenoon made all plain sail, which caused the old vessel to heel over considerably in consequence of having a heavy deck load.

At noon the "Lightning" cast off, and was succeeded by "Desperate," whose great power gave an increase to our former speed. In the course of the afternoon the wind freshened considerably, and at 5 P.M. we followed the motions of the "Assistance," and cast off from "Desperate." Shortening to moderate sail, we continued on our course to the northward.

Friday, 23rd. — During the night the wind increased to a strong breeze from S. E. with a cross sea, which rendered the vessel very uncomfortable the whole day.

Sunday, 25th. — On going on deck this morning I found we were becalmed and about to be taken in tow by the "Desperate," by whose aid we were soon ploughing our way through the mirror-like sea, at the rate of eight miles an hour.

The morning was beautifully fine, with a perfectly cloudless sky. Noss Head with its picturesque lighthouse was distinctly visible, as well as the bold promontory near which stands John o' Groat's house, whilst blue in the distance we

could just distinguish the outline of the high land of Hoy.

Such a day was enjoyed by all on board, but I doubt if gazing on the pretty cottages, snugly ensconced in the recesses of deep bays, tended to reconcile us to the thoughts of leaving England, dear England! for a period which we all knew *must* be for years, and *might* be for ever!

Rounding Duncansby Head, the N.E. extremity of Great Britain, we encountered the tide of the Pentland Firth, which, during the springs runs at the rate of ten miles an hour. By the aid of steam we crossed the Firth in gallant style, and wended our way through circuitous, but noble channels, catching an occasional glimpse of deep bays and fiords, as well as a distant view of Kirkwall with its ancient cathedral, which was scanned with considerable interest by those amongst us who had perused Scott's *Pirate*.

At 1.30 P.M. we anchored off the town of Stromness, but as the sabbath is strictly observed, only a few people came on board. In the course of the evening all the vessels of the squadron arrived, filling the harbour, and imparting an air of gaiety to the town, which by the aid of telescopes appeared crowded with people of both sexes.

Tuesday, 27th.—Calm and fine. During the

forenoon we were honoured by the presence of several ladies, the clear red and white of whose complexions, combined with the brilliancy of their eyes, created quite a sensation on board.

In the evening I accompanied a messmate to the house of Dr. Hamilton, whose wife is a sister of Dr. Rae, the celebrated Arctic traveller. Here we were entertained with the hospitality of a second Magnus Troil, and passed a delightful evening, the reminiscences of which will ever be of the most pleasing description.

Stromness is built on the side of a hill facing to the eastward, and contains, according to the last census in 1851, about 2000 inhabitants. Kirkwall, the capital of the Orkneys, has a population of 3300 souls.

The harbour of Stromness is capable of affording shelter to a large fleet, and its natural formation renders it a place of perfect safety in the heaviest gale. A patent slip, on which were three vessels during our visit, affords great facilities to ships in want of repair.

Wednesday, 28th. — The wind during the night had increased to a strong breeze, with thick misty weather; this with the sickly appearance of the moon around, which we observed a well defined

halo, led us to suppose we were to have a gale, an idea which was supported by the *savans* of Stromness.

At 2 P.M. weather very unpromising; weighed and proceeded out of Hoy Mouth in tow of the "Desperate," squadron in company. Although the atmosphere was laden with moisture, hundreds of people congregated on the heights to witness our departure.

The following is an extract from the orders issued by Sir Edward Belcher, C.B., to Captain Kellett, C.B., the second in command of the expedition, under whom I had the happiness to serve on board the "Resolute:" —

"I wish it to be perfectly understood throughout the squadron, that I shall be at all times open to unreserved communication with all the officers, upon matters which are not already defined by the naval instructions to be transmitted through the commanding officer: and that upon any ideas which may occur to them upon scientific, theoretical, or other interesting matters, their remarks will find a place in the general Journal of the Voyage, which will be kept confidentially by myself.

"It is, I hope, from what I have seen (and from the feeling which I know brought the majority of officers together to support me in this arduous undertaking), unnecessary to say more, than that each will strive to maintain the general happiness of our community — that they

will see the necessity of avoiding any subjects which may cause irritation or difference of opinion; and that if any exciting discussions should arise between others, they will use their utmost endeavours to turn the conversation, or to soften irritable remarks, which may unfortunately have escaped.

“To carry out the important service in which we are all engaged, we should remember that *all must pull together*; that the success of the expedition is the *success of all*, and that according to the importance of the general result, so will they be entitled to ask for reward.

“One failure, one dark spot on the record, may not at the moment be thought important — but remember that the eyes of the whole civilised world are upon us! As those who preceded us have done well, let us strive to exhibit what can be achieved by discipline, good feeling, and that untiring zeal which is ever conspicuous in our noble profession.

“Given under my hand on board Her Majesty's
Ship ‘Assistance,’ at Stromness, Orkney
Islands, the 28th of April, 1852.

“E. BELCHER.

“To Captain Henry Kellett, C. B., and the Officers
commanding Her Majesty's ships and vessels
composing the Arctic Expedition.”

The departure of the squadron must have formed rather an imposing spectacle from the shore: the “Basilisk,” with “Assistance” in tow, took the lead, followed by the tenders, then came

the "Desperate" and "Resolute," whilst the "North Star," under sail, brought up the rear.

Although we all expected a gale, we were agreeably surprised on finding our supposition incorrect, for when outside Hoy Mouth we found the sea smooth, and wind (westerly) moderate.

It was not till 8 P.M. that the arrangements for towing were completed. We then proceeded in two divisions,—the "Basilisk," towing the "Assistance," "Intrepid" and "Pioneer," formed the first division, whilst the second was composed of the "Desperate," "Resolute," and "North Star."

Steering so as to pass to the southward of the Nunbank; the light on Cape Wrath was observed at 3 A.M. on Thursday 29th, and the point passed at 8 A.M. within five miles, with a smooth sea and moderate easterly breeze.

The fine weather enabled us to determine the position of the ship by true bearings of Cape Wrath, which verified the rates of our chronometers.

During the day we had little or no wind, but towards evening a breeze sprang up from S.E. with misty weather. About 6 P.M. we were surprised to observe several fishing-boats, but did not pass within hail. The boats appeared small for

the purpose on which they were employed so many miles from land, but were no doubt admirably adapted to contend with a strong breeze and heavy sea.

This little incident naturally enough caused the conversation to turn on the various styles of naval architecture adopted by the different countries we had visited. One gave a graphic account of the structure and capabilities of the catamaran, which is literally a rude raft of rough logs; several of these I had frequently seen off the northern coast of South America, many leagues out of sight of land, and as often wondered at the recklessness of men who, to obtain what at the best must be a precarious livelihood, trusted themselves to the elements in such a primitive vessel.

For several days after we left the Orkneys the weather continued very unsettled, with variable winds, and a heavy westerly swell.

Sunday, 2nd. — At noon the signal was made to have letters for England ready by to-morrow, which caused postage stamps, signatures to wills, and extracts from journals, to be in great demand. A bag full of letters was completed in an almost incredibly short time, although the process at a gun-room table is at all times difficult, but parti-

cularly so when, in addition to the usual noise, the motion of the vessel is rendered uneasy by a fresh breeze and cross sea.

And these were to be our last letters for a long, long period! and yet there was something pleasing in the feeling that they would be perused with greater pleasure, and prized infinitely more than their predecessors. With these thoughts and the hope of again enjoying the sight of the loved shores of Old England, the bag was closed, and the last link severed that bound us to our homes.

Tuesday, 4th.—Wind strong from S. W., with a cross sea. We scarcely knew what to make of the weather, for although appearances had for several days foretold a gale, the barometer had been gradually rising, and at 3 P. M. stood at 30·21.

It went no higher, however, but commenced falling rapidly, which one would have supposed to be the signal for the sea and wind to begin in earnest. We soon, to use a nautical phrase, had “fresh hands at the bellows,” and foamy crests to the waves; these causes combined compelled us at 10 P. M. to reduce our canvas to close-reefed topsails.

Wednesday, 5th.—At noon to-day the gale was violent indeed, and in the squalls blew a perfect

hurricane, with a very heavy cross sea. The ship laboured greatly, and took water in constantly over the lee gunwale, but considering the weight on deck the old craft behaved well. We were now lying-to under close-reefed maintopsail, storm staysail, and reefed main trysail.

During the afternoon the top-gallant masts were housed, and everything secured for a conti-



H.M.S. "Resolute" lying-to in the North Atlantic.

uation of the gale. Towards night the squalls abated somewhat in violence, but not sufficient to allow any increase of sail.

“A wet sheet and a flowing sea” is all very well in theory, but I should like to see the author of that song in a deeply laden ship in the North Atlantic, with a strong gale and heavy sea, and all their concomitant miseries. I doubt if he would reiterate his request to be supplied with

———“the snorting breeze,
And the white waves heaving high;”

but rather imagine he would bear willing testimony to the good taste of the “fair maid” who sighed “for a soft and gentle breeze.”

Thursday, 6th.—The wind this morning had decreased to a light variable breeze, with occasional squalls and heavy rain. With the exception of the “Basilisk” all the vessels were in sight, but at some distance from us.

We took advantage of the break in the gale to send a tier of casks off deck and stow them below, although by so doing the space in the lower deck was considerably lessened.

Scarcely had we done so when the second part of yesterday’s gale came on, and we were again reduced to very small sail, and so continued during the night.

Friday, 7th.—Weather more moderate, but still

looked threatening. At 10 P.M. we observed a faint appearance of Aurora to the westward.

Saturday, 8th.—This morning, the wind having again subsided, signal was made to have letters for England ready. During the forenoon they were taken on board the steamers. At 11·30 A.M. the “ Basilisk ” and “ Desperate ” gave three hearty cheers to each vessel of the squadron, which were as heartily responded to on our side, they then altered course for Old England, and at 2 P.M. were out of sight.

Towards evening the weather again assumed a threatening appearance, which, accompanied by a falling barometer, led us to expect another breeze; nor were we disappointed, as on

Sunday, 9th, at noon, the breeze from S.W. had increased to a moderate gale, with heavy squalls, which obliged us to heave-to, and house topgallant-masts.

Tuesday, 11th.—The wind during the night had decreased and shifted gradually by way of S. and E. to N.E., bringing with it a pleasant sunshine and fine weather, such as we had not enjoyed for some time.

Wednesday, 12th.—Weather fine; ship near the position assigned to the sunken land of Bus, discovered by, and named after, the “ Busse ” of Bridge-

water on her return from the ill-fated third voyage of Frobisher in 1578. In consequence of the report of her captain, the land of Bus was inserted in the chart; it is described as being "fertile, full of wood, and a fine champaign country."

It was, however, never seen afterwards, and people were in consequence divided in opinion respecting its authenticity; some believing the whole report to be a fabrication, whilst others, taking into consideration the resemblance between it and the description of an island visited by Antonio Zeno in 1384-94, were inclined to place faith in its having once existed, and attributed its disappearance to an earthquake.

The latter opinion appears to have derived additional support from the fact of soundings having been obtained on a bank in the immediate neighbourhood of its assumed situation.*

Thursday, 13th. — Sir Edward Belcher, accompanied by Dr. Lyall, came on board to visit Captain Kellett, who for some days had been confined to his cot, being seriously indisposed.

Wind and weather during the day variable; barometer began to fall.

* Barrow's Chronological History of Voyages to the Arctic Seas.

Friday, 14th.— During the afternoon the wind gradually increased from N., and veering round at night to N.E. blew a strong gale, which at 11 P.M. carried away our bentinck boom.

Saturday, 15th.— Last night was by far the most uncomfortable we had yet experienced, the uneasy motion of the ship not only prevented any one enjoying rest, but did considerable damage to our crockery. In the course of the day the wind fell, and we were again subjected to alternate calms and variable airs.

On looking over Graah's *Greenland*, I find he is very decided respecting the current, which he states "undoubtedly runs to the eastward between the parallels of 57° and 58° ." (p. 20.)

Now our observations would tend to prove the existence of a westerly current; for although, like Graah, we experienced westerly gales, the longitude, by dead reckoning, was invariably to the eastward of that by observation; this discrepancy could not be attributed either to the glass or log, for the accuracy of the former was frequently tested, whilst the latter agreed with the patent log, which was kept over from the day we left the Orkneys.

I agree with him in thinking there is a northerly

current, the strength of which depends in a great measure on the winds.

Tuesday 18th. — For the last few days we have had moderate, but variable winds. At noon we found ourselves nearly due south of Cape Farewell, distant about 100 miles, which is considered a good offing by the whalers, who dread nearing the Cape, in consequence of the heavy “washing pieces,” which are to be met with in its vicinity.

A “washing piece,” according to the whaling definition, is a piece of ice (varying in size) broken from a berg, by the combined action of the winds and waves, and floating only a few feet above the water. Now it must be evident, even to an unprofessional mind, that on dark nights, and in a heavy gale, it would be difficult to distinguish the crested top of a wave, from a “washing or strag-gling piece,” striking which would, in all probability prove fatal to the ship and crew; for although the ice may only be a few feet above, it would be many feet below the surface.

The specific gravity of ice as determined by actual experiment, is as nearly as possible $\frac{7}{8}$; therefore if only four feet be above the level, there would be twenty-eight feet below, the whole form-

ing a solid mass, almost as hard as rock, of thirty-two feet in depth.

Connected with this subject, one of our ice-quarter-masters (Collins) who has been employed in the Greenland trade for many years, related the following interesting but melancholy tale, which illustrates too faithfully the dangers to which our adventurous countrymen are exposed.

The "Shannon" of Hull, when outward bound, fell in with a gale of wind, about 200 miles N. W. of Cape Farewell. At midnight the ship was under snug sail, but the dark masses of heavy clouds, driving across a wild looking sky, cast a dense shadow on the heaving sea, relieved only by the snowy crest of the toppling waves.

The watch had just been relieved, when a fearful crash told the awful tale, — the ship had struck a "washing piece!" the bows of the ill-fated ship were stove in instantaneously, and horrible to relate, the men of the watch below, who had just lain down, were crushed to death by the ice, whose progress was at length arrested by the foremast.

The men on deck rushed to the rigging, but the ship commenced filling; and falling over on her broadside, launched the men on that side of

the rigging into eternity. Few only now survived, and they were in momentary expectation of the ship sinking; fortunately she did not*, but they remained in this fearful state of suspense for many days, and were obliged to have recourse to sucking their own and each other's blood to sustain life. They were eventually rescued by a Danish vessel, and landed at Elsinore, where my informant then was.

Strange to say, the Captain of the Danish vessel had for several nights dreamt some dreadful catastrophe had befallen a ship, in a certain latitude and longitude, and this vision had such an effect on his mind, as to induce him to steer in the direction pointed out, although quite out of his course; which was usually along the coast, as they were accustomed to call at all the settlements.

If the assigned cause for his altering course be true, the result proved the special interposition of Providence.

* I can only attribute her not sinking to the buoyancy of the casks on board.

CHAP. II.

First sight of Ice and Land.—West Coast of Greenland laid down incorrectly.—Experience a sudden Squall.—Arrive at the Whale-Fish Islands.—Their Value to Denmark.—Esquimaux Costume.—Visit Kron-Prins Islands.—The Burial Ground.—Esquimaux Canoe.—Leave Whale-Fish Islands.—Arrive off Godhaven.—“Pioneer” fouls a Berg.—Arrive at Lievely.—Each Ship grounds.—The “Resolute’s” Ball.—Settlement of Lievely.—The town of Lievely.—

THURSDAY, 20th. — At 4 A.M. the first berg was seen, about eighty miles S.E. of Cape Desolation, and was gazed at with great interest by those who now saw ice for the first time. During the day some “washing pieces” were seen as well as a few bottle-nosed whales.

The wind during the day was westerly, but towards night drew round to south, with light winds and misty weather.

Friday, 21st. — Wind S.E., increased at 8 A.M. to a moderate gale, with thick misty weather, and a heavy fall of snow, which rendered it necessary to keep a more than ordinary look-out for icebergs, many of which we passed close to, looming like so many islands through the mist.

At 10 A.M. we caught a glimpse of the land, but only for a few minutes; the thick weather again hid it from our view, and prevented our ascertaining its locality.

Towards evening the wind moderated and veered round to N.E.; the barometer fell to 30°, and we all felt the cold searching wind, which brought with it the temperature of those eternal glaciers over which it must have swept.

For some days past we have been visited by several species of land birds; we succeeded in entrapping several; one of them proved to be a red-pole (*Sylvicola petechia*), all the others were snow buntings (*Emberiza nivalis*) clad in their summer plumage. We have also observed looms (*Alcapica*), mollemauks (*Procellaria glacialis*), kitty-wakes (*Larus tridactylus*), and other birds which frequent the coast of Greenland.

Sunday, 23rd.—Wind S. and S.E. with a heavy fall of snow, and cold weather, which continued during the whole day.

Monday, 24th.—At daylight, observed the land, composed of high and rugged snow-clad peaks, extending from E.N.E. to S.E. Found the longitude, at noon, to be 52° 18' W., which placed us a mile or two on shore according to the chart.

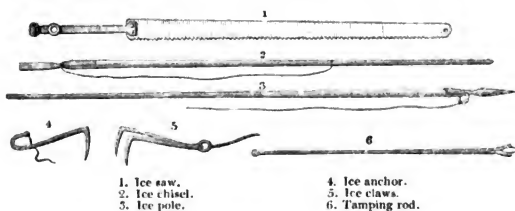
Last voyage we found nearly the whole coast of Greenland laid down several miles to the westward of its actual position.

About 5 P. M., being about ten miles off shore, with light easterly winds, we suddenly encountered a heavy northerly swell, which caused all the vessels to plunge heavily; we could only account for it by supposing we were on a bank, but we failed in obtaining soundings with sixty fathoms.

Tuesday, 25th. — During the night we had made but little progress, in consequence of light winds. At noon we found we had been set to the northward about ten miles, and our position obtained from good observations again placed us on shore, although we were at least ten miles off the nearest land. During the day an accumulation of dense masses of clouds hovered over the mountain tops, constantly changing their position, although we had light airs. To this phenomenon we attributed a sudden squall from the S.W., which obliged us to shorten all sail.

Wednesday, 26th. — The wind during the night had again veered round to the northward, against which we had to contend for several days; the time, however, was not spent unprofitably, but was devoted to completing the fittings of the various ice-

instruments* of which I have subjoined a sketch, that probably will convey a better idea of their shapes and uses than pages filled with a written description.



Saturday, 29th.—This morning wind light and variable, with thick misty weather. About 7 A.M. we caught a glimpse of the Whale-fish Islands, but did not anchor till 2.30. P.M. Before anchoring, we were honoured by a visit from a little fleet of canoes, and we were much amused by the dexterity displayed by the Esquimaux in throwing their spears at biscuits, suspended from boat-hooks over the gunwale of the ship. The best marksmen of course obtained the prize, which was sacredly kept for their koonāhs.

* Models of these may be seen in the Arctic collection presented by Mr. Barrow to the British Museum.

The Whale-fish Islands are a small rocky group lying off the coast of Greenland, and are situated in lat. $68^{\circ} 58'$ N. long. $53^{\circ} 14'$ W. Most of the natives reside on Kron-Prins (Crown-Prince) Island, where the chief factor, a carpenter, holds the reins of government. He, however, is only a deputy, under the Governor of Lively (Disco), distant about sixteen miles, whose business is to collect as much oil, and as many skins, as possible from the native population.

The produce of their labours is forwarded to Denmark by a government transport, which brings the necessary supplies for the various missions along the coast annually, and on her return to Denmark she is generally well freighted with seal-oil and skins. To give an idea of the importance of these stations, it will only be necessary to state the fact of no less than 100 tons of seal-oil being stored at Kron-Prins island alone — the value of a ton of which, in England, varies from thirty-five to forty pounds.

Our little squadron, filled the small harbour in which we were anchored, — we were completely land-locked, being surrounded on all sides by precipitous hills of granite, admirably adapted for

building purposes. The whole group is of the same formation, without any signs of vegetation, save in the valleys and clefts in the rocks, where mosses and lichens flourish for a brief period; — a more barren or uninteresting aspect than these islands present, could not possibly be imagined.

The Esquimaux found a good market on board the various ships for boots, mittens, tobacco-pouches, and minature canoes — old clothes or handkerchiefs being in exchange preferred to money. It was pleasing to remark the absence of all noise, or even gesticulation, to which most uncivilised nations are much addicted.

Silk handkerchiefs were in great demand, being used as a bandeau for the brows of the koonāhs, who failed not to examine the texture and size of the article, previous to the conclusion of the bargain.

The Esquimaux are about the middle stature, copper-coloured, and are distinguished by the elongated eye and high prominent cheek bone of the Chinese, to whom they bear a strong resemblance.

The men are clad in jackets and trousers made out of the skin of the deer, or seal, and in the absence of caps, have attached a hood to the former

article of clothing. Their mittens and boots are made of the same material.

The costume of the women is the strangest I ever saw, excepting that of the "Bloomers," which is nothing more nor less than a modified Esquimaux dress.

It consists of a sealskin frock and trousers, or rather drawers (for they do not come within six



Natives — Whale fish Islands.

inches of the knee), and are ornamented down the sides by strips of brightly dyed leather.

Their hair, which is of a glossy black, is carefully

turned up to the back of the head, and there secured in a peculiar knot-by a piece of ribbon, the colour serving to identify the social position of the wearer; the maidens are distinguished by a red ribbon only, whilst the married women being, I presume, "the better horse," wear any colour they please; the fact of their wearing breeches tends to confirm this supposition.

So far as we were enabled to judge, the little community are entirely free from the vices of dishonesty and immorality, and this is to be imputed to the beneficial influence of the missionaries.

I accompanied a small party of officers to Kron-Prins Island, where, as I have before observed, the factor resided. Our friend received us very kindly in his summer dwelling-house, a commodious wooden building; it consisted of one story, in which all business was transacted. On the ground floor were two small rooms set apart for domestic purposes, one of them contained a bed, a couple of chairs, and some badly executed prints of Danish celebrities, with most unpronounceable names; the other appeared to be used for the double purpose of a workshop and sleeping apartment for his attendant. After inspecting his stock, consisting of deer and seal skins, and a few horns of the sea

unicorn, we visited his winter hut, a little better, but on the same principle as those in which the Esquimaux exist.

The huts of the natives are composed entirely of turf, the lower half being below the surface of the ground. From the interior runs a long, low, narrow, and always filthy underground passage, which enables the inhabitants to keep up a communication with the outer world. I certainly did succeed in exploring one of these, being obliged to stoop until the posture became quite painful, but on reaching the room I was so overpowered with a compound of the most horrible smells as to be obliged to beat a hasty retreat, and as I could not again face the passage by which we entered, I took the liberty of making my exit through the window, or the apology for one, placed a little above the ground.

The most interesting place on the island is the burial ground, where several boards, over protruding coffins, serve to point out the last resting place of some of those adventurous spirits who quit their native land to seek and kill the king of the northern seas. One of the boards bore the date of 1795, the letters being quite distinct.

There was one, however, which excited more

attention than the rest, in consequence of the curious epitaph cut into the wood. It bore the date of 1825. The board in many places was split by the combined action of frost and sun, and it was not without some little difficulty we deciphered the following lines, which are copied verbatim.

“ You Mariners that pass by here,
 Upon my grave let fall a tear ;
 Henry Markinson is my name,
 In the “ Albion,” Captain Hill, I came :
 ’Twas the month of April I came here,
 But did not think death was so near.
 On the 15th day of April
 It was my lot to have a fall.
 From the cross-trees of the main-topmast,
 I on the quarter-deck was cast,
 And was so hurted by the fall,
 My life soon after God did call.”

The Esquimaux canoes are well worthy of notice, being proofs alike of the ingenuity and neat work-



manship of the builders. They are composed of a

light framework of wood (imported from Denmark), over which well stretched seal skins are sewn, quite impervious to water. A hole large enough to admit a man's body is left in the centre of the canoe; around this hole is placed a combing about an inch high; this is covered by the deer-skin frock of the sitter, so that a boat fitted in this manner is not only water, but air tight. The implements for fishing consist of spears and knives; the former are pointed with bone, and are thrown in a very dexterous manner by an experienced hand.

The one used for seals is somewhat larger than the others; a small line is attached to it, and then coiled on a kind of skeleton drum, one of the fixtures of the canoe; the other end is fastened to an inflated seal skin, this, acting as a buoy, serves to indicate the position of the seal, which always dives on being wounded.

During our stay Sir Edward Belcher, assisted by the officers of the squadron, made a survey of the group; this employed us fully during the day. At night, or what was so termed,—for the sun had ceased to sink below the horizon for some days,—our sportsmen left, to shoot for the mess, and although the birds were wild and difficult to

approach, succeeded in bagging several braces of eider-duck, looms, and dovekies.

Saturday, June 5th.—At 7 A.M. weighed, and proceeded through Boat Island Passage, towards Lievely (Disco). In consequence of light winds, we did not sight, or rather did not distinguish, the entrance until about 5 P.M., when we were favoured with a fresh north-easterly breeze.

The “Assistance” now made a signal for the “Pioneer” to lead the way, but continued standing towards the port, off which she “hove-to,” and despatched a boat to ascertain the security of the passage.

About seven, two boats with Danish colours were descried coming out of the harbour, and at the same time “Assistance” bore up for them; we also bore up, supposing that the boats with colors in the fairway to be a preconcerted signal for the vessels to close. Now follows a chapter of accidents.

Whilst running in, we observed the “Pioneer” foul an iceberg (grounded in the entrance), and immediately afterwards her mizen-mast went by the board. But it was not until we were close to her, that we observed her hauling off from the berg by a whale-line to the shore, thus effectually blocking up the passage, save a narrow space between her

stern and the berg. This placed us somewhat in a predicament, as we did not wish to run to leeward of the berg, beyond which there were many others, that would—under present circumstances—have rendered our working to windward both difficult and dangerous. We therefore trusted to good steerage, and bore up for her stern, which we almost grazed on the one side, whilst the other cleared the projecting tongue-piece of the berg by a few feet only.



Pioneer's accident, and Resolute's predicament.

After two or three tacks in which the old “ Resolute ” did not prove remarkable for weatherly qualities, we came to an anchor in twelve fathoms, at the entrance of the outer harbour, on irregular and rocky ground. Fortunately we did not drag as the “ Assistance ” did, she being obliged to heave her anchor up, and again make sail.

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Sending our boats to assist the "Pioneer," she warped up to the near point, and anchored in twenty-eight fathoms.

During the first watch (from 8 P.M. to midnight) the "Assistance," "North Star" and "Intrepid," attempted to work into the inner harbour; all however failed. The "Assistance" struck on a shoal in the centre of the narrow channel, losing a part of her false keel, which floated up alongside. The "Intrepid" also struck whilst in stays, on one side of the passage. Both vessels anchored, as did also the "North Star."

Sunday, 6th. — On going on deck this morning found ourselves enveloped in a dense fog, by which all the vessels of the squadron, though close to us, were hidden from our view. About nine the fog dispersed a little, and Commander M'Clintock came on board with orders for us to remove into the inner anchorage; the wind having changed, we shifted our berth without any trouble, anchored off the town of Lively in nine fathoms (sand), and got a stern hawser out, to a ring on shore.

The "North Star" in attempting to drop in was not so fortunate, she struck on the outer point of the little harbour, and there remained — with a considerable list at low water — until 7 P.M., when

she hauled off and anchored in safety. The "Pioneer" also touched, but she, as well as the "Intrepid," anchored during the afternoon; and thus our little squadron rode at last in safety, in the inner harbour of Godhaven.

Sir Edward Belcher, on making his official visit to the governor, was received with a salute of three guns, mounted near the flag-staff, opposite the governor's house. The salute was returned on the governor visiting the "Assistance," where he dined.

Monday, 7th.—The appearance of the hills was completely changed since yesterday, in consequence of a heavy fall of snow during the night. The mountains beneath which we lay are about 2000 feet above the level of the sea, and appeared to be inaccessible. Several of my messmates, however, started during the forenoon, for the purpose of making the attempt.

About 6 P.M. we were honoured by the presence of a boat filled with the prettiest girls in Lievely; two of them, with auburn hair, clear complexions, blue eyes, and pretty features, carried off the palm of beauty.

Sophy and Marie became in consequence especial favourites, and although they, perhaps, would have appeared more to advantage in petticoats, we tried

to "make believe" their present costume to be nothing more than the result of their own wayward fancy.

The night was beautifully fine, the fiddler being supplied with rosin in the shape of rum, tuned his instrument, and played a polka. Away we started, — the girls nothing loth, — at a rapid pace along the quarter-deck. The sounds of revelry drew the attention of several officers of the other ships, who came on board, and joined in the dance.

The report of a musket directed all eyes to the summit of the mountain, and by the aid of telescopes, we descried four pigmy characters, standing out in bold relief against the sky. It was very evident, from the exclamations of surprise uttered by the natives, that the ascent was considered a great feat.

Our impromptu ball did not conclude till near midnight, and even then we were obliged to give the fair creatures a hint that we were not licensed beyond that hour. The following day, Tuesday the 8th, many of the officers of the squadron were employed surveying the harbour and its entrance.

In the evening we held a little fête at the house of the fair Sophy. The room was perhaps fifteen feet square, and in it were congregated about thirty

persons, the majority of whose garments were made of seal, or deer skin ; this fact, and I say it with all due deference to the wearers, who were principally ladies, was not conducive to our comfort, we were therefore obliged to have recourse to the open air, where we danced until near midnight, and then, quite worn out with fatigue, repaired on board.

The settlement of Lievely consists of about six wooden houses and several Esquimaux huts ; in the two largest of the houses reside the inspector and the governor. The former, who is said to be inspector of *all* the settlements, was absent on an official tour, but the latter assisted us as much as lay in his power in our endeavours to obtain boots, and other necessaries for travelling. The huts at Lievely are better built and much cleaner than those at the Whale-fish Islands. Indeed the whole population, about 200, appeared to be in a more flourishing condition, which no doubt is to be attributed to their being under the immediate eye of those in authority.

CHAP. III.

Land to obtain Coal.—Find the Waygat Channel blocked.—Bergs very numerous.—Sight Sanderson's Hope.—Arrival at Uppernavik. — Encounter a Gale. — Termination of the Gale.—Leave Uppernavik.—Sight of the Sugar-Loaf.—Dense Fogs.—Amusement on the Ice.—Sad Fate of two Dogs.—Sustain a heavy Nip.—The Rudder crushed by Ice.—Cut into Dock.—The Wreck of the "Regalia."—The Pleasures of Wrecking.—Speak the "St. Andrew" of Aberdeen.—Join a Fleet of Whalers.—A few Words on Dock-cutting.—Benefit derived by using Powder.

THURSDAY, 10th.—Wind fresh from easterly, with gloomy weather. At 7 A.M. the signal was made to "weigh;" at 8 tripped our anchor and ran out of harbour, and hove-to outside for "Assistance." About 10 "Assistance" and "North Star" joined company, and we commenced working along the coast to the eastward under all plain sail, Sir Edward's intention being to go through the Waygat Channel, a route with which we were all pleased.

Friday, 11th. — The wind, which had been moderate all night, became light during the day, and eventually calm.

Whilst at Lively we were informed that coal was to be obtained on the beach, about twenty miles to the eastward of the settlement; about 8 P.M. being abreast of the place indicated, boats were despatched from each ship, well provided with bags intended to be filled with coal, but either we were at fault, or the informant had named the wrong locality, for not a single lump did we obtain. The "Pioneer" was however more fortunate, for though she did not succeed in discovering coal, she filled her boat with drift-wood, a good substitute. The sportsmen taking their guns, and passage in the boats, succeeded in bagging a brace of ptarmigan, a few tern, a brace of snipe, and a little redpole.

Saturday, 12th. — Wind fresh from N. W., working to windward through the Waygat Channel; numerous strangely shaped bergs in sight; at noon entered brash ice, which became more compact the further we advanced to the northward. At 1 P.M. we observed the "Assistance" — then several miles to windward of our position — bear up and make the general recall. Awaiting her closing we bore up

in company, and at four found ourselves once more becalmed.

Probably in no part of the world does nature display more grandeur in her works than on the coast of Greenland. True, no towering pines crown the hill, nor are the valleys filled with verdure, but here, amidst a desolation, grand in the extreme, nature may be truly said to reign triumphant.

Precipitous cliffs, themselves mountains, rise out of an unfathomable sea, and are surmounted by the snow of ages, never yet trodden by the foot of man. Deep chasms filled with accumulated snow, form the building-yards from whence are launched into the deep, those floating crystal towers, which are at once the fear and admiration of those who brave the dangers of the Arctic Ocean. Truly those who "go down into the sea in ships, and occupy their business in great waters, these men see the works of the Lord, and his wonders in the deep."

Light winds, and unpleasant weather prevented our making much progress for several days. At length, on

Wednesday, 16th, we found ourselves abreast of Hare Island (situated about midway between Disco and the main), in the northern entrance of the Waygat Channel.

Here, according to the testimony of our ice quartermasters, coal is to be obtained, but in what quantities I could not ascertain.

From Hare Island extended numerous streams of loose ice to the westward; whilst inshore, and across the entrance of the channel, we observed what appeared to be closely packed ice.

At this time bergs of every size and shape lay strewn around us in all directions, and on attempting to count them, they proved to be innumerable.

Early in the afternoon we passed through a perfect labyrinth of those huge floating islands, and all the ships of the squadron took a barrier of stream ice, that lay in our course, in gallant style. Passing through several streams of loose packed ice, we found ourselves at 8 P.M. once more in open water.

Thursday, 17th.—Sighted Black Hook, and with a gentle southerly wind, ran to the northward close along Storoe Island, and Dark Head. About 11 P.M. it fell a perfect calm, but we still passed rapidly along the land to the northward, the result of tide, or current.

Friday, 18th.—Wind light from N.E. with thick fog; about 2 P.M. sighted the land near Sanderson's Hope, towards which we stood in company with the squadron.

Saturday, 19th. — Found ourselves off Uppernavik. It struck me as being providential that none of the vessels grounded on any of the off-lying rocks, (many of them just awash,) which abound in such numbers in the immediate vicinity of this settlement.

By far the best way in is to keep the high land about Sanderson's Hope close aboard, and pass between it and the first, or southern island. The only dangers to be avoided are two flat off-lying rocks a few feet above the water, to the southward of, but near the fairway of the channel recommended. After passing these rocks, the passage to abreast of the town is clear of dangers, although I should recommend, as a matter of precaution, a good look-out to be kept from the mast-head; lead, of course, constantly going.

The rocks, which are sprinkled plentifully enough between the islands, can easily be avoided in fine weather, for nature has buoyed them with berg-pieces, which, being aground, serve to show the position of the danger; they cannot therefore be too narrowly watched, and should not be approached too close.

About 7 A. M. made fast to a berg off the town, and half a cable's length from some rocks awash.

The breeze at this time began to increase from the southward, accompanied by thick misty weather. The "Pioneer" secured astern of us, the remaining vessels of the squadron anchored.

About 5 P.M. I went on board the "Pioneer" to spend an hour, intending to return before eight, the hour appointed for our departure; about seven however, the wind increased to a strong gale, with very heavy squalls, and thick snow. In one of the squalls the "Resolute" broke adrift, and fouling the "Pioneer" carried away her own jibboom, and the latter's foretopmast. Fortunately no other damage was done, and the "Resolute," passing astern, made sail.

The "Pioneer" being obliged to slip and make sail, fully occupied her small crew; and, much to my annoyance, I saw the chances were against my rejoining my ship that night.

About 8 P.M. the snow became so thick as to prevent our being able to see beyond fifty yards from the ship; this contributed to render our situation anything but enviable, for in addition to the rocks I have alluded to, in the preceding page, the bergs were numerous.

We now bore up in the "Pioneer" for an offing, Lieut.-Commander Sherard Osborn preferred run-

ning a gauntlet between the dangers—beyond which he was sure of being comparatively safe—to standing off and on an unknown shore in such a night. Shortly after bearing up, we passed the “Resolute” standing in under very small canvas.

Soon afterwards two rocks were discovered on the lee bow, and until we passed them, within a very short distance, it was a question whether or not the vessel would weather them; providentially she did so, for had we struck, no earthly power could have saved us. The snow at this time almost blinded us, and as it froze immediately it fell, we were soon encased in an icy covering. Steam was now got up, and about 11.30 P.M. the gale and snow abated a little in violence. Inwardly thanking God for our preservation, we steamed slowly out to seaward.

All my thoughts now turned to the “Resolute,” about whose safety I naturally felt very anxious. At length, at 2 A.M., Sunday, 20th, she was descried from the deck; and I was most thankful to find her safe.

At this time it was quite calm; scarcely a trace of the storm existed, save where the snow had lodged on the land, whose appearance was materially altered in consequence. At three, I returned

on board, and found I was not the only absentee, for no less than three of my messmates were on shore at the time of her sudden departure, and of course unable to rejoin.

During the day we experienced light winds, and a dense fog which at times limited our visible horizon to about 100 yards. A little before noon we received a visit from a Dane, and several Esquimaux men and women, who resided on an island some distance to the northward of Uppernavik. Although Sunday, we did a little "truck" with them in the way of boots.

About 5 P.M. the fog lifted for a short time, and we then observed the other vessels under weigh, and our boat, which had been despatched during the forenoon with letters, pulling towards us. In her were the absentees, bringing with them a neat dog-sledge purchased at the village, and several valuable specimens of plumbago from an island in the immediate vicinity of Sanderson's Hope.

Sir E. Belcher now determined upon threading his way between the Woman's Islands, and the result proved it to be by far the best route we could have taken; for although we had to "bore" through considerable streams of loose pack ice, and

laboured under the disadvantage of not seeing the land through the thick mist: we found ourselves quite clear at noon on Monday, where we entered what in arctic navigation is considered quite an open sea.

Towards the evening it became calm, and so continued during the night, during which we were drifted to the northward at the rate of one mile and a half an hour.

Tuesday, 22nd.— At noon to-day we found ourselves abreast of the high and precipitous headland known as Cape Shackleton. The depth of Hingston Bay was visible, whilst beyond it, to the northward, a remarkable peak, the Sugar-loaf of the chart, but known to the whalers as the Kettle-bottom, was hailed as an old friend by many of us, calling to mind, as it did, many little incidents that had occurred whilst it was in sight during the last expedition.

Sir Edward having ordered the tenders to get up steam, the squadron was taken in tow at 3·30 P.M., and thus, with furled sails and squared yards, we proceeded silently but swiftly to the northward.

As usual, the weather at night became foggy,

which rendered great precaution necessary, being in the immediate neighbourhood of the Three Isles of Baffin, one of which we descried at 8 A.M. on

Wednesday, 23rd, being distant less than a quarter of a mile. At this time, the vessels, though only a pistol-shot apart, were not visible to each other, but we distinctly heard the several orders issued, and recognised the voice of the speaker. Being surrounded by very loose ice, we scarcely knew which way to turn, and our anxiety, as may be imagined, was not decreased by the man in the chains reporting nine fathoms rocky bottom. We were now slowly drifting to the southward, with an extensive horizon of about fifty yards! The water in a few casts shoaled to six fathoms and a half, and with it our hopes of being extricated, without some accident, lessened, but the cry of nine, seventeen, and twenty fathoms (no bottom) again reassured us.

At noon the latitude obtained by Sir Edward Belcher on a berg proved to be $74^{\circ} 5' N$. The dense fog by which we were surrounded, though not extending higher than our mast-heads, continued without once lifting, even for the briefest period of time during the whole day. A good look-out was kept as we threaded our way through the

narrow leads of water, but with all our precaution we could not distinguish any of the numerous bergs we passed, until within 100 yards, when their bright summits towering over our comparatively fragile vessels, warned us to avoid such a dangerous locality. At 11 P.M. we were obliged to make fast, having reached the termination of the lead, but not for some time after did we observe a friendly berg, within eighty yards of our position.

Here we remained drifting, with the floe-berg in company, until 11 A.M. on Thursday, 24th, when the fog having cleared a little, (after continuing thirty-two hours,) we again saw our friend the Sugar-loaf, and by observations at noon found ourselves in exactly the same latitude as yesterday.

At 8 P.M. made fast to a floe. The weather being fine the scene on the ice became quite animated; most of the men resorted to the floe, and there amused themselves in various ways.

Leap-frog, cricket, and foot-ball were the favourite games, and loud and hearty laughter resounded across the icy field, disturbing the little rotges in their flight to the northward, much to the annoyance of our sportsmen. All were happy, and the chiefs of the expedition must have experienced great pleasure as spectators of a scene, in which

officers and men were enjoying themselves under such novel circumstances.



Amusements on the ice.

11·30 found ourselves drifting on to an iceberg ; we therefore cast off and proceeded in tow of steamers.

I had almost forgotten to speak of the fate of two dogs, which together with nine others were obtained at Lievely, and distributed between the ships. The dogs as well as the men were allowed a run on the ice during our forced stoppage. All of them returned on the expiration of their leave,

except the two above-mentioned : preferring death to slavery, they would not allow themselves to be captured, although the vessels were detained, and every endeavour used to get them ; they were, therefore, left to their fate—which was indeed a sad one—on the moving floe.

Friday, 25th. — Wind westerly, with another fog. At 5 A.M. made fast to a floe piece, and there remained till 3 P.M., when we again proceeded in tow as before. Shortly after moving we were surprised to hear the howlings of dogs on the floe.

A boat was despatched, and there sure enough were the dogs, but as intractable as on the previous evening. Being foggy, the boat was soon recalled, and bidding a last adieu to the poor animals, we steamed onward.

Some part of the "Intrepid's" machinery having become deranged she was obliged to cast off, and passing astern, made fast to the "North Star." At 5 P.M. she again resumed her station ahead.

We were now abreast of the Devil's Thumb, standing out in bold relief against the eternal glacier as a background. An immense number of bergs lay grounded near the shore, whilst, in many places, the glacier edge, extending to the



H. M. S. Resolute 1818

SITUATION OF H.M.S. RESOLUTE BAFFIN'S BAY

June 21st 1818

W. M. Douglas, Del.

sea, terminated in an icy cliff many hundred feet in height, and several miles in length.

Like Sinbad's old man, the fog clung to us; but with light variable airs we pushed on, taking the most northerly leads along what we fondly conceived to be the land floe.

Saturday, 26th.—At 5·30 P.M. we arrived at the end of the lead and made fast to the floe; the wind at this time was light from S.W., with gloomy misty weather. At 11 P.M. the floes closed, and the ship sustained a heavy "nip," which carried away the rudder.

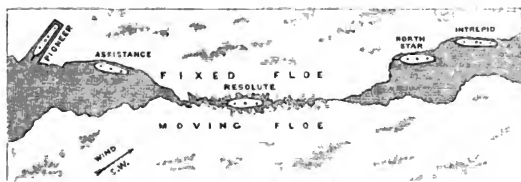


Diagram of the "Resolute's" Nip.

The pressure at times was so great as to cause the ship to careen over 35° , at the same time imparting a quivering motion to the hull, which rung all the bells, a peal that was far from pleasant under existing circumstances. The stern of the vessel was raised seven feet above the surface, and

as some doubts of her righting were entertained, the boats were hauled up on the ice.

At midnight the various vessels began to cut into dock, and as it was evident no human effort could release the old craft, the men were sent to work with the "Assistance's."

In a short time the edge of the ice presented quite an animated scene, with the crews of the various ships cutting through the ice, with huge saws, to a musical, but somewhat noisy chorus. The saws, varying from fourteen to sixteen feet,



were worked by whips attached to a pendant rove through a gin, which was hooked to a shackle,

supported by a bolt rove through the heads of three spars, forming a triangle.

Sunday, at 3:30 A.M., the heavy pressure ceased, the ship was consequently released, and became upright. The rudder was now unshipped, and hauled on the floe, when we found that both wood-work and iron had been unable to withstand the powers of the ice.

The main piece (formed of oak) was broken in two, whilst the back and filling piece of deal were crushed into splinters; which a wag suggested would come in for toothpicks. One of the braces was gone altogether, the bolts of another were drawn, and all suffered more or less.

At 4:30, the dock being completed, we hauled into it, alongside the "Assistance." After getting the spare rudder up to be prepared for shipping, we retired to rest about six, and the pressure must have been hard indeed to have aroused us from the trance-like sleep into which we soon fell.

No opportunity of leaving our present position occurred till the following day, at 10 A.M. when the squadron commenced tracking, and continued till 4 P.M., when we were again obliged to make fast.

Tuesday, 29th.—At 6 A.M., observed a barque

and brig to the westward. During the day we moved a short distance, but were stopped by a barrier, to clear which the crews were despatched, but without success.

Wednesday 30th. — At 0·30 A.M. moved onwards in tow of the tenders. At seven, observed the wreck of a vessel close to the floe edge along which we were steaming.

Securing the ship close to, all hands turned out with axes, saws, crowbars, and every available instrument, and commenced such an attack on the remains of the vessel, as would have induced a spectator to imagine they had been brought up as wreckers from their infancy. The vessel proved to be the "Regalia" of Kircaldy; she had evidently not removed from the spot where we found her, for spars, rope and stores of various descriptions, lay around on the ice, whilst the still smouldering fire * proved she had met her fate within the last few days.

The hull lay close to the floe edge, with some ten or twelve feet of the starboard bow out of

* It is customary to set whalers on fire—a very senseless and wanton proceeding—when all hope of their being saved is gone. How much might not the poor Esquimaux be benefited by the drift timber!

water; and was no doubt prevented from sinking by the pent-up air within the body of the ship. After taking as many spars and other articles as were likely to prove useful, Sir Edward Belcher determined upon blowing her up. She was accordingly towed to a short distance from the vessels, and a 20-pound charge, with Bickford's fuze attached, sunk in the fore-peak. In a few minutes the powder exploded, without creating much effect, and after a few lazy rolls she slowly disappeared, not however without leaving the surface of the water strewn with the fragments of the ill-fated "Regalia."

No sooner had she sunk than boats appeared as if by magic, ready manned, and pulling towards the spot from whence she had departed, hoping to obtain a little "loot" (spoil) from the lost whaler. Casks, staves, planks, &c., occasionally ascended to the surface, and were seized on with avidity by those near; particularly the former, some of which proved to be full, and although it was impossible to ascertain their contents in the water, the imagination of the victors filled them with rum or beer, and thus they were towed alongside in triumph. But, alas! their hopes were doomed to be disappointed, for the casks contained salt water only!

a fact which when made known elicited peals of laughter from their shipmates.

Making one of a small party of officers in the dingy, we threaded our way amongst the pieces of the wreck, and succeeded in bagging a considerable number of turnips, (overlooked by the crews of the contending boats,) which tended to improve the flavour of our Irish stews for several weeks.

The only satisfied spoilers were the mollemauks, revelling in the oily sea, and making a delicious repast on the minute particles of blubber strewn around.

This amusement having lasted about an hour, the boats returned on board laden with fire-wood, which was not to be despised, and each ship obtained sufficient staves to establish an enterprising cooper in a respectable line of business.

Whilst employed on the remains of the "Regalia" we descried a barque, about four miles distant, coming towards us under sail. She proved to be the "St. Andrew," of Aberdeen; from her we learnt the main fleet of whalers was but a short distance ahead. Taking her in tow, we proceeded and about 7 P.M. observed the whaling squadron docked in the land floe.



Capt. W. M. D. D.

M. H. Heubart, 1857

"RESOLUTE" AND "INTREPID" PASSING A LARGE ICEBERG, BAFFIN'S BAY
July, 1852.

On nearing the vessels, all their crews, amounting to upwards of 500 men, assembled on the ice, and with banners displayed, and music playing, greeted each vessel with three hearty cheers on passing. This was a pleasing incident in our voyage.

Making fast close to the whalers, we commenced cutting into dock, and the "Resolute" in the short space of fifty minutes had cleared her dock, and after the lapse of another twenty minutes was secured within it, much to the surprise of the loungers from the whalers, who appeared greatly astonished at the effects produced by several small charges of powder, sunk in a meat canister prepared for the purpose, to assist in loosening the mass of ice, after the cutting was completed.

As the general reader can form but an indistinct idea of cutting a dock, a few words on the subject may prove interesting. To render my meaning intelligible, I have annexed a diagram of the Resolute's dock on this occasion, drawn to scale; the average thickness of the ice being four feet.

The great danger to be feared whilst navigating Baffin's Bay, is being nipped between two "floes" of ice. A vessel so situated is in great danger of having her sides crushed, as in the case of the "Kegalia;" for the progress of the moving ice

increases with wind or current, and rarely does the work of man prove capable of resisting its pressure.

There is generally along the land a body of compact ice fixed to the shore, occasionally extending many miles to seaward; this is termed the land floe, the edge of which — unless compelled by adverse fortune — is never quitted by the experienced Arctic navigator, for two reasons; viz., 1st, keeping the land floe “aboard” facilitates navigation. The mass of ice to seaward, consisting of moving fields, and floes of ice, is called the Pack. Now it must be evident, whenever the wind is blowing off shore, the pack will move in the same direction, whilst the land floe remains fixed; a channel is thus formed between the two bodies, through which the vessel may be sailed, warped, or tracked as circumstances admit. 2nd, The land floe is a harbour of refuge. For supposing the wind should come from seaward, the pack will move with it, and thus endanger the safety of the ship by “nipping” or pressing her against the land floe. To avoid this, all hands commence cutting a dock in the land ice: here the ship rides securely; for the approaching enemy, the pack, is opposed by the edge of the friendly land floe, which almost invariably proves

stronger than its adversary, thus verifying the truth of the old saying that "union is strength."

And now for the diagram.

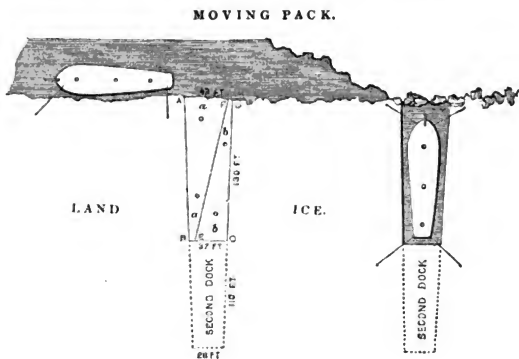
By the time the various crews of the triangles have prepared their saws, &c., the carpenters have marked out the dimensions of the dock, and the lines intended to be cut, viz. $A B C D$ and the diagonal $E F$.

When the sawing is completed, the two pieces of ice, $a a$ and $b b$, are loosened by being jumped on, and (if possible) passed out whole. It however frequently happens that minor cuts are requisite to loosen the mass. To avoid the time and labour attending such a process, we employed an admirable substitute in the shape of powder.

The preserved meat tins being prepared for the purpose, were filled, or partly so, with powder, connected with which was a piece of Bickford's fuze (supplied for the purpose) passed through the cork; a good coating of luting, or tallow, rendered the case water-tight. Holes having been bored where desirable, the charges — after lighting the fuse — were lowered a few feet below the ice, being suspended in that position by a piece of spun yarn to a boat hook, or a piece of ice.

The explosion generally broke the floe for some

distance around, enabling the pieces to be passed out with but little trouble. Care should be taken not to have the charges too great, as they may weaken the ice beyond the dock. We found that charges of two and four pounds were the most serviceable, when placed as marked in diagram.



CHAP. IV.

Constantly on the move.— The “M'Lellan” suffers from a Nip.— Is hove down and effectually repaired.— Loss of the “M'Lellan.”—Whalers move to the Southward.— Strange Effects of Mirage.— Separated from the “Assistance” and “Pioneer.”—Novel Amusement on a Berg.—North Water in Sight.—Enter the North Water.—Communicate with Esquimaux.— At Cape York.— A few Words about the Esquimaux.— Part Company with “Alexander.”— Progress through Lancaster Sound.—Arrive at Beechey Island.—The Graves at Beechey Island.—Arrival of “Assistance.”— Official Search for Records.

THURSDAY, 1st July. — Wind light from S.E., cloudy, misty weather. About 9 A. M. our friends the whalers were observed to be on the move, but only succeeded in getting a few miles, for at ten they were again fast and cutting docks; a small neck of ice prevented our joining them.

Here we remained till 1 A.M., on Monday the 5th, when we proceeded in tow of steamers through a lead to the northward; the wind at the time was moderate from the N.E., and we were in hopes of its continuance, but at 5 it was almost calm, and

we were obliged to make fast again at the end of the lead, in company with the whalers. Scarcely had we completed the dock when we were again on the move. The following day, Tuesday, was a succession of cutting, and hauling in and out of dock. Nothing could be more laborious to the men than work of this description. No sooner would the dock be completed, and the vessel secured, rudder unshipped, and a fair prospect of a few hours' rest, than a narrow lead would invite us to proceed, and all the hurry, bustle, and confusion of getting under weigh, ensued as a matter of course.

However, by 11.30 P. M., we came to the end of the lead, and by 2 A. M. on Wednesday, the 7th, were docked alongside "Assistance." Whilst in the act of cutting, the floes began to close, and the ships narrowly escaped being shut out from the advantages of the dock. Our friends to the northward of us were not so fortunate, for thinking the closing only temporary, they made for the extreme of the lead in hopes of being able to push through to some open water beyond.

In this however they were mistaken, and they were consequently beset, without being able to cut docks, or more properly, without room to clear them.

The pressure gradually became greater, and at 8 A.M. we observed the American barque “M‘Lellan,” the most northern of the fleet, to be severely nipped, and heeling over to port. Her crew, as well as those of all the whalers in her vicinity, were removing their valuables to the boats, drawn up at a safe distance from the ships.

A body of men, including the carpenters, were immediately despatched to render assistance. We found the pressure had been principally on the port side, a little before the mainmast, and the broken masses, passing under her bottom, had been arrested by the keel; this caused her to careen, and pressed her starboard side against the floe.

We found four of her timbers, on the starboard side, below the water line, broken; and she had four feet water in the hold, but no other damages had occurred. Our men were now divided into several parties, and placed where their services were most useful. Some at the pumps, others hoisting out provisions to get at the leak, whilst another party were getting up purchases, to heave the vessel down to the ice.

The crew of the whaler, following the good example set them by our men, and probably feeling not a little ashamed at having deserted her

so soon, returned on board, and materially assisted in reducing the quantity of water in the hold.

Into two holes in the ice, abreast of her fore and mainmasts, were inserted two strong toggles, to the straps of which her masthead-tackles were hooked, and with them she was with great ease hove down far enough to admit of her side being strengthened.

At 7 P.M. she was as sound as ever, the leak having been effectually stopped by our carpenters, and the crew commenced hoisting in, and stowing away the provisions, hoping yet to cross the Atlantic in their ship.

Thursday, 8th.— At 5 A. M. the American was again nipped, and the pressure became so heavy, as to leave little doubt of her having experienced very serious injury. A five minutes' pressure undid all that was done yesterday. Her side was crushed, the water rushed in, and it soon became apparent that the "M'Lellan" was a doomed ship.

It must not be supposed that the other vessels were in perfect security during this period. On the contrary all of them sustained nips more or less violent, and the crews had made every necessary preparation to abandon them. It was novel, but interesting, to gaze on so many vessels in a state



1851-52

1851-52
CREW OF THE MESSIAH, AMERICAN WHALING SHIP

1851-52

of utter helplessness, careening and fouling each other in every possible direction, whilst their crews, standing beside their boats and clothes on the ice, smoked their pipes like perfect philosophers, as all men who frequent Baffin's Bay should be. It is worthy of remark, that the ships which suffered most injury on this occasion were docked together, a process to be avoided, in my opinion, unless circumstances render it unavoidable.

Seeing the loss of the vessel to be inevitable, the Captain gladly availed himself of the offer of Sir Edward Belcher, to take charge of the ship and her contents, after she was abandoned. The English ensign and pendant were accordingly hoisted, and a few marines with muskets, as a safeguard, had a wonderful effect on the Baffin's Bay population, who growled not a little at our having prevented their usual privilege of plundering the wreck, and holding a drunken *soirée* on the ice.

A part of the crew from each ship of the squadron were now employed every day in clearing the ship of provisions, spars, sails, &c., for all of which bills were given on the English Government. The loss of the "M'Lellan" took place in lat. 75° 22' N. long. 61° 33' W.

On the 15th Sylvester's stove was lighted with

the most beneficial results. Every part of the ship was thoroughly dried, and the temperature throughout much increased — sick bay, 65° , lower deck, 77° , Captain's cabin, 75° .

On Friday, 16th, obtained the meridian altitude, which placed us in latitude $75^{\circ} 9' N.$, being thirteen miles to the southward of our position on the 14th, although the relative positions of all the vessels were the same as before.

A continuation of strong southerly winds and dark gloomy weather, kept us firmly fixed in our icy prison until Wednesday 21st, when the meridian altitude placed us in latitude $75^{\circ} 15' N.$ About noon on this day (which was much warmer, and altogether finer than we had experienced for some time) all the whalers, with the exception of the "Alexander" of Dundee, began to move to the southward, whilst we, taking advantage of the somewhat slackened state of the pack, began warping, towing, and tracking to the northward, in company with the before-mentioned whaler.

The following day we lost sight of the whalers and "Assistance" in a dense fog, which continued without a single break till midnight on the 24th when the thick mist by which we were surrounded was lifted as if by magic, disclosing to us a magnificent panoramic view of Melville Bay.

A more beautiful or impressive sight could not well be imagined; not a breath disturbed the serenity of the glass-like surface of the sea, whilst the arctic midnight sun

“— setting into sunrise,”

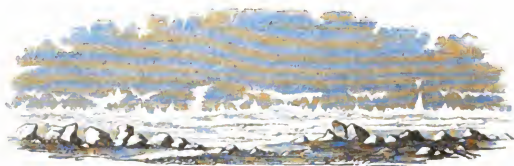
shone with unusual brightness, and even warmth, from a perfectly cloudless sky of the most intense blue, giving promise of a glorious day. The scene around was at once grand and desolate. To the eastward, the ice was bounded by the precipitous snow-clad peaks of Cape Walker, and other remarkable headlands, tinged with gold and purple. All the rest as far as the eye could reach, was unbroken, save by the blue thread of water, at whose extremity we were now delayed.

The intense reflection of light from the ice prevented our distinguishing the sea horizon from the sky, except by distant bergs, which the mirage occasioned to take the most fanciful and ever changing appearances.

Churches, towers, ships, &c., were formed for a moment, and as rapidly passed away, to give place to others equally strange and fantastic. The pressure of the ice had covered the surface of the pack with huge blocks, so as to form a delightful

variety of light and shade, resembling the ruined remains of some mighty city. But, in fact, the effect of the whole was quite indescribable, and must be visited to form an adequate idea of the wonders of the arctic world.

Our consorts, the "Assistance" and "Pioneer," were observed to be closely beset, about four miles distant to the westward of our position. Up to this period we had been constantly at work clearing nips, without the satisfaction of knowing, whether or not the result of our labours would prove beneficial or otherwise.



Mirage — Baffin's Bay.

At the time of the fog clearing, we were shut out from a comparatively large body of water, in shore of the ship, by a stubborn nip about 300 yards in length, and although Sunday, this was attacked by a party of men from each ship. Charges of powder were introduced, and the immediate effect was sa-

tisfactory, but the closing movement of the ice prevented our gaining a ship's length, until about 10 P.M., when, by dint of great exertion, the ships were forced through and gained the water beyond, decreased however considerably in size.

I had almost forgotten to say that in answer to a signal from Captain Kellett, the following were the places of rendezvous named, in the event of our parting company — Cape Dudley Digges, Cape Horsburgh, Cape Warrender, and Admiralty Inlet.

From the 27th to the 29th we were detained in an extensive pool, surrounded by several large bergs, whose room would have been preferred to their company. From one of them we obtained water. This berg by actual measurement was only sixty feet above the level of the sea, and in shape resembled a wedge; being precipitous on one side, and on the other inclined from its summit to the sea. After work for the day was concluded, the officers and men amused themselves by sliding down the inclined plane on staves of casks. Of course they obtained an increased impetus every foot, and the velocity when near the bottom was very great. Many were the tumbles that took place, and although the unlucky wight

was in danger of breaking his limbs, he was nevertheless the object of the hearty and vociferous laughter of the spectators.

The following day the united efforts of the various crews succeeded in clearing a passage through a long pressed-up nip, into a lead which we hoped would take us into a large body of water inshore.

In this however we were disappointed, and our progress till the 31st was a series of goings on and stoppages; added to this a dense fog, limiting the knowledge of our position to within 100 yards of the ship, rendered our situation somewhat unpleasant.

At length, on the 31st, the fog having lifted in an obliging manner for a few minutes, we obtained a view of a broad lane of water from the crow's-nest, extending many miles to the eastward of Cape Melville, where it was lost amidst the innumerable bergs in that locality; but to the westward the sight was most encouraging, and incited us to renewed labour, whilst such a tempting prize was in view. The lane referred to above, was observed to be continuous along the shore of Prince Regent Bay, and join an extensive water beyond Cape York.

Few persons, unless like us for thirty-eight days they had been actually amongst the ice, could imagine the pleasure which the contemplation of such a prospect created in the minds of all on board. Setting aside the danger incurred whilst battling with such a stern enemy as ice, the anxiety and work were alike overpowering to mind and body, and it may be readily imagined that the thoughts of once more having the ship under control in her own natural element, was a source of intense satisfaction to all.

At 2 P.M. we secured to the floe, separated by only a few miles from the much desired water; this space was filled with loose pieces, which were gradually clearing out, and about 7 P.M., after another struggle with an obstinate nip (which a charge of powder decided in our favour), we proceeded in tow of the "Intrepid" without any impediment, and as if the power of our evil attendant the fog ceased with our victory over the ice, the weather cleared, and a more beautiful evening than that in which we entered the long-wished-for North Water, could scarcely be.

In the absence of wind, and by the powerful aid of steam, we made considerable progress along the silent shore of Regent's Bay, so that by 10 A.M. on

Sunday, August 1st, we were within seven or eight miles of Cape York. A breeze from the northward having sprung up, we had cast off from the steamer, and made sail, shaping our course for the Cape, when several natives were observed on the land ice, in the bay to the eastward of the point. The Captain, in common with all on board, having a desire to communicate with the natives of the most northern habitable portion of the globe, we hauled up for that purpose, and at noon landed on the fast ice laden with presents.

Here we found two men and three boys with dogs and sledges. The natives, (arctic highlanders of Sir John Ross,) received us without betraying any great degree of interest or curiosity. The shape of their garments, made of bear and deer skins, was essentially the same as their more southern neighbours, but they outvied all we had previously seen in want of cleanliness, and were, without exception, the most disgustingly filthy race of human beings it has been my lot to encounter.

The men might possibly at some remote period have indulged in a wash, but it is my firm conviction that the boys, apparently ten or twelve years old, had never undergone anything in the form of an ablutionary process. It is, however,

almost impossible to convey an idea of the personal appearance of these degraded creatures, who though to us objects of commiseration, were by no means of that opinion themselves. On the contrary, they with a most amusing serio-comic expression of countenance imitated our gestures and words; and whenever success attended their endeavours, the performer was rewarded by the boisterous laughter of those around, who in their excess of mirth brought tears into their eyes.

It was from this place that Erasmus York* was, with his own consent, taken on board the "Assistance," Captain Ommanney, in August, 1850. Naturally supposing they would make eager enquiries concerning their absent relative, one of the officers had considerably kept an *Illustrated London News* with the portrait of York, for the express purpose

* Erasmus York (Kallihirua) was brought to England in 1851, and educated at St. Augustine's College, Canterbury. In 1855, he was sent to Newfoundland, with a view of being useful among the Esquimaux of Labrador; but he died the following year of consumption. He was of a mild and amiable disposition, and made himself everywhere beloved by his warm and single-hearted affection for all who were kind to him.

A pretty little memoir of him has been published by the Rev. T. B. Murray, issued by the Society for Promoting Christian Knowledge, which will well repay perusal. An account of him will also be found in *Snow's Voyage of the Prince Albert* and *Osborn's Stray Leaves from an Arctic Journal*.

of showing it to these poor people, in the event of communicating with them; but they appeared to have forgotten him, and although his native name was pronounced, they repeated it without any emotion; this want of curiosity respecting his fate



Esquimaux — Cape York.

surprised us, for they must have imagined we were the same vessels by the presence of the steamers, which appeared to fix their attention.

The so-called village consisted of three seal skin tents erected on the inner slope of Cape York, close beside a huge glacier. The inhabitants consisted of two old women, who might have been

belles in their younger days; if so, their present personal appearance would tend to prove beyond a doubt that beauty is but fleeting. Three younger and more comely women, each with a child at her back, were presumed to be the wives of the only three men we observed. Besides these there were nine children of different ages, all as healthy as they were dirty.

The appearance of the interior of the tents was quite in keeping with their persons. The skins strewn around were anything but inviting, and although not very fastidious, it would take a considerable time to reconcile one to the thoughts of seeking repose amongst so much filth. Strewn around on the outside of the tents were bones of birds and seals, besides a quantity of putrid seal flesh and intestines, sending forth an offensive smell.

We of course considered this to be the refuse, on which probably the dogs were fed, but were soon enlightened by seeing one of the ancient ladies take a portion of the entrails, and swallow a quantity of it as Italians do macaroni. Being however a few yards in length, she was unable to swallow the whole, and therefore contented herself with a foot or two, which was severed with a knife.

This feat completed our disgust, and after the Captain had distributed a few presents, we retraced our steps towards the boats, pitying in our inmost hearts the sad lot of these poor wretches, whose only means of subsistence must be very precarious; for having no boats, they are necessitated to trust to killing their prey between the cracks in the ice. And here it may not be unworthy of remark, that no other community in the known world, frequenting sea coasts, are without some description of vessel.

We endeavoured to ascertain whether or not the "Assistance" and "Pioneer" had called here, or had been seen, but could obtain no satisfactory answer from them, and not having observed any articles of European manufacture, we inferred that Sir Edward Belcher had not touched at the Cape.

At 3 P. M. we slipped from the floe edge, and rounding the Cape, stood along the crimson cliffs of Beverley, with a moderate breeze from the eastward. During the evening our last letter bag was closed, and given in charge of Captain Storock of the "Alexander," as it was possible circumstances would prevent our being able to communicate again.

Standing along the land to the northward

during the night, we found ourselves the following morning, Monday, 2nd, amongst loose sailing ice, running to the north-westward with a strong breeze from S.E. attended by thick gloomy weather. The "Alexander" was in sight, but some miles to the S.W. of our position. During the afternoon, the loose ice becoming more open, we obtained a bearing of Cape York and Ragged Island, and altered course for Cape Horsburg.

At 8 P.M. we cleared the last of the loose ice, and now fairly considered ourselves in the North Water, which was confirmed when, at 11 P.M., we observed a perceptible swell from the S. W. A thick mist with a fall of snow continued during the night, but a good look-out enabled us to avoid the few berg pieces we passed. Lost sight of the "Alexander" during the evening.

Tuesday, 3rd. — Wind easterly, with gloomy weather, ship under all sail; at 11·30 observed the land between Cape Horsburg and Cape Howe, forming the south entrance of Jones' Sound. From this time, a series of calms, light variable winds, and strong adverse breezes, generally accompanied by thick misty weather, rendered our progress through Lancaster Sound and Barrow's Straits tedious in the extreme. On passing Cape Warrender and

Dundas Harbour, the cairns erected by the expedition of 1850 were observed; but the unsettled state of the weather prevented our landing to inspect them.

As the sailing qualities of the "North Star" were considerably superior to ours, Captain Kellett desired her to proceed with all despatch to Beechey Island, where we supposed the "Assistance" and tender were awaiting our arrival; but from the time of this order being given, the winds became so variable and local, as to enable us to keep her in sight until within a few hours of her arrival at Beechey Island.

Our progress through the sound and straits, was not remarkable for anything save the absence of ice throughout; this fact excited within us the hope of being able to attain a high figure in west longitude.

Tuesday, August 11th. — At 2 A.M. arrived at the fast ice in Erebus and Terror Bay, where we found only the "North Star."

The non-arrival of "Assistance" and tender surprised us greatly, for knowing they were extricated from the ice a day or two previous to ourselves, we had fully expected to have met them;

indeed it was this feeling which occasioned Captain Kellett to pass Admiralty Inlet, one of the places of rendezvous named by Sir Edward.

But now as his absence from Beechey Island suggested the possibility of his having called at the rendezvous, the "Intrepid" was despatched in hopes of her falling in with the vessels, and informing them of our whereabouts; whilst we in the "Resolute" hauling the ship alongside the "North Star" commenced in right earnest to take the residue of our provisions from her. The various mementos of the missing squadron, such as the graves, workshop, garden, &c., were all visited and narrowly examined, as well as the cairn erected by myself on the previous voyage with Captain Austin. The "Mary" yacht, which had been left by Sir John Ross, was also searched, and the documents deposited by the expedition of 1850 extracted; these, with some additions relating to the present expedition, were eventually replaced, but nothing was seen to induce us to imagine that any persons had visited the island since ourselves in 1850.

The graves were neatly made, and placed about ten feet asunder on the inner slope of the island.

The head-boards, facing the east, bore the following inscriptions, viz.

<p>SACRED TO THE MEMORY OF JOHN HARTNELL, A. B. OF H. M. S. EREBUS. DIED JAN. 4, 1846. AGED 25 YEARS.</p>	<p>SACRED TO THE MEMORY OF W. BRAINE, R. M., H. M. S. EREBUS. DIED APRIL 3RD, 1846. 32 YEARS.</p>	<p>SACRED TO THE MEMORY OF JOHN TORRINGTON, WHO DEPARTED THIS LIFE, JANUARY 1, A. D. 1846. ON BOARD OF H. M. S. TERROR, AGED 20 YEARS.</p>
<p>Haggai, c. 1. v. 7. Thus saith the Lord of hosts, Con- sider your ways.</p>	<p>Choose you this day whom ye will serve. Joshua, c. 24. part of 15 ver.</p>	

Although in 1850 I had made many visits to the graves, I found it impossible to repress the melancholy feelings, which a scene so painfully interesting naturally suggested. Here were we arrived at the very scene, of the first stage of the perilous voyage, of the missing explorers. The three resting places proved that death had been busy amidst the little band, during their lengthened sojourn in this lone and desolate spot; but beyond this, and a few unimportant articles scattered around, there existed no record pointing out their intended route, nor even a trace which gave a clue to their fate, which is, and alas! I am afraid will ever be, shrouded in mystery.

We all felt much surprise at the absence of any document, so contrary to the usual custom of Englishmen, who almost invariably are ambitious

of leaving their names in every available place, where knives, or even stones could be brought into play.

On our arrival at Beechey Island in 1850, a cairn on the summit held out hopes of solving the question, but we were disappointed; it was too large to have been raised for amusement, and it was most likely erected for a surveying mark.

Beechey Island, eastern bluff, is by actual measurement 618 feet above the level of the sea. Here and on the south side of the island the cliffs are very precipitous, but on the northern, or inshore side, the land falls somewhat abruptly for a little distance, from whence it gradually declines in altitude, terminating in a long tongue, or rather a causeway, joining the main land about two miles from Cape Spencer.

None of the primitive rock was to be seen, the whole island being composed of laminated limestone, interspersed with pebbles.

Wednesday, 4th. — During the afternoon we completed provisioning from the "North Star." Whilst hauling off from her, the "Assistance," in tow of the "Intrepid," was observed rounding Cape Riley. On inquiry we found that the "Assistance" had communicated with the natives of Cape York,

on the day previous to our visit, and had distributed amongst them many articles as presents, none of which we saw; this would lead us to suppose they had purposely hidden them, in the expectation of receiving more from us. If this conjecture be correct, their refusing to impart any information about the vessels is easily accounted for.

After leaving the eastern shores of Baffin's Bay, the "Assistance" had got sixty miles to leeward, and was obliged to beat up, from about the vicinity of Pond's Bay to Lancaster Sound: the "Pioneer" had been despatched a few days before to examine Navy Board Inlet, and had not yet rejoined company.

The day after his arrival, Sir Edward organised an official search for documents relating to the Franklin Expedition. Parties of four men, each commanded by an officer, had particular localities, which were most effectually searched but the result tended to prove that nothing had been overlooked by the Expedition of 1850.

Friday, 14th. — "Pioneer" joined company, wind blowing a moderate gale from the northward. The "Intrepid" left, in pursuance of orders from Sir Edward Belcher, to proceed up Wellington

Channel, as far as practicable, for the purpose of reporting on the state of the ice. As far as an extensive view from the summit of Beechey Island enabled us to judge, there appeared to be little or none in the channel; nor did we observe anything save loose streams in Barrow's Straits.

Saturday, 15th.—Wind more moderate from the northward, weather fine. During the forenoon the "Intrepid" arrived from her trip of observation, and brought the gratifying intelligence of the channel being quite free from ice, for a distance of twenty-five miles from Beechey Island, and that beyond that distance there existed from the west side a broad lead running in the direction of the N.E. indentation.

CHAP. V.

Sir E. Belcher addresses Officers and Men.—Abstract of Orders.
 — Vessels of Squadron separate. — Land a Boat near Cape Hotham. — The Ship takes the Ground. — Ship grounds a Second Time. — Obligated to lighten the Ship. — A novel but unpleasant Incident. — Ship severely pressed by Ice. — Ship floats and proceeds to the Westward. — Griffith's Island. — — Prospect to the Westward most Encouraging. — In the Vicinity of a suspected Shoal. — Compasses worse than Useless. — Prospects become less Bright. — Off Lowther Island. — Secure to Land Ice. — Watch the State of the Ice. — Lowther Island roughly Surveyed. — Lowther Island. — Confirm the Existence of a Shoal. — Pass between Somerville and Browne Islands. — Cross the Mouth of M'Dougall Bay. — Land a Depôt near Alison's Inlet. — Pass Cape Cockburn. — Austin Channel. — Stopped by Ice off South point of Byam Martin Island. — Bearing Tables very Useful. — Byam Martin Island. — Sight Melville Island.

THE same day at 8 P. M., Sir Edward Belcher addressed the assembled officers and crews of the various vessels on the floe. After speaking in a highly complimentary manner of the past conduct of all comprising the Expedition, he concluded by reading a prayer, composed for this service, of which printed copies were distributed to all who wished

to possess them. Like most meetings where seamen are concerned, the proceedings terminated with continued cheering.

As Beechey Island was known to be the point from which the various branches were to diverge, we were not a little anxious to ascertain the exact routes, which proved to be as follows, viz., 1 "Assistance" and "Pioneer" to proceed up Wellington Channel. 2. "Resolute" and "Intrepid" to reach Melville Island. 3. "North Star" to remain at Beechey Island, as a depôt, in the event of either of the other ships being deserted.

Respecting our own, the Melville Island branch, the orders were to proceed if possible to the Winter Harbour of Sir Edward Parry in 1819-20, and there deposit a quantity of provisions for the use of the crew of the "Investigator," as in the event of their being obliged to abandon the ship, there was a possibility of their touching at Melville Island, on the homeward route by Baffin's Bay.

On our way thither we were expected to drop depôts for our own subsistence, in case any accident occurred to the "Resolute" which would oblige us to return on foot to Beechey Island. As it was not supposed we could perform the above

service, and return the same season, it was required of us to despatch travelling parties during the spring to the north by Byam Martin Channel, and to the westward of Melville Island; the exact routes, however, as a matter of course, depended on Captain Kellett.

Our return to Beechey Island was expected in the autumn of 1853, when the captain would be guided by circumstances relative to his remaining a second winter, or returning to England, supposing the "Assistance" and "Pioneer" did not make their appearance.

After Sir Edward Belcher's address before alluded to, the officers and crews of the several ships bid each other farewell, and, as was afterwards remarked by many, the parting was expressive of the kindly feelings entertained towards each other, by all composing the Expedition.

Without indulging in a vein of sentiment, I firmly believe that each and all separated, with the firm determination of carrying out the object of the service on which we were employed, and if the natural wish that *their* branch of the Expedition should prove to be the successful one, it was suggested by a pardonable spirit of emulation in the great cause of humanity.

At 10 P. M. the "Assistance" and "Pioneer" parted company, and stood up Wellington Channel, about which there had been so much difference of opinion as to its being always blocked with ice, amidst the cheers of the remaining vessels. The "Intrepid" not having completed coaling, obliged us to wait till the following day.

Sunday, 15th.—At 2 P. M. we left Beechey Island, regretted by the now solitary "North Star," and, in tow of the tender, wended our way across the clear and placid bosom of Wellington Channel, in which no traces of ice could be distinguished. Many a wistful glance was cast to the northward, as we thought of the glorious field for exertion this noble channel held out, and although contented with the service allotted to us, could not but wish our way led to yet undiscovered regions.

From the crow's nest, the prospect to the westward appeared most encouraging, and yet, within a few hours, we were obliged to make fast to an extensive floe, running along the west shore of the channel, as far as the eye could reach to the southward. This block caused great disappointment, but as all regret would have been unavailing, we took the matter as philosophically as possible.

Monday, 16th. — At 4 A.M. a sudden disruption, occasioned by the tide, took place amongst the floes: this in a short time opened a lead around Cape Hotham.

As the number of our boats was more than sufficient for the service on which we were engaged, it was determined to land one of the whalers, a little to the westward of Cape Hotham, close in the neighbourhood of the depôt of the "Assistance" in 1850, of which two casks of bread were found, as well as a few empty casks, the contents having been extracted (by permission) by Sir John Ross.*

Although a "lead" existed along the land to the westward, the proximity of the ice obliged us to borrow rather close to the shore, which rose gradually in terraces of laminated limestone to a moderate eminence.

As is usual on such occasions, the lead was kept going constantly, but we were more annoyed than surprised when, at 8 A.M., the ship took the ground about 300 yards distant from the beach. Whilst preparations were being made for taking out hawsers to the "Intrepid," an officer was despatched

* Admiral Sir John Ross equipped a vessel for the search (the *Felix*), and waited at Cornwallis Island. He was considerably turned 70 years of age.

to the shore with a pole, for the purpose of watching the progress of the tide, which was found to be rising; this fact made us confident of getting off.

After the lapse of an hour, we were again afloat, with, however, only a moderate allowance of water between us and the bottom, which could plainly be seen from the deck. Skirting along the floe edge, in some places not more than a quarter of a mile from the beach, we progressed rapidly along the coast to the westward, in tow of the “Intrepid,” shoaling our water occasionally to within a foot of our draught.

It now became evident that the loose ice was fast closing on the shore, and the “Intrepid” was desired to effect an offing, which, by dint of perseverance, she succeeded in doing.

On approaching Assistance Harbour, loose ice was observed to extend across the bay, leaving a clear space of water in its depth; to gain this we steered for a “lead” close to the eastern horn, which is very low. As we approached, our soundings gradually decreased; but hoping to gain the water in the bay (where we knew there was sufficient depth for the ships) the steamer, with slackened speed, continued on until the shoal nature of the ground warned us to retrace our path. This,

however, was now impossible, for in addition to the headway the ship had, the tide carried her rapidly over the ground until she took the bottom (stones and gravel) about one-third of a mile S. W. of the low point alluded to above.

Until the vessel was stationary, we had no idea of the velocity of the tide, which was setting to the westward at the rate of two and a half miles an hour, bringing with it floes of various sizes, many of them taking the vessel in their passage and endangering the rudder, which we had some difficulty in unshipping.

Various means were now resorted to, for heaving the ship off, but without success ; and when at 1 P. M. the tide began to fall, it became evident the vessel must be lightened to ensure her floating the next tide, for it was within an hour of high water by the ground when she struck ; and what made our situation more embarrassing, was the fear of losing the advantages from the present spring-tides.

The boats were now lowered, and the deck-load of casks, weighing about fifteen tons, transferred to the " Intrepid " about a cable's length distant. As by our instructions we were supposed to place depôts at convenient distances along the coast, one had been prepared (consisting of seven days pro-

visions for ninety men, and this was now landed on the nearest point to the ship.

As the tide fell, the ship heeled over to port until her bilge took the ground at about an angle of 20° . As nearly as we could judge, the water began to fall at 1 P.M., though the superficial current drained to the westward until three, when it commenced setting out of the bay to the eastward, taking with it the loose ice; by it we had fair means estimating the velocity of the tide.

At 5 P.M. the bay was clear of ice, with the exception of an extensive floe, which appeared to be connected with the land to the westward. At six, however, this floe was observed to be moving in the direction of the ship; no power of ours could either stop its progress, or alter its course. Subdued by a feeling of utter helplessness, we watched its approach in silence, and calmly awaited the result of such a mass of ice on a stranded ship.

To give the reader a better idea of our situation, it will be necessary to describe the relative positions of the ship and approaching ice. The vessel, as I have before stated, was grounded on her port bilge, with about seven feet of water under her stern and six under her bow, whilst the floe on her port (or lee) beam was advancing at the rate of

one mile and a half an hour directly towards her. Its length was about two miles and a half, by one mile and a half broad, and was afterwards proved to be about three feet six inches thick.

About seven, the edge of the ice took the ship under the lee gangway, shaking her throughout. A moment had scarcely elapsed ere we became sensible of the ship's lifting, and instinctively each man grasped a rope, as he became aware she would inevitably be thrown over. Yielding inch by inch before such a powerful lever, the ship at length rested on her keel, but it was but momentary, for in a second she was thrown over on her star-board side, with a shock sufficient to bring every mast by the board.

As it *was*, the very topmasts bent like whalebone, bringing a fearful strain on the weather shrouds; but not a rope was stranded, nor a single spar injured by this unprecedented and appalling occurrence.

Would the ship be borne before the ice? or remain immoveable on the ground? were questions that naturally suggested themselves. Supposing the first to be the case, she would be forced nearer the shore, into small water, which would lessen the chances of getting off, and if the latter, she would

in all probability be overrun and buried beneath the ice, as many a gallant ship had been, under somewhat similar circumstances, in Melville Bay.

A careful eye was kept on the lead, but the ship remained fixed, and her side was thus opposed to the ice, on whose progress, however, it had no effect. As the pressure increased, huge pieces scaled the side, and would have fallen in board, had not men been stationed on the gunwale with poles, to repel these formidable boarders.

Our sternpost bore the greatest strain ; to ease the pressure, charges were sunk in the ice, breaking it all around ; but this was found to give the ice fresh motion, and ultimately increase the danger. For two hours we remained in this trying position ; at the end of that time the floe was observed to be moving more out of the bay, when the pressure decreased considerably.

We all felt great anxiety about the sternpost, but after a close inspection, it was found to have received no material injury. A piece of false keel, which had been wrung, when nipped in Melville Bay, now came to the surface and was secured.

At this time, 9 P.M., the tide was rising rapidly ; the time of its commencing being about seven.

The ice was now moving off shore, and two six-

inch hawsers were taken to it, in the hopes of its dragging the ship into deeper water. On first feeling the strain, the ship righted a little, and moved a few feet astern; but the continued jumping of the anchors prevented our deriving any advantage from it.

Fortunately it had continued calm up to this time, but now a moderate breeze springing up from the northward, the square sails were set, and thrown aback.

In the early part of the evening the "Intrepid" had been obliged to retreat before the ice, but she was enabled to join company, by rounding its western end. Hawsers were now taken out to her, and after sundry unsuccessful attempts, we at length got off about midnight, a considerable portion of our false keel coming to the surface at the same time.

There being a good "lead" in the direction of the south part of Griffith's Island, we proceeded in tow of the steamer in that direction, and about 8 A.M. found ourselves off the south bluff, in a broad lead of water, which widened every mile we proceeded. Between the island, and Cornwallis Land, there appeared to be fixed ice extending the whole breadth of the channel.

As we passed along the shore of this barren island, we observed numerous cairns erected by the Expedition of 1850. The most conspicuous is placed in a prominent position, on the high outline, near the south bluff, and may be seen for many leagues around.

The sight of Griffith's Island, as may be supposed, afforded a peculiar interest to those who, forming a part of the expedition under Captain Austin, had spent eleven months, frozen up in its immediate neighbourhood. Every point, hill, and ravine, was connected with some little incident, during our rambles over its desolate, and uninteresting surface.

Nor did we fail to remember with kindly feelings, the sad fate of that brave seaman of the "Resolute" (George Malcolm) who fell a victim to the intense cold, and extreme hardships, he had to encounter in the cause of humanity. His remains are interred on the east side of the island. May he rest in peace!

The prospect from the crow's-nest, after rounding the south bluff, was exhilarating in the extreme, and its effects were visible on the countenances of all on board.

The day was beautifully calm, with a clear blue sky. Distant objects were well defined, although

raised by considerable refraction. Lowther Island, and the land about Cape Bunny, was distinctly visible, with water apparently extending to each, without the appearance of ice blink. The reflection of the vessels was remarkably distinct in the water, the lofty spars and smaller ropes being as plainly seen as in a mirror.

With this bright prospect before us, we steamed along the south side of Griffith's Island, almost regretting the time, necessarily occupied, in despatching a boat to the cairn on the shoulder of the point to deposit a document, containing a brief account of the movements of the squadron, up to that period. On her return a light air from the south-eastward having sprung up, we made sail, intending to round the north point of Lowther Island.

About 3 P.M. the freshening breeze obliged us to cast off from the "Intrepid," and we made all sail in company; the old "Resolute" surprising herself by bounding to the westward at the rate of nearly six knots an hour.

As we rose the land of Lowther Island, several suspicious streams of ice were observed, and in some measure prepared us for the report, that the pack extended from the north end of the Island,

away in a north-easterly direction. It must be confessed this was annoying, but there was yet a "lead" round the south end, and for that point we now hauled up.

About 7 P.M. a dense damp fog set in, which soon covered masts, sails, men, and indeed everything exposed, with a coating of frost. Much precaution was now necessary to avoid the heavy loose pieces, which were increasing in number and size every mile we advanced. But in addition to these floating dangers, there was yet another, a shoal, known to be in our neighbourhood, but its exact position uncertain. This shoal was discovered by Lieut. Meham whilst travelling over the ice in 1851, from the south point of Lowther to Griffith's Island. On his way across he had fallen in with a range of hummocks of more than ordinary height: their broken appearance induced him to sound in a crack, and to his surprise he found bottom in seven fathoms (gravel).

He had fortunately fixed their position relatively with the tangents of Lowther Island, and put its position in his chart of proceedings.

At 9 P.M. the wind (southerly) had increased to a strong breeze, with occasional heavy squalls, and

every appearance of a continuation of bad weather. Fortunately, however, the wind cleared the fog, and we had the satisfaction of seeing the island, by which alone we were enabled to form an idea of our position; the compasses, after passing Cape Warrender, not only ceased to be of service, but would have tended to mislead us, had we placed confidence in them.

A large mass of grounded hummocks, now observed about five miles off shore, was supposed to be in the vicinity of the shoal on which Lieut. Mecham had sounded, as they agreed with the position he assigned to them in his chart.

During the night the increasing breeze obliged us to reduce sail to double-reefed topsails and foresail; and with the lead constantly going we worked to windward, between the supposed shoal, and the island.

Towards morning the wind veered round to the westward, and decreased in violence. Extensive masses of heavy loose pack were observed off the south end of the Island, drifting rapidly before the wind, and thus our hopes of rounding the southern point were, for a time at least, frustrated. But a broad lead, or rather a large body of open water, extended in the direction

of Cape Walker, and it now became a question whether it would be advisable to proceed to the southward, trusting to the water taking a westerly trend in the vicinity of Young Island, or await the result under the lee of Lowther, and closely watch the progress of the ice, both north and south.

As opinions varied on the subject, Captain Kellett happily determined on a middle course, and by 8 A.M. had worked up to the pack-edge, about a mile and a half distant from the S.W. point of the island.

From this position the view from the crow's-nest held out no hopes of our effecting a passage to the westward by the South Water. Cape Walker and the land to the westward of it, as far as Baring Channel, was distinctly seen, as was also Young's Island, but in all these directions ice was observed, and the termination of the water to the southward was also descried. Although the weather during the day was variable, the atmosphere at times was very clear, enabling us to recognise Garrett Island, and the peaked hills of Bathurst Land. Vainly, however, we stretched our eyes to discern Davy Island, and from our position it was decided to be *non est*.

By marks on the shore, we found the pack to be

moving to the S.E. at the rate of three quarters of a mile per hour, and at noon our observations (making allowance for the drift during the forenoon) agreed with our actual position, about two miles from the nearest shore.

At 1 P.M. the ice anchors having jumped out, the topsails were hoisted, and we ran along the island to the northward, until we sighted the ice off the N.W. point; we then stood off and on in a bay on the east side, during the night.

Thursday, 19th.—The ice from the N. and S. points had come in contact about four miles E. of the island, and we were now in an extensive triangular pool of water, the eastern shore of the island forming one side, the other two being formed by the moving pack.

At noon the captain, accompanied by a party of officers, landed near the S. bluff of the island, for the purpose of erecting a cairn, in which they deposited one of the printed records. On their return on board, we stood along the land to the northward for a bay, in the depth of which we had observed some fixed ice. To this the captain wished to secure the ship, in preference to keeping under weigh, in order to allow the men the benefit of resting from their late exertions, and recruiting

their strength for the work before them. It was, however, noon on the 20th ere we reached the floe edge, to which we made fast in eleven fathoms, about one mile distant from the nearest beach.

On running in, a bear was observed, and no sooner had the ship's bows taken the ice, than half-a-dozen Nimrods, fully equipped for the chase, went in pursuit; but Bruin, not liking their appearance, retreated leisurely over the hills, and was soon lost to view.

During the afternoon, the ice, in large masses, was observed to be streaming along the shore from the southward. Wishing to avoid being beset in our present position, we slipped at 4 P.M. and stood towards the N. end of the island, despatching two officers to ascend an eminence, for the purpose of reporting the state of the ice to the N.W. On their return at 10 P.M. they reported lanes of water extending some distance in a northerly direction, but unfortunately their view was limited, in consequence of the misty state of the atmosphere.

Large streams, and washing pieces of ice, — a strong breeze, with dark gloomy weather and snow, the coast within a mile, and not in sight,—prevented our standing for the “leads” alluded to; we therefore

stood off and on during the night (which now deserved its name), intending to reconnoitre in the ships the first thing in the morning.

Saturday, 21st.—Early this morning, the ship and tender worked up to the extreme end of the lead off the N.W. point, and there secured to the pack-edge, about half a mile from the grounded ice on the shore. In this position, the prospect from the crow's-nest was not encouraging, and this impression received confirmation from the reports of Captain Kellet and Commander M'Clintock, on their return from the summit of one of the loftiest ranges of hills.

As the pack to which we were secured was drifting rapidly before the wind to the S.E., it was deemed advisable to shift our position, before the ice rendered it actually necessary to do so. We therefore ran back to our friendly quarters at the edge of the fixed floe; from whence we had a better chance of being able to take advantage of any favourable change in the movements of the ice.

The ice closed in during the night, and the rudder was unshipped; but no pressure took place. By the morning the loose pack again moved off, but our prospect of advancing had not improved.

In this position, on the east of Lowther Island, we remained seven days ; during that time, a constant look-out was kept from the summit of a hill, in sight from the ship. This hill occupies a central position, and is the highest in the island. Its height by barometric measurement proved to be 630 feet above the level of the sea. From its apex the view was very extensive, and we were thus enabled to watch the changes in the ice for many miles around.

Having, in the ship, nearly accomplished the circumnavigation of the island, we failed not to take advantage of the opportunities that offered, of laying down the coast line of the island, with something like accuracy.

During our stay, the island, as may be supposed, was well explored by various parties ; our sportsmen were however unfortunate ; for with the exception of three brace of ptarmigan (two brace were bagged), no living thing was seen to reward their zeal.

The skulls and bones of musk oxen, and the dung of foxes and hares, led us to imagine that those animals frequented the island, but, as I have before stated, none were seen alive.

Lowther Island is of limestone formation, rising

in terraces, or steps, to hills of considerable height. On the south shore, the rise is not gradual, but abrupt; the cliffs — almost perpendicular — commencing about a half mile from the sea. In the centre of the island the land is low, but surrounded on all sides by the hills of the coast line, so that in formation it may be compared to a shallow dish. This basin probably contains water, when the heat of the summer's sun is sufficiently powerful to melt the snow, which crowns the summits of the surrounding heights; these are occasionally divided by deep gorges, terminated by gullies extending to the beach; through them the water probably falls into the sea.

At length, on the morning of the 28th, there appeared a chance of our reaching the much desired water*, by retracing our steps to the eastward for about fifteen miles; this Captain Kellett determined upon doing, as there appeared no probability of our effecting an escape by a shorter route. We therefore, at 7·30 A.M., cast off from the floe, and with a moderate breeze from W.N.W.,

* I find I have omitted to state, in my remarks of the 21st, that "water was seen to the southward of Browne Island, extending east and west until lost in the distance, without any prospect of our attaining it."

with fine clear weather, ran along the ice to the eastward.

As our course lay close by the hummocks on the supposed shoal, the lead was kept going, and a good look-out kept by myself from the masthead. To within one-eighth of a mile no bottom was obtained with the hand lead, but when about 200 yards south of the ice, we got two soundings in fifteen and then twelve fathoms (gravel), and beyond that no bottom with twenty fathoms. This fact in itself would have sufficed to prove the existence of danger, and account for the immense blocks of ice withstanding the pressure of the enormous floes to the N.W.

From the crow's-nest, however, even before soundings were obtained, I observed a knoll of gravel, about 200 yards in circumference, and apparently a few feet above the sea, surrounded on all sides by hummocks, which prevented the bank being perceived from the deck.

Had time allowed, no doubt we should have examined this shoal more narrowly; but having to thread our way through loose pack-ice, ever changing its position, obliged us to sacrifice everything to our desire to gain the open water before night set in.

During the interval which elapsed, between our passing the shoal at 9 A. M. and 3 in the afternoon, our course lay between drifting heavy loose pieces, on which, notwithstanding the attention paid to conning, the ship occasionally struck with considerable violence. Fortunately the ice, by streaming to the southward, a little increased the water as we approached Griffith's Island, and at 4 P. M. we cleared the last stream of ice, and entered into a broad sheet of water extending from the main land to the south of Somerville Island.

Whilst standing in on the port tack towards Cape Sheringham, we observed that our late winter quarters (1850-51), between Griffith's Island and Cornwallis Land, appeared to have cleared out since our last sight of it on the 17th.

The wind from W.N.W., had been light during the day, with fine bracing weather; the former now changed to N.N.W., and increased to a strong breeze, whilst the latter put on a very gloomy appearance, with squalls of hail and snow. The "Intrepid," about six, had taken the ship in tow, but in a short time made no headway against the wind. The fore and aft sails were now set on the starboard tack; this, with the aid of steam and a westerly set, was found to answer, and we stood to

the westward, passing between Browne and Somerville Island.

During the night the deep sea lead was kept going every half-hour, with an occasional cast between whiles of the hand lead, but most frequently we got no bottom; the least water we obtained was twenty-five fathoms (gravel and mud).

Whilst passing between the islands, the sea became agitated to such a degree as to cause rollers; this was attributed to the tide and wind being in opposition, as we got no bottom with forty-five fathoms of line.

Sunday, 29th. — At 4 A.M. the main pack was observed to leeward; we then tacked and stood to the northward for a couple of hours, which enabled us to weather the ice.

At this time the peaks of Bathurst were occasionally seen through the mist. At 9 A.M. the weather cleared, and the day proved beautifully fine. Not a single piece of ice was seen in M'Dougall Bay, nor did there appear any off the S. shore of Bathurst, except a few grounded hummocks.

At noon Moore Island bore N.E. about four miles distant. At this time Cape Cockburn was visible

in the distance, much thrown up by refraction. We were now making great progress to the westward, past Acland Bay and Alison's Inlet, off which we sounded in twelve, eleven, nine and thirteen fathoms (gravel). The pack at this place was about six miles from the beach, but closing towards the land in the direction of Cape Cockburn; near the Cape was observed a considerable quantity of fast ice.

This somewhat altered the original intention of Captain Kellett, who had determined on landing a depôt in the immediate vicinity of the Cape. The fast ice to the westward induced him to land the provisions whilst we had a beach line free of ice, and a depôt for ninety men for six days was accordingly placed on the shore, about three miles W. of Alison's Inlet.

Some little difficulty was found in getting the boats close in, on account of the shallow shelving nature of the ground; the beach was covered with turf and moss; there were also numerous antlers of rein deer. One or two of the most perfect were brought on board.

On the return of the boat, the "Intrepid" again took the ship in tow, and we proceeded on towards Cape Cockburn. The day had hitherto been

beautifully fine and clear, but now a heavy bank of clouds to the westward proved to be the harbinger of a dense fog, which at 9 P.M. hid even the "Intrepid" from our view. At this time the Cape bore N.N.W. about four miles distant; whilst a point of the main pack was observed to be about four points on the port bow, distant one mile from the ship.

All these circumstances were carefully noted, before we became enveloped in the fog, which was accompanied by a fresh south-westerly wind. The sun, by whose aid alone we could obtain bearings, had set at nine; this obliged us to trust to the steadiness of the wind, the lead, and look-out; and thus, in tow of "Intrepid," with fore and aft sails, we stood on through a lead of water, between a lee shore on the one side, and a closing pack to windward.

The hand lead was kept constantly going, much to the discomfiture of the leadsman, in whose hands the line became coated with a mass of ice in hauling in. An occasional cast of the deep sea lead was taken, but the least water obtained was twenty fathoms.

The nature of this navigation, such as I have attempted to depict, was more exciting than

pleasant ; and we were not a little relieved, when about midnight, a strong ice blink was seen on our starboard or lee beam ; this was supposed to be the fast ice off the Cape observed before the fog came on. Shortly afterwards, a temporary lifting of the fog disclosed to our view the cape itself on our lee quarter ; and confirmed our previous supposition, that we were clear of any immediate danger from the shore. The land ice was observed in Graham Moore Bay, extending as far forward as a point on our lee bow.

During the day (Monday, 30th) the wind fell light and the fog cleared, but the weather continued gloomy ; at noon Mount Bullock, and the land to the northward were observed, with ice along shore trending to the W.N.W. Between it, and the loose pack to the southward, there was a broad irregular lead of water, varying from eight to ten miles in breadth ; this water was quite free from stream ice, but numerous large hummocks, or, more properly speaking, small bergs, were scattered about in every direction. One group, however, occupied a space of considerable extent, and as our bearings and distance placed them near the position of the shoal mentioned by Sir Edward

Parry, they were conjectured to be aground on the bank.

Two P.M. observed Byam Martin Island bearing W.N.W. At this time we were passing to the southward of the hummocks before mentioned; there were also heavy hummocks — supposed to be grounded — to the southward, but no soundings were obtained with fifty fathoms.

Tuesday, 31st.—At 3 P.M., being within five miles of the south point of Byam Martin Island, the pack to the southward was observed to be close home on the point. In order to make certain no lead existed, we closed the land to within one mile and a half, and then seeing no chance of getting forward, the "Intrepid" was cast off (to save coals), and we stood along the land to the N.E. to ascertain the state of the ice in that direction; we found the fixed ice close home on Point Langley, off which were numerous grounded hummocks, no appearance of an opening was seen, the ice, apparently in one compact and unbroken mass, extended as far as we could see in an easterly direction, and had evidently not been disturbed this season. We therefore stood back, to await an opening round the south point.

I have before observed that the only means of

knowing the direction of the ship's head, was by the true bearing of the sun, and the reason of my again recurring to this subject, is occasioned by the thoughtful consideration displayed by the Hydrographic Office, in having the true bearing of the sun, calculated to every twenty minutes of apparent time, between the seventieth and eightieth degrees of latitude. When the compasses ceased to be useful, the month's true bearings, abstracted from the Table, were pasted on a board, and hung abaft the mizen-mast, for the use of the officer of the deck. A little before the wheel, was placed a "bearing plate," consisting of a graduated brass circle, with eye-piece and sight-vane.

With this instrument, we obtained the angle between the sun, and ship's head; and when applied to the true bearing of the sun (from the Table), gave the true course the ship was steering. The direction of the wind was obtained by the same process.

It may perhaps be deemed unnecessary to have enlarged on such a simple subject, but it is in the simplicity of the application that all its usefulness consists, and renders the absence of the compasses of less importance than we expected.

It must be very gratifying to the originator of

these Tables, to know that his time and labour (and both must have been great) were not expended in vain; for to them, I consider, we were indebted for the safe navigation of the ship on several occasions; and in bearing this willing testimony to the benefits we derived from them, I feel I am only performing a duty, which in common with others, I owe to the gentleman engaged in their construction.

During the afternoon we continued standing off and on the pack, keeping a good look-out on the ice. At 8 P.M. sail was shortened, and the vessel secured to a large sconce piece, which was afterwards observed to be setting to the south-eastward at the rate of half a mile an hour. The prevailing wind during the day was south-westerly, with misty weather. A little before midnight a star, apparently of the second magnitude, was observed to the northward; cloudy weather prevented our recognising it.

Wednesday, September 1st. — During the middle watch there was scarcely any perceptible wind, but the weather continued misty; at 2.30 the rudder was unshipped, to avoid the possibility of its being injured by some heavy drifting ice; at 5 A.M. it was again shipped, as we expected to slip; at eight we made sail to a moderate breeze from N.W. and

worked up to the extremity of the lead. At ten a lane of water was descried round the south point, leading into a considerable space beyond, and all sail was made in order to take advantage of our good fortune; as we neared the lead, its breadth was observed to be increasing every moment. Keeping as close as prudence permitted to the immense masses of pressed up ice which bordered the south shore, we stood along, in from nine to thirteen fathoms (gravel), at the distance of one mile and a half from the beach, under a press of sail.

We were under the necessity of making several tacks before we cleared the pack. At 2 P. M. it was well under our lee, with no ice in sight to the northward (up Byam Martin Strait), and at 3·40 P. M. Melville Island was distinctly seen from the crow's-nest. There were few on board who did not eagerly ascend the rigging, to catch a glimpse of the island, whose shores had only once before been approached in a ship.

CHAP. VI.

Melville Island. — Land a Depot on Point Griffiths. — Pass Skene Bay. — First Musk-Ox killed. — “Intrepid” grounds near Point Palmer. — Musk-Oxen numerous. — Cape Bounty. — Sight Winter Harbour. — Cairn erected by Sir E. Parry. — Captain decides on returning to Skene Bay. — Sea covered with thick “Sludge Ice.” — Unable to enter Skene Bay. — Secure to Fast Ice near Dealy Island. — Cut into Floe for wintering. — Preparations for wintering. — Departure of Travelling Parties. — Routes of Travelling Parties. — Experience a heavy Gale. — Its Effects. — Preparations for Winter. — Return of Lieut. Hamilton. — Despatch a Balloon. — Lieut. Meham returns with important Documents. — Proceedings of “Investigator,” and Discovery of the North-west Passage. — Remarks on the foregoing Journal. — Mr. Nares returns on Board. — A disagreeable Ducking.

SIR EDWARD PARRY, thirty-two years ago this very day, must have felt his bosom glow with heartfelt satisfaction on first seeing Melville Island; and although we had not, like him, the feelings of indescribable gratification attendant on discovery, yet I am induced to believe that each, and all on board, experienced a thrill of pleasure at having followed in the footsteps of this great man, and achieved, in

a ship, what so many of our predecessors had failed in attaining.*

The land when first seen was very indistinct, from distance and a misty atmosphere; and as we approached nearer night was setting in, so that we were unable to obtain a well defined sketch. We continued standing on, sounding occasionally, and keeping a good look-out. The main pack was about four miles to the southward of our course, placing it (by approximation) about ten miles from the shore near Point Griffiths: — during the night we worked towards this point under easy sail.

Thursday, 2nd. — At 2 A.M. we hove to in twelve fathoms (*g*) a little to the westward of Point Griffiths, and at 3 despatched two boats, in charge of Lieut. Mecham, to land a depôt (consisting of twenty days' provisions for nineteen men); the boats were some time pulling to the beach, in consequence of a strong head (northerly) wind. At 4.30 the boats returned, having placed the depôt some distance above high-water mark on a low shingly beach.

* A sledge party from Captain Austin's Expedition, under command of Captain M'Clintock, had reached Melville Island the previous year — the only time it had been trodden by the foot of man since its first discovery.

Sail was now made and the ship's head was once more turned to the westward. A few miles further on a range of heavy hummocks (connected with the land by fast ice), extended several miles from the shore. We skirted their outer edge, off which we found twelve fathoms. The "lead" had now decreased somewhat in breadth, the main pack varying from five to seven miles off shore; we found the whole coast studded with huge grounded pieces, which we approached unhesitatingly, for experience enabled us to form an idea of the water they were in, and we were seldom out in our calculations more than a fathom. During the forenoon we continued working to the westward, but the old "Resolute" not being remarkable for her weatherly qualities, the "Intrepid" was ordered to take us in tow.

At noon we were a little to the westward of Point Ross, off which were large masses of grounded ice; the loose pack appeared to stretch well into Skene Bay, but a good "lead" existed between it and Point Palmer; at 1 P.M. we shortened and furled sails, and the "Intrepid" took the ship in tow. During the afternoon the wind fell light, and eventually a calm ensued. Under

these favourable circumstances we made good progress to the westward.

The pack obliged us to keep the land about Point Palmer close on board, and as the evening was beautifully fine every glass was in requisition, and not in vain, for several dark objects were observed moving along the beach; they were conjectured to be musk-oxen, although the twilight prevented our being certain. It was, however, quite evident that these objects were alive, and equally so that every man on board was eager to kill them; this feeling must be attributed partly to the imperfection of human nature, and partly to a longing for fresh beef. Indeed the observation which originated in the last expedition might safely be applied to this, viz., "That every man would shoot his own father if he could be converted into *fresh* meat."

At 9 P. M. we arrived at the end of the lead, and secured the ship to land ice, about five degrees west of Point Palmer, and one mile and a half from the beach.

Friday, September 3rd.—At five Lieut. Mecham, Dr. Domville, and a party of men proceeded to the shore, to attempt the capture of some of the "dark objects" seen yesterday, and our delight may be

imagined, when at eight the glorious news of the death of a musk-ox was received on board. Never was seen such a commotion as that which ensued; every description of gun manufactured was brought into play, and shot, wads, flasks of powder, and brandy, were hurried into the boat, that conveyed to the scene of slaughter a trusty band of arctic Nimrods.

Just as they were leaving the ship, a large herd of oxen was observed on the ridge of one of the nearest ranges; this gave them great hopes of success, and tended—if possible—to accelerate their movements.

Unfortunately for me, the sun was shining; and as duty compelled me to obtain observations, I was obliged to forego the pleasure of making one of the party. I do not remember ever seeing the sun shine with less pleasure than on that day.

During the afternoon we had the satisfaction of receiving the carcasses of four musk-oxen, and the intelligence that many more were in the neighbourhood. Captain Kellett had during the forenoon left in the "Intrepid" to examine Skene Bay, as to its capabilities for a winter harbour. Off Point Palmer she grounded on the outer edge of a shoal running off the point in a south-easterly direction,

about three quarters of a mile from the shore. After the lapse of an hour she was hauled off, without sustaining the slightest injury. On her return in the afternoon, the captain gave a favourable account of the bay.

At eight that evening, we were astonished, but much gratified, as may be supposed, to hear of the death of eight more oxen, killed by Mr. Krabbé and party, about five miles from the vessels.

Saturday, 4th.—Wind light from the eastward, weather cloudy. During the middle watch, the main body of ice having closed, we shifted position inshore of a projecting tongue, and unshipped rudder.

Four A.M.—A party with cart and sledge was despatched to bring on board the carcasses of the eight musk-oxen killed yesterday. After breakfast, we cut a dock and secured the ship in it; the wind in the afternoon having shifted to W.S.W., the pack commenced moving off. Lieut. Pim and Mr. Chandler (boatswain) succeeded this day in killing three musk oxen.

Here we remained until noon on Monday the 6th, when a lead was observed extending some distance in the direction of Cape Bounty; we therefore slipped from the floe edge, and made sail

to double-reefed topsails and foresail, wind blowing strong from north, but decreasing in the afternoon, and enabling us to make more sail; at this time Bridport Inlet appeared quite clear of ice, and at 5.30 P.M. on our passing Cape Bounty, the pack to the southward was supposed to be six miles from that headland, whilst to the westward there was every appearance of an abundance of water.

As the sun set, Table Hill, as well as the low land of Winter Harbour was observed; there was also an appearance of a land floe, extending from a little beyond Point Wakeham to what was supposed to be Point Hearne, where the pack appeared to close with the shore.

Night as usual brought with it misty unpleasant weather, but notwithstanding this, we worked windward, our turning marks being the pack on the one side and the land floe on the other; near the latter the soundings were from seventeen to nineteen fathoms (sand) increasing after one or two casts, in a seaward direction, to twenty-three fathoms.

Tuesday, 7th.— At 3 A.M. the weather cleared, and from the crow's-nest the land ice was observed to be continuous from Point Wakeham, round by Fife and Winter Harbours to Point Hearne, off

which there was a lead of water to the westward, about four miles in breadth, between the land ice and pack: the block of sandstone mentioned by Parry, at the entrance of Winter Harbour, was also observed.

We now made sail, and by 6 A.M. were secured to the floe edge, about two miles from Fife Point, and six from the sandstone block.

The wind by this time had veered round to N.N.E. and blew strong, with frequent squalls, creating a considerable drift. At eight I accompanied Captain Kellett and Commander M'Clintock to Fife Point. Towards this point the water extended to within a mile of the beach, forming a sort of natural canal, up which we proceeded in a boat and walked to the shore over the ice, which on a closer inspection appeared to be several years old.

On reaching the land, a cairn was observed erected by Sir Edward Parry, and visited by Commander M'Clintock during his journey in the spring of last year. As we thought it had not been disturbed, the record within was left untouched, but we added a few stones to make the cairn more conspicuous.

From the summit of Fife Point, our view was more expansive than from the ship, and knowing

our distance from her very nearly, we were better enabled to form an estimate of the extent of ice before us.

The practicability of getting into Winter Harbour was first discussed; but the idea of cutting through six miles of solid floe, was too absurd to be long entertained. It became a question whether or not the end of the "lead," up which we had pulled, was adapted for winter quarters. We were unanimously of opinion that the position was anything but a desirable one. After a consultation respecting the means to be adopted to secure good winter quarters for the ships, it was decided to return to Skene Bay, which it may be remembered was visited a few days before. We now retraced our steps, and returned on board. On our arrival the Captain Kellett gave orders to the various officers connected with travelling, to prepare their depôts with all despatch, for landing on Point Fife. This fully occupied all hands during the day, and evening had set in before the parties returned from the point.

During that night the wind continued to blow with considerable violence, accompanied by a dense snow-drift, mixed with gravel from the neighbouring shore.

Wednesday, 8th.—Wind strong from N.N.E. Cast off from floe, and stood to the eastward looking well up for Cape Bounty; at this time the drift had almost entirely ceased, but the appearance of the land had undergone a complete change during the night, and it was not only difficult, but actually impossible in many places, to distinguish between the land, and the ice surrounding it.

The position of Winter Harbour, was however known by the dark boulder of sandstone, on which the snow had not remained; it stood out in bold relief against the snow-clad shore, and became in consequence the most remarkable object for many miles around.

The keen N.E. wind had greatly reduced the temperature during the night, and young bay ice, assisted by the driving snow, formed in consequence. As we advanced on our way to the eastward, the whole sea was covered with a thick sludge, which the seamen not inaptly likened to thick pea-soup. This tended considerably to impede the progress of the ship, and had we not been favoured with a strong breeze, she would have been perfectly unmanageable—a pleasant state of affairs which continued about three hours, when the vessel entered

a sea of somewhat thinner consistency, and increased her rate of sailing.

At 10 P.M. we were again secured to the floe near our old position, waiting for daylight to enter Skene Bay.

Thursday, 9th. — At 2 A.M. the "Intrepid" had her steam up, and with the "Resolute" in tow, proceeded through bay ice an inch and a half thick (formed during the night) along the land towards Point Palmer.

As we neared the entrance of the bay, we found an immense floe had come in, during our absence, and been brought up by some heavy grounded hummocks, about three quarters of a mile east of Point Palmer; this—of course—left that space of water between the floe and the shore. Doubts were now entertained about our clearing the shoal, on which the "Intrepid" had grounded a few days before; nevertheless, as a chance existed, we steamed along the floe edge until the soundings gradually decreased to three and a half fathoms; we then stopped, secured to the floe, and sent boats to sound.

They found no passage between the floe and the shore, and we were therefore unable to take up our intended winter quarters within the point.

I confess I did not much regret it, as in my own mind I did not think the position good. Judging from the formation of the land, and the existence of the shoal, on which were huge grounded hummocks, I am inclined to think that we should have had a considerable distance to cut out. At ten we were again under sail, with our head to the westward. At this time the pack was fast approaching the shore, against a fresh breeze from the northward, which caused the bay ice to overlap, the layers in many places being almost sufficient to arrest the vessels' progress.

Whilst passing along the shore a good look-out was kept from the crow's-nest; fast ice was observed between Dealy Island and the mainland to the eastward. As this appeared a good position, the captain went in the "Intrepid" to examine the floe edge with respect to soundings, leaving the ship to follow.

We arrived a little after noon and secured to the ice in thirteen fathoms; here we were met by Captain Kellett and Commander M'Clintock, both of whom thought the position good in every respect; and it was now decided to make it our quarters for the winter.

During the afternoon the vessels were warped to

within half a mile of the E. end of Dealy Island, where we had thirteen fathoms, gradually decreasing to nine, within a cable's length of the beach. As it was deemed advisable to cut into the floe, the ice instruments were got out, and at 4 P.M. the saws were in motion, cutting in a N.N.W. direction, which was supposed to be that of the prevailing winds.

By six the following evening the canal was completed, and the "Resolute" hauled in; this day (the 10th September) may, therefore, be considered the beginning of winter quarters. To prevent the ice coming into the canal, the flying jib-boom was laid across its entrance.

On the 11th three more musk-oxen fell victims to the prowess of Lieutenant Hamilton and Mr. Purchase. On the 12th, a balloon was despatched with 800 papers attached to a tail of quick-match. The balloon disappeared in a north-westerly direction.*



* It is a singular fact that few of the many thousand slips, which must have been scattered in every direction from the

Tuesday, 14th. — Commander M'Clintock, Dr. Scott and thirteen men, with two carts and twelve days' provisions, left the ship to place a depôt on the southern shore of Hecla and Griper Bay, in order to facilitate the travelling operations next spring.

Lieutenant Bedford Pim with four men, three dogs, and a sledge, provisioned for three days, left at the same time to bring in the carcasses of three musk-oxen, shot by Commander M'Clintock, during his late absence to ascertain the best line of route for the carts.

At 8 P.M. we were surprised and sorry, to hear that both carts had sunk through the floe, near the beach at the head of Bridport Inlet. Dr. Scott returned with them in order to dry their sleeping bags, &c., as well as to exchange the injured bread and other provisions.

By this unfortunate accident, the following provisions were, after a careful survey, condemned as useless, viz.,—

Bread 496 lbs.	Tobacco $8\frac{1}{2}$ lbs.
Sugar $9\frac{1}{2}$ „	Tea $\frac{3}{4}$ „

By 8 A.M on Wednesday the carts were again

balloons despatched on this and Captain Austin's Expedition, were ever picked up by the travelling parties. I am not myself aware of any having been found.

loaded, and left to rejoin Commander M'Clintock, who had remained encamped near the scene of the disaster, about eight miles from the ship.

All was now hurry and bustle on board, preparing depôts and travelling equipments for the autumn parties, who were to leave the last week in the month, if practicable. As after the departure of the parties, the number on board the ship would necessarily be small, the various arrangements requisite for our comfort during the winter were now commenced. As a beginning, the boom boat and deck load of casks were hoisted out, and landed on the beach on the E. side of Dealy Island, a few feet above high-water mark; this made a considerable show, and the vessel appeared much larger than heretofore.

The topgallant yards were of course sent down, and the masts housed, the jibs and square sails were well stowed, and secured for the winter; the driver and trysails were unbent, and the trysail masts unshipped; these, with the studdingsail booms, eventually served for ridge poles for the housing stops.

Stages were now erected outside on the ice plank from the mainmast aft; they were formed of capstan bars, the inner end resting on the ice chock, whilst

the extremities were well supported by the boat's tackle; boats, oars, boarding-pikes, hawsers, and various other articles, found a resting place on them. The ship now looked quite dismantled, a few days having sufficed to effect a complete change in her appearance. The large handmast with which we were supplied was securely lashed to the fore and mainmasts, about thirteen feet from the deck, whilst the smaller one answered for the centre ridge pole for the quarter-deck housing. A studdingsail boom lashed to foremast, and knight-heads, formed the angle of the housing, and the driver boom the ridge spar abaft the mizenmast.

Since our arrival here we had been fortunate enough to obtain several musk-oxen; some of them, however, on being brought on board, proved to be unfit for food, in consequence of the bursting of the gall-bladder.

At length on Wednesday the 22nd, at 7:30 A.M. the travelling parties, consisting of Lieutenants Me-cham, Pim, Hamilton, Messrs. Nares and de Bray*, with thirty-six men, five sledges and a cart, fully

* M. de Bray (now Lieutenant de Vaisseau and Chevalier de la Légion d'Honneur) is an officer of the Imperial Navy of France, who readily volunteered for arctic service, and was appointed to the "Resolute." He was much esteemed by all of us.

equipped and provisioned for twenty-five days, left the ship for the purpose of laying out depôts.

On their leaving, the colours were hoisted, and as hearty a cheer as we could muster from the lungs of the small party remaining on board the "Resolute" gave them a sailor's greeting, a heart-felt God-speed to their journey.

The following is an outline of their intended routes:—Lieutenant Meham, with his aid Mr. Nares, to strike across the land from Winter Harbour, in order to deposit provisions for next year's exploration of the south shore of Melville Island, beyond Cape Beechey.

Lieutenants Pim and Hamilton, accompanied by M. de Bray, intended, if possible, to place a depôt in the vicinity of Cape Providence, in readiness for next season, when they will cross the straits to Banks Land and then diverge, Lieutenant Pim to the westward, and Lieutenant Hamilton to the eastward.

Early on the morning of the 24th, the wind from the northward increased rapidly, until it blew a perfect gale, causing considerable drift, which effectually hid from our view the hull of the "Intrepid," though only 100 yards distant.

Could this gale have been foreseen, I doubt if the

Captain would have permitted the parties to have left the ship. As it was, we experienced considerable uneasiness; all we could do, however, was to hope that even 'midst the dreary regions of the North there was

“A sweet little Cherub, who sits up aloft
To look out for the life of Poor Jack.”

The “Resolute” herself was not in the most en-
viable situation, for we knew not but that the com-
bined action of the wind and tide (it happened to
be springs) might loosen the ice to which she was
secured; if such had proved the case, we should have
drifted to the southward in a perfectly helpless
state.

On Saturday the weather moderated a little,
although it yet blew strong. With the wind the
drift slackened, and we caught a glimpse of the
island, and by it we knew our position had not
altered.

Particulars respecting Dealy Island.

Latitude - - - - -	74° 56' 25" N.
Longitude - - - - -	108° 48' 33" W.
Variation - - - - -	142° 46' E.
Dip - - - - -	88° 25'
High Water (F. and C.) -	1h. 39min.
Rise. — Ordinary springs -	2ft. 4in.

The following day, from the summit of Dealy Island, we observed a lead of water ten or twelve miles broad, extending from half a mile astern of the ship, east and west as far as we could see. To the westward, in the direction of Cape Bounty, no land ice was visible through a telescope.

During the absence of the parties from the "Resolute" we had quite enough work to occupy our attention. A considerable number of casks were taken from the main hold, and stowed under the forecastle, in order to leave a space in the vicinity of Sylvester's stove, for a drying-room for washed clothes, &c.; the benefit of such an arrangement was fully exemplified during the winter of 1850-51. On that occasion Captain Austin obliged the men to make use of the main hold as a bath room, at least once a week. On top of the casks, sides of bacon, as well as many other articles, were stowed for the winter.

The hawsers had, on our first arrival here, been laid across the topgallant yards, which were lashed to three triangles, placed upright on the floe. By some oversight the single leg of each triangle was placed in line, so that on the one side there were six legs, whilst on the other there were but three. As the single legs were observed to

have worked into the ice by the weight above, it was considered advisable to remove the lawsers, and stow them on a stage erected across the after part of the fore-castle, the ends being supported by the bulwarks.

The yards and triangles were stowed on the stages outside, except one, which for a time answered as a guard around the fire hole, until we had time to commence a wall.

Saturday, October 2nd. — At 9 P.M. Commander M'Clintock, Dr. Scott and parties, returned on board, having placed a depôt in the vicinity of Point Reed, in Hecla and Griper Bay. On the 6th a bear was observed on the floe astern of the ship. Mr. Dean and the cooper proceeded in chase, and at length succeeded in despatching the animal about one mile and a half from the ship; they then returned for a sledge, with which they retraced their steps towards the scene of action, but were unable to approach within half a mile of the spot, on account of the broken state of the same ice, they had crossed an hour before. The carcass was lost in consequence.

The following day, Thursday 7th, Commander M'Clintock, accompanied by Dr. Scott and sixteen

men, with two sledges and eighteen days' provisions, left once more for Hecla and Griper Bay, in order to lay out his depôts, for spring travelling, at a greater distance from the ship.

At 11 A.M. George Drover (Captain forecandle "Intrepid") returned on board from the travelling parties, — having become ill. His post as captain of Dr. Scott's sledge was filled by Mr. Purchase (engineer), who left in the morning for the purpose of accompanying the sledges a short distance.

At 5.30 P.M., Lieutenant Vesey Hamilton and men returned on board after an absence of sixteen days, having placed a depôt a few miles this side of Cape Providence. A serious mishap occurred to his sledge on the eighth day of his journey; the ice broke in, and the sledge, with its contents, was very nearly lost. As it was, all the sleeping bags, personal clothing, and a quantity of the provisions were saturated, so that during the remainder of his journey the men were necessitated to sleep in damp bags and clothes, and this at a temperature of 5° below zero, *i.e.* 37° below freezing point. Their effectually carrying out the object of their journey, after such a disaster, reflects the greatest credit on all composing the party.

Friday, 8th. — At 10 A.M. two sledges were observed from the summit of Dealy Island, in the direction of Cape Bounty; they proved to be those under the charge of Lieutenant Pim and M. de Bray, who had been absent seventeen days, having placed provisions under Cape Providence, on the summit of which they erected a large cairn, with pole.

On Monday, 11th, erected a staff on the highest point of Dealy Island, for the purpose of hoisting a flag as a signal to the ship, when the returning parties came in sight. The following day Messrs. Pim, Hamilton, and Domville, with three dogs and sledge, provisioned for three days, proceeded on a shooting excursion up Bridport Inlet.

On the 13th another balloon with paper attached was sent off; it first took a southerly direction, but in a short time, having reached a different current of air, altered its course to west, and disappeared in that direction.

At 9 A.M. on the 14th, the flag on Dealy Island was displayed, and thus we knew that a returning sledge was in sight. At noon, an officer and six men were despatched to assist the party, all of whom (Lieutenant Mecham and ten men) arrived safely alongside at 3.30 P.M. after an absence from

the ship of twenty-two days, having laid out his depôt at Cape Hoppner (Liddon's Gulf). On his return to Winter Harbour he visited the sandstone boulder, and his surprise may be imagined when from a cylinder (placed on the top of the stone) he drew out a Journal of Proceedings, and chart of discoveries, left by Captain M'Clure in April last. His surprise, however great, could not have exceeded ours on hearing this extraordinary news, and many were the comments on this unlooked-for subject of conversation. On one point, however, we were all agreed, and that was, in regretting not visiting the stone whilst the ship was at Winter Harbour.

A brief outline of Captain M'Clure's journal, with the annexed copy of his chart, will tend to convey an idea of the energy and perseverance displayed by that zealous officer, on whom has devolved the honour of solving the long pending problem of the existence of a navigable North-west passage, and thus uniting the two great oceans of the Atlantic and Pacific.

Extracts from the Journal of Proceedings of H.M. Discovery Ship "Investigator," found by Lieutenant Meham on the sandstone boulder, Winter Harbour, October 12, 1852: —

July 31st, 1850.—The "Investigator" parted company with "Herald" off Cape Lisburne, and on August 2nd sighted the ice in latitude 72° N., longitude 166° W. On the 5th, whilst running along the pack edge, the "Plover" was descried, numbers were exchanged, but no communication took place. At midnight they rounded Point Barrow, which thick weather rendered invisible.

On the 8th, being off Point Drew, Mr. Court (second master) and Mr. Miertsching (interpreter) landed to deposit a notice; here they found some friendly Esquimaux, who informed them of the passage of three boats to the eastward last season; these were conjectured to be the boats of Lieutenant Pullen and party, on his way to the Mackenzie river.

On the 9th, when forty miles off the entrance of the Colville, they found only three fathoms and a half. On the 11th, two baidars (large Esquimaux boats), containing twenty-four natives, visited the ship near Jones' Island; they obtained, in exchange for beads and tobacco, salmon and ducks from the natives, whose honesty they had some reason to question.

On the 14th, the ship struck on a shoal, but hove off without injury. Unfortunately, however, a whale boat, in which they had placed eleven casks of beef to lighten the ship, capsised, and the casks sunk. By this accident they experienced the sad loss of 3344 lbs. of meat.

On the 21st, they sighted the Pelly Islands (off the Mackenzie); when near Point Warren on the 24th, they communicated with a warlike tribe, who expressed their unwillingness to have any dealings with them, stating as a reason, that the Hudson's Bay Company had given Indians water (rum?) which caused their death.

A great number of natives visited the ship on the 1st September, off Cape Bathurst, and the same evening the "Investigators" took their final leave of the Esquimaux on the American coast; they are described as a quiet, inoffensive people, who appeared well disposed towards Europeans (except those at Point Warren).

The coast was found to be shallow; but as soundings are regular, it may be safely navigated by strict attention to the lead and look out. The natives assured them that water, varying from one mile to forty in breadth, may be relied on from the beginning of August to the 10th September, more or less ice-encumbered according to the winds, which they found to prevail from E.S.E. to N.E.

On September 6th, being to the northward of Cape Parry, high land was discovered from N.E. to E.N.E. The following day this land was taken possession of in the name of Her Majesty, and named Baring Island*; the shore to the southward rises to an elevation of 3000 feet above the level of the sea. A signal pole with black ball was erected in latitude $71^{\circ} 8' N.$, longitude $122^{\circ} 48' W.$

On the 9th, land was observed bearing N.N.E. which was named Prince Albert's Land; this was afterwards proved to be part of Wollaston and Victoria Lands.

I cannot do better than quote their own words of October 8th:—"Since the 11th of last month, have been drifting in the pack, and narrowly escaped destruction several times, until with a heavy nip at 3 A.M. this day, which listed the ship 3° , we were firmly fixed for the space of nine months, in latitude $72^{\circ} 47' N.$, longitude

* Afterwards proved to be part of Banks Land, and now so called.

117° 34' W." A volume is condensed in the above few lines.

They wintered the first season in a strait named after the Prince of Wales. Near their quarters were two small islands (Princess Royal Islands); on one of them is a large cairn with pole and ball, close to which are three months' provisions for sixty men; a boat with ammunition was also left there.

October 21st.—Commander M'Clure, Mr. Court, and six men, left the ship to trace the strait to the northward. On the 26th, they discovered the entrance into Barrow's Straits, which, to quote their own words, "establishes the existence of a North-west passage."

Five musk-oxen were killed on Prince Albert's Land up to the end of December.

1851. *April 18th.*—Three travelling parties were despatched: Lieutenant Haswell to the S.E., Lieutenant Cresswell to the northward, along Banks Land, and Mr. Wynniatt (mate) to the N.E.; they reached the following positions respectively:—Lieutenant Haswell, latitude 70° 38' N., longitude 115° 0' W.; Lieutenant Cresswell, latitude 74° 16' N., longitude 117° 40' W.; Mr. Wynniatt (D. R.), latitude 72° 6' N., longitude 107° 42' W.

On the 2nd June, Commander M'Clure and Mr. Miertsching communicated with some Esquimaux, about sixty miles to the southward of their position, on Prince Albert's Land; from them was obtained the outline of the land (dotted) beyond the furthest of Lieutenant Haswell, who had first communicated with them.

July 14th.—The ice opened, and they were again on the move, but so surrounded by the pack, as to render the movements of the ship dependent on the ice. Up to

the 14th August, they had only been enabled to make use of their sails on two occasions, and that only for a few hours. During this period they had been carried to the northward, and attained a position in latitude $73^{\circ} 14' N.$, longitude $115^{\circ} 32\frac{1}{2}' W.$

On the 16th, finding that the prevailing N.E. winds kept the ice across the entrance of the strait, thus forming an effectual barrier to their further progress, they bore up, and ran to the southward of Baring Island.*

For four days they continued in clear water, skirting along the coast within a mile of the shore. But when in latitude $74^{\circ} 27' N.$, longitude $122^{\circ} 32' W.$, their progress was again arrested by the heavy pack being close home on the shore.

From this date (the 20th) until September 24th they encountered the peril of being crushed daily, and on several occasions escaped by a miracle. Once they were forced on shore by the pack, but fortunately succeeded in getting off without much injury. At length, on the 24th, they reached the Bay of Mercy (*vide* chart), where they spent the winter of '51-52. He describes their last winter quarters as being good in every respect.

Commander M'Clure appears to think the currents along the coast of America are greatly influenced by the winds; but is very decided in stating that a continued easterly set is found on the west side of Baring Island†, and that the flood tide sets *from* the westward.

The eminences in the neighbourhood of the Bay of Mercy are described as the resort of rein-deer and hares. During the winter they succeeded in procuring 4000 lbs. of fresh meat.

* Banks Land.

† *Ibid.*

The health of his crew had been extraordinary, for not a single casualty had occurred up to the date of his departure from the Bay of Mercy.

He concludes by stating it to be his intention to return to England (if possible) by Melville Island and Port Leopold, but adds: "If we should not be again heard of, in all probability we shall have been carried into the Polar pack, or to the westward of Melville Island; in either case any attempt to send succour would be to increase the evil, as any ship that enters the Polar pack would be inevitably crushed; therefore a depôt of provisions, or a ship at Winter Harbour, is the best and only certainty for the safety of the surviving crews." They had seen no traces, nor received any information which would lead them to imagine any of Sir John Franklin's Expedition had reached the shores they visited.

The document from which the above extracts are taken was deposited by Commander M'Clure in April last; it bore the date of April 12th, 1852, on board the "Investigator" in the Bay of Mercy.

The sledge's crew was composed of Commander M'Clure: Mr. Step. Court (second master): John Calder, Capt. Forecastle: Sergeant Woon, R. M.: Geo. Gibbs, A. B.:— Sam. Bounsell, A. B.: Jno. Davis, A. B.: Peter Thompson, Capt. Foretop.

In a note annexed, Commander M'Clure states he did not intend to re-visit Melville Island, unless he found a vessel there, but would make the best of his way down the straits.

The above remarks require no comment from me, but I cannot refrain from expressing my ad-

miration of the zeal and determination of the gallant "Investigators," under the trying circumstances in which they have been placed, being, as I am, fully acquainted with the nature of the obstacles they must have overcome.

I trust that the Almighty may preserve them in perfect health, to return to their homes and friends, with their brows crowned with success, and that they may receive the reward due to the enterprising few, who have proved themselves such a credit to their country and profession.

The success attending their travelling is very remarkable, as may be observed on looking at the chart. Lieutenant Haswell's furthest is only a few miles north of Dr. Rae's, visited in the same month; whilst Mr. Wynniat only left a space of thirty miles unexplored, between his turning point and the extreme attained by Lieutenant Sherard Osborn.

The whole of the south coast of Barrow's Straits has now been traced, whilst the connection between Prince Albert's Land and that of Wollaston is proved beyond a doubt. It is a strange coincidence that Captain M'Clure and Dr. Rae should name the same land after His Royal Highness.

There was a question respecting the propriety of

immediately despatching a party from the "Resolute" to the Bay of Mercy, in hopes of yet finding the "Investigator" there; but the large body of water seen by Lieutenant Pim off Cape Providence, setting aside the little chance of their being exactly in the same position, the lowness of the temperature, the advance of the winter, and increasing darkness, rendered the undertaking a very perilous one.

After due deliberation, all were unanimously of opinion that the idea should be abandoned, as one which, for a remote chance of conveying agreeable tidings, would most assuredly risk the lives of all composing the party.

It was, therefore, resolved to despatch a sledge as early in the spring as possible, in hopes of finding them, if they had not passed to the eastward, and failing that, to obtain intelligence which all felt would be left in a conspicuous place, near their late winter quarters in the Bay of Mercy.

The night Lieutenant Mecham returned proved very boisterous; and the temperature fell, as the wind increased from the northward; we all felt concerned for Mr. Nares, whom we knew to be within a day's march of the vessel. The following day (the 16th) various parties ascended the island

for the purpose of looking out for the expected sledge; nor were they disappointed, for at 3·30 P.M. it was descried in the direction of Cape Bounty.

An officer with men left immediately to assist in dragging, but as the sledge came round the north point of Dealy Island (instead of the south as was expected), the assistance of the fatigue party was not obtained.

The Captain and myself walked out to meet them, and were much pleased to find "all well," though they had suffered somewhat from the severity of the weather the previous night. In addition to several of the men being frost-bitten, the floe on which they had encamped became loosened, and a lane of water, fifteen or twenty feet wide, effectually prevented their regaining the land floe.

After unpacking the sledge—no pleasant matter in cold weather—they last evening with difficulty succeeded in pushing it across the ice, which had formed during the night on the lane alluded to above.

Judging from its appearance, Mr. Nares thought the ice would bear the weight of a man, and ventured to attempt crossing; he however paid a severe penalty, by being soused in the water up to his neck.

An immersion of this description may appear in a laughable light to the reader, but he must be reminded that there was no Royal Humane Society, with hot beds, and hotter brandy-and-water, to restore the blood to a proper degree of circulation. However, we were glad enough to get him and his party on board, without any further casualty.

All travelling was now over, at least for the season, and a few days were devoted to musk-ox, gelatine soups, beer, and various other little luxuries, in order to refresh the wearied travellers after their tiresome marches.

CHAP. VII.

The first Death.—Character of the Deceased.—Funeral of Thomas Mobley.—A few Remarks on fitting “Housings,” Winter Hatches, &c.—Arrangements for the Winter.—Departure of the Sun.—Last View of the Sun.—Guy Fawkes’ Day.—Strange Noises in the Offing.—Preparation for the Theatre.—The Prologue.—The Performance.—A few Words on the Theatre.

OUR thoughts were now bent on completing our arrangements for the winter, which all on board the “Resolute” determined should pass as pleasantly as good fellowship could make it.

As may be supposed, each traveller had various interesting incidents to recount to the envious few (myself among the number) who had the misfortune to be tied up on board. They each and all saw numerous herds of deer and musk-oxen. Wolves, hares, and foxes were also observed. I shall not enter into a detail of what each saw or killed, but refer the reader to the subjoined result of our sporting exploits, since sighting the shores of Melville Island, which we most certainly have found to abound in animal life.

Up to this period our little community had, thanks to God, been preserved in good health, with every prospect of its continuance, but alas, "in the midst of life we are in death," and the truthfulness of this was sadly exemplified in the melancholy case I am about to relate.

Our steward, Thomas Mobley (marine), had for some time past been incapable of any great exertion, and the surgeon was aware of the cause, viz. a latent disease of the heart; but hoped by dint of precaution, to ward off its effects for some time.

On Monday the 18th, the poor fellow incautiously went on deck, without being properly clad for the change of temperature, between the lower deck and that of the atmosphere. A few minutes afterwards, he fell down dead; his pulse I believe, did beat for about a minute, but no other signs of life appeared after his fall. He was immediately conveyed to the sick-bay, where every remedy that experience and kindness suggested was promptly applied, but unfortunately without effect.

Few things in my somewhat eventful life, have produced a more saddening effect than that occasioned by the death of this man — who was beloved and respected by all on board — and this

must not be considered in the light of commonplace observation; the respect of the officers and men towards him was sincere. He was beloved by his shipmates for his amiable qualities, and respected by the officers for his trustworthy character. In him our mess experienced the loss of an invaluable servant, who could not be replaced. An upright man, and I believe a sincere Christian, he died as he had lived — “the noblest work of God” — an honest man.

The following day, a spot near the beach on the eastern shore of Dealy Island was selected for the burial place, and parties were sent daily to dig a grave, but the frozen state of the ground rendered this no easy matter, and many days were occupied in getting a sufficient depth beneath the surface, and even then we were compelled to rest satisfied with only two feet eight inches; and to effect this, powder was obliged to be resorted to, in addition to pickaxes, shovels, and the usual implements for digging.

On Monday, 25th, Commander M'Clintock with the travelling parties under his charge returned to the ship, after an absence of nineteen days. He had succeeded in placing a depôt on Point Nias, in Hecla and Griper Bay. The difficulties he

encountered were of no ordinary nature, but with his usual perseverance he overcame them.

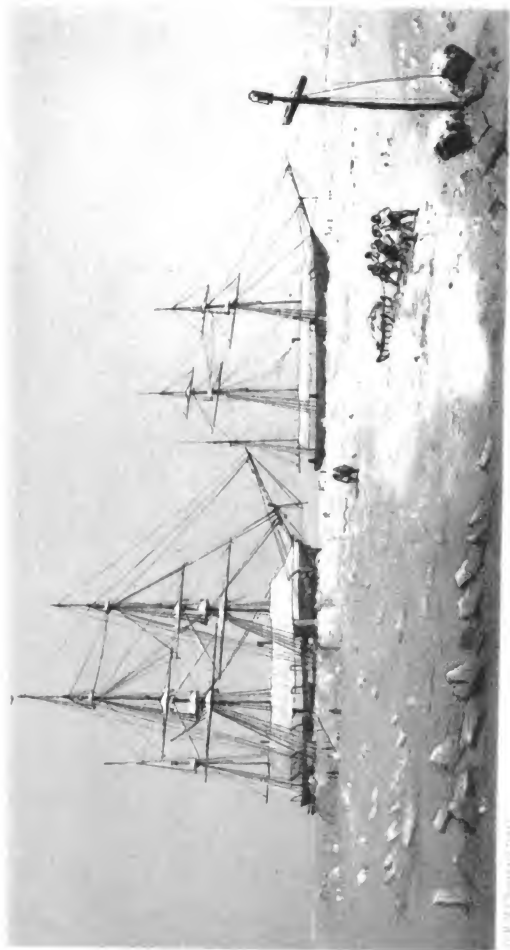
Many ravines intersected his route; these of course he was obliged to cross: the labour in doing so with heavily-laden sledges may be imagined, particularly on the ascending slope, for, however gentle the ascent, the resistance of the sledge must increase with every degree of inclination.

Tuesday, 26th.—At 10 A.M. the officers and men of both vessels assembled for the purpose of attending the funeral of the late Thomas Mobley. A considerable drift raised by a strong wind from the northward rendered the day particularly unpleasant.

The mournful procession was headed by his comrades with arms reversed, then the coffin drawn on a sledge, and covered by a sailor's pall — the Union Jack — the corpse was followed by the officers and men.

As the march commenced, the ensigns on board the ships were hoisted half-mast, and the bells were slowly tolled, sending forth across the snowy plain a most mournful sound.

Few things are more impressive than the burial of a sailor at sea, when the progress of the stately ship is arrested, whilst the simple but beautiful



1850-1851

H. M. S. 'RESOLUTE' AND 'MIRANDA' WITHIN A BAY OF EASTERN GREENLAND

1846

service for the dead is read, previous to committing the body to the deep.

But situated as we were, the loss of one from our little community was deeply felt, and led the thoughtful mind into a train of deep reflection. After the funeral service three volleys were fired over the grave, when we returned on board.

Our arrangements for winter were by this time quite completed, the housings were spread as far aft as the mizenmast, and the curtains nailed down. I do not, however, approve of the plan, being of opinion they should be fitted with stops, to allow of their being triced up in fine weather; this was successfully carried out in the "Resolute" in '50-'51. During the fine days, even in the depth of winter, tricing the curtains up formed part of the morning routine, and the beneficial effects arising from a free circulation were much appreciated; and in blowing weather, by tricing up the lee curtain, the dense volumes of smoke accumulated under the housing were dispelled, and the purity of the atmosphere consequently improved.

As we are now fitted, the impurities generated in the lower deck have but two ways of escaping; the one by a scuttle (the size of a cot frame), cut in the housing over the fore-hatchway, or by tra-

versing the whole length of the deck, they may possibly make their exit through the opening astern.

The companions of the various hatchways had been removed for some time, and replaced by others fitted in England expressly for winter quarters. The after one had been closed altogether, in order to keep up a proper degree of temperature in the holds, spirit, and store rooms. The doors were fitted with weights and pulleys, and a scraper was provided to take off snow or dirt, the entire removal of which was ensured by using a good strong coir brush provided for the purpose, and suspended on a nail driven into the planking of the hatchway.

The operation of snowing the deck, and banking up around the ship, was necessarily slow. By the end of the month all was finished*; the snow on the deck, including a layer of cement, composed of fine gravel and snow well mixed together, was nine inches from the deck. Outside the ship, at a distance of six feet all round, was built a wall four feet and a half high, the space was then filled in with snow and tapered off from the top of the wall, to as high as the lower part of the ice plank.

November 1st.—The attention of the officers was

* This is a mistake; snowing the upper deck was not completed till the end of the first week in November.

now devoted to the instruction and amusement of the men, during the long tedious months of the ensuing winter, and several consultations were held, in order to devise the ways and means of carrying out so laudable an object.*

The result was, that Captain Kellett, Dr. Denville, and myself were elected the "Theatrical Committee of Management," and we set to work in right earnest. The men fell most readily into the views of the officers, and great unanimity of purpose prevailed throughout, rendering our task as committee men comparatively easy.

But instruction also formed part of the system intended to be adopted, and classes were accordingly arranged, and presided over by several of the officers, who had kindly volunteered their services for the purpose.

My class, professedly for the purpose of imparting a knowledge of navigation, consisted of eight pupils; two of them wished to perfect themselves in nautical astronomy, whilst the remainder were all, more or less, acquainted with plane trigonometry and the sailings.

* The admirable arrangements of Sir Edward Parry, the pioneer of arctic enterprise, formed the basis of all subsequent occupations and amusements on board the numerous ships of the Royal Navy, which have from time to time wintered in the arctic regions.

November 2nd.—The morning was fine, with a light air from the northward, the moon had now been above the horizon for several days and nights past, and was now shining brightly, in company with Venus, Aldebaran, and Saturn; but these could not reconcile us to the departure of the sun, which left us on the 3rd, unless indeed, we were fortunate enough to have a clear day, and much refraction on the 4th.

Happily the day proved fine, and at 10·45 A.M. the enlightened limb of the sun was just perceptible above the horizon. At noon, the temperature 18°—, the Captain and myself took the meridian altitude of the sun's upper and lower limb, and were thus enabled to ascertain the amount of refraction; the following results were obtained:—

November 4th, 1852.

Noon. Barometer 30·17 + 47
Thermometer 18°—

	° ' "		
☉ Dec. S.	15 31 24 8	+	45·72
	<u>+ 5 33·7</u>		<u>7·3</u>
Corr. dec.	15 36 58·5		13716
Lat. 74 56 25 N.			<u>32004</u>
Zen. dist.	<u>90 33 23 or</u>		<u>333·756</u>
0° 33' 23" below horizon by computation.			<u><u>5·33·7</u></u>

CAPT. KELLETT. Azimuth and Altitude Instrument.

⊙	25 40	16 10	semidiameter.
⊖	9 30	33 23	
		42 53	actual refraction.
		32 6	ref. and par. (mean temp.) app. ⊖
		10 47	increase of ref. for 18°—.

G. F. M'DOUGALL.—By Sext. 2113. Index Error Nil.

⊙	30 30	3 30	
⊙	3 30	34 0	
⊖	17 0	4 11	dip.
		12 49	
	Below horizon	33 23	by computation.
		46 12	actual refraction.
	Mean ref. and par.	32 39	at mean temp.
	Increase of ref.	13 33	for temp. 18°—.
	Do. (Cap. K.)	10 47	Do.
		24 20	
	Mean increase of ref.	12 10	for temp. 18°—.

This day was altogether one of the finest we had experienced since our arrival here. The sky to the southward was composed of the most brilliant tints; crimson and an intense yellow predominating. At 1.15 P.M. the upper limb sank beneath

the golden-hued horizon; the tints gradually became fainter, as the arch of light travelled to the westward. And thus the sun departed on a tour to the southward, sincerely regretted by all on board. Alas! like other friends, until lost, his value was not sufficiently appreciated.

Friday, November 5th.—This morning, whilst at breakfast, sounds of revelry with occasional cheers were heard alongside, and on reaching the deck to ascertain the cause, we found the fame of that celebrated personage Guy Fawkes, had penetrated even to the remote shores of Melville Island.

The felon looked as "well as could be expected" under the trying circumstances in which he was placed; for being strapped down to a chair is not the pleasantest way of taking exercise, as it in some measure retards the circulation. His satanic majesty in full costume was in close attendance, a type of his being constantly at Guy's elbow.

Having paraded the hero of the day to their hearts' content, he was set aside to keep until the evening, when amidst the sounds of gongs, drums, and unearthly yells, that would have brought tears of envy into the eyes of a New Zealander or a Dyak, the effigy was committed to the flames.

Thursday, Nov. 11th.—During the middle watch

a strange creaking noise was heard in the offing ; this was attributed to the action of the (spring) tide on the ice. In order to satisfy myself on the subject, I took a walk during the forenoon in the direction from whence the noise proceeded, and found at the distance of about half a mile from the ship, a nipped-up barrier of ice, about five feet in height, extending E. and W. as far as the now gloomy light enabled us to see. The morning was unusually still, and thus the effect of the noise was considerably heightened.

It resembled the sound produced by the "soughing" of a dying gale through the cordage of a ship, or the noise of a distant cascade. Many causes were assigned, some imagining it to be the pent-up air rushing through the fissures in the floe, others the movement of the ice in the offing. I believe both these causes were in operation, but I also think there must have been a third, viz. that of a current of air rushing through the atmosphere.

This opinion was strengthened when we arrived on board ; the same noise, though not so loud, was heard distinctly, as if a moderate breeze was passing through the rigging ; at this time there was scarcely a breath of air. I now foretold the approach of a southerly gale ; for not only did I

imagine I heard the wind without feeling it, but I judged the current of air to be coming from the southward, from the fact that the noise was more distinct when standing under the bows of the ship (lying N.N.W. and S.S.E.) than under the stern: that day at noon it was blowing a strong breeze from S.S.E.; barometer rising. I do not wish it to be imagined because my supposition respecting the gale proved correct, that I was equally so in regard to the noises. I merely relate the circumstance as it occurred, feeling that such remarks should be noted; for how often has the veriest trifle solved the most abstruse problem, and opened out to the scientific and inquiring mind, an enlarged field for meditation and discovery.

Nov. 23rd.— All has been hurry and bustle for the last fortnight, in preparing scenes, decorations, dresses, &c., for the theatre. In addition to being a committee man, I was obliged to take on myself the responsible offices of scene painter and dress-maker; the former was sufficiently difficult in consequence of the want of proper materials; to remedy which we were obliged to have recourse to soot, blacking, chalk, &c.

The dress-making business was, indeed, extremely puzzling, particularly in the ladies' department;

but success attended our enterprising efforts, and although much criticised, elicited warm expressions of admiration.

The skirts and polka jackets had been brought from England. A stiff duck petticoat made a capital substitute for a hair ditto; this, with the addition of a comforter stuffed with oakum, made the after part of the dress resemble a miniature St. Paul's dome.

This evening the Theatre Royal, Melville Island, was re-opened after a lapse of thirty-two years. Indeed, no dramatic corps had visited the Island since the breaking up of the first establishment under the management of Captain Parry, in 1820.

On the curtain rising, the following prologue (which I had written for the occasion) was spoken by Dr. Domville, in character, as "The Hyperborean King":—

'Tis now some two and thirty years ago,
This region of eternal ice and snow
Was first discovered by one Edward Parry,
Who near this spot eleven months did tarry;
Ice-bound as you are now,—like you in hope
Next season's summer sun the ice might ope.
Their coming here I deemed a great intrusion,
And thought to cover all with dire confusion:
Frost-bites I sent, and covered them with scars;
They murmured not, but laughed, like jolly British tars.

I then forgave them, for I could not feel resentment,
 'Gainst men who 'midst privation had contentment.
 You're welcome for their sakes,—I can't dissemble,
 For you, your persevering predecessors do resemble
 In everything—including killing deer, and even my musk-
 oxen

You coolly shoot, and then with musket knock 'em
 Down: their carcasses next skin and bear off,
 Whilst not a particle of meat I get a share of.
 But I o'erlook it all. You see I've come to-day
 To join you as of old in forwarding the play.
 Well! 'tis a splendid house, quite equals Parry's,
 And far surpasses that of Mr. Barry's
 Houses of Parliament, for you I see don't need
 The ventilating process used by Doctor Reid.
 And Brothers, for such we are by common consanguinity,
 Let's live as such, in constant unanimity.
 Take exercise, be cheerful, and care throw aside,
 Cold, darkness, and monotony you may thus deride:
 For even here that cherub sweet, with heart both kind and
 soft,

The life of Jack holds dear;—she's watching now—aloft!
 Last spring a herald from the Tchoutschi's king
 Told me this season to my realms would bring
 A "Resolute" and "Intrepid" band, and bid me tell it,
 In order to surprise his friend, their leader—Captain Kellett.

(*A bell rings.*)

But hark—a bell! ah! that's a hint to close my long oration;
 They're anxious to appear, my friends, to gain your appro-
 bation;
 But remember they're beginners, for I know they've fondly
 reckoned,
 On your kindness to gloss lightly o'er the faults of *Charles*
the Second.

Then followed the amusing historical drama of "Charles the Second," the characters being sustained by the following officers.

Charles II.	-	-	-	Lieut. Mecham.
Rochester	-	-	-	Dr. Domville.
Edward (a page)	-	-	-	Lieut. Pim.
Capt. Copp	-	-	-	Mr. Krabbé.
Lady Clara	-	-	-	Mr. Nares.
Mary	-	-	-	Mr. M'Dougall.

A few amusing songs entertained the company, during the interregnum between the plays.

The second piece of the evening (acted by the seamen), was the laughable farce of

"WHO SPEAKS FIRST."

Mr. Militant	-	-	-	Sergt. Hobbs.
Capt. Charles	-	-	-	Blackwell (P.S.)
Potter (Servant)	-	-	-	Joy (I. Q. M.)
Mrs. Militant	-	-	-	Northhouse (A. B.)
Smart (Servant)	-	-	-	Mumford (C. C.)

"God save the Queen" was played by the band, on the fall of the curtain; and the company separated, well pleased with the evening's entertainments, which went off admirably.

Un petit souper, hospitably provided by Captain Kellett, was done ample justice to; nor were the men forgotten on the occasion, but made a plea-

sant finish with a glass of grog, and something to eat.

Amateur theatricals are seldom subjected to severe criticism, even where there are the advantages of being able to select suitable costumes, and choose from a numerous circle of friends or acquaintances, persons competent to sustain an assumed character with some degree of *éclat*: but here, where the dreary darkness of an Arctic winter affects the mind and body in no small measure, where the temperature is at zero on the stage (no joke in petticoats), besides having to depend on our own resources, where is the man who could look at such performances with a too critical eye?

Taking a part as I did in the play, I shall say but little respecting its merits or demerits; but, in mere justice to those with whom I was associated, it is but fair to add, that in the opinion of all present, the action and delivery would have reflected no discredit on a London stage. The scenic arrangements, under the entire control of Mr. Dean (carpenter), were perfect in every respect.

CHAP. VIII.

Routine of the Day during the Winter.—Employment.—An Aurora.—Musk-Oxen seen in Mid-winter.—Death of George Drover.—The Absence of Light.—Entertained by the “Intrepids.”—Christmas Day.—Wind, Weather, &c.—Decrease of Temperature.—Preparations for Travelling.—Two Ptarmigan shot.—A Hare killed.—Rencontre with a Bear.—A few Words about Thermometers.—Theatrical Performances.—Expected Appearance of the Sun.—The Prodigal's Return.—Observed Refraction.—Face Protectors.—The Necessity of a Companion when walking.—Direction of intended Canal.—Visited by a Native—Bear.—A Gale.—Absence of two Officers.—Strange Effects of Cold.—Furious Gale.—Re-stow After-hold with Gravel.—Provisions for Travelling Parties.—Mode of preparing Pemican.—Articles of Equipment.

THE events of the past month, though not very striking, were not entirely devoid of interest. It is not my intention to enter at length on the daily routine, but rather glance at the general nature of the duties, which were so arranged as to give to every man a fair and requisite amount of exercise in the open air.

After divisions, at 8·45 A.M., the men repaired to the various duties assigned to them, which on fine days, were invariably in the open air,—removing the accumulation of snow-drift from around the ship,—bringing off gravel, — completing wall round fire-hole, — and building a snow-house for the observatory.

The low state of the temperature prevented the mechanics working in the open air, but in order to ensure their exercise, they walked the floe or deck until 10·0 A.M., when their daily work commenced. Dinner at noon, and supper at 5·30 P.M., completed the working portion of the day ; after this, those who wished, received instruction from the officers, or otherwise amused themselves.

In order to ensure a good article, no time was lost in setting the shoemakers to work on the travelling boots, the body being composed of canvas, the heel being strengthened and stiffened by an additional piece.

Their shape, to be sure, was not such as would obtain custom if displayed in a shop-front in Regent Street, but as comfort and durability were the two most important qualities to be desired in their construction, an elegant shape could well be dispensed with.

They were made sufficiently large to contain with ease two pairs of socks, a pair of blanket wrappers, and a pair of boot-hose; and even this stock might have been added to, without inconveniencing the foot.

In order to avoid the discomfort arising from a loose boot, each man provided himself with a pair of "ankle straps," or, as the men termed them, "kicking jennies;" they were made of canvas, and, passing round the heel, were kept down by a leathern strap, and laced over the instep.

The carpenters had already commenced repairing the sledges, many of them having suffered during the autumn travelling; particularly those that had been employed on the land.

The phenomena, up to the 30th instant, had been very meagre, only a few faint "auroræ," and indistinct paraselenæ being observed; but on the night of the 30th, between the hours of ten and eleven, an aurora of unusual splendour made its appearance, extending from S.S.E. to W.N.W., in lateral bands of light of great brilliancy, from which ever-changing coruscations shot up in the direction of the zenith. The whole was tinted with a beautiful straw colour, probably occasioned by the presence of the moon, which (with other celestial

objects) was shining brightly from a perfectly cloudless sky.

Sunday, December 5th.— A brace of ptarmigan were seen this day, by Messrs. Krabbé and Ibbets, on the north side of Dealy Island. They were reported to be very sluggish in their movements, scarcely deigning to take wing, but proving more than a match for their pursuers.

On the following day, Lieuts. Hamilton and Meham took a walk on the shore, when, to their surprise, they observed a herd of fourteen musk-oxen (including calves!)— thus setting at rest, beyond all doubt, the various opinions respecting the migration of these animals.

Tuesday, 7th.— A northerly gale sprung up this forenoon, and with but little intermission, continued for a period of ten days. It is worthy of note that the snow-drift decreased perceptibly after the first few days.

Sunday, 12th.— At 2 A.M. this morning George Drover (Captain of fore-castle "Intrepid") breathed his last. It may be remembered that he was obliged by indisposition to return to his ship, from the travelling parties of Commander M'Clintock, on the 7th of October last.

From that period he had gradually declined in

health, and for some weeks past his case was known to be hopeless — within the last few days there were symptoms of improvement, but it proved to be the reaction of the body previous to its final dissolution. The expedition by his death, experienced the loss of a good petty-officer in every sense of the word.

On *Sunday the 19th*, after divine service, the officers and crew of the “*Resolute*” proceeded on board the “*Intrepid*,” where it had been arranged that the burial service should be read, as the temperature (20° minus) was too low to expose the men for any length of time, in a standing position, in the open air. The deceased was then conveyed to his last resting-place, beside the grave of our much regretted steward.

Much difficulty had been experienced in digging a grave; for in addition to the heavy gale, which increased the discomfort, whilst performing such a melancholy task, the ground was frozen as hard as granite, on which the crow-bars, pickaxes, and shovels made little or no impression. The temperature, varying from 17° to 30° minus, rendered it necessary to pitch a tent over the grave, in order to shelter the men from the wind. After five days' work, they were obliged to have recourse

to a wood fire, which was lighted on the spot, to thaw the surface. At length, after a week's labour, a depth of two feet ten inches was obtained — in this poor Drover was buried.*

The advent of the shortest day (the 21st) was welcomed with feelings of pleasure by all on board, for it was the turning point of the winter, when, although the temperature might reasonably be expected to increase in severity, the light, — that great and blessed gift of the Almighty, — would gradually increase to a continued day of several months' duration.

Indeed, of all the discomfort attendant on wintering within the Arctic Circle, none perhaps is so much felt as the absence of light, which changes the aspect of nature, by throwing a veil of gloom alike o'er hill and dale, and affects in a slight degree the human body, it is also injurious to the mind; the temper becomes irritable, the mental energies impaired, and the habits of some gloomy and solitary. But the sweet and soothing influence of memory, assisted by bright hopes for the future, tend to sustain the spirits, under the chilling influence of a

* The use of gunpowder might obviate this difficulty, as the hardest rocks are blasted with little labour.

position at once novel and unnatural, amidst eternal ice and snow; and existing between two atmospheres, which frequently differed 100° in ten steps of a ladder.

The evening of the 23rd was devoted to witnessing a series of tricks in legerdemain, interspersed with songs, recitations, &c. Captain M'Clintock and Lieut. Pim had, with the most praiseworthy zeal and forethought, gone to considerable expense in providing amusing tricks which were entrusted to Mr. Krabbé, the M. Robin of these realms.

Nothing could have gone off with greater *éclat* than the entertainments of the evening; the laughter and surprise were at times intense, particularly when the qualities of the "inexhaustible bottle" were, to the intense delight of the recipients of its contents, proved to be something beyond mere fiction.

After the performances, which terminated at an early hour, the officers of the "Intrepid" were "at home" and made the "Resolute's" so, to an ample spread, over which an agreeable hour or two was spent.

And now Christmas was at hand, a season filled with the most pleasing reminiscences of happy scenes, where English hospitality stands pre-

eminent, and English beauty unrivalled. Where is the man whose heart will fail to warm with sentiments of love and veneration towards a land, the people of which are respected for their virtues, and envied for their greatness by the whole universe!

Christmas Day at length arrived, and many were the expressions of good will and friendship interchanged. The "Intrepids," with their usual hospitality, provided luncheon; and, after a walk for an appetite, all the officers of the squadron met at 5 P.M. in the gun-room of the "Resolute," and sat down to a substantial dinner. Besides other delicacies, there was a splendid piece of roast beef (killed in April), an Arctic hare, and a noble haunch of Arctic venison weighing twenty-one pounds. The latter was the favourite dish, and called forth the unqualified praise of all present. The evening was spent agreeably over a new and amusing game (called "Quack") introduced by Lieut. Meham.

I had almost forgotten to say, the men had an extra allowance issued, and at 1 P.M. sat down to good fare, the various tables being decorated with transparencies, flags, and devices of various descriptions alike appropriate and tasteful.

The experience of the past months have enabled us to ascertain, beyond a doubt, that the prevailing

winds in our immediate neighbourhood come from the northward : and that strong winds, accompanied by violent gusts, occur oftener than light, or even moderate, breezes. Another fact, equally strange, is the continued gloomy state of the weather. Clear and cloudless days being "few and far between."

Parry, in Winter Harbour, in 1819-20, experienced similar winds, but enjoyed much finer weather than we have had ; so also did the expedition under the command of Captain Austin, near Griffith's Island, during the winter of 1850-51.

The cause of the sudden squalls puzzled us not a little ; for although within half a mile of Dealy Island, with the ship's head between it and the main land, we could not attribute the squalls to the proximity of the island to the main, as both were comparatively low, inclining with a gentle slope to the beach.

We at length came to the conclusion that the sudden variations in its force were occasioned by the wind rushing through the deep gorges to the northward of the inlet, where the land was high and precipitous ; intersected by deep ravines through which, in all probability, the melted snows in summer find a passage to the sea.

172 NEW YEAR.—DECREASE OF TEMPERATURE.

The New Year was ushered in with a lower degree of temperature than we had yet experienced. On the 2nd mercury * became solid for the first time, and from this we may fairly date the commencement of the months of extreme cold.

On the 4th the thermometer stood at 48° minus, being within half a degree of the lowest we had experienced in 1850–51; the day was fine and still, and the arch of light to the southward had increased perceptibly during the past week; and with it, in spite of the intense cold, we experienced an increase of pleasure in taking our accustomed and necessary exercise, which was generally between the hours of eleven and two; for we then enjoyed the greatest degree of light.

The New Year tended to remind us that time was passing rapidly, and that in the course of less than three months, all the strength and energy of our crew must be devoted to long and perilous marches, and be subjected, not only to the absence of comforts, but the presence of great privations.

Not a moment was now to be lost, for there was quite sufficient work to occupy all on board in making the requisite preparations for travelling; and for landing a large quantity of provisions and

* Mercury becomes solid at $39\frac{1}{2}^{\circ}$ minus.

clothing on Dealy Island, in anticipation of the possibility of Captains Collinson and M'Clure being obliged to abandon their ships, and wend their way home by Melville Island.

Bacon, which under the forecastle had become like slabs of granite, was taken below, and placed beside the Sylvester stove; and even there, several days elapsed ere it became in a fit state to be subjected to the process of boiling.

Shoemakers had for the last two months been employed making boots; the sailmakers were busy about the tents, robes, macintoshes, and other articles necessary for the perfect equipment of a tent. Each man, during his leisure hours, employed himself making his travelling costume, whilst the officers were "going in" to the weights of the various articles, and scorned not to work out the total to ounces; in short, there was not an idler on board.

My office, in addition to my usual duties, was to prepare printed records, containing the necessary information respecting the whereabouts of ships and provisions; these records were made into a book similar to those in use on board the Thames steamers for tickets. I also made twenty charts of the discoveries up to this period; they were to be

deposited by the travelling officers, at certain stages on their routes.

A solitary ptarmigan had been observed more than once, during the past week, on Dealy Island, and so sluggish were its movements, that an attempt was made to capture it, but without success; but on this day, Friday 7th, a ptarmigan, in complete winter plumage, was shot by Lieut. Pim; the bird weighed two pounds and a half, and appeared very plump. The contents of the crop consisted entirely of sprigs of the dwarf-willow, most of them not yet digested; the whole nearly filled a good-sized tea-cup. On the 8th, a second was killed by Dr. Domville.

On the 10th the curtain of poop-housing, on the port side, was triced up, and threw a welcome gleam of light along the deck; the following day three (2-ton) tanks were hoisted out, and conveyed to the south point of Dealy Island, where it was determined to leave the dépôt. The tanks will, as the summer advances, be filled with bread, preserved potatoes, and other perishable articles.

On the 14th, the "Intrepids" gave another pleasing entertainment, when, to feats of legerdemain, songs, recitations, &c., were added phantasmagorical figures, a description of them being un-

dertaken by Mr. Krabbé, whose quaint and facetious sayings elicited roars of laughter from the much delighted audience. It is useless to hide the fact that officers and men laughed, and enjoyed the fun, like so many children. A few of the songs were full of humour, the singers being dressed in what they conceived to be characteristic costumes.

Retiring to the gun-room of the hospitable "Intrepids," we sat down, and did full justice to an excellent supper, whilst the seamen talked of the wonders of necromancy, over a pipe and glass.

Saturday and *Sunday*, 15th and 16th, the wind blew a whole gale, from a very unusual quarter, the eastward; accompanied, as usual, by heavy snow-drift, but without the great fluctuations in force, invariably experienced with a northerly breeze; the drift in these two days had formed a wall of snow along the starboard side nine feet high, leaving a passage of about ten feet between it and the ship. A slight cessation took place on the 17th, the wind gradually veering to the northward; towards night, fitful gusts of wind foretold another breeze; nor were we disappointed, for on the following day we had a piping gale, with heavy drift.

The 22nd proved remarkably fine, and our walking on this occasion was more extended than usual.

176 PURSUIT OF SCIENCE UNDER DIFFICULTIES.

Mr. Roche (mate) was fortunate enough to kill one of three hares he found on Dealy Island, the first that had been observed since October; although numerous traces had been seen for some weeks. Lieut. Hamilton captured a lemming, but the poor little animal died the following day.

Sunday, 23rd, at 1 A. M., the quartermaster went outside on the floe, to register the thermometers, which were kept in a box secured to a table. In the act of reading off, his attention was attracted



Pursuit of Science under Difficulties.

by a slight noise, and his surprise may be imagined, when, on looking round, he observed a bear within

five yards of him. His situation, to say the least of it, was not an enviable one, for one spring of the brute would have put an end to his registering thermometers for ever. Fortunately, however, the quartermaster (Silvey) had sufficient presence of mind to throw the strong light of the lantern full on the face of the animal; it answered the purpose effectually, for Bruin (startled by such an unusual aurora) beat a hasty retreat; the alarm was immediately given, and two officers went in pursuit, and traced him to the mass of hummocks astern, where they lost the trail.

During the past month, the mean of the temperature was 36·1—by Adie and 40·7—by Pastorelli, the lowest yet registered within the limits of the Arctic Circle; Parry in Winter Harbour, in 1818-19, registered 32·2 minus, Griffith's Island, 1851-52, being 33° minus. The weather during the month, and indeed I may almost say the winter, has been far more unpleasant and severe than that experienced at Griffith's Island in 1850-51, and what may be regarded in the light of phenomena, are the unaccountable falls of snow, during periods of extreme cold.

Adie's thermometer, supplied from Kew Observatory, may be considered the standard for and

below the freezing point of mercury, but the colourless fluid, and faint graduations are highly objectionable, particularly in such a climate as is experienced within the Arctic Circle; the difficulty of reading off is much increased, and in many cases the registration was worse than useless; for by the time the observer had succeeded in detecting the whereabouts of the fluid, and the corresponding degree, the radiation of the heat from the lamp, which was necessarily held close, had affected the temperature of the immediate atmosphere, which has been proved to be as much as 2° in half a minute.

I should therefore suggest that thermometers containing coloured (red) fluid, with the graduations marked in a legible manner, should be supplied to vessels wintering in these regions.

Tuesday, February 1st. — The curtain of the "Theatre Royal" was raised for the second and last time for the season. The plays selected for the occasion were the well-known farce of "Raising the Wind;" the characters sustained by the ship's company; and the extravaganza of "King Glumpus," written by Mr. Barrow, of the Admiralty; the characters in this piece were undertaken by the officers.

The costumes of Miss Durable and Peggy in

“Raising the Wind” were truly admirable; all the articles were manufactured on board, from the stays of No. 8 canvas, and laced with marline, to the black silk mantle and hood, with its crimson silk lining vying with the rouge on their cheeks. Miss Durable was perfection’s self, barring the ankles — which were certainly not transparent. Peggy was also capital, as far as costume and appearance went, and could she only have remained still, would perhaps have been the better of the two; but, alas! there was a certain swagger and rolling in her gait, which would have brought down roars of applause on a stage sailor of the T. P. Cooke school, but certainly did not add to the ladylike appearance of a lovely, retiring, and accomplished girl yet in her teens, particularly when backed by a hitching up of the frock with both hands, as sailors occasionally do to the waistband of their trousers. Jeremy Diddler’s dress, of course, was *not* complete, being out at the knees and elbows; but this difficult part was well sustained throughout.

Between the performances, songs, recitations, and a hornpipe tended to relieve the tedium of waiting until the necessary alterations and preparations had been made for the next piece, which went off

with great applause; roars of laughter, with the usual accompaniment of "Bravo!" "Capital!" was more than a sufficient reward for any little trouble we had been at in getting it up; and I am sure Mr. Barrow would have felt delighted, to have witnessed the pleasure derived from his little interlude, by the whole of the ship's company of the "Resolute," for whose amusement it was intended.

The dresses, of course, were extravagant to a degree, and as the male portion of the characters wore masks, with noses such as are never seen *off* a stage, the absurd effect to be desired was produced.

Gallantry forbids my not paying a just tribute of admiration to the ladies who took a part in "King Glumpus" — they were capitally "got up," with a profusion of bustle. I doubt if any observer, however well read, would have been able to fix on the exact reign in which the various costumes were, at one and the same time, the prevailing fashion. My faithless spouse wore a Bloomer costume, such as is, or at least was, worn by decoy bar girls in London, as an inducement to *very* young men to expend a certain amount of capital in a glass of beer.

The queen, with dress and coronet complete, looked a perfect Boadicea; whilst her attendant maids of honour bore a strong resemblance to superannuated apple-women, in full dress.

The proceedings terminated by performers and audience singing the National Anthem; the whole went off with great success, although, notwithstanding the admirable arrangement in the shape of stoves, the cold at times was intense, the thermometer being at minus 5° within three feet of a stove.

The ladies, of course, felt it most, and may be said to have been compelled to drink hot whisky punch when off the stage; they were also obliged to have recourse to a posture decidedly unlady-like — sitting with their legs extended over the stove.

A capital supper in the gun-room was done ample justice to by all the officers. A feast was also provided for the seamen, consisting of Findon haddock, bread, &c.; the whole washed down with a glass of good old Jamaica.

Saturday, 5th. — For the last few days the sun's near approach to the horizon had been proclaimed by an extended arch of light, with a few small crimson clouds floating in a golden sea. Oh! with what pleasure did we all look forward to his actual presence.

Refraction,—corrections of all descriptions,—not forgetting the dip from the top of Dealy Island, 160 feet high, — were worked out minutely, and the result of our calculations led us to expect he might possibly be seen for the space of a few minutes at noon on the 4th.

The weather on that day, however, was unfavourable; a cold sharp wind, with mist, prevailed. But the 5th was a glorious day, clear, cloudless, and cold.

During the forenoon officers and men might have been observed stopping occasionally during their monotonous walk on the floe, and contemplating with feelings of quiet rapture the southern horizon, as the arch gradually increased in extent and brilliancy.

Officers,—aye, and sedate ones too, on most occasions, might have been observed jumping as high as the weight of their clothes permitted, fondly hoping to be the first to welcome the glorious source of light and warmth, to these inhospitable shores.

At length, at 11·30 A.M., the flag on Dealy Island was hoisted, announcing to the little world below the fact of the sun being visible from that elevation. The ensigns on board both vessels were

immediately hoisted, in honour of the prodigal's return *, after an absence of ninety-three days.

A few minutes only elapsed, when the rays of his upper enlightened limb dazzled the eyes of those who were anxiously gazing from the floe. Every eye-lid drooped before the novel glare, but the features of all bore an expression indicative of happiness. The very dogs appeared more animated, and seemed to have an innate sense that better days were coming. Giving an additional cock to their tails and ears, they gambolled with each other, and looked, in truth, a set of merry dogs.

At noon I succeeded in obtaining the meridian altitude of the \odot (from the deck), $0^{\circ} 23' 30''$, for the purpose of ascertaining the amount of refraction. The following work shows the results obtained. Barometer 30.70, Thermometer (air) 35° minus.

By Computation.	By Observation.
\odot 's declination south.	Obs. \odot by Sext. 2113—0 23 30
o ' "	Dip —4 11
15 50 53.5 — 46.10	0 19 19
5 36.5 7.3	Sem ^r . —16 15
<hr/> 15 45 17.0 13830	Obs. alt. of \ominus — 0 3 4
74 56 25 32270	By comp. below hor. 0 41 42
<hr/> 0 41 42 336.530	Refraction 44 46
\ominus below horizon. 5 36.5	

* The gallant crews of De Haven's ships, when wintering in the pack, hailed his return with three cheers,—all hands on the floe.

In addition to the feelings of intense satisfaction which the return of the sun occasioned, it is to be hoped there were in the breast of every individual composing the expedition, feelings of heartfelt gratitude to the Giver of all goodness, for the preservation of their lives and health throughout the trying period of an arctic winter, whose duration is sufficiently unpleasant and monotonous; but all other evils sink into utter insignificance, when compared with the disheartening nature of utter darkness, for the space of ninety-three days.

Although the number of our little band had been decreased by the two men who lay side by side on Dealy Island, no important cases of sickness have occurred. Happily all enjoy comparatively good health and spirits, which the increase of light and exercise improve daily; and when the time arrives requiring the exertion necessary to ensure success, in the fully carrying out the intended distances on foot, it is to be hoped their health and strength will keep pace with the spirit of determination, pervading each and all, to bear with a resolute fortitude the fatigues and privations they must necessarily encounter.

As the severity of the weather increased during the winter, each man stretched his ingenuity to the

utmost to invent a "face protector;" for the face is peculiarly sensitive, particularly the nose, cheek-bones, and chin, whilst the under eye-lid comes in occasionally for a frost-bite.

This is, of course, to be attributed in a great measure to the face being more exposed than any other part of the body; it therefore becomes necessary to protect it whilst walking, — the object to be attained being the prevention of frost-bites, as also to allow the vapour from the mouth and nostrils to escape without becoming condensed on the cover.

As always happens where many turn their attention to the same subject, the number produced was great, and the shapes varied according to the ideas of the designer, who, by-the-by, invariably proclaimed the superiority of his own invention, by wearing it even at the expense of being frequently frost-bitten.

The old cover, used by the Expedition of 1850--51, was simply a piece of cloth lined with lamb-skin, or flannel, cut so as to cover the whole of the cheeks, leaving an aperture for the nose, which in its turn was covered with an angular piece of the same materials. This was found to answer very well, and was the prevailing fashion for some time;

but as it was necessary to secure it round the head previous to putting on the cap and muffler, it was not convenient for removal, to ascertain whether or not the cheeks were bitten.

The favourite cover of this cruise is even more simple, being composed of a kind of veil, made of seal-skin or cloth, lined with flannel as before; it is attached to the cap outside, by buttons, and herein its utility consists, as the breath escapes without becoming solid.



Winter Costumes.

Another great inconvenience experienced whilst walking during intensely cold weather, is the congelation of the eye-lids, by the action of the cold on

the exhalation of moisture from the eyes. It is then necessary to withdraw the warm hands from the recesses of the mittens and apply them to the eyes, in order to melt the ice, and restore the sight.

It is absolutely necessary, during the prevalence of very cold weather, that each person should have a companion when walking any distance from the ship, — and a standing order to that effect should be issued, in order to avoid the neglect of frost-bites, and the more serious results arising from falls, cracks in the ice, &c., whereby a broken leg, or a sprained ankle, by preventing an immediate return to the ship, might possibly cost a man his life.

It is therefore prudent *always* to have a companion — you are then enabled to inspect each other's faces occasionally, and perform the friendly office of removing frost-bite, which, if neglected, leaves an unpleasant scar, and renders the spot peculiarly sensitive for the future.

Monday, 7th. — Commenced hoisting in, and stowing gravel, as ballast, in the place of the three (2-ton) tanks that were landed; the coals from below them were removed into the bunkers, and the space filled up with ballast, level with the tank tops.

	Tons	cwts.
<i>Port Side.</i> —In space occupied by 2 (2-ton) tanks,	}	5 0
was stowed - - - - -		
<i>Starboard Side.</i> —In space occupied by 1 (2-ton)	}	3 16
tank, was stowed - - - - -		

This day gravel was distributed along the line of the intended canal, which will be the same as the one we cut in September last, in consequence of the ice being thinner there than elsewhere.

Tuesday, 8th. — At 1 A.M. a bright arch of aurora was observed, extending from W.N.W. to S.S.E.; the altitude of the centre of the arch was about 8° minus, the whole appeared to have an undulating movement; from the centre coruscations of considerable brightness shot up in the direction of the zenith.

Thursday, 10th, was one of the finest days we had experienced for some time; clear weather and a perfectly cloudless sky prevailed throughout. Distant objects were very distinct, but much refracted; Cape Bounty, for instance, appeared twice its usual height, whilst the range of hummocks to the southward took almost any shape the mind could imagine. The sky to the southward, glowed with a combination of gold and crimson tints, merging almost imperceptibly into purple and blue towards the zenith. The whole arch of glorious light moved with the sun to the westward, and

there, as the setting sun sank beneath the horizon, dissolved in a mass of subdued light, as evening closed around us.

Friday, 11th. — Wind during the forenoon from northward, and gradually increasing. At noon the drift began to rise, and caused objects on the floe to be much distorted. On such occasions, the unpractised eye is apt to imagine stationary objects to be on the move.

This is the most plausible reason why a bear, that was leisurely inspecting the contents of the



dust heap, about fifty yards astern of the ship, had not been observed before. Such however was the case.

Fortunately for master Bruin, he was first descried from the "Intrepid," whose officers had a long shot, which took effect, but was not of sufficient importance to prevent his beating a hasty retreat in a southerly direction. Pursuers were not wanting, and he was closely followed by an armed party, many of whom, by-the-bye, shortly returned, not caring about sport with a temperature of 40° minus.

The gale and drift increasing, Captain Kellett ordered guns, blue-lights, rockets, maroons, and smoke-balls to be fired as a signal of position to the absentees.* At four, the wind had yet increased, and raised the drift as high as the mast-head, effectually hiding all objects beyond a hundred yards. The temperature also was unusually low (with so much wind), being minus 35°. All hands were now anxiously awaiting their appearance, until at length parties, each commanded by an officer, were despatched in various directions, in hopes of meeting them; lights were also hoisted to the mast-heads, and intense anxiety prevailed.

About 5 P.M. I took a party of men astern of the "Resolute" intending to burn a smoke-ball, and fire a rocket; having reached a spot from whence we could barely descry the ship, two dark objects were

* Commander M'Clintock and Lieut. Meham.

indistinctly observed to the southward; a glance having assured me they were moving, we ran towards them, and were rejoiced to find those we were seeking. It may easily be imagined that every soul was much relieved by the news of their safe return. Both officers were somewhat haggard, and it was remarked that in speech and appearance, they resembled men who had drunk deeply. (Captain Parry in his work (first voyage) mentions some of his men being similarly affected, by combined cold and fatigue.) A good dinner however soon restored them to their usual animation.

Saturday, 12th. — At 9 P.M. a complete arch of aurora was observed extending from N.N.W. to S.S.E. passing directly through the zenith. The gale from the northward, which had commenced on Friday, continued to blow with unabated violence until noon on Thursday the 17th; during the whole of this time we were entirely confined to the ship, and the discomfort arising therefrom for such a length of time was considerable; for both officers and men were of necessity more below decks than usual. This fact did not tend to purify the atmosphere.

The crisis of the gale occurred between midnight on Monday and 4 A.M. on Tuesday, when the wind

blew a complete hurricane; the ship literally trembled; the masts shook like poplar-trees; whilst the awnings, ropes, &c., kept up a continued noise; this, added to the washing of the water against the ship's side, utterly prevented our enjoying our usual amount of eight hours' sleep, which, by-the-by, appeared to be a disease peculiar to this climate; for in all my life I never saw a set of fellows who took so much horizontal recreation as the arctic heroes.

During the gale the communication between ourselves and the "Intrepid" may almost be said to have been cut off; although, as I have elsewhere remarked, only one hundred yards distant. She was frequently completely hidden by the drift, which rolled past like a dense volume of steam, mast-head high.

Some time ago, in a gale much more moderate than this, one of the "Intrepid's" men, in coming across to the "Resolute," made so much leeway as nearly to lose himself astern of the ship; as it was, he had been nearly an hour on the floe, and was badly frost-bitten in the face and both hands; his state was such as to render it necessary to retain him on board our ship for the night.

The gale having abated on the 18th, we got rid

of the casks containing the depôt, landing them beside the tanks on the S.E. point of Dealy Island.

Monday, 21st. —Commenced clearing after-hold, in order to restow it with gravel, in the room of the coals and fire-wood; the gravel is intended for ballast, and was brought off principally by the dogs. In fine weather they have been known to bring off 140 lbs. each.

Account of Gravel stowed in After-Hold.

No. of Bags.	Gross Weight.	Tare of Bags.	Average per Bag.	Nett Weight.	Contents per Bag.
104	lbs. 33,560	lbs. 1294	lbs. $12\frac{4}{10}\frac{1}{4}$	tons. cwt. qrs. lbs. 14 8 0 10	lbs. 310 $\frac{3}{4}$

The various arrangements for travelling may now be said to be completed in every respect; depôts packed, secured, and labelled; tents, clothes, fuel, and indeed every article, however small, has been carefully weighed; but the average weight per man is considerably more than that used in the expedition of 1850-51. This is principally accounted for by an increase in the weight of sledges, cooking utensils, sleeping robes, and a few minor, but nevertheless important articles, which look wonderfully small singly, but tend to swell the gross

weight of the whole, in a manner surprising even to those experienced in arctic travelling.

Daily Scale of Victualling whilst Travelling.

Provisions.	Quantities.	Remarks, &c.
Biscuit - - -	$\frac{3}{4}$ lbs.	} or { Pemican $\frac{3}{4}$ lb.
Pemican - - -	1 "	
Bacon - - -	$\frac{1}{2}$ "	} or { Bacon 1 "
Moore's Chocolate -	1 $\frac{1}{2}$ oz.	
Sugar for ditto -	$\frac{1}{4}$ "	} or { Ship's Chocolate 1 oz.
Tea - - -	$\frac{1}{4}$ "	
Sugar for ditto -	$\frac{1}{2}$ "	} daily for about $\frac{2}{3}$ the No. of days travelled.
Potatoe - - -	2 "	
Tobacco - - -	$\frac{1}{2}$ "	} or biscuit dust 1 oz. for $\frac{1}{2}$ the No. of days.
Concentrated Rum -	$\frac{2}{3}$ gill.	
Curry and Onion Powder, with a proportion of Salt, Pepper, and Patent Soup.		

As pemican (being a manufactured article for consumption) may not generally be known, I have thought it advisable, for the information of those who peruse these remarks, to extract an account of the mode of preparation from Sir John Richardson's "Arctic Searching Expedition of 1847-48." The following description is copied verbatim from the work alluded to:—

"The round or buttock of beef of the best quality having been cut into thin streaks, — from which the fat and membranous parts were pared away, — was dried in a malt-kiln, over an oak fire, until its moisture was entirely dissipated, and the fibre of the meat became friable; it was then

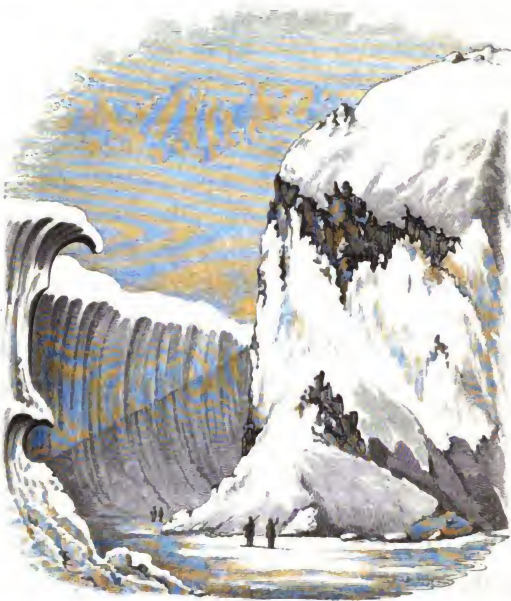
ground in a malt-mill, when it resembled finely grated meat. Being next mixed with nearly an equal weight of beef-suet or lard, the preparation of plain pemican was complete; but to render it more agreeable, a proportion of the best Zante currants was added to part of it, and part of it was sweetened with sugar. Both these kinds were much approved of in the sequel by the consumers, but more especially that to which the sugar had been added. After the ingredients were well incorporated by stirring, they were transferred to tin canisters, capable of containing 85 lbs. each *; and having been firmly rammed down, and allowed to contract further by cooling, the air was completely expelled and excluded by filling the canister to the brim with melted lard, through a small hole in the end, which was then covered with a piece of tin and soldered up; finally, the canister was painted and lettered according to its contents."

Sir John also adds that more than three-fourths of the original weight of meat is lost during the process of drying! The average cost of pemican prepared as the above, was 1s. 7½d. per lb.

A list of articles required for the perfect equipment of a travelling party of eight men (seven men

* Those supplied to this Expedition contained 40 lbs. each.

and one officer) for a long journey, say ninety days, will be found in the Appendix.



Remarkable Snow Cliff, Bridport Inlet, Melville Island.

CHAP. IX.

Supposed Proceedings of "Investigator."—Object of Lieut. Bedford Pim's Search.—Departure of Banks' Land Party.—A few Words about the Dogs.—Mr. Roche leaves to rejoin Lieut. Pim.—The new Sledge "Erin."—Return of Mr. Roche.—Remarkable Phenomenon.—A Musk-Ox killed.—A few Words about Musk-Oxen.—Departure of Travelling Parties.—Lieut. Hamilton returns.—Arrival of Officers and Men of H.M.S. "Investigator."—Summary of "Investigator's" Proceedings.—Pim and Domville's Journey.—Lieut. Pim discovers "Investigator."—Intended Operations of "Investigators" this Spring.—Mode of Travelling.—Privations experienced by "Investigators."—Unhealthy State of "Investigators."

MONDAY the 9th of March, the weather being remarkably fine, with every appearance of its continuing for some days, Captain Kellett decided on despatching Lieut. Bedford Pim, and the Banks' Land party the following day. The sledges were accordingly packed, and everything was arranged for leaving early on Tuesday morning.

I have already stated that on the arrival of Lieut. Mecham from Winter Harbour with

Captain M'Clure's despatch, it was deemed necessary to send a party, as early in the spring as the temperature admitted, to the Bay of Mercy ; for, after due consideration of the subject, we had come to the conclusion, that it was quite possible the "Investigator" might not have "broken out" during the autumn of last year, 1852 ; in that case the scarcity of provisions would render the ship's being abandoned early in the spring absolutely necessary.

In the event of this occurring, we had reason to suppose, from various causes, that Captain M'Clure would make the best of his way to the southward, towards the coast of North America ; and as subsistence for such a large party would be doubtful in any *one* route, it was thought extremely probable that he would divide the crew into two divisions ; the one making for the Mackenzie, in the hope of reaching the Fort on Peel River, from whence they might expect to gain Fort Good Hope in August, and thus have time to lay in a stock of provisions for the winter ; whilst the other section might easily reach Fort Confidence on the Coppermine, near the Great Bear Lake, in time to communicate, if necessary, with Fort Good Hope, before the winter set in.

Acting therefore on these supposed probabilities, the object of Lieut. Pim and party was to reach the Bay of Mercy as early as practicable; and in the event of the "Investigators" being there, to inform Captain M'Clure of the position of the "Resolute" and "Intrepid" would be the end of his mission; for undoubtedly Captain M'Clure would unhesitatingly abandon the "Investigator," and with his crew make the best of his way towards the "Resolute."

If however the "Investigator" was *not* there, a search was to be made for documents, which would be most likely to serve as a clue to the track she had taken. Lieut. Pim was to follow up this track, after despatching Dr. Domville back to the ship with all the information he could transmit.

At the request of Lieut. Pim, Captain Kellett allowed him to have the services of Mr. Roche (mate) and ten men, with ten days' provisions, to assist the parties on their way to Cape Providence.

Tuesday, 10th.—At 8·30 A.M. the preparations were reported complete, and the sledges moved forward, with colours flying, taking with them the good wishes of all for their complete success. The travellers were accompanied by the officers

and crews of the ship, the latter assisting at the drag-ropes.

The men of the pioneer parties of the season, had been especially chosen for the service by Lieut. Pim, under the direction of Captain Kellett. The party consisted of Lieut. Bedford Pim, Dr. Domville, nine men, five dogs (and a young puppy), and two sledges,—exclusive of the auxiliaries under the charge of Mr. Roche.

The sledges, although assisted, as I have before stated, by a considerable number of men from the ship, appeared to drag heavily. When about three quarters of a mile from the ships, in crossing a range of miniature Alps, one of the sledges was drawn down the descending slope of the hummocks diagonally, instead of bows first; the consequence was that the sledge, having a considerable inclination, threw all the weight of cargo on the lower runner, and wrenched the heads of the poppets or uprights from the bearer, which was sprung. Men were instantly despatched to the "Intrepid" for another sledge, and soon after, the parties were again in motion.

At 2·30 P.M. the men who left to assist in dragging returned on board, and brought intelligence that the sledge supplied by the "Intrepid"

had already shown such evident signs of weakness, as to render it unfit for the service, and it was understood that the dogs would return in the evening for another.

We were therefore not surprised, when, about 5 P.M., Mr. Roche with one man and all the dogs returned on board, and it was arranged to forward a fresh sledge early the next morning.

I have already stated somewhere, that a number of dogs were obtained at Lievely, for the use of the sledges. Our share amounted to six. One, however, poor Tinker, was one of the deserters on the floe, and probably paid for his indiscretion by falling a prey to a bear.

The remainder of our dogs were Lion (the leader of the team), Shakings and Oosky (native for Esquimaux), Sophy, after the belle of Lievely, and Jenny, — after I don't know whom.

Late in the autumn, both bitches littered; Sophy and Jenny had eight pups; three of them were drowned on purpose, and a fourth shared the same fate accidentally, by walking into the fire-hole.

I had however almost forgotten to mention poor Napoleon, or Naps as he was more generally called, an Irish retriever, belonging to Captain Kellett. He was a native of Clonmel, but followed

his master's fortunes to the arctic regions. Poor Naps and the Esquimaux dogs were the best of friends for some time, until at length he drew down on himself their enmity. Singly, Naps would not have minded this, but his pluck and fighting propensities were not equal to the combined attack of three dogs, each heavier than himself in weight.

But this is digressing from the main point, viz., that during the winter we had, besides Naps, no less than nine Esquimaux dogs.

Until within a month of the departure of the sledges, the dogs were considered in admirable working order, when it was announced by the dog-driver that Sophy was again likely to have pups. The man's assertion proved correct, for within a week of her leaving she had six. Unfortunately this took place during the middle of a boisterous night, and the young hopefuls were all frozen stiff before they were discovered.

Between extreme cold and intense grief, poor Sophy was reduced to a most deplorable state. She however slowly recovered, and was sufficiently well to leave with the other dogs on the 10th inst. The defunct puppies had been laid-out abaft on the ship's gunwale, and were there when the dogs returned with Mr. Roche for another sledge.

No sooner were the panting animals liberated from their harness than, rushing on deck, they each (except Jenny and Sophy) seized one of the deceased pups, and greedily devoured it.

The day of the departure of the travelling parties, though intensely cold, was fine and clear, with a considerable amount of mirage in the atmosphere, whereby well-known objects were so distorted as almost to create a doubt of their being the same. As night advanced, the wind which during the day had been light from the northward, began to increase with an ominous soughing noise, and before morning it blew a gale with considerable drift. Mr. Roche was therefore obliged to remain on board, the weather being such as to prevent his attempting to rejoin Lieut. Pim.

Friday, Saturday, and Sunday, Mr. Roche was necessitated to remain on board; for although the lulls on Saturday and Sunday were frequent, they were but temporary, and not until Sunday at midnight was there any appearance of the weather improving.

Monday, at 5.30 A.M., fine weather, with a light air from the eastward. Mr. Roche, with one man, five dogs, and four days' provisions for his party, left the ship, and, as far as we could follow

him with our eyes from Dealy Island, appeared to be going over the floe at a good pace.

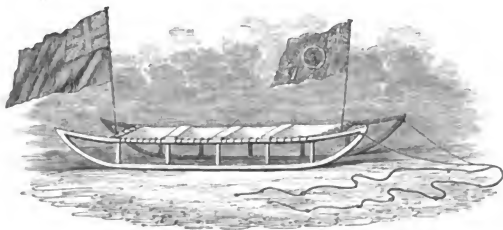
Shortly after (at 7 A.M.) the tents of the travelling parties were distinctly visible, their supposed distance from this position being eight miles. An ice-quartermaster was left on the island to watch their movements. Mr. Roche reached the tents at 8.30 A.M., but the sledges were not on the move until 11.30, when they proceeded to the westward under sail. This fact proved that nothing serious had occurred to any of the party, as Captain Kellett had, in a note to Lieut. Pim, requested that officer to return to the ship if any of his men required medical assistance.

Thursday, 17th. — The finishing stroke was put to a sledge built on board for Captain Kellett, and being St. Patrick's day the Captain, as a loyal Irishman, determined on launching the sledge with all the honours.

Ways were accordingly laid from the gunwale to the floe; the colours were hoisted on board, whilst the sledge itself was decorated with a boat's ensign, and a green flag with the captain's crest embroidered thereon.

The launch took place at 5 P.M., and H. M. sledge "Erin" glided down the inclined plane at a

great rate, amidst the enthusiastic cheers of the assembled arctic public. The builder, Mr. Dean, had



H. M. Sledge "Erin."

the honour of being launched in her, and carried in his hand a bottle of wine, which he was to drink instead of breaking (as is usual on such occasions). This important part of the ceremony he carried out to the admiration of all who witnessed the feat.

On this day Commander M'Clintock, Lieuts. Meham and Vesey Hamilton had taken a walk towards the northern shore of the inlet, where they saw two musk-oxen, but the animals made off without allowing the chance of a shot.

Friday, 18th. — The temperature this day rose to $+ 10^{\circ}$, being the first time since 24th of Nov. last that the thermometer has been above zero.

Sunday, 20th. — At 9 A.M. a sledge party was observed to be approaching the ship from the

westward; it proved to be that of Mr. Roche, returning from assisting Lieut. Pim. The colours were hoisted, and an officer despatched to meet them at 11.30. The sledge arrived alongside, having left the Banks' Land parties in the neighbourhood of Point Hearne on Wednesday last. Serjeant Hobbs, R.M., from Lieut. Pim's sledge, returned in consequence of ill-health, occasioned by a severe cold; his place was promptly filled by John McLean, A.B., who volunteered his services from Mr. Roche's sledge.

The news from the absent parties was, on the whole, very gratifying. As we imagined, they were miserable enough during the time the weather compelled them to remain in the tents, but happily nothing more serious than a few unimportant frost-bites occurred.

The dragging qualities of the dogs exceeded our most sanguine expectations; they invariably kept ahead of the men sledges, sometimes at an inconvenient distance, though, from their admirable instinct in choosing the best route, their sledge tracks proved of infinite service to those following.

This afternoon, whilst taking a stroll on shore, to increase my appetite for dinner, I observed from the top of Dealy Island a very remarkable pris-

matic tint on the horizon to the S.E., which at this time (between 1 and 2 P.M.) was to the left of the ☉, when looking towards it. Neither my companion nor myself could form a conjecture as to the cause of this novel phenomenon, which remained in the same position for upwards of an hour. It bore a strong resemblance to what is known to sailors as a sun-dog, and is supposed to denote the advent of bad weather.

This day is remarkable as the first this year on which snow was observed to dissolve by the heat of the sun, the thermometer being registered as -1° (33° below freezing point). On returning on board from my walk, I observed several tiny rivulets of water streaming down the side of the ship, a sight which caused no small degree of gratification in the minds of all on board, and it became the subject of general conversation during dinner.

Monday, 21st.—A system of training commenced, in order to accustom the men to dragging and walking, preparatory to travelling. Lieut. Vesey Hamilton returned in the course of the afternoon, from a long walk on the northern shore of the inlet. He brought the pleasing intelligence of having killed one, out of a herd of four musk-oxen.*

* These animals do not migrate to the southward, as was previously supposed, but remain on the island throughout the winter,

Of course he was unable to bring any of the animal on board, but arrangements were made to start a large party early the following morning.

Tuesday, 22nd.—Two officers, fourteen men and a sledge left at 7·30 A.M. to bring on board the carcass of the musk-ox shot yesterday; they did not return till 6·15 P.M. It appeared they not only found the animal alive, but were actually obliged to fire no less than twelve bullets before life became extinct.

The musk-ox is difficult to kill, in consequence of its coat of thick long hair, as well as a mass of fine wool, interwoven between the hair near the skin.

The musk-ox is seldom solitary, but generally grazes in herds, of from five to twenty in number. A bull is always on the *qui-vive*, and rarely fails in giving due notice of approaching danger. On such occasions the bulls form in line in front, facing the enemy, keeping the cows and calves in the rear. A single shot seldom proves fatal, in consequence of the perseverance of the animal (even when wounded) to face its persecutor, thus preventing the hunter selecting a fatal spot, which is immediately behind the fore-shoulder—the horny excrescence on their heads is almost imper-

vious to a ball, and most of them died, more from exhaustion, occasioned by loss of blood; than by effective shots.

They seldom attack when in herds, but content themselves with shielding the weaker animals with their bodies. When alone, however, great precaution is necessary, for a wound has been known to irritate the musk-ox to such a degree, as to cause him to make a furious charge on the sportsman; this is the more dangerous, as, from the peculiar character of the country, shelter from the infuriated animal can seldom be obtained.

Account of Gravel, stowed as Ballast from Dealy Island.

Date.	Where Stowed.	Quantity.			Remarks &c.
		tons.	cwts.	qrs.	
Feb. '53.	Main-hold	8	16	0	Stowed in place of 3 (2-ton) tanks. Stowed between casks, instead of the fire-wood.
Mar. 8, & 9.	Fore-hold	10	0	0	
" 22, & 23, 26	After-hold	14	8	0	
	Spirit-room	7	16	0	
	Total	41	0	0	

Tuesday, 29th. — This morning Lieut. Hamilton left with a cart laden with travelling provisions, to place them in an advanced position, for the Hecla and Griper Bay parties.

On his return in the evening, after a long day's march, one of his men (Jeffries) was so much

fatigued as to render the assistance of a sledge necessary to bring him in.

This day we commenced taking the snow off the upper deck. And now for a time I must leave all other subjects, for the all important one of travelling, preparations for which were now fully completed. Monday, the 4th of April, was the day fixed for the departure of the sledges, and all was hurry, bustle, and confusion to the last.

At length the morning of Monday arrived, and at 5 A.M. a flag was hoisted on the summit of Dealy Island, and the ensigns displayed on board the ships. All the travelling officers sat down to a substantial breakfast, on board the "Resolute," in good health and high spirits. At seven the travelling parties were called away, and the effect of such a body of them, in their quaint dresses, distributed amongst the various sledges, was alike novel and impressive.

The sledges, with banners displayed, were drawn up in two divisions, with their heads, or bows, pointing in the direction of their intended destination. A few minutes elapsed, whilst friends grasped each other's hands, and whispered their last messages, and then all were at their posts.

The wind from E.N.E. was favourable for the western division under Lieut. Mecham, who with



M. S. V. Landwehr

THE ARRIVAL OF THE GREAT EAST INDIA COMPANY'S SHIPS AT THE PORT OF BATAVIA

1815

1815

his auxiliary sledge (in charge of Mr. Nares), made sail at 7.15, amidst the hearty cheers of those who witnessed their departure.

Some minutes only elapsed, ere the northern division led by Captain Kellett left the ships, and although the cheers of the few remaining were not remarkable for their noise, each and all gave them a fervent "God speed and good success" in their long and perilous journeys.

The following is the distribution of the various parties.

Name of Officer.	Rank.	No. of Men.	Expected Absence.	Remarks respecting Routes, &c.
F. L. M'Clintock,	Commander.	10	90 days.	To trace Hecla and Griper Bay to the N. W.
E. de Bray,	French officer	8	45	Auxiliary to Commr. M'Clintock.
R. V. Hamilton,	Lieutenant.	7	14	To deposit provisions in Hecla and Griper Bay, for Capt. Kellett's party, returned, and prepare for long journey.
R. Roche,	Mate.	7	14	Auxiliary to Lieut. Hamilton.
Henry Kellett, C.B.	Captain.	7	7	Capt. Kellett left to assist above parties, and gain an insight into Arctic travelling.
G. F. Meham,	Lieutenant.	7	90	To trace S. shore Melville Island beyond C. Hoppner.
G. S. Nares,	Mate.	7	60	Auxiliary to Lieut. Meham.

I shall offer no apology for the brevity of the above table, as I intend, on some future occasion, putting the proceedings of the travellers in a *complete* tabular form.* This, of course, cannot be attempted, until the result of the various journeys is known.

* See Appendix.

For several days after the departure of the travellers, the wind blew a gale from the northward,—with heavy snow-drift;—against which, we on board imagined, it would be impossible for them to make any progress, with heavily laden sledges.

Monday, 11th. — At 5 P.M. Captain Kellett returned with his auxiliary party, having parted company from the main body of travellers, at a ravine about midway between the two beaches. The Captain had, until this, been ignorant of the description of labour and exertion required for arctic travelling, which he candidly confessed surpassed everything in the form of hard work he had ever seen, though his experience in the navy embraces a period of upwards of twenty-five years, during which time he has seen much arduous service in every clime.

Now the parties were gone, the few remaining on board were busily employed in clearing tanks of provisions; the lower deck was also cleaned, and other useful services, which it was in the power of the men to accomplish, were attended to.

Friday, 15th. — Mr. Richards (clerk in charge) left the ship with a party of seven men, to deposit a cask of provisions in the vicinity of the lake, at the head of Bridport Inlet, for any returning

parties, who might, from accident, have run short. Mr. Richards returned the following day.

Sunday, 17th. — At 5 P.M. a sledge was observed crossing the peninsula; it proved to be that in charge of Lieut. Vesey Hamilton, who had placed provisions on the beach of Hecla and Griper Bay, and was now returning, expecting to be ordered to the rendezvous arranged between Sir Edward Belcher and Captain Kellett in lat. 77° N. and long. 105° W.

Tuesday, 19th. — Day remarkably fine. Refraction very great. At 10 A.M. several dark spots, unlike the shade thrown by hummocks, were observed to the westward about Cape Bounty. By noon the "dark objects" proved to be a body of men advancing towards the ship, and great anxiety prevailed until we learnt the news from Banks' Land.

About 5 P.M. a party of men were despatched to assist in bringing in the sledges, and most of the officers walked out to meet Domville, who was recognised through a telescope, somewhat in advance of the main body. As we grasped him by the hand (which, as well as his face, was as black as the ace of spades), his words, "The 'Investigator' is found, and M'Clure is close behind"—over-

powered us with surprise, and the poor fellow was overwhelmed with a thousand questions, ere time was allowed to answer *one*.

Hurrying on, with some of my brother officers, I had the pleasure of adding my welcome and congratulations to Captain M'Clure and Mr. Court (second master); the latter had been an old school-fellow, and afterwards a messmate of mine in H. M. brig "Ranger." This was our first meeting after a lapse of eleven years. Poor fellows! a few words sufficed to inform us, of the miserable state from which we had rescued them, and their hearts overflowed with gratitude towards those, who (by the blessing of the Almighty) had been chosen as the instruments of His never failing mercy.

Our feelings on this occasion, were those of heartfelt thankfulness that our labour had not been in vain, and each member of our little community must have felt his heart glow with honest pride, to reflect that he formed one of the little band whose undertakings in the cause of humanity had been crowned with such signal success. About 6 P. M. we had the before-mentioned officers and seven men on board. Although eager to learn all the news, close questioning was very properly postponed, until their appetites had been quite satisfied.

The following is a brief summary of the proceedings of the " Investigator," from the date of Captain M'Clure's despatch, found in Winter Harbour by Lieut. Mecham :—

On Captain M'Clure's return from Winter Harbour to the Bay of Mercy, the ship was prepared for sea : all on board looking forward not only to being liberated from their present irksome position, but to reach England, *viâ* Barrow's Straits. Such, however, was not to be the case; month after month passed away, without any appearance of the ice breaking up, and even as autumn approached, the prospect from the highest hills held out no hope of deliverance ; for the only water they observed, at this advanced stage of the season, was in detached pools of small extent, whilst the main body appeared firm and impenetrable.

The proximity of the land, assisted by the tides, had formed a lane of water about one hundred yards wide, along the shore, close to the ship ; this was all the water they had near them, and they ceased to hope of escaping this season, when in the middle of August the water again became solidified.

It now became apparent to every one on board that another winter (the third) was inevitable, and this idea was rendered the more unpleasant, by the

fact that a reduced allowance of provisions would be necessary: they had been on two-thirds of an allowance (six men on four men's provisions) since October, 1851; and many who had been nursed in comfort and even affluence now, for the first time, felt the pangs of that dire disease — hunger.

On the 8th September, Captain M'Clure informed the crew that unless the ship was released by the 20th inst., it was not his intention of leaving the bay after that date. On the 20th the young ice near the vessel was nearly one foot in thickness, and the Captain having assembled the officers and crew, informed them that early in the ensuing spring, the majority of the officers and men (divided into two parties) should leave the ship, and make the best of their way to England. One party, *viâ* Prince of Wales Strait, to the Mackenzie River; whilst the other was to proceed to Cape Spencer, and either remain till the breaking up of the ice, or push forward to Port Leopold, and taking the launch left there by Sir James Ross in 1848-9, coast along the west shore of Baffin's Bay, in hope of meeting the whalers.

Captain M'Clure, with a few officers and about twenty men, intended remaining by the ship in expectation of being able to extricate her; and in the

event of not doing so, he intended abandoning her early in the spring of 1854, and to make for Port Leopold, to which point (by his travelling parties) he had requested succour to be sent from England.

It is not my intention to enter into a description of all their sufferings; suffice it to say that, with one or two exceptions, officers and men were alike suffering from the effects of scurvy.

Some idea may be formed of their state, from the fact of four out of the six men of Captain M'Clure's party, being obliged to go on the sick list a day or two after their arrival, and these were acknowledged to be men picked out for the service. One man was brought over on the sledge, his swollen legs utterly preventing his walking.

Lieut. Pim* was twenty-eight days reaching the Bay of Mercy, a distance of 160 miles as the crow flies. When about twenty-five miles from Cape Dundas, on his outward journey, his sledge unfortunately broke down. He now transferred his sledge, crew, &c., to Dr. Domville, and proceeded on with the dogs and two men, leaving orders with Domville to proceed to Cape Dundas, and there await his return.

* This is the earliest extended spring journey on record.

As may be imagined, poor Domville was in a sad dilemma as to the "ways and means" of transporting fifteen hundredweight, a distance of twenty-five miles on a broken sledge over rough ice. The situation was particularly trying to an inexperienced traveller; but by great zeal and perseverance he succeeded in saving every article, although they were obliged to leave one half of the provisions &c., on the floe, whilst they carried on the other half about five miles in advance, when they were compelled to return, in order to bring up the remainder. Too great credit cannot be awarded to Dr. Domville, for the effective manner in which he carried out this arduous and disagreeable duty.

Lieut. Pim, in the meantime, was crossing the Straits, and on the 6th April the "Investigator" was descried. Running on in advance of the sledge, Pim approached within a few hundred yards without being observed. It so happened that Captain M'Clure and Lieut. Haswell were walking to and fro on the ice alongside the ship, no doubt discussing the all-engrossing subject of abandoning the vessel, which was to have taken place on the 15th inst. (nine days from that date). Seeing a man, dressed in an unusual garb, running

with great haste towards them, they expressed surprise, but thought, as a matter of course, the man must be one belonging to the "Investigator," chased probably by a bear or pack of wolves.

On a closer inspection they thought he must be an Esquimaux; but although labouring under this impression, Captain M'Clure naturally called out (in English), "In the name of God, who are you?" The effect of the answer, "I am Lieut. Pim of the "Resolute" (Captain Kellet), now at Melville Island," may, or rather *must* be conceived; for as I am aware I *could not* describe it, I do not intend attempting it.

Whilst this little scene was being enacted, a man from the deck saw Lieut. Pim, and indistinctly caught his answer. Rushing below he roused all hands, by calling out, "Here's a stranger alongside from some ship." The effect was astounding; the sick vied with the healthy in activity to get on deck. All was haste and confusion; in a moment the lower deck was cleared, the carpenters had dropped their tools (they were making the first coffin), and even the men on shore, digging a grave, seeing that something unusual had occurred, hurried off to share in the astonishment and delight of their excited shipmates.

Who is there that cannot readily conceive their feelings of gratitude to the Giver of all goodness, for His merciful interposition in their behalf. Without a hope of being liberated or a thought that aid was near ; they contemplated their fearful march for life, with all the calmness of despair ; for many must have known their strength would not have sustained them, through such privations for any lengthened period.

On Lieut. Pim's arrival on board the "Investigator," on 6th April, Captain M'Clure determined on crossing the Strait, for the purpose of having a personal interview with Captain Kellett, and on the following day, the 7th, he left the Harbour of Mercy, having given directions that a party of twenty-eight officers and men should follow him on the 15th inst. He arrived on board on the 19th, having accomplished the whole distance of 160 miles, in the short space of twelve days, a feat not surpassed by any arctic traveller under the same circumstances. He certainly possessed what might prove an advantage on a short journey, by dividing his hours equally for rest and labour, *i. e.* he travelled six hours, then rested for six, and so on. Twelve hours' dragging with a heavy sledge is, however, too much, even under

this system, to be continued for any length of time; for the toil and consequent fatigue would soon begin to tell, if wholesome meals, and a competent time for rest, be not allowed to re-invigorate a man after a day's hard toil. Although we certainly fell into the shade, when comparing daily distances (for with *us* twelve miles is considered a good day's march), they, on the other hand, were as far behind us in time, and Captain M'Clure, as well as the rest of the officers, expressed great surprise on hearing, that some of our parties had left with the full intention of being absent upwards of ninety days! None of his parties had exceeded forty, and this (by them) was considered a feat of no small importance.

Whilst on this subject, it is but fair to add, that the privations of the "Investigator's" parties far exceeded the "Resolute's." Their daily scale of provisions, whilst travelling, when compared with ours, appears absurd, and it is a matter of surprise that men could support themselves on such an allowance. It was as follows: —

Pemican	14 oz.	Eaten raw.	Fuel not being sufficient to cook it.
Biscuit	1 lb.		
Chocolate	1 oz.	} Fuel just sufficient to warm it.	
Sugar	1 oz.		
Oatmeal	2 oz.		

The above was the daily allowance for each man ; their fuel for seven men consisted of three gills of concentrated rum. (For our scale *vide* page 194). From the small quantity of fuel, it is obvious that no attempt was made to warm anything but the chocolate ; the remainder of the fuel was barely sufficient to dissolve snow, to enable the men to obtain a drink of cold water, after six hours' hard labour.

The health of the officers and crew of the " Investigator " had been truly wonderful up to the date of Lieut. Pim's arrival on board her. Not a single death had taken place until the night before his reaching the Bay of Mercy. This unfortunate man had been for some time in attendance on the sick, and although he, in common with all on board, had been ailing, his death was unexpected. Indeed it was supposed he had taken medicines which were injurious. Be this as it may, the poor fellow died suddenly, and his death proved the forerunner of two others within the week.

There can be no doubt, that the effect of three deaths within so short a time, tended to increase the depression of spirits which all on board were labouring under ; for it must be remembered that, with one or two exceptions, they were all suffering

more or less from the effects of scurvy, a disease of all others which terminates fatally when least expected.

M'Donald (the man who was brought over on the sledge) was in a dreadful state; his flesh would retain an impression, if touched with the finger, like dough or putty; his legs were swollen to twice their natural size; whilst his teeth could be moved to and fro in the gums, by the slightest movement of the tongue. He, however, recovered his health.

CHAP. X.

I am ordered to accompany Lieut. Hamilton. — Departure from the Ship.—Travelling Journal.— A Party leaves for Beechey Island.—De Bray returns with the Corpse of one of his Crew.—Unpleasant Situation of De Bray.— Mr. Dean captures a living Calf (Musk-Ox).— Return of Mr. Nares and Party.— Unexpected Arrival of Commander Richards.— Route of Commander Richards.— Captain Kellett returns on Board.— Commander Richards departs for Northumberland Sound.— Return of Dr. Domville from the Bay of Mercy.— “Investigator” is to be abandoned.— Travelling Journal.— Conclusion of Journal.

I MUST now for a time leave this, to me, interesting subject, to advert once more to travelling. I have, a few pages back, observed that Captain Kellett had intended prosecuting a search along the coast of Sabine Land to the N.E., and that Lieut. Vesey Hamilton was to have the rendezvous party.

The discovery of the “Investigator,” however, caused the Captain to alter the intended arrangements, and as it was necessary he should remain on board, Hamilton had Captain Kellett’s route, whilst he himself was reluctantly compelled to

give up the rendezvous by Byam Martin Channel.

Hamilton being somewhat late in starting, was to have an additional party to ensure a quiet transit over the land. I was only too happy to accompany him; for although there was but little honour to be gained in acting as a depôt-sledge for forty or fifty miles, I felt that my health required exercise.

I must confess it was not without some painful feelings, that I witnessed the departure of men, younger in age and service than myself in command of travelling parties, — not that I had any reason to complain, individually — but, as a member of a particular branch of the service, I regretted that the field of our exertions should be so limited.

Wednesday, 27th. — At 2 P.M. Hamilton and myself, with two sledges and fourteen men, left amidst the cheers of all remaining behind. Domville and Richards accompanied us to beyond the peninsula, and after bidding them adieu, I took to the track belt, and we progressed towards the head of the inlet.

It is not my intention to give a detailed account of our proceedings to and from Hecla and Griper Bay; I shall therefore content myself with a skele-

ton journal, in order to render the reading more intelligible.

We reached the South shore of Polynia lake at 8 P.M.: the drag on the land from Cart proved hard work. Here we encamped, in accordance with an arrangement between Hamilton and myself to march on a modification of the principle adopted by Captain M'Clure, whose method was to march and rest, every alternate six hours, as I have said.

But we thought twelve hours too much, particularly for the cook of the day (whose duty compels him to remain out of his bag at least three hours more than the rest of the crew), and therefore we decided as follows; viz. —

To travel by night for the sake of avoiding the glare of the sun. To commence day's (or rather night's) march at 4 P.M.; grog and bite of biscuit at 7.30; then continue dragging till 10. Pitch tent, and get tea; rest until 2 A.M., when again on the move; grog and biscuit at 4.30 A.M.; pitch tent, and prepare pemican at 6 A.M.; remain in tent for ten hours, — and have chocolate previous to starting. Abstracted, this arrangement would be — march six hours, rest four; march four, rest ten; total twenty-four.

ROUGH NOTES OF A JOURNEY ACROSS THE LAND
FROM BRIDPORT INLET TO HECLA AND GRIPER
BAY.

Wednesday, 27th. — Left the ship with one sledge, Mr. Ibbets (engineer), and six men, in company with Lieut. Hamilton's party: the object of my leaving was to assist the latter officer across the land from Bridport Inlet to Point Reed, one of the horns of Hecla and Griper Bay.

After exchanging cheers with Captain Kellett, Captain M'Clure, and the officers and crew of "Resolute" and "Intrepid," we proceeded towards the peninsula, against a fresh northerly breeze.

On nearing the head of the inlet, three flocks of ptarmigan were seen. After a hard drag from the Cart across the land, we pitched tents at 7·30 P.M. on the S. shore of Polynia lake, about two miles long by one broad.

Thursday, 28th. — At 2 A.M. struck tent, and proceeded across the lake: when about to start, a man was observed on its northern shore, Hamilton and I walked on in advance of the sledges, rightly supposing the man to be one of Mr. Roche's party: we soon afterwards observed the sledges

on the summit of an eminence overlooking the lake. On their joining company, we found that they had been to Cape Mudge, distant about thirty miles from Point Reed. They kindly spared us a fore-quarter of a musk-ox, which provided us with several savoury meals.

On parting company we were obliged to "double bank" the sledge, up a sloping ascent, about 150 feet high: this process was rendered the more difficult, by the absence of snow in any great quantities; the little patches of gravel, seemingly so unimportant, brought the sledge to a dead stop, and required standing pulls to get it across.

Descending on the other side of the slope, we entered a ravine, W. by N. and E. by S. (true), and proceeding to the westward about one mile and a quarter, and then entered a branch ravine, N.W. and S.E. Our road lay up a steep ascent, for about a mile and a half, and at length, after a very laborious march, we pitched the tent at 8 A.M. opposite a cairn with bamboo, erected by Commander M'Clintock.

It was our intention to have proceeded again at 4 P.M., when we breakfasted preparatory to starting, but the wind proved too boisterous and keen, to travel against it, with any advantage; we there-

fore again “bagged” ourselves, waiting for the wind to moderate.

Friday, 29th. — Wind strong, and very keen; determined on remaining quiet in hopes of a change, for although on a level floe, we might have made a little progress, we could not hope to do so up hill, and over land.



Cooking under Difficulties.

At 5 P.M. two deer (a buck and doe) were seen not far from the tent. Hamilton and I went in chase, but the animals proved too wary to allow us any chance of success, and we were obliged to

console ourselves, as best we could, with the idea, that the meat could not be in a state of perfection at this season of the year.

At 8 P.M. the weather having somewhat improved, we struck tents and proceeded, steering as near a N.W. course (true) as the circuitous nature of the road would permit. Our route lay across a bleak undulating plain, without a single prominent landmark in view, and our only guide was the sun (when out), or an occasional reference to the compass; we were, however, necessitated to follow the snow patches, which prevented the course being very direct. About midnight we arrived at the south edge of the Crooked Ravine of our predecessors. Here the descent was very steep; so much so indeed, as to oblige us to "wind" the sledges, and lower them down carefully, by means of the drag-ropes. This operation was attended with considerable laughter, as the sledge, gaining velocity as it descended, capsized several of the men head over heels in the deep snow, from which they had some little difficulty in extricating themselves. On reaching the bottom, we wound round the base of a bluff which divided the ravine into two forks, and after an hour's hard drag encamped at 2 A.M., Friday 29th.

In this ravine we found several pieces of coal, the whole of which amounted to about 40 lbs. Undoubtedly more could have been obtained, had we sought for it; but we could not well afford to increase our weights. During the last march we had all suffered considerably from excessive thirst, without having the means of quenching it, for the water in the bottles had become solid. I detected one of the sledge's crew eating snow; but having had practical experience of the injurious effects of such a remedy, I insisted on his discontinuing it. When close to the ravine, we fortunately discovered some fresh-water ice, which tended, though not wholly so, to satisfy our wants. Great caution was, however, required in sucking the ice; several of the men lost portions of the skin off their tongues and lips, by incautiously applying the frozen mass immediately to the mouth.

The best remedy is to roll a piece of the ice smartly between the palms of the hands for a few seconds; it can then be placed in the mouth with safety.

At 7 A.M. fine clear weather; struck tents and proceeded through the ravine in a N.W. direction; after a short time we commenced a steep ascent,

leading to the plains of high land ; after stopping a few minutes to recover our breath after a hard pull up hill, we struck across the plain in a N.N.W. (true) direction, towards Separation Ravine, on the confines of which we arrived at 11 A.M., where we pitched, and enjoyed a hearty meal ; and then turning into our bags, enjoyed a refreshing slumber till the cook was called to prepare breakfast.

At 8·30 struck tents and proceeded, intending to enter Separation Ravine ; but finding we were to the eastward of our supposed position, we made as much northing as the undulating nature of the ground permitted ; and at length we entered a long ravine leading to the N.N.E. : through this, although the snow was deep, we made good progress until 2 A.M. on Sunday, May 1st, when we pitched the tents at the head of the Long Ravine, where it was crossed, nearly at right angles, by another equally deep, excepting in the direction we wished to go, where there was a broad hollow. Whilst tea was preparing, I walked ahead to have a view of the land beyond, and found (as was hoped) an easy road into a shallow ravine with a northerly trend.

At 6·30 A.M. calm with a beautifully clear sky ; struck tents, and proceeded over the ridge, and with

a good road advanced to the northward. About eight Hamilton and myself ascended the summit of the high land to the westward of the sledge route, from whence we observed the icy plain of Hecla and Griper Bay, with the land beyond, in the vicinity of Cape Mudge. The sight, as may be supposed, was very gratifying, for each and all were heartily tired of the land work, which is far more laborious than travelling on the floe. The ravine the sledge was in had every appearance of running down to the beach. We returned and donning our track belts with a hearty good will, pushed forward with renewed vigour towards the coast line.

Continuing our march until 11 A.M., we pitched the tents in the ravine, about two miles from the beach, having accomplished the distance of six miles in the last four hours. During the last march a dense bank was observed to be rising from the southward: it soon spread, and at length overshadowed the sun, and at the time we pitched, snow had commenced falling.

At 8 P.M. struck tents, and proceeded; but after rounding the first point beyond our encampment, we observed that further progress was barred by a snow-wreath, extending across the ravine; we were

therefore obliged to "double bank" the sledges up the side of the ravine, and follow along the best snowy track towards the beach, which we reached in less than two hours, after having built a cairn, to identify the spot on our return: this was very necessary, as the beach was low and sloping, without a single prominent feature by which to recognise a locality. Indeed we had some difficulty in determining whether we were on the land or ice, much increased by the dense mist by which we were surrounded. A light air having sprung up from the S.E. the sheers were stepped and the sail hoisted, but without much benefit, in consequence of the heavy nature of the ground. In this manner we proceeded along the coast to the westward. Objects around very much distorted. Weather gloomy enough to cause a depression of spirits: we several times fancied we saw the Cart, but found the objects mistaken for it, to be small stones not more than a hundred paces distant.

Early on Monday, 2nd, descried the Cart, looming large through the dense mist. We now pitched the tents, and had grog, after which Hamilton proceeded onwards with a light sledge, to take his dépôt, leaving the cooks behind to prepare a sa-

voury mess of musk-ox. I had now completed my outward journey, and therefore transferred the weights we had brought over to Hamilton's sledge, ("Hope") together with all the coal we had remaining, as well as various other articles we thought would be useful on a long journey.

It was not till 4 A. M. that Hamilton returned with his depôt, the Cart being more distant than we imagined. After a hearty dinner we ensconced ourselves within our blanket bags, and were soon enjoying a sound sleep.

At 3 P. M. called the cooks, and after breakfast we made preparations to assist in dragging out Hamilton's sledge. It was pleasing to observe the readiness with which the men belonging to my sledge parted with their little travelling luxuries (in the shape of pipes and tobacco) to their ship-mates from whom they were about to part; and this little incident is one of the thousand instances I have observed of the disinterestedness of British seamen.

At length all was ready for starting, and we left the beach with all hands at the drag-ropes of the "Hope" (excepting the cook of my sledge, who was left to prepare dinner). The wind was light from the S.E., with fine clear weather, and with so many

hands, we made rapid progress along the floe in the direction of Cape Mudge. At the end of three hours' march we stopped, and after luncheon parted from Hamilton and the crew of the "Hope" with three hearty cheers, and a sincere hope that each and all would return in as good health as when we left them.

I have omitted to mention, that shortly after leaving the beach, five deer were observed proceeding in a direction parallel to our own. Hamilton and I gave chase, but without success.

I now, with the men of my sledge, proceeded to the tent, where we remained till 5 A.M.

Tuesday, May 3rd.—Having packed the sledge, we commenced our homeward march. We soon arrived at the cairn I had built; and after having enlarged it, pushed on for encampment in Snow-drift Ravine, where we arrived and pitched our tent at 9 A.M.

At 6 P.M., wind light from N.E., fine weather, struck tents, and went on keeping near the tracks of outward journey. At 9.30, lunched at junction of ravines, and then entered the Long Ravine of outward journey.

At midnight we encamped, being, according to my dead reckoning (which, however, is likely to be

in error), about fifteen miles, as the crow flies, from the beach of Hecla and Griper Bay; this distance being accomplished in seven hours. Wind light from S. E.; weather gloomy and cold.

Wednesday, 4th., at 4 A.M., fine weather. Struck tents and advanced to the southward, by a circuitous route, winding between the hills. At six the weather became overcast, with a moderate breeze from the S. E.; this being ahead proved very unpleasant. At eight encamped on plain between Crooked and Separation Ravines, about two miles from the former.

After breakfast at 6 P.M., packed sledge, and, keeping in old tracks, soon recognised the Crooked Ravine. About this time we saw a herd of seven deer, but they proved too wary to allow us any chance of success. Descending into the ravine by the way we came we again picked up coal (about sixty pounds); this, with forty pounds on our outward journey, would make a rough total of one hundredweight. We found it burned admirably, leaving no cinders, but a pearl-white ash.

At 9 P.M. arrived at the foot of the hill down which we had been obliged to lower the sledges. I observed the men, whilst taking their grog, casting wistful glances up the sides of the ravine, in antici-

pation of the hard work that would be necessary to gain the summit, about 200 feet above us.

The drag did indeed prove laborious, and we were soon obliged to lighten our load of clothing, whilst the perspiration streamed from every pore of our bodies. Occasionally we were obliged to rest for a few minutes in order to regain our breath. At length, after an hour and a quarter's hard work, we reached the top, and after a short stoppage, went on until 11·30 P. M., when, observing the men to be tired, I pitched the tents half an hour before the usual time.

Thursday, 5th, 10 A. M., called the cook, and turned out. Weather fine, saw seven deer on a rise in the land, a few hundred yards from the tent. Went in chase, and shot one in the fore leg, but after a run of three miles, I was obliged to give up the pursuit as hopeless, and returned to the tent quite tired. At 1·30 P. M. struck tents and proceeded down Cairn Ravine. At 3 P. M. stopped for half an hour to melt snow, after which again went on across the lake, where we saw several deer, and at 7·30 P. M. encamped close to the Cart.

Friday, 6th, 9·30, wind fresh from N.; packed up, and commenced march across Bridport Inlet, towards neck of peninsula.

When half way across, sheers were stepped, flag hoisted, and sail set; dragging, was therefore no longer necessary: indeed the sledge on slippery ice went too fast for the men. Two of the crew therefore, took it in turns to have a ride, whilst the rest attended to its guidance. At 12.30 arrived on board the "Resolute."

On my return I found Lieut. Cresswell, Mr. Wynniatt (a messmate of mine in the "Samarang"), Dr. Piers,— Assistant-surgeon, — and Mr. Miertching,—Interpreter,— with twenty-four men, had, during my absence, arrived (on the 2nd inst.), from the "Investigator," in the Bay of Mercy. Most of the men were on the sick list, labouring under attacks of scurvy, combined with great debility.

I was also informed that two more men belonging to the "Investigator" had died previous to the departure of these officers from that ship. On the fifth, Captain M'Clure, Mr. Court and five men of the "Investigator," accompanied by Dr. Denville and seven men of "Resolute," left for the Harbour of Mercy. The latter officer (Dr. Denville) had been despatched by Captain Kellett, with orders to hold a survey, in conjunction with Dr. Armstrong ("Investigator") on the health of the officers and crew of that ship; and in the event of

the medical officers deeming them unfitted, by physical infirmities, to withstand the rigour of another winter, Captain M'Clure was to abandon the ship ; but in the event of a portion of the crew being found capable of enduring another season, he was then authorised to call for volunteers, and if twenty men expressed their willingness to remain, the ship was not to be deserted, but every endeavour made to extricate her this season. If, on the contrary, twenty volunteers could not be found, the officers and crew were to abandon the ship, as soon as a few necessary arrangements were completed, viz. laying out anchors, landing provisions, &c.

Saturday, 7th.—At 4 P. M. Lieuts. Cresswell and Wynniatt, of the "Investigator," Mr. Roche (mate in command of party), Mr. Chandler, boatswain, and ten men, left the ship for Beechey Island, as an advance party ; for the double purpose of relieving us from provisioning them, and taking despatches to Sir Edward Belcher.

On the 9th we commenced laying out, and gravelling space, intended for the canal astern of the ship. During the afternoon Mr. Richards, accompanied by the carpenter with one man and the dogs, left for Winter Harbour. On his road he was to call at Fife Point, and remove Meham's depôt to a more eligible situation in the depth of Winter

Harbour; after which he was to cut the ships' names on the sandstone boulder, beside the inscription left by Sir Edward Parry in 1820. Having accomplished the objects of their journey, the party returned on the 15th. On the 16th, we found the floe alongside the ship to be six feet nine inches thick; this may be taken as a fair estimate of the thickness of the ice around us, as I personally superintended its measurement. The following day, the 17th, two musk-cows and a calf were killed near Skene Bay.

Wednesday, 18th. — A light air from the southward, with thick misty weather. Shortly after noon to our great surprise, we observed a sledge and party within a few hundred yards of the vessels. We all sallied out to meet them, and found it to be de Bray and party, after an absence of forty-four days from the ship. He had parted company from Commander M'Clintock on the second instant, in lat. $76^{\circ} 10'$, N., long. $116^{\circ} 45'$ W. (all well!) The latter officer had decreased his original number of ten men, by two, whom he had sent back, as well as his broken sledge, by de Bray.

On the 12th instant, when near Point Nias, a fatal accident occurred to one of M. de Bray's little band. It appears they were near the termination

of their day's work, and were pushing on, under sail, to encamp on the land distant about three miles, when John Coombes (stoker of "Intrepid") who a minute before had stepped out from the drag ropes, was heard to cry out in a tone of anguish, "Help! help!" The whole party immediately ran to his assistance, but on reaching him they found life quite extinct. M. de Bray instantly pitched the tent, and prepared hot water, which he applied to the stomach and soles of the feet.

During the time the water was being prepared, the only restorative they had,—a little brandy,—was administered, whilst the men rubbed the hands and feet of the poor man unceasingly, hoping to recall the vital spark, but all without effect; his death in every respect resembled that of our late steward.

M. de Bray was now placed in an embarrassing position, for his orders from Commander M'Clintock were, to take the depôt from Point Nias and carry it on in advance to Cape Fisher, but the men expressed a great wish to take the corpse of their shipmate on board, in order that he might be buried on Dealy Island, beside the graves of his shipmates. M. de Bray therefore naturally, and very properly in his position, acceded to their request, although it was opposed to his own conviction, and

made the best of his way on board. Nor is he, as a foreigner, to be in the least degree blamed for pursuing this line of conduct, although had any other officer of the squadron been in command of the party, his duty, I presume, would have been to have buried the body, and to have fulfilled his orders, after which, if the men had wished it, to have exhumed the corpse, and brought it on board.



Graves on Dealy Island.

Captain Kellett being absent, a party was despatched in the course of the afternoon, to communicate the distressing intelligence, as well as to make arrangements for carrying out the depôt for Commander M'Clintock to Cape Fisher.

During the afternoon Mr. Dean returned with the carcasses of the animals shot yesterday, also a young bull calf about four days old, which he had caught in the vicinity of the scene of yesterday's slaughter, when in all probability the mother had been shot. The little animal was about the size of a small lamb *, with a large head, and prominent eyes. On its arrival on board, it could scarcely stand on its legs, but after partaking of a little warm milk, from a phial, the mouth being covered with chamois leather, it appeared to be thriving, and for a day or two, ran about the decks in such great glee, as to induce us to hope we might be enabled to convey to England in safety, this interesting specimen of an animal so little known as the musk-ox. Unfortunately, however, its strength gradually decreased, and on the fourth or fifth day it died.

Thursday, 19th. — At 3·30 A.M. Captain Kellett returned on board, and on the same day despatched Lieut. Pim with a party to take the cart from the head of Bridport Inlet, across the land, for the use of Lieut. Hamilton on his return; and

* Height to fore shoulder, 19 inches; from nose to tail, 20 inches; weight 25 pounds.

in doing this service he was to carry out the orders given to M. de Bray by Commander M'Clintock.

About this time a suite of four cabins was commenced on board the "Intrepid," for the accommodation of the officers expected from "Investigator;" and the foundation of the depôt house laid near the south point of Dealy Island.

Tuesday, 31st. — At 3 A. M. observed a sledge under sail to the westward; hoisted the colours, and Mr. Nares returned after an absence of fifty-seven days from the ship, having parted from Lieut. Mecham and men (all well) in lat. $75^{\circ} 35' N.$, long. $118^{\circ} 30' W.$, on the 2nd inst. One of Mr. Nares's party,—John Bailey, P. R. M.—was so unwell, from general debility, swollen legs, and other symptoms of scurvy, as to render his immediate return indispensable, although he had been directed to transport the cart from Winter Harbour to the shores of Liddon Gulf.

On the fourth day after his arrival, Mr. Nares was again on his way to Winter Harbour, to perform the above service.

Sunday, June 5th. — At 5 A. M. this morning I was aroused from a heavy sleep by hearing a strange voice calling me. Whilst meditating in a half dreamy state respecting the owner, my curtain

was drawn back, and a figure clad in seal-skins entered my cabin, exclaiming, "Well! how are you, old fellow!" I immediately recognised Commander Richards of "Assistance."

My astonishment at such an unexpected visit had well nigh deprived me of utterance for a minute; on recovering my senses, and finding I was really awake, I jumped out and had the pleasure of grasping the hand of an officer, who is a universal favourite with all comprising the Expedition. His men arrived a few minutes afterwards in perfect health.

Commander Richards had been fifty-seven days absent from the "Assistance," wintering in company with the "Pioneer," in Northumberland Sound, on the east shore of Wellington Channel, lat. $76^{\circ} 58'$ N., long. $96^{\circ} 58'$ W. (all well). He had with him when he left (April 10th) no less than six sledges, two boats and fifty-seven men. One of the boats (whale) he had deposited on Cape Lady Franklin, the other (an ice boat) on the west shore of Byam Martin Channel. He had visited and deposited at the rendezvous ($76^{\circ} 32'$ N., $104^{\circ} 45'$ W.), on the 30th April, a despatch from Sir Edward Belcher; from this position he crossed over towards Point Bradford, on Melville Island, and was

continuing along the land to the N.W., when he unexpectedly fell in with Hamilton and his party, on the 17th May, in lat. $76^{\circ} 45' N.$, long. $109^{\circ} W.$, 110 miles in a straight line from our position.

Finding, from the distribution of our travelling parties, he had no prospect of exploring unknown land, Commander Richards deemed it advisable to visit the "Resolute," in order to learn the latest intelligence respecting the "Investigators," and parted from Hamilton, who now made for the rendezvous, accelerating his speed and lengthening his hours of travelling, in hopes of catching up with Lieut. Sherard Osborn, who had only turned back six hours before the meeting of Captain Richards and Hamilton.

At the cart (Hecla and Griper Bay) the party from "Assistance," fell in with Lieut. Bedford Pim, who had been weather-bound for the last four days. It was rather fortunate they did so, for having expended twelve, of the sixteen days' provisions he had taken with him, his party would have been hard pressed had not Commander Richards supplied him with four days' provisions for himself and crew.

Captain Kellet was absent (intending to make a rough survey of the Inlet) when Commander

Richards arrived. I was in hopes he was yet in sight of the staff on Dealy Island, and therefore caused the signal of recall to be hoisted, in expectation of his immediate return. As however he had not returned by the following day (Monday at noon), M. de Bray was despatched with a party to seek him, as it was of the utmost importance that he and Commander Richards should see each other, previous to the latter officer's departure for Northumberland Sound.

At 4 A.M. on the 7th, the Captain returned with the dogs, and great was his gratification on seeing Captain Richards, who was induced to remain until the evening of the 8th, in hopes of Domville's return from the Bay of Mercy with an account of the future proceedings of the "Investigator." In this, however, we were doomed to be disappointed, and even although Domville was expected hourly, it was admitted by all on board, that no time should be lost in commencing such a journey as the one Captain Richards had before him, at this advanced stage of the season. Not that we were particularly anxious about his safety, for we considered his boats insured that; but because, during the time he had been on board, his feet became so inflamed as to prevent his putting them

to the ground for a whole day. It is true that when he left he could walk without pain; but we could not conceal from ourselves the fact, that the most trying part of his journey had yet to be accomplished;—for arctic travellers are aware from past experience, that the most intense cold is preferable to wading through sludge ice and water, up to the knees for ten hours consecutively every day.

We all sincerely regretted parting from our old friend, and with three heartfelt cheers and a sincere wish for his safe return we bade him farewell.

Thursday, 9th.—Lieut. Pim and party returned from Cape Fisher, after an absence of twenty-two days from the ship. About this period, the arrival and departure of sledges was of almost daily occurrence, and we were consequently kept in one continued state of confusion and excitement.

At midnight on the day of Lieut. Pim's arrival, just after we had sunk into our first sleep, a sledge was announced in sight, to the westward. We soon after distinguished the flag of Dr. Domville, and, in company with several other officers, I advanced some distance to meet him.

He arrived on board at 2 A.M. on the 10th with Mr. Sainsbury (mate) on the sledge; with

two other invalids, and his own party at the drag-ropes.

Fortunately, the dogs and sledge were just about to start for Skene Bay, to take a supply of ammunition to Captain Kellett. I therefore took advantage of this opportunity to forward Captain M'Clure's despatch.

By Dr. Domville, we heard that the "Investigator" was to be abandoned on Saturday, June 4th, by the whole of the remaining officers and crew who would of course, make direct for our winter quarters.

It appeared that on Captain M'Clure's return, he had, in accordance with the written instructions of Captain Kellett, directed the medical officers, Drs. Armstrong and Domville, to hold a medical survey on the men, with a view to ascertain their physical capabilities of remaining another winter. This was accordingly done in the presence of Captain M'Clure. The result proved, that with one or two exceptions, both officers and men were more or less affected by scorbutic symptoms; and from want of food and general debility, were utterly incapable of resisting the severity and privations, attendant on another (the fourth) winter in these regions.

As each man underwent the above examination, he was asked by the Commander if he would volunteer to remain by the ship another winter or not. The result of this inquiry proved that only ten, including the Commander, were willing to remain. These were the Commander, four officers (all of them), one warrant officer, three seamen, and one marine. So that, had not the medical report been so decisive, the number of volunteers required (twenty) as specified by Captain Kellett, not being made up, would have obliged Captain M'Clure to desert the ship.

Dr. Domville, after the question had been finally settled, set out on his return across the strait, bringing a host of little things belonging to the officers and men.

Unfortunately, when about sixteen miles to the westward of Point Hearne, his sledge broke down. He was now necessitated to leave most of the articles on the floe, and make forced marches with a broken sledge towards the ship, principally with the view of relieving poor Sainsbury from his present irksome position on the sledge.

The Captain returned on board on the 11th to be present on the arrival of the officers and crew of the “ Investigator,” who were expected in a few

days. On the 13th, the Captain desired me to prepare to leave the ship the following day (14th), for the purpose of running a meridional distance between our position and Winter Harbour, as well as to ascertain the exact variation of the latter place, there being a discrepancy of five or six degrees between that observed by Sir E. Parry in 1819-20 and Lieut. M'Clintock in 1851. I was also to proceed to the scene of Domville's accident and pick up the articles he had left there.

A little before noon on the 14th, Mr. Nares and party returned from Liddon's Gulf. At four the same day, I set out with twelve day's provisions.

ROUGH NOTES OF A JOURNEY FROM DEALY ISLAND
TO EIGHTEEN MILES BEYOND POINT HEARNE, FROM
JUNE 14 TO 24TH (INCLUSIVE).

June, 14th. — At 4 P.M., left the ship with six men and the dog Napoleon (Naps,) a runner sledge, and twelve days' provisions, and proceeded at a good pace across a level floe towards Cape Bounty. Weather cloudy, wind light from N.N.W. Caught

several little lemmings on the floe, at least five or six miles from the land. Naps enjoyed worrying the little creatures, but occasionally met with a rebuff from the infuriated animals springing up and inflicting a wound on his nose. At 10 P.M., pitched the tent, about nine miles from the ship.



Interior of a Tent.

Wednesday, 15th. — Same wind as yesterday, weather fine and clear. Struck and proceeded to the westward: 4:30 abreast of Cape Bounty cairn, distant about two miles; here we got entangled amidst a confused mass of hummocks, which en-

tailed considerable labour. At six, pitched tent, and made a capital dinner off musk-ox.

After a good sleep, and hearty breakfast, we packed up and proceeded at 4 P.M. We found the floe was gradually becoming worse as we approached to the westward, and for the last two or three hours of this march the men were often immersed above their knees in water and sludge ice. About 9·30 P.M., observed a brilliant parhelia, one on each side of the sun in a feathery halo, very peculiar in appearance, and with the prismatic colours beautifully distinct. Diameter of halo, 46°. At ten, pitched tent, shifted stockings, and after a pannican of tea (the most delicious beverage for travellers,) composed ourselves to rest for four hours.

Thursday, 16th.—2 A.M. (wind north), parhelia as last march. At 3 A.M. arrived abreast of low peninsula east of Fife Point. Shot a boatswain-bird, and caught several lemmings. Floe along the land better than before; 4·45, abreast of cairn on Fife Point, but saw no signs of depôt; six, pitched tent between Fife and Reef Points. Weather warm and pleasant, but floe wet and uncomfortable. After an excellent dinner off musk-beef, flavoured with onion powder (an excellent and portable condiment), we composed ourselves to

sleep, which we all heartily enjoyed after the past day's work.



Packing the Sledge preparatory to marching.

3·30 P.M.—Breakfast; struck tent, and proceeded towards Winter Harbour. Advancing ahead of the sledge for the purpose of ascertaining the exact site of Parry's observatory, I was fortunate enough to find it without any trouble, and at six we encamped on a gravel ridge within twenty yards of the grave of a seaman of the "Hecla." The grave was in a good state of preservation, the letters on the tombstone being very legible; the inscription was as follows:—

“To the Memory of William Scott, seaman, His Brit. Maj. Ship ‘Hecla,’ Obt. June 30. 1820. Æt. 33 years.”

There were two places, which had evidently been the sites of observatories. I decided that the upper and inshore one, had been used for magnetic purposes, and that the lower one (distant from the former about 100 yards) had been used for astronomical observations.

On all sides of our camping place, we found traces of Sir Edward Parry’s Expedition. Nails, wood, rope, twine, bottles, preserved meat tins, coals, iron hoops, and other articles were strewn around; but the most valuable articles were an anchor button, almost as bright as when it came from the manufactory of Messrs. Hammond, Turner and Son, the makers. It was not rounded as the buttons are of the present day, but flat, with the raised anchor and crown. This on my return, I presented to Captain Kellett. The other and equally interesting relic of the “Hecla” and “Griper,” was a chisel in an excellent state of preservation, the maker’s name, “Ward,” being quite distinct.

Friday, 17th. — Obtained observations for time and variation, and a round of angles. Ten A.M., struck tent and proceeded towards Sandstone Boulder; distant from the observatory about one mile and a half. Took a round of angles, and de-

posited record. Pitched tent, intending to commence day's march at 4 P.M.

Whilst sketching the sandstone, several brace of ptarmigan flew round us, apparently startled by such unexpected intruders. We shot a brace of them, fine plump birds, the cock in snow-white plumage, the hen more like the English partridge. John McLean also wounded a deer severely with a charge of shot, and adopted the novel expedient of driving the unfortunate animal towards the tent, near which a knife soon terminated its sufferings.

At 4 P.M. struck tents, and proceeded, wending our way across the land, in order to avoid a *détour* round Point Hearne. At the end of three hours' hard dragging, we reached the beach line, and struck off through a mass of hummocks, until we had gained an offing of one mile from the land; we then altered course along shore to the westward.

The road proved very bad, pools of water and sludge predominating; these with thick misty weather rendered it a very laborious march. Shortly after leaving the beach, the tracks of several sledges were observed; these we conjectured to belong to the expected party from the "Investigator." At 10 P.M. pitched tent, all feeling very tired.

Saturday, 18th. — 2 A. M. Wind fresh from N.N.W. with sleet and hail. Struck tent, and advanced on to the westward keeping in recent tracks; 6 A. M., pitched; no signs of Domville's dépôt. All very wet and tired. Enjoyed the hot mess of musk-ox soup and bouilli.

At 4 P. M. struck tent, and proceeded on to the westward. Weather misty and miserable; wind fresh from N.W. At seven, reached the scene of Domville's disaster, which I suppose to be sixteen miles west of Point Hearne. On examination we found that the parties from the "Investigator" had taken some of the articles; the remainder we quickly transferred to the sledge. This service was facilitated by the fact of our being nearly up to our knees in water. After a luncheon of cold fat bacon, biscuit, and grog, we began to retrace our steps; 10 P. M., pitched, all wet through up to the middle. Decided in my own mind that tea* was the greatest luxury supplied to arctic travellers.

Sunday, 19th. — 2 A. M. wind light from northward, weather gloomy; struck tent and went on, keeping in old tracks towards Point Hearne. Floe this march much improved; 6 A. M., pitched

* All arctic travellers seem to agree to this.

tent. 4·30 P. M., light northerly wind, with dark, gloomy weather. Struck tent and went on in old tracks ; at the end of three hours reached the beach, and proceeded by our outward route across the land. At 11·30 arrived at the old encampment in Winter Harbour.

I had walked on some distance in advance of the sledge, and was standing beside the grave of poor Scott, lost in meditating on the strange vicissitudes attendant on a sailor's life, when happening to cast my eye in shore, I observed two king ducks, about 200 yards distant. Walking quietly up within fifty yards, I selected the male, as I wanted the skin for a specimen. Fortunately I succeeded in killing my bird, and was much pleased in finding myself in possession of one of the best specimens of a king eider-duck I had ever seen.

Monday, 20th.— Wind fresh from W. N. W. with gloomy weather, and occasional squalls of hail and snow. The sun showed itself at times, but the limbs were not sufficiently well defined to ensure a good set of observations. I therefore decided on waiting until the following day, when I hoped to be successful ; in the meantime I informed the men they could take the guns and scour the adjoining country for game.

Tuesday, 21st. — Early this morning, a herd of deer were observed on the opposite side of the harbour. I must confess I was fast asleep at the time; two of the crew went in chase. In the course of a few hours they returned to the tent. John McLean having shot a deer (with shot) and Northhouse four ducks: all the latter were killed at one discharge! a feat, I believe, never surpassed. This morning the sun kindly favoured us with his presence, and allowed of my obtaining a good set of observations for time and variation. For the latter I took true bearings, the object being the cairn erected by Sir Edward Parry on N.E. hill.

11:30 A.M. wind southerly; fine weather. Struck tent and proceeded to the eastward (via Reef Point) towards Fife Point. The floe proved bad for travelling, the water in many places reaching the men's knees. At 2:30 P.M. arrived abreast of depôt cairn, and by the merest accident discovered the provisions placed there in the autumn. We now pitched the tent, and commenced digging out the casks: viz.: —

Beef	-	-	1	Rum (28 galls.)	-	1
Pork	-	-	1	Do. ullage	-	1
Flour	-	-	1	Lime juice jar	-	1
Tea and sugar	-	-	1			

These we removed, by means of sledges, to the rising ground near the cairn. During the night the wind blew strong from the southward, attended by a heavy fall of snow; objects not visible within fifty yards, we therefore remained encamped until 4 P.M. on Wednesday, 22nd, when the weather having cleared a little, we moved on to the eastward, water and sludge ice predominating. After taking a round of angles at the extremity of a low peninsula (Point Wakeham?) we again went on until 10 P.M. when the tent was pitched.

Thursday, 23rd. — At 2 A.M. a light air from N. W.; fine weather. Down tent, and proceeded towards Cape Bounty until 6 A.M., when we again encamped, and enjoyed an excellent kettle mess of musk-beef and deer.

At 5 P.M. again advanced to the eastward. Our track during this march lay through continuous pools of water knee deep "*per mare per glaciem*"; about 7.30 we were abreast of the cairn on Cape Bounty. Here the floe was even worse than before, the men at times being obliged to extricate each other from the deep sludge, as well as to dig out the sledge, which often sunk above the bearers. We, however, managed to make a little progress in the right direction, and when, about 9.30 P.M.,

we encamped, many of the crew as well as myself were fast asleep before tea was announced.



Arctic travelling in the month of June.

Friday, 24th.—At 2 A.M. we again started; the weather at the time was overcast and gloomy, with occasional showers, which penetrated to our skins long before the march was over. About four we observed the ship; at six pitched tents on a patch of comparatively hard snow. At this time the weather had cleared off, and we were favoured by a warm sun and clear sky. We therefore took advantage of this promise of a fine day, by undress-

ing before bagging ourselves, and hanging our clothes outside the tent to dry.

At 3 P.M. weather warm and fine. Packed up and started for the ship. Our clothing had dried during the time we were encamped, but we were again soon wet up to our middles, and reached the ship in that state at 7 P.M., after four hours' march through one continuous pool of deep water.

END OF THE JOURNAL.

CHAP. XI.

Proceedings of the "North Star."—Roche's Dog Journey.—Dr. M'Cormick's Boat Voyage.—Arrival of the "Prince Albert" at Beechey.—An unexpected arrival at Beechey.—Proceedings of "North Star."—Sumptuous Breakfast.—Receipt for Arctic Soup.—Captain M'Clure harangues the Crew.—Remarkable Coincidence.—Shooting Parties despatched.—Success in obtaining Game.—A few words about Animals.—On the Animal Productions of the Arctic Regions.—On the Animal Productions of the Arctic Regions, from Personal Observation.—False reports on the Animal Productions.—Theory of Arctic Vegetation.

ON my return I found that all the officers and crew of the "Investigator" had arrived from the Bay of Mercy during my absence, viz, on Friday 17th, the ship having been abandoned on the 3rd inst. The officers and crew, numbering in all 61, were distributed between the "Resolute" and her tender, whose united crews now amounted to no less than 138 souls. I was greatly astonished on hearing of Mr. Roche's return from Beechey Island on

the 18th inst., with one man and dogs from the "North Star," the whole distance (above 300 miles) having been accomplished in fourteen days.

Roche, it appears, reached the "North Star" on the 22nd day after leaving Dealy Island; but the sledge did not arrive until the 25th, as Messrs. Roche and Wynniatt, with Thompson, A.B., had gone on in advance of the main body, from a short distance the west side of Cape Martyr.

He found the "North Star" had been on shore since September last, the ice having thrown her on the ground, on the east point of Beechey Island. Until the ice had become stationary for the winter, their situation was unpleasant in the extreme, as with the falling tide, she heeled over to such a degree, as to necessitate the use of life lines along each side of the deck.

As the season advanced, they took advantage of every time of high water to build her up by means of a snow wall under her lee side. In consequence of the ship's position, the work of officers and crew had been extremely laborious, and it may safely be inferred their winter was less pleasant than it would have been under different circumstances. The ice saws had been kept constantly

at work — providing blocks for the wall up to December! A short interregnum then occurred until February, when the saws were again put in requisition, to forward as much as possible the chances of heaving the ship off, soon after the surface water ceased to solidify to any considerable degree of thickness.

Roche on his journey down found the floe good on the whole, excepting in Austin Channel, where the hummocky nature of the ice rendered dragging a heavy sledge laborious in the extreme.

Sludgy ice was first observed near Point Frazer, on the 24th May, and water near Cape Capel on the following day. Two musk-oxen were killed, and deer seen on Byam Martin Island. One deer killed, and many more seen on Baker Island. Ducks were first seen near Cape Martyr on the 28th May. Bears were numerous between Cape Cockburn and Baker Island; two were killed. All the depôts (three in number) laid down by this ship in 1852 — viz. at Alison's Inlet, Assistance Harbour, and Point Griffiths — had been disturbed by bears; the one near Alison's Inlet had been injured, and fourteen pounds of preserved meats were missing from a case.

Two of the sledge's crew were disabled for several

days by severe attacks of diarrhœa. Roche relates the following anecdote, illustrative of the keen scent of the dogs. It appears that, whilst crossing Byam Martin Channel, the dogs suddenly started off at full speed, and altered course in the direction of the wind. After running upwards of half a mile, they as suddenly halted, close to a seal hole in the ice; but their exertions were unrewarded.

On his way to Beechey, Roche discovered a remarkable cavity in the ice, formed by a seal. It would appear that after getting through the ice, the seal had formed a cavern in the snow, the only communication with the upper world being a small air-hole.

On his return to Dealy Island with one man, and the "North Star's" dogs (left by Mr. Kennedy of "Prince Albert," the previous year), Mr. Roche observed a large crack — E. S. E. and W. N. W. — near Cape Hotham, averaging six feet in width. The sail left in the boat near the Cape had been dragged out—probably by bears—to a distance of twenty yards. Three bears (two full grown and one cub), killed during the journey, were brought to bay by the dogs. Deer were seen on Baker and Moore Islands. A little sleet, near approach to rain, fell on the 7th June.

On the 19th August last year, Dr. M'Cormick proceeded up Wellington Channel in a whale boat, to explore the east coast as far as Baring Bay of the chart; in order to ascertain if a passage existed — as he hoped and imagined — from near that locality into Jones' Sound. He returned after twenty days' absence — Sept 8th, — having reached as far as the north point of Baring Bay; the latter he describes as being much shallower than it is drawn on the chart.

The day Dr. M'Cormick started a vessel hove in sight from the eastward: she proved to be the private ketch "Prince Albert," Mr. Kennedy (late of H.B.C.), commanding, fitted out by Lady Franklin. She was from Batty Bay, — Prince Regent's Inlet, — where she had spent the winter of 1851-52. During the spring of 1852, Mr. Kennedy crossed the narrow isthmus at the south end of Brentford Bay; and made the best of his way by the Prescott Islands to Cape Walker, from whence he had returned to the vessel by the way of Port Leopold, where he sojourned fourteen days, in order, as he states, to refresh his men! After giving the "North Star" his dogs, and a considerable quantity of pemican, he departed from Beechey Island, with the intention of making the best of his way to England. It is

worthy of remark that Mr. Hepburn (who was a companion of Sir John Franklin, during his perilous journey up the Coppermine in 1821) was on board this little vessel ; although at an advanced age, the hope of succouring his old captain and friend had induced him once more to contend with the privations of an arctic voyage. She also had on board a French officer, M. Bellot *, of the Imperial Navy, who, from humane motives, and a love of enterprise and adventure, had volunteered his services to accompany the Expedition. The French naval authorities had fallen in with his views by allowing him to absent himself on such a mission, in the event of Lady Franklin's accepting his proffered services, which she most gratefully received.

Scarcely had the surprise excited by the visit of the “ Prince Albert,” passed away, when another unlooked-for event took place, in the shape of another arrival on the 8th September. This proved to be no other than the “ Isabel ” screw schooner. Both these vessels were equipped by Lady Franklin. At the time we left England there appeared to be little or no probability of the latter vessel

* The sad fate of M. Bellot, who lost his life in the Wellington Channel, while attached to H.M.S. “ Phœnix,” in 1854, will never be forgotten by Englishmen.

taking any part in the search for the missing expedition in any quarter of the globe.*

Commander Inglefield, however (an old Samarang), with a zealous determination to attempt the exploration of Wolstenholme and Smith Sounds, left as late in the season as July, and after most unprecedented success as regards winds, weather, and season, through Melville Bay, he scoured the shores of Wolstenholme, Whale, Smith, and Jones' Sounds, and had called at Beechey Island to deliver letters, papers, &c., as well as to take home the latest news of our expedition. He intended returning by the west coast of Baffin's Bay. He left Beechey Island on the ninth.

Mr. Roche, on hearing of these unexpected arrivals, volunteered to return immediately, as I have stated, with one man and the dogs, for the purpose of communicating the intelligence to Captain Kellett, to which arrangement Commander Pullen at length consented, and on the fourth day after reaching the " North Star " he again set out on his return to the " Resolute " where, as stated, he arrived

* The reader may perhaps remember Captain Beatson's admirably well-conceived scheme to proceed in this vessel to Behring's Strait, and her unfortunate detention, almost on the eve of departure.

on the fourteenth day from Beechey Island; the distance being upwards of 300 miles. I had almost forgotten to say that Commander Pullen had, in the month of March, gone to Point Phillips (west side of Wellington Channel), and from thence to Baillie Hamilton Island; his object was to communicate with "Assistance" if in this neighbourhood.

As, however, no vessels were in sight from the summit of the island, he determined on retracing his steps to the "North Star," whose position required his presence. Before closing the remarks concerning the "Investigator," it would be as well to mention, that Captain M'Clure had, previous to quitting the ship, landed three months' provisions for sixty-six men, leaving on board two months' for the same number.

Perhaps the smallest quantity of provisions ever consumed by a travelling party, where sufficient could have been obtained, occurred in Captain M'Clure's party of eight men, when he first reached Barrow's Straits from the westward, and thus established the existence of the NORTH-WEST PASSAGE, in October, 1850.

The party was away ten days, and consumed during that period (exclusive of chocolate and tea)

the following solids only : — viz. pemican, 18 lbs., biscuit, 40 lbs.

The cause is attributed to the want of water, the quantity of fuel being insufficient to afford the necessary supply.*

Amongst the numerous anecdotes, illustrative of the biting hunger to which they were subjected, the following are amusing enough to create a smile even amongst the sufferers.

Whenever any game was killed, the hunter had the privilege of retaining certain parts of the animal; and in addition a pound of meat was awarded to those who left the ship for the purpose of bringing on board the carcass. This latter service seldom fell to the lot of the hunter, if the animal had been shot at any great distance from the vessel, as in most cases he was glad to rest awhile after his exertions.

On one occasion an officer volunteered to go for the carcass of a deer. “Certainly,” replied the Commander, “you of course will obtain your pound of meat.” The officer expressed his satisfaction and was turning away, when the Captain, seized with a sudden fit of generosity, added — “And

* The above was communicated by Mr. Paine, of H. M. S. “Investigator.”

Mr. —, if you leave early to-morrow morning — say four o'clock — I shall allow you to have two ounces and a half of oatmeal in addition!" the officer looked his thanks, but was unable to express his gratitude in words. Report adds, the vision of such a splendid breakfast in prospective caused him a very restless night.

The second anecdote refers to the manufacture of Arctic soup.

This delicious, and nourishing article of diet is thus made: — First, melt the snow (melted snow being the principal ingredient), then boil the water, in which immerse the allowance of salt-beef, four pounds — having previously been carefully divided into eight portions — for the space of ten minutes. After which each member of the mess subscribes one ounce of flour — each allowance drawn separately — the *whole* eight ounces are now boiled in the greasy water after the beef is removed. As soon as it is well thickened, the soup is taken from the fire, and soon disappears down the throats of the hungry subscribers.

- I now turn to a more pleasing anecdote, illustrating as it does the never failing mercy of the Almighty. I have before observed in this Journal, that during the night previous to the arrival of

Lieut. Pim in the Bay of Mercy, the first death occurred on board the "Investigator" since leaving England in January, 1850.

The effect was such as might have been anticipated on the minds of men, already depressed by hunger and despair; causes which were visibly affecting both mind and body. Captain M'Clure, therefore, with a view of reassuring the men and sustaining their drooping spirits, called "all hands" on the quarter-deck, and in a brief speech, — in which he adverted to the death of their shipmate, — implored them to be true to themselves and to the service to which they belonged; not to despair, but look forward to the future with a firm determination to overcome the difficulties of their present situation, and bear the vicissitudes which must befall them, with all the fortitude of British seamen.

In conclusion, he reminded them they were as much under the providence of a merciful God, *there* as elsewhere; thus inculcating the same principles as did Sir Humphrey Gilbert, who (in the words of the inspired Longfellow) is made to say, to his frightened mariners,

"Do not fear ! Heaven is as near
By water as by land."

Captain M'Clure wound up his harangue by pointing to a cloud edged with a bright light, and assuring his attentive listeners that not *that* only, but every cloud had its silver lining; and added he, "it is my firm conviction that the cloud of adversity under which we now are, will not prove an exception to the rule!" *That very day* the exploring party from the "Resolute" reached them.

The following morning, the Captain again sent for the crew, and pointing out the manifest workings of an all-seeing God, as displayed in their behalf, he concluded by saying — "I was therefore right, my men, when I stated that every cloud had its silver lining — the arrival of the little band from the 'Resolute' is *ours*; and let me implore you my lads to remember, on your return to your families and homes, that there are *churches* in England as well as *public houses*."

About this time, musk-oxen, deer, geese, ducks, and ptarmigan, were seen in great abundance, and a fair proportion of each were brought on board the "Resolute." Shooting parties were despatched in every direction, all of whom were eminently successful in contributing to the general stock of fresh meat, which was now issued every day, at the rate

of one and a half pounds per man per diem. As the number of mouths to be fed now amounted to 138, Captain Kellett, deemed it necessary to issue hares, geese, and indeed all small game, in common with the musk-beef and venison. The smaller animals were issued at the following rate, viz:—hares, 8 lbs., ducks, 3 lbs., geese, 3 lbs., ptarmigan, 1 lb.

It is almost impossible to arrive at the exact number of animals killed since our first arrival, although I may fairly give myself credit for taking some little trouble in keeping the list as correct as possible.

During the first week in July, three shooting parties, consisting of five officers and ten men, were despatched in various directions in search of game. We may be said to have hunted thirty miles of coast line, by eight miles in breadth — *i. e.*, from Point Ross to beyond Cape Bounty; and these extensive hunting-grounds have yielded a quantity of game, exceeding our most sanguine hopes; quite sufficient indeed to confirm the many *savants* in England, in their theories respecting the abundance and variety of animal life in these regions.

Let us not however too readily jump at conclusions, but calmly, and without prejudice for or against these theories, investigate the circum-

stances which have rendered our success so remarkable.

In the first place, Melville Island was already known to be the favourite resort of animals, in preference to the lands of Cornwallis, Bathurst, North Devon, including the south shores of Barrow's Straits. We therefore, on our arrival at our present winter quarters, looked forward with some reason, to as successful a result in hunting, as was experienced by Sir Edward Parry in his ever-memorable voyage of 1819—20. In this we have not been deceived. On the contrary, our efforts have been crowned with unexpected success; and, judging from my limited experience, I am induced to believe that a small body of men, well armed, with health and strength, sufficient to enable them to range the hills around, to a distance of ten or twelve miles from the ship, might, if only animal food were required, sustain life for a limited period on the produce of the chase.

I say a limited period of time, for we have now before our eyes, in the crew of the "Investigator," living proofs of the injurious effects of a prolonged stay in those regions, on the mental as well as the bodily capabilities of the human frame. Game was not wanting in the vicinity of the Bay of Mercy;

and during their first winter there, when the crew were first placed on a limited scale of provisions, numerous deer, hares, ptarmigan, &c., were procured; but with the approach of the second winter in the bay (the third within the arctic circle), an apathetic indifference pervaded the men. With their strength, which had decreased with the continuation of the small allowance of provisions, all their energy seemed to forsake them, and, as symptoms of scurvy were manifested in the system, they lost all animation, and allowed feelings of lethargy to master them, which utterly precluded any hope of success in hunting. The small quantity of game that *was* procured during the winter of 1852-53, is to be chiefly attributed to the energy of the officers, all of whom were of opinion that another winter, would have reduced them so much, as to prevent their going any distance from the ship in search of game, which had now become very scarce in the immediate vicinity of their winter quarters.

The above facts, in my opinion, tend to prove that even amidst comparative plenty (so far as animal life is concerned) the approach of a third season brings with it a depression of spirits which few minds are strong enough to bear up against, more

particularly when scurvy, one of the most dreadful diseases peculiar to seamen,—and God knows they are subjected to many,—appears amongst them; the blood becomes stagnant, teeth loosened, gums and palate black and sore, flesh softened, all animation ceases, and with the sun, as he sinks beneath the horizon, leaving the dark and gloomy night of three months duration to usurp his throne, the last ray of hope departs.

The impartial reader must also remember that Melville Island forms but a small portion of the arctic regions, which by the bye, is far too vague and undefined a term, to be used when referring to a particular portion. So far as I am enabled to judge from my own experience, as well as that of our predecessors, I think it may with reason be considered as an established fact, that the larger animals, viz., musk-oxen and deer, seldom if ever, visit any other land bordering on Barrow's Straits, save Melville Island. In making this assertion I have not lost sight of the few skulls and bones, which have been found at various places *out* of Melville Island. But as these localities have been visited, and searched effectually, without obtaining any game, I see no reason to modify in any manner my opinion as expressed above.

Confirmatory evidence in support of this idea is not wanting, but may be found in the voyage of Sir James Ross (Port Leopold), 1848-49, Captain Austin's expedition (Griffith's Island), 1850-51; and later still in the branches of the present Expedition, viz., Sir Edward Belcher in Northumberland Sound, and Commander Pullen at Beechey Island; but confining myself to the present time, will I think effectually answer my purpose; for whilst we have been living on fresh meat of every kind, our friends and co-operators in the search, have scarcely obtained a pound of edible meat.

It must be apparent to the reader that I despair of Sir John Franklin and his brave companions still existing within these regions, the more so as the graves and other relics on Beechey Island prove that their first winter was spent in one of the most unproductive places within the arctic circle. Again, the theory that a more temperate climate, richer vegetation, and abundance of animal life increases as the voyager progresses to the north, falls to the ground for want of support; for although I confess my inability to meet the subtle arguments of its supporters by answers equally abstruse, I am content to rest satisfied with the

experience of practical men assisted by my own observation. Captain Penny, on his return to England in 1851, reported that animal life * existed in great abundance well to the northward in the Wellington Channel, and thereby caused many learned men in England to fancy its shores (like Melville Island) to be clothed with rich vegetation, and the hills and ice with animal life in abundance. Unfortunately, Sir Edward Belcher has spent a winter in the very locality pointed out as the promised land of exuberance without obtaining, I believe, so much as a single bird.

Setting aside the belief of many, that the "Erebus" and "Terror" were lost on their homeward route, — a very possible fate to befall any vessel navigating Baffin's Bay on dark nights, amidst innumerable icebergs, — I have reluctantly come to the conclusion that no body of men, could withstand the rigour and privations, attending so protracted a stay amidst the dark and dreary solitudes of the frigid zone, under the same circumstances in which Sir John and the officers and

* Dr. Kane, however, and Lieut. (now Captain) Sherard Osborn, entirely confirm Captain Penny's statements: although Sir Edward Belcher's crews were not so fortunate as to meet with the supplies.

crews of the missing ships, have in all probability been placed.

Whilst fitting out, I overheard a very amusing discourse between an eccentric but talented Scotch gentleman (connected with one of the most important of our public institutions) and a young officer about to make his first trip to the Northern seas. I have said a discourse, but a lecture would have been more correct, for the officer answered not a word, but silently acquiesced in all advanced by the enthusiastic theorist.

“Now,” said he, “I see no reason for supposing, that Nature has entirely excluded the northern regions, from participating in the gifts so lavishly displayed, in the more favoured regions of the south. Not that I would have you expect an English landscape, with its meadow lands and picturesque groups of trees; but I venture to predict, that during the summer and autumnal months, you will find the shores of North Devon abounding in rich vegetation, which forms the food on which the numerous animals in that locality exist. There, interspersed with gay mosses, you will find brilliant lichen, and luxuriant saxifrage, with the arctic poppy; the whole forming a delightful picture and instructive study to the inquiring mind.”

I leave the sojourners at Beechey Island, on board the "North Star," to confirm or refute the above statement. The numerous animals have dwindled down to an occasional solitary bear, whose flesh, even to hungry men, is anything but palatable; and the above description is far too glowing and imaginative, for the scanty portions of the floral world found at Beechey, or in its neighbourhood; although it is true that gay mosses and brilliant lichens are to be found there, specimens of which, obtained by Dr. McCormick, may be seen in the Arctic collection at the British Museum.

CHAP. XII.

Mecham and Party return to the Ship.—Sledges, Flags, and Mottoes.—Complete Dépôt House and Cairn.—Complete Water-Preparations for Sea.—Dealy Island Races.—Obtain the Variation.—Unexpectedly driven out of Winter Quarters.—Situation of the Ship.—At Sea once more after Eleven Months' detention.—Bright Prospects not realised.—Unpleasant Position; Forty Fathoms to Twelve.—Shorten Byam Martin Island Eleven Miles.—Off Point Griffiths.—Extraordinary Ice-blink.

WEDNESDAY, July 6th.—At 11 A.M. observed a party approaching the ship from the westward. The flag was recognised to be that of Lieut. Mecham, and the colours on board both vessels were hoisted to welcome his return. At 1 P.M., the party arrived alongside, after an absence of ninety-four days from the ship, having reached lat. $77^{\circ} 10' N.$ and long. $122^{\circ} 30' W.$ Mecham and crew were in the enjoyment of excellent health, and although a little brought down in appearance,

were in every respect, fully capable of continuing their march weeks longer.

About this time, I commenced a series of magnetic observations, with Fox's dipping needle, for dip and intensity. The mean dip proved to be $88^{\circ} 25'$.

July, 18th.—At 9:30 A.M., the men employed erecting the cairn on the top of Dealy Island, observed a party of nine men, without a sledge, advancing towards our position from the northward. They were, of course, the exploring party under Commander M'Clintock. The colours were hoisted, as well as an ensign at each mast-head, as a signal of welcome to the little band of wanderers, returning to their wooden homes, after an absence of 106 days. Shortly after noon they arrived on board, amidst the cheers and heartfelt congratulations of officers and men. All were looking remarkably well — somewhat thinner, perhaps, than when they started — but far more capable of endurance.

I find I have omitted to insert the names of H.M. sledges, description of flags, &c., of the various travelling parties. They were as follows:—

Officer's Name.	Distinguishing Flag, Name, and Motto.	Officer's Name.	Distinguishing Flag, Name, and Motto.
Capt. Kellett, C. B.	<p>"Erin."</p>  <p>"Erin go bragh."</p>	Mr. McDougall.	<p>"Horatio Austin."</p>  <p>"Spes est solatium periculi."</p>
Comr. McClinton.	<p>"Star of the North."</p>  <p>"Lead thou us on."</p>	Dr. W. T. Domville.	<p>"Sirius."</p>  <p>"Deo volente."</p>
Lieut. Mecham.	<p>"Discovery."</p> 	Mons. De Bray.	<p>"Hero."</p>  <p>"By Faith and Courage."</p>
Lieut. Bedford Pim.	<p>"John Barrow."</p>  <p>"Hope on, hope ever."</p>	Mr. R. Roche.	<p>"Beauty."</p>  <p>"Mon Dieu est ma Roche."</p>
Lieut. R. V. Hamilton.	<p>"Hope."</p>  <p>"I wish for your return."</p>	Mr. C. S. Nares.	<p>"Perseverance."</p>  <p>"Dum spiro spero."</p>

The following brief abstract of Lieut. Mecham's journey will prove interesting.

Lieut. Mecham with seven men, and two runner sledges (one small for a short detached journey), fully equipped and provisioned for ninety days (inclusive of the quantity laid out in depôt in autumn '52), left the ship to pursue a western route from Liddon's Gulf.

He was accompanied by Mr. Nares (mate), with seven men and a runner sledge, as a depôt, or auxiliary party, provisioned for about fifty days, to assist in carrying the necessary stores and provisions, for the successful prosecution of the journey.

On leaving the ship, the men of the party induced Buffer, a young pup, to follow them. He little dreamt, at the time, his absence would be prolonged to a period of ninety-four days; but so it was, and on his return it was apparent to all that Buffer had wonderfully improved, during his lengthened tour in the western provinces.

Whilst crossing the land between Winter Harbour and Liddon's Gulf, both musk-oxen and deer were observed, but not in such numbers as during the last autumn. On the arrival of the parties on the south shores of the gulf, a quantity of coal was found, which, for several days, materially assisted in eking out their limited allowance of fuel.

On the 16th April, snow blindness, from which officers and men were alike suffering, compelled them to resort to night travelling, in order to avoid the glare of the sun during the day. The fact of the temperature falling to -33° (65° below freezing point) is a sufficient proof that necessity alone obliged them to resort to the change. Indeed the previous day, all the men,—with the exception of the officer in advance, and leading men at the sledges, — were blindfolded, and in this manner were dragging their heavy burdens across the floe.

On their arrival at Cape Smyth (the portal of unknown and therefore interesting ground), they were detained for two days, by the illness of one of the men, whose legs were swollen to an alarming extent. As the contents of the medicine chest appeared but of little service in such an emergency, Lieut. Mecham decided on encamping and applying frequent fomentations, which had the desired effect. Advantage was taken of their detention at the Cape to scour the country for game, and the following graphic account, descriptive of the habits of the musk-ox, is copied verbatim from Lieut. Mecham's letter of proceedings.

“During our stay, I proceeded to the northward, overland, towards the head of Hardy Bay. The

land rises to about an elevation of 800 feet above the sea, and nearly all the hills are of a remarkable table shape. Musk-oxen were here in very great numbers. On one plain I observed as many as seventy, grazing within a circuit of two miles. On my approach, they divided into herds of about fifteen each, headed by two or three enormous bulls. Their manœuvres were so quick and regular, that they were to be compared to squadrons of cavalry more than anything I could think of. One herd advanced several times at a gallop within rifle shot, and formed in perfect line, with bulls in front, showing a formidable front of horns. The last time they advanced at a gallop to about sixty yards, and formed in line, the bulls at the same time snorting and tearing up the snow.

“Immediately I fired they wheeled round, joined the main herd, and made off out of sight, only waiting occasionally for the wounded one.”

It would appear that the animal escaped; but on his return to the tent, Lieut. Meham shot a deer, which with a fine bull, shot by the men during his absence, partly repaid him for the unfortunate detention during two days' fine weather. On reaching Cape Smyth, the pack ice was found resting against the cliffs; this continued as far as

Cape Cyclops ; beyond which a somewhat better, though still bad, road was found. Between this cape and the S.W. extremity of Melville Island (Cape Russell) the nature of the ground did not appear favourable for game ; for, in most places, the cliffs rose abruptly from the sea.

From Cape Russell, new land was discovered to the N.W., towards which the party steered ; and after three days' journey over old hummocky floe, they landed on Eglinton Island on the 2nd of May.

On the following day, Mr. Nares and party were despatched on their homeward route, with orders to transport a depôt left at Cape Hoppner to Cape Smyth ; and afterwards to transport the cart from Winter Harbour to Liddon's Gulf, and thence to the ship. Nares, previous to leaving, found several pieces of petrified wood, which were brought on board. Several patches of metallic stone were also discovered in the same locality.

Following along the south shore of the island to the westward, not without much labour and difficulty, — for the pack ice was resting on the beach, — the party at length reached the S.W. point, from whence extensive new land was discovered to the N.W., on the S.E. point of which, Cape Hay, Lieut. Mechem (who had gone on in advance

of the sledge) landed on the 6th. The land on which he stood ultimately proved to be an island, and was honoured with the name of Prince Patrick.

The death of a reindeer and several ptarmigan held out hopes of a plentiful supply of game, but in this they were doomed to be disappointed. Advancing to the westward, coal was found in Pullen Bay; from thence they crossed the mouth of Walker Inlet, to the S.W. point (Cape Mecham) of a remarkable peninsula, bearing a strong resemblance to a boot: in fact, a miniature Italy, barring the temperature.

Here the pack proved almost insurmountable. On one occasion they were obliged to steer to the southward for a distance of three miles, in order to attain anything like a tolerable floe. In addition to the hummocks, there were numerous deep chasms in the ice filled with deep snow; alike as deceptive and dangerous as the pitfalls on the Field of Bannockburn. Into one of these, whilst in advance of the sledge, selecting the best route, Lieut. Mecham fell, and there remained for a quarter of an hour in a perfectly helpless condition; at length, being almost exhausted, he succeeded in extricating himself from what might have proved an icy tomb. Rounding a point which,

from the peculiar appearance of the ice surrounding it, was named the Giant's Causeway, the little party crossed Domville Bay towards Cape Manning, where several pieces of decayed wood were found, partly buried in the sandy soil, about ninety feet above the level of the sea. Lieut. Mecham adds, that from its appearance and position, he was induced to believe it had grown in the country.

In the vicinity of the Cape, two bears were observed, but decamped before the men arrived within rifle distance. From thence they proceeded to the northward, the land becoming less elevated and more barren as they advanced. After rounding the western extremity, appropriately named Land's End*, the shore, which could barely be distinguished from the ice, trended to the N.E.† From the most elevated positions that could be obtained, viz., ice hummocks and occasional knolls, no land to the westward was observed; and from the nature of the pack, which Lieut. Mecham terms tremendous, it may be inferred that if land does exist to the westward, it is at some considerable distance from Prince Patrick Island.

* Lat. $76^{\circ} 15' N.$, long. $124^{\circ} 10' W.$

† On reference to the chart, it will be seen that but twenty miles of unexplored land lay between the furthest position attained by Commander M'Clintock and Mecham.

The turning point proved to be in lat. $77^{\circ} 6' N.$ long. $120^{\circ} 50' W.$, from whence the low coast continued to take a north-easterly direction for about ten miles, as far as they could see. At this time but nine days' provisions remained on the sledge, with a distance of 150 miles between them and their nearest depôt on Cape Cam, the eastern point of Walker Inlet. Retracing their steps a short distance, advantage was taken of a strong N.W. gale to steer boldly across the land, in a southerly direction, in order to avoid the circuit round Land's End, as also the execrable road. For some distance they travelled over a dreary plain, without a single object to relieve the eye; but at length they unexpectedly found themselves amongst ravines; and although by having to follow their tortuous windings, their work was increased, it proved an agreeable relief to the monotonous level. In one of the ravines, a tree, protruding some ten feet from a bank, was discovered; it proved to be four feet in circumference. In its neighbourhood, several others were seen, all of them, be it remarked, of the same description as that found on Cape Manning. A second tree measured four feet in the round by thirty feet in length, and a third two feet ten inches round. Several pieces

were sawn off as specimens and fire wood. In appearance, Mr. Dean, our carpenter, declares it resembles larch, but in weight it bore a stronger resemblance to lignum vitæ, or iron wood; the additional weight was imparted by the soddened state in which it was found. When comparatively dry, it was tried as fuel, but its virtue had gone; it threw out little or no flame, but smouldered rather than burnt, like so much tinder. The position of this decayed forest (for three trees in this country, I consider entitled to the distinction) was, by supposition, about 400 feet above the level of the sea, being on the first step (descending) of the plateau, considered to be between 500 and 600 feet elevation. The trees were found in lat. $76^{\circ} 12' N.$, long. $122^{\circ} W.$, near the head of Walker Inlet.

After picking up their depôt at Cape Cam, the party proceeded to the N.W., intending to prosecute a search along the coast in that direction. But to the great disappointment of Meham, he found a cairn in lat. $76^{\circ} 15' N.$, long. $119^{\circ} 20' W.$, with a record left by Commander M'Clintock, who had attained this spot *from* the N.W. Meham now steered for the N. point of Eglinton Island, where further information was obtained of Commander M'Clin-

tock's movements*, and with great reluctance steered along the coast towards Cape Russell (the S.W. point of Melville Island), where he arrived on the 14th June. Water was first observed this day; the crew, as the sledge neared the land, wading knee-deep through the pools. In a little cove near the Cape, they found a piece of drift wood (fir), about eight feet long, which they used for fuel, though weather-worn, and in some places decayed. The heart of the wood proved to be sound, and gave forth a cheerful bright warm flame, that was pleasant to look at. Such was deemed a luxury, as the name of Comfort Cove was assigned to the spot. Here traces of rein deer were observed, and a pack of wolves seen making to the westward.

Whilst rounding Cape Russell, the left runner of the sledge was broken by a fall from a high hummock.

On the 18th June, Cape Smyth was reached. When about four or five miles to the westward, Lieut. Meham observed several animals in a broad

* Following down the east side, another cairn was found, about midway between the north and south points, with a note stating that both sides of the channel had been visited by Commander M'Clintock. Meham now crossed the channel to Ibbett's Bay.

ravine between the high lands skirting the sea. One being white, he supposed to be a bear; but on approaching within 150 yards, the animal proved to be a *rara avis* indeed, being no other than a white musk-cow, with a young black calf, about four months old, grazing beside her. A ship's length apart, another cow and calf, both black, were also grazing. On approaching, Mecham took his spyglass, in order to make sure of the fact, for he, in common with all on board, had never heard of the existence of such an animal.

His view of the cow was most satisfactory; there were the horns, legs, and hoofs, so that it was impossible to be mistaken. Before he came within the desired distance, the whole four animals made off, and ascended a steep hill with the agility of cats.

Pursuing his course to the eastward, along the N. shore of Liddon's Gulf, they arrived at Bushnan's Cove, where the remnants of Parry's cart, left in 1820, were found, as also a record of Commander M'Clintock, who had visited the Cove, from Captain Austin's Expedition, in 1851. During the time they were in Liddon's Gulf, they were obliged to regulate their journeys by the tides, like river navigation by ships, with this difference, viz., when the flood made, they were obliged to encamp, in consequence of the depth of the pools and the

slippery surface of the ice, which was of an old date. The water affected the feet of all, particularly the ankles, which were obliged to be bandaged.

At their autumn depôt, they found a cart, provisions, leather boots, and a budget of news, which had been transported across the land by Mr. Nares. Great difficulty was experienced in crossing the land, in consequence of the deep rapids that rushed through the ravines. On one occasion, cart and men were carried away by a torrent, waist deep. This, and similar accidents, suggested portages; for the men, when attached to the cart, were almost helpless in the water. No less than sixty-four (working) hours were employed in carrying these articles, during which time they only advanced twenty-two miles. No game was seen whilst crossing; but on their reaching Winter Harbour, Meham shot three young bucks. On their arrival on board, all were in good *bodily* health, though the feet remained tender for many days. One man, Nisbet, had lost sight of his right eye since the 10th of June.

Lieut. Meham, after bearing testimony to the able assistance of Mr. Nares, and the admirable conduct of the men, throughout a prolonged and arduous journey of ninety-four days, concludes his remarks as follows:

“In conclusion, I beg to state, that besides the absence of traces, being a negative proof that the missing crew have not visited any part of the land discovered during this journey, I have further to add, that the character and appearance of the pack driven against the land, and in every direction to seaward, thoroughly convinces me of the impossibility of penetrating with ships to the southward and westward, against such tremendous impediments.”

Rain was first observed June 21st, and lasted for five hours.

Game procured on the Journey.

Dates and Localities.	Musk-Oxen.	Reindeer.	Hares.	Puarnigan.	Brent Geese.	King-ducks.	Pin-tailed Ducks.	Plover.	Lemmings.
On Melville Island, during the month of April, and from June 11th to July 6th, inclusive -	4	4	15	15	5	2	2	2	Innumerable.
Eglinton Island, May 2nd to 4th, and June 8th and 9th - - -	-	-	-	6					
Prince Patrick Land, between May 7th and June 6th -	-	3	1	20					
Total number obtained - -	4	7	16	41	5	2	2	2	—

Table showing the distances travelled from H.M.S.S. "Resolute" and "Intrepid" (Captain Henry Kellett, C.B.), wintering at Dealy Island, 1852-3, with the animals obtained during the spring of 1853.

Left the Ship.	Officers' Names.	No. of Men.	No. of Days out.	Distance travelled.	Mean Daily Rate.	Position attained.		Returned on Board.	Game Procured.								
						Lat.	Long.		Musk Oxen.	Deer.	Hares.	Plarm.	Geese.	Ducks.	Plover.	Lemmings.	
Mar. 10.	Lieut. Pim - -	7	41	Miles. 370	Miles. 9.0	N. 74°6	W. 117°54	April 19.	5		3						
"	Dr. Donville - -	2	41	280	6.8	74°12	114°40	"									
April 4.	Mr. Roche - -	10	10	80	8.0	Point	Hearne.	Mar. 20.									
"	Captain Kellett	7	7	50	7.1			April 11.									
"	Com. McClintock	10	106	1170	11.0			July 18.	7	7	1	22	5	2			
"	M. De Bray - -	8	45	381	8.5	76°15	117°45	May 3.	4	1	1	5	5	4	2		
"	Lieut. Miccham -	7	94	1006	10.7	77°15	119°52	July 6.	4	7	16	40	5	4			
"	Mr. Nares - -	7	57	540	9.5	75°32	119°7	June 1.			12	5					
"	Lieut. Hamilton	7	14	90	7.0	76°31	109°38	April 17.									
"	Mr. Roche - -	7	24	145	6.0	75°31	110°12	April 28.	2	2		16					
April 27.	Lieut. Hamilton	7	55	578	10.5	76°33	104°50	June 21.									
"	Mr. M'Dougall	7	9	105	11.7	75°31	110°0	May 6.									
May 5.	Dr. Donville - -	7	37	260	9.7	74°6	117°54	June 10.	1		27	3					
" 7.	Mr. Roche - -	13	39	590	15.1	Beechey Island.	Island.	June 18.	4	1	2	9					
June 3.	Mr. Nares - -	4	11	123	11.2	75°5	111°30	June 14.	1			25		5			
May 19.	Lieut. Pim - -	7	21	180	8.6	Cape	Fisher.	June 9.		3		4		5			
June 14.	Mr. M'Dougall -	6	10	110	11.0	74°32	111°30	June 24.		2	1	8		7	2		
									24	23	63	137	15	18	4		

Too numerous to form an estimate.

The last of our exploring parties had now returned, and although we could not but deplore the death of poor Coombes, we were thankful to the Giver of all goodness for His merciful preservation of officers and crew, through hardships and privations, such as can scarcely be conceived, certainly not described.

The last week in July saw the depôt house and cairn on Dealy Island completed in every respect; with all information respecting our discoveries and future proceedings, as also a descriptive chart. Nothing I believe was forgotten, as will be seen in the list of contents. Both cairn and house are built of such stout materials, as will enable them to withstand the effects of time and weather for ages.

Water had now made for some time alongside the ship, and around the shores of Dealy Island, and the main land; the ship, however, was still bound, or, more properly speaking, "ice borne." Operations in sawing and blasting were therefore commenced, and the ship was at length released from her icy cradle, and supported by her own element, on the 28th. Her draught proved to be fourteen feet six inches forward, and fourteen feet seven inches aft. She was therefore nearly on an even keel. But in consequence of our having lost

so much of our false keel (about sixty feet from the heel forward), the vessel required to be brought by the stern to ensure her working quickly. The following day, two tons more of gravel was stowed in the spirit room, and several heavy articles removed from the fore peak, and placed in the magazine passage under the Captain's cabin.

During the first few days in August, the masts were stayed, and the rigging set up fore and aft, ratlines repaired, rigging blacked, ship painted inside, sails bent, hawsers coiled, and indeed every other arrangement made necessary to complete the ship for sea; water was completed to forty-four tons, the quantity required for the ship being procured daily; by these means we were enabled to keep our sea stock untouched.

In addition to the pools which had now made for some time on the floe, there were many cracks around the ships, some of them being too wide to leap with the pole. The prospect in the offing, however, from the summit of Dealy Island, was anything but encouraging; scarcely a movement had yet been detected, and we all hoped soon to be favoured with a strong breeze to put the floes in motion, and anxiously looked forward to the 18th, as the day of liberation. Writing of tide, reminds

me of having failed to state, that the time of high water at the full and change (at Dealy) was one hour thirty-nine minutes.

Up to this time we have been unable to decide, by actual experiment, the direction of the flood and ebb tides, but hope to do so ere we quit this locality.

August, 4th. — A fresh breeze from N.N.W. caused a slight movement in the ice, closing the canals of both ships, but without imparting any important change to our former prospect.

Some considerable time back, it had been suggested to have trials of speed amongst the officers and men on Dealy Island, but the duties of the ship had postponed their coming off—from day to day—until Monday, 8th, when officers and crews of both vessels assembled on shore. Of the races, which were numerous, the following were the most interesting, viz., — Captain Kellett, — carrying Commander M'Clintock,—ran fifty yards against Mr. Pim's hundred, and won by eight yards. Mr. Nares accomplished 100 yards in fourteen seconds, and the same officer did 300 yards in forty-six seconds! Prizes were awarded to the seamen who ran, from a fund arising from the stakes of the officers. It was very amusing to perceive the excitement which pre-

vailed during the races; officers and men laughed, shouted, and enjoyed themselves to their hearts' content. Tents, flags, &c., enlivened the scene; but it was judiciously arranged by Captain Kellett, that neither grog nor beer should be administered during the races, but that the main brace should be "spliced" after supper. More money might, perhaps, change hands at Ascot or Epsom races, but I doubt if greater mirth, or more pleasure, could have been derived from witnessing either, than what will be remembered by those present as the ever memorable Dealy Island races.

On the 10th, Mr. Nares was despatched in a whale boat, with five men, provisioned for five days, to the eastward, through an open crack, about half a mile from the ship. He was, if possible, to proceed to Point Griffiths, in order to examine into the state of the ice in the offing, and up Byam Martin Channel. He returned on the 13th, having only reached Skene Bay, beyond which the floes appeared compact.

Previous to leaving our winter quarters, I deemed it advisable to ascertain the variation of the compass, with a view of detecting any change that may have occurred in the magnetic curve since last year.

To my surprise several sets of observations,

though taken with great care, differed materially from the variation I had considered as established. The cause of this perplexed me for some time, until the thought struck me that the needle might possibly have lost its magnetic influence. Acting on this, I re-magnetised the needles, and had the satisfaction of finding the result of my observations agree, within a few minutes, with the variation found in 1852.

Wednesday, 17th.—A strong breeze from the S.E. set the floe in the offing in motion, closing the lanes on the south and east shores of Dealy Island, and nipping the ice up on the shore. Towards the evening the wind gradually veered to E. N. E., and blew a whole gale, nipping up the floes in all directions. We were therefore not surprised, when, at *midnight*, the ice around the ship began to break up; the stream chain and large anchor (formed out of stream anchor of last expedition) were laid out, in addition to the hawser.

At 3 A.M. the wind veered round to north, and the floe to which the vessels were secured began to move to the southward; the ships of course driving with it. It now blew a violent gale, with a pitiless fall of hail and snow, which utterly prevented any attempt being made to bring on board the water-

engine, and small boat from the shore. At noon we were about four miles and a half south of the island. The floe * to which the vessels were fast had, about 11 A. M., separated about three-quarters of a mile to the westward of our position, so that we were now just that distance within a tongue or point of ice,

* Much surprise has been excited by the numerous articles on Beechey Island, and their presence quoted as a proof of the hurried manner in which the "Erebus" and "Terror" left their winter quarters. In this opinion I now concur, and I do so the more readily, after the strange and unexpected movement which routed us from our position, off Dealy Island.

The afternoon the gale came on, we had been watering ship, and had left the engine on shore, as well as a light boat, which had been useful in carrying the parties to and fro across the lane of water, that had now existed along the shore for some time. Both were left on the beach, for, on moving, we had not time to send for them, and eventually (during the forenoon) the wind blew too hard to render even an attempt being made to bring them off. The "Intrepid" also lost a boat (dingy), but it came off with the floe; the numerous cracks, rotten ice, and boisterous weather rendered approaching her unsafe, and she was therefore abandoned to her fate.

Should any subsequent explorers visiting Dealy Island fail in finding records (this is only a supposition, for the cairn and house are too prominent to be overlooked), similar ideas would be entertained respecting our departure.

The conclusion I therefore arrive at from the above facts is, that destruction, or even danger, is not necessarily attendant on vessels being forcibly expelled from their winter quarters, even during a gale of wind.

about half a mile broad, the weather edge of which was rapidly breaking up by the combined efforts of wind and sea; the latter in the clear water was now considerable, as was apparent from the increased undulation of the ice. At 1 P.M. the "Intrepid" was ordered to "get up steam," in the hope of her being able to tow us round the weather-edge of the floe, when the wind (from N. N. W.) would have been favourable for the ship's intended easterly course.

Beating against such a strong breeze,— or rather gale,— was quite out of the question, even with the assistance of the strong flood-tide, which was now setting to the westward with sufficient velocity to prevent the ship being wind-rodé.

Shipping the rudder, we awaited the "Intrepid's" assistance; but ere her steam was up, the point of the floe broke adrift, and she passed astern of us. We now perceived the floe had been coach wheeling (turning round) with the sun, thus bringing the ships more on the weather edge. Seeing the advantages to be derived from this event, we strained every nerve to force her along the edge of the floe, through loose pieces which had congregated against the weather side. But blasting and heaving availed us but little, and after much useless exertion we were

compelled to desist, and await our liberation by the continued movement of the ice. As the barometer had fallen in an inverse ratio to the wind, its fluctuations were closely watched, and we had the pleasure of perceiving an evident rising during the afternoon.

At eight, the gale having subsided somewhat in violence, we again commenced heaving and blasting through the border of loose ice hampering the ship, assisting her occasionally with the sails. At 9-15 she cleared the last piece of ice, and once more gracefully rose and fell to the disturbed sea, the strange unusual motion causing unpleasant sensations to those most susceptible of sea-sickness. About this time we caught occasional glimpses of the land about Points Palmer and Ross, which enabled us to steer a course along the coast; for, as I have before observed, the compasses were worse than useless.

The "Intrepid" cleared the ice a short time after us, and soon joined company, we being under very easy sail. Soundings every half hour from thirty-three to forty fathoms.

Friday, 19th, at 1 A.M., just as sail had been made, and all were in high spirits with such a splendid run in prospective, for no ice had been

observed to bar our progress up to this period, a block was announced from the crow's-nest, extending from Point Griffiths to the southward, being a part of the main pack, now about one mile on our lee beam, and about six from the land.

As repining was useless, nothing remained but to assume a philosophical indifference about the event, which, by the bye, was truly only an *assumption* with many. We now shortened sail, wore, and hove-to on the other tack, awaiting the desired change.

At four we again stood towards the eastward, and reached mid-channel between Point Griffiths and Byam Martin Island, where the stubborn ice again arrested our further progress, and obliged us to lower our flag to such an invincible enemy. The remainder of the day was employed in working to the northward, along the pack edge in Byam Martin Channel.

Saturday, 20th.—Calm, foggy weather, with occasional clearings. At 9·30 A.M. "Intrepid" took ship in tow, and proceeded to the northward, along the pack edge.

At 2 P.M. the termination of the water to the northward was perceived from the crow's-nest, and at six we secured to a floe piece, in sixty fathoms,

as the dense fog and drizzling rain which prevailed prevented our descrying objects beyond 100 yards. The breeze was now from the S. E. ; but as there was ice between us and the land, we were not uneasy at its close proximity, more particularly as the soundings during the day had been such as to lead us to look for a moderately steep shore.

At 10·30 we had decreased our water to forty fathoms, and suddenly to eleven and twelve fathoms (mud). At this time there was but one course to pursue, and that was to shift our berth to the end of the lead we were now in, distant about half a mile; there make fast, and await the result. This was accordingly done, and by midnight the ship was again secured in twenty-three fathoms, the ice slowly but surely surrounding her.

The uneven nature of the ground, and continued foggy weather, made us rather anxious about our position, which at noon was supposed to be about five miles N.E. of Consett Head. The soundings during the forenoon varied from seventeen to twenty fathoms (mud).

At 2 P.M. the fog to the westward lifted for a few minutes, enabling us to catch a transient glimpse of the shore (Melville Island), about two miles distant. This was quite near enough, under the pre-

sent circumstances ; but we had the satisfaction of perceiving sufficient ice between us and the beach, to prevent any danger of touching the ground. Our assumed position was not far out.

In this helpless state, beset in a driving pack, we drifted slowly to the southward, under the influence of a N.N.W. wind, at an average distance of one mile and a half to two miles from the shore.

At 11 P.M. on Monday, I left in a cutter to sound between the ship and the shore. I found the bottom very irregular, not unlike the undulating nature of the ground skirting the sea. Our soundings from the ship were 12, $11\frac{1}{2}$, 11, 10, 9, 8, $7\frac{1}{4}$, 11, 13, 15, and then a gradual shoaling to $2\frac{1}{4}$ fathoms alongside the grounded ice, about 100 yards from the beach. Several flocks of ducks and one or two seals were observed.

Taking advantage of our varied positions, as we drifted about the channel, we were enabled to correct the coast line between Consett Head and Point Griffiths ; as also the tangents of Byam Martin Island, whose north point appears to be laid down about eleven miles too far north. This, supposing Cape Gillman to be correct, would shorten the island that distance.

During the evening of the 23rd, a considerable

body of water was observed to the southward and eastward of Point Griffiths, and at 7 A. M. on Wednesday, observing that the water off the point had increased during the night, the "Intrepid" was ordered to get up steam, and before eight she had us in tow, proceeding to the southward, between the pack and the shore. The morning was beautifully clear, without a breath of wind: the pack appeared loose and disconnected altogether in many places, and we were all in high spirits with the hope of being able to push through the pack, as far as Cape Gillman.

After passing Point Griffiths, we edged away to the S.E., towards an indentation in the pack. As we approached, the prospect to the eastward looked less cheering than heretofore; for although a detached lane of water of considerable length existed about mid-channel, the means of approaching it were indirect and circuitous, entailing our pushing through the pack, which, though still loose, was, on a closer inspection, much more compact than we had imagined. The Captain therefore decided on casting off, and awaiting a more decided change, in order to avoid the possibility of being beset in a driving pack.

At this time, about 1 P.M., we had a light breeze

from the S.W., and we worked up for Point Griffiths under easy sail. At 4 P.M. I left, to sound along the floe edge extending between Point Griffiths and a low point to the northward five miles distant. The bay between the points was from one and a half to two miles deep. The floe was about five feet thick, and had evidently borne considerable pressure, if one might judge from the masses of ice thrown up in all directions.

As was supposed previous to leaving the ship, I found quite sufficient water (from thirteen to eight fathoms) along the fast ice, which quite filled the little bay, its outer edge forming nearly a straight line from point to point.

As night came on, we again had dull misty weather, with but little wind. Towards 8 P.M. I witnessed the most extraordinary ice-blink I had ever seen; its appearance was most deceptive; for although we knew that, in certain directions, we were not within miles of the ice, the blink appeared so bright as to induce some to imagine we were within a few hundred yards of the pack.

During the night we kept off and on, between the point and pack.

CHAP. XIII.

Anecdotes of Lemmings.—Death of Three Musk-Oxen.—Detention at Point Griffiths.—Ten Musk-Oxen killed.—Capture of Four young Foxes (alive).—Skating on the Ice.—Provision “Intrepid.”—Ship arrested by Sludge Ice.—Return to Point Griffiths.—Musk-Ox Hunt.—“Intrepid” leaves to examine state of Ice.—Join “Intrepid” to the Eastward.—Ship beset in young Ice.—Tremendous Squall.—Heavy Gale.—Vessel driven to the Southward.—Ship sustains considerable Pressure.—Vessel drifting in the Pack.—Preparing for second Winter.—Vessel on the Magnetic Meridian.—Build a Snow Wall around the Vessel.

THURSDAY, 25th August, 4 A.M., wind fresh from S.W.; thick misty weather; ran in, and secured to land ice in eight fathoms, “Intrepid” in company. In the course of the afternoon, the pack closing, the “Resolute” was shifted round a projecting tongue of the floe, and secured with stream chain and large anchor. Pack moving up Byam Martin Channel, leaving the ship in a pool, but surrounded by small detached pieces of ice.

Friday, 26th.—During the middle watch, the

officer on deck was amused by watching the gambols of a lemming close to the ship. After a series of extraordinary antics, the little animal deliberately leaped into the water, and apparently enjoyed the bath, for it repeated the operation several times. This was something new to us, for, up to this time, we had supposed lemmings could not take the water with impunity; for many others, as well as myself, on our return to the ship, late in the season, observed scores of dead lemmings in pools on the floe, from which facts we had arrived at the conclusion of their having been drowned.

Several amusing anecdotes are told of this little creature by the officers of the various travelling parties. Lieut. Mecham observes, that, on one occasion, Buffer (an Esquimaux dog) was trudging along, nose to the ground, quite unconscious of danger, when a lemming, suddenly starting from its cavern, seized poor Buffer by the nose, inflicting a severe wound. The dog, astounded at such an unexpected assault, gave a dismal howl, and at length shook the enemy off; after which he became the attacking party, and, in less than a minute, the imprudent lemming disappeared between the jaws of the Tartar he had attempted to catch.

My own experience of those industrious little warriors tended to prove they possessed a strange combination of sociality and combativeness. Industrious they most certainly are, as is proved by the complicated excavation of their subterranean cities; besides which, every feather and hair, of bird and animal, found in the vicinity of their dwellings is made to contribute its iota of warmth and comfort to the interior of their winter quarters.

I had many opportunities of watching their movements during my detention at Winter Harbour. My tent happened to be pitched immediately over one of their large towns, causing its inhabitants to issue forth from its thousand gates to catch a view of the strangers. Frequently, on waking, we have found the little animals, rolled up in a ball-like form, snugly ensconced within the folds of our blanket bags; nor would they be expelled from such a warm and desirable position without showing fight. On several occasions, I observed Naps (the dog) fast asleep, with one or two lemmings huddled away between his legs, like so many pups.

On Friday afternoon seven musk-oxen were seen near the beach. During this as well as the three following days, the pack rendered any attempt to

move to the eastward useless. On Saturday I obtained lat. $75^{\circ} 6' 57''$ N., long. $106^{\circ} 5' 15''$ W. The variation proved to be 152° E.

Monday, 5 P.M.—Lieuts. Mecham and Pim, with six men and a sledge, left to attempt the slaughter of the musk-oxen. Shortly after they landed, we saw two out of a herd of five fall beneath the fire of the party; and at 10 P.M. they returned with the carcasses of three musk-oxen and four hares: the weight of beef amounted to 362 pounds. Ducks, geese, and ptarmigan were observed; the ground formed good pasturage, and there is little doubt but these quarters would prove to be good hunting-grounds.

It was on this occasion that our dogs proved themselves to be possessed of a greater share of sagacity than they were supposed to possess.

On the arrival of the party with the carcasses, the dogs set off for the shore, at the distance of one mile and a quarter, and on their return, about an hour afterwards, showed evident signs of having feasted on the offal of the slaughtered animals.

Thursday, 30th.—At 10.30 A.M. the "Intrepid" slipped, with a light breeze from N.N.W., and stood out to have a closer inspection of the pack than could be obtained from our crow's-nest; the young

ice alongside proved to be three inches thick. The Captain and several officers landed during the forenoon, returning at 2 P.M. with fifteen ptarmigan: many more were seen. The "Intrepid" ran in, and secured at 10 P.M.

Wednesday, 31st.—Calm and fine. Pack from the crow's-nest appeared much slacker than we have yet seen it; ten musk-oxen and four hares were seen. A party was despatched to secure the former. With the aid of our telescope we saw the slaughter from the ship, and immediately forwarded three sledges, and twenty-five men, to the scene of action, for the carcasses. At six the party returned, bringing with them the whole of the ten animals seen this morning; the weight of meat procured amounting to 1590 pounds. Strange to say, they had all fallen within thirty yards of each other. Two hares, two ravens, and several boat-swain birds were also brought on board by some of the officers, who had landed for a few hours' sport.

Thursday, 1st September.—Calm and fine. Prospect of release not improved; twenty more musk-oxen were observed (to the S.W.) from the crow's-nest, but they were too distant to detach a party under present circumstances. We now began to entertain

doubts whether or not we would succeed in reaching Beechey Island, for the ice was quite as compact in the channel as the day we first sighted it. Some of us, however, more sanguine than others, hoped the next spring-tides would cause a change in the ice, and enable us to effect our liberation. Twenty-three ptarmigan were procured this day.

Friday, 2nd. — Early this morning, a couple of musk-oxen were seen quietly grazing near the beach to the S.W. Meham and Donville went in pursuit about 7 A.M., and at nine we saw the animals killed from the ship. This proved to be one of the finest and warmest days we had experienced for some time; but, alas! the ice to the eastward remained as impenetrable as heretofore.

At 1 P.M., the carcasses of the musk-oxen arrived, weighing 340 lbs., which may be considered as a fair average during the autumnal months. This is considerably above the average throughout the year, which is imagined to be about 160 lbs. Twenty-one ptarmigan also fell victims to the rangers of the day. An old she-fox, with six of her young cubs, was surprised by Mr. Dean, who killed the old fox, and captured four out of the six young ones.

Saturday, 3rd.—Light westerly air. Ice in offing

to the eastward much slackened since yesterday. At 9 A.M. a lane of water was seen about mid-channel, the pack between it and our position apparently being sufficiently slack to reach the lane without any great difficulty.

At 10·15 made sail to single reefed topsails, and top-gallantsails; slipped and ran down to a bight in the pack, nearest the above-mentioned water. We found the lanes and pools had closed considerably. Made fast to the pack edge, awaiting a change.

The pools on the ice were now strong enough for skating, and all the skates were put in active service.

Sunday, 4th. — A light easterly air caused the pack to close with the shore. At 1·30 P.M. cast off from pack edge; ran in and secured to land floe near our former position, at the edge of the fast ice. A seal was shot during the first watch.

Tuesday, 5th. — The wind, early this morning, gradually increased to a strong breeze from the S.W., with a dull, gloomy, threatening sky; and as it required no prophet to foretell the approach of bad weather, the stream chain and large anchor were got out in addition to the hawsers.

During the forenoon, all hands were employed

completing the "Intrepid" with provisions up to 1st April, 1854, a precautionary measure adopted by the Captain in the event of our parting company.

The pack edge, during the day, moved slowly off to the eastward. The weather cleared as the evening advanced, and at eight the pack edge was just visible from the spike plank. Anticipating a movement early in the morning, the rudder was shipped during the first watch, in order to be in readiness.

Wednesday, 7th. — At eight slipped and ran down before a strong N.W. breeze to the pack edge, and skirted it along to the southward, until we had satisfied ourselves that no "lead" existed to the eastward. We then stood to the northward, without perceiving any opening. The wind had now increased, with occasionally heavy squalls, one of which carried away our jib-sheet pendant. About 3 P.M. we again secured to the floe, in our old position of the 1st inst.: weather boisterous, with a heavy drift during the evening.

Friday, 9th. — At 1.30 A.M. slipped from the floe, and stood to the eastward under double-reefed topsails and top-gallantsails. At 2.15 the ship was brought up by a mass of sludge, several inches

thick, supposed to be the accumulation of yesterday's drift.

It effectually arrested our progress, and it was not without some difficulty, even with the assistance of the steam tender, that the ship was extricated. At 6:30 A.M. the land floe was again reached; at nine we shifted to position of yesterday.

During the forenoon, no fewer than thirty-five musk-oxen, in different herds, were observed at one time from the crow's-nest. At noon, a party consisting of Mecham, Haswell, Miertsching, and myself, accompanied by two men,—making in all twelve barrels, — landed in the cutter to go in pursuit of the nearest herd of seven oxen, quietly grazing abreast of the ship.

As this was the first opportunity I had of killing any musk-oxen, I shall not apologise for giving an enlarged account of the afternoon's sport. On landing, word was given to the boat's crew to follow, but to keep well in the rear, to avoid frightening the animals. On our approach, the herd congregated closely together in line, with their heads towards us, the calves being in the centre. We now spread out our little force into the form of a crescent, and advanced in open order to within about twenty yards of our prey. A little shuffling

was the only movement we observed on closing, but with heads lowered, they awaited the attack in silence.

They really appeared very formidable, drawn up as they were with their huge ungainly heads, enveloped in dark, shaggy hair, ready for the charge. Waiting until all were prepared, we fired together; for a moment they stood, and thus enabled us to take accurate aim with our second barrels. No sooner had they received the contents, than the poor brutes, all wounded, maddened with rage and pain, dispersed in all directions. Before we loaded to go in chace, two out of the seven had fallen. Leaving them to be skinned by the boat's crew, we set out after the wounded animals. Two of them were making to the westward, along the beach; whilst the other three took inshore. Mecham and I, accompanied by one of the men, followed the latter; whilst Miertsching and Haswell pursued the former. The result was, that not only none of the seven escaped, but four others were killed out of a herd of twelve, which were descried a mile or two to the westward.

Before they were seen, I had returned with one of the men to skin a bull, whereby I was prevented from taking part in the latter exploit. Thus in the

course of a few hours, no less than eleven animals were killed, the quantity of meat obtained being 1970 lbs. ; this divided by eleven, gives an average of $188\frac{1}{4}$ lbs. (nearly). The same evening, another (calf) was shot by Mr. Newton (Ice mate).

Saturday, 10th. — Wind fresh from W.N.W. Early this morning Captains Kellett, M'Clure, and M'Clintock held a consultation in the cabin, with a view to decide on our future proceedings. At 9·30 A.M., Captain Kellett left in the "Intrepid," to ascertain the state of the pack to the eastward ; for there were some doubts whether the ice on the horizon, was the pack or not, our distance from it precluding any opinion being given, beyond mere conjecture.

Before going, the Captain left orders to hoist up provisions sufficient to complete "Intrepid" for seventy men up to the 1st of June, 1854. We therefore supposed the Captain contemplated despatching the "Intrepid" alone (after increasing her crew to seventy souls), if the state of the ice was such as to induce him to imagine the "Resolute" would impede the progress of her tender. The "Intrepid's" motions were closely watched from our mast-head. At noon she bore east—

distance about six miles — at that time running down to the southward.

At 3 P.M., we observed the "close" pendant at the fore, and the general recall at the main of the "Intrepid." We therefore slipped, and making sail, to double-reefed topsails and top-gallantsails, ran down to rejoin her.

At 5 P.M. hove-to, in young ice, alongside "Intrepid." Captain Kellett returned on board, and informed us that water, or rather very young ice, was all that lay before us to the eastward.

We were prevented from obtaining a view from our crow's-nest, as the weather had set in gloomy. We now hove up before the wind, and shook the reefs out of the topsails. At 6:30 a momentary view of the sun, enabled me to obtain a true bearing. The wind proved to be N.N.W. This circumstance I reported to the captain, as I imagined a S.S.E. course would take us too far to the southward. A few minutes afterwards the ship was "brought up" by young, sludgy ice.

Supposing an increase of sail would probably force the ship through, every stitch of canvas was set on both sides, but with no effect.

At length a boat was got under the bows, with a tow rope from the jib boom, one or two four



S. P. M. D. 1901

Two large sailing ships on the water

M. & H. 1901

pound charges sunk and exploded, and by dint of rolling the boat from side to side, we again made slow progress, through the sea of sludgy ice by which we were surrounded. About eight the “Intrepid,” having been recalled by two guns, ranged alongside, and a hawser was thrown to her; and up to 11 P.M. we were alternately ranging ahead and stationary. By this time the studding sails had been taken in, and it was now apparent to all on board, that even with the assistance of the tender, the rapidly increasing ice was too formidable for us to contend against.

We therefore cast off, and were brought up within about 200 yards of each other, a few detached pools being the only water in sight. The night had now set in dark and gloomy, with heavy squalls, and falls of snow, our prospects of release being in keeping with the weather.

At 11:30, the ship, having her topsails and jib set, was struck by a tremendous squall, causing her to careen considerably; the jib was hauled down, and the topsails lowered. Fortunately for the safety of the two vessels a small field of ice lay between us and the tender, which prevented our coming in contact.

Our situation, to say the least of it, was un-

pleasant enough. Here we were beset in young ice five inches thick, in an open strait, at the close of the short navigable season, with a heavy gale from N.N.W., which we all felt must be setting us to the southward. It was evident however, that no efforts on our side could improve our prospects. Confiding ourselves therefore, to the All-merciful Providence, whose protecting arm had been extended to each and all, through our adventurous lives, we retired to rest amid the howling of the storm and grating of the ice, as the ship occasionally forged ahead, sounds which tended to lull us to sleep, much required by all on board.

From noon, on the 9th, when the aneroid stood at 29·70, the barometer gradually fell until 3 P.M. on the 10th, when it was registered at 29·26, remained till midnight at 29·27, and then rapidly rose to 29·83 at 3 P.M. on the 12th.

The following morning, Sunday, 11th, the wind still blew with great violence from N.N.W., accompanied by strong squalls and heavy falls of snow. The prospect from the crow's-nest was disheartening; for with the exception of an occasional thread of water, nothing but ice met our view; and we could not conceal from ourselves, that in all probability we were doomed to pass the

dreary months of the approaching winter in the pack, the dangers attending which are vividly depicted by Lieut. (now Captain) Symth, in the narrative of Captain (now Sir George) Back, during his voyage in the "Terror," in 1836-37, and later still by the American Expedition in 1850-51.

Lieut. Mechem and I, during the morning watch, thought we perceived the loom of the shores of Melville and Byam Martin Islands, the extreme south point of the latter, bearing S.E. In this, however, we must have been mistaken, as the weather cleared for a short time during the day, when no land was in sight; besides which, our approximate latitude at noon was $74^{\circ} 50' N.$, which would place us too far south to have Byam Martin Island bearing as above.

Monday.—Wind still strong from N.N.W., with occasional heavy falls of snow. I fortunately obtained good sights for time, but only succeeded in getting an indifferent latitude. Our position at noon (only approximate) was lat. $74^{\circ} 41' N.$, long. $105^{\circ} 54' W.$, thus placing us near the meridian of Point Griffiths, whereas from the winds, and supposed easterly set, we expected to find ourselves near the meridian of Cape Gillman.

Tuesday. — During the afternoon, the land of

Byam Martin and Melville Islands was distinctly seen from the crow's-nest. At noon, good observation for latitude and time, placed us S. 40 W., twenty-three miles from Cape Gillman. "Intrepid" E. N. E., about 700 yards.

Saturday, 17th. —Just before midnight the ice became in motion, causing considerable pressure on the ship. This continued throughout the night, accompanied by loud rumbling noises, with a succession of sharp reports, not unlike the explosion of artillery; then would follow doleful singing sounds, occasioned by the sudden escape of the pent air.* It would almost be impossible to conceive anything more dispiriting than these discordant sounds, breaking suddenly on the stillness of the night, accompanied as they always were by the creaking of beams and bulk-heads, as the vessel laboured beneath the pressure of the moving pack. These noises continued without cessation during the middle watch. At three, the ship sustained a heavy pressure, which listed her to port

* Reminding one of the "Ancient Mariner's" description:—

"The Ice was here, the Ice was there,
The Ice was all around:
It crack'd and growl'd, and roar'd and howl'd,
Like noises in a swound."

about 5°, and caused the ice on that side to rise nearly even with the gunwale. At 4 A.M. the motion ceased, and with it the disagreeable sounds. We were thus enabled to obtain a few hours sleep.

At 3 P.M., just as we were sitting down to dinner, the ship suddenly forged ahead her own length, but at four she was again quiet. During the last disturbance, the distance between us and the “ Intrepid ” was decreased to about 400 yards.

We now commenced provisioning the “ Intrepid,” as well as stowing a quantity on deck for our own use, in the event of our being obliged to desert the ship. The carpenters were also busy making sledges, whilst the old ones, after undergoing repairs, were relashed ; and placed on the floe ready for service in case of emergency.

The alteration in our position depends in a great measure on the prevailing winds, which exercise so great an influence on the ice ; but I think our continued, though slow advance to the eastward, is in itself a sufficient proof there is a constant set in that direction. This need not be a current, but may be attributed to the almost immovable nature of the pack between Cape Dundas and Banks’ Land ; whilst to the eastward there is a continual

drain through Lancaster Sound, by the exit of the ice into Baffin's Bay. I intend a few pages on showing in a tabulated form our drift since entering the ice.

Thick dense fogs and dirty weather generally prevailed throughout the month, caused no doubt, by the exhalations arising from the numerous cracks and pools around the ship.

Tuesday, 20th.—Commenced preparations for a second winter, by unreeving running rigging, sending down top-gallant yards, and unbending flying-jib and trysails.

Wednesday, 21st.—By good observations for latitude and longitude, found ourselves on the meridian of Cape Gillman, distant thirty-three miles, having drifted within the last two days, S.E., eight miles.

Soundings were obtained each watch, and proved the bottom to be very irregular.

Sunday, 25th.—Wind from the southward again set the ice in motion, it did not however effect the ship, now firmly fixed in an icy cradle, formed by layers of young ice being detained under her bottom, to the depth of twenty feet, as was ascertained when digging a fire-hole close to the port beam.

This day a lane formed, N.W. by N. and S.E. by S., several miles in length, and from ten to twenty feet broad, the nearest part being thirty yards from the ship.

Monday, 26th September.— The boats were lowered on the ice, slung bottom up, and again secured to their respective davits for the winter; the object of keeping them in this position was to prevent snow from accumulating in them.

Ridge spars were secured aloft the next day (thirteen feet from the deck), and the sidespars (studding sail booms), lashed fore and aft, eight feet from the deck. The centre spars were the two hand masts, for main and quarter-deck housings; whilst the spanker-boom served for the same purpose abaft. Our head being to the southward, we prepared for nailing down the housing abaft, leaving an opening forward, northerly winds being expected to prevail. I have omitted to state that the top-gallant masts were sent on deck, and mizen-top-mast housed; stays and backstays being secured, in order to prevent noise during boisterous weather.

On the 12th of this month, the rudder was unshipped, and secured across the stern.

The fore and after parts of the upper deck were now snowed in, to the depth of nine inches on the

starboard side, increasing to nearly two feet on the port side, in order to have a level surface ; the ship, as I have before stated, having a list to port of about 5°. On the surface of the snow was placed a layer of arctic cement, composed of water, snow, cinders, and gravel, well mixed together, until the ingredients attained the consistency of thick sludgy ice. When hard enough, hawsers, and casks from main hold, as well as summer hatches, and various other articles, were stowed for the winter.

The weather on the whole, during the past month, has been very thick, damp, and misty, the temperature however, has been moderate, which may be attributed to the proximity of the water. Since the cessation of the gale on the 10th, we have experienced nothing stronger than a moderate breeze, and in all probability we will not have so much wind the ensuing winter, as we were favoured with at Dealy Island, where both the direction and force, were no doubt influenced by local causes.

October set in with strong breezes, and a heavy fall of snow ; the wind in the course of the day fluctuated considerably, veering from S.E. round by W. to N.N.W. On the 5th, the pack on the other side of the crack (which had opened and closed alternately for the last few days) now began

to move slowly to the northward, but without any great effect, save the crushing and grinding, of the edges of the opposing floes. The thickness of the ice this day, by actual measurement, proved to be sixteen inches.

The following day, the 6th, weather beautifully fine and clear, enabled me to obtain good observations for latitude, longitude, and variation; the results obtained were as follows, viz:—lat. $74^{\circ} 29' 25''$ N., long. $102^{\circ} 9' 30''$ W.; variation, $179^{\circ} 40' 0''$ W. Confident as I am of the observations, and computation, I think this position may fairly be taken as a point in the magnetic meridian. The crack this day opened thirty feet.

On the 10th a strong gale sprung up from E.S.E., with heavy squalls and drift, setting the ice in motion close to the ship. The following day the gale arrived at its height, and blew a perfect hurricane between 10 A.M. and noon, after which it gradually moderated, the wind shifting at 4 P.M. to S.S.W.; the barometer at this time 29.08 began to rise rapidly. The soundings having gradually decreased, gave us reason to imagine we had made considerable northing; this supposition was verified on Thursday, 13th, when, at 10.30 A.M., land was observed, bearing W. by N. (true). Our observa-

tions this day placed us in lat. $75^{\circ} 4' 17''$ N., long. $102^{\circ} 33'$ W.; so that since the 10th, when we were in lat. $74^{\circ} 34'$, and about the same long., we have been drifted N. $\frac{1}{2}$ W. thirty miles. This day, commenced banking up around the ship. The snow wall was five feet thick; outer side, four feet in height, and sloping from thence to the ice chock.

The outer parts were neatly built of blocks of young ice, placed with line and plummet; the space then filled in with loose snow, which by actual experiment, has been found to increase the temperature of the ship's side by nearly 30° . This increase of heat is not the only advantage, for an additional degree of dryness necessarily follows; so that one comfort, dependent in a measure on those two essential points, is ensured.

CHAP. XIV.

Attempts to ascertain Daily Drift. — Arctic Sculpture. — Main Deck Housing secured. — Cover Upper Deck with a layer of Snow, &c. — Death and Burial of Poor Sainsbury. — Winter Lectures commenced by Domville. — a *Lyræ* (*Vega*), 1st May, seen at Noon. — The Theatre. — Domville's Second Lecture. — Studious Character of the Crew. — Moonlight. — Christmas Day in the Arctic Regions. — Christmas Dinner in the Gun-Room. — Electric Telegraph; its Successful Working. — New Year's Day. — The Lost Man.

ALTHOUGH the weather was somewhat misty on the 14th October, we observed for the first time the range of heavy hummocks on the shoal discovered by Sir Edward Parry, at least we supposed them to be the same, from their position; and from the fore-top, lanes and pools of water, extended as far as the eye could reach in all directions; whilst from an unmistakable water sky, in the direction of Cape Cockburn, we imagined a considerable body of water existed in that quarter. Our soundings during the forenoon had decreased to forty-eight fathoms.

It is a strange, and somewhat anomalous circumstance, that notwithstanding the fury of the late gale, and the rapidity with which we had been driven to the northward, we on board the ship did not experience the slightest motion; indeed save the alternate opening and closing, of the crack beside us, we observed no appearance of any movements in the main body of ice.

On Sunday, 16th, we again obtained observations that could be relied on: the result placed us in lat. $75^{\circ} 1' 41''$ N., long. $102^{\circ} 25' 30''$ W. Cape Cockburn E. 5° , N. thirty-two miles. This would give a drift of about three miles in a S.S.E. direction in three days; this agreed with supposition.

Several methods have been attempted to ascertain the daily drift, but in my opinion all failed. One, though simple, was ingenious, and theoretically correct, but practically not so, at least, in my opinion. I shall attempt to describe the process. The deep-sea line with two leads attached, gave the perpendicular height from the bottom (say sixty fathoms), the line was then veered away, say 100 fathoms, which formed the hypotenuse of a right-angled triangle, the bottom, of course, being the base. With the perpendicular and hypotenuse, the value of the base (or distance drifted) can

easily be computed ; the direction was ascertained by eye. My reason for placing no reliance on this method is as follows : — the ice during the pressure of the ship had, as I have before remarked, doubled under the ship's bottom to the distance of twenty feet ; and I maintain it to be impossible to ascertain the course of the drift within four points, by a line dragging against the always ragged ice, at the bottom of a hole twenty feet deep, by four or five feet square. Had we a larger surface of water to work on, then I am willing to admit the usefulness of the operation.

With respect to the distance, the results are, I believe, more defective than the direction ; for I have — by actual experiment — repeatedly found that the ragged ice beneath the surface often held the line at the *marks*, and thus prevented its paying out.

During the month snow pillars were erected between the two ships, in order to guide the wayfarer across the floe ; several of them were converted into statues by the knives of the men, and in one — a grotesque caricature of one of themselves — in order to increase the resemblance, they placed black buttons for the eyes ; and an old pair of boots made the figure perfect.

During this month, several corks of the lime-juice bottles had been forced out by the action of frost. On examination, no less than forty-eight pounds were found deficient. The cases containing these bottles were stowed in gravel ballast, which we thought would at least have retained sufficient heat to prevent the loss of lime-juice bursting; such, however, was not the case. I would therefore suggest that lime-juice, pickles, cranberries, and other stores, likely to be injured by frost, should be removed to a safe place of stowage as winter approaches.

By observations, on the 21st and 22nd, we found we were slowly moving due south; this was annoying, as our chances of being released, decreased with our movement in that direction. On the 23rd, we saw Byam Martin Island for the last time. On the 26th, by meridian altitude of \sphericalangle lat. $74^{\circ} 48' 22''$ N., long. by Capella, $101^{\circ} 23' 45''$ W., led me to think we might see Cape Cockburn if the day proved fine. Scarcely had I finished my calculations when I was informed that land could be seen in the N. E. quarter; it proved to be, as I anticipated, Cape Cockburn. This was the more satisfactory, as it tended to prove that little or no deviation had occurred in the rate of the chronometers, since the

middle of August ; the last time I had been enabled to obtain an accurate rate.

A portion of the last week in October was occupied in making a snow depôt along the starboard side, in readiness for snowing the deck. When not otherwise employed, the men amused themselves (although the temperature was at times as low as -15°), by playing rounders on the ice, an occupation which kept them sufficiently warm to enjoy the sport, as it required continued running.

On the last day of the month, the main deck housing was hauled over and secured, as snowing the deck was to commence on the morrow ; the quarter-deck was however left uncovered, as there was yet a little light during the day, and this would be of assistance to the men employed about the deck, whilst the housing over main deck would afford shelter from the wind.

The mean temperature of the past month, when compared with that of 1852, shows an increase of heat in favour of this year ; these were as follows :
1852 — $0^{\circ}5$ mean, for the month of October.

1853 + $4^{\circ}6$ ditto, ditto.

This difference was appreciable to the feelings, and the increased mean, or rise, this year, had been predicted ere the month drew to a close.

Tuesday, Nov. 1st.— Commenced snowing the upper deck to the depth of seven inches; this was covered with a layer of cement, an inch thick, consisting, as I have said, of snow, gravel, and cinders, well mixed together; which in the course of a few hours becomes hardened by the action of the cold, and so remains throughout the winter. The ship, as I have before stated, had a list of several degrees to port; the snow on that side of the deck was therefore raised to a level with the starboard side, in order to make the surface horizontal.

On the 2nd, a breeze from the N.N.W. gradually increased, until the 4th, when it blew a brisk gale with considerable drift. On the 5th it subsided, and I was enabled to obtain observations for fixing our position, which — by subsequent sights — was proved to be our winter quarters; lat. by Altair, $74^{\circ} 41' 18''$ N., long. $101^{\circ} 17' 15''$ W. On the 12th I again obtained sights, which gave the lat. $74^{\circ} 41' 53''$ N., and long. $101^{\circ} 22' 06''$ W., the latter being the mean of five (box) chronometers; the pocket watches I did not include, as I had no reliance on their regularity. Sun last seen on the 6th.

Up to this period poor Sainsbury of the "Investigator" had been gradually growing weaker

every day, and for weeks past he was aware of his approaching end. Thanks to the kind, humane, and Christian spirit displayed by Drs. Domville and Piers, his path to the grave was smoothed, his heart became softened to each and all of us, and he was enabled to look forward, through faith in his Saviour's redeeming grace, to being received into the kingdom of God.

Poor fellow! his body presented a dreadfully emaciated appearance. He lingered, it is hoped and believed, without much pain, until half an hour after midnight on the 14th, when he expired without a struggle.

On the 16th, the few preparations required were completed; the funeral service was read on board, in a most impressive manner, by Captain Kellett, and the mournful procession then wended its way to the grave, a hole in the ice, about 250 yards from the ship. The day was cold (-20°), and misty, and never shall I forget the scene on the ice, as the body, sewn in canvas, with weights attached, was launched through the narrow opening, and disappeared to our view. Within an hour, Nature had placed an icy slab over the grave of our departed messmate.

On the 19th Nov. the quarter-deck housing was

hauled over and secured, conveying a considerable degree of warmth, both below and on deck. Ventilators were fitted in various places, to allow the escape of vapour from the deck below, and other minor but necessary arrangements, too numerous to mention in detail, were completed.

On the 21st, a remarkable elliptical halo—an unusual phenomenon—occurred during the middle watch. The moon at the time was nearly on the upper meridian; the major axis was horizontal, and measured 52° , having a paraselena at each extremity; the shorter axis measured 42° without any paraselena; but the upper arch of the halo presented a feathery appearance, resembling the corruscations of an aurora.

Some little time past a few of the men expressed a wish to Dr. Domville that he, and one or two of the other officers, should kindly read them a paper, original or otherwise, written in a simple and popular manner, by which they might improve their minds during the ensuing winter; he readily assented, and mentioned the subject to me. I at once entered into the scheme, although I felt my inability to carry out as I could wish the object in view.

Captain Kellett warmly supported the proceed-

ings, and the doctor, at seven this evening, read an original introductory paper on "Chemistry," the officers and crew of the "Resolute" in attendance. It was well received, and each and all felt obliged to the doctor for the trouble he had taken in the compilation of facts on such an interesting subject. Such a numerous audience astonished us all, for the original intention was to read the paper quietly in the sick bay to the few men who suggested the idea, but as all the crew wished to attend, the chests were arranged as for church, and the lower deck lighted up. Had Dr. Domville supposed for a moment that he would have been complimented by such a numerous and attentive audience, he would have extended the information to the "Intrepid." This is to be remedied next lecture night.

Preparations for the theatre had been going on for some time; the day named for the performance being the 30th inst. The play chosen by the men was an abridgment (by Garrick) which I happened to have, of Shakspeare's admirable comedy of "Taming the Shrew," whilst that of the officers was the popular farce of "The Two Bonnycastles." Songs, recitations, &c., were arranged to take place during the interregnum between the principal performances.

As the day drew near, every one was in a state of excitement. Dresses were required to be altered, chandeliers rigged, drop-scenes retouched. One of the figures ornamenting the proscenium had mysteriously disappeared, and required to be replaced. Wooden legs of mutton and guitars must be manufactured, and indeed the whole *corps dramatique* was in a state of the greatest anxiety as the day approached.

On the 26th, α Lyræ (Vega) was observed at noon, and at 5 P.M. a bright double arch of aurora was seen; one passing through the zenith from east to west; the other about 5° south of and parallel to it.

At length the 30th, the eventful day, arrived, and the last rehearsal was concluded. At 6·30 P.M. the officers and crews began to assemble, and the upper deck was soon crowded with the arctic public. Although kept in suspense for some little time, the time passed pleasantly enough, thanks to the talented brass band in attendance. I have so often adverted to the perfection of theatrical arrangements in every department, that I am now really at a loss to find original words to describe the excellence of the *tout ensemble*, but I shall content myself by making the necessary observa-

tions as concise as possible. The trouble of "getting up" a theatre in these regions, can only be appreciated by those who have assisted in the preparations. The very fifes had to be manufactured out of brass curtain rods, whilst a tin fiddle occupied the tinker for several days.

The scenic arrangements were under the entire control of Mr. Dean, the carpenter, who fulfilled the trust reposed in him, to the surprise and admiration of all comprising the audience. For the last ten days his exertions had been unwearied; the fifes, guitar, and leg of mutton were manufactured by him; the latter, composed of wood and canvas, was acknowledged to be a *chef-d'œuvre*. In addition to these, yards of magnificent point lace were made by cutting calico; besides wigs of every description, shape, and colour, from the jet black (thread) locks of the lovely heroines, to the brown (oakum) wig of the testy old uncle.

"Taming the Shrew" was in one of several volumes of plays, kindly presented to me by a friend. The characters were admirably supported throughout, and much to my surprise, the language was well delivered, and all appeared to enter into the spirit of the immortal bard. Then followed several amusing songs in character; one in

particular, "I'm ninety-five," being vociferously applauded; the action, tone, and dress of Old Humphries, the marine, could not have been surpassed.

The performance of Mr. Bonnycastle (Krabbé), the acknowledged Buckstone of these regions, would have reflected credit on that talented comedian himself. Smuggins also—but no, it is unnecessary to go through the entire cast; suffice it to say, that all were perfect. God save the Queen, and three times three, concluded the evening's amusements, which were doubly enjoyed by the "Investigators." I must not forget to remark that Lieut. Hamilton, with his usual kindness, undertook the office of prompter.

The officers, before separating, repaired to Captain Kellett's cabin, where ham and beef sandwiches, wine, punch, &c., were discussed; these viands, with a cross-fire of animated conversation, agreeably relieved by an occasional song from one of the vocalists of the party, formed a pleasant termination to the entertainment of the night.

This month, unlike the last, showed an increase of cold over that of last year, of no less than $-7^{\circ}4$. Nov., 1852, mean temperature $-12^{\circ}7$; Nov., 1853, $-20^{\circ}1$.

November has not been remarkable for the number or peculiarities of its phenomena, as will be seen on turning to the meteorological abstract. The month on the whole has been fine, more particularly the nights, when the moon was in opposition, and continually above the horizon.

On December the 4th, I again obtained observations that could be relied on; and with them I decided the mean latitude of our position to be $74^{\circ} 41' 34''$ N. On the evening of the 5th, I had the honour to read the first of a series of papers on Arctic Exploration during the present century, to a numerous and attentive audience, composed of nearly every officer and man in the Expedition.

On the 7th, the thermometer was registered at -42° ; but the mercury in a small test-tube remained unaffected; the following day, however, the mercury became solid, though the temperature had risen to 37° minus; the fact of its not freezing I attribute to the slow withdrawal of the heat contained in the quicksilver itself; but cannot account for the absence of liquefaction when the temperature rose.

Monday, 19th. — Dr. Domville read a second paper on chemistry; the captain, officers, and crew

forming an attentive audience. This lecture was infinitely more interesting and, I believe, instructive than the last ; which I before observed, was only introductory.

He described the component parts of the atmosphere, its weight, effect on human life, and many other interesting facts, in such a clear and simple manner, that every one present must have understood him. His description of the common weather-glass, barometer, air-pump, all of which were drawn on a large scale of reference, assisted by several simple, but effective experiments (which were eminently successful), must, by his clear elucidation of the subject, have conveyed information not only to the seamen, but to every officer present.

The presence of every man, and their attention to the lecture, is very gratifying, as it proves the deep and sincere interest they take in acquiring knowledge. It was amusing to observe the varied expressions of delight, ambiguity, and wonder depicted on their faces. One fact, and an astounding one it was, that was mentioned, viz.—the enormous pressure of the atmosphere, amounting to no less than 32,000 lbs. on the body of a man, proved *rather too much* for Jack to swallow,

as was evident by the general shuffle, doubtful shake of the head, meaning smiles, and raised eyebrows; they evidently put this assertion down as a "mass of gammon."

I think I have never yet observed such a studious body of men as are now on board the "Resolute." I have frequently walked round the deck of an evening for the express purpose of ascertaining their occupations, and have as frequently been gratified to find *all* employed; most of them reading or writing (for many keep journals), whilst the minority are repairing clothes, and listening to one of their messmates, reading aloud from a library book, stumbling over the hard words, or leaving them out altogether to be filled up by the imagination of his hearers. Navigation, music, and even drawing, have their votaries, and it would indeed be difficult to recognise, in the studious features of our ship's company, the British sailor of the present day with that described by Dibdin, or imitated by the T. P. Cooke school.

It will readily be imagined, the pleasure we all experienced as the shortest day approached; every one longed for the termination of the dreary and disheartening darkness, and the return of the sun. I know nothing more depressing than being

unable (as we frequently were) to distinguish night from day. But why repine?

Human nature is, and ever will be, frail and complaining. We are all apt to dwell on the privations, troubles, and petty annoyances of the moment; forgetting the many blessings and privileges we enjoy; and we cannot have a better exemplification of these feelings than in our own fitful expressions of impatience at our present position. It would be as well, whilst regretting the absence of the sun, if we were more frequently reminded of the goodness and omnipotence of the Almighty, as displayed in the disposal and motions of the heavenly bodies. Few of us, I am afraid, whilst gazing with admiration on the glorious orb of night, sufficiently appreciate her brightness as the effect produced by God's creative wisdom. Fewer still, whilst wondering at the novel but continued presence of that luminary, in all her majesty, above our horizon for a space of eight nights and days every month, recognise the admirable arrangements of the great architect of the universe, by supplying, in some degree, the wants created by the absence of the sun; for it must be remembered that it is only during the winter that the moon is above the horizon.

Although man has been endowed with intellect, sufficient to trace these effects to physical causes, it ought not—as it has too often done—withdraw mind the from *Him*, but increase tenfold the feelings of devotion, admiration, and awe, which the contemplation of the heavenly bodies should invariably inspire.

On the 21st, small print was read on the floe at 11 A.M. though not without difficulty. At 6 P.M. on the 22nd, the Captain, officers, and crew left to witness dramatic performances, legerdemain, and other amusements, on board the "Intrepid." I was not present myself; but, judging from the pleasure all derived, I imagine the entertainments must have gone off with considerable *éclat*. On the fall of the curtain, the officers adjourned to the gun-room, where they were entertained by the "Intrepids," returning on board a little after 11 P.M.

Christmas Day, with all its endearing associations, at length came round; cold, dark, and gloomy without, as became these inhospitable regions; but within, the season gave rise to a warmer train of thought than usual. How delightful when fancy, that ever busy monitor, wafts one across the dreary wastes of snow, and transports us, as with a ma-

gician's wand, into the presence of those dear absent friends, so necessary to our happiness, whom memory recalls as the principal authors of our past joys, and decks with all that hope could wish or fancy portray. I pity the man who is incapable of enjoying in its fullest sense such a train of reflections; of being unable to imagine, almost with the force of reality, the exchange of thoughts and feelings with those who are all in all to us. Such reveries are derived from the purest source of man's nature.

For my own part I am willing to confess I encourage and cultivate such ideas, and revel in scenes which memory recalls, or hope anticipates.

Christmas Day on board a man-of-war is generally considered a holiday; and in most ships it is customary to make some slight addition to the usual supply of provisions, and in order that the men may the better enjoy themselves, the discipline, even in the best regulated ships, is a little relaxed on this occasion; *i. e.*, they are allowed the use of the fire the previous night, and an extension of lights in the evening.

Seamen are well known to possess great taste in decorations; and to a landsman, the effect produced with a few materials is surprising. As a

proof, take the appearance of a ball-room on the deck of a man-of-war, with bright lights, brilliant uniforms, and lovely faces; and I will venture to assert that in scenic effect it would not only vie with, but eclipse, the noblest hall on shore. For days past preparations for Christmas festivities have employed all the spare time of the crew. Each mess boasted a chandelier, ornamented with paper flags, glass beads, and paper rosettes; the latter formed out of bright coloured papering, the property of the theatre. As it was determined everything should undergo a change, the very candles were painted; not one retained its original appearance.

The scene on the lower deck, when dinner was spread, was imposing in appearance and gratifying in arrangement, illustrating as it did the brotherly feeling that reigned throughout our little world. The crew had arranged amongst themselves to amalgamate on this occasion, and form two messes, one on each side of, and extending the whole length of, the deck. The sides themselves, shelves, &c., were hidden by flags, against which were placed every available picture in the ship, besides several original cartoons, some emanating from the officers, others from the men themselves. As the

pictures were not only numerous but good, the whole formed a highly respectable gallery. Three chandeliers were suspended at equal distances over each table, and threw a brilliant light on the affair. The tables themselves were literally covered with roast-beef (musk-ox), beef-steak pies, preserved meats, bacon, plum puddings, apple and cranberry tarts, and, lastly, several jugs of "Richards's" home-brewed beer, which, in addition to the nutritious qualities, possesses the taste of porter, and reflects much credit on Mr. Richards as a brewer.

On the 28th, Mr. Nares (mate) read a paper on winds in general, descriptive of the cause and directions of land and sea breezes. His description of the trade winds was lucid and interesting, and must have conveyed no little amount of information to those of his hearers who could follow; but I am inclined to think the reasoning was somewhat too complicated for the seamen. Considerable time and trouble must have been expended in its compilation, for which he well deserved the thanks which he received of the whole community.

The last day of 1853 falling on a Saturday, it was determined to ask Captains Kellett and M'Clure to join us at dinner on that day, in preference to

the following day (Sunday), and the invitation was extended to my old schoolfellow Krabbé.

We all met at an excellent repast at 4 P.M. First came ox-tail and hare soups, then preserved salmon (much calumniated, as all the headaches the next morning are invariably imputed to it); this was followed by a leg of venison, ditto of musk veal, roast ptarmigan, musk beef pie, and ham with vegetables in the shape of mashed turnips, green peas, parsnips, and preserved potatoes. The second course was composed of a plum pudding, mince pies (real), and numerous tarts and tartlets, the whole decorated with gaily coloured miniature flags, made in England for the purpose. Cheese, of course, followed, and an ample dessert of almonds and raisins, of ginger-bread nuts, wine biscuits, French olives, and, though last, not least, a noble plum cake, which would have been excellent, had it not been for the numerous geological specimens the cook had inserted, creating a somewhat unpleasant surprise on coming in contact with one's teeth. With the aid of beer, champagne, port, and sherry, to assist the flow of soul, the dinner passed off admirably; the celebrated arctic band being in attendance, playing popular and appropriate airs, after the removal of the cloth;

when with full hearts and glasses, we drank to "absent friends! God bless them!"

Nor were the ship's company backward in enjoyment, songs and sentiments were the order of the evening, under the excellent arrangements of a despotic master of the ceremonies—who, with the stroke of a hammer on the armourer's bench, imposed order and silence amongst the somewhat noisy but good-humoured company.

During the day, the wires of the electric telegraph had been run across to the "Intrepid," supported about twelve feet from the floe by boat oars placed about thirty yards asunder; the gear had been put in order by Lieut. Hamilton, who had very kindly given instruction in the working and reading off of the telegraph to as many as expressed a desire to learn.

Now the wind from N.N.W. had gradually increased, during the day, from a moderate breeze to a strong gale with heavy drift, as night approached—of course hiding the "Intrepid" from our view. Although the temperature, 18° minus, was not to be feared in itself, yet, combined with a long exposure, a very probable circumstance if the men lost their way,—than which nothing is more likely in a heavy drift,—it was decided the Intrepids

should remain on board for the night, and arrangements were accordingly made for their accommodation.

But what was our surprise when, about 10 o'clock, two men belonging to the "Intrepid" arrived on board, literally covered with drift, to inquire if their shipmate Hartnell, whom they had missed for the last half hour, had arrived on board. On inquiry, it appeared no one had seen the man, and the circumstance was reported to Captain Kellett, who desired Lieut. Vesey Hamilton to telegraph to "Intrepid," "Is Hartnell on board?" It must be remembered this was the first essay after the telegraph had been reported in gear. Nearly all the officers assembled in the captain's cabin, watching with eager gaze the motions of the mysterious needle. A few seconds elapsed, when tinkle, tinkle, went the alarum. The stroke for ready was promptly returned, and the question was asked in less than a minute. A short time elapsed (this we expected, for of course the man must be sent for), when again the alarum sounded, and YES was read off with as much ease and facility as if Captain M'Clintock had personally responded to the inquiry. Nothing could be more fortunate than this trial or the result, for it would have been dangerous to have

exposed parties in search of the missing man. The perfection thus displayed in the working of the telegraph, and the efficiency of the whole arrangements carried out so successfully by Lieut. Hamilton, reflect much credit on that officer.

As the sonorous bell (scarcely heard above the storm) pealed forth eight, announcing to our little world that another year had passed away, the band played that soul-stirring tune (associated as it is, and always will be, with never-to-be-forgotten friends), "Auld lang syne," in which we all joined. The telegraph was again set in motion, and the compliments of the season were exchanged between ourselves and the Intrepids.

Being Sunday morning, we soon separated and retired to rest; some possibly to contemplation.

Two men from the "Intrepid" coming below, I happened to be within hearing of one of our men, who, in a tone of surprise, asked one of the new comers, — "Why, Jim! what the deuce brought you aboard, such a night as this 'ere?" "What brought me aboard?" responded his friend (who, by the bye, is acknowledged to be the wag of his ship), "why! I come over by the electric telegraph, to be sure!" It is not necessary to state, this happy hit was received with roars of laughter by all who heard it,

and was the cause of the man's obtaining a glass of grog.

With respect to the "lost man," as he has since been termed, it appears he left the "Intrepid," with the intention of crossing to the "Resolute." On reaching the first post, however, he lost sight of the "Intrepid," though within fifty yards of her. Afraid of advancing or returning, he adopted the best, though somewhat laughable, expedient of calling out at the top of his voice, "A man lost! a man lost!" He was fortunately heard, and soon discovered crouching for shelter under a snow pillar. The circumstance, as might have been anticipated, gave rise to much pleasantry, and the *sobriquet* of the "lost man," was affixed to him by his shipmates.

Table of Positions of H.M.S. "Resolute" (and tender, "Intrepid,")
Sept. 10. 1853, (the day first beset,) to Nov. 5. 1853, when

Date, 1853.	Latitude. (North.)	Longitude. (South.)	Sound- ings at Noon.	Prevailing Winds since previous Date.		Drift since last Observations.
				Direction.	Force.	
	(Assumed 8 P.M.)	position, P.M.)	fms.			
<i>September.</i>						
Sat. 10. -	74° 59' 00"	105° 28' 00"	...	W.N.W.-N.N.W.	6-10	
Mon. 12. -	74 40 41	105 53 15	...	N.N.W.-N.W.	5-10	S. 12½° W.—23¼'
Tues. 13. -	74 47 00	105 0 0	95	W.N.W.	6-3	N. 67 E.—15½
Wed. 14. -	74 46 35	104 51 30	95	W.-W.S.W.	3-1	S. 70 E.— 1
Frid. 16. -	74 44 4	104 49 30	75	S.E.-N.E.-N.W.	1-4	S. 34 E.— 3
Sat. 17. -	74 41 56	101 30 45	107	N.W.-W.	5-7	S. 68 E.— 5¼
Sun. 18. -	74 49 00	104 24 15	...	N.-N.N.W.	7-3	S. 30 E.— 3¼
Mon. 19. -	74 37 42	104 32 00	...	N.N.W.	4	S. 47 W.— 2½
Wed. 21. -	74 32 50	104 8 30	...	N.-N.N.W.	2-6	S. 52 E.— 7½
Thur. 22. -	74 30 3	104 5 30	...	N.N.W.	3	S. 16 E.— 3
Frid. 23. -	74 22 42	103 35 00	90	N.N.W.-W.-S.W.	3	N. 71 E.— 8¼
Sat. 24. -	74 35 00	- - -	95	S.W.-W.S.W.	2	
Sun. 25. -	74 33 45	102 33 45	98	W.S.W.-S.	2-3	N. 24 E.— 1½
Mon. 26. -	74 35 18	103 23 00	...	S	3	N. 74 E.— 2¼
Wed. 28. -	74 37 39	103 20 45	...	Southly.-Easterly.	1-4	N. 17½ E.— 3
<i>October.</i>						
Sat. 1. -	74 39 2	103 2 15	...	E.-S.E.-Westerly.	3-2 7	N. 74 E.— 5¼
Tues. 4. -	74 30 36	- - -	105	N.W.	7-3	
Wed. 5. -	74 29 15	102 28 00	98	W.N.W.	5	S. 49 E.—13¼
Thur. 6. -	74 29 25	102 9 30	94	N.-N.W.-W. by S.	4-2	N. 55 E.— 5¼
Mon. 10. -	74 34 31	- - -	70	W.-E.S.E.	1-2-9	
Thur. 13. -	75 4 17	102 33 00	65	E.S.E.-S.-S.W.	10-2	N. 11 W.—35¼
Sun. 16. -	75 0 57	- - -	55	Var.-N.W.-N.	1-0-1-3	
Tues. 18. -	75 1 41	102 26 30	62	N.E.-Var.	1-0-1	S. 42 E.— 3¼
Frid. 21. -	74 56 7	102 13 30	...	N.W.-N.E.-N.W.	1-0-2	S. 27 E.— 6½
Sat. 22. -	74 48 44	102 14 15	65	N.N.W.	2-6-4	South — 7¼
Tues. 25. -	74 48 22	101 23 45	80	W.-S.W.	3-4	S. 89 E.—13¼
Thur. 27. -	74 44 52	101 11 30	80	Southerly.-N.E.	1-9	S. 40 E.— 5
<i>November.</i>						
Sat. 5. -	74 41 18	101 17 15	76	N.N.W.	3-8-3-7	S. 25 W.— 4
Sat. 12. -	74 41 53	101 11 00	75	N.N.W.-W.-Calm.	1-4-7-1	Total drift - 180

Position of Winter Quarters. { Mean of 4 latitudes — 74° 41' 34" N. } Cape Cockburn N. 34° E.—28'
 { Long. Mean. of 5 Chro. — 101° 22' 06" W. }

Captain H. Kellett, C. B. ; showing their drift in the pack, from both ships became permanently fixed for the winter.

Bearings and Distances.	Remarks, &c.
Young Ice, 3 inches thick	Slipped from fast ice, off Point Griffiths, at 3:50 P.M. Ran down to join "Intrepid" about S.E., 5 miles, thence S.S.E. about four miles, till 6 P.M., when ships were beset for this position (by D.K.) vide Table.
Pt. Griffiths N. 50° W.—7'	11th. Ice five inches thick. Increase since yesterday two inches.
" N. 50° W.—21'	Wind blowing at times a whole gale till P.M. yesterday, then gradually moderated to a fresh breeze.
C. Gillman N. 40° E.—23'	Communicated with "Intrepid" across the ice; 1 P.M. observed land from N. to W.N.W.
" N. 35° E.—30'	Ship's head, south. Cutting around ship to bring her head to northward. "Intrepid" E.N.E. (true) 400 yards.
" N. 34° E.—22'	During the forenoon. Ice being in motion rendered winding ship impracticable. Preparing travelling gear.
" N. 15° E.—23'	Ice occasionally in motion. P.M., pressure on ship; increased considerably between 8 P.M. and midnight.
" N. 11° E.—25'	3 A.M., ice nipping with a loud noise. Ship heeled 50° to port. Ice level with port gunwale; 4. Motion ceased.
" N. 13° E.—27½'	Preparing travelling gear, provisions, &c., in event of being obliged to abandon ship.
" N. 3° E.—30'	No motion in ice. "Intrepid" altered bearing on the 18th to E.S.E., 400 yards. Down top-gallantmasts.
" North —34'	No change. Unshipped and secured rudder across the stern for the winter.
" N. 17° W.—31½'	Leveling ice round ship. Lane of water formed a quarter of a mile a-head of ship; a few pools S.W.
" N. 17° W.—31'	5 A.M. ice opened, forming a lane twenty yards distant on starboard side. Heard noise of ice in motion to south.
" N. 25° W.—30'	No apparent motion.
" N. 25° W.—28'	No motion. Digging fire-hole on port side. Ice doubled up in layers to a thickness of twenty-two feet.
" N. 35° W.—30'	Heavy fall of snow during forenoon. 7 P.M., a narrow crack a-head of ship.
" N. 35° W.—43'	Several pools, S.E. Ice in motion; cracks all around; thickness of ice, sixteen inches.
" N. 43° W.—46'	Snowing upper deck; crack on starboard side open thirty feet; variation by good azimuth, 179° 40' W. Heavy squalls towards night; during the 11th and 12th, ship driving to northward; no apparent motion.
" S. 87° W.—25'	10:30, observed Byam Martin W. by N. (true). 14th, heavy range of hummocks (? Parry's shoal) N. 49° E.—10'. Hummocks in sight since the 14th, with considerable pools and lanes of water in all directions.
" N. 85° W.—26'	Banking up around ship; fitting winter hatches; building wall round fire-hole.
" N. 77° W.—31½'	Cape Cockburn N. 63° E.—31½'. Ship equal-distant from Cape Cockburn and Cape Gillman.
" N. 65° W.—32½'	Observed an owl.
C. Cockburn N. 46° E.—24½'	8. observed Cape Cockburn N E. (true), 10 1/2 rt. land 10° 27'.
" N. 34° E.—37'	Land N.N.E. from foretop (? Mount Bullock).
" N. 34° E.—27½'	From this day the ship may be considered stationary for the winter.
" N. 34° E.—26½'	The position of winter quarters, as determined by a series of observations, is given below.

Course and distance made good since beset at 8 P.M. on the 10th Sept. (56 days) is S. 75° E. —69 miles. "Intrepid" E. S. E. (true) 400 yards.

CHAP. XV.

Read a Second Paper on Arctic Explorations.—Mr. Nares reads a Paper on "Mechanics."—Death of James Wilkie (I. Q. M.).—Hamilton ordered to prepare for Beechey.—A Few Words about the Dogs.—Harness for Dogs.—Hamilton's intended Proceedings.—Hamilton leaves for Beechey Island.—Roche Shot through the Thigh.—Hamilton's Second Start for Beechey.—Proposed Routes for Exploration.—Mecham and Krabbé leave for Baring Island.—Commander Richards arrives from "Assistance."—Proceedings of "Phœnix" in 1853.—Death of Lieut. Bellot in August, 1853.—Proceedings of "Assistance" and "North Star."—Return of Hamilton and Nares from Beechey.—Commander M'Clintock returns from "Assistance."—Preparations for abandoning the Ship.—Arrival and Departure of Lieut. Cheyne and Mr. Jenkins.—The Last Day on Board "Resolute."—Abandonment of H.M.S. "Resolute" and "Intrepid."

JANUARY, 1854, was, as I have before observed, ushered in with a strong gale, well befitting the gloomy regions of the north. The delight felt by all at the arrival of another year, which we fondly hoped would prove the season of our release from our present state of thralldom, was somewhat saddened when'er our thoughts reverted to the

dying state of poor Hood (a marine), belonging to the "Intrepid," who for some time had been in a dangerous state, although the exact nature of his malady was unknown even to the "medical officers of the squadron."

On the 2nd he breathed his last, and the same evening a post-mortem examination took place, when it became apparent the poor man had been labouring under a complication of diseases, affecting the heart.

The following day, the 3rd, at 11 A.M., the body of our departed comrade was committed to the deep with the usual solemnities. He had been in the two former expeditions (under Sir James Ross and Captain Austin), and had formed one of Commander M'Clintock's crew to Melville Island in 1851. During this voyage, however, his health gradually but surely declined, so much so, indeed, as to render it necessary to confine his travelling operations to a depôt, or short party. This journey probably accelerated his disease; his system never recovered, but gradually became worse, until death terminated his sufferings. The floe on the 3rd was four feet six inches thick, being an increase (since December 16th) of twenty-one inches in eighteen days.

On the night of the 10th, I read a second paper on arctic explorations to the officers and crews of ship and tender. The subject-matter was the sufferings of Franklin and his companions, during the truly eventful journey to the polar seas in 1820-23. Forty minutes' reading (to which I confined myself) gave a very imperfect idea of the misfortunes they experienced, or the misery they endured; but, I confess, I was gratified to observe the unusual interest the seamen evinced, as the narrative advanced, and the terrifying and disheartening incidents increased; and I felt fully rewarded for any little trouble I had taken in its compilation, by the sincere "Thank you, sir," from the audience.

The daily increasing bright arch to the southward was welcomed as the harbinger of the sun's arrival in these regions, on his annual tour; but the hours were yet eagerly counted that would elapse ere his actual presence would brighten the dreary scene around us, and gladden the hearts of each and all.

On the 27th, the port quarter deck housing was triced up for the first time. I confess I prefer the system adopted by Captain Austin, in always

having (of course in moderate weather) the lee curtain triced up during the day, for it not only allowed light to penetrate, but assisted in carrying off the confined air.

I have not mentioned that, on the 24th inst., Mr. Nares read a paper explanatory of a few of the simple laws of Mechanics.

During the month, an order had been issued to close the purser's and warrant officers' accounts by the 31st March, and as the captain contemplated despatching a party, the first week in March, to Beechey Island, the purser's stores were commenced at once, as it was necessary to estimate the quantity of provisions that would remain on the above date, and transmit it to Sir Edward Belcher.

Thursday, 2nd.—Poor Wilkie, ice-quartermaster of the "Intrepid," breathed his last at 3 A.M., of disease of the heart and effusion of the chest. He had been on the sick list nearly the whole winter, but was not considered in danger until within about three weeks of his death. Latterly his body had swollen to such a size as scarcely to be credited, not one feature could have been recognised. It is a sad reflection that the "Intrepid" should have lost no less than four out

of her crew of thirty souls, being nearly one seventh of the whole.

Hood and Wilkie had been shipmates in no less than three arctic expeditions—viz., in Sir James Ross's, 1848–49, Captain Austin's, 1850–51, and the present one. Both had been considered remarkable for their strength and powers of endurance, and it is probable that the laborious nature of arctic travelling may have accelerated the death of each of these fine fellows. The following day, the 3rd, all that remained of poor Wilkie was consigned to the grave, just as the first beams of the long absent sun tinged the southern horizon. At noon the sun's semi-diameter was above the horizon, after an absence of eighty-nine days, although, according to my calculation, it should not have appeared from the floe until the following day. Gloomy, misty weather prevented our obtaining a second view until the 7th.

Monday, 6th. — Commenced clearing the forehold for surveying provisions. Considerable difficulty was experienced in breaking the casks out from the frozen ground, and pickaxes, as well as crowbars, were required ere the ground tier was "broken out." I attribute this circumstance to the fact of snow being in many instances brought

off with the ballast; the latter, melting during the summer, percolated through the gravel, and was again frozen during the winter, of course consolidating the gravel immersed.

The after-hold, however, presented a very different appearance. There the temperature being considerably higher than in the fore-hold, the water had not frozen; but was found beneath the gravel, and about three inches deep; the upper layer of gravel being perfectly dry.

On the first day of the month, the captain had informed Lieut. Hamilton he was to prepare to leave with a party for Beechey Island, early (probably the first week) in March.

This was the more necessary, as Sir Edward Belcher, if at Beechey Island, would naturally feel very anxious respecting us. For although, when Captain Richards quitted Dealy Island, the abandonment of the "Investigator" was not known, yet it was the unanimous opinion of all that she would be left to her fate, and he separated impressed with this feeling. On the other hand, it was necessary to ascertain whether any ships were at Beechey Island, and, if not, the extent of the resources left there. It must be remembered that when last we heard of the "North Star" she was on shore, and was con-

sidered to be in an unpleasant position; also that we were entirely unacquainted with the movements of the senior branch of the expedition, whether it had been extricated or not.

On the 16th, Hamilton and party commenced taking long walks, after divisions at 9 A.M., in order to accustom the men to pedestrian exercise. On their return a pint of home-brewed beer was issued to each. The floe in the vicinity of the ships was found to be more broken and irregular than it was three or four miles from them in a N.E. direction, towards Cape Cockburn, which on fine days could be seen, particularly when refraction affected the atmosphere.

Some little attention was paid to the dogs, as they had not been overfed during the winter, but now, when they were about to be employed, it was necessary to give them a few good feeds previous to starting. With this object in view, a mass was concocted composed of bread-dust, seal-skins, whale oil, and peas-soup; indeed, anything in the edible way that could be obtained was put into the stock-pot. With this all the dogs were allowed to distend their skins until they could scarcely walk, and it is astonishing how soon some of them picked up flesh.

During the last fortnight in February they also took exercise with the party, being sometimes harnessed to the sledge; this was the more necessary, as, for the first few days, the exertion required caused several of the weakest to have serious fits; none of them, however, ended fatally, but evidence of their injurious effects could be traced in the very expression of the dogs. I have inserted the following Table of their weights, by which it will be apparent that the dogs are not in such good condition this year as they were on their departure for Banks' Land in 1853.

Dogs.	Mar. 1853.	Feb. 6, 1854.	Mar. 1854	Remarks.
Lion (leader) -	72 lbs.	60 lbs.	63 lbs.	Shakings was shot in Sept. 1853.
Husky - -	67 "	62½ "	69 "	
Shakings - -	73 "			
Sophy - -	57 "	54 "	56 "	
Jenny - -	55 "	62 "	52 "	
Merry Lass -	41½ "	55 "	53 "	
Buffer - -	40½ "	62 "	70½ "	

The harness for the dogs in '53 had been arranged from a design of one of the men, who had been selected to take charge of the dogs, in consequence of the experience he was said to have acquired, during a residence of four years in Newfoundland.

A stuffed collar was made to fit close round the neck, to the sides of which were attached the drag-ropes, fitted with a toggle to facilitate slipping. A belly-band and back-strap kept the drag-ropes, or, more properly speaking, traces, in their proper position.

This time, however, Thompson (who had proved the excellence of his qualities as dog-driver under Captain Penny, and later still, under Mr. Roche on his return from Beechey Island in June, 1852) had installed himself as master of the hounds, and on taking office, substituted for the old harness some of his own, lighter, more simple, and better adapted for the service in every respect.

It consisted of two strips of canvas, with occasional stops (white line), thus forming loops, one fitting over the head, and one for each fore-leg, being a combination of martingale and belly-band. On trial, the pressure on the neck and shoulders was much decreased, and the dogs evidently dragged with greater ease than under the old system.

March, the usually boisterous month, was ushered in with light southerly airs, and comparatively warm weather. We all regretted Hamilton did not start this day (1st, and none more so than

himself), for after the late gale on the 26th and 27th ultimo, we had reason to believe the weather would continue fair for some days; and let it be known fair weather to start with, is as much desired by a travelling party, as a fair fresh breeze is to commence an ordinary voyage,—both are considered propitious.

On the 3rd. Hamilton packed his sledge and received his orders; a summary of which I insert:—“To command the two parties, consisting (in all) of two officers, nine men, nine dogs, and two runner sledges, provisioned for fifteen days. His own party besides himself consisted of Mr. Roche, two men, and the dogs; the other party of seven men was placed under the command of Mr. Court, acting-master, late of “Investigator.” Hamilton was to strike in for the land in order to deposit a notice of his intended route, as it was supposed possible that Sir Edward Belcher might despatch early parties in search of us, and if so, their meeting with Hamilton’s cairn and record would not only inform them of our whereabouts, but of the departure of the parties for Beechey Island. Mr. Court, in the meantime, was to make the best of his way to Erebus and Terror Bay; where it was

expected Hamilton would have arrived several days before.

In the event of Sir Edward Belcher being there, or in Gascoigne Inlet, Hamilton's future proceedings would be controlled by him. In the absence of the Commodore, however, Commander Pullen was directed to despatch Mr. Court and party to Port Leopold, to take an account, and ascertain the state of the depôt left by Sir James Ross in 1848-49. Mr. Roche, in the meantime, was to proceed with the dogs up Wellington Channel in search of "Assistance" and "Pioneer;" Hamilton awaiting his return to Beechey Island, to bring the result to Captain Kellett.

On the morning of Saturday, the 4th, at 8 A. M. precisely, the Beechey Island parties left amidst the hearty cheers, and with the good wishes of all comprising the squadron, who looked forward with no little anxiety to their return with news of the doings of the other two branches of this eventful Expedition, more particularly the young married men, and suspected lovers, who were anxious to receive news from England.

This day, the 3rd, at 0.30 P. M., a small rill of water was observed to trickle down a black tar-

paulin, facing to the southward. The spot alluded to, where the agreeable phenomenon occurred, had been exposed to the influence of the sun since his rising. The temperature in the shade was -30° , in the sun -4° , being an increase of no less than 26° of heat from the sun.

In 1853, the first water, under similar circumstances, was not observed until a later date, viz., on the 20th March. The thermometer in the shade being -1° .

Monday, 13th. — The *second* electric telegraph between the ship and tender was removed, in order to try the effect of water (under the ice) as a conducting medium. For this purpose the ends of the single wire were placed a few feet beneath the surface of the water, in the respective fire-holes of the two vessels, and on trial the circuit of electric fluid was found to be quite complete.

The travellers were assisted on their way during the forenoon, by two fatigue parties under Messrs. Nares and de Bray, who returned at noon, reporting their having already separated on their different routes, and being on good floes.

The following day, at 1.30 P. M., to our great surprise, Mr. Roche and one man returned with five dogs, to exchange the sledge; disabled in

crossing a range of hummocks. It appears that, shortly after Mr. Nares left them, the road gradually became more and more irregular, until at length it consisted of broken masses of hummocky ice. At 3 P.M., they were obliged to encamp about sixteen miles from the ship (and twelve from the nearest land), in consequence of the dogs (several of whom had fits) showing evident signs of being "done up."

Mr. Roche then attempted to return alone, in order to take out another sledge; but, fortunately, when only four miles distant from the tent, he felt too exhausted to proceed, and turned back for the encampment, where he arrived footsore and weary at 8 P.M.

This morning (Sunday), he again started with the dog-sledge, and as I have before observed, arrived a little after 1 P.M., Hamilton and one man with the weakest of the dogs remaining encamped.

At 6 A.M., on Monday the 6th, Roche again started with a new sledge to rejoin Lieut. Hamilton; Nares and a party accompanying him part of the way. We now hoped they were fairly off; but who can foresee what a day, nay an hour, may bring forth? About half-past three, whilst sitting

at dinner, we heard, during a slight cessation in the conversation, the electric telegraph bell ringing; a minute afterwards we were informed that Hamilton had arrived on board the "Intrepid," reporting Roche severely wounded by the accidental discharge of a gun; the contents of which passed through his thigh.

As may be supposed, all was hurry and commotion, and in a few minutes the floe was crowded with people to meet the advancing sledge. It appears that a gun, which Hamilton was inserting under the lashing of the sledge, had exploded. Roche, who was incautiously standing before the muzzle of the gun, received the ball through the inner fleshy part of the left thigh. After passing a temporary bandage above the wound, Hamilton placed Roche on the sledge and hurried back to the ship. The party arrived at 3.45 P.M. (having accomplished a distance of sixteen miles in three hours and three quarters); the wound, after being examined, was pronounced not dangerous. Had the sledge been heavily laden, and consequently higher, the ball must have passed through the abdomen, and in all probability would have caused instantaneous death.

The conduct of Thompson, who left with Roche in the morning, is deserving of every praise; for he must have travelled at least thirty-two miles in eight and a half hours, marching over an irregular floe; a distance equivalent to at least forty miles on any road in England.

The dogs on their arrival appeared quite worn out with fatigue; not to be wondered at, when their arduous services during the day are considered; their powers had been overtaken in consequence of the accident. A substantial warm meal, composed of pea-soup, bread-dust, and a pound (each) of musk-beef, was awarded on the occasion; no second bidding was required to "fall to," and after having gorged themselves to their hearts' content, they composed themselves to rest. The day they first left, Merry Lass, during a fit, had scampered off, and had not since been seen.

An amusing scene took place a little before the dog mess was prepared. Mr. Dean, commiserating the condition of the animals, brought on deck a pie, from which only a small portion had been taken, intending to divide it amongst the team; Lion however, snuffing the savoury dish, stationed himself at the top of the fore-ladder, and on the appearance of the dish above the coamings, instantly

took possession by thrusting a fore leg through the hole in the crust, nor would he allow Mr. Dean or any of the dogs to approach the dish, until the contents had been duly discussed.

Tuesday, 7th. — Lieut. Vesey Hamilton again started, with Mr. Nares (mate), in lieu of Mr. Roche, and all sincerely hoped that this, the third time, would prove fortunate.

The month of March was peculiarly devoid of interest, nothing worthy of record occurring, save the preparations for the departure of the various parties. As may be supposed, the principal topic of conversation related to the proceedings and supposed position of "Assistance," the chances for, and against, — any vessel visiting Beechey Island in 1853, — the result of Hamilton's journey, — and the forthcoming season.

We were also a little anxious concerning Hamilton and party, in consequence of the continuance of extreme cold, more particularly as most of us had experienced the misery endured in a tent with the temperature 30° minus. We however trusted to his prudence and experience in arctic travelling, to return with his crew uninjured.

On Monday, 20th, commenced removing the snow banking from around the ship, and preparing the

equipments of the various sledges for the parties about to leave for Beechey.

Several routes had been mentioned for exploration during the present year; viz., to the southward, down Peel Inlet; to connect the piece of coast line between Rae and Browne's farthest; but as we knew before leaving England that Dr. Rae was about to attempt its accomplishment this very year, it was not deemed of sufficient importance to be *the* line of search.

The other, and by far the most important direction, was to the westward as far as the Princess Royal Islands (and if possible beyond), in Prince of Wales Strait, for the purpose of ascertaining whether or not Captain Collinson had penetrated so far as that neighbourhood, a thing not at all improbable; for the Esquimaux had informed Captain M'Clure that, during the summer months, there was *always* water along the shore, varying in width, but of sufficient extent to admit a ship's passing to the eastward.

It was not until the latter end of March that Captain Kellett finally determined on despatching two parties to the westward, the one to proceed down the Prince of Wales Strait (for the purpose given above), with a second sledge, to perform the

double service of auxiliary, to visit the Bay of Mercy, and ascertain the state of the "Investigator."

It was intended to have despatched the travellers on the 1st April, but they were retained on board until the morning of the 3rd, in hopes of Hamilton's arrival with news of our friends at Beechey. However, as he did not appear, Lieut. Mecham and Mr. Krabbé with fourteen men, two runner sledges, and twelve days' provisions, left the ship for Dealy Island, where they would replenish from the depôt.

On parting, we exchanged three hearty cheers, and in order to render the first day's march easy, a fatigue party accompanied them, to assist in dragging the sledges for a few hours.

The details of the arrangements, so far as could be foreseen, are as follows:— After leaving Dealy, the two parties would keep company along the south coast of Melville Island, to at least as far as Cape Providence, when they would probably diverge; Mecham to the Princess Royal Islands, and as far beyond as he deemed prudent, whilst Krabbé would make direct for Cape Russell, where he would deposit the provisions for Mecham on

his return, and then proceed along the land to visit the "Investigator," in the Bay of Mercy.

On Thursday the 6th, at 11 A.M. a few dark moving specks were descried to the N.E. Everybody was immediately in an unusual state of excitement, awaiting the much-desired news. But all were astonished on finding the figure in advance to be no other than our friend and visitor of the previous year, Commander Richards, of "Assistance." He had with him seven men and five dogs, and brought, in addition to his own good qualities, what would have ensured him a hearty welcome, viz., letters and papers from Old England, per H.M.S.V. "Phœnix," Commander Inglefield, who had communicated with the "North Star" in the month of August, 1853.

Although opinions were divided respecting any communication having taken place with Beechey Island in 1853, all were rejoiced to receive from home, letters and papers, albeit a twelvemonth old.

It would appear that Commander Inglefield had been chosen to communicate with Beechey Island, in consequence of his successful cruise in the "Isabel" up Smith's Sound the previous year.

For this purpose the "Phœnix" (screw steamer) had been duly fitted to encounter the ice, and

commanded by Commander Inglefield, left England in the month of May, 1853, for Beechey Island, accompanied by two transports. One filled with coals, for the purpose of replenishing the "Phœnix" at the Whale-Fish Islands; the other, the "Breadalbane," being laden with provisions for the Expedition. The "Devastation" (Commander Campbell) and "Baracouta" (Commander George Parker) were ordered to assist the transports on their way; the former saw her charge to the Whale-Fish Islands; the latter parted company at an early stage of the passage, and returned to England. On the 14th August the "Phœnix" arrived at Beechey Island, in company with the "Breadalbane" transport, and immediately commenced clearing the latter vessel.

Monsieur Bellot, a lieutenant in the French navy, who had accompanied Mr. Kennedy in the "Prince Albert," the previous year, gallantly volunteered his services to communicate with Sir Edward Belcher up the Wellington Channel—a service of extreme risk, at this season of the year.

Unhappily, during a heavy gale, on the 18th August (the day, it will be remembered, we were driven from our winter quarters at Dealy Island), poor Bellot lost his life. It appears that when

about to land for tenting, in the vicinity of Point Hogarth, a lane of water had to be crossed between the ice they had been marching on, and the shore. The line, however, proved too short to draw the sledge on the beach, and they were obliged to remain on the moving ice.

The last that was seen of Lieut. Bellot was on his going round a hummock, out of sight of his companions; the rest is mere conjecture, for he never returned. The prevailing idea is that he was blown, or stumbled into the sea, and was unable to regain the ice. Poor fellow! the simple fact of his being a second time employed in the search for Sir John Franklin and the crews of the "Erebus" and "Terror," and this last time by the British Government, is a sufficient proof of his high merits as an officer, and of his noble devotion to the cause, whilst Mr. Kennedy, in his narrative of the second voyage of the "Prince Albert," as well as the officers of the "Phœnix," bear ample testimony to his having been in possession of all those qualities, that cause a man to be respected and beloved by his associates. This sad accident, the first and last, which has occurred in all the Searching Expeditions, was deeply felt by the whole squadron.

On the 20th August, the wind blowing strong

from the S.E., the "Phœnix" and "Breadalbane" were secured to a driving floe, about half a mile south of Beechey Island. The ice from the offing closed, and so effectually crushed the transport as to complete her destruction in the short space of fifteen minutes; the "Phœnix" narrowly escaping a similar catastrophe. And here I would respectfully call the attention of the theoretical *savants* to the fact that in the short space of a quarter of an hour, a vessel capable of navigating the globe, disappeared beneath the surface of the sea, by the almost mysterious power of a field of ice. The accident occurred at night, and was so unexpected, that the agent narrowly escaped with his life, being obliged to rush on deck, and scramble to the floe in almost a state of nudity. The "Breadalbane," however, I must admit, was a *hired* transport, and was not strengthened, as she ought to have been, like all other arctic ships, and the agent had never been in the ice before.

On the 24th, the "Phœnix" left Beechey Island for England, taking with her Lieuts. Cresswell and Wynniatt of "Investigator," and the boatswain and men belonging to this ship who accompanied Mr. Roche to Beechey Island in May '53.

The "Assistance" left her winter quarters on

14th July, and after a series of escapes was again frozen up within 150 yards of the shore, about fifty miles northward of Beechey Island. The "Assistance" herself was on the ground, and it was a question whether she would not be thrown on shore by the movement of the ice this season.

Nearly all the crew of the "North Star" had exchanged with the ship's company of the "Phoenix." Dr. M'Cormick and Mr. Alston (mate) also returned to England by the same conveyance.

On Monday, the 10th April, at 1 P. M., Lieut. Haswell, Mr. Paine, clerk in charge, Messrs. Newton and Ford, and nineteen men, all late of "Investigator," with two sledges and fifteen days' provisions, left for Beechey Island. The following morning a second detachment, consisting of Lieut. Pim, Dr. Armstrong, Mr. Kennedy, and seventeen men, with two sledges and fifteen days' provisions, left for the same place.

At 0.45 P. M. observed the dog-sledge approaching, and at 1 P. M. Lieut. Hamilton returned from the "Assistance" *viâ* "North Star," in the short space of eight days, having accomplished the almost incredible average of thirty miles a day. We now heard, for the first time, that there was some pro-

bability of abandoning the ship, but the communication on which this report was founded, was not promulgated.

On Wednesday, 12th, Mr. Nares and party returned from Beechey; two of the men had remained behind, one at the "Assistance," in consequence of a frost-bite, the second on board the "North Star," with a severe cold and cough. Most of the party had suffered from frost-bites, and some of their faces were disfigured in consequence. One man in particular, remarkable for a long proboscis, was badly scarred, his nose, poor fellow, being swollen to a laughable size.

At 5 P. M. this day the temperature rose to zero, being the first time it had attained that height since October 28th, 1853, being a period of no less than 166 days.

This day we commenced removing snow from off the upper deck.

Thursday, April 13th. — At 1 P. M. Commander Richards and party belonging to "Assistance," set out on their return, shortly followed by Commander M'Clintock, with one man, twelve dogs, and eight days' provisions, with despatches for Sir Edward Belcher.

Friday, 14th. — At 10 A. M., Captain M'Clure,

C C

Mr. Piers (assistant-surgeon), Mr. Miertsching, (interpreter), and seventeen men, late of "Investigator," with three sledges, and fifteen days' provisions, left for Beechey Island. Nearly all the parties being now despatched, our attention was turned to completing the "Intrepid" with provisions up to July 1st, whilst the carpenters were also busily employed cutting up one of our skid-beams (American elm) for two new sledges.

Thursday, 20th.—At 5 P.M. M. de Bray, with nine men and a runner sledge, left to deposit the ice boat at the depôt near Cape Cockburn.

Monday, 24th.—Commenced clearing main-hold, preparatory to restowing; and on the 27th began forming the cable (or rather hawser) tiers.

Friday, 28th.—At 4.30 P.M., Commander M'Clintock returned on board, having accomplished the distance from the "Assistance" in seven days, and from Beechey Island in five days. He brought decided orders from Sir Edward Belcher to abandon the ships, after a certain quantity of provisions had been landed at the depôt near Cape Cockburn, and for which purpose three sledges were on their way to this ship from Beechey Island.

Sunday, April 30th.—At divisions this day, Captain Kellett informed the assembled officers and

crew, that it was his intention to proceed to Beechey Island, with the whole crew ; as soon as the various necessary arrangements were completed, and that he would inform them of the amount in weight he could permit each person to take, at the same time ordering them to have their clothes, &c., so packed, as to avoid confusion, in the event of re-occupying the ship.

Monday, May 1st to the 5th.— All hands were employed on the various duties incidental to abandoning the ship. Boats were hoisted in and up, and secured ; booms stowed ; cables coiled ; rudder hoisted in, and, in short, every moveable article either struck below, or else securely lashed.

The captain also decided on each officer being confined to forty-five pounds weight of clothes and necessaries, the men to thirty pounds.

Friday, 6th.— At 6 P.M. Messrs. Roche and Nares (mates), and Johnson (acting boatswain), seventeen men, two sledges, and eight days' provisions, left for Cape Cockburn, with Lieut. Me-cham and Mr. Krabbé's depôts of provisions for their journey to Beechey Island. Two ptarmigan were observed, hovering within a few feet of the floe, about fifty yards from the ship, evidently

intending to pitch, but Naps (the dog), unfortunately observed them and frightened them away.

Happily most of the invalids were in a state of convalescence ; but the one exception still continued in a sad state, and it became necessary to construct a kind of palanquin for his removal.

Monday, 8th.—At 7 P.M. Dr. Domville and M. de Bray, with nine men (principally invalids, including poor Morgan in a cot), nine dogs, and two sledges, left for Beechey ; at the same time Lieut. Hamilton, with one man and five dogs, left for Dealy Island, with the double purpose of depositing a record, and leaving a letter for Lieut. Mecham and Mr. Krabbé, with orders to proceed to Beechey with all despatch, without calling at the ships.

Tuesday, 9th.—At 3 P.M., Lieut. Cheyne (of "Assistance"), Mr. Shellabeer, and thirteen men belonging to "North Star," arrived from Beechey Island, for the purpose of transporting provisions on shore near Cape Cockburn.

Thursday, 11th.—Mr. Jenkins (mate), and six men belonging to "North Star," arrived from Beechey.

Friday, 12th.—During the forenoon, the captain sent for me to witness the burning of the secret

signals. Carpenter running down candles for fuel, and caulking down fore-hatchway.

Saturday, 13th.—Passed an additional lashing round the topsails and courses; weighing packages, for depôt, and clearing up on deck and around the ship.

At 7 P.M., Lieut. Cheyne, Messrs. Jenkins and Shellabeer, with seventeen men and two sledges, left with provisions to increase depôt near Cape Cockburn, and thence to Beechey Island. The sledges were heavily laden, but were favoured with a fair wind on starting, though not sufficient to relieve the pressure on the men's shoulders.

At length the sun rose on the morning of the last day, we were to spend on board our old ship, endeared to us all by many bygone associations. Without affecting any absurd sentimentality, it may easily be imagined we all experienced feelings of regret as the time approached, when we were to abandon the staunch old craft to her fate, and almost certain destruction, as we then thought, by the ice.

There were a thousand and one things we would have desired to save, such as souvenirs from those we loved and respected, had our weights permitted; forty-five pounds is, however, too low a figure to indulge in luxuries. With a sigh, therefore, we

were obliged to set aside the ornamental, and choose something more useful, but less romantic, in the shape of shirts, flannels, drawers, &c.

All was hurry and bustle in concluding the necessary arrangements. The pilot jack (letter D), was hoisted at the foretopmast-head, and the red ensign and pendant displayed, that, in the event of her being obliged to "knock under" to her icy antagonist, she might sink beneath the wave, as many a gallant predecessor had done, with colours flying.

All on board, officers and men, were much excited during the day by the novelty of their situation. As the bell struck the hour, some waggish Cocker of the lower deck would calculate the hours and minutes to the time fixed for deserting.

Numerous were the spectators when the signal books were effectually burnt at the galley fire.

Shortly after the men's dinner the sledges were packed, averaging 215 lbs. per man. Whilst the carpenters were employed caulking down the gun-room skylight and after-companion, the only means of descending to the lower deck was by the main hatchway, and only half of that was open; the captain dined with us in the darkened gun-room, and after supper, at 5 P.M., the carpenter with his crew prepared to close the main hatchway.

At 6·15 P.M., the Captain Kellett inspected the lower deck, holds, &c., and after drinking a glass of wine to the old "Resolute" and her crew, the lower deck was cleared for the last time, and the main hatchway secured.

At 7 P.M. precisely, the four sledges, commanded by Captain Kellett, Commander M'Clintock, Mr. Roche (mate), and myself, moved on in the direction of Cape Cockburn; Roche, being the junior officer, leading, whilst the captain brought up the rear, as in funeral order. We numbered in all forty-two souls; viz, eleven officers and thirty-one men; officers as follows:—

"RESOLUTE."

Captain H. Kellett, C. B.
G. F. M'Dougall, Master.
Richard Roche, Mate.
G. S. Nares, Mate.
W. H. Richards, Clk. in charge.
W. Johnson, Acting Boatswain.
W. Dean, Carpenter.
And men.

"INTREPID."

Francis L. M'Clintock, Com.
Robt. C. Scott, Assist.-Surg.
Thos. R. Purchase, Engineer.
Wm. Josh. Ibbetts, Engineer.
And men.

After advancing about a quarter of a mile, the crews of the various sledges halted simultaneously; unharnessed, and gave three hearty cheers for the "Resolute" and "Intrepid;" but though the ice is a good conductor of sound, we heard no response.

CHAP. XVI.

Journal from "Resolute" to "North Star."—Arrival on board the "North Star."—Travelling Arrangements between "North Star" and "Assistance."—Arrival of Meham, Hamilton, and Krabbé.—Copy of Meham's Letter of Proceedings.—Krabbé's Letter of Proceedings.—Lieut. Hamilton appointed to command "Pioneer."—Leave "North Star" for "Assistance" in Disaster Bay.—Arrive on board "Assistance."—Winter Quarters of "Assistance" and "Pioneer."—Return to Beechey Island.—Arrive on board the "North Star."—Cairn on Beechey Island.—Sir Edward Belcher arrives at Beechey Island.—The Monument on Beechey Island.—Liberation of "Assistance" and "Pioneer" from Disaster Bay.—Sir Edward Belcher and Party leave for "Assistance."—"Assistance" and "Pioneer" abandoned.—Arrival of "Phœnix" and "Talbot" at Beechey Island.—Tablet to Lieut. Bullock.—Leave Beechey Island for England.—Anchor in Navy Board Inlet.—Depôt injured by Esquimaux.—Lose an Anchor and four Shackles of Cable.—Regain another and five Shackles of Cable.—Off the Black Hook.—Anchor off Lievely.—Sail from Lievely.—Return to England and Court-Martial.

THE wind being light from the N. W. enabled us to make sail, and the scenic effect of perhaps the most striking incident of our lives, was not a little

heightened by the display of the various coloured ensigns and pendants.

The weights proved heavy enough in all conscience, and the work consequently laborious, and our pace bore a stronger resemblance to that of the tortoise than the hare; when about a mile and a half from the ship, Roche's sledge began to evince evident signs of weakness, and a party returned to the "Resolute" to bring up another sledge, on which we deposited a part of the load from the weaker one, one man being taken from my sledge to assist in dragging the new one. I therefore installed myself as one of the horses at my own sledge.

Tuesday, 16th June. — At 4.45 A.M., encamped about eight miles from the ships; weather fine, clear, and cold; the men, heartily tired, gladly availed themselves, as I did, of the comfort (comparative I must acknowledge) of a felt bag.

At 3.30 P.M., struck tents and proceeded; wind light from the northward, weather fine and clear; about seven encountered a heavy and extensive mass of hummocks, and with many a standing pull, crossed without any accident to the sledges. On stopping for luncheon, all the water had disappeared from our bottles (thanks to the increased exertion

and thirst occasioned by the nature of the road), we were therefore compelled to melt a little snow, and I doubt if any *bon-vivant* ever appreciated the most costly wine, with greater *goût* than we did the scarcely dissolved snow.

The sledge's crew had converted their last allowance of flour and currants into a very palatable cake, which, after being chopped with a hatchet, was washed down with a little grog. Every man after draining his "tot," * lights his pipe, and for a few short minutes enjoy uninterrupted bliss, as his thoughts stray far away from the cold and dreary scene of his present labour. At length the well-known voice of the captain, shouting with stentorian lungs, "Buckle to, boys!" dispels his dream, destroys the foundation of all his airy castles, and brings him back, with the speed of Aladdin's lamp, to the wearying, monotonous, cart-horse-work of sad reality; it also, literally, "puts his pipe out," for although I have seen it attempted, few succeed in smoking whilst dragging.

Wednesday, 17th. — At 0·45 A.M., encamped close to a high range of hummocks, after several hours toil through a most abominable road. From the top of the range Cape Cockburn appeared to be

* Allowance of grog.

about ten miles distant, this would make our last march, a ten mile one, in a N.E. by N. direction.

At 3 P.M., struck tents and proceeded ; weather overcast ; wind light from N.W. floe rugged, with occasional patches of level ice, to gain which we were often obliged to make a considerable *détour*. Passed several old encampments during the day.

It would perhaps be as well to state, that the men at the leading sledge, having to choose the road, are more liable to be affected by the refracted glare of the snow than those who follow. The sledges therefore took the lead alternately for half a march, and thus prevented considerable suffering.

Thursday, 18th. — At 1 A.M., encamped about three-quarters of a mile in a direct line from the low land of Cape Cockburn ; road for the last hour very, *very* bad, requiring much extra labour, which, when exerted after a hard day's toil, affected the men not a little.

At 3 P.M., struck tents and proceeded, under sail, with a fresh breeze from W.N.W., through a high range of hummocks, not inaptly compared to a miniature Alps ; fortunately all crossed without any accident, or even being obliged to "double bank," this is to be attributed to the road being levelled by the numerous parties who had preceded us.

We gained the beach about 4 P.M., and then commenced what proved a most laborious march, across the low lands between Cape Cockburn and Acland Bay. Had we skirted the beach on the floe, a few hundred yards off, no doubt we would have experienced less difficulty, and have reached the depôt in a shorter time.

About 4:30, observed the sledges of the "North Star" ahead under sail; thus we had accomplished, in little more than three marches, what had taken them above five. Their sledges however, it must be confessed, were not so well adapted for heavy loads as those we had.

At midnight, pitched tents at the depôt, which I take to be about eight miles east of the nearest high land of the cape. The "North Star" sledges had left a short time before we arrived, and, after depositing a certain quantity of provisions, had proceeded on; they were yet in sight, about two miles to the eastward. Unpacked, and left at the depôt (from my sledge) two tins of boiled bacon. The provisions for Mecham, Krabbé, and Hamilton were stowed apart from the general depôt; the latter consists of an ice-boat, Halkett's ditto, a sledge, and provisions for twenty days for sixty-six men, besides a quantity of fuel.

Friday, 19th. — At 4 P. M., struck tents ; placed the sledge "Erin" on end, as a landmark to Lieut. Mecham, and Mr. Krabbé. Proceeded on; the "North Star" sledges, under weigh, about four miles ahead. Wind light from W. N. W. Weather gloomy, and objects very distorted and indistinct in consequence.

An hour after starting, stopped to relash Roche's sledge, and again went on. About seven I accompanied Captain M'Clintock on shore, near Alison's inlet, to look for game, but saw none. The dung of hares and deer abounded ; and foot-prints of both animals, as also foxes, were numerous. We had struck in on the footsteps of two men (officers of the sledges ahead), and after losing them for about an hour, on the land, struck off, by mere accident, in their outward trail.

On rejoining the sledges, about 1.15 A. M., on Saturday, the 20th, we encamped, being about four miles S. W. of Acland Bay. Wind light from the southward, with gloomy weather.

At 4 P. M., struck tents and proceeded along a moderately good floe to the eastward. About eight saw a bear, but the rascal would not allow us to approach within rifle shot.

Passed between Moore Island and the main.

Went ahead to find a passage through a range of hummocks extended from the E. point of the island to the main. Found an excellent road, there being a kind of inlet, or bay of smooth ice, leaving but a very narrow isthmus of rugged ice to cross. On turning round I was surprised to find the sledges had taken another lead to the southward, which proved intricate, obliging us to double bank, and greatly endangered all the sledges. "North Star's" sledges in sight all the march. We were evidently nearing them. Pitched tents about two miles east of Moore Island; wind light from the eastward since 4 P.M., with gloomy weather and a light fall of snow.

Sunday, 21st.—At 3 P.M., proceeded on to the eastward; first part of the march gloomy; towards midnight, fine clear weather. Saw Browne, Lowther, Garrett, Moore, and Baker islands, also the cairn I erected on Point Frazer in the spring of 1851. "North Star's" sledges ahead.

Monday, 22nd.—At 1 A.M., pitched tents about five miles S.E. of Baker Island. "North Star's" sledges half a mile distant to the N.E.; communicated with them; found a party had just returned from pursuing five deer crossing M'Dougall Bay to the eastward.

Shortly after we encamped, I heard the cook exclaim, in a tone of surprise, "Here's a bear close to the tent, Sir!" I immediately rushed out of the tent, gun in hand, but Captain M'Clintock fired and wounded the animal just as I quitted the tent. I hoped to gain sufficiently on the bear, by running, to get a shot. In my eagerness to follow I was tripped by a rugged piece of ice, and fell, when one of the barrels went off, the ball passing close to my head. I can only account for the accident by attributing it to weak locks, for the gun was only half cocked, and I am not aware of the cock having caught any part of my dress. My escape from a severe wound, or probably death, was very providential.

The unfortunate cause of the mischief was killed, after a hunt of a couple of miles.

Monday, 4 P. M., again proceeded across the mouth of M'Dougall Bay towards Browne Island. Wind moderate from eastward; weather cloudy; about nine the wind veered to N. by W. and enabled us to make sail.

Tuesday, 23rd, 1 A. M., pitched tents about five miles W.N.W. of Browne Island. "North Star's" sledges about two miles to S. E.

At 4 P. M., proceeded over a somewhat irregular

floe towards the south point of Browne Island. About eight passed close to the south end, skirting very heavy hummocks thrown against the beach. "North Stars" in company; weather fine and clear; wind light from the northward; sledges under sail. The captain having determined on dividing the march, pitched at 9 P. M. "North Stars" going ahead, as they travelled according to the old routine.

Wednesday, 24th.— At 1 A. M., struck tents and proceeded; wind light and variable; weather fine; 2:30 sighted, "North Star's" tents ahead, and at 5:30 passed them, and shortly afterwards encamped.

At 4 P. M. struck tents, and proceeded, with the "North Star's" sledges in company. At nine pitched tents about 4' W. by N. of Cape Martyr. Weather calm and clear.

Thursday, 1 A. M., struck tents and proceeded across a level floe to the eastward; three, passed Cape Martyr; four, a breeze sprung up from the N. W.; made sail; at five encamped abreast of Resolute Bay, about two miles off shore. Saw cairn on Cape Martyr and Griffiths Island.

At 3 P. M., wind fresh from N. W., with gloomy weather, struck tents and proceeded under sail, over a very rugged road, making for the depôt at

Assistance Harbour, where we encamped about 10·30, close to the tents of the "North Star."

We found the depôt in a very unsatisfactory state, the bread cases, containing bread, meat, pepper, mustard, &c., not only stowed indiscriminately, but the cases sadly out of repair, and liable to be affected by rain, &c.

Friday, 26th. — At 1 A.M. Messrs. Cheyne and Jenkins left for Beechey Island; at 0·30 P. M. roused, and commenced restoring the depôt, about twenty yards from its original position.

At 4 P. M. proceeded under sail to the eastward, over a very irregular road. At 9 P. M. observed a wolf ahead, and shortly afterwards perceived a man advancing to meet us from Cape Hotham. He proved to be Mr. Court, who, with a party of four men, was stationed at the Cape, to render assistance if necessary to any of the parties from the westward. His party had originally consisted of six men, but M. de Bray had taken two on Monday last, to assist the invalids to Beechey Island.

It appears that Lieut. Pim had originally been stationed at the Cape, but had unfortunately shot his thumb, and was obliged to be carried to the "North Star," the whole distance of 34 miles being accomplished in one march. We also heard that Dr.

Domville had fortunately arrived at Cape Hotham, a short time after the accident had occurred, and was thus enabled to give his valuable medical assistance in dressing the wound. Poor Morgan remained in the same precarious state, and had arrived safely on board.

At 9·30 encamped about 2 miles S.S.W. off Rugged Bluff (called by some Cape Hotham); saw Beechey Island and the land adjacent. Mr. Dean (carpenter), who had been sent on shore to inspect a boat brought across by Mr. Court, returned with a report of her being in want of considerable repair, for she had been drawn across the channel on her keel, and the ice had worn away no less than three planks above the garboard streak on each side, to the sixteenth part of an inch. Mr. Court was therefore, ordered to bring his sledge and crew on with us.

Saturday, 17th. — At 2 A.M. wind light from the northward; struck tents and proceeded under sail. Sun very fierce, men suffering from snow blindness. About 2 miles east of the Rugged Bluff, crossed a crack in the ice, about two feet wide, and apparently very recently made.

The wolf before mentioned followed abreast of the sledges, and occasionally favoured us with

a most melancholy howl, evidently intended to call Tiger, the dog, who frequently ran out, and kept company in the most friendly manner with the wolf. At 6 A.M. pitched tents on the ice, having marched about eight miles.

At 4 P.M. proceeded under sail, over a good floe, towards Beechey Island; the wind being light and variable, with a burning sun nearly ahead, caused the march to be unpleasantly warm.

Sunday, 2 A.M.—Pitched tents about five miles from Beechey Island, very tired and foot-sore.

At 4 P.M. wind strong from the westward, land very indistinct, weather threatening, with every appearance of snow.

Proceeded on, under sail, with ensigns and pendants displayed, following the old sledge tracks, over hummocky ice. Road very circuitous. At 6 P.M. reached the shore, during a heavy fall of snow. Several officers from the "North Star" came out to meet and welcome us. After partaking of luncheon, on the usual viands,—bread, bacon, and rum,—not forgetting the soothing pipe; we wended our way along the beach, under the overhanging cliffs of Beechey.

On rounding the point and sighting the "North Star," her bugler played, "Auld lang syne." I can

scarcely call the scene that ensued imposing, for the heavy fall of snow detracted considerably from the effect, or rather prevented our enjoying it as it probably deserved.

At 7 P.M. arrived alongside the "North Star," and from choice pitched tents on the floe for the night, in preference to going on board.

About an hour in advance of us, a sledge with sixteen officers and men (principally invalids) arrived from the "Assistance," between which ship and the "North Star," constant communication had been kept up since the 22nd of February. The day following our arrival, we took possession of our cabins and gun room on the lower deck, and in a short time settled down as only sailors *can*. The medical officers on board, of whom there were now no less than five—viz., Lyall, Armstrong, Domville, Piers, and Scott—held a survey on the crews of the "Resolute" and "Intrepid," in order to ascertain the physical capability of each officer and man.

Dr. Domville had arrived with poor Morgan on the 19th; he lingered only until between the hours of 2 and 3 on the morning of the 22nd, and on the 24th his corpse was interred beside the gallant fellows, late of the "Erebus" and "Terror," who had fallen victims to their first winter in 1845-46; and

were destined to find a last resting-place on the barren shores of Beechey Island.

Dr. Lyall, of the "Assistance," had been appointed as surgeon-superintendent on board the "North Star;" whilst Dr. Richards, a week previous to our arrival, proceeded to the "Assistance," as acting surgeon of that ship during the absence of Dr. Lyall.

May, 30th.—Mr. Court, acting master, left for Assistance Bay, to secure and restore the depôt, taking with him several empty casks for the before-mentioned service, as well as carpenters and materials to repair the disabled boat at Cape Hotham.

As it would not only be perfectly useless, but almost impossible, to describe in a readable manner the various arrivals and departures, I shall content myself by extracting from the ship's log the most important.

May 31st, at 6·30 A.M., Mr. Grove, mate of "Assistance," left for Disaster Bay, the winter quarters of "Assistance" and "Pioneer." At 5 P.M. Mr. Dean, with Thompson and the dogs, left for "Assistance" with despatches. Mr. Dean, the carpenter, was to remain for duty, the carpenter of "Assistance," Mr. Kerr, having been invalided for scorbutic affection.

The dogs were followed in the course of an hour

by two other sledges, commanded by Lieut. Cheyne and Mr. Nares, for the same destination. I have forgotten to state that the "Assistance" and her tender are wintering in lat. $75^{\circ} 31' 14''$ N., long. $92^{\circ} 21' 55''$ W., being, roughly, about fifty-two miles nearly north of the "North Star." Stationed at various points along the coast, are no less than four tents, with blanket bags, robes, cooking apparatus, &c., thus rendering it unnecessary for the sledges to carry any of these articles. The tents are stationed as follows, — viz., at Point Innis, Cape Bowden, Cape Grinnel, and Cape Osborn. Perfection has never yet been attained, therefore the apparent advantages of this scheme, great as they are, have a trifling drawback, in the event of two parties arriving at the same tent within a short time of each other, as has actually occurred on several occasions, whereby the unfortunates who happened to arrive last, were obliged to resume their march for another twelve miles, ere they could hope to rest their wearied limbs.

June 12th. — At 5 A.M. we were aroused by an unusual noise, occasioned by Mecham's arrival from the Prince of Wales's Strait, bringing joyful news of the safety of Captain Collinson, C.B. and the "Enterprise." Whilst he, poor fellow, devoured his breakfast, we plagued him with innumerable

questions, generally commencing with how, when, and where ?

On one of the most important points, however, he soon set our minds at rest, by assuring us of the good health of his own, as well as Krabbé's crew. They had fallen in with each other about Point Griffiths, from whence they had kept company. Near Moore Island they had overtaken Hamilton, with the dogs, who had suffered considerably. Hamilton, of whom Mecham had borrowed the dog-sledge the previous night, would probably arrive in the course of the day, and Krabbé, being a little further astern, to-morrow.

At 7-30 A.M. Mons. de Bray, with the dogs, was despatched to Sir Edward Belcher with the result of Mecham's journey.

About 1 P.M. Hamilton arrived with Mecham's sledge and crew, all well in health, but looking haggard and careworn. Most of them complained of sore ankles and feet.

June 13th. — At 4 A.M. Krabbé arrived with his crew. By the kind permission of Messrs. Mecham and Krabbé, I am enabled to insert their condensed letters of proceedings, which will give a sufficiently detailed account of their respective journeys.

Both have done wonders ; the journey of Lieut.

Mecham, in particular, is one of the most successful of all the arduous explorations that have been carried out in these regions, not only as regards time and distance, but in important results. But, as I have before observed, both officers shall speak for themselves—the reader may judge for himself.

“H. M. Ship, ‘North Star,’

“Beechey Island, June 14. 1854.

“SIR,

“I have the honour to inform you that I left the ship on April the 3rd, in command of the sledge ‘Discovery,’ accompanied by Mr. Krabbé, with sledge ‘Newton,’ under my orders. On the fatigue party leaving us, we shaped our course to the W.N.W., travelled over heavy hummocks of pressed-up young ice, following the leads trending to the northward until the 5th, when we gained a perfectly level floe about thirty miles N.W. of the ship.

“Passed one mile south of Point Gillman, and arrived at Melville Island on the 8th, and the Sailors’ Home, Dealy Island, on the 12th. Off Point Griffiths we remained a day, on account of the disabled state of several men from snow blindness, sore feet and ankles.

“The house we found in perfect condition, well banked up with snow on the outside, but the interior perfectly free from drift. The upper part of the bread in No. 1. tank was slightly damaged, and one rum cask about one fourth empty. After provisioning our sledges, proceeded to the westward on the 13th.

“Deposited a record on the stone in Winter Harbour, crossed over Point Hearne, and travelled about three miles,

off shore, towards Cape Providence. On the 18th shaped our course for Cape Russell on Baring Island, and gradually changed to night travelling.

“ About eight miles south of Cape Providence entered the first range of heavy hummocks composed of young ice. Through this we travelled about five miles, when we met the old floes, generally surrounded by heavy ridges of pressed-up young ice. About the centre of the Straits we found the floes old and of larger extent; and as we neared the southern shore, we were constantly entangled, during dense fogs, among most intricate hummocks and deep snow, which made the work most laborious.

“ On the 24th April the land was indistinctly seen with a glass about six miles distant, and soon after, on the weather clearing, found we were past the old ice, and a large extent of pressed-up young floes lay before us.

“ On the 25th encamped off a low point at the entrance of an inlet, which I supposed to be Cape Russell, as the high land near Cape Providence was distinctly seen bearing N. $\frac{1}{4}$ E.

“ Here I deposited eleven days' provisions in depôt, and despatched Mr. Krabbé to the westward, in execution of your orders. I also directed him, on his return to Dealy Island, to examine the bread and remove as much of the damaged portions as possible.

“ After leaving the depôt the land trended to the S.S.W., along which we steered. On the 26th, during a heavy northerly breeze, we came to very old ice, deeply covered with snow, most unlike that described in Prince of Wales's Strait, and after steering five hours on a course across the Strait, came suddenly to a large boulder. The gale continued until the evening of the 28th, when it lulled suffi-

ciently to enable me to obtain bearings, which convinced me it could not be Prince of Wales's Strait.

"The high land on each side terminates abruptly, beyond which there appeared to be an extensive plain sweeping across the bottom. This obliged us to go upon half allowance of provisions, pick up our depôt, and follow the land to the westward.

"In two journeys we opened the Prince of Wales's Strait; this, together with the bearings of Melville Island, satisfied me the land must be laid down too far to the eastward.

"When south of Cape Russell, I deposited our depôt, and proceeded to the S.W., about two miles off shore. Although the ice was considerably pressed up, the snow was hard, and travelling tolerably good. Landed occasionally to obtain drift wood, which was in great abundance about the low points. On the 4th May, at midnight, arrived at the Princess Royal Islands, and at the cairn found a document, stating that H.M.S. 'Enterprise' had, in 1851, passed up the straits to Point Peel, returned, and after following the west coast of Baring Island to lat. $72^{\circ}55'N.$, had wintered, in 1851 and 1852, in lat. $71^{\circ}35'N.$, long. $117^{\circ}40'W.$; also that information of her movements would be found upon an islet in lat. $71^{\circ}36'N.$, long. $119^{\circ}W.$ Provisioned the sledge for ten days, and started that night in quest of further traces; after passing Point Gordon, found the beach thickly strewed with traces of Esquimaux encampments.

"On the 9th arrived at the islet, and after several hours' digging, found records, ten feet mag. north of a small cairn on its summit. These stated that the 'Enterprise's' parties had visited Point Hearne on Melville Island, and had

examined the north and south shores of Prince Albert's land ; and upon her leaving this on the 27th August, 1852, intended to pursue a channel between Wollaston and Prince Albert's Land. For particulars I beg to refer you to the accompanying records. Rebuilt the cairn and deposited charts, and every information connected with our proceedings, also records of depôts, &c. Taking into consideration the date of these records, and my remaining resources, I determined to return with all despatch to the ship ; arrived at the Islands on the 13th May, provisioned the sledge, and deposited records, &c. The whale boat I found in perfect condition, but the sugar and two cases of potatoes soddened with the wet. The cocoa also damaged. These I removed to the rise above the depôt. After leaving the Islands, despatched the sledge along the south shore of Straits, and travelled along the north side, accompanied by one man, with the small one.

“ Deposited records at Point Russell, rejoined the sledge on the 17th, found them all ready to start, having built a cairn, deposited records, and collected enough drift wood to last us across to Dealy Island. On May 19th, we cleared the Straits, and travelled direct for Cape Providence. The ice for ten miles north of Cape Russell we found of last year's formation, without a crack. After crossing a barrier of heavy old hummocks, came to a level but old floe, over which we travelled fifteen miles, and then entered heavy hummocks of young ice, mixed with small floes of heavy old ice: through these we travelled thirty miles, and on the 23rd cleared them about seven miles S. b. E. of Cape Providence.

“ Very heavy falls of snow and strong easterly winds checked our progress very much, and caused snow blindness

throughout the party. On the 27th arrived at the Sailors' Home, Dealy Island, and found orders to proceed to Beechey Island. The heaps of letters, papers, and news of all kinds which our shipmates had contributed, added much to our pleasure, but not much to our rest.

“Deposited records, notices, &c., of our proceedings, and after provisioning and securing the house, started at midnight to the eastward. Walked overland to Skene Bay, but found no traces of large animals. The light rain and warm weather softened the snow very much, and pools of water were seen on the land about Point Ross. On the 30th May overtook Mr. Krabbé's party, all well. Travelled together, and reached most intricate hummocks twenty miles east of Cape Gillman, which were very tiresome, on account of the sloppy state of the snow.

“The weather then became much colder, which checked the thaw, and improved the travelling. On June 5th arrived at Cape Cockburn depôt. Finding I was somewhat lighter than Mr. Krabbé, together with the importance of reaching the ship as soon as possible, I informed him of my intention to travel independently. Left everything secure at the depôt, and proceeded on our journey. Passed over very decayed ice inside Moore Island, and overtook Mr. Hamilton off Cape Capel. His dogs were much fagged, but I hoped, by giving them a few feeds of damaged pemican, to enable him to push on a day in advance of me to the ship; but the favourable winds allowed me to keep well up, and on the 11th of June we encamped together near Cape Hotham.

“During the last three journeys, we crossed several cracks open in the ice, varying from six to twelve feet in width. On the evening of the 11th, the dogs being fresh, I left Lieut. Hamilton in charge of my sledge, and proceeded

with the dogs across Wellington Channel, and arrived on board the 'North Star' at 4:30 A. M. on the 12th, kindly welcomed by all hands.

"For the detail of the journey I beg to refer you to my journal, &c. Throughout the journey we have all enjoyed good health, but the men are much reduced by their exertions, and all complain of sore ankles and feet.

"Although travelling along land well known by us as being stocked with animals, we have only seen six reindeer and seven musk-oxen, besides small game, and have only procured one reindeer, three hares, and thirty ptarmigan, which has obliged us to be content with one meal a day.

"In conclusion, allow me to bring before your notice the most excellent behaviour of the men. Circumstances have obliged us frequently to travel upon reduced rations, but throughout I have never heard a murmur; and they have evinced such zeal and spirits in the performance of their work, that in spite of the tedium connected with travelling, they have voluntarily performed distances which, under ordinary circumstances, I would not have ordered.

"I have the honour to remain,

"Sir,

"Your most obedient servant,

"(Signed) G. F. MECHAM, Lieut.

"Captain H. Kellett, C. B.
Beechey Island."

ABSTRACT OF MECHAM'S JOURNEY.

Number of days, outward journey	-	-	-	37
„ homeward journey	-	-	-	33
				Total days absent 70
Number of journeys lost by various detentions	{	Out, 6	=	$8\frac{1}{2}$
		Home, $2\frac{1}{2}$		
				Total number of journeys or marches, $61\frac{1}{2}$

414 ABSTRACT OF MECHAM'S JOURNEY.

Travelled outwards	-	-	-	-	Geo. Miles	499
„ homewards	-	-	-	-	-	658
Total distance						1157
Total in statute miles						1336

	Miles.	
	Geog.	Stat.
Average rate of outward travelling, deducting detentions	-	-
„ homeward travelling, &c., deducting detentions and distance done, 32', by detached sledge	-	-
Average rate throughout journey, 32', by detached sledge	-	-
Total distance done, 1336', divided by number of days (70) absent	-	-
	16·1	18·6
	20·5	23·6
	18·0	20·0
	16·5	19·0
	H. M.	
Average number of hours travelling	-	-
„ time for luncheon	-	-
„ time cooking, packing, and rest, exclusive of detentions (30 hours) by bad weather, &c.	-	-
Cairns built (Point Russell 1, 14' S. W. Point Peel 1, Point Loch 1, Ramsay Island 1)	-	-
Records deposited	-	-
Charts of discoveries and depôts (Point Russell, 14' S. W. of Point Peel, Princess Royal Island, and Ramsay Island)	-	-
	9	25
	25	25
	13	22
	4	4
	7	7
	4	4

In his concluding remarks, Mr. Mecham deploras the absence of game in any quantity. Five reindeer, a few ptarmigan and willow-grouse, were all that were seen on Prince Albert's land; and on Melville Island seven musk-oxen, one reindeer, one hare, and a few ptarmigan only.

As I have previously observed, the preceding journey accomplished by Lieut. Mecham and a party of seven men, is, I believe, almost without a parallel even in these regions, where pedestrian feats of no ordinary nature have been accomplished. As the sledges of Messrs. Mecham and Krabbé kept company until the 25th April, it would be useless to recapitulate their proceedings up to that date. At the time of their diverging on their separate courses (Mecham down the Prince of Wales's Straits, and Krabbé to the Bay of Mercy), they were actually near Point Peel, which, owing to the unfavourable state of the weather, had been mistaken for Point Parker. On the 27th, Mr. Krabbé, having ascertained his true position, to be further from his destination than he expected, was necessitated to place his sledge's crew on two-thirds of the usual allowance. From Cape Russell an excellent road, composed of last year's ice, extended the whole distance to the Bay of Mercy, where the party arrived on May 5th, at 10·30 P.M.

The "Investigator" was observed on rounding Point Back, and the stacks of spars on shore, on their approach within four or five miles. The remains of the ensign and pendant were yet flying. A great accumulation of drift was found on the

northern side of the ship (? the bow), enabling the whole party to walk on board on this novel "brow."

The ship's head was N. 30° W., the cable hanging slack under the bow. She was a little down by the head, and had an inclination to starboard of about ten degrees. No signs of pressure were observed, although in many places oakum was hanging loosely from her seams. Her bearing from the cairn was found to be S. 12° E., at a distance of about 1400 yards, and 426 feet from the nearest point of land, her stern being in eleven fathoms water.

On going below, things in general were found in good order, the lower deck being free from frost. A great accumulation, however, was found overhead in the holds and orlops.

That she had leaked considerably during the past summer, was evident from the solid mass of ice found in her holds, extending to the orlop beams forward, and within ten inches of similar beams abaft. Mr. Krabbé now determined on clearing the ship of all useful articles he could remove; and to facilitate this purpose, as also to repair his kettle, &c., he housed his crew on board the ship.

The day following his arrival, the crew began

breaking out stores and provisions, and by the 9th had landed the following: —

Biscuit	-	-	-	1232 lbs. in 12 casks.
Salt Beef	-	-	-	1 "
„ Pork	-	-	-	Harness cask.
Suet	-	-	-	112 lbs. in 1 cask.
Flour	-	-	-	720 „ 3 „
Tobacco	-	-	-	750 „ 5 cases.
Sugar	-	-	-	475 „ 1 cask.
Tea	-	-	-	50 (?) ullage in cask.
Preserved meats	-	-	-	1150 lbs. stowed between the casks.
Flannel	-	-	-	230 yds. in a bale.
Duck	-	-	-	70 „ ullage.
Serge	-	-	-	80 „ a bale.
Mitts	-	-	-	100 pairs „
Flushing jackets	-	-	-	15 „ ullage.
Tent gear (contents unknown).				
Main deck and forecastle housing cloths.				
One main course.				
One royal.				

The above articles were stowed fifty yards north of the stacked spars, and fifteen feet inland of “Investigator’s” provisions; they are all together, and covered with a tarpaulin lashed on.

The spirits, wine, coals, and 3,300 lbs. of preserved meats he was unable to remove, frozen as they were, in a compact body of ice.

The two following days were employed in packing sixteen days’ provisions for his sledge,

collecting and packing a quantity of medicine of various descriptions (eventually left at Dealy Island), as well as botanical and zoological specimens, thermometers, &c. A record containing every useful information was deposited at the cairn at Point Providence, and at 6 P.M. on the 11th May, the party commenced their homeward journey, after closing the hatches and leaving the ship in the same state they found her.

Mr. Krabbé's firm conviction was that no water made inside a line drawn from Point Providence to Point Back during 1853, but that open water had made, during that season, to a breadth of two or three miles outside that line, bounded on the northward by the pack. Along the cliffs of Banks Land also, there was a belt of new ice from two to four miles wide, terminating in heavy pressure on Point Parker. On the 26th May the party arrived at the Sailors' Home, at Dealy Island, where orders awaited them to proceed immediately to Beechey Island.

From the time of Lieut. Mecham's falling in with him, Mr. Krabbé's letter is of course a counterpart of the former officer's. The list of game procured is small compared with what they expected to obtain — one musk-ox, one hare, two

foxes, and nineteen ptarmigan, being all that rewarded their sporting efforts. They, however, saw — poor satisfaction! — seven musk-oxen, three deer, four hares, forty-five ptarmigan, six foxes, two wolves, three owls (snowy), two ravens, two burgomasters, and two bears.

ABSTRACT OF JOURNEY.

Days out - - - - -	32½
„ at “Investigator” - - - - -	5½
„ home - - - - -	33
Total days absent	<u>71</u>

Whole days detained - - - - -	4
Small detentions - - - - -	4
Total	<u>8</u>

Number of marches out - - - - -	30
Detentions - - - - -	2
Full marches out - - - - -	28
Number of marches home - - - - -	33
Detentions - - - - -	2
Full marches home - - - - -	31
Total number of full marches	<u>59</u>

	Geog.	Statute.
Distance travelled outwards - - - - -	397	451·1
+ by 28 gives average length of march	14·2	16·1
Distance travelled homewards - - - - -	466·5	536·9
+ by 31 gives average length of march	15·0	17·3
Total distance travelled - - - - -	863·5	987·0
+ by 59, average of all marches - - - - -	14·6	16·7
+ by 65·5, number of days travelling - - - - -	13·2	15·1

420 · LIEUT. HAMILTON APPOINTED TO "PIONEER."

			H.	M.	H.	M.
Number of hours marching	-	-	572	15		
+ by 63 days	-	-	-	-	9	5
Total time lunching	-	-	16	25		
+ 58 days	-	-	-	-	0	17
Total time encamped	-	-	837	20		
+ 61 days	-	-	-	-	1	44
Detentions	-	-	136	40		
			<hr/>			
			1562	40	=	65 2 40
					Days	h. m.
					On board "Investigator"	5 19 10
					Total time absent	<u>70 21 50</u>

(See Table, pp. 422-3.)

Wednesday, June 14th. — At 7 P.M. Lieut. Haswell and party arrived with a whale boat from Cape Grinnel, after an absence of four days. At the same time a shooting party, consisting of four officers and six men, provisioned for fourteen days, left for Caswell's Tower, and its neighbourhood. The same evening Mr. Jenkins (mate) with a sledge party left for "Assistance," being lent to that ship for duty.

Friday, 16th. — At 5 A.M. Lieut. May and party arrived from "Assistance."

Saturday, 17th. — This forenoon I was ordered to hold myself in readiness to leave for "Assistance" in the evening.

At 9 P.M. Lieut. Hamilton, who had been appointed to the "Pioneer," *vice* Commander, now Captain, Sherard Osborn, C.B., superseded at his

own request, left with the dog sledge to join his new command, and I with a sledge party left for Disaster Bay. On our way up we killed a few dovebies and ptarmigan, which materially assisted our allowance of provisions. At Cape Bowden we found Sergeant Jeffries of "Assistance" and Dix, a marine from the "Pioneer." Both these men had been stationed here since May, the sergeant being responsible for all receipts and issues of provisions. He also sent in all game he procured to Sir E. Belcher, collecting geological and botanical specimens, and indeed anything he deemed sufficiently curious to be preserved.

The sergeant, whilst we were encamped, shot two geese and a ptarmigan, which I took on to Sir E. Belcher. The sergeant informed me that one of the geese fell some distance from where he had fired; on nearing it, he observed two gulls pecking at the goose, and found on coming up the head had been eaten off. He also informed me the rise and fall of tide was about ten feet, judging by the outer floe beyond the crack (close to the shore), which fell eight feet below the fast ice, and on several occasions rose to two feet above, the standing ice of course being covered with water to that depth.

On leaving Cape Bowden, I despatched two men to walk along the land, in hopes of their picking

and Crews of H.M.S.S. "Resolute" and "Intrepid," Captain H. Searching Expedition, under the Command of Captain Str Edward June, 1854 (inclusive), compiled from Official Documents by Geo. F.

New Coast Line Geog. Statute.			Game procured whilst travel- ling, Autumn 1852, Spring 1853, Spring 1854.										Quantity of Meat in lbs.		Cairns built, records deposited.	Charts of Dis- coveries, with Posi- tions of Depôts, &c.	Remarks, &c.
Explored.	Seen, but not ex- plored.	Total	Musk Oxen.	Deer	Hares.	hares.	Ptarmigan.	Geese.	Ducks.	Plover.	Lemmings.	1852	1853	1854			
700	68	768	7	7	1	-	22	5	2	-	-	1629	1629	22	4	The force employed on this service consisted of 84 officers and men, and 10 dogs, — or 88 officers and men, allowing the power of 5 dogs to be equal to that of 2 men.	
809	77	886	-	8	-	-	5	-	-	-	-	185	1574	26	4		
680	-	680	4	7	16	-	40	5	4	-	-	1275	-	7	4		
785	-	785	1	3	-	-	30	5	-	-	-	114	-	-	-		
-	-	-	1	12	-	-	6	-	-	-	-	188	384	-	-		
-	-	-	3	-	-	-	4	5	-	-	-	196	-	-	-		
170	-	170	1	-	-	-	2	-	-	-	-	168	-	-	-		
196	-	196	12	2	-	-	16	-	-	-	-	136	636	4	1		
-	-	-	-	-	-	-	-	-	-	-	-	332	-	-	-		
-	-	-	1	1	-	-	19	-	-	-	-	193	193	3	1		
-	-	-	-	2	1	-	8	7	2	-	-	154	154	1	1		
-	-	-	6	30	-	-	3	-	-	-	-	1239	1239	1	-		
-	-	-	6	1	2	5	14	-	-	-	-	1066	1066	-	-		
-	-	-	-	-	-	-	-	2	-	-	-	2	-	-	-		
-	-	-	1	12	-	-	30	-	5	-	-	304	306	2	-		
-	-	-	-	1	1	-	5	-	-	-	-	73	73	5	-		
-	-	-	-	-	-	-	2	-	-	-	-	2	2	-	-		
1550	68	1618	2	3	2	-	15	-	-	-	-	543	7,276	71	15		
1790	77	1867	24	23	63	5	144	15	18	4	-	6,094					
			3	4	-	-	49	-	-	-	-	639					
			29	26	69	5	208	15	18	4	-	7,276					

up any stray dovekies or ptarmigan. On rejoining us at Cape Grinnel, they reported having found in the depth of the bay the remains of a spar about eight feet in length. From their description, it appeared to be part of a trysail mast (? "Breadalbane's"), for the marks of a lacing were quite apparent. They also found a record, left by Captain Stewart (of "Sophia") in 1851. When about six miles from Cape Bowden, met Mr. Purchase and party from "Assistance," with a whaleboat, on their way to Beechey Island. They were dragging the boat on her keel, the sledge built expressly for the purpose, on the designs of Sir E. Belcher, having broken down, amongst a patch of hummocks near Cape Osborn Tent. They had then been out five days, and all their provisions had been expended; of course they would replenish from the depôt for that purpose at Cape Bowden.

The following March, at 0·30 A.M. on the 22nd, met Commander Osborn, with the dog sledge, about four miles from the Tent near Cape Osborn (named after him by Captain Penny in '51). He had left the "Pioneer" a few hours before, having been superseded by Lieut. Hamilton, and was then proceeding to the "North Star."

On the 23rd, at 4 A.M., arrived on board the

"Assistance," saw Sir E. Belcher at nine, and gladly took up my quarters with my friend Hamilton on board his new command, the "Pioneer."

During our journey of five marches, we had northerly winds, with fine weather. A few cracks were seen, but only one or two we could not jump over. The following distances from point to point will be found to be nearly correct.

	Miles.	
North Star (Beechey) to Point Innis	8	tent pitched 1' to the northward.
Point Innis to Cape Bowden	14	tent on the point.
Cape Bowden to Cape Grinnel	12	,,
Cape Grinnel to Cape Osborn	14	tent 2' south of the Cape.
Cape Osborn to "Assistance"	5	
	Total	<u>53</u> miles.

The "Assistance" and "Pioneer" were within 200 yards of the shore, about midway, in a slight indentation, between two points of land, scarcely deserving the name of a bay.

They were about 100 yards apart, the heads of both vessels being off shore. I found the "Assistance" not only afloat, but relieved from her icy cradle,—much time and labour had been expended to effect this object. Both vessels had lower yards and topmasts down, and, I must

confess, bore a stronger resemblance to two stranded ships than to British men-of-war. Whilst I remained, the whole force of men, considerably augmented by the "Resolute's" and "North Star's," were employed cutting a canal *astern* of the "Pioneer," for the purpose of grounding her keel to inspect her screw gear abaft, for the screw had been shipped during the past winter, as it could not be raised at the close of the navigable season in 1853.

Cutting, chopping, and blasting were the orders of the day, the latter making the vessel tremble fore and aft, and causing sad ravages amongst all breakable articles, particularly crockery, which was the more annoying as their original stock had diminished to a quantity barely sufficient for their wants.

The remains of two ice houses yet existed, but were rapidly thawing away, under the influence of the heat of the sun.

The smaller of the two had been the observatory, whilst the larger, about 100 feet in length, had been used as a skittle alley during the winter. Close to the houses stood a solitary grave, containing the bodies of two men who had fallen during the past winter. The inscription was

neatly stamped in capital letters on a plate of sheet lead, and was as follows: —

SACRED TO THE MEMORY OF
ISAAC BARNETT,
CAPTAIN OF THE MAINTOP, H.M.S. "ASSISTANCE,"
AND
GEORGE HARRIS,
ALSO OF THAT SHIP, DOING DUTY ON BOARD H.M.S. TENDER
"PIONEER."
BOTH DEPARTED THIS LIFE UNDER SCORBUTIC AFFECTION, AS UNDER:
GEORGE HARRIS
ON THE 10TH DAY OF JANUARY, 1854, AGED 33 YEARS;
ISAAC BARNETT
ON THE 27TH DAY OF JANUARY, 1854, AGED 27 YEARS;
DESERVEDLY LAMENTED BY THEIR SHIPMATES.
A FURTHER MEMORIAL WILL BE DEPOSITED AT BEECHY ISLAND,
CONTAINING THE NAMES OF ALL WHO
HAVE UNFORTUNATELY YIELDED
TO THE EFFECTS OF
ARCTIC SERVICE IN THIS EXPEDITION.

OFF THIS SPOT H. M. S. "ASSISTANCE" AND TENDER WINTERED,
IN 1853—54, AGROUND.

The "Assistance" was in seven fathoms, the "Pioneer" in six, inside a range of heavy hummocks, aground; both vessels had their anchors down.

Easterly winds prevailed during my stay, but it was impossible to form a conjecture as to the probability of the ships being released during this season. I did no ship's duty, but was employed

making two sketches for Sir E. Belcher, whom I accompanied, as of old, surveying.

Shortly before I left for Beechey Island, the "Pioneer" floated, and the same day the screw was raised; the cause assigned for not being able to do so in October last was attributed to the low state of temperature.

July 5th. — Mr. Roche arrived with the dogs from the "North Star;" and on the 8th, at 8 P.M., I left with him and the dog sledge to return to the "North Star." I was charged with four pocket watches, a duty I would gladly have dispensed with, for had I stumbled on my way down, some of them, and probably all, would have been ruined by water. On reaching Cape Osborn, we found an immense quantity of water on the floe, often reaching as high as the bearers of the sledge. Dovekies were plentiful in the numerous cracks, and a few dozen fell victims to our double barrels.

On Sunday, at 2 A.M., landed at Cape Grinnel, and enjoyed a hot mess of dovekies, with other delicacies. We left at 6, much against the will of the dogs; and after travelling through vast sheets of water up to the dogs' bellies, arrived at Cape Bowden, at 10·30 A.M. Here we again feasted, in company with Serg. Jeffries and Dix, the marine,

who had not eaten a single bird during their long sojourn on this bleak point, though at the time of our arrival, there were no less than forty-eight dovekies hanging to the tent line. Here we remained until 10 P. M., sharing another good meal with the marines. Dix complained of his legs being weak, which he attributed to the presence of several black spots above the knee. On inspection I was fully convinced the marks were scorbutic taints, but did not feel justified in taking him on to the "North Star" for medical advice. The road from Cape Bowden proved to be the worst part of the journey, for cracks varying from six to twelve feet were numerous. The dogs were terrified at the water. There was, however, but one course to pursue: the poor animals were forced across the water, and then being started at full speed, rarely failed in drawing the sledge across, without immersing anything save the bottom of Halkett's boat, which is an invaluable auxiliary to arctic travelling, and may be considered indispensable when travelling from the middle of June to the close of the season.

After no slight personal toil, through a mass of hummocks near Point Innis, where the road was almost indescribable, being composed of a mixture of rugged hummocks, cracks, snow and water waist-

deep, we at length forded a noisy watercourse near Cape Spencer, and made for the shooting tent pitched about half a mile N.W. of the cape. Here we were welcomed by Dr. Scott, and regaled with hot tea and a savoury soup, prepared from the backs, necks, and the least fleshy parts of dovekies: the dogs were also feasted on the skins.

At 8:45 A.M. we arrived on board the "North Star," and I delivered the four watches (one had stopped) to Captain Kellett, at the same time reporting the state of the man Dix at Cape Bowden.

Dr. Lyall advised his immediate recall, and the following day the poor dogs, foot-sore and weary as they were, left to bring him down; a marine of the "Resolute" being despatched to supersede him as companion to the sergeant.

July 12th. — A small seal was captured alive in the floe, and at 5 A.M. on the 13th two bears were shot from the stern of the ship. At 4:20 P.M. the dogs returned with Dix, who was immediately placed under medical treatment.

On the 14th the Cape Spencer shooting party returned, after an absence of eleven days, having during that period shot numerous dovekies — the quantity sent on board being devoted exclusively to the use of the sick.

On the 3rd of July, the people on board this ship had commenced cutting and blasting, to release her from the ice, through which they had some difficulty in sawing, it being in many places eight feet thick. The ice was cut into rectangular pieces, and then parbuckled out. Some of them were of great weight. For instance, pieces eight feet long, six broad, and as many deep, would (by allowing 56 lbs per cubic foot) weigh no less than 7 tons 4 cwt., and many such pieces were drawn on the floe.

On returning to the "North Star," I found the finishing stroke was being put to the cairn on Beechey Island, built on the site of Franklin's cairn. It requires no description, as it was as close a representation of the one on Dealy Island as the architect and masons could make it.

On the 15th of July, a small crack across Erebus Bay had opened out to six or eight feet.

The despatch I brought to Captain Kellett from Sir E. Belcher, contained the news of the senior officer's intention to visit Beechey in the course of a week. At 9 P.M. on the 16th two sledges with boats were observed rounding Cape Spencer, from the northward. As was expected, they proved to be the parties led by Sir E. Belcher, for whose

accommodation Northumberland House had been made far more comfortable than could have been expected, though scarcely equal to a house bearing the same name near Charing Cross. Two officers and twenty men, were despatched to render assistance if required. The sledges did not arrive until 2 A. M. on the 17th. The second party was in charge of Mr. Loney, bringing with him fifteen chronometers, to be placed under my charge.

At 10·15 A. M., on the 19th, Lieut. May, of the "Assistance" and Mr. Johnson, acting boatswain of the "Resolute," left the ship, the former to the "Assistance," the latter to Cape Bowden, from whence he was to bring a boat.

Signal posts were ordered to be erected at Point Innis, Cape Bowden, Cape Grinnel, and Cape Osborn Tent, in order to communicate with the "Assistance," in the event of its being found necessary to abandon that ship and her tender; the signal for leaving them being *any* flag hoisted on Point Innis, to be repeated by the parties stationed at the other points and to the ship.

21st. — Mr. Loney and party left to rejoin "Assistance."

24th. — Mr. Court (acting master) left with a

party of four men, to watch the tide at a crack about three miles west of Beechey North Point.

He returned on the 26th, and reported the flood tide set to the northward, and continued doing so two hours after the time of high water at Beechey Island. He found the length of flood and ebb nearly equal, but the strength of the former was much greater than the current of the latter.

Since the arrival of Sir E. Belcher, several carpenters, under Mr. Kerr of the "Assistance," have been employed on shore, repairing boats, altering the fittings of the house, building a cairn of preserved meat tins, and preparing and erecting a wooden pillar, to the memory of those men who had fallen in this expedition, including the four men of "Investigator."

Its elevation is about six feet above the ground, with octagonal sides, surmounted by a ball. In each of the eight sides tablets of sheet-lead were introduced, on which the various inscriptions were neatly stamped in capital letters.*

Whilst on this subject, it would be as well to observe that an addition of two head-boards had been made to the three erected by "Erebus" and

* Many of the illustrations are unavoidably omitted, a selection only having been made from them in my journal.

“Terror;” one was placed over the remains of poor Morgan, the other was erected to the memory of Lieut. Bellot of the French navy. The following are copied from the inscriptions on the boards:—

SACRED

TO THE MEMORY

OF M. BELLOT, LIEUTENANT
OF THE FRENCH NAVY; WHO
WAS UNFORTUNATELY
DROWNED, BY A SUDDEN
DISRUPTION OF THE ICE,
IN A HEAVY GALE OF
WIND, ON THE MORNING OF
THE 18TH DAY OF AUGUST, 1853,
WHILST GALLANTLY LEADING
A SMALL PARTY OF BRITISH
SEAMEN FROM THE “NORTH
STAR” UP WELLINGTON
CHANNEL, WITH DESPATCHES
FOR THE ARCTIC
SEARCHING EXPEDITION.

SACRED

TO THE MEMORY OF

THOS. MORGAN,
SEAMAN OF H.M.S. “INVESTIGATOR,”
WHO DEPARTED THIS LIFE
ON BOARD OF H.M.S. “NORTH STAR,”
ON THE 22ND OF MAY, 1854,
AGED 36 YEARS.

By grace are ye saved through
faith, and that not of yourselves,
it is the gift of God.
Eph. chap. ii. verse 8.

The duties from this period were general, and such as circumstances rendered necessary; it would therefore be useless to enter into details. Every man was employed; the principal portion of the

crews in cutting and blasting canals; mechanics variously on board and on shore.

On the 7th, at 11.15, Sir E. Belcher mustered the various officers and crews on board the "North Star." During the afternoon, Mr. Krabbé left with a party for the purpose of fixing the position of Cape Bowden, and Mr. Court, with sledge, boat, and party, to examine the coast line as far as Cape Hurd for traces of Franklin, and to report on the state of the ice to the eastward.

At 9, three of his crew returned for a stronger boat, the one they had taken with them having been injured and rendered unfit for service.

8th.—An officer and party commenced digging around the supposed site of the workshop of "Erebus" and "Terror;" another party building a stone wall six feet high, from north and west sides of "Northumberland House."

On the 11th, from the summit of Beechey, the main pack in Barrow's Straits was observed to be broken up, and slowly drifting down the straits. I had forgotten to observe, that one of Mr. Krabbé's party arrived on board at 6 A.M., with despatches for Sir E. Belcher, from Commander Richards, reporting the liberation of "Assistance" and "Pioneer," from Disaster Bay, and their arrival at the

floe edge two miles south of Cape Osborn. The despatches left the "Assistance" at 11 A.M. on the morning of the 10th, and were thus conveyed a distance of forty-five miles in the short space of nineteen hours.

12th. — Mr. Krabbé and party returned from Cape Bowden.

14th. — Mr. Shellabeer, second master, with two men, left for Point Innes, to repeat signals, and forward despatches.

17th. — Mr. Court returned, having found no traces of Franklin. He stated, that no great amount of water had been made until the previous night, when the strong northerly winds caused the ice to move off shore.

From this period a very decided change took place in the movements of the pack, which slowly but surely, moved on to the eastward, leaving much water in Wellington Channel, and to the southward of our position.

Sunday, 20th. — The canal was cleared of ice; and about 6 P.M. commenced warping down, intending to secure to the floe outside, but the inside floe giving way, blocked up the channel, barring further progress. The following day we succeeded in getting out, and secured to the edge of the fast ice. The men were employed provisioning ship

(principally from Cape Riley) to six months for 200 men.

On the 22nd, Sir Edward Belcher left for “ Assistance,” in his whale boat, accompanied by Commander M’Clintock, Mr. Court, Doctors Lyall and Scott, and Mr. Jenkins. The apparent object of this movement was to leave a certain number of men on board “ Assistance ” and “ Pioneer.” Messrs. Court, Scott, and Jenkins were volunteers.

There were rumours that if there should be no prospect of immediate release, the ships would be abandoned forthwith, and such proved to be the case, for at 7 A.M., on the 26th, Sir E. Belcher, Commander M’Clintock, and Dr. Lyall returned, with the news of the abandonment of the ships the previous day (the 25th of August), at 5 A.M.

At 11·30 A.M., Sir Edward arrived on board the “ North Star,” after closing Northumberland House, depositing records, &c. At noon we cast off, intending to round south point of Beechey Island, to look out for the boats of “ Assistance ” and “ Pioneer.” The weather, however, became misty, with a heavy fall of snow, confining our range of vision to a very short distance.

At 1·10 P.M., whilst below, I heard a man say, in a hurried tone, “ A steamer off the point.” A rush of all hands on deck took place as a matter of

course, and there, sure enough, to our intense gratification, we observed two dark shapeless masses off Cape Riley, which proved to be the "Phœnix," Captain Inglefield, and "Talbot," Commander Jenkins.* We gave them three hearty cheers on joining company, and feasted in imagination on perceiving fresh beef and numerous ducks, looms, and dovekies suspended from her davits, guys, and stern.

Captain Inglefield, on coming on board, informed us of the war with Russia; and soon after we were all engrossed with our letters from home.

As was to have been expected, many changes had taken place since we last heard from England. Several, including myself, heard of the death of dear friends, which cast a shadow on the pleasure we experienced in perusing letters from those yet remaining.

In tow of "Phœnix," we again secured to the land ice, near our old position of the forenoon; and arrangements were immediately entered into for the equal distribution of the various crews between the three ships. All the boats had arrived from "Assistance" and "Pioneer" by 5 P.M., when I was despatched to Point Innes in a boat to bring on board the last party under the command of

* Now commanding H.M.S. "Comus"

Mr. Court, who had walked from Cape Bowden, in consequence of want of accommodation in the boats.

On my return, about 9 P.M., I found nearly all my shipmates, including the captain, had gone on board the "Phœnix." I, however, remained in the "North Star," for the purpose of keeping watch on the passage home.

Sunday, 27th.—This forenoon, M. de Bray, in the presence of the officers in command of the respective ships, who attended for the purpose, together with a party of marines, erected the marble tablet, sent out from England, as a memorial of the valuable services, and melancholy death, of his brother officer and countryman, Lieut. Bellot.

On its being secured to the wooden monument before alluded to, three volleys were fired in honour of the departed. The inscription is as follows:—

IN MEMORY
OF LIEUTENANT BELLOT
OF THE FRENCH NAVY,
WHO LOST HIS LIFE WHILST
NOBLY AIDING IN THE SEARCH FOR
SIR JOHN FRANKLIN,
IN THE WELLINGTON CHANNEL
ON THE 18TH AUGUST, 1853.

This tablet
To record the sad event
Was erected by his friend John Barrow,
A. D. 1854.

F F 4

At 1 P.M., our little squadron slipped from the ice, and, in tow of the "Phoenix," proceeded to the eastward, with little regret, on the part of any one, on leaving these inhospitable regions, except that we had failed to discover the missing crews of the "Erebus" and "Terror." As we advanced, we found a broad "lead" of water, ten or twelve miles in width, extending along the northern shore. To the southward of the "lead," and particularly in the neighbourhood of Leopold Island, the ice appeared closely packed, nor could we perceive any water beyond it to the southward.

It was generally understood that Sir Edward Belcher intended calling at Port Leopold, if possible, for the purpose of leaving two boats, and depositing a record of our past and future movements, with all information respecting the depôts, &c. Our not calling is to be regretted, for it is quite within the bounds of possibility that some of the crew of the "Enterprise" were at that moment awaiting succour within thirty miles of our position.

On the morning of the 29th, we were off Port Dundas, but were unable to communicate, as I believe was intended, in consequence of loose pack ice, which, commencing here, extended to the southward for a distance of twenty miles. Skirting its western edge, we ran into Navy Board inlet,

where we anchored at 4·55 P.M. within the "Wollaston," and about half a mile from the depôt left by Mr. Saunders, in this ship, in 1850.

This depôt had been visited by Captain Inglefield on his passage up the sound, when twenty-six casks of rum were missing, and all the other casks were found to be stove in by some rude blunt instrument.

All the injured casks, containing flour, peas, salt meat, &c., were taken on board the "Phœnix," and the following day she called at Port Dundas, where they found about twenty Esquimaux; but although a strict search was made for any article likely to convict them of the injury, no satisfactory evidence was obtained of their being the marauders.

It will be recollected that this tribe was discovered by Captain Inglefield during his previous voyage to Beechey Island in 1853. The little community at Port Dundas possessed kayacks of larger dimensions than those generally used by Esquimaux, were well supplied with dogs, and, judging from their healthy appearance, were doubtless successful in hunting seal and deer. Numerous traces of the latter animal were seen by Captain Ommanney, who discovered the port in 1850; but none were seen, nor was it supposed at the time, that any natives were in the neighbourhood.

The crews of the various ships were fully employed till midnight on the 29th coaling the "Phoenix," and watering the "Talbot." The following morning the wind blew hard from the S. W. (right on the shore): veering on the port bower; the small ditto was "dropped under foot." During the forenoon the wind increased to a gale, with a heavy ground swell. Housed top-gallant masts.

Our position was anything but a pleasant one, for we were aware of the bad nature of the ground (rock) for holding (the "North Star" lost an anchor and cable in 1850), and we were in but five fathoms, with the ground gradually shoaling to the rocky shore about one-third of a mile distant.

At 11 A.M., the port cable parted just within the fourth shackle; cable was immediately veered on the small bower; the sheer took us within a ship's breadth of the "Talbot:" fouling her would have been to lose both ships.

We did not "bring up" until we had veered to six shackles, with three and a half fathoms under her stern. In the meantime, a party was employed clearing away, and stocking waist anchor, which was let go, as a matter of precaution, some time after the ship had brought up.

The "Phœnix" sent a hawser, and attempted to tow us ahead, but without success. Towards evening the wind moderated, and shifted round to the westward; the steamer again attempted to go ahead with us in tow, when the bight of the towing hawser was found to be foul of something on the bottom.

After considerable time and labour, we hove up, to our great astonishment, the anchor and five shackles of bower cable lost by the "North Star" in 1850; we found the towing hawser curiously hitched round one of the flukes, and we had some little difficulty in clearing it.

At 7 P.M. we were again on the move, in tow of "Phœnix," and after skirting, within a cable's length, a rocky point on which the sea was breaking heavily, we kept away to the eastward, along the land, with a flowing sheet.

During the forenoon of the day following, we passed Possession Bay, and enjoyed a magnificent view of the Byam Martin Mountains, which rise in a series of snow-clad peaks to a greater elevation than any other land on this coast. Bergs were numerous in all directions.

At 1 P.M., the "Phœnix," casting off, proceeded to Pond's Bay, leaving us to stand off under easy

sail. At 10 P.M., she rejoined, and again took us in tow. No natives were seen.

Sept. 1st.—Wind strong from N.W. 7 A.M., cast off and hove to till noon — we all wondered why— but afterwards found some gear connected with the shaft had become deranged.

At noon bore up and made sail to the southward, the old craft astonishing herself and us by going eight knots an hour.

Sept. 2nd.—At eight, taken in tow, just after entering loose sailing ice, through which we were threading our way the whole day, frightening numerous young rotges that were disporting themselves in the water.

Sept. 3rd.—About 6 A.M., a bear was observed swimming in the water, between the loose pack close to the ship,— a strange position for master Bruin, who, notwithstanding the distance from the land (upwards of 150 miles), appeared to be enjoying himself mightily.

Sept. 4th. — Cast off and made sail for Lively. At 10 P.M., we lost sight of our consorts, and during the night remained becalmed off the Black Hook in close proximity to several bergs; of which unpleasant neighbours there were about eighty in sight. Ship in from fifteen to twenty fathoms.

During the middle watch (of the 5th), I was obliged to have the ship towed clear of a berg. The morning was beautifully fine, and I observed one of the finest meteors I ever saw; it descended from the eastern quarter of the heavens at an angle of 30° , with the horizon, and its brilliancy equalled a star of the first magnitude. Almost simultaneously with its fall, I heard a sharp report resembling the firing of a rifle, and thought for the moment it was connected with the meteor; but afterwards, hearing a succession of similar noises, found they were caused by the splitting of some of the numerous bergs around us.

Light variable airs prevented our sighting the entrance to Lievely until the 9th, and on this day the variable wind, light and squally alternately, placed us somewhat too near a dangerous rock (marked on the chart), about eight miles to the S.W. (true) of Lievely.

The sea was breaking violently over it. This danger should be carefully avoided, for, although it may appear strange, it is nevertheless true, that at a little distance the white foam is liable to be mistaken for one of the numerous berg-pieces in the neighbourhood, more particularly on a moon-light night.

Early the following morning, the 10th, we

anchored at the entrance of the Harbour Channel, in seven fathoms (rock); on veering to six shackles, found the ship in forty-five fathoms. N.B. This is the second time I have been anchored near this position. Avoid doing so if possible. I would infinitely prefer standing off and on outside.

We communicated with "Phœnix" and "Talbot" in the inner harbour; the former had arrived on the 5th, the latter on the 7th.

The "Phœnix" and "Talbot" were to leave the next morning; but, as *our* position was unsafe, Commander Pullen obtained permission to stand off and on during the night. At 5 P.M., we weighed, and were not surprised to find an arm of the anchor gone.

At 10 A.M., on the 11th, the "Phœnix" and "Talbot" joined company, and with a fresh northerly wind, we bore up under all sail to the southward. We kept the shore close aboard until abreast of Holsteinborg, where we expected to call, but to our satisfaction the course was altered to gain a greater offing.

On the 12th and 14th, brilliant auroras flitted across the heavens; the stars, though slightly dimmed in lustre, were distinctly visible through the brightest portions of the phenomena, and I also remarked that the clear sky appeared like dense

black clouds, compared with other portions of the heavens that were overcast.

After passing Cape Farewell, we parted company from our consorts, the "Phœnix" and "Talbot," in a gale of wind, nor did we again meet them until our arrival in England, during the first week in October.

The abandonment of so many ships naturally excited great interest and much discussion, and the proceedings of the court martial, which, as a matter of course, was held on the various officers in command, were watched with no common interest.

The Court was held on board the "Waterloo," at Sheerness, and occupied three days, viz., the 18th, 19th, and 20th October. Admiral the Hon. George Gordon presided; the other officers comprising the Court were Captains Sir Thomas Pasley, of the "Royal Albert;" Wyvill, of the "Wellesley;" Tucker, of the "Formidable;" Keith Stewart, of the "Nankin;" Seymour, of the "Cumberland;" and Fanshawe, of the "Cossack." Mr. W. W. Hayward officiated as judge-advocate.

The first case proceeded with was the abandonment of the "Investigator." Her captain, the present Sir Robert L. M. M'Clure, justified his leaving his ship by producing written orders to that effect, from his senior officer, Captain Kellett.

The prosecution in this case being merely nominal, occupied but a short time. The verdict of the court, after a short absence, was to the effect that Captain M'Clure, and the officers and crew of the "Investigator," deserve the highest commendation for their exertions, and that each and all were fully acquitted.

The Admiral, in restoring Captain M'Clure's sword, observed: "The court are of opinion that your conduct throughout your arduous exertions, has been most meritorious and praiseworthy."

The court then proceeded to inquire into the cause and circumstances attending the loss of the "Resolute." Captain Henry Kellett, C.B., being asked if he had any statement to make, pleaded orders produced from Sir Edward Belcher, C.B., ordering him to abandon the "Resolute" and her steam tender "Intrepid." Extracts from several letters bearing on the abandonment, some of them being marked confidential, were then read by the express order of the court. One letter from Sir Edward Belcher to Captain Kellett, dated in Feb. 7. 1854, contained a "request" that Captain Kellett would, with the officers and crews of the "Resolute" and "Intrepid," meet Sir Edward at Beechey Island before the 26th August. To this letter Captain

Kellett replied that he had come to the conclusion, that nothing contained in his orders would justify him in abandoning the ships under his command; and therefore begged Sir Edward Belcher (who was in possession of the orders from Government), to send him "final, decided, and most unmistakeable orders," and further, in a private letter of the same date, Captain Kellett, declared it to be the unanimous opinion of all on board the "Resolute," that they would not suffer from the first break up, as the ice was only of the previous year's formation.

To these letters Sir Edward returned an answer, dated April 21st, directing Captain Kellett to withdraw everything valuable from the ships under his command, and with the officers and crews to proceed for further instructions to Beechey Island.

This order released Captain Kellett from all responsibility connected with the abandonment, and the court returned a verdict of honourable acquittal to Captain Kellett, the officers, and crew. The admiral restored Captain Kellett's sword, observing that he experienced much satisfaction in returning a sword which the owner had worn with so much credit, satisfaction, and advantage to his country.

The trial of Sir Edward Belcher then commenced, and after the examination of various witnesses for the prosecution, Sir Edward read a lengthened and clever defence, in which he touched on all the occurrences of the voyage likely to justify the determination he ultimately arrived at. He also quoted various authorities, and read long extracts from his instructions bearing on the subject.

After the defence, the court remained closed for an hour and a half, at the end of that time the Deputy Judge-Advocate read the finding of the court, which was to the following effect:—

“ The court is of opinion that the abandonment of H.M.S. ‘ Investigator ’ was directed by Captain Kellett, who was justified in giving such order. The court is further of opinion that, from the great confidence reposed in Captain Sir Edward Belcher by the Lords Commissioners of the Admiralty, and the ample discretionary powers given to him, he was authorised and did not act beyond his orders, in abandoning H.M.S. ‘ Assistance ’ and her tender, ‘ Pioneer,’ or in directing the abandonment of H.M.S. ‘ Resolute ’ and her tender ‘ Intrepid ; ’ although, if circumstances had permitted, it would have been advisable that he should have consulted

with Captain Kellett previously. And the court doth adjudge the said Captain Sir Edward Belcher to be acquitted, and he is hereby acquitted accordingly."

The president then returned Sir Edward Belcher his sword, and the court broke up.

CHAP. XVII.

Recovery and Restoration of H.M.S. "Resolute."

Few events in the annals of the civilised world are so deserving of permanent record, as the restoration of H.M. Discovery ship "Resolute" to the Queen of England, by our Transatlantic brethren. By such a graceful proof of their affection for the old country, they have lessened party animosity, silenced the noisy declamations of stump orators on both sides of the Atlantic, and have funded a capital of good will in the hearts of all true Englishmen.

The abandonment of a ship under similar circumstances is, I believe, without precedent—her recovery is equally novel, and her restoration unparalleled. The narrative of the finding of the old ship, which has now attained an enviable notoriety, is compiled from documents kindly placed at my disposal by John Barrow, Esq., F.R.S., and Robert Postans, Esq., of Southsea, to whom, as well as to Ezekiel Emanuel, Esq., of Portsmouth, I beg to offer my sincere thanks for the valuable assistance I have derived in conse-

quence of the kind interest they have taken in the present narrative.

The following account is extracted almost *verbatim* from the "New York Herald," December 27, 1855.

"On the 29th May last, the whaling barque 'George Henry,' Captain James M. Buddington, set sail from New London Coast, on a voyage to Northumberland Inlet and Davis Straits. The bark was manned with a crew of seventeen men, including the first and second mates. On the 14th June, and while in latitude 54°, Captain Buddington encountered, quite unexpectedly, large fields of ice, through which he dared not penetrate. However, wishing to arrive at his destination as soon as possible, he followed the edge of the "pack," as far as latitude 67°. As the ship was much damaged by the floating ice, Captain Buddington concluded to wear out the season here, and accordingly the crew of the barque were employed in catching whales in, and about Esco Bay, with only tolerable luck, however. The floes are represented as being very extensive, stretching far and wide to the north, and completely blocking up the channel to Davis Straits. From the masthead of the 'George Henry,' nothing could be distinguished but masses of ice. Even with the aid of the telescope, nothing but mountains could be descried in the distance.

"On the 20th August, and while off Cape Walsingham, in lat. 67° N., the ice became, to a certain extent, penetrable, and the barque was forced through it in a southwest direction for about 150 miles. At this time a heavy

gale from the north-east sprung up, which, lasting three days, the 'George Henry' became unnavigable, and was drifted in the floe in a south-west direction. Captain Buddington saw land, but could not say to what continent it belonged.

"On the 10th September, lat. 67° N., and, while in this field of ice, Captain Buddington discovered a ship in the distance, bearing north-east, about twenty miles from Cape Mercy. He ascended the rigging of his craft, and, looking at her through the glass, pronounced her, from her appearance, to be an abandoned vessel. The head of the stranger appeared to be due east, and during the whole of that day and the one following, the course of the ship did not vary more than a point or so from the east. 'We kept gradually nearing one another,' as Captain Buddington says, 'although I could not exactly say what caused the thing to come about, except, perhaps, the ship may have been struck by a counter current from Davis Straits, and driven towards us in that manner. For five days we were in sight of one another, and continued to drift towards each other. On the sixth day after making the discovery, and when the ship was about seven miles off, Captain Buddington ordered the two mates and two of the crew to proceed to the abandoned vessel across the packed ice, and, after inspecting her, to return to the barque as soon as practicable.

"Soon after the departure of the party a south-easter sprung up, and, in consequence thereof, no communication was had with those on board the ship for two days. As soon as the wind subsided, and it was safe for the party to retrace their steps, they left the ship, and, after a tedious and hard march, arrived on board the barque in

safety. They immediately represented the facts to Captain Buddington, saying that the abandoned vessel was Her Britannic Majesty's ship 'Resolute.'

"The 'Resolute' being entirely free of water, preparations were made to bring the ship to the United States. Captain Buddington decided to sail the vessel himself, and accordingly, taking eleven men with him from his own barque, he began in good earnest to release the abandoned vessel from her ice-bound situation. The rigging had to be 'set up,' and the sails put in order, before he could venture to start. These jobs occupied him some time, but were successfully accomplished. Captain Buddington was in a great dilemma for proper navigating instruments, and the wherewith to bring him to New London after being released from the ice. His compass was not at all trustworthy; he was without a chronometer, and had no other map or chart to steer by, than a rough outline of the great North American coast, drawn on a sheet of foolscap. With his lever watch, a quadrant, and a miserable compass, the brave fellow bade adieu to his comrades in the barque 'George Henry,' and, trusting to Providence and his experience in those latitudes, prepared to bring home the prize he had so cleverly won.

"From the time that Captain Buddington took charge of the 'Resolute,' up to the 16th of October, she continued to drive in a S.W. direction with the pack of ice, when she succeeded in getting clear. Wishing to be in company as long as possible with the barque, Captain Buddington waited on the outside of the floe for three or four days, with the hope of meeting her, but the vessels missed one another, and did not meet again during the remainder of the eventful voyage.

“ While here waiting for the ‘George Henry,’ the British barque, ‘Alibi,’ hove in sight, and, on being signalled, came alongside the ‘Resolute.’ The news of the recovery of the ‘Resolute’ was communicated to Captain Stuart, of the ‘British’ barque, and a pair of Captain Kellett’s epaulettes, found on board the abandoned vessel, were entrusted to him by Captain Buddington, with instructions to have them forwarded to the owner as speedily as possible. They were sent by Captain Stuart to Mr. Barrow, who forwarded them to Commodore Kellet in the West Indies, and were duly received by him in perfect order for attending a drawing-room if required, not being soiled in the slightest degree. A letter for the owners of the ‘George Henry,’ informing them of what had occurred, was also placed in the hands of Captain Stuart, who promised to mail it immediately on his arrival in Great Britain. [This letter, it appears, reached the owners of the barque, at New London, Connecticut, long before the ‘Resolute’ arrived there.]

“ We now come to the homeward voyage. Short-handed, poorly rigged, and unfitted for the long voyage as the ‘Resolute’ was, Captain Buddington found it no easy task to bring the ship into port. The water-tanks had burst in the hold long before he came in possession of her, rendering her very light and apt to roll heavily in the trough of the sea. Gale after gale was experienced; yet the brave fellow laboured day and night, and at last was successful in the praiseworthy effort made to rescue the abandoned vessel, driving across the mouth of Northumberland Inlet down to Cape Elizabeth. The open sea was gained, and on the 20th October the homeward voyage commenced. After a succession of strong gales and head

winds, the New London lighthouse was made on the 24th December, and the voyage was successfully accomplished with credit to all concerned, but especially to Captain Buddington, for he worked morning, noon, and night.

"It is the opinion of Captain Buddington that, if the crew of the 'Resolute' had remained on board of her, with the hope of eventually releasing her, they could not have effected the task any sooner than it was performed by the natural causes which eventually freed her."

Respecting this last paragraph, however, I must beg to differ from Captain Buddington, who, nearly 1000 miles from the scene of the ship's abandonment, could form but a vague conjecture respecting the probable extrication of the vessel; and I may be allowed to observe that the above opinion is in direct opposition to the testimony of Captains Kellett and M'Clintock, as well as myself, at the Court-Martial on our return to England. Our evidence on that occasion is fully borne out by the result.

I may further be permitted to correct the erroneous statement that has gone the round of the papers, respecting the locality of the abandonment. It is, I believe, the generally received impression that the vessel was "*frozen in amongst icebergs in latitude 77° N.*," whilst the actual fact is, that no icebergs were nearer probably than 300 miles, the

ice around the ship forming one vast plain, whose level was only relieved by occasional masses of packed ice, thrown on its surface by pressure during the previous autumn.

The latitude of the abandonment was $74^{\circ} 41'$ N. and not 77° .

On the arrival of the "Resolute" at the port of New London, the English minister, Mr. Crampton, laid claim to a continuing right on behalf of Her Majesty, in virtue of a notice to that effect published in the "London Gazette" of November 10, 1854. But after communicating with the Home Government, Mr. Crampton had the pleasing duty of stating that Her Majesty waived all claim and right to the vessel, leaving her at the disposal of the gallant Captain Buddington, by whose skill and exertion she had been extricated from her icy prison, at no little peril to himself and followers.

It must indeed have been a sad and desolate scene, that presented itself to the American on breaking open the well caulked hatches, and allowing the first gleam of light to penetrate the interior of the ship after a space of sixteen months. How strange the human voice must have sounded in that deserted ship, once manned by as gallant a crew as ever faced danger, and distinguished for

the happiness they enjoyed amidst the wilds of Arctic desolation. For a year and four months no human foot had trod the deck of that phantom ship, yet, amid those savage solitudes, where man there was none, and might never be, the pilot's wheel made a stern proclamation; for around it were inscribed in letters of brass, the immortal words, "England expects that every man will do his duty."

In the Navy, some ships in themselves bear a name for being comfortable or otherwise, and this circumstance is well known to Jack, who chooses accordingly. It is no theory of mine, but a well authenticated fact, that the seeds of discord, like the African fever, are seldom wholly eradicated from a ship; and I would suggest a change of name in the latter, as well as in the former case.

The old "Resolute," under Captain Austin during her first voyage to the Arctic regions in 1850, earned for herself a well-deserved reputation as a happy ship; her chief was one who had established his character as an energetic and zealous officer, in every quarter of the globe, and no man was better adapted to carry out the arduous service, on which the Expedition was engaged. Active in mind and body, doing his duty faithfully, and de-

manding the same from all under his command, he well knew when to unbend; and was always foremost in promoting good humour, and diverting the mind from the gloomy prospects of an arctic winter, which, as Sir Edward Parry observes, "*would sometimes obtrude itself on the stoutest heart.*" The kindly disposition of Captain Austin, his suavity of manner and thorough goodness of heart, were eminently conspicuous throughout. The comfort of each individual member of the squadron under his command, was one of the principal objects he had in view, and its due accomplishment—I firmly believe—was necessary to his own happiness.

And well did her last commander, Captain Henry Kellett, sustain the character the old ship had acquired during her previous voyage; for, under his supervision, every arrangement that thoughtfulness could suggest, was made to pass the dreary season of winter in health and happiness, and indeed the valuable assistance derived from the experience of Commander Francis M'Clintock, Lieut. George F. Meham, R. V. Hamilton, Mr. Krabbé, Master of "Intrepid," and other officers who had already wintered within the Arctic circle, was in itself sufficient to insure success in the instruction and amusement of the whole. In every

good work, in every useful purpose, whether for the benefit of mind or body, the co-operation of Captain Kellett was, as a matter of course, reckoned on ; nor did he confine himself to countenancing, but joined personally, in everything tending to alleviate the monotony of an arctic winter.

I feel no apology is necessary in taking a retrospective view of the causes which authorise my statement that the old "Resolute" was indeed a happy ship.

Captain Buddington, on descending below, found the vessel in a deplorable state. The water-tanks had burst, and the hold was full of water, whilst all perishable articles were almost entirely destroyed by cold and damp. Scarcely anything on board, save the salt provisions in casks, and preserved meats in hermetically sealed tins, that had not suffered from the intense hyperborean frost. The cordage, canvas, sails, &c., were all more or less injured, and the gallant Americans had no little difficulty in making the gear they found on board answer the desired purpose of taking the ship into an American port.

The vessel herself, however, had, strange to say, escaped any material injury, after a self-directed voyage of no less than nearly 1000 miles, along a

track abounding in perils, not only from rocks, shoals, and other dangers which *a ship is heir to*, but those ever moving icy plains, and mighty crystal mountains, that sail in undisputed sway, and form the terror of the Arctic Ocean.

Immediately the determination of the British Government to waive all claim to the ship was made known; a graceful act was carried out by the Congress, worthy of the representatives of a great nation. This was no less than the purchase of the "Resolute" for the sum of 40,000 dollars; after which she was removed to one of the navy yards of the United States, and there repaired and refitted with every care, in order to carry out the noble intention of the American people, of restoring the old ship (again ready for Arctic service in every respect), as an offering of good will to the Queen and people of Great Britain; a noble incident in the history of nations, alike honourable to the donors and recipients.

On the 13th November, the "Resolute" left New York, fully equipped in every respect, even to the minutest detail, on her voyage of good will; and after a protracted passage, reached Spithead on the 12th December; when, on letting go her anchor in English water, the St. George's Cross of

Old England was displayed beside the stars and stripes of America.

The "Resolute" was, on this occasion, commanded by Captain Hartstein of the United States Navy; an officer who himself had some experience of Arctic matters, having commanded the American Expedition fitted out for the relief of Dr. Kane and party, with whom they returned in 1855.

The other officers, all distinguished in their profession, consisted of Lieuts. C. H. Wells, E. E. Stone, and Hunter Davidson, Dr. R. T. Maccoun, and Dr. Otis, acting secretary.

With such care and attention had the repairs and re-equipment been performed, that not only had the ship's stores, even to flags, been replaced, but even the officers' libraries, musical boxes, pictures, &c., had been preserved, and with an excellent taste, which reflects much credit on those who superintended the regulations, had all been restored to their original positions. They are all, I believe, in the storehouses at Chatham.

Her Majesty having expressed a wish to visit the ship, she was towed to Cowes, and there secured alongside the royal embarkation place at Trinity Wharf. The "Retribution" was anchored near for the purpose of firing salutes, whilst in the Roads

her Majesty's yachts "Elfin" and "Fairy," with numerous gun-boats, tended to make a holiday scene of the auspicious event.

The "Resolute" was dressed in colours, the English and American ensigns floating amicably together at the peak; and on the Queen's stepping her foot on board, the royal standard was hoisted at the main.

The royal party, consisting of Her Majesty, Prince Albert, the Prince of Wales, the Princess Royal, and the Princess Alice, accompanied by a numerous suite, were received by Captain Hartstein at the gangway, whilst grouped on either side were the officers of the ship in full uniform, as well as many distinguished American visitors, all of whom were in turn presented to the Queen by Captain Hartstein, who then addressed her Majesty in the following words: "Allow me to welcome your Majesty on board the 'Resolute,' and, in obedience to the will of my countrymen and of the President of the United States, to restore her to you, not only as an evidence of a friendly feeling to your sovereignty, but as a token of love, admiration, and respect to your Majesty personally."

The Queen, who was evidently touched by the manly simplicity of the frank and sailor-like

address of the gallant captain, replied, with a gracious smile, "*I thank you, Sir.*"

The Royal party then went over the ship, and examined her with manifest interest. Captain Hartstein traced her course on a map, and indicated the most important discoveries of the American Arctic Expeditions.

After completing the inspection of the ship, the royal party retired amid the enthusiastic acclamations of the spectators—the Queen having invited Captain Hartstein to dine and spend the night at Osborne; whilst the officers were allowed the privilege of visiting the palace and grounds. Her Majesty also ordered 100*l.* to be distributed amongst the crew.

On Wednesday "the Resolute" was taken in tow by the "Echo," and left Cowes harbour, amid the cheers of the inhabitants, in company with the "Retribution" and "Sprightly." On passing Osborne, the American colours were dipped on board the "Resolute," and the "Retribution" fired a royal salute. On reaching Spithead the "Shannon" was passed, on her way to the measured mile at Stoke's Bay. The colours were again dipped, and the men filled the shrouds, and gave three hearty cheers.

On nearing the harbour, at about four o'clock, a

royal salute was fired from the garrison battery. The Victoria Pier was gaily dressed with flags, and was covered with spectators, who heartily cheered them on passing. The band of the 22nd Regiment was in attendance on the pier, and played "Cheer boys, cheer," and other popular airs. On passing the Common Hard and the "Victory," the cheers were again repeated; and in each instance were acknowledged by the officers on deck and the crew in the rigging of the "Resolute."

The "Resolute" dropped anchor in the harbour abreast of the King's-stairs, when Captain Hartstein assembled all his officers around the table in the state cabin, and in a bumper of champagne proposed "the health of the Queen of Great Britain: God bless her!" which was most vociferously responded to.

Numerous were the invitations that were showered on the gallant officers of the "Resolute" during their short stay in England; but the most significant, in point of kindly feeling and importance, was the Portsmouth Banquet, at the Portland Hotel, Southsea. Into no better hands than the Corporation of Portsmouth, could have fallen the honour of welcoming and extending the hand of fellowship, to those who were chosen to be the messengers to the

Queen, the Government, and the people of this country, of the kindly feelings entertained towards them by the Government and people of the United States; by the delivery into the hands of our sovereign, of the "Christmas present," from the child towards the parent.

The entertainment was such as might have been expected from the well-known liberality of the body with whom the banquet originated; the guests were numerous and distinguished, including, by a delicate and generous foresight, the British officers, late of the "Resolute."

There was, however, one present deserving of more than passing notice. I allude to Mr. Cornelius Grinnell, the son of a noble-minded and generous man, who (to his eternal honour, be it said,) animated by the spirit of pure philanthropy, at his own cost and risk, fitted out two vessels to assist in attempting the rescue of the subjects of a foreign state, but whom, with the feelings of a true Christian, he regarded as brothers.

This disinterested action will never be forgotten. Generations yet unborn, whilst comparing it with those of the Howards, Wilberforces, and Frys, will perpetuate the fame of the donor of the princely gift; and contemplate with unfading esteem the

revered name of the American citizen and philanthropist, Henry Grinnell.

The "Resolute" was naturally an object of much interest, and was crowded with visitors from far and near. Amongst the stores found on board, were several puncheons of fine old rum, shipped previous to her leaving England in 1852. One of these puncheons was presented to Prince Albert, by Captain Hartstein, as a relic of the "Resolute."

It would have been more gratifying to the public, could the stay of the gallant Americans in England have been prolonged. Liverpool longed for the honour of receiving and entertaining them, and that being impossible, despatched a deputation from the Shipowners' Association, to offer the congratulations of its members, and accept "the munificent gifts of the President and people of America," as an additional pledge of unity.

On Tuesday morning the deputation from the Shipowners' Association of Liverpool, comprising Mr. S. R. Graves, chairman, Mr. James Smith, and Mr. F. A. Clint, who had requested and obtained permission to present an address to Captain Hartstein, arrived at Portsmouth and inspected the "Victory," and Clarence-yard, whence they were embarked by Mr. John Davies, master-attendant of that esta-

blishment, accompanied by Mr. James Garratt, of the firm of Garratt, Gibbon, and Sons, agents to Lloyd's, for the "Resolute." They were received at the gangway by Captain Hartstein and officers, and conducted below. After an introduction, the deputation were invited to the quarter-deck, where the officers and crew were assembled, together with Chevalier Pappalardo, the Vice-Consul, and Mr. Davies.

Mr. Graves then addressed Captain Hartstein as follows:—

"By desire of the Shipowners' Association of Liverpool, we are here to-day to offer to you the congratulations of its members on your safe arrival on our shores. The circumstances which have led to this auspicious event indicate that in the exercise of humanity, intrepidity, and sympathy, our countries nobly emulate each other, and it is impossible to foresee the benefits which may result to mankind from a rivalry between two great nations in the frequent interchange of those ennobling sentiments of our nature. It has not pleased Providence to bless with success the generous and bold efforts of your country to restore to us—I will not say lost—our missing countrymen, yet who can say the sacrifices made have not met with a high reward? for this ship, after human skill had failed to extricate her from the apparent destruction which awaited her, has been miraculously preserved, that she might be the means of affording the people of America a further opportunity for evincing their strong sympathy, and draw-

ing into closer union the friendly relations of both countries. If in after years slight differences of opinion should arise between our respective governments, we have but to remember the 'Resolute' and her priceless cargo of goodwill — freely sent, and as freely received — to feel assured that the threatening clouds must in time be dispelled and pass away. We have learnt with extreme satisfaction that Her Majesty, with that thoughtfulness for which she is so distinguished, has placed at your disposal the means of returning to your homes in a manner befitting the nature of your visit. Yet we cannot help saying regret is mingled with that satisfaction, for we are deprived of offering to you, your officers, and crew a reception more in accordance with our feelings. The trading community of Liverpool is bound to yours with more than common ties of interest, intercourse, and friendship; we watch with the deepest interest every act which can disturb or strengthen these ties, and we receive with delight this munificent gift of the President and people of America as an additional pledge of unity. These feelings the shipowners of Liverpool have recorded with the simplicity of truth in the address we have now the honour to present to you.

“ To Captain Hartstein of the United States Navy, and to his brother officers and crew of the “Resolute.”

“ We, the Liverpool Shipowners' Association, desire to offer to you our sincere congratulations on your safe arrival in England, having navigated to these shores the discovery ship “Resolute,” as an offering of friendship and goodwill from the United States of America to this country.

“ We recognise in this act of the United States a

generous testimony of the kindly feelings of its government and people to the British nation, and of an earnest wish to foster those sentiments of mutual regard and esteem, which constitute the real basis of cordial amity and enduring peace.

“The circumstances of a common ancestry and a common language, a similarity of laws, and in many respects an identity of interests, to say nothing of private friendships and personal ties, united your country to ours by bonds which cannot easily be severed, but spontaneous acts of friendship by the one nation to the other, such as that which it has been your pleasing duty to accomplish, are the best evidence to mankind at large of the indissoluble character of those bonds, and engender the utmost confidence in the nations themselves that the peace which has so long happily subsisted between them will continue undisturbed.

“This Association, representing the shipping interest of this port, has witnessed this graceful act on the part of the United States with the greatest pleasure and satisfaction. Our flags and those of your country, are blended together in the harbours of commerce throughout the world; and we rejoice upon every occasion when the good feelings which the trading community of each country bear towards each other, are encouraged by more than ordinary acts of friendship on the part of either of their governments.

“We have now only to express our earnest hope and trust that the same protecting Providence which enabled you to bring the “Resolute” in safety to England through the difficulties and perils of unusually tempestuous weather, will conduct you in safety to your homes; and that you

may there individually long enjoy health, happiness, and prosperity.

“ S. R. GRAVES, *Chairman.*

“ ‘In pursuance of a special general meeting of the Association, held the 20th day of December, 1856.’ ”

To this Captain Hartstein delivered the following reply :

“ Gentlemen, — To say that I feel honoured by this unmistakeable mark of your consideration would but feebly express my sense of the compliment which you have thus paid through me to the Government, whose representative I now have the honour to be. Meeting you as delegates from the shipowners of the great commercial city of the United Kingdom, I rejoice at the kindly feeling thus manifested for a nation with whose interests you are so intimately connected. In my present mission to your Government, you can read the spirit of Americans towards the people of this country ; and can easily believe that your happy allusion to the mutual bonds of origin and a community of feeling between us, will meet with a cordial response. The advancement of science and the arts, to which both nations have, in a spirit of generous rivalry, so greatly contributed, have changed our ancient geographical positions. Miles and seconds have become almost synonymous words, and now the iron messengers of our commerce fly like steam shuttles, weaving between us a fabric of mutual interest. May that spirit of friendly emulation, enterprise, and enlightened purpose which has given to our shipping interests the distinguished place they occupy throughout the universe, ever continue. For your expression of friendly interest

and congratulations to myself and officers of the 'Resolute,' be pleased, gentlemen, to accept our hearty thanks."

The deputation and officers (who had stood uncovered during the whole of the interesting ceremony) then went below and partook of a splendid *déjeuner*.

Amongst other marks of attention, Captain Hartstein was entertained by Lord Palmerston, at his seat Broadlands; and on Christmas Day the crew sat down to a sumptuous dinner, provided for them, at the George Hotel, by the British Government; but perhaps nothing gratified Captain Hartstein and his officers more than the kindly attention shown to them by Lady Franklin, in inviting them all to an elegant entertainment which she had prepared for them expressly at Brighton, where, in addition to Sir Roderick Murchison, General Sabine, &c., Captain Sherard Osborn, Captain M'Clintock, Captain M'Guire, and several other distinguished officers assembled to meet them.

At length, on Tuesday the 30th December, the final handing over of the "Resolute" to Great Britain took place. A little before one o'clock, Captain George Seymour, of the "Victory," accompanied by Mr. Penn, the master, and Mr. Burdwood, second master of the "Victory," a party of seamen,

and corporal's guard of royal marines from the same ship, repaired on board the "Resolute." At this time the American colours, side by side with those of this country, hung from the peak of the ship.

As the dockyard clock struck one, the flag-ship, "Victory," hoisted the United States "stars and stripes" at her main, which she saluted with twenty-one guns. Whilst the salute was being fired, Captain Hartstein ordered the American colours to be hauled down on board the "Resolute," at whose peak the British ensign now floated alone, whilst at her main-truck an English pendant was displayed. The salute being ended, and the change of colours effected, the American crew manned the rigging, and gave three hearty cheers, as a return for the salute, and thus did the ice-beaten "Resolute" become once more Her Majesty's ship.

Captain Hartstein, surrounded by the Chevalier Pappalardo, United States Vice-Consul at this port, and the American officers, then addressing Captain Seymour, said: "Sir, the closing scene of my most pleasant and important mission has now to be performed. And permit me to hope that long after every timber in her sturdy frame shall have perished, the remembrance of the old 'Resolute' will be cherished by the people of the respective nations.

I now, with a pride totally at variance with our professional ideas, strike my flag, and to you, Sir, give up the ship."

To this Captain Seymour replied, "that the graceful act on the part of the United States towards this country, and the courteous manner in which it has been carried out by Captain Hartstein, and the officers of the ship, would ever live in the memory of the people of England."

This concluded the ceremony of the delivery of the vessel to this country. The "Sprightly" steamer, Master-Commander George Allen, which has been in close attendance on the officers and crew of the "Resolute" since her arrival here, was lying alongside, with steam up, all the officers' and seamens' baggage being already on board.

The crew of the "Resolute" then quitted her, and went on board the "Sprightly," Captain Hartstein and the other officers following, after bidding a cordial farewell to Captain Seymour, the other British officers left on board the "Resolute," and the few civilians present. Prior to this, however, a bumper of champagne had been most enthusiastically drunk to Captain Hartstein, and the other officers and crew of the "Resolute." The final abandonment of the vessel seemed to create some

emotion on the part of the officers and men who had brought her home, all of whom appeared to feel that they had only been performing a work of love and pleasure, and which had been amply requited by the kindness and hospitality with which they had been received in England. However great that hospitality may have been, it is certain that no set of officers and men could have deserved it, even in a personal point of view, more than those in question.

By a quarter past one the "Sprightly" was under weigh, and the "Resolute" remained in charge of Mr. Penn and Mr. Burdwood, the half-dozen British seamen, and the corporal's guard of marines. Passing between the flag-ship "Victory" and the screw block-ship "Pembroke," 60 guns, the crews of these vessels manned the rigging, and gave cheer after cheer to the American officers and men. The latter returned the compliment in the most hearty manner, and it was repeated from ship to ship with the greatest enthusiasm. The general effect was of a most thrilling and interesting character. Even the dockyard steam-tug "Pigmy" managed to mount some of her crew on her spare and crude rigging, and they also gave their quota of applause to the nation's guests as they passed

by. The "Sprightly" was by this time going out of harbour, on her way to Southampton, to place the officers and crew on board the United States mail steam-ship "Washington," which sailed the following day for New York. H.M.S. "Retribution" had been offered to convey Captain Hartsein and the crew of the "Resolute" to their home, but previous arrangements had been entered into for their return by the mail steam ship "Washington." Under the supposition that they might perhaps return in ships of war, preparations on a great scale were made at New York for the reception of the British officers and crews, and much disappointment was felt by the inhabitants of the city, and particularly by Mr. Grinnell; all of whom were most anxious to show the people of England how much the people of America appreciated the good feeling to which the incident had given rise between the two nations.

Before leaving, Captain Hartstein wrote a highly complimentary letter to Mr. Digby Dent, of the Portland Hotel, Southsea, thanking him for his unremitting attention to himself and officers, and the handsome accommodation provided them, at the order of the Crown, during their sojourn.

Nobly did these officers carry out the wishes of

the American people, when delivering, with a dignified and delicate tact, their nation's generous gift, and in leaving this country for their own, they may rest assured that, as missionaries of peace, friendship, and good-will, they have cemented the brotherly love and affection with which old England regards her Titanic child, and may the strong link of kindly feeling, forged by our American brethren, ever unite in bonds of amity the two great nations of the earth, allied together as they are by ties of blood, language, and commerce,—rivals in every good work in which the better feelings of our nature are called forth,—and representatives alike of the pride and glory of the Anglo-Saxon race.

APPENDIX.

TABLE OF POSITIONS FOR TRACK OF H.M. DISCOVERY SHIP
"RESOLUTE," 1852.

Date.	Latitude N.	Longitude W.	Var. W.	Bearings and distances.
	° ' "	° ' "	°	
April 21	- -	- -	- -	Nore Light Vessel S.W. $\frac{1}{2}$ W. 1 mile.
22	52 5 47	1 43 15 E.	- -	Orfordness Low Light, S. 73° W. (true ?) Aldbrough Church, N. 50 W. (true ?)
23	54 35 57	0 16 16 E	2 $\frac{1}{2}$	Flamboro' Head, S.S.W. $\frac{1}{2}$ W. 28 miles. (true ?)
24	57 11 23	1 31 30 W.	2 $\frac{1}{2}$ pls.	Buchan-ness N.N.W. $\frac{1}{2}$ W. (true) 18 miles.
25	- -	- -	- -	Abreast of the Island of Flota.
29	58 33 42	5 27 0	- -	Butt of Lewis in sight, S. 83 W. 24 miles.
30	58 52 24	9 26 0	- -	Rocka!, S. 61 W., 155 miles.
May 1	59 7 23	13 40 0	33°	Cape Farewell, N. 66 W. 1025 miles.
2	59 24 50	17 41 0	40	Cape Farewell, N. 88 W. 805 miles.
3	59 53 27	22 2 30	40	Cape Farewell, S. 86 W. 660 miles.
4	60 31 26	22 50 45	42 $\frac{1}{2}$	Cape Farewell, S. 86 W. 630 miles.
5	60 32 1 Red.	24 4 0	- -	Cape Farewell, S. 86 W. 600 miles.
6	60 53 D.N.	23 57 D.N.	- -	Cape Farewell, S. 84 W. 605 miles.
7	60 1 39	22 52 30	- -	Cape Farewell, S. 89 W. 635 miles.
8	60 12 1	24 0 15	49	Cape Farewell, S. 88 W. 597 miles.
9	59 54 35	25 47 0	45	Cape Farewell, S. 89 W. 545 miles.
10	60 15 37	26 48 0	- -	Cape Farewell, S. 87 W. 515 miles.
11	59 9 33	29 26 30	45	Cape Farewell, N. 85 W. 450 miles.
12	58 14 7	31 22 30	44 $\frac{1}{2}$	Cape Farewell, N. 77 W. 410 miles.
13	58 9 34	32 34 0	43 $\frac{1}{2}$	Cape Farewell, N. 75 W. 375 miles.
14	58 26 51	34 32 45	- -	Cape Farewell, N. 74 W. 310 miles.
15	57 56 38	38 19 45	- -	Cape Farewell, N. 57 W. 210 miles.
16	57 27 6	39 35 45	- -	Cape Farewell, N. 44 W. 197 miles.

TABLE OF POSITIONS FOR TRACK OF H.M. DISCOVERY SHIP
"RESOLUTE" — *continued.*

Date.	Latitude N.	Longitude W.	Var. W.	Bearings and Distances.
	° ' "	° ' "	°	
May 17	58 0 0	40 56 0	50	Cape Farewell, N. 42° W. 148 miles.
18	58 7 53	43 30 7	49½	Cape Farewell, N. 7 W. 102 miles.
19	58 46 35	46 15 7	- -	Cape Desolation, N. 25 W. 133 miles.
20	59 46 45	47 8 0	- -	Cape Desolation, N. 26 W. 67 miles.
21	61 3 57	50 13 45	- -	Cape Comfort, N. 10 E. 42 miles.
22	62 4 15	53 32 45	55	Lichtenfeld, N. 23 E. 63 miles.
23	62 41 39	53 16 49	60	" N. 66 E. 49 miles.
24	64 25 41	52 18 4	60½	Holstenborg, N. 15 W. 158 miles.
25	64 54 56	52 45 0	55	" N. 13 W. 126 miles.
26	65 57 26	55 56 15	58	" N. 37 E. 77 miles.
27	66 39 8	55 16 15	- -	" N. 59 E. 37 miles.
28	67 32 45	55 54 30	- -	Whale Fish Islands, N. 35 E. 104 miles.
29	- -	- -	- -	Kron-Prins Islands, East 6 miles.
June 11	69 23 5	52 20 16	- -	rt Disco Island, N. 23 E. 4
12	69 45 56	- -	- -	sub. pass. 4° ⊕
13	69 23 43	51 46 15	71½	l x t Disco Island, N. by W. ⊕
14	very thick weather.			off shore 1 mile.
15	" "	" "	- -	Beacon Lievely, S. 17° E. ⊕ S. H. N. by E.
				Disco Island rt, N. 59° E. ⊕ S. H. N. by E.
16	70 23 33	55 37 45	- -	Hare Island, S. 42 E. ⊕ 4 sub. 22° 45'.
17	71 45 46	55 44 15	- -	Black Hk. S. 53° W. Lawson Island, rt. S. 49° E. ⊕.
				Black Hk., S. 53° W. Lawson Island, rt. N. 85 E. S. E. E.N.E.
18	72 32 0	57 19 0	71	Sanderson's Hope, N. 63 E. 23.
19	- -	- -	- -	Fast to a berg off Upernavik.
20	- -	- -	- -	In offing do.
21	- -	- -	- -	Boring between the Woman Islands.
22	- -	- -	- -	Sugar Loaf, S. 84 E. C. Shackleton, S. 15 E. ⊕ S. H. N.E.
23	74 5 0	- -	- -	In the vicinity of the Duck Islands.
24	74 5 44	57 42 0		
25	74 13 49	58 30 7	87	Devils Peak (Raper's pos.) N. 83 E. 9 miles, 15 too far west.

TABLE OF POSITIONS FOR TRACK OF H. M. DISCOVERY SHIP
"RESOLUTE" — *continued.*

Date.	Latitude N.	Longitude W.	Var. W.	Bearing. and Distances.
	° / "	° / "	°	
June 26				
27	75 4 59	60 12 32	- -	Sabine Islands (S.W. one) N. 7° W., 17 miles.
28	75 5	60 12	- -	Sabine Islands (S.W. one) N. 7 W., 17 miles.
29	74 57 24	59 57 30	- -	Sabine Islands (S.W. one) N. 14 W. 26 miles.
30	74 52 41			
July 1	75 6 45	60 54 15	89	
4	- -	- -	- -	Cape Walker, S. 61 E. Mel. Mont. S. 51 E., r x t land, S.
5	75 15 26	61 21 52	87½	Cape Walker, true bearing N. 36° 13 E.
6	- -	- -	- -	Cape Walker, S. 56 E. ⊕ no deviation.
10	75 21 42	61 32 45	89½	Cape Walker, N. 43. 29 E., true.
14	75 22 53	61 34 0	84½	
16	75 9 35	- -	- -	Cape Walker, S. 56½ E., Mont. S. 30 E., S. H. N. by E. ¼ E.
17	75 7 27	61 11 00	88½	
20	75 19 10	61 10 0	90½	
21	75 15 9	- -	- -	Cape Walker left peak, S. 73, 45 E. S. H. E. by N. Melville's Monument, S. 63, 25 E., S. H. E. by N.
23	75 21 19			
24	75 34 56	61 25 26		
25	75 35 37	61 26 0	92	
27	75 49 11	62 7 0		
31	75 49 47	63 33 15		
Aug. 1	75 51 47	65 45 41	- -	Cape York, N.N.W. 1¼ miles, S. H. N.E.
2	- -	- -	- -	Rugged Island, N. 74½ E., Cape York, S. 9° E., S. H., N. by E.
3	75 14 12	74 25 30	110	Cape Horsburgh, N. 75 W. 80 miles.
4	74 27	80 0	- -	Hope's Mont. N. 73 E., Beatrice, Island, and do. 98½° Do. and low t, Cape Osborn, 62° 40', S. H., N.W. ¼ W.
5	74 22 55	81 2 22	110½	
6	74 26 33	- -	- -	Cape Warrender, r t, S. by W. ¼ W. S. H., N. by E. (?) Cape Home, W. by E. ¼ E. S. H., N. by E. Ent. to Dundas Harbour S. by E. S H., N. by E.

TABLE OF POSITIONS FOR TRACK OF H.M. DISCOVERY SHIP
 "RESOLUTE" — *continued.*

Date.	Latitude N.	Longitude W.	Var. W.	Bearings and Distances.
Aug. 7	74 24 56	(Indiff.)	- -	Cape Bullen low pt. E.N.E., true 4 miles.
8	74 17 42	87 25 45		
9	74 24 2	90 7 0		
10	- -	- -	- -	At Beechey Island.
16	- -	- -	- -	Assistance Harb. S.E. true $\frac{1}{2}$ ship on shore.
17	- -	- -	- -	Browne and Somerville Islands, $\textcircled{1}$ N. 26° W. true. Somer It. and Lowther Island, rt. 45.
18	74 27 18	97 49 30		
19	74 25 18	- -	- -	Lowther Island, S. bluff. North (true) 2 miles.
20				
21	74 34 26	- -	- -	Lowther Island N. pt., N. 30° W. (true) \angle sub. 123° .
22	74 30 51	97 28 0	- -	Fast to fixed ice, east side of Lowther $\frac{1}{2}$ off shore.
28	- -	- -	- -	Lowther S. pt. S. 81° W., true. rt Browne and rt. Lowther, $71^{\circ} 35'$, true.
29	74 57 23	- -	- -	Garrett Island (centre) S. 37° E. and rt Bathurst 60° , 50 fms.
30	75 11 9	101 26 15		
31	- -	- -	- -	Cape Gillman (Byam Martin Island) West 6.
Sept. 1	- -	- -	- -	Cape Gillman, S. 85° W. rt Island, N. 50° E. true 12 fms.
2	- -	- -	- -	Melville Island and bluff of Beverly Inlet, $90^{\circ} 20'$. Bever. Inlet and Pt. Palmer, $36^{\circ} 9'$.
3				
7	- -	- -	- -	Fife Harbour E. Pt. and sandstone, $56^{\circ} 49'$. Sandstone and Point Hearne, $45^{\circ} 28'$.
8	74 46 41	- -	- -	Cape Bounty, N. 50° W. 8 miles.
9	- -	- -	- -	Winter Quarters, Dealy Island.

TABLE OF POSITIONS FOR TRACK OF H. M. DISCOVERY SHIP
"RESOLUTE" — *continued.*

Between leaving Dealy Island and being beset — Aug. 18th to Sept. 9th, 1853.

Date.	Latitude N.	Longitude W.	Var. E.	Bearings and Distances.						
	° ' "	° ' "								
Aug. 18	-	-	-	Cairn on Dealy Island, N. (t.) 4½ miles						
19	75 11 34	-	-	<table border="0"> <tr> <td rowspan="3" style="font-size: 3em; vertical-align: middle;">}</td> <td>Byam Martin, N.</td> <td rowspan="3" style="font-size: 3em; vertical-align: middle;">}</td> <td rowspan="3" style="vertical-align: middle;">Bearing plate.</td> </tr> <tr> <td>pt. N. 45 E., S.</td> </tr> <tr> <td>Melville Island, lt. S. 48 W.</td> </tr> </table>	}	Byam Martin, N.	}	Bearing plate.	pt. N. 45 E., S.	Melville Island, lt. S. 48 W.
}	Byam Martin, N.	}	Bearing plate.							
	pt. N. 45 E., S.									
	Melville Island, lt. S. 48 W.									
20	-	-	-	Byam Martin, \angle sub. 70°, S. pt. and Point Griffiths, 110°.						
21	-	-	-	Consett Head, S. W., 5 miles (supposed position).						
22	-	-	-	Consett Head N.W. by W., true ; Byam Martin, N., E. by N.						
23	75 16 49	105 52 30	East 162½°	Off shore, 1½ miles. Melville Island, rt. N. by E. ¼ E. lt. S.S.W., off shore 2 miles.						
24	-	-	-	Byam Martin \angle sub., 45° 28', Consett and Mel., lt. 102°.						
25	-	-	-	Lt. Byam Martin and Consett, 57°, Consett and Mel. lt. 102°.						
27	75 6 57	106 5 15	153	Point Griffiths, S. 2', off shore ¾ in 8 fms. floe edge. Do. S. by W. ¾ W. 3', off shore 1½ in 7 fms.						
Sep. 3	-	-	-	Byam Martin \angle sub. 41° 20, Con- sett and Point Griffiths, 130° lt. do. and Consett, 60° 40, 46 fms.						
4	-	-	-	Point Griffiths E. by S. 3 miles.						
5	-	-	-	Do. S.S.W. ¼ W. 2½ pt. to north- ward, N.N.E. 2' 15 fms.						
7	-	-	-	Point Griffiths, S. 45 W., Byam Martin, S. pt. S. 80 E., 28 (g.) fms.						
9	-	-	-	Do. S.W. ¾ W. 3', off shore, 1½ in 7 fms.						

Note.—On the 10th September the ship became firmly beset in young ice, during a heavy gale of wind. She drifted in the pack until November 5th, when she became fixed for the winter, twenty-eight miles S.W. by S. from Cape Cockburn.

For her drift in the pack, vide page 360.

TABLE OF POSITIONS FOR TRACK OF H. M. S. "NORTH STAR,"
FROM BEECHEY ISLAND TO ENGLAND. — 1854.

Date.	Latitude N.	Longitude W.	Bearings and Distances.
Aug.	o / "	o / "	
☉ 27	- -	- -	1 p. m. left Beechey Island.
☽ 28	74 24 0	- -	Cape Bullen, E.N.E. (true).
♁ 29	73 50 0	81 4 0	Cape Hay, S. by E. $\frac{3}{4}$ E. 16 or 18 miles.
♃ 30	- -	- -	At anchor in Navy Board Inlet, Cape Castlereagh, N.W. $\frac{1}{4}$ W. S. x. Wollaston Island, W.S.W. 5 $\frac{1}{2}$ fms.
♄ 31	73 6 22	75 30 45	Cape Graham Moore S. $\frac{1}{4}$ E., Burney, S.W., Bathurst, W. by N., Compy.
Sept.			
♀ 1	72 47 0	73 20 0	Cape Graham Moore, N. 78° W. N. pt. of Disco S. 65 $\frac{1}{2}$ E. 374.
♁ 2	71 26 0	67 39 0	Lievely (Disco) S. 65 E. 309 miles.
☉ 3	70 54 0	63 15 0	Lievely (Disco) S. 64 E. 218 miles.
☽ 4	71 7 0	56 43 0	Black Hook, N. by E., Cape Cranstoun, N. 64 E. 33.
♁ 5	71 7 0	55 49 0	Black Hook, N. 6 E. 28'.
♃ 6	70 43 0	55 42 0	Hare Island, centre, S. 49 E. 23' (?)
♄ 7	69 48 0	55 41 0	Entrance of Mellan Fiord, E., 14 miles.
♀ 8	69 25 0	- -	Disc. Island S. Ex., S.E. $\frac{1}{4}$ E. 16 or 18 miles.
♁ 9	69 7 0	54 3 0	Lievely Beacon, N.E. by E. $\frac{1}{4}$ E. 7 or 8.
☉ 10	- -	- -	At anchor outer Harbour of Lievely.
☽ 11	68 52 0	53 50 0	Holsteinborg, S. 6 E. 122 miles.

TABLE OF TEMPERATURE.

Months.	Sir Edward Parry, Winter Harbour, Melville Island. 1819-20.			Sir Edward Parry, Winter Island, 1821-22.			Sir Edward Parry, Igloodik, 1822-23.			Sir Edward Parry, Port Bowen, Prince Regent's Inlet. 1824-25.		
	Max.	Min.	Mean.	Max.	Min.	Mean.	Max.	Min.	Mean.	Max.	Min.	Mean.
	+	+	+			+	+	+	+	+	+	+
Aug.	42	28	33.67	-	-	-	50	27	33.68	-	-	-
Sept.	37	1	22.54	-	-	31.62	37	11	24.4	36	16	25.9
Oct.	17.5	28	3.46	-	-	13.15	29	9	12.8	31.5	12	10.8
Nov.	6	47	20.60	-	-	7.80	8	32	19.4	17	26	4.99
Dec.	6	43	21.79	-	-	14.14	10	43	27.8	4.5	35	19.05
Jan.	2	47	30.09	-	-	23.13	22	45	17.97	14.5	42.5	28.91
Feb.	17	50	32.19	-	-	24.01	20	43	20.4	8	45	27.32
March	6	40	18.10	-	-	10.78	4	41	19.75	9	47.5	28.4
April	32	32	8.37	-	-	6.50	32	25	1.68	20	37	6.5
May	47	4	16.66	-	-	23.31	49.5	8	24.85	39	7.5	17.6
June	51	28	36.24	-	-	33.16	52	8	32.16	47	23	36.1
July	60	32	42.41	-	-	35.33	59	30	40.04	50	30	37.3
Aug.	45	22	32.68	-	-	36.88	-	-	-	51	25	35.8
Mean Ann. Temp. from Sept. to Aug.		+	0.54	Sept. to Aug.	+	9.80	Aug. to July.	+	5.07	Sept. to Aug.	+	6.0

TABLE OF TEMPERATURE.

Months.	Captain Austin, Gridliva Island. 1850-51.			Capt. M'Clure, P. of Wales Strait. 1850-51.			Capt. M'Clure, Bay of Mercy. 1851-52.			Capt. M'Clure, Bay of Mercy. 1852-53.		
	Max.	Min.	Mean.	Max.	Min.	Mean.	Max.	Min.	Mean.	Max.	Min.	Mean.
	+	+	+	+	+	+	+	+	+	+	+	+
Aug.	-	-	-	50	27	36.53	52	21	37.50	52	19	33.24
Sept.	40	3	20.2	46	0	20.20	43	1	24.46	38	4	20.8
Oct.	17	13	5 0 3	24	23	0 23	26	23	3 39	14	33	5 01
Nov.	14	30	6 9	7	32	10 17	10	40	14 63	9	43	16 55
Dec	4	39	5 22 2	3	40	23 36	11	44	20 01	4	48	26 08
Jan.	11	47	31 9	15	51	32 44	8	51	27 27	16	65	43 77
Feb.	13	48	32 9	9	51	37 67	1	47	25 95	13	56	36 50
March	8	43	25 7	5	51	28 82	5	52	28 38	17	58	25 09
April	32	29	7 0	38	32	4 70	31	38	1 36	38	41	6 58
May	50	0	23 0	47	5	18 85	37	25	10 25			
June	-	-	-	53	27	36 09	51	11	31 49	Ship abandoned.		
July	57	26	5 36 6	52	32	37 54	52	30	36 74			
Aug.	-	-	-	52	21	37 50	52	19	33 24			
				Sept. to Aug.		+ 0 99			+ 1 63			

TABLE OF TEMPERATURE.

Months.	Sir E. Belcher, C. B. Northumberland Sound, Wellington Channel. 1852-53.			Sir E. Belcher, C. B. Disaster Bay, Wellington Channel. 1853-54.			Capt. Kellett, C. B. Dealy Island, Bridport Inlet. 1852-53.			Capt. Kellett, C. B. in the Pack. Lat. 74° 41½' Long. 101° 22' W. 1853-54.		
	Max.	Min.	Mean.	Max.	Min.	Mean.	Max.	Min.	Mean.	Max.	Min.	Mean.
							+	+	+	+	+	+
Aug.	-	-	-	-	-	-	0	0	0	0	0	0
Sept.	-	-	-	-	-	-	29	1	18 8	38	6	17 88
Oct.	-	-	-	-	-	-	18	21	0 56	30	15	4 6
Nov.	-	-	-	-	-	-	11 5	27 5	12 7	8	37	20 18
Dec.	-	-	-	-	-	-	17 5	35	26	6	44	30 45
Jan.	-	-	-	-	-	-	9	54	36 13	20	55	36 71
Feb.	-	-	-	-	-	-	10	44	30 42	23	57 5	41 12
March	-	-	-	-	-	-	+			17	47	31 95
April	-	-	-	-	-	-	16	46	19 17	+		
May	-	-	-	-	-	-	14	25	2 47	23	33 5	7 13
June	-	-	-	-	-	-	+					
July	-	-	-	-	-	-	31	5	16 9			
Aug.	-	-	-	-	-	-	47	20	33 04			
							47	30	36 42	Ship abandoned on the 15th May, by order of Sir E. Belcher.		
							42	24	33 1			
							Sept. to Aug.		+			
									0 86			

TABLE OF TEMPERATURE.

Months.	Sir John Ross, Felix Harbour.			Sir John Ross, Sheriff's Harbour.			Sir James Ross, Port Leopold, Prince Regent's Inlet.			Mr. Saunders, Wolstenholme Sound, Baffin's Bay.		
	1829-30.			1830-31.			1848-49.			1849-50.		
	Max.	Min.	Mean.	Max.	Min.	Mean.	Max.	Min.	Mean.	Max.	Min.	Mean.
	+	+	+	+	+	+	+	+	+			
	o	o	o	o	o	o	o	o	o			
Aug.	-	-	-	-	-	-	-	-	-	-	-	33.67
Sept.	40	17	29.4	43	5	27.4	37.5	6	23.2	-	-	26.76
Oct.	24	16.5	7.9	24	12	11.0	32	12.3	10.0	-	-	11.32
Nov.	26	37	3.6	24	41	11.4	16	33.7	12.8	-	-	18.60
Dec.	8	37	23.1	6	47	20.2	12.3	47.5	32.5	-	-	27.05
Jan.	5	45	27.2	2.5	59.5	25.4	8.6	45	31.8	-	-	25.07
Feb.	1	5.47	29.9	9.5	49	32.5	15.3	53	31.3	-	69½	34.02
March	20	4.42	20.9	8.5	51	34.7	8	45	19.4	-	-	17.47
April	31	21	1.4	30	25	6.4	7	29	10.1	-	-	3.74
May	37	1	15.3	36	16	16	42	9	16.4	-	-	25.82
June	62	26	36.8	52	14	31.6	54	11.5	31.7	-	-	39.78
July	70	32	44.6	50	32	37.9	43	31.5	36.0	-	-	40.52
Aug.	58	33	40.9	54	24	36.5	42	27	33.7	-	-	-
Mean Ann. Temp from Sept. to Aug.			+ 6.0	Sept. to Aug.		+ 2.50	Sept. to Aug.		+ 1.09	Aug. to July.		+ 3.49

TABLE OF TEMPERATURE.

Months.	Commander Pullen, Beechey Island. 1852-53.			Commander Pullen, Beechey Island. 1853-54.		
	Max.	Min.	Mean.	Max.	Min.	Mean.
	+	+	+	+	+	+
	°	°	°	°	°	°
August	-	-	-	-	-	-
September	31 5	11	21 4	34	4	18 5
October	29	9 5	5 2	25	11	7 4
November	16	21	3 12	8 5	37	15 6
December	7	34 7	24 7	19 5	42	24 1
January	9 5	53	35 8	25 5	48 5	31 4
February	10	37	19 0	15	51	35 33
March	20	46	13 0	10	39	24 96
April	31	15 6	1 8	24	30	0 35
May	45	4	19 0	45	2	16 74
June	52	25	36 8	51	19	33 15
July	54	31	39 4	52	32	38 94
August	44	24	34 5			

**RESULTS OF CAPTAIN M'CLINTOCK'S EXPERIMENTS WITH
TRAVELLING KETTLES AND LAMPS.**

Description of Lamp.	Size of Kettle.	Time per pint to dis-	Time per pint to boil	Kind of Fuel used.	Fuel per	Number of experi-	Temperature of the Air and Snow.
		solve.	from Snow.		pint to boil from Snow.		
		min. sec.	min. sec.		oz. tenths.		
Argand - -	13 pint.	2 40	4 48	Alcohol	1 2	3	32° minus
5-wick - -	9 "	4 24	8 48	Ditto	0 9	3	ditto
Stearine - -	13 "	3 54	10 00	Stearine.	1 1	3	ditto
Ditto - - -	9 "	3 21	7 12	Ditto	1 1	3	ditto
Ditto - - -	9 "	6 00	16 00	Tallow	1 4	1	ditto

**SCHEME OF FUEL FOR A PARTY OF ELEVEN PERSONS.
Temperature 32° minus.**

	Alcohol.	Stearine.
	ounces.	ounces.
To boil tea or cocoa for breakfast, 13 pints - - -	—	14½
To dissolve snow for diluting rum and filling water-bottles, 10 pints - - -	—	7½
Luncheon water, 8 pints - - -	6	—
Supper of preserved meats - - -	15½	—
Evening grog and water-bottles (? about ten pints) - -	—	7½
	21½	29

Amounting to (21½ + 29) 50½ ounces at Temp. minus 32°, or 40½ oz. at zero. Capt. M'Clintock found by actual experiment, that to boil from snow in Temp. minus 40°, required twice as much time that it does from snow near the freezing point, and in a Temp. of + 40°, and from this fact, arrived at the following conclusions: —

That since the quantity of fuel for 11 persons be 54 oz. in Temp. 40° —	
The quantity would be	47½ " 20° —
Ditto	40½ " zero
Ditto	33½ " 20° +
Ditto	(found by experiment) 27 " 40° +

EQUIPMENTS FOR A TRAVELLING PARTY OF EIGHT MEN (1 OFFICER AND 7 MEN).

Constant weights.

Description of Articles.	Lbs.	Remarks, &c.
1 tent, complete with head-ropes, &c.	34	11 feet long, 7 broad, 7 high; head-rope of horse-hair.
4 tent poles, pikes reduced, 8 ft. 6 in.	22	
1 sledge complete, with drag-ropes, &c.	115	11 feet long, 3 feet broad, 11½ inches high.
1 canvas boat for ditto	20	{ Bottom, and 1 foot of sides; saturated with a mixture of boiled oil and bees-wax.
2 sheers (fir), 12 feet long	15	
1 yard for sail	8	
1 sail (No. 7. canvas) 12 ft. by 9	14	
1 macintosh floor cloth	20	
2 buffalo robes, 12 ft. by 8.	56	
8 sleeping bags (felt)	50	
2 cooking apparatus	34	
1 sundry bag, with contents	16	
1 medicine box, with contents	5	
1 luncheon haversack, pannicans, &c.	8	
1 double-barrelled gun and gear	10	The officer carries a second gun.
1 shovel	5	
1 pickaxe	9	
8 knapsacks (with spare clothes)	144	
1 small Canadian axe	3	
1 ammunition bag (with contents)	12	Taken instead of the pemican chopper supplied.
1 instruments	12	

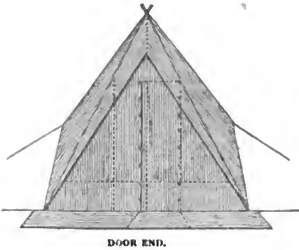
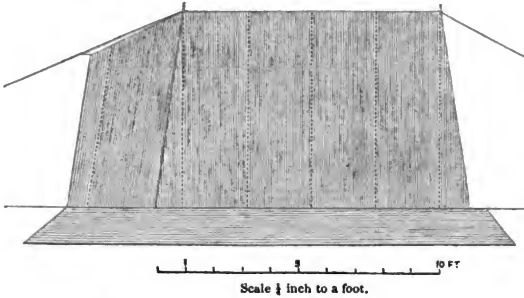
NOTE.—The above articles are adapted for a long journey.

LIST OF CLOTHING TAKEN BY A PARTY PROCEEDING ON A LONG JOURNEY.

Description of Articles.	In wear.	Spare.	Remarks, &c.
Woolen shirt (inner) or flannel	-	1	} 1 of each of these articles between two men would be quite sufficient.
Ditto drawers	-	*1 pair	
Checked shirt	-	-	
Box cloth trousers	-	*1 pair	
Sleeved waistcoat (lined)	-	-	
Woolen frock	-	*1	
Duck coat (pockets where convenient)	-	-	
Welsh wig	-	-	
Seal skin cap	-	*1	
Stockings (heeled)	-	2 pair	
Mitt socks	-	1 pair	} 14 inches square. Should be heeled as well as stockings.
Blanket wrappers	-	*1 pair	
Boot hose	-	*1 pair	} Should be worn as a neckerchief.
Canvas boots	-	*2 pair	
Deer-skin moccasins	-	*3 pair	} Almost useless ; spectacles recommended.
Grey mitts (woollen)	-	*1 pair	
Seal-skin ditto (slung round neck)	-	*1 pair	} Very necessary with strong wind and low temperat. { 1 towel between 2 men, and 1 lb. of soap for the whole party would be quite sufficient.
Comforter	-	1	
Shawl or muffler	-	*1	
Crape veil or eye shade	-	*1	
Duck over-all trousers	-	1 pair	} Should be worn as a neckerchief.
Face protector	-	1	
Towel, comb, and piece of soap each	-	-	

NOTE.—Those articles marked * are supplied by Government.

TENT FOR EIGHT MEN.



DIMENSIONS.

	feet.	in.
Length of floor. - -	-	11 0
Breadth of ditto - -	-	7 0
Perpendicular height - -	-	7 0
Length of head - -	-	8 0
Length of weather cloth - -	-	3 0
Valence - -	-	1 0
Horns for pike ends - -	-	0 3
Height of door cloth - -	-	1 0
Ditto door - -	-	4 6
Length of hair rope - -	-	8 fms.

DIMENSIONS OF TENT FOR ELEVEN MEN.

	feet.	in.
Length of floor - - - - -	-	15 0
Breadth of ditto - - - - -	-	7 0
Perpendicular height - - - - -	-	7 0
Length of head - - - - -	-	12 0
Ditto of weather cloth - - - - -	-	3 0
Valence - - - - -	-	1 0
Horns for pike ends - - - - -	-	0 3
Height of door cloth - - - - -	-	1 0
Ditto of door - - - - -	-	4 6
Length of hair rope - - - - -	-	10 fms.

SUMMER OF 1853.—DEALY ISLAND.

Rain first fell at ship, June 11th.			
Ditto, last observed, August 29th.			
Hours of moderate rain	-	-	- 100
Ditto heavy ditto	-	-	- 15
Ditto drizzling ditto	-	-	- 63
Total			- 178

Rain in June	-	-	- 8 days
Ditto July	-	-	- 11 "
Ditto August	-	-	- 6 "

Snow first observed to melt, March 20th.

Heavy rain was experienced in the Bay of Mercy on the 18th of May.

TIDES AT DEALY ISLAND.—1853.

					feet.	in.
June 21st	○	-	High water	1 48	-	Range 4 1
July 6th	●	-	"	1 59	-	" 3 7
" 20th	○	-	"	1 38	-	" 4 0
			Mean	1 48	-	3 11

NEW COAST LINE DISCOVERED IN 1853.

By Commander M'Clintock	-	-	768 miles geog.
By Lieut. Meham	-	-	680 "
By Lieut. Hamilton	-	-	170 "
Total			- 1618 = 1870 statute miles.

THICKNESS OF ICE, 1853—54

				feet.	in.
1853.	September 10th	-	-	- 0	3
	November 15th	-	-	- 2	2
	December 16th	-	-	- 2	9
1854.	January 3rd	-	-	- 4	6
	" 21st	-	-	- 5	2
	February 2nd	-	-	- 5	6
	" 15th	-	-	- 6	2
	March 15th	-	-	- 7	0

NAVIGABLE SEASON CLOSED.

1848.	Sir James Ross	-	-	-	Sept. 11
1850.	Captain Austin	-	-	-	" 13
"	Captain Penny	-	-	-	" 12
"	Sir John Ross	-	-	-	" 12
1852.	Captain Kellett	-	-	-	" 9
1852.	Ditto	-	-	-	" 10
Mean date					- Sept. 11

LAND DISCOVERED AND SEARCHED FROM 1848 to 1854.

Date.	Commander.	Searched on Foot.		New Land.		Remarks, &c.
		Geographi- cal.	Statute.	Geographi- cal.	Statute.	
1848 1849	Sir JAS. ROSS.	990	1,143	200	230	
1850-51	Captain H. T. AUSTIN, C.B.	6,087	7,025	1,076*	1,225	* 845 on foot. 231 "Pioneer" — Jones Sound.
1850-51	Captain PENNY.	1,700	1,965	500	578	New land is approxi- mate, being mea- sured from correct- ed chart of Wel- lington Channel, by Sir E. Belcher.
1850 1851 1852 1853	Captain M'CLURE.	2,350	2,710	1,591	1,838	
1851	Dr. RAE.	1,030	1,190	617	712	402 miles were disco- vered by boat, the remainder on foot.
1852	Commander INGLEFIELD.	—	—	180	208	Discovered in vessel — no travelling.
1852 1853 1854	Captain KELLETT, C.B.	9,432*	10,881	1,618	1,870	* Exclusive of the march of the offi- cers and crew to Bee- chey Island on aban- doning the ship.
	Total	21,589	24,914	5,782	6,661	

ABSTRACTED LIST OF GAME PROCURED DURING

Date.	Commanders.	No. of Men		Musk-Oxen, 166 lbs.	Reindeer, 60 lbs.	Hares, 8 lbs.	Beavers.	Wolves.	Foxes.
		forming Crew.	died.						
1819-20	SIR EDWARD PARRY (Melville Island)	94	1	3	24	68			
1848-9	SIR JAMES ROSS (Port Leopold)	138	7						
1850-51	CAPT. H. AUSTIN, C.B. (Griffiths Island)	180	1	4	1	9	18		
1850-51	CAPTAIN PENNY (Assistance Harbour)	46	—						
1849-50	MR. SAUNDERS (Wolstenholme Sound)	40	4			50			
1850-53	CAPTAIN M'CLURE (Banks' Land)	66	5	7	110	169	14	2	
1852-54	SIR E. BELCHER, C.B. (Wellington Channel)	90	2						
1852-54	CAPT. KELLETT, C.B. (Melville Island)	90	4	114	95	146	6	3	51
1852-54	COM. PULLEN (Beechey Island)	40	—				3		

VARIOUS VOYAGES IN THE ARCTIC REGIONS.

Lemmings.	Ptarmigan, 1 lb.	Geese, 2½ lbs.	Ducks, 2½ lbs.	Loons, 1 lb.	Dovekies, ½ lb.	Plover.	Quantity of Meat in lbs.	Average No. of lbs. per Man.	Remarks, &c.
	144	53	59				4,766	37	
			40	1,866	2,200		2,700	20	More birds were probably obtained, but not accounted for.
	130	1	60	1,095	120		3,546	7	800 lbs. of this quantity was obtained by Lieut. M'Clintock on Melville Island.
			12				430	10	No return received: Much less than Captain Austin: But only a fourth number of his crew.
	486	29	198				10,167	154	About 9,000 lbs. were is- sued.
	711	128	229			16	27,433	305	148 lbs. per man were ac- tually issued on board the ship.
	5								

METEOROLOGICAL ABSTRACT.—For September, 1852.

Kept on board H.M.S. "Resolute," wintering in Bridport Inlet, Melville Island.

Date.	Bar. Aneroid.		Temp. Air.			Winds.	Force.	Weather.	Remarks, &c.
	Mean.	Tem.	Max.	Min.	Mean.				
					+				
♀ 1	29·68	46			25·7	N. Westerly	1·6	m. q.	
♂ 2	·78	43			25·0	"	4	B. C. q.	
♀ 3	·95	48			26·5	Easterly.	1	c.	
h 4	·90	46			27·5	Westerly.	2	B. C. m.	
⊙ 5	·80	47			27·2	W. S. W.	4	c. o.	
♂ 6	·82	49			26·2	North.	2·7	B. C. q.	
♀ 7	·87	46			26·5	"	6	m. p. s.	
♂ 8	30·10	49			19·5	N. E.	6	B. C. m. q.	
♀ 9	·19	46			18·7	"	5	B. C. s.	Frozen in.
10	·16	51			15·7	North.	2	B. C.	
h 11	·15	52			20·2	N. E.	3	B. C.	
⊙ 12	29·97	51			25·5	S. Easterly.	6	m. c. q.	
♂ 13	·84	52			26·7	S. E.	7·4	o. p. s.	
♀ 14	·90	54			22·2	North.	4	o. s. q.	
♂ 15	·92	53·5			22·7	Westerly.	4	B. C.	
♀ 16	·90	52			24·0	"	6	B. C. q.	
♂ 17	·94	47			13·7	S. Westerly	4·6	B. C. q.	
h 18	30·14	46·5			6·5	N. Easterly.	4·1	B. C.	
⊙ 19	·11	48			14·5	S.E. to S.W.	2	B. C. m.	
♂ 20	·04	49			19·2	Westerly.	2·6	"	
♀ 21	29·81	46			18·5	N. W.	6·3	o. q. s.	
♂ 22	·95	47·5			16·5	Westerly.	4	o. q.	
♀ 23	·81	50			15·5	Variable.	4	B. C.	
♂ 24	·80	44			8·2	N. W.	4·10	B. C. z.	
h 25	·79	43·5			5·5	"	10·3	B. C. z.	
⊙ 26	·77	42			15·2	"	6·2	B. C.	
♂ 27	·48	40			12·5	North.	9·4	B. C. q. z.	
♀ 28	·18	43			13·0	N. to S. E.	10	o. q. z.	
♂ 29	·12	46			16·7	Easterly.	9·4	B. C. z.	
♀ 30	·33	46			16·7	"	5·2	o. q. m.	
	29·84	47·3			—				
					19·2				

METEOROLOGICAL ABSTRACT.—For October, 1852.

Kept on board H.M.S. "Resolute," wintering in Bridport Inlet, Melville Island.

Date.	Barom. (Aner.)	Ther. (alt.)	Temp. air.			True Winds.	Force.	Weather.	Remarks, &c.
			Max.	Min.	Mean.				
♀ 1	29·65	+ 35	+ 16	+ 10	+ 12·5	S. S. E.	2	B. C.	Removed Aneroid to Upper deck.
h 2	·62	15	+ 18	- 2	+ 7·5	South.	1	B. m.	
⊙ 3	·62	5	+ 3	- 6	- 2·5	S. Westerly.	2	B.	A Parhelion left of ⊙
⊙ 4	·62	9	+ 10	- 5	+ 5	W. S. W.	5	B. m.	
♂ 5	·62	13	+ 9	+ 5	+ 7·5	Westerly.	6·3	B. C. m.	
♀ 6	·88	39	+ 12	+ 8	+ 10	N. N. W.	3	o. m. c.	Removed Aneroid to Captain's Cabin, as it would not work when exposed to the open [air.
♀ 7	·94	44	+ 9	+ 5	+ 7	N. W.	6	o. q. z.	
♀ 8	30·10	44	+ 6·5	+ 1	+ 4·2	Westerly.	3	B. C.	
h 9	·21	46	+ 7	+ 3	+ 5	N. W.	2	B. C.	
⊙ 10	·29	47	+ 8	+ 3	+ 5·5	N. N. W.	2	o. q. s.	
⊙ 11	·40	49	+ 9	+ 6·5	+ 7·7	S. East'y.	1	o. c.	
♂ 12	·41	52	+ 9	+ 5	+ 6·7	Calm S. E.	0·1	o. c.	
♀ 13	·40	50	+ 5	+ 4	+ 4·5	N. East'y.	3	o. m. c.	
♀ 14	·33	49	+ 7·5	+ 4	+ 5·7	Northerly.	3	C. m.	
♀ 15	·16	46	+ 5	- 20	- 7·7	Northerly.	5	B. q. z.	Heavy snow drift.
h 16	·07	42	- 3	- 21	- 11	North.	4·9	B. B. q. z.	
⊙ 17	29·83	39	- 2	- 10	- 4·7	N. W.	1	C. M.	
⊙ 18	·63	44	- 4	- 11	- 6·3	West.	2	o. m.	
♂ 19	·61	47	- 2	- 10	- 4·6	North.	2·0	o. m.	
♀ 20	·73	44	- 3	- 8	- 4·4	N. N. E.	2	o. m.	Observed an aurora to the S. W.
♀ 21	·74	40	- 3	- 9·5	- 5·5	Northerly.	4·8	B. C. m. z.	
♀ 22	·69	40	+ 5	- 4	+ 2·3	Northerly.	7·3	B. C. m.	11·30, P. M. aurora from S. E. to South.
h 23	·92	41	+ 1	- 7	- 4·2	North.	4·1	B. C. m.	
⊙ 24	·99	41	+ 2	- 8	- 1·7	N. E.	1	B. C. s	
⊙ 25	·95	43	+ 1	- 5	- 2·8	N. E.	1	B. C.	
♂ 26	·97	40	+ 2	- 5	- 1·5	Northerly.	2	B. C. m.	
♀ 27	·99	45	+ 2	- 5	- 1·3	Northerly.	4	B. C.	
♀ 28	30·16	45	- 2	- 12	- 5·5	Northerly.	1	B. C.	
♀ 29	·31	44	- 7	- 12·5	- 9·2	Northerly.	5·2	B. C.	
h 30	·18	45	- 3	- 15	- 6	Northerly.	6·2	C. O. Z.	
⊙ 31	·20	46	- 9	- 18	- 13·6	N. N. E.	7·2	B. C. z.	
	29·97		+ 18	- 21	0·6	Northerly.	2·7	B. C. M. Z.	

METEOROLOGICAL ABSTRACT.—For November, 1852.

Kept on board H.M.S. "Resolute," wintering in Bridport Inlet, Melville Island.

Date.	Barom. (Aner.)	Ther. (alt.)	Temp. air.			True Winds.	Force.	Weather.	Remarks, &c.	
			Max.	Min.	Mean.					
1	30.28	48	0	-4	-10	-5.9	N. E.	2	B. C.	
♂ 2	34	50	-3	-17	-12.6	N. E.	2	B. C.	2 A.M. Remarkable halo around the moon.	
♀ 3	32	45	-17	-21	-18.8	Northerly.	4	B. C. z	1 A.M. Paraselenæ each side of ☾.	
♂ 4	22	44	-18	-22	-20.7	N.E. calm.	1.0	B. C.	(
♀ 5	29	49	-15	-20	-16.1	East.	2	B. C.		
h 6	42	47	-14	-25	-19.5	North.	1.10	B. C. z.		
⊙ 7	46	48	-8	-20	-13.4	"	1.9	B. C. m. z.		
♂ 8	14	49	-6	-17	-9.9	"	9.2	B. C. q. z.		
♂ 9	29.74	46	-10	-17	-13.0	"	3.10	m. o. q. z.	Ship housed in for the winter.	
♀ 10	39	42	-9	-18	-14.0	North.	9.1	B. C. m. z.	7. Straw-coloured aurora.	
♂ 11	99	50	-6	-15	-9.7	S.S.E.	4	B. C. m. z.	●	
♀ 12	30.44	50	-6	-12	-8.8	S.E.	5.1	B. C.	5. P.M. Bright arch of aurora from S.E. to N.W. passing through Polar.	
h 13	45	48	-6	-11	-8.7	East.	2	B. C.		
⊙ 14	32	51	-3.5	-20	-10.3	N.N.W. S. by W.	1	B. C.	11 P.M. Faint aurora to the westward.	
♂ 15	40	52	-3	-15	-8.0	E.N.E.	1.6	B. C. z.		
♂ 16	22	52	+4	-3	+1.3	E.S.E.	8.3	C. m. o. z.	6.30 P.M. Faint aurora in zenith and the S.W. quarter.	
♀ 17	24	52	+8	+2	+5.2	S. East'ly.	1	C. m.		
♂ 18	25	53	+8	+2	+4.3	N.E., S.E.	1	C. o.)	
♀ 19	09	53	+8	+2	+5.5	Easterly.	1	C. p. o.		
h 20	29.86	55	+14	+4	+9.5	E.N.E.	2	S. o. g.		
⊙ 21	56	52	+12	+5	+2.0	N.E.	3.6	O. m.		
♂ 22	69	52	-4	-20	-10.3	West.	7	B. C. o. z.	11 P.M. Halo round the moon. Sun 10°.	
♂ 23	74	49	-10	-21	-14.5	N.E.	1	B. C.		
♀ 24	84	49	-15	-24	-18.0	N. by E.	1	B. C.	7 P.M. Flashes of aurora N.W.	
♂ 25	30.03	52	-13	-22	-17.7	"	1	B. C.		
♀ 26	07	52	-15	-22	-17.8	"	1.6	B. C. z.	○	
h 27	29.92	50	-11	-19	-14.7	"	1.6	B. C. z.		
⊙ 28	72	50	-11	-13	-12.3	N.N.E.	4.8	B. C. m. z.		
♂ 29	69	45	-15	-25	-20.6	N. by E. ½ E.	4.8	C. m. q. z.	7 P.M. Halo round the moon, with a Paraselenæ at each extremity of horizontal diameter.	
♂ 30	90	47	-11	-21	-18.4	N. by W.	1.7	B. C. o. z.	9 P.M. Aurora from west to south.	
	30.07	49	+14	-25	-10.2					

METEOROLOGICAL ABSTRACT.—For December, 1852.

Kept on board H.M.S. "Resolute," wintering in Bridport Inlet, Melville Island.

Date.	Barom. (Aner.)	Ther. (Alt)	Temp. Air.			Winds.	Force.	Weather.	Remarks, &c.
			Max.	Min.	Mean.				
♀ 1	29.99	47.0	15	23	20.1	N. by W.	5.1	B. C.	2. Obsd. halo round the ☽, and Parasclenæ on each side.
♀ 2	30.00	47.7	21	25	23.0	N. $\frac{1}{2}$ W.	1	B. C.	
♀ 3	.01	48	22	31	27.7	N. by E.	1	B. C.	Faint streaks of aurora.
♀ 4	.07	50	24	29	26.4	N. $\frac{1}{2}$ E.	1	B. C.	
☉ 5	.05	50	26	31	28.0	N. $\frac{1}{2}$ E. Calm.	1.0	B. C.	7. Waving streams of light and brilliant coronation, suffusing the whole heavens, from two different arches.
☽ 6	.06	50	22	31	26.9	N. $\frac{1}{2}$ W.	1	B.	
♂ 7	.00	48	18	23	21.1	Northerly.	3.7	B. C. q.	Arched aurora W.N.W. to South.
♀ 8	29.99	43	18	26	21.8	NN.W.	6	B. C. q. z.	Noon. Could scarcely read newspaper.
♀ 9	.99	43.7	28	31	29.4	North.	12.7	B. C. q.	
♀ 10	30.01	46	29	31	30.2	"	7.4	B. C. q. z.	
☉ 11	.12	41	23	31	26.9	N.N.W.	11.2	B. O. G. q. z.	
☽ 12	29.98	44	15	26	20.1	North.	1	B. C. m.	
☽ 13	.99	43	15	33	26.8	"	1.7	B. C. q. z.	
♂ 14	.92	42	21	29	24.0	"	2.10	B. C. q. z.	
♀ 15	30.05	51	18.5	22	20.1	"	1.10	B. C. q. z.	
♀ 16	.47	48	15	30	22.0	Northerly.	9.5	B. C. q. z.	
♀ 17	.48	47	28	30	29.0	North-East.	7.1	B. C.	
♀ 18	29.95	49	20	28	24.9	S. Easterly.	1.4	C. m.	
☉ 19	.78	48	19	20	19.6	"	1.5	O. s.	
☽ 20	30.08	48	20	30	27.0	E.S.E. by S.	4.1	O. s.	
♂ 21	.21	45	29	31	29.9	Variable.	1	B. C. m.	
♀ 22	.26	48	29	33	31.1	Northerly.	3	B. C.	
♀ 23	.06	49	24	35	31.1	S.Easterly.	1	B. C.	
♀ 24	29.52	46	18	26	22.0	Variable.	1	B. C. m. s.	
♀ 25	.68	43	22	26.5	23.2	Northerly.	10.2	B. C. q. z.	
☉ 26	.85	42	25	30	28.9	"	8	B. C. m. q. z.	
☽ 27	30.00	44	22	32.5	27.5	"	8.1	B. C. m. q. z.	
♂ 28	29.94	45	25	33.5	29.4	Northly, S.E.	2.1	B. C. m.	
♀ 29	.39	46	26	33	30.2	Easterly.	7.1	O. m. q. z.	
♀ 30	.44	46	27	32	29.1	Variable.	1	B. C. s.	
♀ 31	.28	43	21	33.5	27.0	"	1	B. C. s.	
			15	35.0	26.0				

METEOROLOGICAL JOURNAL.—For January, 1853.

Kept on board H.M.S. "Resolute," wintering in Bridport Inlet, Melville Island.

Date.	Barom. (Aner.)	Ther.	Temperature.			Winds		Weather.	Remarks, &c.
			Min.	Max.	Mean.	Direction.	Force		
h 1	29.22	47.7	-35	-29	-30.9	Easterly.	1	O. M. S.	Not able to read paper at noon.
⊙ 2	.35	43.7	44	36	40.2	Northerly.	1.7	B. C. M.	2 A.M. Paraselene over the moon. 5 P.M. Mercury [became solid
⊙ 3	.58	45	40	34	37.8	Northerly.	7.0	B. Q. Z.	[became solid
♂ 4	.69	47	48	42	44.3	Wst'ly calm	1.0	B. C. M. —	11 A.M. obsd. P. on summit [of Deady Island.
♀ 5	.78	45	53	47	49.1	E.N.E.	1	B. C.	
♀ 6	.88	45	58	48	52.3	Calm N'thly	1	B.	
♀ 7	.90	47	55	50	51.2	Calm & var.	0.1	B. C.	6 to 8 A.M. Arch of aurora passing through zenith —with a few coruscations.
h 8	.94	46	58	49	55.2	Easterly.	1	B.	11 P.M. Patches of colored aurora to southward.
⊙ 9	30.02	42	61	51	56.5	Calm east.	0.1	B.	7.30 A.M. observed an aurora to westward faintly coruscating towards zenith.
⊙ 10	29.93	44	51	48	50.7	Easterly.	2	B. C.	5 and 6 P.M. Slight aurora to S.W.
♂ 11	.89	46	59	49	55.7	North to east	1	B. C.	1 to 7 A.M. Slight aurora.
♀ 12	.91	48	54	47	51.6	North.	2	B. M.	[5 P.M. aurora
♀ 13	.99	46	53	29	41.7	W.N.W.	3	B. C.	
♀ 14	30.21	47	43	30	36.5	N.N.W.	1	B. C.	11.15 P.M. An aurora from west to S.S.E., increasing in brilliancy towards midnight.
h 15	.16	49	41	29	34.5	N.-Easterly.	1.7	B. C. M. Z.	1 A.M. Aurora from south to west.
⊙ 16	29.63	47	25	19	20.6	E.N.E.	6	B. C. Q.	
⊙ 17	.52	46	40	30	36.0	N.N.E.	2	B. C.	1 A.M. Slight aurora.
♂ 18	.75	49	45	41	42.7	N. W.	2	B. C. M.	
♂ 19	.73	49	43	39	40.7	North.	6.7	B. Q. Z.	9 P.M. Circle round the ☉
♀ 20	.60	47	44	39	41.7	"	7.10	B. Q. Z.	
♀ 21	.68	45	47	41	42.6	Northerly.	4.7	B. C. Q.	Noon.—Spirit Room—
h 22	.60	46	45	34	38.2	N. by W.	1	B. C.	[20°
⊙ 23	.75	46	47	41	44.2	N. N. W.	2	B. C.	
⊙ 24	.95	47	48	30	35.7	W. S. W.	1.7	B. C. Q.	
♂ 25	30.05	50	35	21	27.1	S.W.easterly	2	B. C.	Halo and circle round ☉—
♀ 26	29.80	49	41	26	39.2	W. to north.	1	B. C.	[Diamr. 45°
♀ 27	.82	50	49	41	45.8	Northerly.	1	B.	11 A.M. Mercury frozen.
♀ 28	.72	49	48	30	38.6	Com. W.N.W	0.2	B. C.	
h 29	.68	49	32	11	20.4	Westerly.	2.9	O. Q. Z.	
⊙ 30	.43	50	46	11	25.0	W.N.W. Nly	9.3	O. Q. Z.	
⊙ 31	.49	51	44	30	35.7	North to W.	6.8	B. C. M. Q. Z.	
	29.75	47	-61	-11	-40.7	Northerly.	2.5		

METEOROLOGICAL JOURNAL.—For February, 1853.

Kept on board H.M.S. "Resolute," wintering in Bridport Inlet, Melville Island.

Date.	Barom (Auer.)	Ther.	Temp. Air.			Winds. Direction.	Force.	Weather.	Remarks, &c.
			Max.	Min.	Mean.				
♂ 1	29·57	50	—	—	—	Northerly.	1·7	o. q. z.	
♀ 2	30·01	51	27	43	33·3	Calm.	0·4	B. c. m.	
♂ 3	·12	48	26	37	32·8	Northerly.	1·7·1	B. q. z.	2 A.M. Aurora S.W.
♀ 4	·26	49	19	29	22·5	N. to E.	1·4	o. s.	9 P.M. Aurora E. to W.
h 5	·63	49	32	40	35·4	"	5·2	B. c. c. m.	
⊙ 6	·65	42	31	38	32·9	Northerly.	2·5	B. z.	9 P.M. Aurora S.W.
♂ 7	·36	50	24	36	30·2	Calm.	0	B. c.	
♂ 8	·27	51	24	40	29·5	E.N.E.	1·5	B. c.	
♀ 9	·32	54	32	40	36·6	Easterly.	2	B. c.	1. Aurora South and West thro' zenith.
♂ 10	·31	48	37	46	41·2	Easterly.	1	B. c.	
♀ 11	·05	50	34	46	39·3	Northerly.	2·11	B. q. z.	
h 12	·03	49	25	35	28·9	"	11·4	B. q. z.	
⊙ 13	·24	46	13	29	24·0	"	6·9	B. q. z.	
♂ 14	·36	46	15	30	25·9	"	9·12	o. q. z.	
	·36	48	26	31	29·5	"	12·8	B. c. q. z.	9 P.M. Aurora N.N.W. to S.S.E., thro' the zenith.
♂ 15									
♀ 16	29·93	47	24	32	26·9	"	10·7	C. q. z.	
♂ 17	30·07	48	29	38	32·9	N.N.E.	9·1	C. q. z.	
♀ 18	·12	49	24	39	33·0	Easterly.	2	B. c.	
h 19	·05	48	20	31	23·3	Southerly.	6·1	o. q. z.	
⊙ 20	·29	49	29	43	36·2	Northerly.	1	B.	
♂ 21	·54	49	33	41	37·5	N.N.W.	4·7	o. q. z.	
♂ 22	·17	47	33	40	37·7	"	8·4	B. c. q. z.	Complementary colors on each side of the ⊙. 9 P.M. Parasclena under ♀.
♀ 23	29·79	47	29	31	30·3	North.	6·4	"	
♂ 24	·86	46	30	33	31·5	S.	3·5	"	
♀ 25	·84	46	35	43	39·2	N.Wly.	3	"	
h 26	·76	46	34	39	37·5	S.W.	1	B. c.	
⊙ 27	·87	43	37	46	41·8	South.	"	"	
♂ 28	·90	42	35	48	43·2	East.	"	"	
	30·14	48	—13	—48	33·2	Northerly.	3·7		

METEOROLOGICAL JOURNAL.—For March, 1853.

Kept on board H.M.S. "Resolute," wintering in Bridport Inlet, Melville Island.

Date.	Barom. (Aner.)	Ther.	Temp. air.			Lower Deck.	Winds.		Weather.	Remarks, &c.
			Max.	Min.	Mean		Direction.	Force		
			—	—	—	+ °				
♂ 1	30.08	42	32	45	37.6	54	Easterly.	1	B. C.	
♀ 2	29.91	43	12	28	19	55	S. Wly.	1	O. m. s.	
♂ 3	30.08	44	20	38	30	54	Northerly.	4	B. C. Q.	
♀ 4	32	40	28	39	35	54	"	1	B.	1 A.M. Aurora to the S.W.
♂ 5	43	41	36	42	39	53	"	5	B. C. m.	9 P.M. Aurora from NW. S. E. ; centre of arch S.W.
⊙ 6	52	40	31	36	34	51	"	7	O. Q. Z.	
♂ 7	20	43	20	29	26	42	"	"	"	
♀ 8	08	48	19	36	26	44	"	4	B. C. Q.	
♂ 9	08	48	28	44	35	45	"	1	B. C.	
♀ 10	13	49	33	44	37.5	45	N.N.W.	2	"	
♂ 11	11	48	29	36	34	42	Northerly.	7	O. Q. Z.	2 A.M. Slight aurora to S.W.
♀ 12	29	43	29	34	31	43	N. by W.	8	"	
♂ 13	28	42	30	35	31	48	N.N.W.	7-2	"	
♀ 14	16	43	30	40	35	50	Easterly.	2	B. C.	
♂ 15	06	43	26	37	30	50	E.S.E.	"	"	
♀ 16	13	44	17	29	23	49	"	"	"	
♂ 17	05	45	7	19	12	51	North.	3	B. C. m.	
♀ 18	29.71	47	+ 10	- 10	- 1	52	S.E.	3	B. C. m. s.	
♂ 19	85	48	0	- 10	- 5	55	E.S.E.	3	B. C. m.	
⊙ 20	30.04	47	+ 1	- 4	- 1	55	"	"	"	Between 1 and 2 P.M. observed a remarkable: of orange and yellow horizon about 45° left of ⊙ ; snow dissolved on ship's side for first time this season.
♂ 21	43	49	+ 16	- 4	+ 6	55	S.E.	1	"	
♀ 22	52	52	+ 11	- 8	+ 4	54	E.S.E.	2	B. C.	
♂ 23	58	51	+ 1	- 14	- 7	55	South.	1	B. C. m.	
♀ 24	53	50	- 5	- 20	- 12	54	North.	1	m.	9 to 11 P.M. Halo round the ⊙.
♀ 25	34	49	10	23	15	52	Easterly.	1	B. C.	
♂ 26	29.97	51	4	18	10	53	E. S.E.	1	O. m.	
⊙ 27	73	53	+ 3	11	5	55	Easterly.	1	O. s.	
♂ 28	69	51	3	24	6	53	"	1	B. m.	
♀ 29	70	69	1	28	11	49	"	1.7	O. m.	
♂ 30	77	52	3	8	3	52	W.N.W.	4.6	O. m.	
♀ 31	30.05	55	6	17	11	51	E.S.E. N N.W.	2	B. C.	
	30.12	46.5	+ 16	45	19	51				

METEOROLOGICAL JOURNAL.—For April, 1853.

Kept on board H.M.S. "Resolute," wintering in Bridport Inlet, Melville Island.

Date.	Barom. Aneroid.	Ther.	Temp. air.			Lower Deck.	Wind.		Weather.	Remarks, &c.
			Max.	Min.	Mean.		Direction.	Force.		
Frid. 1	30·15	51	—	—	—	+	S. E.	2	B. C.	1 P.M. Observed a halo around the ☉.
Sat. 2	10	55	4	13	6·5	46	Easterly.	3	"	
Sun. 3	29·97	54	+ 5	- 4	+ 1	52	Calm.	0	B. C. m.	
Mon. 4	90	43	8·5	1	+ 3·6	48	E. N. E.	2	o. m. s.	Considerable fall of snow.
Tues. 5	30·01	36	3	7	- 2·4	47	N. by E.	1·5	"	Distance and dimensions of objects deceptive.
Wed. 6	·09	39	- 1	- 8	- 3·5	44	"	4	o. m. q.	Weather unsettled.
Thur. 7	·05	35	10	19	14	40	N. N. E.	2·7	m. q. z.	Wind fluctuating in force.
Frid. 8	29·87	36	13	20	16·5	39	N. by W.	4·10	"	A perfect hurricane during the squalls. "Intrepid" hidden at times.
Sat. 9	·86	32	9	17	13	36	North.	4·9	B. C. q. z.	Weather as yesterday.
Sun. 10	·90	34	7	14	11	34	"	6·9	"	Weather as yesterday.
Mon. 11	·99	35	+ 1	12	6·7	33	"	7·3	"	7 P.M. Weather fine: little drift.
Tues. 12	·96	44	3	13·5	6·6	41	Calm.	0	B. s.	Fine and clear: objects much refracted.
Wed. 13	·93	44	15	9	Zero	41	E.—S.W.	3	B. C. m.	Observed a halo, 47° dia. Hor. Par. 2 in No. and inverted arch above halo.
Thur. 14	30·11	45	4	15	- 3	39	Northerly.	2	B. C.	
Frid. 15	29·77	44	3	18	7·6	38	N. N. W.—S.	10·1	o. m. s. z.	5. 30 P.M. wind suddenly shifted to N.N.W., and blew with great violence.
Sat. 16	·93	41	12	22	18	35	"	10·5	B. C. z.	
Sun. 17	30·00	41	5	18	7·7	35	"	3	o. m.	Fine.
Mon. 18	·00	44	+ 10	- 4	+ 2	41	Calm.	1	o. m. s.	Fine and clear: objects much refracted.
Tues. 19	·00	44	+ 10	- 4	+ 6	45	E. N. E.	1	B. C.	
Wed. 20	·00	46	+ 4	- 15	+ 1·4	48	S. E.	2	B. C.	
Thur. 21	·00	47	+ 12	- 4	+ 5	49	"	1	B. C. m.	
Frid. 22	·08	48	+ 20	+ 3	+ 12	51	N. E.	1	B. C. m.	
Sat. 23	·35	47	+ 6	- 2	+ 6	48	North.	4	o. q. z.	
Sun. 24	·45	43	+ 3	- 4·5	- 3	44	"	7	"	
Mon. 25	·40	44	+ 2	- 7	- 3	41	N. N. W.	6	o. q. z.	
Tues. 26	·49	45	+ 3	- 4	- 2	44	"	7	B. C. z.	
Wed. 27	·69	44	+ 7	- 5	+ 3	43	North.	3	B. C.	
Thur. 28	·71	43	+ 7	+ 3	+ 5	43	N. N. W.	4	B. C. q.	
Frid. 29	·62	44	+ 17	+ 6	+ 11	43	North.	5	B. C.	
Sat. 30	·55	42	+ 18	+ 2	+ 10	46	"	3	"	
	30·13	43	+ 20	- 22	- 2·5	43				

METEOROLOGICAL TABLE.—For May, 1853.

Kept on board H.M.S. "Resolute," wintering in Bridport Inlet, Melville Island.

Date.	Barom. Aneroïd.	Ther.	Temp. air.			Lower Deck.	Winds.		Weather.	Remarks, &c.	
			Max	Mean	Min		Direction.	Force.			
Sun. 1	30.49	45	23	+	12	2	52.4	N.S.Estrly.	1	B. C. O. S.	
Mon. 2	.51	48	10		7.5	3	47.4	S. Easterly.	2	O. C.	
Tues. 3	.53	46	10		6	3	45.0	"	2	O. C.	
Wed. 4	.56	51	13		7.2	3	46.5	"	"	B. C. M.	
Thur. 5	.57	49	13	5	11	5	45.9	Easterly.	"	M. S.	
Frid. 6	.58	44	23		15	7	45.7	N.E.	1	B. C. V.	
Sat. 7	.54	44	12		9	5	44.0	Northerly.	"	B. C.	
Sun. 8	.41	41	14		11	5	44.4	Calm.	0	B. C. V.	Distant objects much re- fracted. Considerable glare.
Mon. 9	.14	41	19		14	11	44.0	N.N.W.	4	B. C. M.	Weather gloomy and threatening.
Tues. 10	29.88	42	21		15	7	44.1	N.W.	5	O. Q. S.	
Wed. 11	.94	42	16		12	6	43.0	N.N.W.	5	B. O. M.	
Thur. 12	.96	42	15		11.5	7	41.4	"	5	B. C. Q. Z.	
Frid. 13	30.06	37	29		13.7	7	43.3	North.	2	B. C.	
Sat. 14	.36	44	19		13.4	4	43.6	Calm—S.	0.1	B. C. V.	Day beautifully fine and clear.
Sun. 15	.33	44	13		9	3	44.5	South.	2	B. C. V.	
Mon. 16	.11	43	24		16.5	10	45.2	"	1	B. C. V.	Gravel in canal, cal- through.
Tues. 17	29.83	40	27		19.2	8	46.6	"	2	B. C.	
Wed. 18	.78	36	33		28.7	24	50.8	"	1	O. C. M.	
Thur. 19	.66	49	29		24.5	20	46.6	S.E.	3	O. C. M.	
Frid. 20	.68	50	40		31.5	25	49.7	"	1	B. C. M.	Snow fell during forenoon. Floe beginning to be sloppy.
Sat. 21	.82	50	34		28.4	21	49.0	N.Wly.	3	B. C. M.	
Sun. 22	.78	46	31		24.9	19	47.7	W.N.W.	2	B. C. V.	
Mon. 23	.68	43	23		19.1	14	46.7	N.N.W.	4	B. C. M.	
Tues. 24	.75	46	28		21.4	17	45.6	N.W.	3	B. C. M.	
Wed. 25	.98	46	26		21.8	18	43.9	N.N.W.	4	O. C.	
Thur. 26	30.24	46	17		14.9	12	38.7	"	7	B. C. Q. Z.	Clear sky overhead. Heavy drift.
Frid. 27	.14	46	27		21.5	16	39.6	"	6	"	
Sat. 28	29.84	45	25		22.7	19	42.5	"	8	"	
Sun. 29	.86	44	28		21.9	18	42.9	North.	6	"	
Mon. 30	.76	44	24		21.5	19	42.1	"	8	"	Very heavy drift.
Tues. 31	.65	46	22		20.2	18	38.4	N.N.W.	6	O. M. Q. S.	
	30.08			+							
				+	16.9	2	44.8				

METEOROLOGICAL JOURNAL — For June, 1853.

Kept on board H.M.S. "Resolute," Bridport Inlet, Melville Island.

Date.	Barom. (Auer.)	Ther. Alc.	Temperature.				Winds.		Weather.	Remarks, &c.
			Max.	Min.	Mean.	Lower Deck.	Direction.	Force.		
Wed. 1	29.64	48	30	21	25.6	40	North	4	o. m. s.	
Thur. 2	.74	47	35	25	29.2	48	W.S.W.	3	o. m.	
Frid. 3	.72	45	39	25	31.1	50	"	2	"	
Sat. 4	.78	40	30	25	27.1	46	N.N.E.	5	o. m. g.	Weather unsettled during the day. A pool of water, 1 foot deep on the starboard side.
Sun. 5	30.00	38	40	25	29.4	50	"	4	"	Weather gloomy and un- settled.
Mon. 6	29.79	38	37	25	31.4	51	N.N.W.	3	B. C. V.	
Tues. 7	.73	42	29	23	26.6	47	"	4	B. C.	
Wed. 8	.82	45	40	22	32.1	47	"	"	B. C. V.	
Thur. 9	.74	38	31	27	30.9	47	N.Wly.	3	"	
Frid. 10	.72	35	30	25	27.4	50	N.N.W.	"	B. C. M.	Snow falling. Weather gloomy.
Sat. 11	.72	38	34	24	28.7	50	North.	4	o. m. s.	Rain during the afternoon.
Sun. 12	.74	45	30	23	27.0	52	N.N.W.	6	m. s. r.	
Mon. 13	.79	46	36	23	30.9	51	"	4	B. C. V.	Day fine, distant object refracted.
Tues. 14	.80	48	43	32	35.5	55	"	2	B. C.	
Wed. 15	.76	46	45	30	36.4	54	"	1	"	
Thur. 16	.76	48	38	32	34.2	48	"	5	B. C. q.	
Frid. 17	.79	46	38	30	33.2	52	N.W.	1	o. s.	
Sat. 18	.56	48	37	31	33.4	54	"	3	o. c. p. s.	
Sun. 19	.60	46	37	30	33.6	57	"	"	"	
Mon. 20	.77	49	40	31	35.9	57	S.Wly.	1	c. m. s.	
Tues. 21	.86	47	41	31	36.9	60	Westly.	"	"	
Wed. 22	.80	46	46	33	39.9	61	S.E.	1	o. m.	
Thur. 23	.95	45	43	34	37.1	61	Southly.	"	B. C.	
Frid. 24	.91	44	45	35	38.9	60	Calm.	0	"	
Sat. 25	30.12	44	40	33	36.5	61	N.Ely.	2	c. m.	
Sun. 26	.26	46	37	34	36.0	62	"	3	B. C.	
Mon. 27	.21	45	43	37	39.2	58	"	"	"	
Tues. 28	29.90	50	39	35	37.0	56	Northly.	2	o.	
Wed. 29	30.07	46	36	35	35.9	58	"	"	B. C.	
Thur. 30	29.91	51	35	33	34.0	58	"	"	o.	
			46	21	33.0					
			+	+	+					

METEOROLOGICAL JOURNAL.—For July, 1853.

Kept on board H. M. S. "Resolute," Bridport Inlet, Melville Island.

Date.	Barom. (Aner.)	Ther.	Temp. Air.			Lower Deck.	Winds.		Weather.	Remarks, &c.
			Max.	Min.	Mean.		Direction.	Force		
Frid. 1	29.78	+	49	34	40.4	61	N. W.	1	B. C.	
Sat. 2	.81	49	43	32	38.1	59	S. S. W.	2	B. C.	
Sun. 3	.89	48	47	31	37.9	61	S. W.	"	B. C. O.	
Mon. 4	.87	47	43	34	38.0	60	South.	"	B. C. m.	
Tues. 5	.73	49	38	32	34.7	58	N. N. E. calm	4.0	f.	Dense fog.
Wed. 6	.82	48	42	33	36.2	58	S. S. W.	1	o. c.	
Thur. 7	.68	49	42	33	36.9	58	South.	1	B. C. m.	
Frid. 8	.68	47	43	34	37.4	60	"	"	o. r.	
Sat. 9	.59	50	38	32	34.5	57	S. Westerly.	3	B. C. d.	
Sun. 10	.38	49	34	30	32.7	56	N. N. W.	3	B. C. m.	
Mon. 11	.60	59	37	33	37.3	57	Northerly.	"	B. C.	A crack astern— opened 2 feet.
Tues. 12	.78	48	41	33	37.1	59	Calm.	0	"	
Wed. 13	.86	50	41	34	36.2	60	East.	1	B. C. f.	
Thur. 14	.86	49	46	34	38.1	59	Calm.	0	f.	
Frid. 15	.69	49	42	34	36.7	60	Southerly.	3	B. C. q.	
Sat. 16	.41	53	37	34	35.7	60	Westerly.	3	o. m.	
Sun. 17	.54	50	45	36	40.2	60	"	1	B. C.	
Mon. 18	.58	50	37	34	36.0	60	S. E.	7	m. d.	Canal eaten thro' in some places.
Tues. 19	.37	50	38	33	35.9	60	"	7.1	"	
Wed. 20	.47	48	38	35	36.5	60	N. N. W.	1	o. m. d.	
Thur. 21	.67	48	38	33	35.5	56	North.	4	B. C.	Crack astern opened 12 feet.
Frid. 22	.72	48	45	34	39.1	60	N. W. calm	1.0	B. C. m.	
Sat. 23	.61	50	37	34	35.5	61	Calm. South	0.1	o. d. o. m.	
Sun. 24	.61	52	42	34	38.2	61	N. N. W.	1	B. C. m.	
Mon. 25	.66	53	37	33	34.5	61	Southerly.	1	o. m.	
Tues. 26	.64	52	39	34	35.9	59	N. Easterly.	1.5	o. m.	
Wed. 27	.70	48	39	32	35.5	60	N. Westerly	5.1	B. C. m.	
Thur. 28	.46	47	34	33	33.8	58	W. S. W.	2	s. m.	
Frid. 29	.26	50	36	31	33.9	59	N. W. S. E.	4.1	c. s. m. s.	
Sat. 30	.35	52	35	34	34.7	56	N. N. W.	5	B. C. q. s.	
Sun. 31	.69	49	39	32	34.5	58	S. Westerly.	2	B. C. m.	
			+	+	+					
			47	30	36.4					

METEOROLOGICAL JOURNAL.—For August, 1853.

Kept on board H.M.S. "Resolute," Melville Island.

Date.	Barom. (Aner.)	Ther.	Temp. Air.			Lower Deck.	Wi ds.		Weather.	Remarks, &c.
			Max.	Min.	Mean.		Direction.	Force.		
Mon. 1	29.70	48.5	+	+	+	+	Calm, S.W'ly.	0.1	o. m.	Thermometer re- moved from floe to upper deck.
Tues. 2	.62	47.7	36	32	34.0	59	W.S.W.	2	o.	
Wed. 3	.62	47.1	37	32	35.0	57	N.N.W.	2	B. C.	
Thur. 4	.57	52.4	35	33.5	34.5	56	N. W'ly.	5	B. C. q. s.	
Frid. 5	.69	50.1	36	31.5	34.2	57	N., W.S.W.	6.2	B. C. m. q.	
Sat. 6	.76	50.5	37	33	34.4	60	West.	1	B. C. O.	
Sun. 7	.78	48.5	38	33	35.2	60	"	1	E. C. m. f.	
Mon. 8	.70	47.7	38	34	35.5	60	N., calm.	1.0	O. r. o. m.	
Tues. 9	.73	51.0	35	34	34.1	58	"	2	m. p. s.	
Wed. 10	.66	53.0	35	31	33.4	59	"	"	o. s. m.	
Thur. 11	.71	52.9	35	30	34.0	59	Easterly.	3	B. C. m.	
Frid. 12	.80	50.9	35.5	32	37.0	60	North.	6.1	"	
Sat. 13	.83	52.2	41	33	36.0	59	Calm, W.	2	B. C. m.	
Sun. 14	.80	50.5	39	33	35.4	61	N.E., W.	2.1	"	
Mon. 15	.87	51.5	39	34	35.9	58	"	"	c. m. r.	
Tues. 16	.89	49.2	38	20.5	36.8	57	"	2	O. s. B. C.	
Wed. 17	.61	41.7	42	27	32.9	57	E.N.E.	10	O. m. q. s.	Aneroid removed to upper deck.
Thur. 18	.26	45.3	35	32	32.4	54	N.N.W.	8	"	Broke out of winter quarters. Aner- oid removed to the cabin.
Frid. 19	.69	49.0	33	30.5	32.0	54	N.W. to S.W.	7.2	B. C. q.	In Byam Martin Channel.
Sat. 20	.86	46.5	35	30	31.5	59	N.E.	3	o. c.	
Sun. 21	.85	47.2	32	29.5	32.0	58	"	1	s. f.	
Mon. 22	.98	49.6	32	29	30.0	60	N.N.W.	3	B. C. m.	
Tues. 23	.95	51.1	40	30	34.7	57	Westerly.	1	B. C.	
Wed. 24	.81	50.1	36	31	33.1	59	S.W'ly.	2	B. C. m.	
Thur. 25	.55	49.7	35	28.5	31.7	60	"	4	O. m. f.	
Frid. 26	.38	55.1	34	32	33.2	56	N., S.S.E.	4	f. m. r.	
Sat 27	.57	53.0	34	25	30.7	56	"	4	B. C. q.	
Sun. 28	.62	49.7	27	24	25.6	56	N.E.	5.1	B. C. m. f.	
Mon. 29	.64	50.1	33	25	29.4	55	S.E., S.W.	2	B. C. m.	
Tues. 30	.91	53.1	28	24	26.7	56	N.W.	2	B. C.	
Wed. 13	30.01	47.8	31	25	26.7	56	Westerly.	2	B. C. m.	
	29.70	49.8	+	+	+					

METEOROLOGICAL JOURNAL. — For September, 1853.

Kept on board H.M.S. "Resolute," Capt. H. Kellett, C.B., off Pt. Griffiths until the 10th, and beset in the Pack between that date and the end of the month, in Lat. 75° N., Long 106° W.

Date.	Barom. (Aner.)	Ther (alt)	Temp. Air.			Lower Deck.	Winds.		Weather.	Remarks, &c.
			Max.	Min.	Mean.		Direction.	Force.		
Thur. 1	29.93	49	34	27	31	56	S. East'yly.	2	B. C. m.	
Frid. 2	80	50	38	27	31	55	"	2	B. C.	
Sat. 3	78	48	31	27.5	29.5	55	W. N. W.	2	B. C. m.	
Sun. 4	80	49	31	27	29	55	E., South.	1	O. m.	
Mon. 5	91	51	33	26	29	56	S. West'yly.	1	B. C. m.	
Tues. 6	87	50	33	25	28	55	"	$\frac{3}{4}$	O. m. q. s.	
Wed. 7	83	47	24	16	20	54	W. N. W.	5	B. C. q.	
Thur. 8	65	47	20	18	19	48	N. W.	4.6	B. C. m. q.	
Frid. 9	66	44	20	16	18	48	"	3.7	B. C. q.	
Sat. 10	32	42	20.5	16	18	47	"	4.9	B. C. m. q.	
Sun. 11	53	42	15	7	11	48	N. N. W.	"	"	
Mon. 12	80	45	15	9	13	51	N. W.	5	B. C. m.	
Tues. 13	78	45	22	15	19	53	West.	3	"	
Wed. 14	69	46	18	8	13	48	W. S. W., S.	2	B. C.	
Thur. 15	57	45	24	17	20	51	North'yly.	2	O. f. s.	
Frid. 16	78	47	21	14	18	52	West.	3	B. C.	
Sat. 17	89	43	20	9	14	53	N. W.	5	B. C. m. s.	
Sun. 18	30.13	43	12	9	10	55	N. N. W.	4	B. C. m.	
Mon. 19	17	45	12	8	11	53	N. West'yly.	3	"	
Tues. 20	11	45	20	13	17	56	N. N. W.	4	B. m.	
Wed. 21	06	46	17	13	15.5	56	"	4	B. C.	
Thur. 22	13	44	19	12	16	54	N. West'yly.	3	"	
Frid. 23	29.97	44	15	11	13	54	S. West'yly.	3	B. C.	
Sat. 24	82	41	15.5	8	12	54	Wester'yly.	3	B. C. m. s.	
Sun. 25	84	42	10.5	6	8	52	South.	2	B. C.	
Mon. 26	89	44	18	8	13	48	"	1	B. C. m. s.	
Tues. 27	93	44	18	15	16	51	S. East'yly.	1	O. s.	
Wed. 28	85	45	17	10	14	52	Easterly.	3	O. m.	
Thur. 29	87	44	13	8	11	52	"	2	O.	
Frid. 30	79	45	15	11	12	50	"	3	"	
	29.85	45	38	6	18	52.5				

METEOROLOGICAL JOURNAL.—For October, 1853.

pt on board H.M.S. "Resolute," Capt. H. Kellett, C.B., wintering in the Pack, in Lat. 74° 41' 34" N., Long. 101° 22' 06" W.

Date.	Barom. (Aner.)	Ther. (alt.)	Temp. Atr.			Lower Deck.	Winds.		Weather.	Remarks, &c.	
			Max.	Min.	Mean.		Direction.	Force			
			+	—	+						
t.	1	29.50	45	12	8.5	1.3	53	S.E., Wy.	4.7	B. C.	
n.	2	.65	45	11	3	5.0	56	N.N.W.	5	B. m. o.	
on.	3	.51	43	10.5	+5	7.2	45	N.W.	5	B. C. q. m.	
res.	4	.41	44	16	10	13	52	Westerly.	4	S. o. m.	
ed.	5	.42	43	16	1	10.2	56	N.West'ly	4	B. C. m.	Faint flashes of aurora — observed several shooting stars.
hrs.	6	.59	42	3	-3	-1	55	Westerly.	2	"	9, observed vapour rising from Fire hole—Paraslene on each side of ☉
h.	7	.80	43	4	4	+0.2	52	N.W.	1	B. C. f.	
st.	8	30.05	41	4	1	2.6	56	W.S.W.	1	o. m.	
n.	9	.20	42	8	Zero	4.8	57.5	Calm, S.E.	0.1	o. c. m.	
bn.	10	.05	45	12	+2	5.4	50.5	E.S.E.	5.9	B. C. m. q.	
aes.	11	29.41	46	24	11	17.5	50	"	8	o. q. r.	10 P.M., arch of aurora through zenith.
ed.	12	.47	45	30	11	25.9	54	S. Easterly	6	o. c. q.	
hur.	13	.64	45.5	8	-1	4.5	56	Westerly.	1	B. C. m.	
rl.	14	.71	45.5	15	+11	13.5	56	N.W.	1	C. o. m.	
st.	15	.81	45	16	8	13.3	55	N.N.W.	1	o. m.	
m.	16	.90	43.5	16	11	13.8	56	Northerly.	2	B. o. m. o.	
on.	17	.80	44	19	7	15.8	56	Easterly.	1	o. s.	
aes.	18	.85	44	12	-1	5.9	54	N. W.'ly.	1	B. C. m.	
ed.	19	.98	45	15.5	+12	14.2	55	Calm.	0	o. s.	
hur.	20	30.00	45	14	3	10	54	N.E. Calm.	1.0	o. m. s.	
rl.	21	.13	45	2	-12	-5.4	53	N.N.W.	3	B. C. m.	
st.	22	.36	48	Zero.	8	3.5	57	"	5	B. C. q.	
m.	23	.38	45	+9	6	+2.4	55	W.N.W.	3	B. C. m.	
on.	24	.09	47	9	+4	9	54	West.	-	-	
aes.	25	.02	46	3	-6	0.2	52	S. W.'ly.	2	B. C.	
ed.	26	.07	43	4	2.5	1.4	52	S.E.	1	o. m.	
hur.	27	29.90	43	1.5	8	-1.6	53	N.N.E.	2	o. m.	
ri.	28	.79	42	Zero.	2	1.4	52	N.N.W.	1	-	
st.	29	.70	44	-3	15	10.1	57	Northerly.	1	-	
on.	30	.67	43	6	13	10.7	54	"	2	B. C.	Occasional coruscations in S.E. quarter.
Ion.	31	.68	44	10	10	16.4	50	N.N.W.	3	B. C. m.	5 A.M., flashes of aurora to westward.
		29.83	44	30	15	4.5	54				

METEOROLOGICAL JOURNAL.—For November, 1853.

Kept on board H. M. S. "Resolute," Capt. H. Kellett, C. B., wintering in the Pack, S.W.S. from C. Cockburn. Lat. 74° 41' N., Long. 101° 22' W.

Date.	Barom. (Aner.)	Ther.	Temp. Air.			Lower Deck.	Winds.		Weather.	Remarks, &c.
			Max.	Min.	Mean.		Direction.	Force		
Tues. 1	29·74	46	12	19	15·0	46	N.N.W.	3	B. m. q.	
Wed. 2	·83	45	13	15	14·5	49	N.W.	5	B. m. q. z.	
Thur. 3	·80	44	9·5	16	12·6	53	N.N.W.	5	B. C. m. q.	
Frid. 4	·77	46	8	11	7·2	57	"	"	"	
Sat. 5	·83	45	10	17	13·7	56	"	8·1	"	
Sun. 6	·80	48	18	21·5	20·2	57	N.W.	3	B. m.	
Mon. 7	·95	48	15	20	17·3	58	N.N.W.	"	B. C. m.	
Tues. 8	30·12	47	20	21	20·3	57	"	2	B. C.	
Wed. 9	29·93	46	15	19	16·2	59	N.N.W.	4	O. m.	
Thur. 10	·53	46	10	25	15	59	N.W.	2	"	
Frid. 11	·38	45	12	20	15·7	60	Westerly.	"	"	9.30, observed flashes of aurora to the south.
Sat. 12	·48	46	26	34	30·2	58	Calm.	0	B. m. c.	6.30 A.M., observ- ed a meteor S.W. 11.0 A.M. ob- served a meteor N.E.
Sun. 13	·83	45	24	30	26·7	60	S.E.	1	B. C. m.	
Mon. 14	30·18	47	26	31	28·2	59	N.E.	1	B. C.	
Tues. 15	·29	50	25	28	26·6	57	North'ly.	1	B. m.	11.0 P.M., ob- served a meteor round the north.
Wed. 16	·19	47	16	25	19·5	58	W.N.W.	2	B. C. m.	
Thur. 17	·14	49	13	21	16·2	60	"	"	"	5.0 P.M., observ- ed a circle round the north.
Frid. 18	29·93	48	12	21	16·1	63	West.	1	B. C.	
Sat. 19	·73	48	13	22	17·4	63	South'ly.	3	B. C. m.	
Sun. 20	·63	46	14	29·5	22·8	61	S.W.	2	"	
Mon. 21	·65	47	28	36	32·6	63	"	1	"	
Tues. 22	·81	47	25	37	30·7	62	North'ly.	2	B. C. m.	7.0 A.M., flashes of aurora to the ward, and round the north.
Wed. 23	30·00	48	24	27	24·8	61	N.W'ly.	4	B. C. q. z.	
Thur. 24	·02	47	24	36	30·7	58	N.W.	1	B. C.	
Frid. 25	·00	46	31	37	34·5	59	"	2	"	
Sat. 26	29·85	47	12·5	29	19·9	60	W.N.W.	6	B. C. q. z.	
Sun. 27	·64	47	10	14	11·8	60	"	5·9	O. q. z.	
Mon. 28	·48	47	8·5	21	11·9	61	N.W.	4	"	
Tues. 29	·43	47	11	23	18·3	59	Calm.	0	B. C.	
Wed. 30	·54	49	12	22	17·4	59	N.E'ly.	2	B. C. m.	
			—	—	—					
			8	37	20·2					

METEOROLOGICAL JOURNAL.—For December, 1853.

Kept on board H.M.S. "Resolute," Capt. Henry Kellett, C.B., wintering in the Pack,
S. W. by S., 28 miles from C. Cockburn, Lat. 74° 41' N., Long. 101° 22' W.

Date.	Barom (Aner.)	Ther.	Temp. Air.			Lower Dewk.	Winds.		Weather.	Remarks, &c.
			Max.	Min.	Mean.		Direction	Force.		
			—	—	—	+				
hur. 1	29·68	49	16	23	19	59	North.	2	B. m. c.	Faint flashes of au-
rid. 2	·56	49	18	26	21·7	62	"	"	B. m.	[rora to S.W.
at. 3	·60	50	17	25	21·7	62	"	1	"	7 P.M., fine arch of aurora S.S.E. to W. [alt. about 25°.
un. 4	·77	47	24	36	32·2	64	Calm.	0	B.	
fon. 5	·80	48	35	38	36·7	61	West.	"	B. m.	
ues. 6	·82	45	30	38	34·5	59	"	1	B. c.	1, faint arch of au-
ved. 7	·78	45	37	42	40·3	54	Calm.	0	B.	[rora S.W. to W.
hur. 8	·68	46	34	40	36·4	54	N.E.	1	B. c.	8 P.M., a faint arch of aurora, passing through zenith, N.E. [to S.E.
rid. 9	·84	45	36	40·5	37·9	55	"	"	B.	
at. 10	30·05	43	40	43	41·9	57	Calm.	0	"	1 A.M., mercury fro-
sun. 11	·08	42	38	41	39·5	57	N.W.	1	"	zen. 9 P.M., a bright me- teor, N.N.W.
mon. 12	·04	44	27	37	33·7	55	West'ly.	1	B. c.	3 P.M., circle and
tues. 13	·00	43	22·5	26	24·3	56	S.W'ly.	1	O. m.	halo round the ☉
wed. 14	·06	43	15	21	16·6	58	N.W'ly.	1	O. m.	diam., about 45°.
thur. 15	·10	44	18	21	19·1	57	"	3	B. c. m.	
frid. 16	·02	43	16	23	19·4	57	"	4	O. m. q.	
sat. 17	29·96	45	14·5	21	16·4	58	N.N.W.	3	B. c. m.	4.30 P.M., observed a very bright circle and prismatic colours [round ☉.
sun. 18	·96	45	22	29	25·2	58	"	1	B.	
mon. 19	·86	45	27	31·5	28·8	57	North.	"	"	5.30 P.M., observed [a brilliant meteor.
tues. 20	·75	45	24	27	25·9	55	N.N.W.	6·9	B. m. q. z.	9 P.M., a faint halo round the ☉.
wed. 21	·79	46	27	33	29·9	55	North.	3	B. m.	3 A.M., a bright pa-
thur. 22	·58	45	30	41	35·3	55	"	"	"	raselene. 11, read pa-
frid. 23	·61	43	40	44	41·8	52	"	"	"	per. Arch of aurora from N.W., through zen., 0·45. Read pa-
								1	B. c. m.	per. 6 P.M., aurora to [the S.W.
								1	B. c.	11 P.M., flashes of aurora from W. to [S.
Sat. 24	·77	44	31·5	40	36·6	55	N.W.			
Sun. 25	·81	42	29	33	30·8	52	S.E.			
						55	"	4·6	B. c. q. z.	An arch of aurora
						56	S.S.E.	4	B. c. m.	[from west to south.
Mon. 26	·94	41	32	42	37·3	53	"	1	"	
Tues. 27	·67	44	40	43	41·7	53	N.W.	3	B. c. m. q.	7, flashes of aurora
Wed. 28	30·08	42	39	43·5	41·2	52	"	2	B. c. m.	[west to south.
Thur. 29	·39	44	40	44	41·8	54	Eastly.	1	B. c.	
Frid. 30	29·93	45	13	41	26·7	54	Northly.	2	B. c. m.	
Sat. 31	·51	46	6	16	10·4	59	N.N.W.	4·10	m. q. z.	
			—	—	—					
			6	44	30·4					

METEOROLOGICAL JOURNAL.—For February, 1854.

Kept on board H.M.S. "Resolute," Captain H. Kellett, C.B., wintering in the Park
 Lat. 74° 41' 30" N., Long. 101° 22' 00" W.

Date.	Barom. Aneroid.	Ther. (alt.)	Temp. Air.			Lower Deck.	Winds.		Weather.	Remarks.
			Max.	Min.	Mean.		Direction.	Force.		
Wed. 1	29·91	+	—	—	—	+	N.W.	6·3	B. m. q.	11.30, sun's diam. above the horizon (last 3 days). 371 mercury 816.
Thur. 2	·96	46	32	35	33·5	56	"	4	B. C.	
Frid. 3	·85	47	33	42	38·1	55	"	1	B.	
Sat. 4	·68	45	30	42	34·4	57	East'ly.	"	o. m. s.	7 A.M. direction
Sun. 5	·57	45	32	38	35·5	56	N.W.	4	o. m. q.	
Mon. 6	·74	47	35	42	38·2	56	"	5	B. C. m. q.	
Tues. 7	·97	49	43	50	46·6	54	East.	1	B. C.	
Wed. 8	30·10	46	49	50	49·4	51	"	"	B.	
Thur. 9	29·93	45	48	50	49·4	55	N.W.	1	B. C. m.	
Frid. 10	·98	46	50	54	52·2	54	South'ly.	"	B. m.	
Sat. 11	·93	45	47	52	49·1	56	"	3	B.	
Sun. 12	30·00	41	40	47	43·4	57	"	4	o. m. z.	
Mon. 13	29·85	41	39	43	40·7	53	"	3	B. C. m.	
Tues. 14	·51	45	32	43	37·2	52	S.E.'ly.	3·7	C. m. q.	
Wed. 15	·41	44	32	44	36·6	55	S.W.	2	B. C. m.	
Thur. 16	·68	45	43	53	48·4	54	S.E.	1	"	
Frid. 17	·68	43	47	53	50·0	56	N.W.	1	B.	
Sat. 18	·30	45	45	50	47·7	58	"	2	B. C.	
Sun. 19	·20	42	38	49	41·0	57	"	4	B. C. m.	
Mon. 20	·33	41	33	41	35·8	53	N.N.W.	3	B. C. m. q.	
Tues. 21	·52	45	23	41	32·7	52	N.W.	3	B. C. m.	
Wed. 22	·65	46	28	37	33·2	53	"	1	B. C.	
Thur. 23	·90	47	33	39	36·7	56	Calm.	0	B. C. m.	Adie's Ther. rose 13° in the Kew Stand.
Frid. 24	30·29	47	27	35	32·6	56	N.W.	2	B. C. m.	
Sat. 25	·28	48	26	35	31·2	57	N.N.W.	4	B. C. m.	
Sun. 26	29·89	46	27	33	30·5	57	"	8	B. m. q. z.	
Mon. 27	·99	47	21	27	24·2	57	"	8 1·5	"	
Tues. 28	30·05	51	20	27	23·6	56	West.	2	B. C. m.	Temp. rose 18° ☉ at noon.
	29·80	45·4	—	—	—	+	N.W.'ly.	2 $\frac{7}{10}$	B. C. m.	

METEOROLOGICAL JOURNAL.—For March, 1854.

Kept on board H.M.S. "Resolute," Capt. H. Kellett, C.B., wintering in the Pack, in
Lat. 74° 41' 30" N., Long. 101° 22' 06" W.

Date.	Barom.	Ther. (alt.)	Temperature.			Lower beck.	Winds.		State of Weather.	Remarks, &c.
			Max.	Min.	Mean.		Direction.	Force.		
Wed. 1	29.73	50.4	12	26	19.4	55.5	S.W.'ly.	1.4	O. m. s.	Noon, temp. rose 26° in the ☉. 0.30 P.M., snow was ob- served to melt on a tarpaulin exposed to the ☉'s rays.
Thur. 2	.89	51.0	27	34	31.6	54.8	North'ly.	6.1	O. q. z.	
Frid. 3	30.26	50.8	28	36	32.8	54.4	North'ly.	1	B. m.	
Sat. 4	.32	49.0	30	41	36.5	55.4	S.S.W.	1	B.	Noon, indistinct objects much dis- torted. Wind very vari- able during the day. 4.20 P.M., a faint halo round the ☉ with a bright parhel- lion at each extre- mity of horizontal diameter. 11 P.M., halo round the ☉ 11 P.M., faint flashes of aurora. 11 A.M., distant hummocks, mag- nified and dis- torted. 3 P.M., heavy snow [drift. 1 P.M., therm. in ☉ showed 21° +
Sun. 5	.20	47.1	34	41	38.6	54.3	South.	1	B. C.	
Mon. 6	29.99	46.6	26	42	37.7	52.7	S.E.	1	B. C.	
Tues. 7	.70	45.3	22	40	30.7	52.7	S.E.	1	B. C. m.	
Wed. 8	.74	49.0	13	31	20.1	54.7	S.E., N.E.	1	O. m. s.	
Thur. 9	.86	48.0	28.5	36	32.6	54.0	E.W. & N.	1	B. C.	
Frid. 10	.88	48.0	32	40	35.4	54.0	E., N.N.E.	1	B. C.	
Sat. 11	.77	50.0	36	44	40.3	56.0	North'ly.	1	B.	
Sun. 12	.76	46.0	37	44	41.4	56.3	N.N.W.	1	B.	
Mon. 13	.81	47.2	34	43	38.3	53.9	N.N.W. South.	2.4	B.	
Tues. 14	.51	47.4	29	41	33.1	58.0	S.E.	4	O. m. s.	
Wed. 15	.41	43.9	22	30	25.2	50.7	S.E., East.	4.1	O. m. s.	
Thur. 16	.76	47.6	17	25	21.1	54.7	E.N.E.	1.4	O. m. s.	
Frid. 17	.88	49.0	18	28	23.9	54.2	N.N.E.	2.3	B. C. m.	
Sat. 18	.93	50.0	28	34	29.8	56.0	N.N.W.	5.4	B. C. m.	
Sun. 19	30.20	47.7	27	36	31.7	54.7	N.West'ly.	3.1	B. C. m.	
Mon. 20	.06	46.2	25	35	30.0	55.0	N.N.W.	1.5	B. C. m.	
Tues. 21	29.69	48.7	25	31	29.2	56.8	N.N.W.	4	B. C. m.	
Wed. 22	.94	47.7	24	34	28.7	54.7	N.N.W.	2	B. C.	
Thur. 23	30.20	49.2	29	36	33.1	53.9	N.N.W.	3.6	B. m. q.	
Frid. 24	.45	45.2	26	35	31.1	53.7	N.N.W.	3.5	B. m. q.	
Sat. 25	.63	45.7	30	33	31.5	54.6	N.N.W.	2	B. m.	
Sun. 26	.44	43.9	20	35	25.7	55.1	N.West'ly.	2.5	m. q. z.	
Mon. 27	.31	42.3	25	36	30.7	55.3	N.W.	9.7	B. m. q. z.	
Tues. 28	29.84	43.4	15	30	21.6	54.8	N.W., S.W.	3.6.2	B. C. m.	
Wed. 29	.27	46.8	14	25	17.4	54.0	West.	1	B. C. m.	
Thur. 30	.37	46.6	16	24	20.7	55.1	North.	2	B. C. m.	
Frid. 31	.46	42.2	16	34	22.9	55.1	N.E.	2	B. C.	
Means	29.91	47.1	12	44	29.7	54.7	N.N.W.	2.4	B. C. m.	
Corrected	-	-	12	46	30.7	-	-	-	-	

NOTE.—It is somewhat remarkable that the maximum registration of the thermometer during the past month should have occurred on the 1st.





METEOROLOGICAL JOURNAL.—For April, 1854.

Kept on board H.M. Discovery Ship "Resolute," Captain H. Kellett, C.B., frozen up in Pack.
Lat. 74° 41' 30'' N., Long. 101° 22' 06'' W.

Date.	Barom.	Ther. (alt.)	Temp. air.			Lower Deck.	Winds.		Weather.	Remarks, &c.
			Max.	Min.	Mean.		Direction.	Force.		
		40	-18	-31	25.6	57.4	N.E.	1	B. v.	Cape Cockburn plain visible without reflection.
		37.5	19	32	26.2	55.0	"	1	B.	
		36.6	19	34	25.8	55.0	West.	1	B. m.	
		36.3	13	38	19.2	54.2	S.W.	4	O. m.	
		37.1	8	18	11.7	54.7	W.S.W.	1	O. m. s.	
		39.6	6	20	13.3	54.0	West	1	B. C. M.	
		42.	15	31	19.2	56.0	S.E.	1	B. C.	
		43.5	16	32	24.5	55.1	N.N.W.	2	B. C.	
		38.2	10	26	14.6	56.7	N.W.	2	B. m.	
		45.	6	18	11.2	57.2	N.N.W.	2	B. C.	
		46.4	6	20	12.5	56.7	S.W.	1	B. m.	
		46.4	+ 1	20	7.9	53.2	S.E.	4	B. m. z.	5 P. M. therm. up to 50 for the first time since Oct. 28, 1853.
		45.3	7.5	7	2.7	56.6	S.W.	3	B. C. M.	
		42.4	- 4	15	10.2	52.5	N.W.	3	B. C.	
		36.8	+ 4	17	4.8	49.0	S.W.	5.6	B. C.	
		37.7	8.5	6	+1.2	51.6	South.	4.1	P. C.	
		42.5	16	+ 2	9.8	52.9	S.S.E.	1	B. C. m.	
		43.3	16	1.5	8.8	53.2	E.S.E.	3	B. C.	
		44.7	12.5	2	6.8	53.2	S.E.	1	B. C.	
		44.6	15	4	9.2	54.7	"	1	B. C. v.	
		47.3	25	6	13.1	55.6	"	2	B. M.	Saw the first snow here.
		51.3	10	1	5.3	54.8	Var.	1	B. f.	
		50.0	6	-11	-2.1	54.4	Calm.	0	B. O.	
		47.2	9	13	2.0	55.7	Var.	1	R. C.	
		47.2	15	9	+4.0	53.9	S.E.	1	B. C.	
		48.7	15	6	12.5	51.7	"	1	B. C.	
		48.7	24	+ 5	18.7	53.4	"	3.7	B. m. z.	
		51.1	29	12	21.9	55.8	"	2.4	O. m. s.	
		52.7	15	1	9.7	55.0	N.W.	6.3	B. C. m.	
		52.0	17	- 2	3.9	52.2	N.N.W.	1	B. C. v.	Land about C. Cockburn very distinct.
			+29	-34						

A COMPENDIUM
OF
TRAVELLING OPERATIONS,
&c. &c.

A COMPENDIUM of the TRAVELLING OPERATIONS during the SPRING of 1853 by the OFFICER COMMANDING THE WESTERN BRANCH of the ARCTIC EXPEDITION, CAPTAIN HENRY KELLETT, C. B., commanding the Western Branch of the ARCTIC EXPEDITION, compiled from Official Documents, by GEORGE...






NAMES OF OFFICERS COMMANDING PARTIES, AND NUMBER OF CREW.	Distinguishing Flag and Motto of H.M. Sledges.	Direction of Route.	Date of leaving and return.	Number of Days absent from Ship.	TIME.					
					HOURLY DIVISION OF DAY.				ABSTRACT OF JOURNAL H.R.S.	
					ENCA MERA.				TRAVELLING.	
					On March.	Fitching Sleds, Unloading, and Packing.	Actual Rest.	Encamped.	Advancing, Depots, and other matters.	Retreating.
Lieut. Bedford Pim, and seven men.	JOHN BARROW. 	To proceed to the Bay of Mercy, Baring Island, and thence through the Prince of Wales Strait to Nelson's Head, for traces of Expedition under Cap. Collinson.	March 10. April 19.	41	10	5	9	14	25	300
	"Hope on, Hope ever." JAMES FITZJAMES. 	As depot and despatch sledge to above party as far as Bay of Mercy; then return with news.	March 10. April 14.	41	10	5	9	14	—	300
Richard Roche, Mate, and eight men.	BEAUTY. 	To act as auxiliary to above parties, for three outward journeys; then to return.	March 10. March 20.	10	10	5	9	14	—	65
Capt. Henry Kellett, and seven men.	ERIN. 	To assist overland parties, and advance depot sledge for N.E. party. Captain's own.	April 4. April 11.	74	10	5	9	14	—	60

* * For full accounts of the sledge operations, see Parliamentary Papers.

OFFICERS AND CREWS of Her Majesty's Discovery Ship "RESOLUTE" and Tender "INTREPID," SEARCHING EXPEDITION under CAPTAIN SIR EDWARD BELCHER, KNIGHT, C.B.; F. M'DOUGALL, Master of H.M.S. "Resolute."

Farthest Position attained; Date of reaching it, &c.	DISTANCE.				SEATEDS.	Estimated Number of Pounds of Meat.	Living Weight per Man, on leaving the Ship, and first depot.	METEOROLOGY.			REMARKS, &c.
	SEATEDS MILES TRAVELLED.							Temp.			
	Direct from Ship.	Travelled.	Average daily Rate.	Average Length of Marches.				Maximum.	Minimum.	Prevailing Winds.	
Bay of Mercy, Baring Island. Lat. 73° 56' N. Long. 117° 56' W. Var. 103° E. April 6.	181	927	10·2	12·5	-	212 311	+ 19	- 14	-	-	Lieutenant Pim's sledge being disabled on 29th March, when about 20 miles S.W. of Cape Dundas, he transferred his party to Dr. Donville, and proceeded with the dog sledge to the Bay of Mercy, where the "Investigator," Commander M'Clure, was found on the 13th April.
20 miles S. W. of Cape Dundas. March 29. At Cape Dundas, per order, from April 9 to 14.	121	323	8·1	12·2	-	212 311	+ 19	- 14	-	-	Dr. Donville, with Lieutenant Pim's party and disabled sledge, did not reach Cape Dundas until 29th April; after waiting five days, he was joined by Lieutenant Pim, on his homeward route, with news of "Investigator." Dr. Donville, taking charge of the dogs, was the first to communicate the news.
5 Miles South of Point Hearne. March 16. Thence to the ship.	38	79	7·9	12·1	-	100	+ 10	- 14	-	-	Mr. Roche accompanied the above parties to about five miles south of Point Hearne. After placing a depot on the Point, he returned to the ship on the 29th March, on which day snow was first observed to dissolve.
About midway between the ship and Hecla and Griper Bay. April 7.	23	58	7·5	9·5	-	210	+ 1	- 18	-	-	The first doe was seen by this party on the 29th April.






Compendium of Travelling Operations during the Spring of 1853 by the Officers and commanding the Western Branch of the Arctic Searching Expedition

NAMES AND RANK OF PARTY.	Distinguishing Flag and Motto, of H. M. Sledges.	Direction of Route	Date of leaving and return.	Number of Days absent from Philip.	TIME.					
					HOURLY DIVISION OF DAY.				ABSTRACT OF JOURNAL H.R.S.	
					ESCAPED.				TRAVERSING.	
					On March.	Picking Tent, Cook- ing, and Packing.	Actual Rest.	Encamped.	Ascending Inlets and Inhabiting Cairns.	On March.
Comm. F. L. M'Clintock, and eight men.	<p>STAR OF THE NORTH.</p>  <p>"Lead thou us on."</p> <p>HARS.</p>	Cross Melville Island to Hecla and Grisey Bay, thence explore to the N.W. Provisions 95 days.	April 4. July 18.	105	9½	4	10½	14½	60	56½
Emile de Bree, Enseigne de Vaisseau, and ten in.	<p>BY FAITH AND COURAGE.</p>  <p>"By Faith and Courage."</p> <p>DISCOVERY.</p>	As auxiliary to Comm. under M'Clintock, N.W. Melville Island route. Provisions 50 days.	April 4. May 18.	45	9½	4	10½	14½	—	51
Lieut. George F. Meacham, and seven men.	<p>PER MARE.</p>  <p>"Per Mare, per Terram, per Glaciem."</p> <p>PERSISTENCE.</p>	To explore the S.W. Coast of Melville Island, and any new lands beyond. Provisions 94 days.	April 4. July 6.	91	10½	4	9½	13½	19	91½
George S. Nares, Mate, and seven men.	<p>DUM SPIRO SPERO.</p>  <p>"Dum spiro spero."</p> <p>HARS.</p>	As dépôt sledge to Lieut. Meacham on S.W. Coast of Melville Island. Provisions 60 days.	April 4. June 1.	58	10½	4	9½	13½	—	50
Lieut. R. V. Hamilton, and seven men.	<p>WATCH YOUR RETURN.</p>  <p>"I watch for your return."</p>	To advance dépôt for N. E. Melville Island, route across the land to "Hecla and Grisey" Bay. Provisions 16 days.	April 4. April 17.	13½	9½	5	9½	14½	5	90½

Crews of Her Majesty's Ship "Resolute," and Tender "Intrepid," Captain Henry Kellett, C.B., under Captain Sir Edward Belcher, Knight C.B.—*continued.*

Farthest Position attained; Date of reaching it, &c.	DISTANCE.					Estimated Number of Pounds of Meat.	Drugging Weight per Man on leaving the Ship, and first Tryals.	METEOROLOGY.			REMARKS, &c.	
	STATUTE MILES TRAVELLED.							Maximum.	Minimum.	Prevailing Winds.		
	Direct from Ship.	Travelling.	Average daily Rate.	Average Length of Marches.	New Coast Line discovered and explored.							Temp.
Point M'Chuteck, Prince Patrick Island. Lat. 75° 23' N. Long. 118° 20' W. June 17 and 18.	229	1378	12.7	13.4	886	1029	227 235	+	51	34	June 21 June 21	At Point Nias noticed marks of Parry's cart-wheels in 1850. No traces whatever of either Esquimaux or bears. Part of a drift tree found near Point Reed, 27 feet long and 7 in circumference at base. No appearance of open water to the north of Patrick's Island.
Cape De Bray, Melville Island. Lat. 76° 10' N. Long. 116° 45' W. May 2.	162	440	5.0	11.6	—	75	230 253	+	33	34	May 8	Mr. De Bray observed a solitary hare in a natural cavern near Point Nias; no others were seen. Pools of water and sludge ice fallen in with its latitude 76° 30' N. on the 8th May; Mr. De Bray falling into one of the pools struck up to his middle. On the 19th May John Coombes, Stoker, fell dead upon the floe.
Prince Patrick Island. Lat. 75° 6' N. Long. 130° 50' W. May 29.	245	1165	12.5	15.5	785	1275	280 250	+	17	35		On Prince Patrick Island, about 10' from the sea, several larch trees were found partly buried in the soil. At and near Cape Manning pieces of decayed wood were picked up. At Cape Smyth was seen a perfectly white muck ox grazing beside a black calf.
Cape Nares, Eglintown Island. Lat. 75° 30' N. Long. 110° 30' W. Var. 107° E. May 3.	181	630	10.9	12.4	—	101	280 250	+	34	35		A few pieces of petrified wood were found on south shore of Eglintown Island, in one place only. The floe in Liddon's Gulf appeared to have been there for years, being composed of some mass of rounded blocks. The line of route between Melville and Eglintown Islands was over old ice similar to that in Liddon's Gulf.
South shore of Hecla and Griper Bay. Lat. 75° 30' N. Long. 109° 40' W. Var. 154 E. April 13.	43	105	7.7	11.6	—	—	220	+	6	29		The march across the land was very fatiguing in consequence of the quantity of fresh fallen snow. Descended in tents by a N.W. gale from 7 1/2. April to the 11th. Temperature varying from 15° to 25° minus, being 5° lower than the temperature on board, attributed to being 600 feet above the level of the sea.






Compendium of Travelling Operations during the Spring of 1853 by the Officers and commanding the Western Branch of the Arctic Searching Expedition

NAMES AND RANK OF PARTY.	Distinguishing Flag and Motto of H. M. Sledges.	Direction of Route.	Date of leaving and return.	Number of Days absent from Ship.	TIME.					
					HOURLY DISTANCE OF DAY.				ABSTRACT JOURNAL, R.S.S.	
					HOURS.				TRAVELLING.	
					On March,	Following Foot, Cask, Bag, and Package.	Actual Basis.	Unaccounted,	Attending Sledges and Hauling Parties.	On March.
Richard Roche, Mate, and seven men.	<p>HEAULT.</p>  <p>"Mon Dieu est ma Roche."</p>	To place dépôt for N.E. party on Cape Modjo, then return. Provisions 27 days.	April 4.	24	10	6	8	14	3	120
			April 28.							
Lieut. R. V. Hamilton and seven men.	<p>HORN.</p>  <p>"I watch for your return."</p>	Cross the land to Hecla and Griper Bay, and explore N.E. towards rendezvous in Lat. 77° N. Long. 105° W. Provisions 70 days.	April 27.	54½	10	4	10	14	12	304
			June 20.							
G. F. McDougall, Master, A.B., and seven men.	<p>HORATIO AVSTIN.</p>  <p>"Spes est solatium primum."</p>	To assist above party across the land to Hecla and Griper Bay. Provisions 16 days.	April 27.	9	10	4	10	11	-	70
			May 6.							
W. T. Donville, Surgeon, and seven men.	<p>JOHN DYER.</p>  <p>"Veritas sed Vera."</p>	To proceed to Bay of Metry, and hold a medical survey on officers and crew of "Investigator." Provisions 16 days.	May 5.	55½	9½	4	10	11	-	200
			June 10.							
Richard Roche, Mate, Lieut. Samuel Crosswell, Lieut. Robert Wynnatt, and eleven men.	<p>HEAULT.</p>  <p>"Mon Dieu est ma Roche."</p>	To proceed to the "North Star" at Beechey Island, and thence communicate with Sir Edward Belcher. Provisions 54 days.	May 5.	-	30	4	10	14	-	244
			June 1.							

Crews of Her Majesty's Ship "Resolute," and Tender "Intrepid," Captain Henry Kellett, C.B., under Captain Sir Edward Belcher, Knight C.B.—*continued.*

Farthest Position attained; Date of reaching it, &c.	DISTANCE.					Estimated Number of Pounds of Meat. Drying Weight per Man on leaving the Ship, and first Depot.	METEOROLOGICAL LOG.				REMARKS, &c.	
	STATUTE MILES TRAVELLED.						Maximum.	Minimum.	Prevalent Winds.	Rain first fell. Thaw first observed.		
	Direct from Ship.	Traveled.	Average daily Rate.	Average length of Marches.	New Coast Line discovered and explored.							
Cape Mudge. Lat. 75° 51' N. Long. 110° 12' W. Var. 154° East. April 17.	75	175	8½	11½	-	138	195	+	10	-	-	On Cape Mudge 6 musk oxen were seen. Mr. Roche shot one and severely wounded another; (the latter was found a few weeks afterwards by Lieutenant Hamilton's party, but the flesh was unfit for use). The southern slope was, at this early period, covered in many places with moss. April 21st, first ptarmigan seen on south shore of Hecla and Griper Bay.
Appointed Reservations. Lat. 66° 38' N. Long. 104° 50' W. May 23.	13½	675	17½	13½	195½	136	180	+	40	-	May 1 June 17	A deer was observed crossing from Hamilton Island to Cape Richards. Lieutenant Hamilton fell in with Commander Richards of H. M. Ship "Assistance," on the 18th May, about 5 miles S. E. of Cape Richards, and from thence proceeded to remounts. Water-fowl and gulls breeding in ravines on tundra.
5 miles N. of Point Resad, Hecla and Griper Bay. May 2.	50	115½	12½	16½	-	-	160	+	25	-	-	Accompanied Lieutenant Hamilton across the land to Hecla and Griper Bay. 5 deer were seen crossing over towards Cape Mudge. Returned from Hecla and Griper Bay in 23 hours; two and one third marches.
Bay of Mercy, Baring Island. May 21. Detained on board 3 days.	179	411	15½	13½	-	36	300	+	49	+	May 18 June 5	Heavy rain fell at "Investigator" on the 18th May. Water found on the land the same day. Coal exhibited 9 miles S. E. of Cape Hamilton, at an elevation of 400 feet. Musk oxen and bears very numerous on Melville Island on return. No carnivora seen; and remains of musk oxen left at Cape Dundas two months previous untouched.
North Star, Beechey Island. June 1.	21	39	1½	16½	-	749	-	+	10	+	-	Single ice was first observed near Point Fraser on the 24th May, and water the following day near Cape Capel. 2 musk oxen killed, and deer seen on Byatt Martin Island. One deer killed, and many instar seen on Baker Island. Ducks first seen near Cape Martyr 28th May. Bears numerous.

Compendium of Travelling Operations during the Spring of 1853 by the Officers and commanding the Western Branch of the Arctic Searching Expedition

NAMES AND RANK OF PARTY.	Distinguishing Flag and Motto of H. M. Sledge.	Direction of Route.	Date of leaving and return.	Number of Days absent from Ships.	TIME.					
					HOURLY DIVISION OF DAY.				ABSTRACT OF JOURNAL, H. M. S.	
					ENCAMPMENT.				TRAVELLED.	
On March.	Pitching Tent, Cook-ing, and Packing.	Actual Rest.	Encamped.	Arranging loads and building Camp.	On March.					
Richard Roche, Mate, one man, and five Esquimaux dogs.	 BEAULT. " Mon Dieu est ma Roche."	To return to "Resolute" with letters from England and despatches from Commander Pallen. Provisions 14 days.	June 4. June 18.	11	8½	2	14	16	-	116
Will. H. Richards, Clerk, in charge two men, and five Esquimaux dogs.	 JOHN ROBE. " Toujours prêt."	To arrange and complete depot at Fife Harbour, cut ships' noses on sandstone. Provisions 7 days.	May 9. May 15.	5½	10	4	10	14	36	66
Lieut. Bedford Pim, and seven men.	 M. RICHMOND. " Hope on, Hope ever."	Cross land with cart, and advance with depot for Commander McIntosh to Cape Fisher. Provisions 16 days.	May 19. June 5.	21	9½	4	10½	14½	-	108
George Nares, Mate, and four men.	 PERSEVERANCE. " Dum spiro spero."	Convey cart from Winter Harbour to Lidston's tra for Lieut. Meahan's return. Provisions 12 days.	June 5. June 14.	11	9	4½	10½	15	2	101
G. F. M'Dougall, Master, and six men.	 HERATIO AGUIR. " Spes est totum periculi"	To run mer. distance between ship and Winter Harbour, pick up articles left by Dr. Donville S. W. of Point Hearne. Provisions 17 days.	June 14. June 21.	10	10	3	11	14	+	70

Note. — The Force employed on the above service amounted to 51 Officers and Men and 10 Dogs.

Crews of Her Majesty's Ship "Resolute" and Tender "Intrepid," Captain Henry Kellett, C.B., under Captain Sir Edward Belcher, Knight C.B.—*continued.*

Furthest Position attained; Date of reaching it, &c.	DISTANCE.				Estimated Number of Pounds of Meat.	Drugging Weighing Men on leaving the Ship and first Report.	METEORO. LOGY.				REMARKS, &c.
	STATUTE MILES TRAVELLED.						Maximum.	Minimum.	Prevailing Wind.	Rain first fell. Thaw first observed.	
	Direct from Ship.	Travelled.	Average daily Rate.	Average Length of Marches.							
Returned on board "Resolute" after 44 days' absence. June 15.	321	593	78.2	19.3	-	-	40	21	-	June 7	June 6th. A large crack was observed near Cape Hotham; average width 6 feet. The bears (2 full grown and 1 cub) killed on this journey were brought to bay by the dogs. Deer observed on Baker and Moore Island. A little sled on the 7th June.
Point Hearne. May 12.	43	97	16.9	15.0	-	-	21	9	-	-	Lost one of the dogs that had strayed from the tent during a gale of wind.
Cape Fisher, Hecla and Griper Bay. June 3.	81	201	9.9	12.9	-	196	100	40	12	-	During a detention at Point Reed, communicated with Commander Richards of H.M.S. "Adventure," on his way to the "Resolute" for the purpose of communicating with Captain Kellett, C.B. Took Farry's record from cairn on Point Nias, and dug for coins; but none were found.
Mouth of Farry's Lagoon, Lat. 79° 7' N. Long. 111° 56' W. June 9.	57	140	12.9	12.9	-	707	150	43	13	June 11	On recrossing the land from Liddon's Gulf the snow was fast disappearing from the land on the south coast; such was not the case in Liddon's Gulf, for no appearance of a thaw was perceived. The party were enabled to obtain a fresh meal of ptarmigan flesh. Water has made close to the shore, but not on the outside ice.
12 miles S. W. of Point Hearne. June 18.	52	121	12.1	18.5	-	151	150	46	30	June 21	Found lemmings innumerable at Winter Harbour. Variation at Farry's observatory 1324° E., differing from that found in 1820 by 60° Off Cape Hecla several large holes were observed. Returning, the men were wading through extensive pools of water, often reaching as high as the middle.

or 55 Officers and Men, allowing the Power of 12½ Dogs to be equal to that of 1 Man.

GAME LIST.

From 3rd September 1852 to 9th September 1853.

Musk Oxen	-	-	-	-	-	114
Reindeer	-	-	-	-	-	95
Hares	-	-	-	-	-	146
Bears	-	-	-	-	-	6
Wolves	-	-	-	-	-	3
Foxes	-	-	-	-	-	51
Lemmings	-	-	-	-	{ Innumerable during June.	
Ptarmigan	-	-	-	-	-	711
Geese	-	-	-	-	-	128
Ducks	-	-	-	-	-	229
Plover	-	-	-	-	-	16
Hawks	-	-	-	-	-	2
Owls	-	-	-	-	-	1
Ravens	-	-	-	-	-	2
Seals	-	-	-	-	-	2

MEAT ACCOUNT.

					lbs.
Issued on board	-	-	-	-	13,302
Travelling	-	-	-	-	6637
Unfit for use	-	-	-	-	2406
Small Game, &c.	-	-	-	-	5138
					<hr/>
				Total	27483
					<hr/>

ANIMALS.

Average Weights employed.

						lbs.
Musk Ox	-	-	-	-	-	166
Reindeer	-	-	-	-	-	60
Hare	-	-	-	-	-	8
Ptarmigan	-	-	-	-	-	1
Goose	-	-	-	-	-	2½
Ducks	-	-	-	-	-	2½

THE END.

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AMERICA AND ENGLAND.

THE RESTORATION
OF
THE ARCTIC SHIP RESOLUTE

BY THE PEOPLE OF THE UNITED STATES TO HER MAJESTY THE
QUEEN OF ENGLAND, AT COWES, DEC. 16, 1856.

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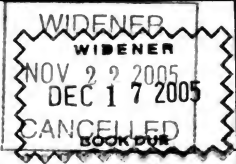
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