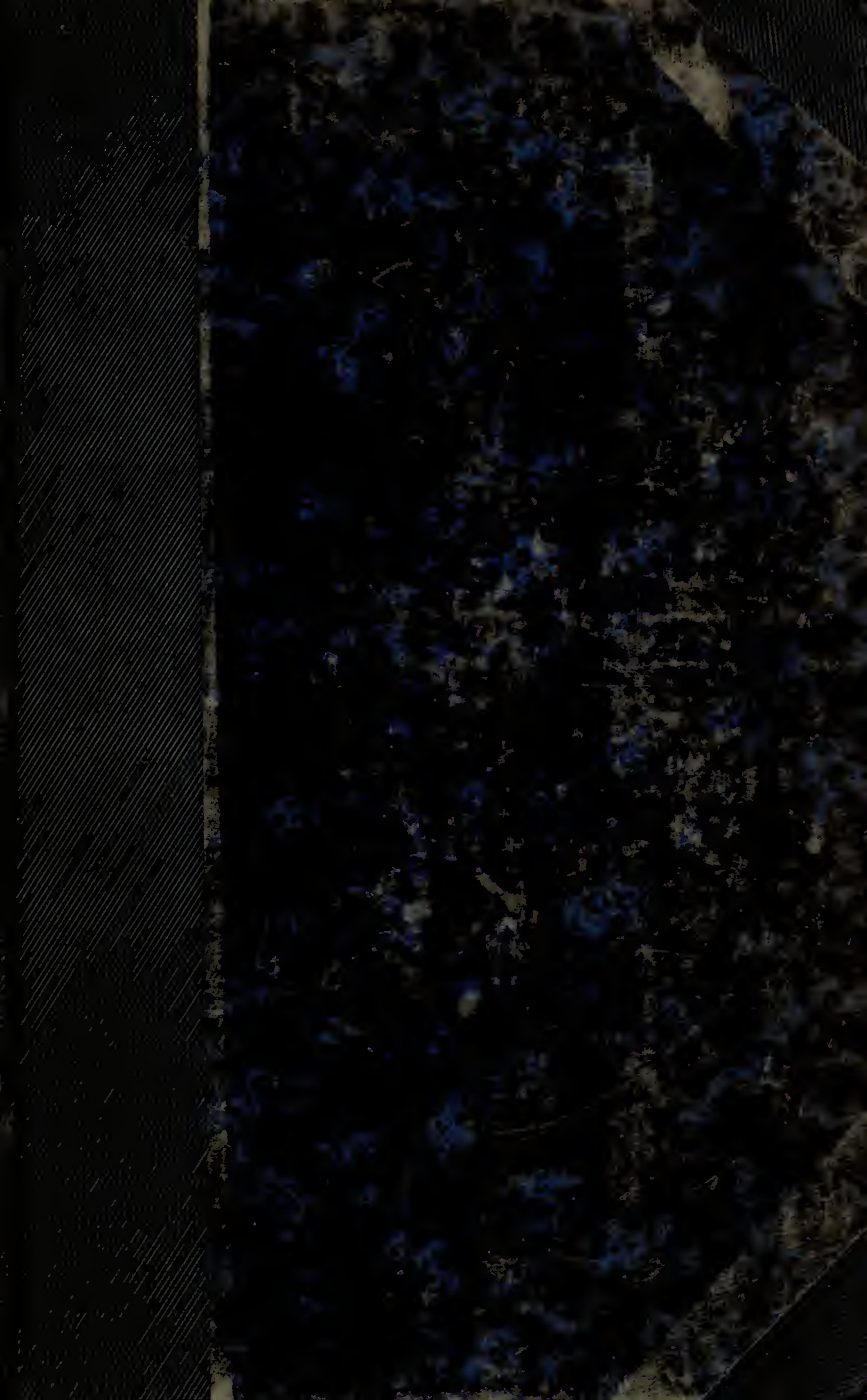

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GEO. MEASOM SC.

# FRANKLIN,

AND

# THE ARCTIC REGIONS.



By P. L. SIMMONS.



LONDON:
GEORGE ROUTLEDGE & CO., FARRINGDON-STREET.
1853.

# SIR JOHN FRANKLIN

AND

# THE ARCTIC REGIONS:

## A NARRATIVE,

SHOWING

## The Progress of British Enterprise

FOR THE

## DISCOVERY OF THE NORTH-WEST PASSAGE DURING THE NINETEENTH CENTURY:

WITH

NOTICES OF ALL THE EXPEDITIONS SENT IN SEARCH OF THE MISSING VESSELS UNDER CAPTAIN SIR JOHN FRANKLIN.


BY P. L. SIMMONDS, 1814-1897

MANY YEARS EDITOR OF THE COLONIAL MAGAZINE, ETC. ETC.



THIRD EDITION,

INCLUDING THE MOST RECENT INTELLIGENCE.




"Miserable they
Who here entangled in the gathering ice
Take their last look of the descending sun."

THOMSON.


LONDON:

G. ROUTLEDGE & CO., FARRINGDON STREET.

MDCCCLIII.

# PREFACE TO THE FIRST EDITION.

THE desire for information felt all over this country, and, indeed, I may almost say throughout the civilized world, respecting the fate of the missing expedition under Capt. Sir John Franklin, is very great, and continues to become more and more intense, as the lapse of time lessens the probability of their return in safety. The large number of individuals now engaged in prosecuting the search for them in the Arctic regions, and the deep anxiety manifested by the friends and relatives whom these fresh explorers have left behind, has turned the attention of thousands to this inhospitable and comparatively little known quarter of the globe, serving to lend an added interest to every book descriptive of the Polar seas and shores.

Among the publications which have from time to time appeared, there seems to have been no popular narrative, especially treating of the voyages and journeys of discovery and research prosecuted in the nineteenth century towards the North Pole, embracing accounts of all the recent public and private searching expeditions after the lost ships, and adapted in price to the bulk of the community who so eagerly seek information.

To meet this want I have been induced, at the solicitation of my publishers, to undertake the compilation of the following work, in which I have brought into one view all that is really important to be known by those who

desire to form a correct opinion of the present state of the case, and to make themselves acquainted with what has really been done in the progress of discovery for a north-west passage, and what measures have been adopted for the relief of our imprisoned seamen. Much of the material thus condensed is to be found scattered through a variety of publications, huge and expensive quarto volumes of voyages, now scarce or out of print, parliamentary papers and returns, foreign journals, &c., but the largest portion of this information is entirely new. In condensing from the voluminous Blue books on this subject that have been published during the last few years, my chief object has been, avoiding rash and speculative opinion, to direct the reader's attention as much as possible to matters of fact; to place before him all that is really practical, important, and interesting, and especially to put him in possession of what is known of the result of the recent voyages, and the latest position and intended plan of operations of the numerous vessels at present out on the search for the *Erebus* and *Terror*.

In putting myself in communication with all those best informed on the subject of which this volume treats, I have to acknowledge myself deeply indebted for much polite attention and valuable information to Lady Franklin and her niece Miss Cracroft, to John Barrow, Esq., of the Admiralty, to Capt. Becher, R.N., the talented editor of the *Nautical Magazine*, to Commander C. C. Forsyth, R.N., and to Dr. Shaw, the Secretary of the Royal Geographical Society of London.

In conclusion, I may state, that as the son and grandson of very old Lieutenants in the Royal Navy, having been originally in the service myself, having five brothers afloat, and a large number of other relatives holding Her Majesty's commission, I feel a deep professional, as well as philanthropic interest, in hearing tidings of the safety of

Sir John Franklin and his gallant comrades, and am but too happy to aid in satisfying the public desire for information, by contributing my mite in the publication of the following narrative of voyages and travels in the Arctic Regions, with the appended suggestions and opinions of experienced officers and competent parties.

To the intrepid veteran and navigator, whose name figures so frequently and so honourably in these pages, I hope we may yet be able to apply, with the few slight verbal alterations I have made, the following lines, which were originally addressed to Dr. Leichardt, who after two years' absence on a journey through the unexplored regions of Australia, returned to Sydney, when all hopes of his safety had been given up, and his dirge had been sung by his friends. That bold traveller is again absent on a second journey in the interior of that vast continent, and has not been heard of for more than two years. May Heaven grant to each and all of our care-worn travellers by sea and land a speedy deliverance from the perils which environ them, and a safe return to their friends and native country,—a wish to which all my readers will, I am sure, most heartily respond "So mote it be!"

"Thy footsteps have returned again, thou wanderer of the wild,
Where Nature from her Northern throne in silent beauty smiled,
Pilgrim of mighty wastes, untrod by human foot before,
Triumphant o'er Frost's wilderness, thy weary journey's o'er.

"Thou hast battled with the dangers of the iceberg and the flood,
And amid the crystal desert a conqueror hast stood;
Thou hast triumphed o'er the perils of the glacier and the main,
And a nation's smiling welcome is thy greeting home again.

"Long had we mourn'd with sorrowing, and plaintive dirges sung,
For fate a wild mysterious veil around thy name had flung;
And hope's declining energies with feeble effort strove
Against the boding voice of fear that haunts the heart of love.

"And Rumour, with her hundred tongues, her vague and blighting
breath,
Had whispered tidings sad and drear, dark tales of blood and death
Till tortured fancy ceased to hope, and all despairing gave
Thy name a hallowed memory—thy bones a Polar grave.

"But, no! that proud intrepid heart still held its purpose high,
Like Afric's martyr traveller, resolved to do or die;
Like him, to find a lonely grave, in desert lands of flame,
Or win a bright eternity of high and glorious fame!

"Oft amid famine, danger, death, when meaner spirits quail'd,
Have thy unfailing energies to cheer and soothe prevail'd;
For well thy hope-inspiring voice could speak of perils past,
And bid each coming one appear less painful than the last.

"And oft e'en that brave heart of thine has sadden'd to despair,
When o'er some wild and ice-clad scene, the sunlight shining fair,
Hath bid thy softened spirit feel, how lonely were thy lot,
To die, thy mission unfulfill'd, unknown, unwept, forgot.

"Proud man! in after ages the story shall be told,
Of that advent'rous voyager, the generous, the bold,
Who scorning hope of selfish gain, disdaining soft repose,
Went forth to trace a pathway through unyielding ice and snows."

P. L. Simmonds.

5, *Barge-yard, City,*
*March*, 1851.

# PREFACE TO THE THIRD EDITION.

Two years have elapsed since this work was first sent to press, yet the mystery attending the fate of Sir John Franklin and his followers remains undetermined, and still the search is energetically prosecuted by public and private enterprise. The rapid sale of two editions, and the call for a third, has induced the publishers to reproduce the book at even a more moderate cost than the very low price at which it was originally issued, that it may be placed within the reach of all classes, and its contents be studied alike at the cottage fireside, or by those who will be able more fully to appreciate the hardships and powers of endurance recorded therein; the hardy seamen of our Royal navy, and of the British and American mercantile marine. The circumstance of the book having been republished by an American firm, in a very costly form, and ten thousand copies sold within a few days, at the high price of one pound, is an evidence of the wide-spread interest awakened for Arctic discovery and intelligence of the long-lost voyagers; coupled, too, with the commendatory notices of the work which I have received from all the Arctic voyagers, who are so well able to judge of the fidelity and honesty of the narrative; these facts may be taken as proofs that I have acquitted myself fairly and faithfully as a chronicler. Many valuable and elaborated journals of the land journeys and searching voyages of the past

few years have recently appeared, which may be consulted with advantage by those interested in following minutely the discoveries and route of each separate expedition. My purpose having been merely to enable the reader to keep pace with the general progress of research up to the present time, I have in the present edition re-written and condensed the account of all the private and public expeditions sent in search of Sir John Franklin's ships, so as to bring the details within a reasonable compass.

I have been blamed by many, and among others even by naval officers, for still enunciating the hope that any of the party, who have now been absent from England eight years, can possibly be still in existence. It is at least satisfactory to know that I am not singular in these views, remote as the probability becomes day by day. Many who have carefully studied the matter, and have had great personal experience in the Arctic regions, have not yet abandoned the idea of the probable safety of some at least of the large missing party. Dr. Rae, Dr. Scoresby, Lieut. Kane, of the American navy, Mr. Penny, Mr. Kennedy, Mr. Peterman , and others, entertain ideas in accordance with my own. If I am too sanguine, it is at least an excusable fault on the side of humanity. I have also a firm reliance upon the national honour, and British duty, in behalf of their zealous and deserving servants, and glad am I to find that the Government, nothing daunted, still nobly pursues the search. It might, it is true, have been carried on more continuously and perseveringly, than by cooping up the energies of about 300 men and ten vessels in one locality for a twelvemonth, instead of employing them by different routes, but this is not the place to criticize the course of operations that has been followed; and the multitude of councillors, each with varying suggestions and conflicting opinions, may well have embarrassed any Admiralty Board.

I have endeavoured, from time to time, to diffuse

authentic information, and to correct many prevalent misconceptions regarding the animal life of the Arctic regions, and the assumed destruction of the missing vessels, by lectures and papers delivered, during the past year, before the members of the Royal Geographical Society and the United Service Institution of London, the Mechanics' Institutes of Manchester, Liverpool, and other places, in which I hope I have succeeded. Too delighted shall I be to hail the return of any of the gallant absentees, should Providence have preserved them, and our bold explorers, now on the track, be able to discover and liberate them. But if they are no more, I, in common with a mourning nation, must bow with submission to Heaven's wise but inscrutable decrees. At least the disgrace will never attach to the country which sent them forth on its public duty, of having left their fate undetermined.

*April*, 1853.

# CONTENTS.

# THE PROGRESS

OF

# ARCTIC DISCOVERY

IN THE

# NINETEENTH CENTURY.

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If we examine a map of Northern, or Arctic, America, showing what was known of the countries around the North Pole in the commencement of the present century, we shall find that all within the Arctic circle was a complete blank. Mr. Hearne had, indeed, seen the Arctic Sea in the year 1771; and Mr. Mackenzie had traced the river which now bears his name to its junction with the sea; but not a single line of the coast from Icy Cape to Baffin's Bay was known. The eastern and western shores of Greenland, to about 75° latitude, were tolerably well defined, from the visits of whaling vessels; Hudson's Bay and Strait were partially known; but Baffin's Bay, according to the statement of Mr. Baffin, in 1616, was bounded by land on the west, running parallel with the 90th meridian of longitude, or across what is now known to us as Barrow's Strait, and probably this relation led to the subsequently formed hasty opinion of Captain Sir John Ross, as to his visionary Croker Mountains, of which I shall have occasion to speak hereafter.

As early as the year 1527, the idea of a passage to the East Indies by the North Pole was suggested by a Bristol merchant to Henry VIII., but no voyage seems to have been undertaken for the purpose of navigating the Polar seas, till the commencement of the following century, when an expedition was fitted out at the expense of certain merchants of London. To this attempt several others succeeded at different periods, and all of them were projected and carried into execution by private individuals. The adventurers did not indeed accomplish the object they exclusively sought, that of reaching India by a nearer route than doubling the Cape of Good Hope, but though they failed in that respect, the fortitude, perseverance,

and skill which they manifested, exhibited the most irrefragable proofs of the early existence of that superiority in naval affairs, which has elevated this country to her present eminence among the nations of Europe.

At length, after the lapse of above a century and a half, this interesting question became an object of Royal patronage, and the expedition which was commanded by Captain Phipps (afterwards Lord Mulgrave), in 1773, was fitted out at the charge of Government. The first proposer of this voyage was the Hon. Daines Barrington, F.R.S., who, with indefatigable assiduity, began to collect every fact tending to establish the practicability of circumnavigating the Pole, and as he accumulated his materials he read them to the Royal Society, who, in consequence of these representations, made that application to Lord Sandwich, then First Lord of the Admiralty, which led to the appointment of this first official voyage. Captain Phipps, however, found it impossible to penetrate the wall of ice which extended for many degrees between the latitude of 80° and 81°, to the north of Spitzbergen. His vessels were the *Racehorse* and *Carcass;* Captain Lutwidge being his second in command, in the latter vessel, and having with him, then a mere boy, Nelson, the future hero of England.

From the year 1648, when the famous Russian navigator, Senor Deshnew, penetrated from the river Kolyma through the Polar into the Pacific Ocean, the Russians have been as arduous in their attempts to discover a north-east passage to the north of Cape Shelatskoi, as the English have been to sail to the north-west of the American continent, through Baffin's Bay and Lancaster Sound. On the side of the Pacific many efforts have, within the last century, been made to further this object. In 1741, the celebrated Captain Behring discovered the straits which bear his name, as we are informed by Müller, the chronicler of Russian discoveries, and several subsequent commanders of that nation seconded his endeavours to penetrate from the American continent to the north-east. From the period when Deshnew sailed on his expedition, to the year 1764, when Admiral Tchitschagof, an indefatigable and active officer, endeavoured to force a passage round Spitzbergen, (which, although he attempted with a resolution and skill which fall to the lot of few, he was unable to effect,) and thence to the present times, including the arduous efforts of Captains Billings and Vancouver, and the more recent one of M. Von Wrangell, the Russians have been untiring in *their* attempts to discover a passage eastwards, to the north of Cape Taimur and Cape Shelat-

skoi. And certainly, if skill, perseverance, and courage, could have opened this passage, it would have been accomplished.

Soon after the general peace of Europe, when war's alarms had given way to the high pursuits of science, the government recommenced the long-suspended work of prosecuting discoveries within the Arctic circle.

An expedition was despatched under the command of Sir John Ross, in order to explore the scene of the former labours of Frobisher and Baffin. Still haunted with the golden dreams of a north-west passage, which Barrington and Beaufoy had in the last age so enthusiastically advocated, our nautical adventurers by no means relinquished the long-cherished chimera.

It must be admitted, however, that the testimony of Parry and Franklin pass for much on the other side of the question. Both these officers, whose researches in the cause of scientific discovery entitle them to very high respect, have declared it as their opinion that such a passage does still exist to the north of the 75th degree of latitude.

Captain Parry, in the concluding remarks of his first voyage (vol. ii. p. 241) says,—"Of the existence of a north-west passage to the Pacific, it is now scarcely possible to doubt, and from the success which attended our efforts in 1819, after passing through Sir James Lancaster's Sound, we were not unreasonable in anticipating its complete accomplishment," &c. And Franklin, in the eleventh chapter of his work, is of the same opinion, as to the practicability of such a passage. (See Appendix A.)

But in no subsequent attempt, either by themselves or others, has this long sought desideratum been accomplished; impediments and barriers seem as thickly thrown in its way as ever. (*Col. Mag.*, vol. xiii. p. 340.)

An expedition was at length undertaken for the sole purpose of reaching the North Pole, with a view to the ascertainment of philosophical questions. It was planned and placed under the command of Sir Edward Parry, and here first the elucidation of phenomena connected with this imaginary axis of our planet formed the primary object of investigation.

My space and purposes in this work will not permit me to go into detail, by examining what Barrow justly terms "those brilliant periods of early English enterprise, so conspicuously displayed in every quarter of the globe, but in none, probably, to greater advantage than in those bold

and persevering efforts to pierce through frozen seas, in their little slender barks, of the most miserable description, ill provided with the means either of comfort or safety, without charts or instruments, or any previous knowledge of the cold and inhospitable region through which they had to force and to feel their way; their vessels oft beset amidst endless fields of ice, and threatened to be overwhelmed with instant destruction from the rapid whirling and bursting of those huge floating masses, known by the name of icebergs. Yet so powerfully infused into the minds of Britons was the spirit of enterprise, that some of the ablest, the most learned, and most respectable men of the times, not only lent their countenance and support to expeditions fitted out for the discovery of new lands, but strove eagerly, in their own persons, to share in the glory and the danger of every daring adventure."

To the late Sir John Barrow, F.R.S., for so long a period secretary of the Admiralty, and who, in early life, himself visited the Spitzbergen seas, as high as the 80th parallel, we are mainly indebted for the advocacy and promotion of the several expeditions, and the investigations and inquiries set on foot in the present century, and to the voyages which have been hitherto so successfully carried out as regards the interests of science and of our knowledge of the Polar regions.

Although it is absurd to impute the direct responsibility for these expeditions to any other quarter than the several administrations during which they were undertaken, there can be no question but that these enterprises originated in Sir John Barrow's able and zealous exhibition, to our naval authorities, of the several facts and arguments upon which they might best be justified and prosecuted as national objects. The general anxiety now prevailing respecting the fate of Sir John Franklin and his gallant companions, throws at this moment somewhat of a gloom on the subject, but it ought to be remembered that, up to the present period, our successive Polar voyages have, without exception, given occupation to the energies and gallantry of British seamen, and have extended the realms of magnetic and general science, at an expense of lives and money quite insignificant, compared with the ordinary dangers and casualties of such expeditions, and that it must be a very narrow spirit and view of the subject which can raise the cry of "*Cui bono*," and counsel us to relinquish the honour and peril of such enterprises to Russia and the United States of America! (See Appendix B.)

It can scarcely be deemed out of place to give here a

short notice of the literary labours of this excellent and talented man, as I am not aware that such an outline has appeared before.

Sir John Barrow was one of the chief writers for the *Quarterly Review*, and his articles in that journal amount to nearly 200 in number, forming, when bound up, twelve separate volumes. All those relating to the Arctic Expeditions, &c., which created the greatest interest at the period they were published, were from his pen, and consist chiefly of the following papers, commencing from the 18th volume:—On Polar Ice; On Behring's Straits and the Polar Basin; On Ross's Voyage to Baffin's Bay; On Parry's First Voyage; Kotzebue's Voyage; Franklin's First Expedition; Parry's Second and Third Voyages, and Attempt to Reach the Pole; Franklin's Second Expedition; Lyon's Voyage to Repulse Bay; Back's Arctic Land Expedition, and his Voyage of the *Terror*. Besides these he published "A Chronological History of Voyages to the Arctic Seas," and afterwards a second volume, "On the Voyages of Discovery and Research within the Arctic Regions."

He also wrote lives of Lord Macartney, 2 vols. 4to; of Lord Anson and Howe, each 1 vol. 8vo; of Peter the Great; and an Account of the Mutiny of the Bounty, (in the "Family Library;") "Travels in Southern Africa," 2 vols. 4to; and "Travels in China and Cochin China," each 1 vol. 4to.

In the "Encyclopædia Britannica" are ten or twelve of his articles, and he wrote one in the *Edinburgh Review* by special request.

In addition to these Sir John Barrow prepared for the press innumerable MSS. of travellers in all parts of the globe, the study of geography being his great delight, as is evidenced by his having founded the Royal Geographical Society of London, which now holds so high and influential a position in the learned and scientific world, and has advanced so materially the progress of discovery and research in all parts of the globe. Lastly, Sir John Barrow, not long before his death, published his own autobiography, in which he records the labours, the toil, and adventure, of a long and honourable public life.

Sir John Barrow has described, with voluminous care and minute research, the arduous services of all the chief Arctic voyagers by sea and land, and to his volume I must refer those who wish to obtain more extensive details and particulars of the voyages of preceding centuries. He has also graphically set forth, to use his own words, "their

several characters and conduct, so uniformly displayed in their unflinching perseverance in difficulties of no ordinary description, their patient endurance of extreme suffering, borne without murmuring, and with an equanimity and fortitude of mind under the most appalling distress, rarely, if ever, equalled, and such as could only be supported by a superior degree of moral courage and resignation to the Divine will—displaying virtues like those of no ordinary caste, and such as will not fail to excite the sympathy, and challenge the admiration, of every right-feeling reader."

Hakluyt, in his "Chronicle of Voyages," justly observes, that we should use much care in preserving the memories of the worthy acts of our nation.

The different sea voyages and land journeys of the present century towards the North Pole have redounded to the honour of our country, as well as reflected credit on the characters and reputation of the officers engaged in them; and it is to these I confine my observations.

The progress of discovery in the Arctic regions has been slow but progressive, and much still within the limits of practical navigation remains yet unexplored. As Englishmen, we must naturally wish that discoveries which were first attempted by the adventurous spirit and maritime skill of our countrymen, should be finally achieved by the same means.

"Wil it not," says the worthy "preacher," Hakluyt, "in all posteritie be as great a renown vnto our English natione, to have beene the first discouerers of a sea beyond the North Cape, (neuer certainely knowen before,) and of a conuenient passage into the huge empire of Russia, by the Baie of St. Nicholas and of the Riuer of Duina, as for the Portugales, to have found a sea beyond the Cape of Buona Esperanza, and so consequently a passage by sea into the East Indies?"

I cordially agree with the *Quarterly Review*, that "neither the country nor the naval service will ever believe they have any cause to regret voyages which, in the eyes of foreigners and posterity, must confer lasting honour upon both."

The cost of these voyages has not been great, while the consequences will be permanent; for it has been well remarked, by a late writer, that "the record of enterprising hardihood, physical endurance, and steady perseverance, displayed in overcoming elements the most adverse, will long remain among the worthiest memorials of human enterprise."

"How shall I admire," says Purchas, "your heroic

courage, ye marine worthies, beyond all names of worthiness! that neyther dread so long eyther the presence or absence of the sunne; nor those foggy mysts, tempestuous winds, cold blasts, snowe and hayle in the ayre; nor the unequall seas, which might amaze the hearer, and amate the beholder, when the Tritons and Neptune's selfe would quake with chilling feare to behold such monstrous icie ilands, renting themselves with terrour of their own massines, and disdayning otherwise both the sea's sovereigntie and the sunne's hottest violence, mustering themselves in those watery plaines where they hold a continual civill warre, and rushing one upon another, make windes and waves give backe; seeming to rent the eares of others, while they rent themselves with crashing and splitting their congealed armours."

So thickly are the polar seas of the northern hemisphere clustered with lands, that the long winter months serve to accumulate field ice to a prodigious extent, so as to form an almost impenetrable barrier of hyperborean frost—

> "A crystal pavement by the breath of Heaven
> Cemented firm."

Although there are now no new continents left to discover, our intrepid British adventurers are but too eager to achieve the bubble reputation, to hand down their names to future ages for patient endurance, zeal, and enterprise, by explorations of the hidden mysteries of—

> "the frigid zone,
> Where, for relentless months, continual night
> Holds o'er the glittering waste her starry light;"

by undergoing perils, and enduring privations and dangers, which the mind in its reflective moments shudders to contemplate.

It is fair to conjecture that, so intense is the cold, and so limited the summer, and consequently so short the time allowed for a transit within the Arctic circle, from Baffin's Bay to Behring's Straits, that a passage, even if discovered, will never be of any use as a channel. It is not likely that these expeditions would ever have been persevered in with so much obstinacy, had the prospects now opening on the world of more practicable connexions with the East been known forty years ago. Hereafter, when the sacred demands of humanity have been answered, very little more will be heard about the north-west passage to Asia; which, if ever found, must be always hazardous and protracted, when a short and quick

one can be accomplished by railroads through America, or canals across the Isthmus.

A thorough knowledge of the relative boundaries of land and ocean on this our globe has in all ages, and by all countries, been considered one of the most important desiderata, and one of the chief features of popular information.

But to no country is this knowledge of such practical utility and of such essential importance as to a maritime nation like Great Britain, whose mercantile marine visits every port, whose insular position renders her completely dependent upon distant quarters for half the necessary supplies, whether of food or luxury, which her native population consume, or which the arts and manufactures, of which she is the emporium, require.

With a vast and yearly increasing dominion, covering almost every region of the habitable globe,—the chart of our colonies being a chart of the world in outline, for we sweep the globe and touch every shore,—it becomes necessary that we should keep pace with the progress of Colonization, by enlarging wherever possible our maritime discoveries, completing and verifying our nautical surveys, improving our meteorological researches, opening up new and speedier periodical pathways over the oceans which were formerly traversed with so much danger, doubt, and difficulty, and maintaining our superiority as the greatest of maritime nations, by sustaining that high and distinguished rank for naval eminence which has ever attached to the British name.

The arduous achievements, however, of our nautical discoverers have seldom been appreciated or rewarded as they deserved. We load our naval and military heroes—the men who guard our wooden walls and successfully fight our battles—with titles and pensions; we heap upon these, and deservedly so, princely remuneration and all manner of distinctions; but for the heroes whose patient toil and protracted endurance far surpass the turmoil of war, who peril their lives in the cause of science, many of whom fall victims to pestilential climates, famine, and the host of dangers which environ the voyager and traveller in unexplored lands and unknown seas, we have only a place in the niche of Fame.

What honours did England as a maritime nation confer on Cook, the foremost of her naval heroes,—a man whose life was sacrificed for his country? His widow had an annuity of 200*l.*, and his surviving children 25*l.* each per annum. And this is the reward paid to the

most eminent of our naval discoverers, before whom Cabot, Drake, Frobisher, Magellan, Anson, and the arctic adventurers, Hudson and Baffin,—although all eminent for their discoveries and the important services they rendered to the cause of nautical science,—sink into insignificance! If we glance at the results of Cook's voyages we find that to him we are indebted for the innumerable discoveries of islands and colonies planted in the Pacific; that he determined the conformation, and surveyed the numerous bays and inlets, of New Holland; established the geographical position of the north-western shores of America; ascertained the trending of the ice and frozen shores to the north of Behring's Straits; approached nearer the South Pole, and made more discoveries in the Australian regions, than all the navigators who had preceded him. On the very shores of their vast empire, at the extremity of Kamtschatka, his active genius first taught the Russians to examine the devious trendings of the lands which border the Frozen Ocean, in the neighbourhood of the Arctic circle. He explored both the eastern and western coasts above Behring's Straits to so high a latitude as to decide beyond doubt the question as to the existence of a passage round the two continents. He showed the Russians how to navigate the dangerous seas between the old and the new world; for, as Coxe has remarked, "before his time, everything was uncertain and confused, and though they had undoubtedly reached the continent of America, yet they had not ascertained the line of coast, nor the separation or vicinity of the two continents of Asia and America." Coxe, certainly, does no more than justice to his illustrious countryman when he adds, "the solution of this important problem was reserved for our great navigator, and every Englishman must exult that the discoveries of Cook were extended further in a single expedition, and at the distance of half the globe, than the Russians accomplished in a long series of years, and in a region contiguous to their own empire."

Look at Weddell, again, a private trader in seal-skins, who, in a frail bark of 160 tons, made important discoveries in the Antarctic circle, and a voyage of greater length and peril, through a thousand miles of ice, than had previously been performed by any navigator, paving the way for the more expensively fitted expedition under Sir James Ross. Was Weddell remunerated on a scale commensurate with his important services?

Half a century ago the celebrated Bruce of Kinnaird,

by a series of soundings and observations taken in the Red Sea, now the great highway of overland eastern traffic, rendered its navigation more secure and punctual. How was he rewarded by the then existing ministry?

Take a more recent instance in the indefatigable energy of Lieutenant Waghorn, R.N., the enterprising pioneer of the overland route to India. What does not the commerce, the character, the reputation, of this country owe to his indefatigable exertions, in bringing the metropolis into closer connexion with our vast and important Indian empire? And what was the reward he received for the sacrifices he made of time, money, health, and life? A paltry annuity to himself of 100*l.*, and a pension to his widow of 25*l.* per annum!

Is it creditable to us, as the first naval power of the world, that we should thus dole out miserable pittances, or entirely overlook the successful patriotic exertions and scientific enterprises and discoveries of private adventurers, or public commanders?

The attractions of a summer voyage along the bays and seas where the sun shines for four months at a time, exploring the bare rocks and everlasting ice, with no companion but the white bear or the Arctic fox, may be all very romantic at a distance; but the mere thought of a winter residence there, frozen fast in some solid ocean, with snow a dozen feet deep, the thermometer ranging from 40° to 50° below zero, and not a glimpse of the blessed sun from November to February, is enough to give a chill to all adventurous notions. But the officers and men engaged in the searching expeditions after Sir John Franklin have calmly weighed all these difficulties, and boldly gone forth to encounter the perils and dangers of these icy seas for the sake of their noble fellow-sailor, whose fate has been so long a painful mystery to the world.

It has been truly observed, that "this is a service for which all officers, however brave and intelligent they may be, are not equally qualified; it requires a peculiar tact, an inquisitive and persevering pursuit after details of fact, not always interesting, a contempt of danger, and an enthusiasm not to be damped by ordinary difficulties."

The records which I shall have to give in these pages of voyages and travels, unparalleled in their perils, their duration, and the protracted sufferings which many of them entailed on the adventurers, will bring out in bold relief the prominent characters who have figured in Arctic Discovery, and whose names will descend to posterity, em-

blazoned on the scroll of Fame, for their bravery, their patient endurance, their skill, and, above all, their firm trust and reliance on that Almighty Being who, although He may have tried them sorely, has never utterly forsaken them.

## Capt. John Ross's Voyage, 1818.

In 1818, His Royal Highness the Prince Regent having signified his pleasure that an attempt should be made to find a passage by sea between the Atlantic and Pacific Oceans, the Lords Commissioners of the Admiralty were pleased to fit out four vessels to proceed towards the North Pole, under the command of Captain John Ross. No former expedition had been fitted out on so extensive a scale, or so completely equipped in every respect as this one. The circumstance which mainly led to the sending out of these vessels, was the open character of the bays and seas in those regions, it having been observed for the previous three years that very unusual quantities of the Polar ice had floated down into the Atlantic. In the year 1817, Sir John Barrow relates that the eastern coast of Greenland, which had been shut up with ice for four centuries, was found to be accessible from the 70th to the 80th degree of latitude, and the intermediate sea between it and Spitzbergen was so entirely open in the latter parallel, that a Hamburgh ship had actually sailed along this track.

On the 15th of January, 1818, the four ships were put in commission—the *Isabella*, 385 tons, and the *Alexander*, 252 tons—under Captain Ross, to proceed up the middle of Davis's Strait, to a high northern latitude, and then to stretch across to the westward, in the hope of being able to pass the northern extremity of America, and reach Behring's Strait by that route. Those destined for the Polar sea were, the *Dorothea*, 382 tons, and the *Trent*, 249 tons, which were ordered to proceed between Greenland and Spitzbergen, and seek a passage through an open Polar sea, if such should be found in that direction.

I shall take these voyages in the order of their publication, Ross having given to the world the account of his voyage shortly after his return in 1819; while the narrative of the voyage of the *Dorothea* and *Trent* was only published in 1843, by Captain Beechey, who served as Lieutenant of the *Trent*, during the voyage.

The following were the officers &c. of the ships under Captain Ross:—

*Isabella.*

Captain—John Ross.
Lieutenant—W. Robertson.
Purser—W. Thom.
Surgeon—John Edwards.
Assistant Surgeon—C. J. Beverley.
Admiralty Midshipmen—A. M. Skene and James Clark Ross.
Midshipman and Clerk—J. Bushnan.
Greenland Pilots—B. Lewis, master; T. Wilcox, mate.
Captain (now Colonel) Sabine, R.A.
John Sacheuse, an Esquimaux interpreter.
45 petty officers, seamen, and marines.
Whole complement, 57.

*Alexander.*

Lieutenant and Commander—William Edward Parry, (now Captain Sir Edward.)
Lieutenant—H. H. Hoppner (a first-rate artist.)
Purser—W. H. Hooper.
Greenland Pilots—J. Allison, master; J. Philips, mate.
Admiralty Midshipmen—P. Bisson and J. Nius.
Assistant Surgeon—A. Fisher.
Clerk—J. Halse.
28 petty officers, seamen, &c.
Whole complement, 37.

On the 2nd of May, the four vessels being reported fit for sea, rendezvoused in Brassa Sound, Shetland, and the two expeditions parted company on the following day for their respective destinations.

On the 26th, the *Isabella* fell in with the first iceberg, which appeared to be about forty feet high and a thousand feet long. It is hardly possible to imagine anything more exquisite than the variety of tints which these icebergs display; by night as well as by day they glitter with a vividness of colour beyond the power of art to represent. While the white portions have the brilliancy of silver, their colours are as various and splendid as those of the rainbow; their ever-changing disposition producing effects as singular as they are new and interesting to those who have not seen them before.

On the 17th of June, they reached Waygatt Sound, beyond Disco Island, where they found forty-five whalers detained by the ice. Waygatt Island, from observations taken on shore, was found to be 5° longitude and 30

miles of latitude from the situation as laid down in the Admiralty Charts.

They were not able to get away from here till the 20th, when the ice began to break. By cutting passages through the ice, and by dint of towing and warping, a slow progress was made with the ships until the 17th of July, when two ice-floes closing in upon them, threatened inevitable destruction, and it was only by the greatest exertions that they hove through into open water. The labours of warping, towing, and tracking were subsequently very severe. This tracking, although hard work, afforded great amusement to the men, giving frequent occasion for the exercise of their wit, when some of the men occasionally fell in through holes covered with snow or weak parts of the ice.

Very high mountains of land and ice were seen to the north side of the bay, which he named Melville's Bay, forming an impassable barrier, the precipices next the sea being from 1000 to 2000 feet high.

On the 29th of June, the Esquimaux, John Sacheuse, who had accompanied the expedition from England as interpreter, was sent on shore to communicate with the natives. About a dozen came off to visit the ship, and, after being treated with coffee and biscuit in the cabin, and having their portraits taken, they set to dancing Scotch reels on the deck of the *Isabella* with the sailors.

Captain Ross gives a pleasant description of this scene —"Sacheuse's mirth and joy exceeded all bounds; and with a good-humoured officiousness, justified by the important distinction which his superior knowledge now gave him, he performed the office of master of the ceremonies. An Esquimaux M.C. to a ball on the deck of one of H.M. ships in the icy seas of Greenland, was an office somewhat new, but Nash himself could not have performed his functions in a manner more appropriate. It did not belong even to Nash to combine in his own person, like Jack, the discordant qualifications of seaman, interpreter, draughtsman, and master of ceremonies to a ball, with those of an active fisher of seals and a hunter of white bears. A daughter of the Danish resident (by an Esquimaux woman), about eighteen years of age, and by far the best-looking of the half-caste group, was the object of Jack's particular attentions; which being observed by one of our officers, he gave him a lady's shawl, ornamented with spangles, as an offering for her acceptance. He presented it in a most respectful, and not ungraceful, manner to the damsel, who bashfully took a pewter ring

from her finger and gave it to him in return, rewarding him, at the same time, with an eloquent smile, which could leave no doubt on our Esquimaux's mind that he had made an impression on her heart." (Vol. 1, p. 67-8.) On the 5th of August the little auks (*Mergulfus alle,*) were exceedingly abundant, and many were shot for food, as was also a large gull, two feet five inches in length, which, when killed, disgorged one of these little birds entire.

A fortnight later, on two boats being sent from the *Isabella* to procure as many of these birds as possible, for the purpose of preserving them in ice, they returned at midnight with a boat-load of about 1500, having, on an average, killed fifteen at each shot. The boats of the *Alexander* were nearly as successful. These birds were afterwards served daily to each man, and, among other ways of dressing them, they were found to make excellent soup—not inferior to hare soup. Not less than two hundred auks were shot on the 6th of August, and served out to the ships' companies, among whose victuals they proved an agreeable variety, not having the fishy flavour that might be expected from their food, which consists of crustacea, small fishes, mollusca, or marine vegetables.

On the 7th of August the ships were placed in a most critical situation by a gale of wind. The *Isabella* was lifted by the pressure of ice floes on each side of her, and it was doubted whether the vessel could long withstand the grips and concussions she sustained; "every support threatened to give way, the beams in the hold began to bend, and the iron water-tanks settled together. The two vessels were thrown with violent concussion against each other, the ice-anchors and cables broke one after the other, a boat at the stern was smashed in the collision, and the masts were hourly expected to go by the board; but at this juncture, when certain destruction was momentarily looked for, by the merciful interposition of Providence the fields of ice suddenly opened and formed a clear passage for the ships."

A singular physical feature was noticed on the part of the coast near Cape Dudley Digges:—"We have discovered (says Ross) that the snow on the face of the cliffs presents an appearance both novel and interesting, being apparently stained or covered by some substance which gave it a deep crimson colour. This snow was penetrated in many places to a depth of ten or twelve feet by the colouring matter." There is nothing new, however,

according to Barrow, in the discovery of red snow. Pliny, and other writers of his time, mention it. Saussure found it in various parts of the Alps; Martin found it in Spitzbergen, and no doubt it is to be met with in most alpine regions.

In the course of this tedious, and often laborious, progress through the ice, it became necessary to keep the whole of the crew at the most fatiguing work, sometimes for several days and nights without intermission. When this was the case, an extra meal was served to them at midnight, generally of preserved meat; and it was found that this nourishment, when the mind and body were both occupied, and the sun continually present, rendered them capable of remaining without sleep, so that they often passed three days in this manner without any visible inconvenience, returning after a meal to their labour on the ice or in the boats quite refreshed, and continuing at it without a murmur.

After making hasty and very cursory examinations of Smith's and Jones' Sounds, Ross arrived on the 30th of August off the extensive inlet, named by Baffin Lancaster Sound. The entrance was perfectly clear, and the soundings ranged from 650 to 1000 fathoms. I shall now quote Ross's own observations on this subject, because from his unfortunate report of a range called the Croker mountains, stretching across this Strait, has resulted much of the ridicule and discredit which has attached to his accounts, and clouded his early reputation—"On the 31st (he says) we discovered, for the first time, that the land extended from the south two-thirds across this apparent Strait; but the fog which continually occupied that quarter, obscured its real figure. During the day, much interest was excited on board by the appearance of this Strait. The general opinion, however, was, that it was only an inlet. The land was partially seen extending across; the yellow sky was perceptible. At a little before 4 o'clock a.m., the land was seen at the bottom of the inlet by the officers of the watch, but before I got on deck a space of about seven degrees of the compass was obscured by the fog. The land which I then saw was a high ridge of mountains extending directly across the bottom of the inlet. This chain appeared extremely high in the centre. Although a passage in this direction appeared hopeless, I was determined to explore it completely. I therefore continued all sail. Mr. Beverley, the surgeon, who was the most sanguine, went up to the crow's

nest, and at twelve reported to me that before it became thick he had seen the land across the bay, except for a very short space.

"At three, I went on deck; it completely cleared for ten minutes, when I distinctly saw the land round the bottom of the bay, forming a chain of mountains connected with those which extended along the north and south side. This land appeared to be at the distance of eight leagues, and Mr. Lewis, the master, and James Haig, leading man, being sent for, they took its bearings, which were inserted in the log. At this moment, I also saw a continuity of ice at the distance of seven miles, extending from one side of the bay to the other, between the nearest cape to the north, which I named after Sir George Warrender, and that to the south, which was named after Viscount Castlereagh. The mountains, which occupied the centre, in a north and south direction, were named Croker's Mountains, after the Secretary to the Admiralty." (Vol. 1, p. 241-46, 8vo edit.)

They next proceeded to Possession Bay, at the entrance of the Strait, where a great many animals were observed. Deer, fox, ermine, bears, and hares, were either seen, or proved to be, in abundance by their tracks, and the skeleton of a whale was found stranded about 500 yards beyond high water mark. Finding, as Ross supposed, no outlet through Lancaster Strait, the vessels continued their progress to the southward, exploring the western coast of Baffin's Bay to Pond's Bay, and Booth's Inlet, discovering the trending of the land, which he named North Galloway, and North Ayr to Cape Adair, and Scott's Bay.

On September the 10th, they landed on an island near Cape Eglington, which was named Agnes' Monument. A flag-staff and a bottle, with an account of their proceedings, were set up. The remains of a temporary habitation of some of the Esquimaux were here observed, with a fire-place, part of a human skull, a broken stone vessel, some bones of a seal, burnt wood, part of a sledge, and tracks of dogs, &c.

While the boat was absent, two large bears swam off to the ships, which were at the distance of six miles from the land. They reached the *Alexander*, and were immediately attacked by the boats of that ship, and killed. One, which was shot through the head, unfortunately sank; the other, on being wounded, attacked the boats, and showed considerable play, but was at length secured and towed to the *Isabella* by the boats of both ships. The

animal weighed 1131½lbs., besides the blood it had lost, which was estimated at 30lbs. more.

On the following day, Lieut. Parry was sent on shore to examine an iceberg, which was found to be 4169 yards long, 3869 yards broad, and 51 feet high, being aground in 61 fathoms. When they had ascended to the top, which was perfectly flat, they found a huge white bear in quiet possession of the mass, who, much to their mortification and astonishment, plunged without hesitation into the sea from the edge of the precipice, which was fifty feet high.

From careful observation it was found that there was no such land in the centre of Davis Strait as James's Island, which was laid down in most of the charts. Nothing deserving of notice occurred in the subsequent course of the vessels past Cape Walsingham to Cumberland Strait.

The 1st of October having arrived, the limit to which his instructions permitted him to remain out, Ross shaped his course homewards, and after encountering a severe gale off Cape Farewell, arrived in Grimsby Roads on the 14th of November. As respects the purposes of Arctic discovery, this voyage may be considered almost a blank, none of the important inlets and sounds of Baffin's Bay having been explored, and all that was done was to define more clearly the land-bounds of Davis Strait and Baffin's Bay, if we except the valuable magnetic and other observations made by Capt. Sabine. The commander of the expedition was promoted to the rank of captain on paying off the ships in December, 1818.

The account of his voyage, published by Capt. Ross, is of the most meagre and uninteresting description, and more than half filled with dry details of the outfit, copies of his instructions, of his routine letters and orders to his officers, &c.

## Buchan and Franklin.

### *Dorothea and Trent to Pole*, 1818.

In conjunction with the expedition of Capt. John Ross, was that sent out to the coast of Spitzbergen, and of which Capt. Beechey has published a most interesting account, embellished with some very elegant illustrations from his pencil. The charge of it was given to Capt. D. Buchan, who had a few years previously conducted a very interesting expedition into the interior of Newfoundland. The first and most important object of this expedition was the

discovery of a passage over or as near the Pole, as might be possible, and through Behring's Straits into the Pacific. But it was also hoped that it might at the same time be the means of improving the geography and hydrography of the Arctic regions, of which so little was at that time known, and contribute to the advancement of science and natural knowledge. The objects to which attention was specially pointed in the Admiralty instructions, were the variation and inclination of the magnetic needle, the intensity of the magnetic force, and how far it is affected by atmospherical electricity ; the temperature of the air, the dip of the horizon, refraction, height of the tides, set and velocity of the currents, depths and soundings of the sea. Collections of specimens to illustrate the animal, mineral, and vegetable kingdoms, were also directed to be made.

The officers and crew appointed to these vessels were :—

*Dorothea*, 382 tons.

Captain—David Buchan.
Lieutenant—A. Morell.
Surgeon—John Duke.
Assistant-Surgeon—W. G. Borland.
Purser—John Jermain.
Astronomer—George Fisher.
Admiralty-Mates—C. Palmer and W. J. Dealy.
Greenland Pilots—P. Bruce, master ; G. Crawfurd, mate.
45 Petty Officers, Seamen, &c.
Total complement, 55.

*Trent*, 249 tons.

Lieutenant and Commander—John Franklin.
Lieutenant—Fred. W. Beechey (artist).
Purser—W. Barrett.
Assistant-Surgeon—A. Gilfillan.
Admiralty Mates—A. Reid and George Back.
Greenland Pilots—G. Fife, master, and G. Kirby, mate.
30 Petty Officers and Seamen.
Total complement, 38.

Having been properly fitted for the service and taken on board two years' provisions, the ships sailed on the 25th of April. The *Trent* had hardly got clear of the river before she sprang a leak, and was detained in the port of Lerwick nearly a fortnight undergoing repairs.

On the 18th of May, the ships encountered a severe

gale, and under even storm staysails were buried gunwale deep in the waves. On the 24th they sighted Cherie Island, situated in lat. 74° 33′ N., and long. 17° 40′ E., formerly so noted for its fishery, being much frequented by walruses, and for many years the Muscovy Company carried on a lucrative trade by sending ships to the island for oil, as many as a thousand animals being often captured by the crew of a single ship in the course of six or seven hours.

The progress of the discovery ships through the small floes and huge masses of ice which floated in succession past, was slow, and these from their novelty were regarded with peculiar attention from the grotesque shapes they assumed. The progress of a vessel through such a labyrinth of frozen masses is one of the most interesting sights that offer in the Arctic seas, and kept the officers and crew out of their beds till a late hour watching the scene. Capt. Beechey, the graphic narrator of the voyage, thus describes the general impression created:—"There was besides, on this occasion, an additional motive for remaining up; very few of us had ever seen the sun at midnight, and this night happening to be particularly clear, his broad red disc, curiously distorted by refraction, and sweeping majestically along the northern horizon, was an object of imposing grandeur, which riveted to the deck some of our crew, who would perhaps have beheld with indifference the less imposing effect of the icebergs; or it might have been a combination of both these phenomena; for it cannot be denied that the novelty, occasioned by the floating masses, was materially heightened by the singular effect produced by the very low altitude at which the sun cast his fiery beams over the icy surface of the sea. The rays were too oblique to illuminate more than the inequalities of the floes, and falling thus partially on the grotesque shapes, either really assumed by the ice or distorted by the unequal refraction of the atmosphere, so betrayed the imagination that it required no great exertion of fancy to trace in various directions architectural edifices, grottos and caves here and there glittering as if with precious metals. So generally, indeed, was the deception admitted, that, in directing the route of the vessel from aloft, we for awhile deviated from our nautical phraseology, and shaped our course for a church, a tower, a bridge, or some similar structure, instead of for lumps of ice, which were usually designated by less elegant appellations."

The increasing difficulties of this ice navigation soon, however, directed their attention from romance to the

reality of their position, the perils of which soon became alarmingly apparent.

"The streams of ice, between which we at first pursued our serpentine course with comparative ease, gradually became more narrow, and at length so impeded the navigation, that it became necessary to run the ships against some of these imaginary edifices, in order to turn them aside. Even this did not always succeed, as some were so substantial and immovable, that the vessels glanced off to the opposite bank of the channel, and then became for a time embedded in the ice. Thus circumstanced, a vessel has no other resource than that of patiently awaiting the change of position in the ice, of which she must take every advantage, or she will settle bodily to leeward, and become completely entangled."

On the 26th the ships sighted the southern promontory of Spitzbergen, and on the 28th, while plying to windward on the western side, were overtaken by a violent gale at south-west, in which they parted company. The weather was very severe. "The snow fell in heavy showers, and several tons weight of ice accumulated about the sides of the brig (the *Trent*), and formed a complete casing to the planks, which received an additional layer at each plunge of the vessel. So great, indeed, was the accumulation about the bows, that we were obliged to cut it away repeatedly with axes to relieve the bowsprit from the enormous weight that was attached to it; and the ropes were so thickly covered with ice, that it was necessary to beat them with large sticks to keep them in a state of readiness for any evolution that might be rendered necessary, either by the appearance of ice to leeward, or by a change of wind."

On the gale abating, Lieutenant Franklin found himself surrounded by the main body of ice in lat. 80° N., and had much difficulty in extricating the vessel. Had this formidable body been encountered in thick weather, whilst scudding before a gale of wind, there would have been very little chance of saving either the vessels or the crews. The *Trent* fortunately fell in with her consort, the *Dorothea*, previous to entering the appointed rendezvous at Magdalena Bay, on the 3rd of June. This commodious inlet being the first port they had anchored at in the Polar regions, possessed many objects to engage attention. What particularly struck them was the brilliancy of the atmosphere, the peaceful novelty of the scene, and the grandeur of the various objects with which Nature has stored these unfrequented regions. The anchorage is

formed by rugged mountains, which rise precipitously to the height of about 3000 feet. Deep valleys and glens occur between the ranges, the greater part of which are either filled with immense beds of snow, or with glaciers, sloping from the summits of the mountainous margin to the very edge of the sea.

The bay is rendered conspicuous by four huge glaciers, of which the most remarkable, though the smallest in size, is situated 200 feet above the sea, on the slope of a mountain. From its peculiar appearance this glacier has been termed the Hanging Iceberg.

Its position is such that it seems as if a very small matter would detach it from the mountain, and precipitate it into the sea. And, indeed, large portions of its front do occasionally break away and fall with headlong impetuosity upon the beach, to the great hazard of any boat that may chance to be near. The largest of these glaciers occupies the head of the bay, and, according to Captain Beechey's account, extends from two to three miles inland. Numerous large rents in its upper surface have caused it to bear a resemblance to the ruts left by a wagon, hence it was named by the voyagers the "Wagon Way." The frontage of this glacier presents a perpendicular surface of 300 feet in height, by 7000 feet in length. Mountain masses—

> "Whose blocks of sapphire seem to mortal eye
> Hewn from cerulean quarries in the sky,
> With glacier battlements that crowd the spheres,
> The slow creation of six thousand years,
> Amidst immensity they tower sublime,
> Winter's eternal palace, built by Time."

At the head of the bay there is a high pyramidal mountain of granite, termed Rotge Hill, from the myriads of small birds of that name which frequent its base, and appear to prefer its environs to every other part of the harbour. "They are so numerous that we have frequently seen an uninterrupted line of them extending full half way over the bay, or to a distance of more than three miles, and so close together that thirty have fallen at one shot. This living column, on an average, might have been about six yards broad, and as many deep; so that, allowing sixteen birds to a cubic yard, there must have been nearly four millions of birds on the wing at one time. The number I have given certainly seems large; yet when it is told that the little rotges rise in such numbers as completely to darken the air, and that their chorus is distinctly audible at a distance of four miles, the estimate will not be thought to bear any reduction."

One of their earliest excursions in this bay was an attempt to ascend the peak of Rotge Hill, "upon which," says Captain Beechey, "may now, perhaps, be seen at the height of about 2000 feet, a staff that once carried a red flag, which was planted there to mark the greatest height we were able to attain, partly in consequence of the steepness of the ascent, but mainly on account of the detached masses of rock which a very slight matter would displace and hurl down the precipitous declivity, to the utter destruction of him who depended upon their support, or who might happen to be in their path below. The latter part of our ascent was, indeed, much against our inclination; but we found it impossible to descend by the way we had come up, and were compelled to gain a ledge, which promised the only secure resting-place we could find at that height. This we were able to effect by sticking the tomahawks with which we were provided into crevices in the rock, as a support for our feet; and some of these instruments we were obliged to leave where they were driven, in consequence of the danger that attended their recovery." During the vessel's detention in this harbour, the bay and anchorage were completely surveyed.

When the first party rowed into this bay, it was in quiet possession of herds of walruses, who were so unaccustomed to the sight of a boat that they assembled about her, apparently highly incensed at the intrusion, and swam towards her as though they would have torn the planks asunder with their tusks. Their hides were so tough that nothing but a bayonet would pierce them. The wounds that were inflicted only served to increase their rage, and it was with much difficulty they were kept off with fire-arms. Subsequently the boats went better prepared and more strongly supported, and many of these monsters were killed; some were fourteen feet in length and nine feet girth, and of such prodigious weight that the boat's crew could scarcely turn them.

The ships had not been many days at their anchorage when they were truly astonished at the sight of a strange boat pulling towards the ships, which was found to belong to some Russian adventurers, who were engaged in the collection of peltry and morse' teeth. This is the last remaining establishment at Spitzbergen still upheld by the merchants of Archangel.

Although equally surprised at the sight of the vessels, the boat's crew took courage, and after a careful scrutiny, went on board the *Dorothea;* Captain Buchan gave them a

kind reception, and supplied them with whatever they wanted; in return for which they sent on board the following day a side of venison in excellent condition. Wishing to gain some further information of these people, an officer accompanied them to their dwelling at the head of a small cove, about four miles distant from the bay, where he found a comfortable wooden hut, well lined with moss and stored with venison, wild ducks, &c.

It is related by Captain Beechey that it was with extreme pleasure they noticed in this retired spot, probably the most northern and most desolate habitation of our globe, a spirit of gratitude and devotion to the Almighty rarely exercised in civilized countries. "On landing from the boat and approaching their residence, these people knelt upon its threshold, and offered up a prayer with fervour and evident sincerity. The exact nature of the prayer we did not learn, but it was no doubt one of thanksgiving, and we concluded it was a custom which these recluses were in the habit of observing on their safe return to their habitation. It may, at all events, be regarded as an instance of the beneficial effects which seclusion from the busy world, and a contemplation of the works of Nature, almost invariably produce upon the hearts of even the most uneducated part of mankind."

On the 7th of June the expedition left the anchorage to renew the examination of the ice, and after steering a few leagues to the northward, found it precisely in the same state as it had been left on the 2nd. In spite of all their endeavours, by towing and otherwise, the vessels were driven in a calm by the heavy swell into the packed ice, and the increasing peril of their situation may be imagined from the following graphic description :—

"The pieces at the edge of the pack were at one time wholly immersed in the sea, and at the next raised far above their natural line of flotation, while those further in, being more extensive, were alternately depressed or elevated at either extremity as the advancing wave forced its way along.

"The see-saw motion which was thus produced was alarming, not merely in appearance, but in fact, and must have proved fatal to any vessel that had encountered it; as floes of ice, several yards in thickness, were continually crashing and breaking in pieces, and the sea for miles was covered with fragments ground so small that they actually formed a thick, pasty substance—in nautical language termed '*brash* ice'—which extended to the depth of five

feet. Amidst this giddy element, our whole attention was occupied in endeavouring to place the bow of the vessel, the strongest part of her frame, in the direction of the most formidable pieces of ice—a manœuvre which, though likely to be attended with the loss of the bowsprit, was yet preferable to encountering the still greater risk of having the broadside of the vessel in contact with it; for this would have subjected her to the chance of dipping her gunwale under the floes as she rolled, an accident which, had it occurred, would either have laid open her side, or have overset the vessel at once. In either case, the event would probably have proved fatal to all on board, as it would have been next to impossible to rescue any person from the confused moving mass of brash ice which covered the sea in every direction."

The attention of the seamen was in some degree diverted from the contemplation of this scene of difficulty by the necessity of employing all hands at the pump, the leak having gained upon them. But, fortunately, towards morning, they got quite clear of the ice.

Steering to the westward to reconnoitre, they fell in, in longitude 4° 30′ E., with several whale ships, and were informed by them that the ice was quite compact to the westward, and that fifteen vessels were beset in it. Proceeding to the northward, the ships passed, on the 11th of June, Cloven Cliff, a remarkable isolated rock, which marks the north-western boundary of Spitzbergen, and steered along an intricate channel between the land and ice; but, next morning, their further advance was stopped, and the channel by which the vessels had entered became so completely closed up as to preclude the possibility also of retreating. Lieut. Beechey proceeds to state—

"The ice soon began to press heavily upon us, and, to add to our difficulties, we found the water so shallow that the rocks were plainly discovered under the bottoms of the ships. It was impossible, however, by any exertion on our part, to improve the situations of the vessels. They were as firmly fixed in the ice as if they had formed part of the pack, and we could only hope that the current would not drift them into still shallower water, and damage them against the ground."

The ships were here hemmed in in almost the same position where Baffin, Hudson, Poole, Captain Phipps, and all the early voyagers to this quarter had been stopped.

As the tide turned, the pieces of ice immediately around the ships began to separate, and some of them to twist

round with a loud grinding noise, urging the vessels, which were less than a mile from the land, still nearer and nearer to the beach.

By great exertions, the ships were hauled in to small bays in the floe, and secured there by ropes fixed to the ice by means of large iron hooks, called ice anchors. Shifting the ships from one part of this floe to the other, they remained attached to the ice thirteen days. As this change of position could only be effected by main force, the crew were so constantly engaged in this harassing duty, that their time was divided almost entirely between the windlass and the pump, until the men at length became so fatigued that the sick-list was seriously augmented. During this period, however, the situation of the leak was fortunately discovered, and the damage repaired.

An officer and a party of men who left the *Dorothea* to pay a visit to the shore, about three or four miles distant, lost themselves in the fog and snow, and wandered about for sixteen hours, until, quite overcome with wet, cold, and fatigue, they sat down in a state of despondency upon a piece of ice, determined to submit their fate to Providence. Their troubles are thus told—

"To travel over ragged pieces of ice, upon which there were two feet of snow, and often more, springing from one slippery piece to the other, or, when the channels between them were too wide for this purpose, ferrying themselves upon detached fragments, was a work which it required no ordinary exertion to execute.

"Some fell into the water, and were with difficulty preserved from drowning by their companions; while others, afraid to make any hazardous attempt whatever, were left upon pieces of ice, and drifted about at the mercy of the winds and tides. Foreseeing the probability of a separation, they took the first opportunity of dividing, in equal shares, the small quantity of provision which they had remaining, as also their stock of powder and ammunition. They also took it in turns to fire muskets, in the hope of being heard from the ships."

The reports of the fire-arms were heard by their shipmates, and Messrs. Fife and Kirby, the Greenland ice-masters, ventured out with poles and lines to their assistance, and had the good fortune to fall in with the party, and bring them safely on board, after eighteen hours' absence. They determined in future to rest satisfied with the view of the shore which was afforded them from the ship, having not the slightest desire to attempt to approach it again by means of the ice.

The pressure of the ice against the vessels now became very great.

"At one time, when the *Trent* appeared to be so closely wedged up that it did not seem possible for her to be moved, she was suddenly lifted four feet by an enormous mass of ice getting under her keel; at another, the fragments of the crumbling floe were piled up under the bows, to the great danger of the bowsprit.

"The *Dorothea* was in no less imminent danger, especially from the point of a floe, which came in contact with her side, where it remained a short time, and then glanced off, and became checked by the field to which she was moored. The enormous pressure to which the ship had been subjected was now apparent by the field being *rent*, and its point broken into fragments, which were speedily heaped up in a pyramid, thirty-five feet in height, upon the very summit of which there appeared a huge mass, bearing the impression of the planks and bolts of the vessel's bottom."

Availing themselves of a break in the ice, the ships were moved to an anchorage between the islands contiguous to the Cloven Cliff; and on the 28th of June, anchored in fifteen fathoms water, near Vogel Sang. On the islands they found plenty of game, and eider ducks.

The island of Vogel Sang alone supplied the crews with forty rein-deer, which were in such high condition that the fat upon the loins of some measured from four to six inches, and a carcass, ready for being dressed, weighed 285 lbs. Later in the season, the deer were, however, so lean that it was rare to meet with any fat upon them at all.

On the 6th of July, finding the ice had been driven to the northward, the ships again put to sea, and Captain Buchan determined to prove, by a desperate effort, what advance it was possible to make by dragging the vessels through the ice whenever the smallest opening occurred. This laborious experiment was performed by fixing large ropes to iron hooks driven into the ice, and by heaving upon them with the windlass, a party removing obstructions in the channel with saws. But in spite of all their exertions, the most northerly position attained was 80° 37′ N. Although fastened to the ice, the ships were now drifted bodily to the southward by the prevailing current. They were also much injured by the pressure of hummocks and fields of ice.

On the 10th of July, Captain Beechey tells us, the *Trent* sustained a squeeze which made her rise four feet, and heel over five streaks; and on the 15th and 16th, both

vessels suffered considerable damage. "On that occasion," he says, "we observed a field fifteen feet in thickness break up, and the pieces pile upon each other to a great height, until they upset, when they rolled over with a tremendous crash. The ice near the ships was piled up above their bulwarks. Fortunately, the vessels rose to the pressure, or they must have had their sides forced in. The *Trent* received her greatest damage upon the quarters, and was so twisted that the doors of all the cabins flew open, and the panels of some started in the frames, while her false sternpost was moved three inches, and her timbers cracked to a most serious extent. The *Dorothea* suffered still more: some of her beams were sprung, and two planks on the lower deck were split fore and aft, and doubled up, and she otherwise sustained serious injury in her hull. It was in vain that we attempted any relief; our puny efforts were not even felt, though continued for eight hours with unabated zeal; and it was not until the tide changed that the smallest effect was produced. When, however, that occurred, the vessels righted and settled in the water to their proper draught."

From the 12th to the 19th, they were closely beset with ice. For nine successive days following this the crews were occupied, night and day, in endeavouring to extricate the ships, and regain the open sea. Thinking he had given the ice a fair trial here, the commander determined upon examining its condition towards the eastern coast of Greenland, and in the event of finding it equally impenetrable there, to proceed round the south cape of Spitzbergen, and make an attempt between that island and Nova Zembla.

On the 30th of July, a sudden gale came on, and brought down the main body of the ice upon them, so that the ships were in such imminent danger that their only means of safety was to take refuge amongst it—a practice which has been resorted to by whalers in extreme cases—as their only chance of escaping destruction.

The following is a description of the preparation made to withstand the terrible encounter, and the hair-breadth escape from the dangers:—

"In order to avert the effects of this as much as possible, a cable was cut up into thirty-feet lengths, and these, with plates of iron four feet square, which had been supplied to us as fenders, together with some walrus's hides, were hung round the vessels, especially about the bows. The masts, at the same time, were secured with additional ropes, and the hatches were battened and nailed down. By the time these precautions had been taken, our ap-

proach to the breakers only left us the alternative of either permitting the ships to be drifted broadside against the ice, and so to take their chance, or of endeavouring to force fairly into it by putting before the wind. At length, the hopeless state of a vessel placed broadside against so formidable a body became apparent to all, and we resolved to attempt the latter expedient."

Eagerly, but in vain, was the general line of the pack scanned, to find one place more open than the other. All parts appeared to be equally impenetrable, and to present one unbroken line of furious breakers, in which immense pieces of ice were heaving and subsiding with the waves, and dashing together with a violence which nothing apparently but a solid body could withstand, occasioning such a noise that it was with the greatest difficulty the officers could make their orders heard by the crew.

The fearful aspect of this appalling scene is thus sketched off by Captain Beechey:—

"No language, I am convinced, can convey an adequate idea of the terrific grandeur of the effect now produced by the collision of the ice and the tempestuous ocean. The sea, violently agitated and rolling its mountainous waves against an opposing body, is at all times a sublime and awful sight; but when, in addition, it encounters immense masses, which it has set in motion with a violence equal to its own, its effect is prodigiously increased. At one moment it bursts upon these icy fragments and buries them many feet beneath its wave, and the next, as the buoyancy of the depressed body struggles for reascendancy, the water rushes in foaming cataracts over its edges; whilst every individual mass, rocking and labouring in its bed, grinds against and contends with its opponent, until one is either split with the shock or upheaved upon the surface of the other. Nor is this collision confined to any particular spot; it is going on as far as the sight can reach; and when from this convulsive scene below, the eye is turned to the extraordinary appearance of the blink in the sky above, where the unnatural clearness of a calm and silvery atmosphere presents itself, bounded by a dark hard line of stormy clouds, such as at this moment lowered over our masts, as if to mark the confines within which the efforts of man would be of no avail. The reader may imagine the sensation of awe which must accompany that of grandeur in the mind of the beholder."

"If ever," continues the narrator, "the fortitude of seamen was fairly tried, it was assuredly not less so on this occasion; and I will not conceal the pride I felt in wit-

nessing the bold and decisive tone in which the orders were issued by the commander (the present Captain Sir John Franklin) of our little vessel, and the promptitude and steadiness with which they were executed by the crew."

As the labouring vessel flew before the gale, she soon neared the scene of danger.

"Each person instinctively secured his own hold, and with his eyes fixed upon the masts, awaited in breathless anxiety the moment of concussion.

"It soon arrived,—the brig (*Trent*) cutting her way through the light ice, came in violent contact with the main body. In an instant we all lost our footing; the masts bent with the impetus, and the cracking timbers from below bespoke a pressure which was calculated to awaken our serious apprehensions. The vessel staggered under the shock, and for a moment seemed to recoil; but the next wave, curling up under her counter, drove her about her own length within the margin of the ice, where she gave one roll, and was immediately thrown broadside to the wind by the succeeding wave, which beat furiously against her stern, and brought her lee-side in contact with the main body, leaving her weather-side exposed at the same time to a piece of ice about twice her own dimensions. This unfortunate occurrence prevented the vessel penetrating sufficiently far into the ice to escape the effect of the gale, and placed her in a situation where she was assailed on all sides by battering-rams, if I may use the expression, every one of which contested the small space which she occupied, and dealt such unrelenting blows, that there appeared to be scarcely any possibility of saving her from foundering. Literally tossed from piece to piece, we had nothing left but patiently to abide the issue; for we could scarcely keep our feet, much less render any assistance to the vessel. The motion, indeed, was so great, that the ship's bell, which in the heaviest gale of wind had never struck of itself, now tolled so continually, that it was ordered to be muffled, for the purpose of escaping the unpleasant association it was calculated to produce.

"In anticipation of the worst, we determined to attempt placing the launch upon the ice under the lee, and hurried into her such provisions and stores as could at the moment be got at. Serious doubts were reasonably entertained of the boat being able to live amongst the confused mass by which we were encompassed; yet as this appeared to be our only refuge, we clung to it with all the eagerness of a last resource."

From the injury the vessel repeatedly received, it became very evident that if subjected to this concussion for any time, she could not hold together long; the only chance of escape, therefore, appeared to depend upon getting before the wind, and penetrating further into the ice.

To effect this with any probability of success, it became necessary to set more head-sail, though at the risk of the masts, already tottering with the pressure of that which was spread. By the expertness of the seamen, more sail was spread, and under this additional pressure of canvass, the ship came into the desired position, and with the aid of an enormous mass under the stern, she split a small field of ice, fourteen feet in thickness, which had hitherto impeded her progress, and effected a passage for herself between the pieces.

In this improved position, by carefully placing the protecting fenders between the ice and the ship's sides, the strokes were much diminished, and she managed to weather out the gale, but lost sight of her consort in the clouds of spray which were tossed about, and the huge intervening masses of ice among which they were embayed. On the gale moderating, the ships were fortunately got once more into an open sea, although both disabled, and one at least, the *Dorothea*, which had sustained the heavy shocks, in a foundering condition. For the main object of the expedition they were now useless, and, both being in a leaky state, they bore up for Fair Haven, in Spitzbergen. In approaching the anchorage in South Gat, the *Trent* bounded over a sunken rock, and struck hard, but this, after their recent danger, was thought comparatively light of.

On examining the hulls of the vessels, it was found they had sustained frightful injuries. The intermediate lining of felt between the timbers and planks seems to have aided greatly in enabling the vessels to sustain the repeated powerful shocks they had encountered. Upon consulting with his officers, Captain Buchan came to the opinion that the most prudent course was to patch up the vessels for their return voyage. Lieutenant Franklin preferred an urgent request that he might be allowed to proceed in his own vessel upon the interesting service still unexecuted; but this could not be complied with, in consequence of the hazard to the crew of proceeding home singly in a vessel so shattered and unsafe as the *Dorothea*. After refitting, they put to sea at the end of August, and reached England by the middle of October.

## Franklin's First Land Expedition, 1819-21.

In 1819, on the recommendation of the Lords of the Admiralty, Capt. Franklin was appointed to command an overland expedition from Hudson's Bay to the northern shores of America, for the purpose of determining the latitudes and longitudes, and exploring the coast of the continent eastward from the Coppermine River. Dr. John Richardson, R.N., and two Admiralty midshipmen, Mr. George Back, (who had been out on the Polar expedition in the previous year in H. M. S. *Trent*,) and Mr. Robert Hood, were placed under his orders. Previous to his departure from London, Capt. Franklin obtained all the information and advice possible from Sir Alex. Mackenzie, one of the only two persons who had yet explored those shores. On the 23rd of May, the party embarked at Gravesend, in the *Prince of Wales*, belonging to the Hudson's Bay Company, which immediately got under weigh in company with her consorts, the *Eddystone* and *Wear*. Mr. Back, who was left on shore by accident in Yarmouth, succeeded in catching the ship at Stromness. On the 4th of August, in lat. 59° 58′ N., and long. 59° 53′ W., they first fell in with large icebergs. On the following day, the height of one was ascertained to be 149 feet. After a stormy and perilous voyage they reached the anchorage at York Flats on the 30th of August.

On the 9th of September, Capt. Franklin and his party left York Factory in a boat by the way of the rivers and lakes for Cumberland House, another of the Company's posts, which they reached on the 22nd of October.

On the 19th of January, Franklin set out in company with Mr. Back, and a seaman named Hepburn, with provisions for fifteen days stowed in two sledges, on their journey to Fort Chipewyan. Dr. Richardson, Mr. Hood, and Mr. Connolly, accompanied them a short distance. After touching at different posts of the Company, they reached their destination safely on the 26th of March, after a winter's journey of 857 miles. The greatest difficulty experienced by the travellers was the labour of walking in snow shoes, a weight of between two and three pounds being constantly attached to galled feet and swelled ankles.

On the 13th of July, they were joined by Dr. Richardson and Mr. Hood, who had made a very expeditious journey from Cumberland House; they had only one day's provisions left, the pemmican they had received at the posts

being so mouldy that they were obliged to leave it behind. Arrangements were now made for their journey northward. Sixteen Canadian voyageurs were engaged, and a Chipewyan woman and two interpreters were to be taken on from Great Slave Lake. The whole stock of provision they could obtain before starting was only sufficient for one day's supply, exclusive of two barrels of flour, three cases of preserved meats, some chocolate, arrow-root, and portable soup, which had been brought from England, and were kept as a reserve for the journey to the coast in the following season; seventy pounds of deer's flesh and a little barley were all that the Company's officers could give them. The provisions were distributed among three canoes, and the party set off in good spirits on the 18th of July. They had to make an inroad very soon on their preserved meats, for they were unfortunate in their fishing. On the 24th of July, however, they were successful in shooting a buffalo in the Salt River, after giving him fourteen balls. At Moose Deer Island they got supplies from the Hudson's Bay and North West Companies' officers, and on the 27th set out again on their journey, reaching Fort Providence by the 29th.

Shortly after they had an interview with a celebrated and influential Indian chief, named Akaitcho, who was to furnish them with guides. Another Canadian voyageur was here engaged, and the party now consisted of the officers already named, Mr. Fred. Wentzel, clerk of the N. W. Fur Company, who joined them here, John Hepburn the English seaman, seventeen Canadian voyageurs, (one of whom, named Michel, was an Iroquois,) and three Indian interpreters, besides the wives of three of the voyageurs who had been brought on for the purpose of making clothes and shoes for the men at the winter establishment. The whole number were twenty-nine, exclusive of three children. I give the list of those whose names occur most frequently in the narrative: J. B. Belanger, Peltier, Solomon Belanger, Samandre, Benoit, Perrault, Antonio Fontano, Beauparlant, Vaillant, Credit, Adam St. Germain, interpreter; Augustus, and Junius, Esquimaux interpreters. They had provisions for ten days' consumption, besides a little chocolate and tea, viz., two casks of flour, 200 dried rein-deer tongues, some dried moose meat, portable soup, and a little arrow-root. A small extra canoe was provided for the women, and the journey for the Coppermine River was commenced on the 2nd of August. The party met with many hardships—were placed on short diet—and some of the Canadians broke out into open

rebellion, refusing to proceed further. However, they were at last calmed, and arrived on the 20th of August at Fort Enterprise on Winter Lake, which, by the advice of their Indian guides, they determined on making their winter quarters. The total length of the voyage from Chipewyan was 553 miles; and after leaving Fort Providence they had 21⅓ miles of portage to pass over. As the men had to traverse each portage four times with a load of 180 lbs., and return three times light, they walked in the whole upwards of 150 miles.

In consequence of the refusal of Akaitcho and his party of Indians to guide and accompany them to the sea, because, as they alleged, of the approach of winter, and the imminent danger, Capt. Franklin was obliged to abandon proceeding that season down the river, and contented himself with despatching, on the 29th, Mr. Back and Mr. Hood, in a light canoe, with St. Germain as interpreter, eight Canadians, and one Indian, furnished with eight days' provisions—all that could be spared.

They returned on the 10th of September, after having reached and coasted Point Lake. In the meantime, Franklin and Richardson, accompanied by J. Hepburn and two Indians, also made a pedestrian excursion towards the same quarter, leaving on the 9th of September, and returning on the 14th. The whole party spent a long winter of ten months at Fort Enterprise, depending upon the fish they could catch, and the success of their Indian hunters, for food.

On the 6th of October, the officers quitted their tents for a good log house which had been built. The clay with which the walls and roof were plastered had to be tempered before the fire with water, and froze as it was daubed on; but afterwards cracked in such a manner as to admit the wind from every quarter. Still the new abode, with a good fire of fagots in the capacious clay-built chimney, was considered quite comfortable when compared with the chilly tents.

The rein-deer are found on the banks of the Coppermine River early in May, as they then go to the sea coast to bring forth their young. They usually retire from the coast in July and August, rut in October, and shelter themselves in the woods during winter. Before the middle of October, the carcases of 100 deer had been secured in their store-house, together with 1000 lbs. of suet, and some dried meat; and eighty deer were stowed away at various distances from their house, *en caché*. This placing provisions "en caché," is merely burying and protecting it from

wolves and other depredators by heavy loads of wood or stone.

On the 18th of October, Mr. Back and Mr. Wentzel, accompanied by two Canadian voyageurs, two Indians and their wives, set out for Fort Providence to make the necessary arrangements for transporting the stores they expected from Cumberland House, and to see if some further supplies might not be obtained from the establishments on Slave Lake. Despatches for England were also forwarded by them, detailing the progress of the expedition up to this date. By the end of the month the men had also completed a house for themselves, 34 feet by 18. On the 26th of October, Akaitcho, and his Indian party of hunters, amounting with women and children to forty souls, came in, owing to the deer having migrated southwards. This added to the daily number to be provided for, and by this time their ammunition was nearly expended.

The fishing failed as the weather became more severe, and was given up on the 5th of November. About 1200 white fish, of from two to three lbs., had been procured during the season. The fish froze as they were taken from the nets, becoming in a short time a solid mass of ice, so that a blow or two of the hatchet would easily split them open, when the intestines might be removed in one lump. If thawed before the fire, even after being frozen for nearly two days, the fish would recover their animation.

On the 23rd of November, they were gratified by the appearance of one of the Canadian voyageurs who had set out with Mr. Back. His locks were matted with snow, and he was so incrusted with ice from head to foot, that they could scarcely recognise him. He reported that they had had a tedious and fatiguing journey to Fort Providence, and for some days were destitute of provisions. Letters were brought from England to the preceding April, and quickly was the packet thawed to get at the contents. The newspapers conveyed the intelligence of the death of George III. The advices as to the expected stores were disheartening; of ten bales of 90 lbs. each, five had been left by some mismanagement at the Grand Rapid on the Sattkatchawan. On the 28th of November, St. Germain the interpreter, with eight Canadian voyageurs, and four Indian hunters, were sent off to bring up the stores from Fort Providence.

On the 10th of December, Franklin managed to get rid of Akaitcho and his Indian party, by representing to them the impossibility of maintaining them. The leader, however,

left them his aged mother and two female attendants; and old Keskarrah, the guide, with his wife and daughter, remained behind. This daughter, who was designated "Green Stockings" from her dress, was considered a great beauty by her tribe, and, although but sixteen, had belonged successively to two husbands, and would probably have been the wife of many more, if her mother had not required her services as a nurse.

Mr. Hood took a good likeness of the young lady, but her mother was somewhat averse to her sitting for it, fearing that "her daughter's likeness would induce the Great Chief who resided in England to send for the original!"

The diet of the party in their winter abode consisted almost entirely of rein-deer meat, varied twice a week by fish, and occasionally by a little flour, but they had no vegetables of any kind. On Sunday morning they had a cup of chocolate; but their greatest luxury was tea, which they regularly had twice a day, although without sugar. Candles were formed of rein-deer fat and strips of cotton shirts; and Hepburn acquired considerable skill in the manufacture of soap from the wood-ashes, fat, and salt. The stores were anxiously looked for, and it was hoped they would have arrived by New Year's Day (1821), so as to have kept the festival. As it was, they could only receive a little flour and fat, both of which were considered great luxuries.

On the 15th, seven of the men arrived with two kegs of rum, one barrel of powder, sixty pounds of ball, two rolls of tobacco, and some clothing.

"They had been twenty-one days on their march from Slave Lake, and the labour they underwent was sufficiently evinced by their sledge collars having worn out the shoulders of their coats. Their loads weighed from sixty to ninety pounds each, exclusive of their bedding and provisions, which at starting must have been at least as much more. We were much rejoiced at their arrival, and proceeded forthwith to pierce the spirit cask, and issue to each of the household the portion of rum which had been promised on the first day of the year. The spirits, which were proof, were frozen; but after standing at the fire for some time they flowed out, of the consistence of honey. The temperature of the liquid, even in this state, was so low as instantly to convert into ice the moisture which condensed on the surface of the dram-glass. The fingers also adhered to the glass, and would doubtless have been speedily

frozen had they been kept in contact with it; yet each of the voyagers swallowed his dram without experiencing the slightest inconvenience, or complaining of tooth-ache."

It appeared that the Canadians had tapped the rum-cask on their journey, and helped themselves rather freely.

On the 27th, Mr. Wentzel and St. Germain arrived, with two Esquimaux interpreters who had been engaged, possessed of euphonious names, representing the belly and the ear, but which had been Anglicised into Augustus and Junius, being the months they had respectively arrived at Fort Churchill. The former spoke English. They brought four dogs with them, which proved of great use during the season in drawing in wood for fuel.

Mr. Back, at this time, the 24th of December, had gone on to Chipewyan to procure stores. On the 12th of February, another party of six men was sent to Fort Providence to bring up the remaining supplies, and these returned on the 5th of March. Many of the *cachés* of meat which had been buried early in the winter were found destroyed by the wolves, and some of these animals prowled nightly about the dwellings, even venturing upon the roof of their kitchen. The rations were reduced from eight to the short allowance of five ounces of animal food per day.

On the 17th of March, Mr. Back returned from Fort Chipewyan, after an absence of nearly five months, during which he had performed a journey on foot of more than eleven hundred miles on snow shoes, with only the slight shelter at night of a blanket and deer skin, with the thermometer frequently at 40° and once at 57°, and very often passing several days without food.

Some very interesting traits of generosity on the part of the Indians are recorded by Mr. Back. Often they gave up and would not taste of fish or birds which they caught with the touching remark, "We are accustomed to starvation, and you are not."

Such passages as the following often occur in his narrative—"One of our men caught a fish, which, with the assistance of some weed scraped from the rocks (*tripe de roche*) which forms a glutinous substance, made us a tolerable supper; it was not of the most choice kind, yet good enough for hungry men. While we were eating it, I perceived one of the women busily employed scraping an old skin, the contents of which her husband presented us with. They consisted of pounded meat, fat, and a greater proportion of Indian's and deer's hair than either, and,

though such a mixture may not appear very alluring to an English stomach, it was thought a great luxury after three days' privation in these cheerless regions of America."

To return to the proceedings at Fort Enterprise. On the 23rd of March, the last of the winter's stock of deer's meat was expended, and the party were compelled to consume a little pounded meat, which had been saved for making pemmican. The nets scarcely produced any fish, and their meals, which had hitherto been scanty enough, were now restricted to one in the day.

The poor Indian families about the house, consisting principally of sick and infirm women and children, suffered even more privation. They cleared away the snow on the site of the Autumn encampments to look for bones, deer's feet, bits of hide, and other offal. "When (says Franklin) we beheld them gnawing the pieces of hide, and pounding the bones for the purpose of extracting some nourishment from them by boiling, we regretted our inability to relieve them, but little thought that we should ourselves be afterwards driven to the necessity of eagerly collecting these same bones a second time from the dunghill."

On the 4th of June, 1821, a first party set off from the winter quarters for Point Lake and the Coppermine River, under the charge of Dr. Richardson, consisting, in all, voyageurs and Indians, of twenty-three, exclusive of children. Each of the men carried about 80 lbs., besides his own personal baggage, weighing nearly as much more. Some of the party dragged their loads on sledges, others preferred carrying their burden on their backs. On the 13th, Dr. Richardson sent back most of the men; and on the 14th Franklin despatched Mr. Wentzel and a party with the canoes, which had been repaired. Following the water-course as far as practicable to Winter Lake, Franklin followed himself with Hepburn, three Canadians, two Indian hunters, and the two Esquimaux, and joined Dr. Richardson on the 22nd. On the 25th they all resumed their journey, and, as they proceeded down the river, were fortunate in killing occasionally several musk oxen.

On the 15th they got a distinct view of the sea from the summit of a hill; it appeared choked with ice and full of islands. About this time they fell in with small parties of Esquimaux.

On the 19th Mr. Wentzel departed on his return for Slave Lake, taking with him four Canadians, who had been discharged for the purpose of reducing the expenditure of provision as much as possible, and despatches to

be forwarded to England. He was also instructed to cause the Indians to deposit a relay of provisions at Fort Enterprise, ready for the party should they return that way. The remainder of the party, including officers, amounted to twenty persons. The distance that had been traversed from Fort Enterprise to the mouth of the river was about 334 miles, and the canoes had to be dragged nearly 120 miles of this.

Two conspicuous capes were named by Franklin after Hearne and Mackenzie; and a river which falls into the sea, to the westward of the Coppermine, he called after his companion, Richardson.

On the 21st of July, Franklin and his party embarked in their two canoes to navigate the Polar Sea to the eastward, having with them provisions for fifteen days.

On the 25th they doubled a bluff cape, which was named after Mr. Barrow, of the Admiralty. An opening on its eastern side received the appellation of Inman Harbour, and a group of islands were called after Professor Jameson. Within the next fortnight, additions were made to their stock of food by a few deer and one or two bears, which were shot. Being less fortunate afterwards, and with no prospect of increasing their supply of provision, the daily allowance to each man was limited to a handful of pemmican and a small portion of portable soup.

On the morning of the 5th of August they came to the mouth of a river blocked up with shoals, which Franklin named after his friend and companion Back.

The time spent in exploring Arctic and Melville Sounds and Bathurst Inlet, and the failure of meeting with Esquimaux from whom provisions could be obtained, precluded any possibility of reaching Repulse Bay, and therefore having but a day or two's provision left, Franklin considered it prudent to turn back after reaching Point Turnagain, having sailed nearly 600 geographical miles in tracing the deeply indented coast of Coronation Gulf from the Coppermine River. On the 22d Aug. the return voyage was commenced, the boats making for Hood's River by the way of the Arctic Sound, and being taken as far up the stream as possible. On the 31st it was found impossible to proceed with them farther, and smaller canoes were made, suitable for crossing any of the rivers that might obstruct their progress. The weight carried by each man was about 90 lbs., and with this they progressed at the rate of a mile an hour, including rests.

On the 5th of September, having nothing to eat, the last piece of pemmican and a little arrow-root having

formed a scanty supper, and being without the means of making a fire, they remained in bed all day. A severe snow-storm lasted two days, and the snow even drifted into their tents, covering their blankets several inches. "Our suffering (says Franklin) from cold, in a comfortless canvass tent in such weather, with the temperature at 20°, and without fire, will easily be imagined; it was, however, less than that which we felt from hunger."

Weak from fasting and their garments stiffened with the frost, after packing their frozen tents and bedclothes the poor travellers again set out on the 7th.

After feeding almost exclusively on several species of Gyrophora, a lichen known as *tripe de roche*, which scarcely allayed the pangs of hunger, on the 10th "they got a good meal by killing a musk ox. To skin and cut up the animal was the work of a few minutes. The contents of its stomach were devoured upon the spot, and the raw intestines, which were next attacked, were pronounced by the most delicate amongst us to be excellent."

Wearied and worn out with toil and suffering, many of the party got careless and indifferent. One of the canoes was broken and abandoned. With an improvidence scarcely to be credited, three of the fishing-nets were also thrown away, and the floats burnt.

On the 17th they managed to allay the pangs of hunger by eating pieces of singed hide, and a little *tripe de roche*. This and some mosses, with an occasional solitary partridge, formed their invariable food; on very many days even this scanty supply could not be obtained, and their appetites became ravenous.

Occasionally they picked up pieces of skin, and a few bones of deer which had been devoured by the wolves in the previous spring. The bones were rendered friable by burning, and now and then their old shoes were added to the repast.

On the 26th they reached a bend of the Coppermine, which terminated in Point Lake. The second canoe had been demolished and abandoned by the bearers on the 23rd, and they were thus left without any means of water transport across the lakes and river.

On this day the carcass of a deer was discovered in the cleft of a rock, into which it had fallen in the spring. It was putrid, but little less acceptable to the poor starving travellers on that account; and a fire being kindled a large portion was devoured on the spot, affording an unexpected breakfast.

On the 1st of October one of the party, who had been

out hunting, brought in the antlers and backbone of another deer, which had been killed in the summer. The wolves and birds of prey had picked them clean, but there still remained a quantity of the spinal marrow, which they had not been able to extract. This, although putrid, was esteemed a valuable prize, and the spine being divided into portions was distributed equally. "After eating the marrow (says Franklin), which was so acrid as to excoriate the lips, we rendered the bones friable by burning, and ate them also."

The strength of the whole party now began to fail, from the privation and fatigue which they endured. Franklin was in a dreadfully debilitated state. Mr. Hood was also reduced to a perfect shadow, from the severe bowel-complaints which the *tripe de roche* never failed to give him. Back was so feeble as to require the support of a stick in walking, and Dr. Richardson had lameness superadded to weakness.

A rude canoe was constructed of willows, covered with canvass, in which the party, one by one, managed to reach in safety the southern bank of the river on the 4th of October, and went supperless to bed. On the following morning, previous to setting out, the whole party ate the remains of their old shoes, and whatever scraps of leather they had, to strengthen their stomachs for the fatigue of the day's journey.

Mr. Hood now broke down, as did two or three more of the party, and Dr. Richardson kindly volunteered to remain with them, while the rest pushed on to Fort Enterprise for succour. Not being able to find any *tripe de roche*, they drank an infusion of the Labrador tea-plant (*Ledrum palustre*, var. *decumbens*), and ate a few morsels of burnt leather for supper. This continued to be a frequent occurrence.

Others of the party continued to drop down with fatigue and weakness, until they were reduced to five persons, besides Franklin. When they had no food or nourishment of any kind, they crept under their blankets, to drown, if possible, the gnawing pangs of hunger and fatigue by sleep. At length they reached Fort Enterprise, and to their disappointment and grief found it a perfectly desolate habitation. There was no deposit of provision, no trace of the Indians, no letter from Mr. Wentzel to point out where the Indians might be found. "It would be impossible (says Franklin) to describe our sensations after entering this miserable abode, and discovering how we had been neglected: the whole party

shed tears, not so much for our own fate as for that of our friends in the rear, whose lives depended entirely on our sending immediate relief from this place." A note, however, was found here from Mr. Back, stating that he had reached the house by another route two days before, and was going in search of the Indians. If he was unsuccessful in finding them, he purposed walking to Fort Providence, and sending succour from thence, but he doubted whether either he or his party could perform the journey to that place in their present debilitated state. Franklin and his small party now looked round for some means of present subsistence, and fortunately discovered several deer skins, which had been thrown away during their former residence here. The bones were gathered from the heap of ashes; these, with the skins and the addition of *tripe de roche*, they considered would support life tolerably well for a short time. The bones were quite acrid, and the soup extracted from them, quite putrid, excoriated the mouth if taken alone, but it was somewhat milder when boiled with the lichen, and the mixture was even deemed palatable with a little salt, of which a cask had been left here in the spring. They procured fuel by pulling up the flooring of the rooms, and water for cooking by melting the snow.

Augustus arrived safe after them, just as they were sitting round the fire eating their supper of singed skin.

Late on the 13th, Belanger also reached the house, with a note from Mr. Back, stating that he had yet found no trace of the Indians. The poor messenger was almost speechless, being covered with ice and nearly frozen to death, having fallen into a rapid, and for the third time since the party left the coast narrowly escaped drowning. After being well rubbed, having had his dress changed, and some warm soup given him, he recovered sufficiently to answer the questions put to him.

Under the impression that the Indians must be on their way to Fort Providence, and that it would be possible to overtake them, as they usually travelled slowly with their families, and there being likewise a prospect of killing deer about Reindeer Lake, where they had been usually found abundant, Franklin determined to take the route for that post, and sent word to Mr. Back by Belanger to that effect on the 18th.

On the 20th Oct. Franklin set out in company with Benoit and Augustus to seek relief, having patched three pairs of snow shoes, and taken some singed skin for their support. Peltier and Samandre had volunteered to remain at the

house with Adam, who was too ill to proceed. They were so feeble as scarcely to be able to move. Augustus, the Esquimaux, tried for fish, without success, so that their only fare was skin and tea. At night, composing themselves to rest, they lay close to each other for warmth, but found the night bitterly cold, and the wind pierced through their famished frames.

On resuming the journey next morning, Franklin had the misfortune to break his snow-shoes, by falling between two rocks. This accident prevented him from keeping pace with the others, and in the attempt he became quite exhausted; unwilling to delay their progress, as the safety of all behind depended on their obtaining early assistance and immediate supplies, Franklin resolved to turn back, while the others pushed on to meet Mr. Back, or, missing him, they were directed to proceed to Fort Providence. Franklin found the two Canadians he had left at the house dreadfully weak and reduced, and so low-spirited that he had great difficulty in rallying them to any exertion. As the insides of their mouths had become sore from eating the bone-soup, they now relinquished the use of it, and boiled the skin, which mode of dressing was found more palatable than frying it. They had pulled down nearly all their dwelling for fuel, to warm themselves and cook their scanty meals. The *tripe de roche*, on which they had depended, now became entirely frozen; and what was more tantalizing to their perishing frames, was the sight of food within reach, which they could not procure. "We saw (says Franklin) a herd of rein-deer sporting on the river, about half a mile from the house; they remained there a long time, but none of the party felt themselves strong enough to go after them, nor was there one of us who could have fired a gun without resting it."

Whilst they were seated round the fire this evening, discoursing about the anticipated relief, the sound of voices was heard, which was thought with joy to be that of the Indians, but, to their bitter disappointment, the debilitated frames and emaciated countenances of Dr. Richardson and Hepburn presented themselves at the door. They were of course gladly received, although each marked the ravages which famine, care, and fatigue had made on the other. The Doctor particularly remarked the sepulchral tone of the voices of his friends, which he requested them to make more cheerful if possible, unconscious that his own partook of the same key.

Hepburn having shot a partridge, which was brought to

the house, Dr. Richardson tore out the feathers, and having held it to the fire a few minutes, divided it into six portions. Franklin and his three companions ravenously devoured their shares, as it was the first morsel of flesh any of them had tasted for thirty-one days, unless, indeed, the small gristly particles which they found adhering to the pounded bones may be termed flesh. Their spirits were revived by this small supply, and the Doctor endeavoured to raise them still higher by the prospect of Hepburn's being able to kill a deer next day, as they had seen, and even fired at, several near the house. He endeavoured, too, to rouse them into some attention to the comfort of their apartment. Having brought his Prayer-book and Testament, some prayers, psalms, and portions of scripture, appropriate to their situation, were read out by Dr. Richardson, and they retired to their blankets.

Early next morning, the Doctor and Hepburn went out in search of game; but though they saw several herds of deer, and fired some shots, they were not so fortunate as to kill any, being too weak to hold their guns steadily. The cold compelled the former to return soon, but Hepburn perseveringly persisted until late in the evening.

"My occupation (continues Franklin) was to search for skins under the snow, it being now our object immediately to get all that we could; but I had not strength to drag in more than two of those which were within twenty yards of the house, until the Doctor came and assisted me. We made up our stock to twenty-six; but several of them were putrid, and scarcely eatable, even by men suffering the extremity of famine. Peltier and Samandre continued very weak and dispirited, and they were unable to cut firewood. Hepburn had, in consequence, that laborious task to perform after he came back late from hunting." To the exertions, honesty, kindness, and consideration of this worthy man, the safety of most of the party is to be attributed. And I may here mention that Sir John Franklin, when he became governor of Van Diemen's Land, obtained for him a good civil appointment. This deserving man, I am informed by Mr. Barrow, is now in England, having lost his office, which, I believe, has been abolished. It is to be hoped something will be done for him by the government.

After their usual supper of singed skin and bone soup, Dr. Richardson acquainted Franklin with the events that had transpired since their parting, particularly with the afflicting circumstances attending the death of Mr. Hood,

and Michel, the Iroquois; the particulars of which I shall now proceed to condense from his narrative.

After Captain Franklin had bidden them farewell, having no *tripe de roche* they drank an infusion of the country tea plant, which was grateful from its warmth, although it afforded no sustenance. They then retired to bed, and kept to their blankets all next day, as the snow drift was so heavy as to prevent their lighting a fire with the green and frozen willows, which were their only fuel.

Through the extreme kindness and forethought of a lady, the party, previous to leaving London, had been furnished with a small collection of religious books, of which (says Richardson) we still retained two or three of the most portable, and they proved of incalculable benefit to us.

"We read portions of them to each other as we lay in bed, in addition to the morning and evening service, and found that they inspired us on each perusal with so strong a sense of the Omnipresence of a beneficent God, that our situation, even in these wilds, appeared no longer destitute; and we conversed not only with calmness, but with cheerfulness, detailing with unrestrained confidence the past events of our lives, and dwelling with hope on our future prospects." How beautiful a picture have we here represented, of true piety and resignation to the Divine Will inducing patience and submission under an unexampled load of misery and privation.

Michel the Iroquois joined them on the 9th Oct., having, there is strong reason to believe, murdered two of the Canadians who were with him, Jean Baptiste Belanger and Perrault, as they were never seen afterwards, and he gave so many rambling and contradictory statements of his proceedings, that no credit could be attached to his story.

The travellers proceeded on their tedious journey by slow stages. Mr. Hood was much affected with dimness of sight, giddiness, and other symptoms of extreme debility, which caused them to move slowly and to make frequent halts. Michel absented himself all day of the 10th, and only arrived at their encampment near the pines late on the 11th.

He reported that he had been in chase of some deer which passed near his sleeping place in the morning, and although he did not come up with them, yet that he found a wolf which had been killed by the stroke of a deer's horn, and had brought a part of it.

Richardson adds—"We implicitly believed this story then, but afterwards became aware—from circumstances,

the details of which may be spared—that it must have been a portion of the body of Belanger or Perrault. A question of moment here presents itself—namely, whether he actually murdered these men, or either of them, or whether he found the bodies in the snow. Captain Franklin, who is the best able to judge of this matter, from knowing their situation when he parted from them, suggested the former idea, and that both these men had been sacrificed; that Michel, having already destroyed Belanger, completed his crime by Perrault's death, in order to screen himself from detection."

Although this opinion is founded only on circumstances, and is unsupported by direct evidence, it has been judged proper to mention it, especially as the subsequent conduct of the man showed that he was capable of committing such a deed. It is not easy to assign any other adequate motive for his concealing from Richardson that Perrault had turned back; while his request, over-night, that they would leave him the hatchet, and his cumbering himself with it when he went out in the morning, unlike a hunter, who makes use only of his knife when he kills a deer, seem to indicate that he took it for the purpose of cutting up something that he knew to be frozen.

Michel left them early next day, refusing Dr. Richardson's offer to accompany him, and remained out all day. He would not sleep in the tent with the other two at night. On the 13th, there being a heavy gale, they passed the day by their fire, without food. Next day, at noon, Michel set out, as he said, to hunt, but returned unexpectedly in a short time. This conduct surprised his companions, and his contradictory and evasive answers to their questions excited their suspicions still further. He subsequently refused either to hunt or cut wood, spoke in a very surly manner, and threatened to leave them. When reasoned with by Mr. Hood, his anger was excited, and he replied it was no use hunting—there were no animals, and they had better kill and eat him.

"At this period," observes Dr. Richardson, "we avoided as much as possible conversing upon the hopelessness of our situation, and generally endeavoured to lead the conversation towards our future prospects in life. The fact is, that with the decay of our strength, our minds decayed, and we were no longer able to bear the contemplation of the horrors that surrounded us. Yet we were calm and resigned to our fate; not a murmur escaped us, and we were punctual and fervent in our addresses to the Supreme Being."

On the morning of the 20th, they again urged Michel to go a-hunting, that he might, if possible, leave them some provision, as he intended quitting them next day, but he showed great unwillingness to go out, and lingered about the fire under the pretence of cleaning his gun. After the morning service had been read, Dr. Richardson went out to gather some *tripe de roche*, leaving Mr. Hood sitting before the tent at the fireside, arguing with Michel; Hepburn was employed cutting fire-wood. While they were thus engaged, the treacherous Iroquois took the opportunity to place his gun close to Mr. Hood, and shoot him through the head. He represented to his companions that the deceased had killed himself. On examination of the body, it was found that the shot had entered the back part of the head and passed out at the forehead, and that the muzzle of the gun had been applied so close as to set fire to the nightcap behind. Michel protested his innocence of the crime, and Hepburn and Dr. Richardson dared not openly to evince their suspicion of his guilt.

Next day, Dr. Richardson determined on going straight to the Fort. They singed the hair off a part of the buffalo robe that belonged to their ill-fated companion, and boiled and ate it. In the course of their march, Michel alarmed them much by his gestures and conduct, was constantly muttering to himself, expressed an unwillingness to go to the Fort, and tried to persuade them to go southward to the woods, where he said he could maintain himself all the winter by killing deer. "In consequence of this behaviour, and the expression of his countenance, I requested him (says Richardson) to leave us, and to go to the southward by himself. This proposal increased his ill-nature; he threw out some obscure hints of freeing himself from all restraint on the morrow; and I overheard him muttering threats against Hepburn, whom he openly accused of having told stories against him. He also, for the first time, assumed such a tone of superiority in addressing me, as evinced that he considered us to be completely in his power; and he gave vent to several expressions of hatred towards the white people, some of whom, he said, had killed and eaten his uncle and two of his relations. In short, taking every circumstance of his conduct into consideration, I came to the conclusion that he would attempt to destroy us on the first opportunity that offered, and that he had hitherto abstained from doing so from his ignorance of his way to the Fort, but that he would never suffer us to go thither in company with him. Hepburn and I were not in a condition to resist even an

open attack, nor could we by any device escape from him —our united strength was far inferior to his; and, beside his gun, he was armed with two pistols, an Indian bayonet, and a knife.

"In the afternoon, coming to a rock on which there was some *tripe de roche*, he halted, and said he would gather it whilst we went on, and that he would soon overtake us.

"Hepburn and I were now left together for the first time since Mr. Hood's death, and he acquainted me with several material circumstances, which he had observed of Michel's behaviour, and which confirmed me in the opinion that there was no safety for us except in his death, and he offered to be the instrument of it. I determined, however, as I was thoroughly convinced of the necessity of such a dreadful act, to take the whole responsibility upon myself; and immediately upon Michel's coming up, I put an end to his life by shooting him through the head with a pistol. Had my own life alone been threatened (observes Richardson, in conclusion), I would not have purchased it by such a measure, but I considered myself as entrusted also with the protection of Hepburn's, a man who, by his humane attentions and devotedness, had so endeared himself to me, that I felt more anxiety for his safety than for my own.

"Michel had gathered no *tripe de roche*, and it was evident to us that he had halted for the purpose of putting his gun in order with the intention of attacking us—perhaps whilst we were in the act of encamping."

Persevering onward in their journey as well as the snow-storms and their feeble limbs would permit, they saw several herds of deer, but Hepburn, who used to be a good marksman, was now unable to hold the gun straight. Following the track of a wolverine which had been dragging something, he however found the spine of a deer which it had dropped. It was clean picked, and at least one season old, but they extracted the spinal marrow from it.

A species of *cornicularia*, a kind of lichen, was also met with, that was found good to eat when moistened and toasted over the fire. They had still some pieces of singed buffalo-hide remaining, and Hepburn, on one occasion, killed a partridge, after firing several times at a flock. About dusk of the 29th they reached the Fort.

"Upon entering the desolate dwelling, we had the satisfaction of embracing Captain Franklin, but no words can convey an idea of the filth and wretchedness that met our eyes on looking around. Our own misery had stolen upon us by degrees, and we were accustomed to the contempla-

tion of each other's emaciated figures; but the ghastly countenances, dilated eye-balls, and sepulchral voices of Captain Franklin and those with him were more than we could at first bear."

Thus ends the narrative of Richardson's journey.

To resume the detail of proceedings at the Fort. On the 1st of November two of the Canadians, Peltier and Samandre, died from sheer exhaustion.

On the 7th of November they were relieved from their privations and sufferings by the arrival of three Indians, bringing a supply of dried meat, some fat, and a few tongues, which had been sent off by Back with all haste from Akaitcho's encampment on the 5th. These Indians nursed and attended them with the greatest care, cleansed the house, collected fire-wood, and studied every means for their general comfort. Their sufferings were now at an end. On the 26th of November they arrived at the encampment of the Indian chief, Akaitcho. On the 6th of December, Belanger and another Canadian arrived, bringing further supplies, and letters from England, from Mr. Back, and their former companion, Mr. Wentzel.

The despatches from England announced the successful termination of Captain Parry's voyage, and the promotion of Captain Franklin, Mr. Back, and of poor Mr. Hood.

On the 18th they reached the Hudson's Bay Company's establishment at Moose Deer Island, where they joined their friend Mr. Back. They remained at Fort Chipewyan until June of the following year.

It is now necessary to relate the story of Mr. Back's journey, which, like the rest, is a sad tale of suffering and privation.

Having been directed on the 4th of October, 1821, to proceed with St. Germain, Belanger, and Beauparlant to Fort Enterprise, in the hopes of obtaining relief for the party, he set out. Up to the 7th they met with a little *tripe de roche*, but this failing them they were compelled to satisfy, or rather allay, the cravings of hunger, by eating a gun-cover and a pair of old shoes. The grievous disappointment experienced on arriving at the house, and finding it a deserted ruin, cannot be told.

"Without the assistance of the Indians, bereft of every resource, we felt ourselves (says Mr. Back) reduced to the most miserable state, which was rendered still worse from the recollection that our friends in the rear were as miserable as ourselves. For the moment, however, hunger prevailed, and each began to gnaw the scraps of putrid and frozen meat and skin that were lying about, without waiting to prepare them." A fire was, however,

afterwards made, and the neck and bones of a deer found in the house were boiled and devoured.

After resting a day at the house, Mr. Back pushed on with his companions in search of the Indians, leaving a note for Captain Franklin, informing him if he failed in meeting with the Indians, he intended to push on for the first trading establishment—distant about 130 miles—and send us succour from thence. On the 11th he set out on the journey, a few old skins having been first collected to serve as food.

On the 13th and 14th of October they had nothing whatever to eat. Belanger was sent off with a note to Franklin. On the 15th they were fortunate enough to fall in with a partridge, the bones of which were eaten, and the remainder reserved for bait to fish with. Enough *tripe de roche* was, however, gathered to make a meal. Beauparlant now lingered behind, worn out by extreme weakness. On the 17th a number of crows, perched on some high pines, led them to believe that some carrion was near; and on searching, several heads of deer, half buried in the snow and ice, without eyes or tongues, were found. An expression of "Oh, merciful God, we are saved," broke from them both, and with feelings more easily imagined than described, they shook hands, not knowing what to say for joy.

St. Germain was sent back to bring up Beauparlant, for whose safety Back became very anxious, but he found the poor fellow frozen to death.

The night of the 17th was cold and clear, but they could get no sleep. "From the pains of having eaten, we suffered (observes Back) the most excruciating torments, though I in particular did not eat a quarter of what would have satisfied me; it might have been from having eaten a quantity of raw or frozen sinews of the legs of deer, which neither of us could avoid doing, so great was our hunger."

On the following day Belanger returned famishing with hunger, and told of the pitiable state of Franklin and his reduced party. Back, both this day and the next, tried to urge on his companions towards the object of their journey, but he could not conquer their stubborn determinations. They said they were unable to proceed from weakness; knew not the way; that Back wanted to expose them again to death, and in fact loitered greedily about the remnants of the deer till the end of the month. "It was not without the greatest difficulty that I could restrain the men from eating every scrap they found: though they

were well aware of the necessity there was of being economical in our present situation, and to save whatever they could for our journey, yet they could not resist the temptation; and whenever my back was turned they seldom failed to snatch at the nearest piece to them, whether cooked or raw. Having collected with great care, and by self-denial, two small packets of dried meat or sinews sufficient (for men who knew what it was to fast) to last for eight days, at the rate of one indifferent meal per day, they set out on the 30th. On the 3rd of November they came on the track of Indians, and soon reached the tents of Akaitcho and his followers, when food was obtained, and assistance sent off to Franklin.

In July they reached York Factory, from whence they had started three years before, and thus terminated a journey of 5550 miles, during which human courage and patience were exposed to trials such as few can bear with fortitude, unless, as is seen in Franklin's interesting narrative, arising out of reliance on the ever-sustaining care of an Almighty Providence.

## Parry's First Voyage, 1819—1820.

The Admiralty having determined to continue the progress of discovery in the Arctic seas, Lieut. W. E. Parry, who had been second in command under Capt. Ross, in the voyage of the previous year, was selected to take charge of a new expedition, consisting of the *Hecla* and *Griper*. The chief object of this voyage was to pursue the survey of Lancaster Sound, and decide on the probability of a north-west passage in that direction; failing in which, Smith's and Jones's Sounds were to be explored, with the same purpose in view.

The respective officers appointed to the ships, were—

*Hecla*, 375 tons:

Lieut. and Commander—W. E. Parry.
Lieutenant—Fred. W. Beechey.
Captain—E. Sabine, R.A., Astronomer.
Purser—W. H. Hooper.
Surgeon—John Edwards.
Assistant-Surgeon—Alexander Fisher.
Midshipmen—James Clarke Ross, J. Nias, W. J. Dealy, Charles Palmer, John Bushnan.
Greenland Pilots—J. Allison, master; G. Crawfurd, mate.
44 Petty Officers, Seamen, &c.
Total complement, 58.

*Griper*, 180 tons :

Lieut. and Commander—Matthew Liddon.
Lieutenant—H. P. Hoppner.
Assistant-Surgeon—C. J. Beverley.
Midshipmen—A. Reid, A. M. Skene, W. N. Griffiths.
Greenland Pilots—George Fyfe, master; A. Elder, mate.
28 Petty Officers, Seamen, &c.
Total complement, 36.

The ships were raised upon, strengthened, and well found in stores and provisions for two years. On the 11th of May, 1819, they got away from the Thames, and after a fair passage fell in with a considerable quantity of ice in the middle of Davis Straits about the 20th of June; it consisted chiefly of fragments of icebergs, on the outskirts of the glaciers that form along the shore. After a tedious passage through the floes of ice, effected chiefly by heaving and warping, they arrived at Possession Bay on the morning of the 31st of July, being just a month earlier than they were here on the previous year. As many as fifty whales were seen here in the course of a few hours. On landing, they were not a little astonished to find their own footprints of the previous year still distinctly visible in the snow. During an excursion of three or four miles into the interior, a fox, a raven, several ring-plovers and snow-buntings, were seen, as also a bee, from which it may be inferred that honey is to be procured even in these wild regions. Vegetation flourishes remarkably well here, considering the high latitude, for wherever there was moisture tufts and various ground plants grew in considerable abundance.

Proceeding on from hence into the Sound, they verified the opinion which had previously been entertained by many of the officers, that the *Croker Mountains* had no existence, for on the 4th of August the ships were in long. 86° 56′ W., three degrees to the westward of where land had been laid down by Ross in the previous year. The strait was named after Sir John Barrow, and was found to be pretty clear; but on reaching Leopold Island, the ice extended in a compact body to the north, through which it was impossible to penetrate. Rather than remain inactive, waiting for the dissolution of the ice, Parry determined to try what could be done by shaping his course to the southward, through the magnificent inlet now named Regent Inlet. About the 6th of August, in

consequence of the local attraction, the ordinary compasses became useless from their great variation, and the binnacles were removed from the deck to the carpenter's store-room as useless lumber, the azimuth compasses alone remaining; and these became so sluggish in their motions, that they required to be very nicely levelled, and frequently tapped before the card traversed. The local attraction was very great, and a mass of iron-stone found on shore attracted the magnet powerfully. The ships proceeded 120 miles from the entrance.

On the 8th of August, in lat. 72° 13′ N., and long. 90° 29′ W., (his extreme point of view Parry named Cape Kater), the *Hecla* came to a compact barrier of ice extending across the inlet, which rendered one of two alternatives necessary, either to remain here until an opening took place, or to return again to the northward. The latter course was determined on. Making, therefore, for the northern shore of Barrow's Strait, on the 20th a narrow channel was discovered between the ice and the land. On the 22nd, proceeding due west, after passing several bays and headlands, they noticed two large openings or passages, the first of which, more than eight leagues in width, he named Wellington Channel. To various capes, inlets, and groups of islands passed, Parry assigned the names of Hotham, Barlow, Cornwallis, Bowen, Byam Martin, Griffith, Lowther, Bathurst, &c. On the 28th a boat was sent on shore at Byam Martin Island with Capt. Sabine, Mr. J. C. Ross, and the surgeons, to make observations, and collect specimens of natural history. The vegetation was rather luxuriant for these regions; moss in particular grew in abundance in the moist valleys and along the banks of the streams that flowed from the hills. The ruins of six Esquimaux huts were observed. Tracks of rein-deer, bears, and musk oxen were noticed, and the skeletons, skulls, and horns of some of these animals were found.

On the 1st of September, they discovered the large and fine island, to which Parry has given the name of Melville Island after the First Lord of the Admiralty of that day. On the following day, two boats with a party of officers were despatched to examine its shores. Some rein-deer and musk oxen were seen on landing, but being startled by the sight of a dog, it was found impossible to get near them. There seemed here to be a great quantity of the animal tribe, for the tracks of bears, oxen, and deer were numerous, and the horns, skin, and skulls were also found.

The burrows of foxes and field-mice were observed; several ptarmigan were shot, and flocks of snow-bunting, geese, and ducks, were noticed, probably commencing their migration to a milder climate. Along the beach there was an immense number of small shrimps, and various kinds of shells.

On the 4th of September, Parry had the satisfaction of crossing the meridian of 110° W. in the latitude of 74° 44′ 20″, by which the expedition became entitled to the reward of 5000*l.*, granted by an order in Council upon the Act 58 Geo. III., cap. 20, entitled "An Act for more effectually discovering the longitude at sea, and encouraging attempts to find a northern passage between the Atlantic and Pacific Oceans, and to approach the North Pole." This fact was not announced to the crews until the following day; to celebrate the event they gave to a bold cape of the island then in sight the name of Bounty Cape; and so anxious were they now to press forward, that they began to calculate the time when they should reach the longitude of 130° W., the second place specified by the order in Council for reward. On the afternoon of the 5th, the compactness of the ice stopped them, and therefore, for the first time since leaving England, the anchor was let go, and that in 110° W. longitude.

A boat was sent on shore on the 6th to procure turf or peat for fuel, and, strangely enough, some small pieces of tolerably good coal were found in various places scattered over the surface. A party of officers that went on shore on the 8th killed several grouse on the island, and a white hare; a fox, some field mice, several snow-bunting, a snowy owl, and four musk oxen were seen. Ducks, in small flocks, were seen along the shore, as well as several glaucous gulls and tern; and a solitary seal was observed.

As the ships were coasting along on the 7th, two herds of musk oxen were seen grazing, at the distance of about three-quarters of a mile from the beach: one herd consisted of nine, and the other of five of these cattle. They had also a distant view of two rein-deer.

The average weight of the hares here is about eight pounds. Mr. Fisher the surgeon, from whose interesting journal I quote, states that it is very evident that this island must be frequented, if not constantly inhabited, by musk oxen in great numbers, for their bones and horns are found scattered about in all directions, and the greatest part of the carcase of one was discovered on one occasion. The skulls of two carnivorous animals, a wolf and a lynx,

were also picked up here. A party sent to gather coals brought on board about half a bushel—all they could obtain.

On the morning of the 10th, Mr. George Fyfe, the master pilot, with a party of six men belonging to the *Griper*, landed with a view of making an exploring trip of some fifteen or twenty miles into the interior. They only took provisions for a day with them. Great uneasiness was felt that they did not return; and when two days elapsed, fears began to be entertained for their safety, and it was thought they must have lost their way.

Messrs. Reid (midshipman), Beverley (assistant-surgeon), and Wakeham (clerk), volunteered to go in search of their missing messmates, but themselves lost their way; guided by the rockets, fires, and lights exhibited, they returned by ten at night, almost exhausted with cold and fatigue, but without intelligence of their friends. Four relief parties were therefore organized, and sent out on the morning of the 13th to prosecute the search, and one of them fell in with and brought back four of the wanderers, and another the remaining three before nightfall.

The feet of most of them were much frost-bitten, and they were all wearied and worn out with their wanderings. It appears they had lost their way the evening of the day they went out. With regard to food, they were by no means badly off, for they managed to kill as many grouse as they could eat.

They found fertile valleys and level plains in the interior, abounding with grass and moss; also a lake of fresh water, about two miles long by one broad, in which were several species of trout. They saw several herds of rein-deer on the plains, and two elk; also many hares, but no musk oxen. Some of those, however, who had been in search of the stray party, noticed herds of these cattle.

The winter now began to set in, and the packed ice was so thick, that fears were entertained of being locked up in an exposed position on the coast; it was, therefore, thought most prudent to put back, and endeavour to reach the harbour which had been passed some days before. The vessels now got seriously buffeted among the floes and hummocks of ice. The *Griper* was forced aground on the beach, and for some time was in a very critical position. Lieutenant Liddon having been confined to his cabin by a rheumatic complaint, was pressed at this juncture by Commander Parry to allow himself to be removed to the *Hecla*, but he nobly refused, stating that he should be the

last to leave the ship, and continued giving orders. The beach being sand, the *Griper* was got off without injury.

On the 23rd of September they anchored off the mouth of the harbour, and the thermometer now fell to 1°. The crew were set to work to cut a channel through the ice to the shore, and in the course of three days, a canal, two and a half miles in length, was completed, through which the vessel was tracked. The ice was eight or nine inches thick. An extra allowance of preserved meat was served out to the men, in consideration of their hard labour. The vessels were unrigged, and everything made snug and secure for passing the winter. Captain Parry gave the name of the North Georgian Islands to this group, after his Majesty, King George III., but this has since been changed to the Parry Islands.

Two reindeer were killed on the 1st of October, and several white bears were seen. On the 6th a deer was killed, which weighed 170 pounds. Seven were seen on the 10th, one of which was killed, and another severely wounded. Following after this animal, night overtook several of the sportsmen, and the usual signals of rockets, lights, &c. were exhibited, to guide them back. One, John Pearson, a marine, had his hands so frost-bitten that he was obliged, on the 2nd of November, to have the four fingers of his left hand amputated. A wolf and four reindeer were seen on the 14th. A herd of fifteen deer were seen on the 15th; but those who saw them could not bring down any, as their fowling-pieces missed fire, from the moisture freezing on the locks. On the 17th and 18th herds of eleven and twenty respectively, were seen, and a small one was shot. A fox was caught on the 29th, which is described as equally cunning with his brethren of the temperate regions.

To make the long winter pass as cheerfully as possible, plays were acted, a school established, and a newspaper set on foot, certainly the first periodical publication that had ever issued from the Arctic regions. The title of this journal, the editorial duties of which were undertaken by Captain Sabine, was "The Winter Chronicle, or New Georgia Gazette." The first number appeared on the 1st of November.

On the evening of the 5th of November the farce of "Miss in her Teens" was brought out, to the great amusement of the ships' companies, and, considering the local difficulties and disadvantages under which the performers laboured, their first essay, according to the officers'

report, did them infinite credit. Two hours were spent very happily in their theatre on the quarter-deck, notwithstanding the thermometer outside the ship stood at zero, and within as low as the freezing point, except close to the stoves, where it was a little higher. Another play was performed on the 24th, and so on every fortnight. The men were employed during the day in banking up the ships with snow.

On the 23rd of December, the officers performed "The Mayor of Garratt," which was followed by an after-piece, written by Captain Parry, entitled the "North-West Passage, or the Voyage Finished." The sun having long since departed, the twilight at noon was so clear that books in the smallest print could be distinctly read.

On the 6th of January, the farce of "Bon Ton" was performed, with the thermometer at 27° below zero. The cold became more and more intense. On the 12th it was 51° below zero, in the open air; brandy froze to the consistency of honey; when tasted in this state it left a smarting on the tongue. The greatest cold experienced was on the 14th January, when the thermometer fell to 54° below zero. On the 3rd of February, the sun was first visible above the horizon, after eighty-four days' absence. It was seen from the maintop of the ships, a height of about fifty-one feet above the sea.

On the forenoon of the 24th a fire broke out at the storehouse, which was used as an observatory. All hands proceeded to the spot to endeavour to subdue the flames, but having only snow to throw on it, and the mats with which the interior was lined being very dry, it was found impossible to extinguish it. The snow, however, covered the astronomical instruments and secured them from the fire, and when the roof had been pulled down the fire had burned itself out. Considerable as the fire was, its influence or heat extended but a very short distance, for several of the officers and men were frost-bitten, and confined from their efforts for several weeks. John Smith, of the Artillery, who was Captain Sabine's servant, and who, together with Sergeant Martin, happened to be in the house at the time the fire broke out, suffered much more severely. In their anxiety to save the dipping needle, which was standing close to the stove, and of which they knew the value, they immediately ran out with it; and Smith not having time to put on his gloves, had his fingers in half an hour so benumbed, and the animation so completely suspended, that on his being taken on board by Mr. Edwards, and having his

hands plunged into a basin of cold water, the surface of the water was immediately frozen by the intense cold thus suddenly communicated to it; and notwithstanding the most humane and unremitting attention paid him by the medical gentlemen, it was found necessary, some time after, to resort to the amputation of a part of four fingers on one hand, and three on the other.

Parry adds, "the appearance which our faces presented at the fire was a curious one; almost every nose and cheek having become quite white with frost bites, in five minutes after being exposed to the weather, so that it was deemed necessary for the medical gentlemen, together with some others appointed to assist them, to go constantly round while the men were working at the fire, and to rub with snow the parts affected, in order to restore animation."

The weather got considerably milder in March; on the 6th the thermometer got up to zero for the first time since the 17th of December. The observatory house on shore was now rebuilt.

The vapour, which had been in a solid state on the ship's sides, now thawed below, and the crew, scraping off the coating of ice, removed on the 8th of March above a hundred bucketsfull each, containing from five to six gallons, which had accumulated in less than a month, occasioned principally from the men's breath, and the steam of victuals at meals.

The scurvy now broke out among the crew, and prompt measures were taken to remedy it. Captain Parry took great pains to raise mustard and cress in his cabin for the men's use.

On the 30th of April the thermometer stood at the freezing point, which it had not done since the 12th of September last. On the 1st of May the sun was seen at midnight for the first time that season.

A survey was now taken of the provisions, fuel, and stores; much of the lemon juice was found destroyed from the bursting of the bottles by the frost. Having been only victualled for two years, and half that period having expired, Captain Parry, as a matter of prudence, reduced all hands to two-thirds allowance of all sorts of provisions, except meat and sugar.

The crew were now set to work in cutting away the ice round the ships: the average thickness was found to be seven feet. Many of the men who had been out on excursions began to suffer much from snow blindness. The sensation when first experienced, is described as like that felt when dust or sand gets into the eyes. They

were, however, cured in the course of two or three days by keeping the eyes covered, and bathing them occasionally with sugar of lead, or some other cooling lotion.

To prevent the recurrence of the complaint, the men were ordered to wear a piece of crape or some substitute for it over the eyes.

The channel round the ships was completed by the 17th of May, and they rose nearly two feet, having been kept down by the pressure of the ice round them, although lightened during the winter by the consumption of food and fuel. On the 24th they were astonished by two showers of rain, a most extraordinary phenomenon in these regions. Symptoms of scurvy again appeared among the crew; one of the seamen who had been recently cured, having imprudently been in the habit of eating the fat skimmings, or "slush," in which salt meat had been boiled, and which was served out for their lamps. As the hills in many places now became exposed and vegetation commenced, two or three pieces of ground were dug up and sown with seeds of radishes, onions, and other vegetables. Captain Parry determined before leaving to make an excursion across the island for the purpose of examining its size, boundaries, productions, &c. Accordingly on the 1st of June an expedition was organized, consisting of the commander, Captain Sabine, Mr. Fisher, the assistant-surgeon, Mr. John Nias, midshipman of the *Hecla*, and Mr. Reid, midshipman of the *Griper*, with two sergeants, and five seamen and marines. Three weeks' provisions were taken, which together with two tents, wood for fuel, and other articles, weighing in all about 800 lbs., was drawn on a cart prepared for the purpose by the men.

Each of the officers carried a knapsack with his own private baggage, weighing from 18 to 24 lbs., also his gun and ammunition. The party started in high glee, under three hearty cheers from their comrades, sixteen of whom accompanied them for five miles, carrying their knapsacks and drawing the cart for them.

They travelled by night, taking rest by day, as it was found to be warmer for sleep, and they had only a covering of a single blanket each, besides the clothes they had on.

On the 2nd they came to a small lake, about half a mile long, and met with eider ducks and ptarmigan; seven of the latter were shot. From the top of a range of hills at which they now arrived, they could see the masts of the ships in Winter Harbour with the naked eye, at about

ten or eleven miles distant. A vast plain was also seen extending to the northward and westward.

The party breakfasted on biscuit and a pint of gruel each, made of salep powder, which was found to be a very palatable diet. Reindeer with their fawns were met with.

They derived great assistance in dragging their cart by rigging upon it one of the tent blankets as a sail, a truly nautical contrivance, and the wind favouring them, they made great progress in this way. Captain Sabine being taken ill with a bowel complaint, had to be conveyed on this novel sail carriage. They, however, had some ugly ravines to pass, the crossings of which were very tedious and troublesome. On the 7th the party came to a large bay, which was named after their ships, Hecla and Griper Bay. The blue ice was cut through by hard work with boarding pikes, the only instruments they had, and after digging fourteen and a half feet the water rushed up; it was not very salt, but sufficient to satisfy them that it was the ocean. An island seen in the distance was named after Captain Sabine; some of the various points and capes were also named after others of the party. Although this shore was found blocked up with such heavy ice, there appear to be times when there is open water here, for a piece of fir wood seven and a half feet long, and about the thickness of a man's arm, was found about eighty yards inland from the hummocks of the beach, and about thirty feet above the level of the sea. Before leaving the shore, a monument of stones twelve feet high was erected, in which were deposited, in a tin cylinder, an account of their proceedings, a few coins, and several naval buttons. The expedition now turned back, shaping its course in a more westerly direction, towards some high blue hills, which had long been in sight. On many days several ptarmigans were shot. The horns and tracks of deer were very numerous.

On the 11th they came in sight of a deep gulf, to which Lieutenant Liddon's name was given; the two capes at its entrance being called after Beechey and Hoppner. In the centre was an island about three-quarters of a mile in length, rising abruptly to the height of 700 feet. The shores of the gulf were very rugged and precipitant, and in descending a steep hill, the axle-tree of their cart broke, and they had to leave it behind, taking the body with them, however, for fuel. The wheels, which were left on the spot, may astonish some future adventurer

who discovers them. The stores, &c., were divided among the officers and men.

Making their way on the ice in the gulf, the island in the centre was explored, and named after Mr. Hooper, the purser of the *Hecla*. It was found to be of sandstone, and very barren, rising perpendicularly from the sea on the west side. Four fat geese were killed here, and a great many animals were seen around the gulf; some attention being paid to examining its shores, &c., a fine open valley was discovered, and the tracks of oxen and deer were very numerous; the pasturage appeared to be excellent.

On the 13th, a few ptarmigan and a golden plover were killed. No less than thirteen deer in one herd were seen, and a musk ox for the first time this season.

The remains of six Esquimaux huts were discovered about 300 yards from the beach. Vegetation now began to flourish, the sorrel was found far advanced, and a species of saxifrage was met with in blossom. They reached the ships on the evening of the 15th, after a journey of about 180 miles.

The ships' crews, during their absence, had been occupied in getting ballast in and re-stowing the hold.

Shooting parties were now sent out in various directions to procure game. Dr. Fisher gives an interesting account of his ten days' excursion with a couple of men. The deer were not so numerous as they expected to find them. About thirty were seen, of which his party killed but two, which were very lean, weighing only, when skinned and cleaned, 50 to 60 lbs. A couple of wolves were seen, and some foxes, with a great many hares, four of which were killed, weighing from 7 to 8 lbs. The aquatic birds seen were—brent geese, king ducks, long-tailed ducks, and arctic and glaucous gulls. The land birds were ptarmigans, plovers, sanderlings, and snow buntings. The geese were pretty numerous for the first few days, but got wild and wary on being disturbed, keeping in the middle of lakes out of gun-shot. About a dozen were, however, killed, and fifteen ptarmigans. These birds are represented to be so stupid that all seen may be shot. Dr. Fisher was surprised on his return on the 29th of June, after his ten days' absence, to find how much vegetation had advanced; the land being now completely clear of snow, was covered with the purple-coloured saxifrage in blossom, with mosses, and with sorrel, and the grass was two to three inches long. The men were sent out twice a week to collect the sorrel, and in a few minutes enough could be procured to make a

salad for dinner. After being mixed with vinegar it was regularly served out to the men. The English garden seeds that had been sown got on but slowly, and did not yield any produce in time to be used.

On the 31st of June Wm. Scott, a boatswain's mate, who had been afflicted with scurvy, diarrhœa, &c., died, and was buried on the 2nd of July—a slab of sandstone bearing an inscription, carved by Dr. Fisher, being erected over his grave.

From observations made on the tide during two months, it appears that the greatest rise and fall here is four feet four inches. A large pile of stones was erected on the 14th of July, upon the most conspicuous hill, containing the usual notices, coins, &c., and on a large stone an inscription was left notifying the wintering of the ships here.

On the 1st of August the ships, which had been previously warped out, got clear of the harbour, and found a channel, both eastward and westward, clear of ice, about three or four miles in breadth along the land.

On the 6th they landed on the island, and in the course of the night killed fourteen hares and a number of glaucous gulls, which were found with their young on the top of a precipitous insulated rock.

On the 9th the voyagers had an opportunity of observing an instance of the violent pressure that takes place occasionally by the collision of heavy ice. "Two pieces (says Dr. Fisher) that happened to come in contact close to us pressed so forcibly against one another that one of them, although forty-two feet thick, and at least three times that in length and breadth, was forced up on its edge on the top of another piece of ice. But even this is nothing when compared with the pressure that must have existed to produce the effects that we see along the shore, for, not only heaps of earth and stones several tons weight are forced up, but hummocks of ice, from fifty to sixty feet thick, are piled up on the beach. It is unnecessary to remark that a ship, although fortified as well as wood and iron could make her, would have but little chance of withstanding such overwhelming force."

This day a musk ox was shot, which weighed more than 700 lbs.; the carcass, when skinned and cleaned, yielding 421 lbs. of meat. The flesh did not taste so very strong of musk as had been represented.

The ships made but slow progress, being still thickly beset with floes of ice, 40 or 50 feet thick, and had to make fast for security to hummocks of ice on the beach.

On the 15th and 16th they were off the south-west

point of the island, but a survey of the locality from the precipitous cliff of Cape Dundas, presented the same interminable barrier of ice as far as the eye could reach. A bold high coast was sighted to the south-west, to which the name of Bank's Land was given.

Captain Parry states that on the 23rd the ships received by far the heaviest shocks they had experienced during the voyage, and performed six miles of the most difficult navigation he had ever known among ice.

Two musk bulls were shot on the 24th by parties who landed, out of a herd of seven which were seen. They were lighter than the first one shot—weighing only about 360 lbs. From the number of skulls and skeletons of these animals met with, and their capabilities of enduring the rigour of the climate, it seems probable that they do not migrate southward, but winter on this island.

Attempts were still made to work to the eastward, but on the 25th, from want of wind, and the closeness of the ice, the ships were obliged to make fast again, without having gained above a mile after several hours labour. A fresh breeze springing up on the 26th opened a passage along shore, and the ships made sail to the eastward, and in the evening were off their old quarters in Winter Harbour. On the following evening, after a fine run, they were off the east end of Melville Island. Lieut. Parry, this day, announced to the officers and crew that after due consideration and consultation, it had been found useless to prosecute their researches farther westward, and therefore endeavours would be made in a more southerly direction, failing in which, the expedition would return to England. Regent Inlet and the southern shores generally, were found so blocked up with ice, that the return to England was on the 30th of August publicly announced. This day, Navy Board and Admiralty Inlets were passed, and on the 1st of September the vessels got clear of Barrow Strait, and reached Baffin's Bay on the 5th. They fell in with a whaler belonging to Hull, from whom they learnt the news of the death of George the Third and the Duke of Kent, and that eleven vessels having been lost in the ice last year, fears were entertained for their safety. The *Friendship*, another Hull whaler, informed them that in company with the *Truelove* she had looked into Smith's Sound that summer. The *Alexander*, of Aberdeen, one of the ships employed on the former voyage of discovery to these seas, had also entered Lancaster Sound. After touching at Clyde's River, where they met a good-natured tribe of Esquimaux, the ships made the best of their way

across the Atlantic, and after a somewhat boisterous passage, Commodore Parry landed at Peterhead on the 30th of October, and, accompanied by Captain Sabine and Mr. Hooper, posted to London.

## PARRY'S SECOND VOYAGE, 1821—1823.

THE experience which Capt. Parry had formed in his previous voyage, led him to entertain the opinion that a communication might be found between Regent Inlet and Roe's Welcome, or through Repulse Bay, and thence to the north-western shores. The following are his remarks: "On an inspection of the charts I think it will also appear probable that a communication will one day be found to exist between this inlet (Prince Regent's) and Hudson's Bay, either through the broad and unexplored channel called Sir Thomas Roe's Welcome, or through Repulse Bay, which has not yet been satisfactorily examined. It is also probable that a channel will be found to exist between the western land and the northern coast of America." Again, in another place, he says, "Of the existence of a North-West Passage to the Pacific it is now scarcely possible to doubt, and from the success which attended our efforts in 1819, after passing through Sir James Lancaster's Sound, we were not unreasonable in anticipating its complete accomplishment. But the season in which it is practicable to navigate the Polar Seas does not exceed seven weeks. From all that we observed it seems desirable that ships endeavouring to reach the Pacific Ocean by this route should keep if possible on the coast of America, and the lower in latitude that coast may be found, the more favourable will it prove for the purpose; hence Cumberland Strait, Sir Thomas Roe's Welcome, and Repulse Bay appear to be the points most worthy of attention. I cannot therefore but consider that any expedition equipped by Great Britain with this view ought to employ its best energies in attempting to penetrate from the eastern coast of America along its northern shore. In consequence of the partial success which has hitherto attended our attempts, the whalers have already extended their views, and a new field has been opened for one of the most lucrative branches of our commerce, and what is scarcely of less importance, one of the most valuable nurseries for seamen which Great Britain possesses."—*Parry's First Voyage*, vol. ii. p. 240.

Pleased with his former zeal and enterprise, and in order to give him an opportunity of testing the truth of

soon beset. Fifty-four icebergs were counted from the mast-head.

On the 3rd they made some progress through very heavy floes; but on the tide turning, the loose ice flew together with such rapidity and noise, that there was barely time to secure the ships in a natural dock, before the two streams met, and even then they received some heavy shocks. Water was procured for use from the pools in the floe to which the ships were made fast; and this being the first time of doing so, afforded great amusement to the novices, who, even when it was their period of rest, preferred pelting each other with snow-balls, to going to bed. Buffeting with eddies, strong currents, and dangerous bergs, they were kept in a state of anxiety and danger, for a week or ten days. On one occasion, with the prospect of being driven on shore, the pressure they experienced was so great, that five hawsers, six inches thick, were carried away, and the best bower anchor of the *Hecla* was wrenched from the bows, and broke off at the head of the shank, with as much ease as if, instead of weighing upwards of a ton, it had been of crockery ware. For a week they were embayed by the ice, and during this period they saw three strange ships, also beset, under Resolution Island, which they contrived to join on the 16th of July, making fast to a floe near them. They proved to be the Hudson's Bay Company's traders, *Prince of Wales* and *Eddystone*, with the *Lord Wellington*, chartered to convey 160 natives of Holland, who were proceeding to settle on Lord Selkirk's estate, at the Red River. "Whilst nearing these vessels (says Lyon), we observed the settlers waltzing on deck, for above two hours, the men in old-fashioned grey jackets, and the women wearing long-eared mob caps, like those used by the Swiss peasants. As we were surrounded by ice, and the thermometer was at the freezing point, it may be supposed that this ball, *al vero fresco*, afforded us much amusement." The Hudson's Bay ships had left England twenty days after the expedition.

The emigrant ship had been hampered nineteen days amongst the ice, before she joined the others; and as this navigation was new to her captain and crew, they almost despaired of ever getting to their journey's end, so varied and constant had been their impediments. The Dutchmen had, however, behaved very philosophically during this period, and seemed determined on being merry, in spite of the weather and the dangers. Several marriages had taken place, (the surgeon, who was accompanying them to the colony, officiating as clergyman,) and many

received his promotion as Captain, when the expedition returned.

The ships were accompanied as far as the ice by the *Nautilus* transport, freighted with provisions and stores, which were to be transhipped as soon as room was found for them.

The vessels got away from the little Nore early on the 8th of May, 1821, but meeting with strong gales off the Greenland coast, and a boisterous passage, did not fall in with the ice until the middle of June.

On the 17th of June, in a heavy gale from the southward, the sea stove and carried away one of the quarter boats of the *Hecla*. On the following day, in lat. 60° 53′ N., long. 61° 39′ W., they made the pack or main body of ice, having many large bergs in and near it. On the 19th, Resolution Island, at the entrance of Hudson Strait, was seen distant sixty-four miles. Capt. Lyon states, that during one of the watches, a large fragment was observed to fall from an iceberg near the *Hecla*, which threw up the water to a great height, sending forth at the same time a noise like the report of a great gun. From this period to the 1st of July, the ships were occupied in clearing the *Nautilus* of her stores preparatory to her return home, occasionally made fast to a berg, or driven out to sea by gales. On the 2nd, after running through heavy ice, they again made Resolution Island, and shaping their course for the Strait, were soon introduced to the company of some unusually large icebergs. The altitude of one was 258 feet above the surface of the sea; its total height, therefore, allowing one-seventh only to be visible, must have been about 1806 feet! This however is supposing the base under water not to spread beyond the mass above water. The vessels had scarcely drifted past this floating mountain, when the eddy tide carried them with great rapidity amongst a cluster of eleven bergs of huge size, and having a beautiful diversity of form. The largest of these was 210 feet above the water. The floe ice was running wildly at the rate of three miles an hour, sweeping the vessels past the bergs, against any one of which they might have received incalculable injury. An endeavour was made to make the ships fast to one of them, (for all of them were aground), in order to ride out the tide, but it proved unsuccessful, and the *Fury* had much difficulty in sending a boat for some men who were on a small berg, making holes for her ice anchors. They were therefore swept past and

soon beset. Fifty-four icebergs were counted from the mast-head.

On the 3rd they made some progress through very heavy floes; but on the tide turning, the loose ice flew together with such rapidity and noise, that there was barely time to secure the ships in a natural dock, before the two streams met, and even then they received some heavy shocks. Water was procured for use from the pools in the floe to which the ships were made fast; and this being the first time of doing so, afforded great amusement to the novices, who, even when it was their period of rest, preferred pelting each other with snow-balls, to going to bed. Buffeting with eddies, strong currents, and dangerous bergs, they were kept in a state of anxiety and danger, for a week or ten days. On one occasion, with the prospect of being driven on shore, the pressure they experienced was so great, that five hawsers, six inches thick, were carried away, and the best bower anchor of the *Hecla* was wrenched from the bows, and broke off at the head of the shank, with as much ease as if, instead of weighing upwards of a ton, it had been of crockery ware. For a week they were embayed by the ice, and during this period they saw three strange ships, also beset, under Resolution Island, which they contrived to join on the 16th of July, making fast to a floe near them. They proved to be the Hudson's Bay Company's traders, *Prince of Wales* and *Eddystone*, with the *Lord Wellington*, chartered to convey 160 natives of Holland, who were proceeding to settle on Lord Selkirk's estate, at the Red River. "Whilst nearing these vessels (says Lyon), we observed the settlers waltzing on deck, for above two hours, the men in old-fashioned grey jackets, and the women wearing long-eared mob caps, like those used by the Swiss peasants. As we were surrounded by ice, and the thermometer was at the freezing point, it may be supposed that this ball, *al vero fresco*, afforded us much amusement." The Hudson's Bay ships had left England twenty days after the expedition.

The emigrant ship had been hampered nineteen days amongst the ice, before she joined the others; and as this navigation was new to her captain and crew, they almost despaired of ever getting to their journey's end, so varied and constant had been their impediments. The Dutchmen had, however, behaved very philosophically during this period, and seemed determined on being merry, in spite of the weather and the dangers. Several marriages had taken place, (the surgeon, who was accompanying them to the colony, officiating as clergyman,) and many

more were in agitation; each happy couple always deferring the ceremony until a fine day allowed of an evening ball, which was only terminated by a fresh breeze, or a fall of snow. (*Lyon's Private Journal*, p. 11.) On the 17th the ships were separated by the ice, and they saw no more of their visitors. On the 21st they were only off the Lower Savage Islands. In the evening they saw a very large bear lying on a piece of ice, and two boats were instantly sent off in chase. They approached very close before he took to the water, when he swam rapidly, and made long springs, turning boldly to face his pursuers. It was with difficulty he was captured. As these animals, although very fat and bulky, sink the instant they die, he was lashed to a boat, and brought alongside the ship. On hoisting him in, they were astonished to find that his weight exceeded sixteen hundred pounds, being one of the largest ever killed. Two instances, only, of larger bears being shot are recorded, and these were by Barentz's crew, in his third voyage, at Cherie Island, to which they gave the name of Bear Island. The two bears killed then measured twelve and thirteen feet, while this one only measured eight feet eight inches, from the snout to the insertion of the tail. The seamen ate the flesh without experiencing any of those baneful effects which old navigators attribute to it, and which are stated to have made three of Barentz's people "so sick that we expected they would have died, and their skins peeled off from head to foot." Bruin was very fat, and having procured a tub of blubber from the carcass, it was thrown overboard, and the smell soon attracted a couple of walruses, the first that had been yet seen.

They here fell in with a numerous body of the Esquimaux, who visited them from the shore. In less than an hour the ships were beset with thirty "kayaks," or men's canoes, and five of the women's large boats, or "oomiaks." Some of the latter held upwards of twenty women. A most noisy but merry barter instantly took place, the crew being as anxious to purchase Esquimaux curiosities, as the natives were to procure iron and European toys.

"It is quite out of my power (observes Captain Lyon) to describe the shouts, yells, and laughter of the savages, or the confusion which existed for two or three hours. The females were at first very shy, and unwilling to come on the ice, but bartered everything from their boats. This timidity, however, soon wore off, and they, in the end, became as noisy and boisterous as the men." "It is scarcely possible (he adds) to conceive anything more

ugly or disgusting than the countenances of the old women, who had inflamed eyes, wrinkled skin, black teeth, and, in fact, such a forbidding set of features as scarcely could be called human; to which might be added their dress, which was such as gave them the appearance of aged ourang-outangs. Frobisher's crew may be pardoned for having, in such superstitious times as A.D. 1576, taken one of these ladies for a witch, of whom it is said, 'The old wretch whom our sailors supposed to be a witch, had her buskins pulled off, to see if she was cloven-footed; and being very ugly and deformed, we let her go.'"

In bartering they have a singular custom of ratifying the bargain, by licking the article all over before it is put away in security. Captain Lyon says he frequently shuddered at seeing the children draw a razor over their tongue, as unconcernedly as if it had been an ivory paper-knife. I cannot forbear quoting here some humorous passages from his journal, which stand out in relief to the scientific and nautical parts of the narrative.

"The strangers were so well pleased in our society, that they showed no wish to leave us, and when the market had quite ceased, they began dancing and playing with our people, on the ice alongside. This exercise set many of their noses bleeding, and discovered to us a most nasty custom, which accounted for their gory faces, and which was, that as fast as the blood ran down, they scraped it with the fingers into their mouths, appearing to consider it as a refreshment, or dainty, if we might judge by the zest with which they smacked their lips at each supply." * * *

"In order to amuse our new acquaintances as much as possible, the fiddler was sent on the ice, where he instantly found a most delightful set of dancers, of whom some of the women kept pretty good time. Their only figure consisted in stamping and jumping with all their might. Our musician, who was a lively fellow, soon caught the infection, and began cutting capers also. In a short time every one on the floe, officers, men, and savages, were dancing together, and exhibited one of the most extraordinary sights I ever witnessed. One of our seamen, of a fresh, ruddy complexion, excited the admiration of all the young females, who patted his face, and danced around him wherever he went.

"The exertion of dancing so exhilarated the Esquimaux, that they had the appearance of being boisterously drunk, and played many extraordinary pranks. Amongst others, it was a favourite joke to run slily behind the seamen, and

shouting loudly in one ear, to give them at the same time a very smart slap on the other. While looking on, I was sharply saluted in this manner, and, of course, was quite startled, to the great amusement of the bystanders: our cook, who was a most active and unwearied jumper, became so great a favourite, that every one boxed his ears so soundly, as to oblige the poor man to retire from such boisterous marks of approbation. Amongst other sports, some of the Esquimaux rather roughly, but with great good humour, challenged our people to wrestle. One man, in particular, who had thrown several of his countrymen, attacked an officer of a very strong make, but the poor savage was instantly thrown, and with no very easy fall; yet, although every one was laughing at him, he bore it with exemplary good humour. The same officer afforded us much diversion by teaching a large party of women to bow, curtsey, shake hands, turn their toes out, and perform sundry other polite accomplishments; the whole party, master and pupils, preserving the strictest gravity.

"Towards midnight all our men, except the watch on deck, turned in to their beds, and the fatigued and hungry Esquimaux returned to their boats to take their supper, which consisted of lumps of raw flesh and blubber of seals, birds, entrails, &c.; licking their fingers with great zest, and with knives or fingers scraping the blood and grease which ran down their chins into their mouths."

Many other parties of the natives were fallen in with during the slow progress of the ships, between Salisbury and Nottingham Islands, who were equally as eager to beg, barter, or thieve; and the mouth was the general repository of most of the treasures they received; needles, pins, nails, buttons, beads, and other small et-ceteras, being indiscriminately stowed away there, but detracting in nowise from their volubility of speech. On the 13th of August the weather being calm and fine, narwhals or sea-unicorns were very numerous about the ships, and boats were sent, but without success, to strike one. There were sometimes as many as twenty of these beautiful fish in a shoal, lifting at times their immense horn above the water, and at others showing their glossy backs, which were spotted in the manner of coach dogs in England. The length of these fish is about fifteen feet, exclusive of the horn, which averages five or six more.

Captain Parry landed and slept on Southampton Island. His boat's crew caught in holes on the beach sufficient

sillocks, or young coal-fish, to serve for two meals for the whole ship's company. During the night white whales were seen lying in hundreds close to the rocks, probably feeding on the sillocks. After carefully examining Duke of York Bay, the ships got into the Frozen Strait of Middleton on the morning of the 20th, and an anxious day was closed by passing an opening to the southward, which was found to be Sir Thomas Roe's Welcome, and heaving to for the night off a bay to the north-west. The ships got well in to Repulse Bay on the 22nd, and a careful examination of its shores was made by the boats.

Captains Parry and Lyon, with several officers from each ship, landed and explored the northern shores, while a boat examined the head of the bay. The waters of a long cove are described by Captain Lyon as being absolutely hidden by the quantities of young eider ducks, which, under the direction of their mothers, were making their first essays in swimming.

Captain Lyon with a boat's crew made a trip of a couple of days along some of the indents of the bay, and discovered an inlet, which, however, on being entered subsequently by the ships, proved only to be the dividing channel between an island and the mainland, about six miles in length by one in breadth. Proceeding to the northward by Hurd's channel, they experienced a long rolling ground swell setting against them. On the 28th, ascending a steep mountain, Captain Lyon discovered a noble bay, subsequently named Gore Bay, in which lay a few islands, and towards this they directed their course.

Captain Parry, who had been two days absent with boats exploring the channel and shores of the strait, returned on the 29th, but set off again on the same day with six boats to sound and examine more minutely. When Parry returned at night, Mr. Griffiths, of the *Hecla,* brought on board a large doe, which he had killed while swimming (amongst large masses of ice) from isle to isle ; two others and a fawn were procured on shore by the *Fury's* people. The game laws, as they were laid down on the former voyage while wintering at Melville Island, were once more put in force. These "enacted that for the purpose of economizing the ship's provisions, all deer or musk-oxen killed should be served out in lieu of the usual allowance of meat. Hares, ducks, and other birds were not at this time to be included. As an encouragement to sportsmen, the head, legs, and offal of the larger animals were to be the perquisites of those who procured the carcases for the general good." "In the

animals of this day (observes Lyon) we were convinced that our sportsmen had not forgotten the latitude to which their perquisites might legally extend, for the necks were made so long as to encroach considerably on the vertebræ of the back; a manner of amputating the heads which had been learnt during the former voyage, and, no doubt, would be strictly acted up to in the present one."

Whilst the ships on the 30th were proceeding through this strait, having to contend with heavy wind and wild ice, which with an impetuous tide ran against the rocks with loud crashes, at the rate of five knots in the centre stream; four boats towing astern were torn away by the ice, and, with the men in them, were for some time in great danger. The vessels anchored for the night in a small nook, and weighing at daylight on the 31st they stood to the eastward, but Gore Bay was found closely packed with ice, and most of the inlets they passed were also beset.

A prevalence of fog, northerly wind, and heavy ice in floes of some miles in circumference, now carried the ships, in spite of constant labour and exertions, in three days back to the very spot in Fox's Channel, where a month ago they had commenced their operations. It was not till the 5th of September that they could again get forward, and then by one of the usual changes in the navigation of these seas, the ships ran well to the north-east unimpeded, at the rate of six knots an hour, anchoring for the night at the mouth of a large opening, which was named Lyon Inlet. The next day they proceeded about twenty-five miles up this inlet, which appeared to be about eight miles broad. Captain Parry pushed on with two boats to examine the head of the inlet, taking provisions for a week. He returned on the 14th, having failed in finding any outlet to the place he had been examining, which was very extensive, full of fiords and rapid overfalls of the tide. He had procured a sufficiency of game to afford his people a hot supper every evening, which, after the constant labour of the day, was highly acceptable. He fell in also with a small party of natives who displayed the usual thieving propensities.

Animal food of all kinds was found to be very plentiful in this locality. A fine salmon trout was brought down by one of the officers from a lake in the mountains. The crew of the *Hecla* killed in a fortnight four deer, forty hares, eighty-two ptarmigan, fifty ducks, three divers, three foxes, three ravens, four seals, ermines, marmottes, mice, &c. Two of the seals killed were immense animals of the

bearded species (*Phoca barbata*), very fat, weighing about eight or nine cwt., the others were the common species (*P. vitulina.*)

Captain Parry again left in boats on the 15th to examine more carefully the land that had been passed so rapidly on the 5th and 6th. Not finding him return on the 24th, Captain Lyon ran down the coast to meet him, and by burning blue lights fell in with him at ten that night. It appeared he had been frozen up for two days on the second evening after leaving. When he got clear he ran down to, and sailed round, Gore Bay, at that time perfectly clear of ice, but by the next morning it was quite filled with heavy pieces, which much impeded his return. Once more he was frozen up in a small bay, where he was detained three days; when finding there was no chance of getting out, in consequence of the rapid formation of young ice, by ten hours' severe labour, the boats were carried over a low point of land, a mile and a half wide, and once more launched.

On the 6th of October the impediments of ice continuing to increase, being met with in all its formations of sludge or young ice, pancake ice and bay ice, a small open bay within a little cape of land, forming the S. E. extremity of an island off Lyon Inlet, was sounded, and being found to be safe anchorage the ships were brought in, and, from the indications which were setting in, it was finally determined to secure them there for the winter; by means of a canal half a mile long, which was cut, they were taken further into the bay. The island was named Winter Isle.

Preparations were now made for occupation and amusement, so as to pass away pleasantly the period of detention. A good stock of theatrical dresses and properties having been laid in by the officers before leaving England, arrangements were made for performing plays fortnightly, as on their last winter residence, as a means of amusing the seamen, and in some degree to break the tedious monotony of their confinement. As there could be no desire, or hope of excelling, every officer's name was readily entered on the list of *dramatis personæ*, Captain Lyon kindly undertaking the difficult office of manager. Those *ladies* (says Lyon) who had cherished the growth of their beards and whiskers, as a defence against the inclemency of the climate, now generously agreed to do away with such unfeminine ornaments, and everything bade fair for a most stylish theatre.

As a curiosity, I may here put on record the play-bill for

the evening. I have added the ship to which each officer belonged.

## THEATRE ROYAL,

### WINTER ISLE.

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The Public are respectfully informed that this little, yet elegant, Theatre will open for the season on Friday next, the 9th of November, 1821, when will be performed Sheridan's celebrated Comedy of

### THE RIVALS.

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|---|---|
| *Sir Anthony Absolute* . | Captain Parry (*Fury*). |
| *Captain Absolute* . . | Captain Lyon (*Hecla*). |
| *Sir Lucius O'Trigger* . | Mr. Crozier (*Fury*). |
| *Faulkland* . . . . | Mr. J. Edwards (*Fury*). |
| *Acres* . . . . . | Mr. J. Henderson (*Fury*). |
| *Fag* . . . . . | Lieut. Hoppner (*Hecla*). |
| *David* . . . . . | Lieut. Reid (*Fury*). |
| *Mrs. Malaprop* . . . | Mr. C. Richards (*Hecla*). |
| *Julia* . . . . . | Mr. W. H. Hooper (*Fury*). |
| *Lydia Languish* . . | Mr. J. Sherer (*Hecla*). |
| *Lucy* . . . . . | Mr. W. Mogg (clerk of *Hecla*). |

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Songs by Messrs. C. Palmer (*Hecla*) and J. Henderson will be introduced in the course of the evening.

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On the 17th of December a shivering set of actors performed to a great-coated, yet very cold audience the comedy of the "Poor Gentleman." A burst of true English feeling was exhibited during the performance of this play. In the scene where *Lieut. Worthington* and *Corporal Foss* recount in so animated a manner their former achievements, advancing at the same time, and huzzaing for "Old England," the whole audience, with one accord, rose and gave three most hearty cheers. They then sat down, and the play continued uninterrupted.

On Christmas Eve, in order to keep the people quiet and sober, two farces were performed, and the phantasmagoria (which had been kindly presented anonymously to the ships before leaving by a lady) exhibited, so that the night passed merrily away.

The coldness of the weather proved no bar to the performance of a play at the appointed time. If it amused

the seamen the purpose was answered, but it was a cruel task for the performers. "In our green-room (says Lyon), which was as much warmed as any other part of the Theatre, the thermometer stood at 16°, and on a table which was placed over a stove, and about six inches above it, the coffee froze in the cups. For my sins, I was obliged to be dressed in the height of the fashion, as *Dick Dowlas*, in the "Heir at Law," and went through the last scene of the play with two of my fingers frost-bitten! Let those who have witnessed and admired the performances of a Young, answer if he could possibly have stood so cold a reception."

Captain Parry also states in his Journal, "Among the recreations which afforded the highest gratification to several among us, I may mention the musical parties we were enabled to muster, and which assembled on stated evenings throughout the winter, alternately in Commander Lyon's cabin and in my own. More skilful amateurs in music might well have smiled at these, our humble concerts, but it will not incline them to think less of the science they admire, to be assured that, in these remote and desolate regions of the globe, it has often furnished us with the most pleasurable sensations which our situation was capable of affording; for, independently of the mere gratification afforded to the ear by music, there is, perhaps, scarcely a person in the world really fond of it, in whose mind its sound is not more or less connected with 'his far distant home.' There are always some remembrances which render them inseparable, and those associations are not to be despised, which, while we are engaged in the performance of our duty, can still occasionally transport us into the social circle of our friends at home, in spite of the oceans that roll between us." But their attention was not confined to mere amusements. Much to the credit of the seamen, an application was made in each ship for permission to open an evening school, which was willingly acceded to. Almost every man could read and some could write a little, but several found that, from long disuse, it was requisite to begin again.

Mr. Halse volunteered to superintend the classes in the *Fury;* while Benjamin White, a seaman, who had been educated at Christ's Hospital, officiated as schoolmaster in the *Hecla*, and those best qualified to assist aided in the instruction of their shipmates, who made rapid progress under their tuition. On Christmas Day, Captain Lyon states that he received sixteen copies from men, who two

months before scarcely knew their letters. These little specimens were all well written, and sent with as much pride as if the writers had been good little schoolboys, instead of stout and excellent seamen.

An observatory was erected on shore, for carrying on magnetical, astronomical, and other scientific operations. Foxes were very plentiful about the ships; fifteen were caught in one trap in four hours on the night of the 25th of October, and above one hundred were either trapped or killed in the course of three months, and yet there seemed but little diminution in their numbers. Captain Lyon says he found them not bad eating, the flesh much resembling that of kid. A pack of thirteen wolves came occasionally to have a look at the ships, and on one occasion broke into a snow-house alongside, and walked off with a couple of Esquimaux dogs confined there. Bears now and then also made their appearance.

A very beautiful ermine walked on board the *Hecla* one day, and was caught in a small trap placed on the deck, certainly the first of these animals which was ever taken alive on board a ship 400 yards from the land. The ravenous propensities of even some of the smallest members of the animal kingdom are exemplified by the following extract:—

"We had for some time observed that in the fire-hole, which was kept open in the ice alongside, a countless multitude of small shrimps were constantly rising near the surface, and we soon found that in twenty-four hours they would clean, in the most beautiful manner, the skeletons."

After attending Divine service on Christmas Day, the officers and crews sat down to the luxury of joints of English roast beef, which had been kept untainted by being frozen, and the outside rubbed with salt. Cranberry pies and puddings, of every shape and size, with a full allowance of spirits, followed, and, probably the natural attendance of headaches succeeded, for the next morning it was deemed expedient to send all the people for a run on the ice, in order to put them to rights; but thick weather coming on it became necessary to recal them, and, postponing the dinner hour, they were all danced sober by one o'clock, the fiddler being, fortunately, quite as he should be. During this curious ball, a witty fellow attended as an old cake woman, with lumps of frozen snow in a bucket; and such was the demand for his pies on this occasion, that he was obliged to replenish pretty frequently. The year had now drawn to a close, and all

enjoyed excellent health, and were blessed with good spirits, and zeal for the renewal of their arduous exertions in the summer.

No signs of scurvy, the usual plague of such voyages, had occurred, and by the plans of Captain Parry, as carried out on the former voyage, a sufficiency of mustard and cress was raised between decks to afford all hands a salad once, and sometimes twice a week. The cold now became intense. Wine froze in the bottles. Port was congealed into thin pink laminæ, which lay loosely, and occupied the whole length of the bottle. White wine, on the contrary, froze into a solid and perfectly transparent mass, resembling amber.

On the 1st of February the monotony of their life was varied by the arrival of a large party of Esquimaux, and an interchange of visits thenceforward took place with this tribe, which, singularly enough, were proverbial for their honesty. Ultimately, however, they began to display some thievish propensities, for on one evening in March a most shocking theft was committed, which was no less than the last piece of English corned beef from the midshipmen's mess. Had it been an 18lb. carronade, or even one of the anchors, the thieves would have been welcome to it; but to purloin English beef in such a country was unpardonable.

On the 15th of March Captain Lyon, Lieutenant Palmer, and a party of men, left the ship, with provisions, tents, &c., in a large sledge, for an excursion of three or four days, to examine the land in the neighbourhood of the ships.

The first night's encampment was anything but comfortable. Their tent they found so cold, that it was determined to make a cavern in the snow to sleep in; and digging this afforded so good an opportunity of warming themselves, that the only shovel was lent from one to the other as a particular favour. After digging it of sufficient size to contain them all in a sitting posture, by means of the smoke of a fire they managed to raise the temperature to 20°, and, closing the entrance with blocks of snow, crept into their blanket bags and tried to sleep, with the pleasant reflection that their roof might fall in and bury them all, and that their one spade was the only means of liberation after a night's drift of snow.

They woke next morning to encounter a heavy gale and drift, and found their sledge so embedded in the snow that they could not get at it, and in the attempt their faces and extremities were most painfully frost-bitten.

The thermometer was at 32° below zero: they could not, moreover, see a yard of the road; yet to remain appeared worse than to go forward—the last plan was, therefore, decided on. The tent, sledge, and luggage were left behind, and with only a few pounds of bread, a little rum, and a spade, the party again set out; and in order to depict their sufferings, I must take up the narrative as related by the commander himself.

"Not knowing where to go, we wandered amongst the heavy hummocks of ice, and suffering from cold, fatigue, and anxiety, were soon completely bewildered. Several of our party now began to exhibit symptoms of that horrid kind of insensibility which is the prelude to sleep. They all professed extreme willingness to do what they were told in order to keep in exercise, but none obeyed; on the contrary, they reeled about like drunken men. The faces of several were severely frost-bitten, and some had for a considerable time lost sensation in their fingers and toes; yet they made not the slightest exertion to rub the parts affected, and even discontinued their general custom of warming each other on observing a discoloration of the skin. Mr. Palmer employed the people in building a snow wall, ostensibly as a shelter from the wind, but in fact to give them exercies, when standing still must have proved fatal to men in our circumstances. My attention was exclusively directed to Sergeant Speckman, who, having been repeatedly warned that his nose was frozen, had paid no attention to it, owing to the state of stupefaction into which he had fallen. The frost-bite had now extended over one side of his face, which was frozen as hard as a mask; the eyelids were stiff, and one corner of the upper lip so drawn up as to expose the teeth and gums. My hands being still warm, I had the happiness of restoring the circulation, after which I used all my endeavours to keep the poor fellow in motion; but he complained sadly of giddiness and dimness of sight, and was so weak as to be unable to walk without assistance. His case was so alarming, that I expected every moment he would lie down, never to rise again.

"Our prospect now became every moment more gloomy, and it was but too probable that four of our party would be unable to survive another hour. Mr. Palmer, however, endeavoured, as well as myself, to cheer the people up, but it was a faint attempt, as we had not a single hope to give them. Every piece of ice, or even of small rock or stone, was now supposed to be the ships, and we had great difficulty in preventing the men from running to the different

objects which attracted them, and consequently losing themselves in the drift. In this state, while Mr. Palmer was running round us to warm himself, he suddenly pitched on a new beaten track, and as exercise was indispensable, we determined on following it, wherever it might lead us. Having taken the sergeant under my coat, he recovered a little, and we moved onwards, when to our infinite joy we found that the path led to the ships."

As the result of this exposure, one man had two of his fingers so badly frost-bitten as to lose a good deal of the flesh of the upper ends, and for many days it was feared that he would be obliged to have them amputated. Quarter-master Carr, one of those who had been the most hardy while in the air, fainted twice on getting below, and every one had severe frost-bites in different parts of the body, which recovered after the usual loss of skin in these cases.

One of the Esquimaux females, by name Igloolik, who plays a conspicuous part in the narrative, was a general favourite, being possessed of a large fund of useful information, having a good voice and ear for music, being an excellent sempstress, and having such a good idea of the hydrography and bearings of the neighbouring sea-coasts, as to draw charts which guided Parry much in his future operations, for he found her sketches to be in the main correct. She connected the land from their winter-quarters to the north-west sea, rounding and terminating the northern extremity of this part of America, by a large island, and a strait of sufficient magnitude to afford a safe passage for the ships. This little north-west passage, observes Lyon, set us all castle-building, and we already fancied the worst part of our voyage over; or, at all events, that before half the ensuing summer was past, we should arrive at Akkoolee, the Esquimaux settlement on the western shore. Halfway between that coast and Repulse Bay, Igloolik drew on her chart a lake of considerable size, having small streams running from it to the sea, on each side; and the correctness of this information was fully proved by Rae in his recent expedition in 1846.

On the 13th of April their Esquimaux friends took their departure for other quarters; towards the end of the month the crews completed the cutting of trenches round the vessels, in order that they might rise to their proper bearings previous to working in the holds, and the ships floated like corks on their native element, after their long imprisonment of 191 days. As the season appeared to be improving, another land expedition was determined on,

and Captain Lyon and Lieutenant Palmer, attended by a party of eight men, set off on the 8th of May, taking with them twenty days' provisions. Each man drew on a sledge 126 lbs., and the officers 95 lbs. a-piece.

"Loaded as we were (says the leader), it was with the greatest difficulty we made our way amongst and over the hummocks, ourselves and sledges taking some very unpleasant tumbles. It required two hours and a half to cross the ice, although the distance was not two miles, and we then landed on a small island, where we passed the night."

Several islands and shoals in the strait were named Bird's Isles. At noon on the 11th, they camped at the head of a fine bay, to which the name of Blake was given. In spite of all the care which had been taken by using crape shades, and other coverings for the eyes, five of the party became severely afflicted with snow blindness. Before evening two of the sufferers were quite blinded by the inflammation. Their faces, eyes, and even heads, being much swollen, and very red. Bathing would have afforded relief, but the sun did not produce a drop of water, and their stock of fuel being limited, they could only spare enough wood to thaw snow for their mid-day draught.

As the morning of the 12th brought no change in the invalids, another day was lost. Towards evening, by breaking pieces of ice, and placing them in the full glare of the sun, sufficient water was obtained, both for drinking and for the sick to bathe their faces, which afforded them amazing relief, and on the morrow they were enabled to resume their journey. At noon the sun was sufficiently powerful to afford the travellers a draught of water without having to thaw it, as had hitherto been the case.

For nearly three days after this, they were imprisoned in their low tent by a snow-storm, but on the morning of the 18th, they were enabled to sally out to stretch their legs, and catch a glimpse of the sun. After examining many bays and indentations of the coast, the party returned to the ships on the evening of the 21st. A canal was now cut through the ice, to get the ships to the open water, in length 2400 feet, and varying in breadth from 60 to 197 feet. The average thickness of the ice was four feet, but in some places it was as much as twelve feet. This truly arduous task had occupied the crews for fifteen days, from six in the morning to eight in the evening; but they laboured at it with the greatest spirit and good humour, and it was concluded on the 18th of June, when the officers and men began to take leave of their several haunts and

promenades, particularly the "garden" of each ship, which had become favourite lounges during their nine months' detention. A few ill-fated bunting came near enough to be shot, and were instantly roasted for a farewell supper, and bright visions of active exertions on the water on the morrow were universally entertained. But the night dispelled all these airy castles, for with the morning's dawn they found that the whole body of ice astern of the ships had broke adrift, filled up the hard-wrought canal, and imprisoned them as firm as ever.

Death now for the first time visited the crews. James Pringle, a seaman of the *Hecla*, fell from the mast-head to the deck, and was killed on the 18th of May. Wm. Souter, quarter-master, and John Reid, carpenter's mate, belonging to the *Fury*, died on the 26th and 27th, of natural causes. Towards the end of June, the sea began to clear rapidly to the eastward, and the bay ice soon gave way as far as where the ships were lying, and on the 2nd of July they put to sea with a fresh breeze, after having been frozen in for 267 days.

In making their way to the northward, they were frequently in much danger. On the 3rd, the ice came down on the *Hecla* with such force as to carry her on board the *Fury*, by which the *Hecla* broke her best bower anchor, and cut her waist-boat in two. On the 4th, the pressure of the ice was so great as to break the *Hecla* adrift from three hawsers. Four or five men were each on separate pieces of ice, parted from the ships in the endeavour to run out a hawser. A heavy pressure closing the loose ice, unexpectedly gave them a road on board again, or they must have been carried away by the stream to certain destruction. On the 8th, the *Hecla* had got her stream-cable out, in addition to the other hawsers, and made fast to the land ice, when a very heavy and extensive floe took the ship on her broadside, and being backed by another large body of ice, gradually lifted her stem as if by the action of a wedge.

"The weight every moment increasing, obliged us," says Captain Lyon, "to veer on the hawsers, whose friction was so great as nearly to cut through the bitt-heads, and ultimately to set them on fire, so that it became requisite for people to attend with buckets of water. The pressure was at length too powerful for resistance, and the stream-cable, with two six and one five-inch hawsers, all gave way at the same moment, three others soon following them. The sea was too full of ice to allow the ship to

drive, and the only way in which she could yield to the enormous weight which oppressed her, was by leaning over on the land ice, while her stem at the same time was entirely lifted to above the height of five feet out of the water. The lower deck beams now complained very much, and the whole frame of the ship underwent a trial which would have proved fatal to any less strengthened vessel. At the same moment, the rudder was unhung with a sudden jerk, which broke up the rudder-case, and struck the driver-boom with great force."

From this perilous position she was released almost by a miracle, and the rudder re-hung.

The ships at last reached the island which had been so accurately described to them by the Esquimaux lady—Igloolik, where they came upon an encampment of 120 Esquimaux, in tents. Captains Parry and Lyon and other officers made frequent exploring excursions along the shores of the Fury and Hecla strait, and inland. On the 26th of August the ships entered this strait, which was found blocked up with flat ice. The season had also now assumed so wintry an aspect that there seemed but little probability of getting much farther west: knowing of no harbour to protect the ships, unless a favourable change took place, they had the gloomy prospect before them of wintering in or near this frozen strait. Boating and land parties were dispatched in several directions, to report upon the different localities.

On the 4th of September, Captain Lyon landed on an island of slate formation, about six miles to the westward of the ships, which he named Amherst Island. The result of these expeditions proved that it was impracticable, either by boats or water conveyance, to examine any part of the land south-west of Igloolik, in consequence of the ice.

Mr. Reid and a boat-party travelled about sixty miles to the westward of Amherst Island, and ascertained the termination of the strait. On a consultation with the officers, Captain Parry determined to seek a berth near to Igloolik, in which to secure the ships for the winter. They had now been sixty-five days struggling to get forward, but had only in that time reached forty miles to the westward of Igloolik. The vessels made the best of their way to the natural channel between this island and the land, but were for some time drifted with the ice, losing several anchors, and it was only by hard work in cutting channels that they were brought into safer quarters near

the land. Some fine teams of dogs were here purchased from the Esquimaux, which were found very serviceable in making excursions on sledges.

Their second Christmas Day in this region had now arrived, and Lyon informs us—

"Captain Parry dined with me, and was treated with a superb display of mustard and cress, with about fifty onions, rivalling a fine needle in size, which I had reared in boxes round my cabin stove. All our messes in either ship were supplied with an extra pound of real English fresh beef, which had been hanging at our quarter for eighteen months. We could not afford to leave it for a farther trial of keeping, but I have no doubt that double the period would not have quite spoiled its flavour."

This winter proved much more severe than the former. Additional clothing was found necessary. The stove-funnels collected a quantity of ice within them, notwithstanding fires were kept up night and day, so that it was frequently requisite to take them down in order to break and melt the ice out of them.

Nothing was seen of the sun for forty-two days.

On the 15th of April, Mr. A. Elder, Greenland mate of the *Hecla*, died of dropsy: he had been leading man with Parry on Ross's voyage, and for his good conduct was made mate of the *Griper*, on the last expedition.

On the 6th of September, 1823, Mr. Geo. Fife, the pilot, also died of scurvy.

After taking a review of their provisions, and the probability of having to pass a third winter here, Captain Parry determined to send the *Hecla* home, taking from her all the provision that could be spared. Little or no hopes could be entertained of any passage being found to the westward, otherwise than by the strait now so firmly closed with ice; but Parry trusted that some interesting additions might be made to the geography of these dreary regions, by attempting a passage to the northward or eastward, in hopes of finding an outlet to Lancaster Sound or Prince Regent's Inlet.

On the 21st of April, 1823, they began transshipping the provisions; the teams of dogs being found most useful for this purpose. Even two anchors of 22 cwt. each, were drawn by these noble animals at a quick trot.

Upon admitting daylight at the stern windows of the *Hecla*, on the 22nd, the gloomy, sooty cabin showed to no great advantage, no less than ten buckets of ice were taken from the sashes and out of the stern lockers, from which latter some spare flannels and instruments were only liberated by chopping.

On the 7th of June, Captain Lyon, with a party of men, set off across the Melville Peninsula, to endeavour to get a sight of the western sea, of which they had received descriptive accounts from the natives, but owing to the difficulties of travelling, and the ranges of mountains they met with, they returned unsuccessful, after being out twenty days. Another inland trip of a fortnight followed.

On the 1st of August, the *Hecla* was reported ready for sea. Some symptoms of scurvy having again made their appearance in the ships, and the surgeons reporting that it would not be prudent to continue longer, Captain Parry reluctantly determined to proceed home with both ships. After being 319 days in their winter quarters, the ships got away on the 9th of August.

A conspicuous landmark, with despatches, was set up on the mainland for the information of Franklin, should he reach this quarter.

On reaching Winter Island, and visiting their last year's garden, radishes, mustard and cress, and onions were brought off, which had survived the winter and were still alive, seventeen months from the time they were planted, a very remarkable proof of their having been preserved by the warm covering of snow.

The ships, during the whole of this passage, were driven by the current more than three degrees, entirely at the mercy of the ice, being carried into every bight, and swept over each point, without the power of helping themselves.

On the 1st of September, they were driven up Lyon Inlet, where they were confined high up till the 6th, when a breeze sprung up, which took them down to within three miles of Winter Island; still it was not until the 12th that they got thoroughly clear of the indraught. The danger and suspense of these twelve days were horrible, and Lyon justly observes that he would prefer being frozen up during another eleven months' winter, to again passing so anxious a period of time.

"Ten of the twelve nights were passed on deck, in expectation, each tide, of some decided change in our affairs, either by being left on the rocks, or grounding in such shoal water, that the whole body of the ice must have slid over us. But, as that good old seaman Baffin expresses himself, 'God, who is greater than either ice or tide, always delivered us!'"

For thirty-five days the ships had been beset, and in that period had driven with the ice above 300 miles without any exertion on their part, and also without a possibility

of extricating themselves. On the 23rd of September they once more got into the swell of the Atlantic, and on the 10th of October arrived at Lerwick, in Shetland.

## Clavering's Voyage to Spitzbergen and Greenland, 1823.

In 1823, Capt. Sabine, R.A., who had been for some time engaged in magnetic observations, and also in experiments to determine the configuration of the earth, by means of pendulum vibrations in different latitudes, having perfected his observations at different points, from the Equator to the Arctic Circle, suggested to the Royal Society, through Sir Humphry Davy, the importance of extending similar experiments into higher latitudes towards the Pole. Accordingly, the Government placed at his disposal H.M.S. *Griper*, 120 tons, Commander Clavering, which was to convey him to Spitzbergen, and thence to the east coast of Greenland.

The *Griper* sailed from the Nore on the 11th of May, and proceeded to Hammerfest, or Whale Island, near the North Cape in Norway, which she reached on the 4th of June, and Capt. Sabine having finished his shore observations by the 23rd, the vessel set sail for Spitzbergen. She fell in with ice off Cherry Island, in lat. 75° 5′, on the 27th, and on the 30th disembarked the tents and instruments on one of the small islands round Hakluyt's Headland, near the eightieth parallel. Capt. Clavering, meanwhile, sailed in the *Griper* due north, and reached the latitude of 80° 20′, where being stopped by close packed ice, he was obliged to return.

On the 24th of July they again put to sea, directing their course for the highest known point of the eastern coast of Greenland. They met with many fields of ice, and made the land, which had a most miserable desolate appearance, at a point which was named Cape Borlase Warren. Two islands were discovered, and as Capt. Sabine here landed and carried on his observations, they were called Pendulum Islands. From an island situate in lat. 75° 12′, to which he gave the name of Shannon Island, Clavering saw high land, stretching due north as far as lat. 76°.

On the 16th of August, Clavering landed with a party of three officers and sixteen men on the mainland, to examine the shores. The temperature did not sink below 23°, and they slept for nearly a fortnight they were on shore with only a boat-cloak and blanket for a covering, without feel-

ing any inconvenience from the cold. A tribe of twelve Esquimaux was met with here. They reached in their journey a magnificent inlet, about fifty miles in circumference, which was supposed to be the same which Gale Hamkes discovered in 1654, and which bears his name. The mountains round its sides were 4000 to 5000 feet high. On the 29th of August, they returned on board, and having embarked the tents and instruments, the ship again set sail on the 31st, keeping the coast in view to Cape Parry, lat. 72½°. The cliffs were observed to be several thousand feet high. On the 13th of September, as the ice in shore began to get very troublesome, the ship stood out to sea, and after encountering a very heavy gale, which drove them with great fury to the southward, and it not being thought prudent to make for Iceland, a station in about the same latitude on the Norway coast was chosen instead by Capt. Sabine. They made the land about the latitude of Christiansound. On the 1st of October the *Griper* struck hard on a sunken rock, but got off undamaged.

On the 6th they anchored in Drontheim Fiord, where they were received with much kindness and hospitality, and after the necessary observations had been completed the ship proceeded homewards, and reached Deptford on the 19th of December, 1823.

## Lyon's Voyage in the Griper.

In 1824 three expeditions were ordered out, to carry on simultaneous operations in Arctic discovery. To Capt. Lyon was committed the task of examining and completing the survey of the Melville Peninsula, the adjoining straits, and the shores of Arctic America, if possible as far as Franklin's turning point. Capt. Lyon was therefore gazetted to the *Griper* gun-brig, which had taken out Capt. Sabine to Spitzbergen in the previous year. The following officers and crew were also appointed to her:—

*Griper.*

Captain—G. F. Lyon.
Lieutenants—P. Manico and F. Harding.
Assistant-Surveyor—E. N. Kendal.
Purser—J. Evans.
Assistant-Surgeon—W. Leyson.
Midshipman—J. Tom.
34 Petty officers, seamen, &c.
Total complement, 41.

It was not till the 20th of June that the *Griper* got away from England, being a full month later than the usual period of departure, and the vessel was at the best but an old tub in her sailing properties. A small tender, called the *Snap*, was ordered to accompany her with stores as far as the ice, and having been relieved of her supplies, she was sent home on reaching Hudson's Straits.

The *Griper* made but slow progress in her deeply laden state, her crowded decks being continually swept by heavy seas, and it was not until the end of August that she rounded the southern head of Southampton Island, and stood up towards Sir Thomas Roe's Welcome. On reaching the entrance of this channel they encountered a terrific gale, which for a long time threatened the destruction of both ship and crew. Drifting with this, they brought up the ship with four anchors, in a bay with five fathoms and a half water, in the momentary expectation that with the ebb tide the ship would take the ground, as the sea broke fearfully on a low sandy beach just astern, and had the anchors parted nothing could have saved the vessel. Neither commander nor crew had been in bed for three nights, and although little hope was entertained of surviving the gale, and no boat could live in such a sea, the officers and crew performed their several duties with their accustomed coolness. Each man was ordered to put on his warmest clothing, and to take charge of some useful instrument. The scene is best described in the words of the gallant commander:—

"Each, therefore, brought his bag on deck, and dressed himself; and in the fine athletic forms which stood exposed before me, I did not see one muscle quiver, nor the slightest sign of alarm. Prayers were read, and they then all sat down in groups, sheltered from the wash of the sea by whatever they could find, and some endeavoured to obtain a little sleep. Never perhaps was witnessed a finer scene than on the deck of my little ship, when all hope of life had left us. Noble as the character of the British sailor is always allowed to be in cases of danger, yet I did not believe it to be possible that among forty-one persons not one repining word should have been uttered. Each was at peace with his neighbour and all the world; and I am firmly persuaded that the resignation which was then shown to the will of the Almighty, was the means of obtaining His mercy. God was merciful to us, and the tide, almost miraculously, fell no lower." The appropriate name of the Bay of God's Mercy has been given to this spot on the charts by Capt. Lyon.

Proceeding onward up the Welcome, they encountered, about a fortnight later, another fearful storm. On the 12th of September, when off the entrance of Wager Inlet, it blew so hard for two days, that on the 13th the ship was driven from her anchors, and carried away by the fury of the gale, with every prospect of being momentarily dashed to pieces against any hidden rock; but the same good Providence which had so recently befriended them, again stood their protector. On consulting with his officers, it was unanimously resolved, that in the crippled state of the ship, without any anchor, and with her compasses worse than useless, it would be madness to continue the voyage, and the ship's course was therefore shaped for England.

I may observe, that the old *Griper* is now laid up as a hulk in Chichester Harbour, furnishing a residence and depôt for the coast guard station.

## Parry's Third Voyage.

In the spring of 1824 the Admiralty determined to give Capt. Parry another opportunity of carrying out the great problem which had so long been sought after, of a north-west passage to the Pacific, and so generally esteemed was this gallant commander that he had but to hoist his pennant, when fearless of all danger, and in a noble spirit of emulation, his former associates rallied around him.

The same two ships were employed as before, but Parry now selected the *Hecla* for his pennant. The staff of officers and men was as follows:—

### *Hecla.*

Captain—W. E. Parry.
Lieutenants—J. L. Wynn, Joseph Sherer, and Henry Foster.
Surgeon—Samuel Neill, M.D.
Purser—W. H. Hooper.
Assistant-Surgeon—W. Rowland.
Midshipmen—J. Brunton, F. R. M. Crozier, C. Richards, and H. N. Head.
Greenland Pilots—J. Allison, master; and G. Champion, mate.
49 Petty Officers, Seamen, and Marines.

Total complement, 62.

*Fury.*

Commander—H. P. Hoppner.
Lieutenants—H. T. Austin and J. C. Ross.
Surgeon—A. M'Laren.
Purser—J. Halse.
Assistant-Surgeon—T. Bell.
Midshipmen—B. Westropp, C. C. Waller, and E. Bird.
Clerk—W. Mogg.
Greenland Pilots—G. Crawford, master; T. Donaldson, mate.
48 Petty Officers, Seamen, and Marines.
Total complement, 60.

The *William Harris*, transport, was commissioned to accompany the ships to the ice with provisions. Among the promotions made, it will be seen, were Lieut. Hoppner to the rank of Commander, and second in command of the expedition. Messrs. J. Sherer and J. C. Ross to be Lieutenants, and J. Halse to be Purser. The attempt on this occasion was to be made by Lancaster Sound through Barrow's Strait to Prince Regent Inlet. The ships sailed on the 19th of May, 1824, and a month afterwards fell in with the body of the ice in lat. 60¾°. After transshipping the stores to the two vessels, and sending home the transport, about the middle of July they were close beset with the ice in Baffin's Bay, and "from this time (says Parry) the obstructions from the quantity, magnitude, and closeness of the ice, were such as to keep our people almost constantly employed in heaving, warping, or sawing through it; and yet with so little success that, at the close of July, we had only penetrated seventy miles to the westward." After encountering a severe gale on the 1st of August, by which masses of overlaying ice were driven one upon the other, the *Hecla* was laid on her broadside by a strain, which Parry says must inevitably have crushed a vessel of ordinary strength; they got clear of the chief obstructions by the first week in September. During the whole of August they had not one day sufficiently free from rain, snow, or sleet, to be able to air the bedding of the ship's company.

They entered Lancaster Sound on the 10th of September, and with the exception of a solitary berg or two found it clear of ice. A few days after they, however, fell in with the young ice, which increasing daily in thickness, the ships became beset, and by the current which set to the east at the rate of three miles an hour, they were soon

drifted back to the eastward of Admiralty Inlet, and on the 23rd they found themselves again off Wollaston Island, at the entrance of Navy Board Inlet. By perseverance, however, and the aid of a strong easterly breeze, they once more managed to recover their lost ground, and on the 27th reached the entrance of Port Bowen on the eastern shore of Prince Regent Inlet, and here Parry resolved upon wintering; this making the fourth winter this enterprising commander had passed in these inhospitable seas.

The usual laborious process of cutting canals had to be resorted to, in order to get the ships near to the shore in secure and sheltered situations. Parry thus describes the dreary monotonous character of an Arctic winter:—

"It is hard to conceive any one thing more like another than two winters passed in the higher latitudes of the Polar regions, except when variety happens to be afforded by intercourse with some other branch of the whole family of man. Winter after winter, nature here assumes an aspect so much alike, that cursory observation can scarcely detect a single feature of variety. The winter of more temperate climates, and even in some of no slight severity, is occasionally diversified by a thaw, which at once gives variety and comparative cheerfulness to the prospect. But here, when once the earth is covered, all is dreary monotonous whiteness, not merely for days or weeks, but for more than half a year together. Whichever way the eye is turned, it meets a picture calculated to impress upon the mind an idea of inanimate stillness, of that motionless torpor with which our feelings have nothing congenial; of anything, in short, but life. In the very silence there is a deadness with which a human spectator appears *out of keeping*. The presence of man seems an intrusion on the dreary solitude of this wintry desert, which even its native animals have for awhile forsaken."

During this year Parry tells us the thermometer remained below zero 131 days, and did not rise above that point till the 11th of April. The sun, which had been absent from their view 121 days, again blessed the crews with his rays on the 22nd of February. During this long imprisonment, schools, scientific observations, walking parties, &c., were resorted to, but "our former amusements," says Parry, "being almost worn threadbare, it required some ingenuity to devise any plan that should possess the charm of novelty to recommend it." A happy idea was, however, hit upon by Commander Hoppner, at whose suggestion a monthly *bal masqué* was held, to the

great diversion of both officers and men, to the number of 120. The popular commander entered gaily into their recreations, and thus speaks of these Polar masquerades:—

"It is impossible that any idea could have proved more happy, or more exactly suited to our situation. Admirably dressed characters of various descriptions readily took their parts, and many of these were supported with a degree of spirit and genuine good humour which would not have disgraced a more refined assembly; while the latter might not have been disgraced by copying the good order, decorum, and inoffensive cheerfulness which our humble masquerades presented. It does especial credit to the dispositions and good sense of our men, that though all the officers entered fully into the spirit of these amusements, which took place once a month alternately on board of each ship, no instance occurred of anything that could interfere with the regular discipline, or at all weaken the respect of the men towards their superiors. Ours were masquerades without licentiousness — carnivals without excess."

Exploring parties were sent out in several directions. Commander Hoppner and his party went inland, and after a fortnight's fatiguing journey over a mountainous, barren, and desolate country, where precipitous ravines 500 feet deep obstructed their passage, travelled a degree and three-quarters—to the latitude of 73° 19′—but saw no appearance of sea from thence.

Lieutenant Sherer with four men proceeded to the southward, and made a careful survey of the coast as far as $72\frac{1}{4}°$, but had not provisions sufficient to go round Cape Kater, the southernmost point observed in their former voyage.

Lieutenant J. C. Ross, with a similar party, travelled to the northward, along the coast of the Inlet, and from the hills about Cape York, observed that the sea was perfectly open and free from ice at the distance of twenty-two miles from the ships.

After an imprisonment of about ten months, by great exertions the ships were got clear from the ice, and on the 20th of July, 1825, upon the separation of the floe across the harbour, towed out to sea. Parry then made for the western shore of the Inlet, being desirous of examining the coast of North Somerset for any channel that might occur, a probability which later discoveries in that quarter have proved to be without foundation. On the 28th, when well in with the western shore, the *Hecla*, in spite of every

exertion, was beset by floating ice, and after breaking two large ice anchors in endeavouring to heave in shore, was obliged to give up the effort and drift with the ice until the 30th. On the following day, a heavy gale came on, in which the *Hecla* carried away three hawsers, while the *Fury* was driven on shore, but was hove off at high water. Both ships were now drifted by the body of the ice down the Inlet, and took the ground, the *Fury* being so nipped and strained that she leaked a great deal, and four pumps kept constantly at work did not keep her clear of water. They were floated off at high water, but, late on the 2nd of August, the huge masses of ice once more forced the *Fury* on shore, and the *Hecla* narrowly escaped. On examining her and getting her off, it was found that she must be hove down and repaired; a basin was therefore formed for her reception and completed by the 16th, a mile further to the southward, within three icebergs grounded, where there were three or four fathoms of water. Into this basin she was taken on the 18th, and her stores and provisions being removed, she was hove down, but a gale of wind coming on and destroying the masses of ice which sheltered her, it became necessary to re-embark the stores, &c., and once more put to sea; but the unfortunate vessel had hardly got out of her harbour before, on the 21st, she was again driven on shore. After a careful survey and examination, it was found necessary to abandon her: Parry's opinion being thus expressed—"Every endeavour of ours to get her off, or if got off, to float her to any known place of safety, would be at once utterly hopeless in itself, and productive of extreme risk to our remaining ship."

The loss of this ship, and the crowded state of the remaining vessel, made it impossible to think of continuing the voyage for the purposes of discovery.

"The incessant labour, the constant state of anxiety, and the frequent and imminent danger into which the surviving ship was thrown, in the attempts to save her comrade, which were continued for twenty-five days, destroyed every reasonable expectation hitherto cherished of the ultimate accomplishment of this object."

Taking advantage of a northerly wind, on the 27th the *Hecla* stretched across the Inlet for the eastern coast, meeting with little obstruction from the ice, and anchored in Neill's Harbour, a short distance to the southward of their winter quarters, Port Bowen, where the ship was got ready for crossing the Atlantic.

The *Hecla* put to sea on the 31st of August, and enter-

ing Barrow's Strait on the 1st of September, found it perfectly clear of ice. In Lancaster Sound a very large number of bergs were seen; but they found an open sea in Baffin's Bay, till, on the 7th of September, when in latitude 72° 30′, they came to the margin of the ice, and soon entered a clear channel on its eastern side. From thirty to forty large icebergs, not less than 200 feet in height, were sighted.

On the 12th of October, Captain Parry landed at Peterhead, and the *Hecla* arrived at Sheerness on the 20th. But one man died during this voyage—John Page, a seaman of the *Fury*—who died of scurvy, in Neill's Harbour, on the 29th of August.

This voyage cannot but be considered the most unsuccessful of the three made by Parry, whether as regards the information gleaned on the subject of a north-west passage or the extension of our store of geographical or scientific knowledge. The shores of this Inlet were more naked, barren, and desolate than even Melville Island. With the exception of some hundreds of white whales, seen sporting about the most southernmost part of the Inlet that was visited, few other species of animals were seen.

"We have scarcely," says Parry, "ever visited a coast on which so little of animal life occurs. For days together only one or two seals, a single sea-horse, and now and then a flock of ducks were seen."

He still clings to the accomplishment of the great object of a north-west passage. At page 184 of his official narrative, he says—

"I feel confident that the undertaking, if it be deemed advisable at any future time to pursue it, will one day or other be accomplished; for—setting aside the accidents to which, from their very nature, such attempts must be liable, as well as other unfavourable circumstances which human foresight can never guard against, or human power control—I cannot but believe it to be an enterprise well within the reasonable limits of practicability. It may be tried often and fail, for several favourable and fortunate circumstances must be combined for its accomplishment; but I believe, nevertheless, that it will ultimately be accomplished."

"I am much mistaken, indeed," he adds, "if the north-west passage ever becomes the business of a single summer; nay, I believe that nothing but a concurrence of very favourable circumstances is likely ever to make a single *winter* in the ice sufficient for its accomplishment. But there is no argument against the possibility of final success:

for we now know that a winter in the ice may be passed not only in safety but in health and comfort."

Not *one* winter alone, but two and three have been passed with health and safety in these seas, under a wise and careful commander.

## Franklin's Second Expedition, 1825-26.

Undaunted by the hardships and sufferings he had encountered in his previous travels, with a noble spirit of ardour and enthusiasm, Captain Franklin determined to prosecute the chain of his former discoveries from the Coppermine river to the most western point of the Arctic regions. A sea expedition, under the command of Captain Beechey, was at the same time sent round Cape Horn to Behring's Straits, to co-operate with Parry and Franklin, so as to furnish provisions to the former, and a conveyance home to the latter.

Captain Franklin's offer was therefore accepted by the government, and leaving Liverpool in February, 1825, he arrived at New York about the middle of March. The officers under his orders were his old and tried companions and fellow sufferers in the former journey—Dr. Richardson and Lieutenant Back, with Mr. E. N. Kendal, a mate in the navy, who had been out in the *Griper* with Capt. Lyon, and Mr. T. Drummond, a naturalist. Four boats, specially prepared for the purposes of the expedition, were sent out by the Hudson's Bay Company's ship.

In July, 1825, the party arrived at Fort Chipewyan. It is unnecessary to go over the ground and follow them in their northern journey; suffice it to say, they reached Great Bear Lake in safety, and erected a winter dwelling on its western shore, to which the name of Fort Franklin was given. To Back and Mr. Dease, an officer in the Hudson's Bay Company's service, were entrusted the arrangements for their winter quarters.

From here a small party set out with Franklin down the Mackenzie to examine the state of the Polar Sea. On the 5th of September they got back to their companions, and prepared to pass the long winter of seven or eight months.

On the 28th of June, 1826, the season being sufficiently advanced, and all their preparations completed, the whole party got away in four boats to descend the Mackenzie to the Polar Sea. Where the river branches off into several channels, the party separated on the 3rd of July, Captain Franklin and Lieutenant Back, with two boats and fourteen men, having with them the faithful Esquimaux interpreter,

Augustus, who had been with them on the former expedition, proceeded to the westward, while Dr. Richardson and Mr. Kendal in the other two boats, having ten men under their command, set out in an easterly direction to search the Coppermine river.

Franklin arrived at the mouth of the Mackenzie on the 7th of July, where he encountered a large tribe of fierce Esquimaux, who pillaged his boats, and it was only by great caution, prudence, and forbearance, that the whole party were not massacred. After getting the boats afloat, and clear of these unpleasant visitors, Franklin pursued his survey, a most tedious and difficult one, for more than a month; he was only able to reach a point in latitude 70° 24′ N. longitude 149° 37′ W., to which Back's name was given; and here prudence obliged him to return, although, strangely enough, a boat from the *Blossom* was waiting not 160 miles west of his position to meet with him. The extent of coast surveyed was 374 miles. The return journey to Fort Franklin was safely accomplished, and they arrived at their house on the 21st of September, when they found Richardson and Kendal had returned on the first of the month, having accomplished a voyage of about 500 miles, or 902 by the coast line, between the 4th of July and the 8th of August. They had pushed forward beyond the strait named after their boats the Dolphin and Union.

In ascending the Coppermine, they had to abandon their boats and carry their provisions and baggage.

Having passed another winter at Fort Franklin, as soon as the season broke up the Canadians were dismissed, and the party returned to England.

The cold experienced in the last winter was intense, the thermometer standing at one time at 58° below zero, but having now plenty of food, a weather-tight dwelling, and good health, they passed it cheerfully. Dr. Richardson gave a course of lectures on practical geology, and Mr. Drummond furnished information on natural history. During the winter, in a solitary hut on the Rocky Mountains, he managed to collect 200 specimens of birds, animals, &c., and more than 1500 of plants.

When Captain Franklin left England to proceed on this expedition he had to undergo a severe struggle between the feelings of affection and a sense of duty. His wife (he has been married twice) was then lying at the point of death, and indeed died the day after he left England. But with heroic fortitude she urged his departure at the very day appointed, entreating him, as he

valued her peace and his own glory, not to delay a moment on her account. His feelings, therefore, may be inferred, but not described, when he had to elevate on Garry Island a silk flag which she had made and given him as a parting gift, with the instruction that he was only to hoist it on reaching the Polar Sea.

## Beechey's Voyage.—1826-28.

H.M. sloop *Blossom*, 26, Captain F. W. Beechey, sailed from Spithead on the 19th of May, 1825, and her instructions directed her, after surveying some of the islands in the Pacific, to be in Behring's Straits by the summer or autumn of 1826, and contingently in that of 1827.

It is foreign to my purpose here to allude to those parts of her voyage anterior to her arrival in the Straits.

On the 28th of June the *Blossom* came to an anchor off the town of Petropolowski, where she fell in with the Russian ship of war *Modeste*, under the command of Baron Wrangel, so well known for his enterprise in the hazardous expedition by sledges over the ice to the northward of Cape Shelatskoi, or Errinos.

Captain Beechey here found despatches informing him of the return of Parry's expedition. Being beset by currents and other difficulties, it was not till the 5th of July that the *Blossom* got clear of the harbour, and made the best of her way to Kotzebue Sound, reaching the appointed rendezvous at Chamiso Island on the 25th. After landing and burying a barrel of flour upon Puffin Rock, the most unfrequented spot about the island, the *Blossom* occupied the time in surveying and examining the neighbouring coasts to the north east. On the 30th she took her departure from the island, erecting posts or land-marks, and burying despatches at Cape Krusenstern, near a cape which he named after Franklin, near Icy Cape.

The ship returned to the rendezvous on the evening of the 28th of August. The barrel of flour had been dug up, and appropriated by the natives.

On the first visit of one of these parties, they constructed a chart of the coast upon the sand, of which, however, Captain Beechey at first took very little notice. "They, however, renewed their labour, and performed their work upon the sandy beach in a very ingenious and intelligible manner. The coast line was first marked out with a stick, and the distances regulated by the day's journey. The hills and ranges of mountains were next shown by elevations of sand or stone, and the islands

represented by heaps of pebbles, their proportions being duly attended to. As the work proceeded some of the bystanders occasionally suggested alterations, and Captain Beechey moved one of the Diomede Islands, which was misplaced. This was at first objected to by the hydrographer, but one of the party recollecting that the islands were seen *in one* from Cape Prince of Wales, confirmed its new position and made the mistake quite evident to the others, who were much surprised that Captain Beechey should have any knowledge of the subject. When the mountains and islands were erected, the villages and fishing-stations were marked by a number of sticks placed upright, in imitation of those which are put up on the coast wherever these people fix their abode. In time, a complete hydrographical plan was drawn from Cape Derby to Cape Krusenstern.

This ingenuity and accuracy of description on the part of the Esquimaux is worthy of particular remark, and has been verified by almost all the Arctic explorers.

The barge which had been despatched to the eastward, under charge of Mr. Elson, reached to lat. 71° 23′ 31″ N., and long. 156° 21′ 30″ W., when she was stopped by the ice which was attached to the shore. The farthest tongue of land they reached, was named Point Barrow, and is about 126 miles north-east of Icy Cape, being only about 150 or 160 miles from Franklin's discoveries west of the Mackenzie river.

The wind suddenly changing to south-west, the compact body of ice began to drift with the current to the north-east at the rate of 3½ miles an hour, and Mr. Elson, finding it difficult to avoid large floating masses of ice, was obliged to come to an anchor to prevent being driven back. "It was not long before he was so closely beset in the ice, that no clear water could be seen in any direction from the hills, and the ice continuing to press against the shore, his vessel was driven upon the beach, and there left upon her broadside in a most helpless condition; and to add to his cheerless prospect, the disposition of the natives, whom he found to increase in numbers as he advanced to the northward, was of a very doubtful character. At Point Barrow, where they were very numerous, their overbearing behaviour, and the thefts they openly practised, left no doubt of what would be the fate of his little crew, in the event of their falling into their power. They were in this dilemma several days, during which every endeavour was made to extricate the vessel but without effect, and Mr. Elson contemplated sinking her secretly in a lake that was near, to

prevent her falling into the hands of the Esquimaux, and then making his way along the coast in a baidar, which he had no doubt he should be able to purchase from the natives. At length, however, a change of wind loosened the ice, and after considerable labour and trial, in which the personal strength of the officers was united to that of the seamen, Mr. Elson, with his shipmates, fortunately succeeded in effecting their escape.

Captain Beechey was very anxious to remain in Kotzebue Sound until the end of October, the period named in his instructions, but the rapid approach of winter, the danger of being locked up, having only five weeks' provisions left, and the nearest point at which he could replenish being some 2000 miles distant, induced his officers to concur with him in the necessity of leaving at once. A barrel of flour and other articles were buried on the sandy point of Chamiso, for Franklin, which it was hoped would escape the prying eyes of the natives.

After a cruise to California, the Sandwich Islands, Loochoo, the Bonin Islands, &c., the *Blossom* returned to Chamiso Island on the 5th of July, 1827. They found the flour and despatches they had left the previous year unmolested. Lieut. Belcher was despatched in the barge to explore the coast to the northward, and the ship followed her as soon as the wind permitted. On the 9th of September, when standing in for the northern shore of Kotzebue Sound, the ship drifting with the current took the ground on a sand-bank near Hotham Inlet, but the wind moderating, as the tide rose she went off the shoal apparently without injury.

After this narrow escape from shipwreck they beat up to Chamiso Island, which they reached on the 10th of September. Not finding the barge returned as expected, the coast was scanned, and a signal of distress found flying on the south-west point of Choris Peninsula, and two men waving a white cloth to attract notice. On landing, it was found that this party were the crew of the barge, which had been wrecked in Kotzebue Sound, and three of the men were also lost.

On the 29th a collision took place with the natives, which resulted in three of the seamen and four of the marines being wounded by arrows, and one of the natives killed by the return fire.

After leaving advices for Franklin as before, the *Blossom* finally left Chamiso on the 6th of October. In a haze and strong wind she ran between the land and a shoal, and a passage had to be forced through breakers at the imminent

danger of the ship's striking. The *Blossom* then made the best of her way home, reaching England in the first week of October, 1828.

## Parry's Fourth, or Polar Voyage, 1827.

In 1826, Capt. Parry, who had only returned from his last voyage in the close of the preceding year, was much struck by the suggestions of Mr. Scoresby, in a paper read before the Wernerian Society, in which he sketched out a plan for reaching the higher latitudes of the Polar Sea, north of Spitzbergen, by means of sledge boats drawn over the smooth fields of ice which were known to prevail in those regions. Col. Beaufoy, F.R.S., had also suggested this idea some years previously. Comparing these with a similar plan originally proposed by Capt. Franklin, and which was placed in his hands by Mr. Barrow, the Secretary of the Admiralty, Capt. Parry laid his modified views of the feasibility of the project, and his willingness to undertake it, before Lord Melville, the First Lord of the Admiralty, who after consulting with the President and Council of the Royal Society, was pleased to sanction the attempt; accordingly, his old ship, the *Hecla*, was fitted out for the voyage to Spitzbergen, the following officers (all of whom had been with Parry before,) and crew being appointed to her:--

*Hecla.*

Captain—W. E. Parry.
Lieutenants—J. C. Ross, Henry Foster, E. J. Bird. F. R. M. Crozier.
Purser—James Halse.
Surgeon—C. J. Beverley.

On the 4th of April, 1827, the outfit and preparations being completed, the *Hecla* left the Nore for the coast of Norway, touching at Hammerfest, to embark eight reindeer, and some moss (*Cenomyce rangiferina*) sufficient for their support, the consumption being about 4 lbs. per day, but they can go without food several days. A tremendous gale of wind, experienced off Hakluyt's Headland, and the quantity of ice with which the ship was in consequence beset, detained the voyagers for nearly a month, but on the 18th of June, a southerly wind dispersing the ice, they dropped anchor in a cove, on the northern coast of Spitzbergen, which appeared to offer a secure haven, and to which the name of the ship was

given. On the 20th, the boats, which had been specially prepared in England for this kind of journey, were got out and made ready, and they left the ship on the 22nd of June. A description of these boats may not here be out of place.

They were twenty feet long and seven broad, flat floored, like ferry boats, strengthened and made elastic by sheets of felt between the planking, covered with waterproof canvass. A runner attached to each side of the keel, adapted them for easy draught on the ice after the manner of a sledge. They were also fitted with wheels, to be used if deemed expedient and useful. Two officers and twelve men were attached to each boat, and they were named the *Enterprise* and the *Endeavour*. The weight of each boat, including provisions and every requisite, was about 3780 lbs. Lieuts. Crozier and Foster were left on board, and Capt. Parry took with him in his boat Mr. Beverley, Surgeon, while Lieut. (now Capt. Sir James) Ross, and Lieut. (now Commander) Bird, had charge of the other.

The reindeer and the wheels were given up as useless, owing to the rough nature of the ice. Provisions for 71 days were taken—the daily allowance per man on the journey being 10 ozs. biscuit, 9 ozs. pemmican, 1 oz. sweetened cocoa powder (being enough to make a pint), and one gill of rum; but scanty provision in such a climate for men employed on severe labour; three ounces of tobacco were also served out to each per week.

As fuel was too bulky to transport, spirits of wine were consumed, which answered all the purposes required, a pint twice a day being found sufficient to warm each vessel, when applied to an iron boiler by a shallow lamp with seven wicks. After floating the boats for about eighty miles, they came to an unpleasant mixed surface of ice and water, here their toilsome journey commenced, the boats having to be laden and unladen several times according as they came to floes of ice or lanes of water, and they were drifted to the southward by the ice at the rate of four or five miles a day. Parry found it more advantageous to travel by night, the snow being then harder, and the inconvenience of snow blindness being avoided, while the party enjoyed greater warmth during the period of rest, and had better opportunities of drying their clothes by the sun.

I cannot do better than quote Parry's graphic description of this novel course of proceeding:—"Travelling by night, and sleeping by day, so completely inverted the natural order of things that it was difficult to persuade ourselves of the reality. Even the officers and myself,

who were all furnished with pocket chronometers, could not always bear in mind at what part of the twenty-four hours we had arrived; and there were several of the men who declared, and I believe truly, that they never knew night from day during the whole excursion.

"When we rose in the evening, we commenced our day by prayers, after which we took off our fur sleeping-dresses and put on clothes for travelling; the former being made of camlet lined with racoon skin, and the latter of strong blue cloth. We made a point of always putting on the same stockings and boots for travelling in, whether they had been dried during the day or not, and I believe it was only in five or six instances at the most that they were not either still wet or hard frozen. This indeed was of no consequence, beyond the discomfort of first putting them on in this state, as they were sure to be thoroughly wet in a quarter of an hour after commencing our journey; while, on the other hand, it was of vital importance to keep dry things for sleeping in. Being 'rigged' for travelling, we breakfasted upon warm cocoa and biscuit, and after stowing the things in the boats, and on the sledges, so as to secure them as much as possible from wet, we set off on our day's journey, and usually travelled four, five, or even six hours, according to circumstances."

In five days, notwithstanding their perseverance and continued journeys, they found, by observation at noon, on the 30th, that they had only made eight miles of direct northing.

At Walden Island, one of the Seven islands, and Little Table Island, reserve supplies of provisions were deposited to fall back upon in case of necessity.

In halting early in the morning for the purposes of rest, the boats were hauled up on the largest piece of ice that offered the least chance of breaking through, or of coming in contact with other masses, the snow or wet was cleaned out and the sails rigged as awnings. "Every man then immediately put on dry stockings and fur boots, after which we set about the necessary repairs of boats, sledges, or clothes, and after serving the provisions for the succeeding day, we went to supper. Most of the officers and men then smoked their pipes, which served to dry the boats and awnings very much, and usually raised the temperature of our lodgings 10° or 15°. This part of the twenty-four hours was often a time, and the only one, of real enjoyment to us; the men told their stories,

and fought all their battles o'er again, and the labours of the day, unsuccessful as they too often were, were forgotten. A regular watch was set during our resting time to look out for bears, or for the ice breaking up round us, as well as to attend to the drying of the clothes, each man alternately taking this duty for one hour. We then concluded our day with prayers, and having put on our fur dresses, lay down to sleep with a degree of comfort which perhaps few persons would imagine possible under such circumstances, our chief inconvenience being, that we were somewhat pinched for room, and therefore obliged to stow rather closer than was quite agreeable."

This close stowage may be imagined when it is remembered that thirteen persons had to sleep in a boat seven feet broad. After sleeping about seven hours, they were roused from their slumbers by the sound of a bugle from the cook and watchman, which announced that their cocoa was smoking hot, and invited them to breakfast.

Their progress was of the most tedious and toilsome character, heavy showers of rain rendering the ice on many occasions a mass of "slush;" on others there was from six to eighteen inches of snow lying on the surface. Frequently the crew had to proceed on their hands and knees to secure a footing, and on one occasion they made such a snail-like progress that in two hours they only accomplished 150 yards. On the 12th of July they had reached the latitude of 82° 14′ 28″. After five hours' unceasing labour on the 14th, the progress was but a mile and a half due north, though from three to four miles had been traversed, and ten at least walked, having made three journeys a great part of the way; launched and hauled up the boats four times, and dragged them over twenty-five separate pieces of ice. On the 18th, after eleven hours of actual labour, requiring for the most part the exertion of the whole strength of the party, they had travelled over a space not exceeding four miles, of which only two were made good.

But on halting on the morning of the 20th, having by his reckoning accomplished six and a half miles in a N.N.W. direction, the distance traversed being ten miles and a half, Parry found to his mortification from observation at noon, that they were not *five* miles to the northward of their place at noon on the 17th, although they had certainly travelled twelve miles in that direction since then.

On the 21st a floe of ice on which they had lodged the

boats and sledges, broke with their weight, and all went through with several of the crew, who with the sledges were providentially saved.

On the 23rd the farthest northerly point was reached, which was about 82° 45′.

At noon on the 26th, the weather being clear, the meridian altitude of the sun was obtained, "by which," says Parry, "we found ourselves in latitude 82° 40′ 23″, so that since our last observation (at midnight on the 22nd) we had lost by drift no less than thirteen and a half miles, for we were now more than three miles to the southward of that observation, though we had certainly travelled between ten and eleven due north in this interval! Again, we were but one mile to the north of our place at noon on the 21st, though we had estimated our distance made good at twenty-three miles." After encountering every species of fatigue and disheartening obstacles, in peril of their lives almost every hour, Parry now became convinced that it was hopeless to pursue the journey any further, and he could not even reach the eighty-third parallel; for after thirty-five days of continuous and most fatiguing drudgery, with half their resources expended, and the middle of the season arrived, he found that the distance gained in their laborious travelling was lost by the drift and set of the ice with the southerly current, during the period of rest. After planting their ensigns and pennants on the 26th, and making it a day of rest, on the 27th the return to the southward was commenced. Nothing particular occurred. Lieutenant Ross managed to bring down with his gun a fat she bear, which came to have a look at the boats, and after gormandizing on its flesh, an excess which may be excused considering it was the first fresh meat they had tasted for many a day, some symptoms of indigestion manifested themselves among the party.

On the outward journey very little of animal life was seen. A passing gull, a solitary rotge, two seals, and a couple of flies, were all that their eager eyes could detect. But on their return these became more numerous. On the 8th of August seven or eight narwhals were seen, and not less than 200 rotges, a flock of these little birds occurring in every hole of water. On the 11th, in latitude 81° 30′, the sea was found crowded with shrimps and other sea insects, on which numerous birds were feeding. On this day they took their last meal on the ice, being fifty miles distant from Table Island, having accomplished in fifteen days what had taken them thirty-three to effect

on their outward journey. On the 12th they arrived at this island. The bears had walked off with the relay of bread which had been deposited there. To an islet lying off Table Island, and the most northern known land upon the globe, Parry gave the name of Ross, for "no individual," he observes, "could have exerted himself more strenuously to rob it of this distinction."

Putting to sea again, a storm obliged the boats to bear up for Walden Island. "Everything belonging to us (says Captain Parry) was now completely drenched by the spray and snow; we had been fifty-six hours without rest, and forty-eight at work in the boats, so that by the time they were unloaded we had barely strength left to haul them up on the rocks. However, by dint of great exertion, we managed to get the boats above the surf; after which a hot supper, a blazing fire of drift wood, and a few hours quiet rest, restored us."

They finally reached the ship on the 21st of August, after sixty-one days' absence.

"The distance traversed during this excursion was 569 geographical miles; but allowing for the times we had to return for our baggage during the greater part of the journey over the ice, we estimated our actual travelling at 978 geographical, or 1127 statute miles. Considering our constant exposure to wet, cold, and fatigue, our stockings having generally been drenched in snow-water for twelve hours out of every twenty-four, I had great reason to be thankful for the excellent health in which, upon the whole, we reached the ship. There is little doubt that we had all become in a certain degree gradually weaker for some time past; but only three men of our party now required medical care—two of them with badly swelled legs and general debility, and the other from a bruise, but even these three returned to their duty in a short time."

In a letter from Sir W. E. Parry to Sir John Barrow, dated November 25, 1845, he thus suggests some improvements on his old plan of proceedings:—

"It is evident (he says) that the causes of failure in our former attempt, in the year 1827, were principally two: first, and chiefly, the broken, rugged, and soft state of the ice over which we travelled; and secondly, the drifting of the whole body of ice in a southerly direction.

"My amended plan is, to go out with a single ship to Spitzbergen, just as we did in the *Hecla*, but not so early in the season; the object for that year being merely to find secure winter quarters as far north as possible. For

this purpose it would only be necessary to reach Hakluyt's Headland by the end of June, which would afford ample leisure for examining the more northern lands, especially about the Seven Islands, where, in all probability, a secure nook might be found for the ship, and a starting point for the proposed expedition, some forty or fifty miles in advance of the point where the *Hecla* was before laid up. The winter might be usefully employed in various preparations for the journey, as well as in magnetic, astronomical, and meteorological observations, of high interest in that latitude. I propose that the expedition should leave the ship in the course of the month of April, when the ice would present one hard and unbroken surface, over which, as I confidently believe, it would not be difficult to make good thirty miles per day, without any exposure to wet, and probably without snow blindness. At this season, too, the ice would probably be stationary, and thus the two great difficulties which we formerly had to encounter would be entirely obviated. It might form a part of the plan to push out supplies previously, to the distance of 100 miles, to be taken up on the way, so as to commence the journey comparatively light; and as the intention would be to complete the enterprise in the course of the month of May, before any disruption of the ice, or any material softening of the surface had taken place, similar supplies might be sent out to the same distance, to meet the party on their return."

The late Sir John Barrow, in his last work, commenting on this, says, " With all deference to so distinguished a sea-officer, in possession of so much experience as Sir Edward Parry, there are others who express dislike of such a plan; and it is not improbable that many will be disposed to come to the conclusion, that so long as the Greenland Seas are hampered with ice, so long as floes, and hummocks, and heavy masses, continue to be formed, so long as a determined southerly current prevails, so long will any attempt to carry out the plan in question, in like manner fail. No laborious drudgery will ever be able to conquer the opposing progress of the current and the ice. Besides, it can hardly be doubted, this gallant officer will admit, on further consideration, that this unusual kind of disgusting and unseamanlike labour, is not precisely such as would be relished by the men; and it may be said, is not exactly fitted for a British man-of-war's-man; moreover, that it required his own all-powerful example to make it even tolerable." Sir John therefore suggested a somewhat different plan. He recommended that two

small ships should be sent in the early spring along the western coast of Spitzbergen, where usually no impediment exists, as far up as 80°. They should take every opportunity of proceeding directly to the north, wherein about 82° Parry has told us the large floes had disappeared, and the sea was found to be loaded only with loose, disconnected, small masses of ice, through which ships would find no difficulty in sailing, though totally unfit for boats dragging; and as this loose ice was drifting to the southward, he further says, that before the middle of August a ship might have sailed up to the latitude of 82°, almost without touching a piece of ice. It is not then unreasonable to expect that beyond that parallel, even as far as the Pole itself, the sea would be free of ice, during the six summer months of perpetual sun, through each of the twenty-four hours; which, with the aid of the current, would, in all probability, destroy and dissipate the Polar ice.

The distance from Hakluyt's Headland to the Pole—is 600 geographical miles. Granting the ships to make only twenty miles in twenty-four hours, (on the supposition of much sailing ice to go through,) even in that case it would require but a month to enable the explorer to put his foot on the pivot or point of the axis on which the globe of the earth turns, remain there a month, if necessary, to obtain the sought-for information, and then, with a southerly current, a fortnight, probably less, would bring him back to Spitzbergen.—*Barrow's Voyages of Discovery*, p. 316.

In a notice in the *Quarterly Review* of this, one of the most singular and perilous journeys of its kind ever undertaken, except perhaps that of Baron Wrangell upon a similar enterprise to the northward of Behring's Straits, it is observed,—"Let but any one conceive for a moment the situation of two open boats, laden with seventy days' provisions and clothing for twenty-eight men, in the midst of a sea covered nearly with detached masses and floes of ice, over which these boats were to be dragged, sometimes up one side of a rugged mass, and down the other, sometimes across the lanes of water that separate them, frequently over a surface covered with deep snow, or through pools of water. Let him bear in mind, that the men had little or no chance of any other supply of provisions than that which they carried with them, calculated as just sufficient to sustain life, and consider what their situation would have been in the event, by no means an improbable one, of losing any part of their scanty stock. Let any one try to imagine to himself a situation of this kind, and he will

still have but a faint idea of the exertions which the men under Capt. Parry had to make, and the sufferings and privations they had to undergo."

Capt. Parry having thus completed his fifth voyage into the Arctic regions, in four of which he commanded, and was second in the other, it may here be desirable to give a recapitulation of his services.

In 1818 he was appointed Lieutenant, commanding the *Alexander*, hired ship, as second officer with his uncle, Commander John Ross. In 1819, still as Lieutenant, he was appointed to command the *Hecla*, and to take charge of the second Arctic expedition, on which service he was employed two years. On the 14th of November, 1820, he was promoted to the rank of Commander.

On the 19th of December, 1820, the Bedfordean Gold Medal of the Bath and West of England Society for the Encouragement of Arts, Manufactures, and Commerce, was unanimously voted to him. On the 30th of December of that year, he was appointed to the *Fury*, with orders to take command of the expedition to the Arctic Sea. With the sum of 500 guineas subscribed for the purpose, "the Explorer of the Polar Sea" was afterwards presented with a silver vase, highly embellished with devices emblematic of the Arctic voyages. And on the 24th of March, 1821, the city of Bath presented its freedom to Captain Parry, in a box of oak highly and appropriately ornamented. On the 8th of November, 1821, he obtained his post-captain's rank. On the 22nd of November, 1823, he was presented with the freedom of the city of Winchester; and, on the 1st of December, was appointed acting-hydrographer to the Admiralty in the place of Capt. Hind, deceased. In 1824 he was appointed to the *Hecla*, to proceed on another exploring voyage.

On the 22nd of November, 1825, Capt. Parry was formally appointed hydrographer to the Admiralty, which office he continued to hold until the 10th of November, 1826.

In December, 1825, he was voted the freedom of the borough of Lynn, in testimony of the high sense entertained by the corporation of his meritorious and enterprising conduct.

In April, 1827, he once more took the command of his old ship, the *Hecla*, for another voyage of discovery towards the North Pole. On his return in the close of the year, having paid off the *Hecla* at Deptford, he resumed on the 2nd of November his duties as hydrographer to the Admiralty, which office he held until the 13th of

May, 1829. Having received the honour of knighthood, he then resigned in favour of the present Admiral Beaufort, and, obtaining permission from the Admiralty, proceeded to New South Wales as Resident Commissioner to the Australian Agricultural Company, taking charge of their recently acquired large territory in the neighbourhood of Port Stephen. He returned from Australia in 1834. From the 7th of March, 1835, to the 3rd of February, 1836, he acted as Poor Law Commissioner in Norfolk. Early in 1837, he was appointed to organize the Mail Packet Service then transferred to the Admiralty, and afterwards, in April, was appointed Comptroller of Steam Machinery to the Navy, which office he continued to hold up to December, 1846. From that period to the present time he has filled the post of Captain Superintendent of the Royal Naval Hospital at Haslar.

## Captain John Ross's Second Voyage, 1829-33.

In the year 1829, Capt. Ross, the pioneer of Arctic exploration in the 19th century, being anxious once more to display his zeal and enterprise as well as to retrieve his nautical reputation from those unfortunate blunders and mistakes which had attached to his first voyage, and thus remove the cloud which had for nearly ten years hung over his professional character, endeavoured without effect to induce the Government to send him out to the Polar Seas in charge of another expedition. The Board of Admiralty of that day, in the spirit of retrenchment which pervaded their councils, were, however, not disposed to recommend any further grant for research, even the Board of Longitude was abolished, and the boon of 20,000*l.* offered by Act of Parliament for the promotion of Arctic discovery, also withdrawn by a repeal of the act.

Captain Ross, however, undaunted by the chilling indifference thus manifested towards his proposals by the Admiralty, still persevered, having devoted 3000*l.* out of his own funds towards the prosecution of the object he had in view. He was fortunate enough to meet with a public-spirited and affluent coadjutor and supporter in the late Sir Felix Booth, the eminent distiller, and that gentleman nobly contributed 17,000*l.* towards the expenses. Captain Ross thereupon set to work, and purchased a small Liverpool steamer named the *Victory*, whose tonnage he increased to 150 tons. She was provisioned for three years. Capt. Ross chose for his second in command his nephew, Commander James Ross, who had

been with him on his first Arctic expedition, and had subsequently accompanied Parry in all his voyages. The other officers of the vessel were—Mr. Wm. Thom, purser; Mr. George M'Diarmid, surgeon; Thomas Blanky, Thos. Abernethy, and George Taylor, as 1st, 2nd, and 3rd mates; Alexander Brunton and Allan Macinnes as 1st and 2nd engineers; and nineteen petty officers and seamen; making a complement in all of 28 men.

The Admiralty furnished towards the purposes of the expedition a decked boat of sixteen tons, called the *Krusenstern*, and two boats which had been used by Franklin, with a stock of books and instruments.

The vessel being reported ready for sea was visited and examined by the late King of the French, the Lords of the Admiralty, and other parties taking an interest in the expedition, and set sail from Woolwich on the 23rd of May, 1829. For all practical purposes the steam machinery, on which the commander had greatly relied, was found on trial utterly useless.

Having received much damage to her spars, in a severe gale, the ship put in to the Danish settlement of Holsteinberg, on the Greenland coast, to refit, and sailed again to the northward on the 26th of June. They found a clear sea, and even in the middle of Lancaster Sound and Barrow's Strait perceived no traces of ice or snow, except what appeared on the lofty summits of some of the mountains. The thermometer stood at 40°, and the weather was so mild that the officers dined in the cabin without a fire, with the skylight partially open. On the 10th of August they passed Cape York, and thence crossed over into Regent Inlet, making the western coast between Seppings' and Elwin Bay on the 16th.

They here fell in with those formidable streams, packs, and floating bergs of ice which had offered such obstructions to Parry's ships. From their proximity to the magnetic pole, their compasses became useless as they proceeded southward. On the 13th they reached the spot where the *Fury* was abandoned, but no remnants of the vessel were to be seen. All her sails, stores, and provisions, on land, were, however, found; the hermetically-sealed tin canisters having kept the provisions from the attacks of bears; and the flour, bread, wine, spirits, sugar, &c., proved as good, after being here four years, as on the first day they were packed. This store formed a very seasonable addition, which was freely made available, and after increasing their stock to two years and ten months' supply, they still left

a large quantity for the wants of any future explorers. On the 15th, crossing Cresswell Bay, they reached Cape Garry, the farthest point which had been seen by Parry. They were here much inconvenienced and delayed by fogs and floating ice. While mountains of ice were tossing around them on every side, they were often forced to seek safety by mooring themselves to these formidable masses, and drifting with them, sometimes forward, sometimes backward. In this manner on one occasion no less than nineteen miles were lost in a few hours; at other times they underwent frequent and severe shocks, yet escaped any serious damage.

Captain Ross draws a lively picture of what a vessel endures in sailing among these moving hills. He reminds the reader that ice is stone, as solid as if it were granite; and he bids him "imagine these mountains hurled through a narrow strait by a rapid tide, meeting with the noise of thunder, breaking from each other's precipices huge fragments, or rending each other asunder, till, losing their former equilibrium, they fall over headlong, lifting the sea around in breakers, and whirling it in eddies. There is not a moment in which it can be conjectured what will happen in the next; there is not one which may not be the last. The attention is troubled to fix on anything amid such confusion; still must it be alive, that it may seize on the single moment of help or escape which may occur. Yet with all this, and it is the hardest task of all, there is nothing to be acted,—no effort to be made,—he must be patient, as if he were unconcerned or careless, waiting, as he best can, for the fate, be it what it may, which he cannot influence or avoid."

Proceeding southward, Ross found Brentford Bay, about thirty miles beyond Cape Garry, to be of considerable extent, with some fine harbours. Landing here, the British colours were unfurled, and the coast, named after the promoter of the expedition, was taken possession of in the name of the king. Extensive and commodious harbours, named Ports Logan, Elizabeth, and Eclipse, were discovered, and a large bay, which was called Mary Jones Bay. By the end of September, the ship had examined 300 miles of undiscovered coast. The winter now set in with severity, huge masses of ice began to close around them, the thermometer sank many degrees below freezing point, and snow fell very thick. By sawing through the ice, the vessel was got into a secure position to pass the winter, in a station which is now named on the maps Felix Harbour. The machinery of the steam-engine was done

away with, the vessel housed, and every measure that could add to the comfort of the crew adopted. They had abundance of fuel, and provisions that might easily be extended to three years.

On the 9th of January, 1831, they were visited by a large tribe of Esquimaux, who were better dressed and cleaner than those more to the northward. They displayed an intimate acquaintance with the situation and bearings of the country over which they had travelled, and two of them drew a very fair sketch of the neighbouring coasts, with which they were familiar; this was revised and corrected by a learned lady named Teriksin,—the females seeming, from this and former instances, to have a clear knowledge of the hydrography and geography of the continent, bays, straits, and rivers which they had once traversed.

On the 5th of April, Commander Ross, with Mr. Blanky, the chief mate, and two Esquimaux guides, set out to explore a strait which was reported as lying to the westward, and which it was hoped might lead to the western sea. After a tedious and arduous journey, they arrived, on the third day, at a bay facing to the westward, and discovered, further inland, an extensive lake, called by the natives Nie-tyel-le, whence a broad river flowed into the bay. Their guides informed them, however, there was no prospect of a water communication south of their present position. Capt. Ross then traced the coast fifty or sixty miles further south.

Several journeys were also made by Commander Ross, both inland and along the bays and inlets. On the 1st of May, from the top of a high hill, he observed a large inlet which seemed to lead to the western sea. In order to satisfy himself on this point, he set out again on the 17th of May, with provisions for three weeks, eight dogs, and three companions. Having crossed the great middle lake of the isthmus, he reached his former station, and thence traced an inlet which was found to be the mouth of a river named by them Garry. From the high hill they observed a chain of lakes leading almost to Thom's Bay, the *Victory's* station in Felix Harbour. Proceeding northwest along the coast, they crossed the frozen surface of the strait which has since been named after Sir James Ross, and came to a large island which was called Matty; keeping along its northern shore, and passing over a narrow strait, which they named after Wellington, they found themselves on what was considered to be the main-

land, but which the more recent discoveries of Simpson have shown to be an island, and which now bears the name of King William's Land. Still journeying onward, with difficulties continually increasing, from heavy toil and severe privation, the dogs became exhausted with fatigue, and a burden rather than an aid to the travellers.

One of their greatest embarrassments was how to distinguish between land and sea. "When all is ice, and all one dazzling mass of white—when the surface of the sea itself is tossed up and fixed into rocks, while the land is on the contrary very often flat, it is not always so easy a problem as it might seem on a superficial view, to determine a fact which appears in words to be extremely simple." Although their provisions began to fall short, and the party were nearly worn out, Commander Ross was most desirous of making as much western discovery as possible; therefore, depositing everything that could be dispensed with, he pushed on, on the 28th, with only four days' provisions, and reached Cape Felix, the most northern point of this island, on the following day. The coast here took a south-west direction, and there was an unbounded expanse of ocean in view. The next morning, after having travelled twenty miles farther, they reached a point, which Ross called Point Victory, situated in lat. 64° 46′ 19″ long. 98° 32′ 49″, while to the most distant one in view, estimated to be in long. 99° 17′ 58″, he gave the name of Cape Franklin. However loath to turn back, yet prudence compelled them to do so, for as they had only ten days' short allowance of food, and more than 200 miles to traverse, there could not be a moment's hesitation in adopting this step. A high cairn of stones was erected before leaving, in which was deposited a narrative of their proceedings.

The party endured much fatigue and suffering on their return journey; of the eight dogs only two survived, and the travellers in a most exhausted state arrived in the neighbourhood of the large lakes on the 8th of June, where they fortunately fell in with a tribe of natives, who received them hospitably, and supplied them plentifully with fish, so that after a day's rest they resumed their journey, and reached the ship on the 13th. Capt. Ross in the meanwhile had made a partial survey of the Isthmus, and discovered another large lake, which he named after Lady Melville.

After eleven months' imprisonment, their little ship once more floated buoyant on the waves, having been released from her icy barrier on the 17th of September,

but for the next few days made but little progress, being beaten about among the icebergs, and driven hither and thither by the currents.

A change in the weather, however, took place, and on the 23rd they were once more frozen in, the sea in a week after exhibiting one clear unbroken surface. All October was passed in cutting through the ice into a more secure locality, and another dreary winter having set in, it became necessary to reduce the allowance of provisions. This winter was one of unparalleled severity, the thermometer falling 92° below freezing point. During the ensuing spring a variety of exploratory journeys were carried on, and in one of these Commander Ross succeeded in planting the British flag on the North Magnetic Pole. The position which had been usually assigned to this interesting spot by the learned of Europe, was lat. 70° N., and long. 98° 30′ W.; but Ross, by careful observations, determined it to lie in lat. 70° 5′ 17″ N., and long. 96° 46′ 45″ W., to the southward of Cape Nikolai, on the western shore of Boothia. But it has since been found that the centre of magnetic intensity is a moveable point revolving within the frigid zone.

"The place of the observatory," Ross remarks, "was as near to the magnetic pole as the limited means which I possessed enabled me to determine. The amount of the dip, as indicated by my dipping-needle, was 89° 59′, being thus within one minute of the vertical; while the proximity at least of this pole, if not its actual existence where we stood, was further confirmed by the action, or rather by the total inaction, of the several horizontal needles then in my possession."

Parry's observations placed it eleven minutes distant only from the site determined by Ross.

'As soon," continues Ross, "as I had satisfied my own mind on the subject, I made known to the party this gratifying result of all our joint labours; and it was then that, amidst mutual congratulations, we fixed the British flag on the spot, and took possession of the North Magnetic Pole and its adjoining territory in the name of Great Britain and King William IV. We had abundance of materials for building in the fragments of limestone that covered the beach, and we therefore erected a cairn of some magnitude, under which we buried a canister containing a record of the interesting fact, only regretting that we had not the means of constructing a pyramid of more importance, and of strength sufficient to withstand the assaults of time and of the Esquimaux. Had

it been a pyramid as large as that of Cheops, I am not quite sure that it would have done more than satisfy our ambition under the feelings of that exciting day."

On the 28th of August, 1831, they contrived to warp the *Victory* out into the open sea, and made sail on the following morning, but were soon beset with ice as on the former occasion, being once more completely frozen in by the 27th of September.

On the previous occasion their navigation had been three miles; this year it extended to four. This protracted detention in the ice made their present position one of great danger and peril. As there seemed no prospect of extricating their vessel, the resolution was come to of abandoning her, and making the best of their way up the inlet to Fury Beach, there to avail themselves of the boats, provisions, and stores, which would assist them in reaching Davis Straits, where they might expect to fall in with one of the whale ships.

On the 23rd of April, 1832, having collected all that was useful and necessary, the expedition set out, dragging their provisions and boats over a vast expanse of rugged ice. "The loads being too heavy to be carried at once, made it necessary to go backward and forward twice, and even oftener, the same day. They had to encounter dreadful tempests of snow and drift, and to make several circuits in order to avoid impassable barriers. The general result was, that by the 12th of May they had travelled 329 miles to gain thirty in a direct line, having in this labour expended a month." After this preliminary movement, they bade a farewell to their little vessel, nailing her colours to the mast. Capt. Ross describes himself as deeply affected; this being the first vessel he had been obliged to abandon of thirty-six in which he had served during the course of forty-two years. On the 9th of June, Commander Ross and two others, with a fortnight's provisions, left the main body, who were more heavily loaded, to ascertain the state of the boats and supplies at Fury Beach. Returning they met their comrades on the 25th of June, reporting that they had found three of the boats washed away, but enough still left for their purpose, and all the provisions were in good condition. The remainder of the journey was accomplished by the whole party in a week, and on the 1st of July they reared a canvas mansion, to which they gave the name of Somerset House, and enjoyed a hearty meal.

By the 1st of August the boats were rendered serviceable, and a considerable extent of open sea being visible,

they set out, and after much buffeting among the ice in their frail shallops, reached the mouth of the inlet by the end of August. After several fruitless attempts to run along Barrow's Strait, the obstructions of the ice obliged them to haul the boats on shore, and pitch their tents. Barrow's Strait was found, from repeated surveys, to be one impenetrable mass of ice. After lingering here till the third week in September, it was unanimously agreed that their only resource was to fall back again on the stores at Fury Beach, and there spend their fourth winter. They were only able to get half the distance in the boats, which were hauled on shore in Batty Bay on the 24th of September, and the rest of their journey continued on foot, the provisions being dragged on sledges. On the 7th of October they once more reached their home at the scene of the wreck. They now managed to shelter their canvas tent by a wall of snow, and, setting up an extra stove, made themselves tolerably comfortable until the increasing severity of the winter, and the rigour of the cold, added to the tempestuous weather, made them perfect prisoners, and sorely tried their patience. Scurvy now began to attack several of the party, and on the 16th of February, 1833, Thomas, the carpenter, fell a victim to it, and two others died. "Their situation was becoming truly awful, since if they were not liberated in the ensuing summer, little prospect appeared of their surviving another year. It was necessary to make a reduction in the allowance of preserved meats; bread was somewhat deficient, and the stock of wine and spirits was entirely exhausted. However, as they had caught a few foxes, which were considered a delicacy, and there was plenty of flour, sugar, soups, and vegetables, a diet could be easily arranged sufficient to support the party."

While the ice remained firm, advantage was taken of the spring to carry forward a stock of provisions to Batty Bay, and this, though only thirty-two miles, occupied them a whole month, owing to their reduced numbers from sickness and heavy loads, with the journeyings to and fro, having to go over the ground eight times.

On the 8th of July they finally abandoned this depôt, and encamped on the 12th at their boat station in Batty Bay, where the aspect of the sea was watched with intense anxiety for more than a month. On the 15th of August, taking advantage of a lane of water which led to the northward, the party embarked, and on the following morning had got as far as the turning point of their last

year's expedition. Making their way slowly among the masses of ice with which the inlet was encumbered, on the 17th they found the wide expanse of Barrow's Strait open before them, and navigable, and reached to within twelve miles of Cape York. Pushing on with renewed spirits, alternately rowing and sailing, on the night of the 25th they rested in a good harbour on the eastern shore of Navy Board Inlet. At four on the following morning they were roused from their slumbers by the joyful intelligence of a ship being in sight, and never did men more hurriedly and energetically set out; but the elements conspiring against them, after being baffled by calms and currents, they had the misery to see the ship leave them with a fair breeze, and found it impossible to overtake her, or make themselves seen. A few hours later, however, their despair was relieved by the sight of another vessel which was lying to in a calm. By dint of hard rowing they were this time more fortunate, and soon came up with her; she proved to be the *Isabella*, of Hull, the very ship in which Ross had made his first voyage to these seas. Captain Ross was told circumstantially of his own death, &c., two years previously, and he had some difficulty in convincing them that it was really he and his party who now stood before them. So great was the joy with which they were received, that the *Isabella* manned her yards, and her former commander and his gallant band of adventurers were saluted with three hearty cheers. The scene on board can scarcely be described; each of the crew vied with the other in assisting and comforting the party, and it cannot better be told than in Ross's own words:—

"The ludicrous soon took place of all other feelings; in such a crowd, and such confusion, all serious thought was impossible, while the new buoyancy of our spirits made us abundantly willing to be amused by the scene which now opened. Every man was hungry, and was to be fed; all were ragged, and were to be clothed; there was not one to whom washing was not indispensable, nor one whom his beard did not deprive of all human semblance. All, everything too, was to be done at once: it was washing, dressing, shaving, eating, all intermingled; it was all the materials of each jumbled together, while in the midst of all there were interminable questions to be asked and answered on both sides; the adventures of the *Victory*, our own escapes, the politics of England, and the news which was now four years old.

"But all subsided into peace at last. The sick were accommodated, the seamen disposed of, and all was done for us which care and kindness could perform.

"Night at length brought quiet and serious thoughts, and I trust there was not a man among us who did not then express, where it was due, his gratitude for that interposition which had raised us all from a despair which none could now forget, and had brought us from the very borders of a most distant grave, to life and friends and civilization. Long accustomed, however, to a cold bed on the hard snow or the bare rock, few could sleep amid the comfort of our new accommodations. I was myself compelled to leave the bed which had been kindly assigned me, and take my abode in a chair for the night, nor did it fare much better with the rest. It was for time to reconcile us to this sudden and violent change, to break through what had become habit, and to inure us once more to the usages of our former days."

The *Isabella* remained some time longer to prosecute the fishery, and left Davis Strait on her homeward passage on the 30th of September. On the 12th of October they made the Orkney Islands, and arrived at Hull on the 18th. The bold explorers, who had long been given up as lost, were looked upon as men risen from the grave, and met and escorted by crowds of sympathizers. A public entertainment was given to them by the townspeople, at which the freedom of the town was presented to Captain Ross, and next day he left for London, to report his arrival to the Admiralty, and was honoured by a presentation to the king at Windsor.

The Admiralty liberally rewarded all the parties, except indeed Captain Ross. Commander J. C. Ross was appointed to the guardship at Portsmouth to complete his period of service, and then received his post rank. Mr. Thom, the purser, Mr. M'Diarmid, the surgeon, and the petty officers, were appointed to good situations in the navy. The seamen received the usual double pay given to Arctic explorers, up to the time of leaving their ship, and full pay from that date until their arrival in England.

A committee of the House of Commons took up the case of Captain Ross early in the session of 1834, and on their recommendation 5000*l.* was granted him as a remuneration for his pecuniary outlay and privations.

A baronetcy, on the recommendation of the same committee, was also conferred by his Majesty William IV. on Mr. Felix Booth.

In looking back on the results of this voyage, no impar-

tial inquirer can deny to Captain Ross the merit of having effected much good by tracing and surveying the whole of the long western coast of Regent Inlet, proving Boothia to be a peninsula, and setting at rest the probability of any navigable outlet being discovered from this inlet to the Polar Sea. The lakes, rivers, and islands which were examined, proved with sufficient accuracy the correctness of the information furnished to Parry by the Esquimaux.

To Commander James Ross is due the credit of resolving many important scientific questions, such as the combination of light with magnetism, fixing the exact position of the magnetic pole. He was also the only person in the expedition competent to make observations in geology, natural history, and botany. Out of about 700 miles of new land explored, Commander Ross, in the expeditions which he planned and conducted, discovered nearly 500. He had up to this time passed fourteen summers and eight winters in these seas.

The late Sir John Barrow, in his "Narrative of Voyages of Discovery and Research," p. 518, in opposition to Ross's opinion, asserted that Boothia was not joined to the Continent, but that they were "completely divided by a navigable strait, ten miles wide and upwards, leading past Back's Estuary, and into the Gulf (of Boothia), of which the proper name is Akkolee, not Boothia; and moreover, that the two seas flow as freely into each other, as Lancaster Sound does into the Polar Sea." This assumption has been since shown to be incorrect. Capt. Ross asserts there is a difference in the level of these two seas.

I may here fitly take a review of Capt. Ross's services. He entered the navy in 1790; served fifteen years as a midshipman, seven as a lieutenant, and seven as a commander, and was posted on the 7th of December, 1818, and appointed to the command of the first Arctic expedition of this century. On his return he received many marks of favour from continental sovereigns, was knighted, and made a Companion of the Bath on the 24th of December, 1834; made a Commander of the Sword of Sweden, a Knight of the Second Class of St. Anne of Prussia (in diamonds). Second Class of the Legion of Honour, and of the Red Eagle of Prussia, and of Leopold of Belgium. Received the royal premium from the Geographical Society of London, in 1833, for his discoveries in the Arctic regions; also gold medals from the Geographical Society of Paris, and the Royal Societies of Sweden, Austria, and Denmark. The freedom of the cities of London, Liverpool, and

Bristol; six gold snuff-boxes from Russia, Holland, Denmark, Austria, London, and Baden; a sword valued at 100 guineas from the Patriotic Fund, for his sufferings, having been wounded thirteen times in three different actions during the war; and one of the value of 200*l.* from the King of Sweden, for service in the Baltic and the White Sea. On the 8th of March, 1839, he was appointed to the lucrative post of British consul at Stockholm, which he held for six years.

## Captain Back's Land Journey, 1833—1835.

Four years having elapsed without any tidings being received of Capt. Ross and his crew, it began to be generally feared in England that they had been added to the number of former sufferers, in the prosecution of their arduous undertaking.

Dr. Richardson, who had himself undergone such frightful perils in the Arctic regions with Franklin, was the first to call public attention to the subject, in a letter to the Geographical Society, in which he suggested a project for relieving them, if still alive and to be found; and at the same time volunteered his services to the Colonial Secretary of the day, to conduct an exploring party.

Although the expedition of Captain Ross was not undertaken under the auspices of the Government, it became a national concern to ascertain the ultimate fate of it, and to make some effort for the relief of the party, whose home at that time might be the boisterous sea, or whose shelter the snow hut or the floating iceberg. Dr. Richardson proposed to proceed from Hudson's Bay, in a north-west direction to Coronation Gulf, where he was to commence his search in an easterly direction. Passing to the north, along the eastern side of this gulf, he would arrive at Point Turnagain, the eastern point of his own former discovery. Having accomplished this, he would continue his search towards the eastward until he reached Melville Island, thus perfecting geographical discovery in that quarter, and a continued coast line might be laid down from the Fury and Hecla Strait to Beechey Point, leaving only the small space between Franklin's discovery and that of the *Blossom* unexplored. The proposal was favourably received; but owing to the political state of the country at that time, the offer was not accepted.

A meeting was held in November, 1832, at the rooms of the Horticultural Society, in Regent-street, to obtain funds,

and arrange for fitting out a private relief expedition, as the Admiralty and the Government were unable to do this officially, in consequence of Capt. Ross's expedition not being a public one. Sir George Cockburn took the chair, and justly observed that those officers who devoted their time to the service of science, and braved in its pursuit the dangers of unknown and ungenial climates, demanded the sympathy and assistance of all. Great Britain had taken the lead in geographical discovery, and there was not one in this country who did not feel pride and honour in the fame she had attained by the expeditions of Parry and Franklin; but if we wished to create future Parrys and Franklins, if we wished to encourage British enterprise and courage, we must prove that the officer who is out of sight of his countrymen is not forgotten; that there is consideration for his sufferings, and appreciation of his spirit. This reflection will cheer him in the hour of trial, and will permit him, when surrounded by dangers and privations, to indulge in hope, the greatest blessing of man. Capt. George Back, R.N., who was in Italy when the subject was first mooted, hastened to England, and offered to lead the party, and his services were accepted. A subscription was entered into to defray the necessary expenses, and upwards of 6000*l.* was raised; of this sum, at the recommendation of Lord Goderich, the then secretary of state, the Treasury contributed 2000*l.*

After an interview with the king at Brighton, to which he was specially summoned, Capt. Back made preparations for his journey, and laid down his plan of operations. In order to facilitate his views, and to give him greater control over his men, special instructions and authority were issued by the Colonial Office, and the Hudson's Bay Company granted him a commission in their service, and placed every assistance at his disposal throughout their territory in North America.

Everything being definitively arranged, Capt. Back, accompanied by Dr. Richard King as surgeon and naturalist, with three men who had been on the expedition with Franklin, left Liverpool on the 17th of Feb. 1833, in one of the New York packet ships, and arrived in America after a stormy passage of thirty-five days. He proceeded on to Montreal, where he had great difficulty in preventing two of the men from leaving him, as their hearts began to fail them at the prospect of the severe journey, with its attendant difficulties, which they had to encounter.

Four volunteers from the Royal Artillery corps here

joined him, and some voyageurs having been engaged, the party left, in two canoes, on the 25th of April. Two of his party deserted from him in the Ottawa river.

On the 28th of June, having obtained his complement of men, he may be said to have commenced his journey. They suffered dreadfully from myriads of sand-flies and musquitoes, being so disfigured by their attacks that their features could be scarcely recognised. Horse-flies, appropriately styled "bull dogs," were another dreadful pest, which pertinaciously gorged themselves like the leech, until they seemed ready to burst.

"It is in vain to attempt to defend yourself against these puny bloodsuckers; though you crush thousands of them, tens of thousands arise to revenge the death of their companions, and you very soon discover that the conflict which you are waging is one in which you are sure to be defeated. So great at last are the pains and fatigue in buffeting away this attacking force, that in despair you throw yourself, half suffocated, in a blanket, with your face upon the ground, and snatch a few minutes of sleepless rest." Captain Back adds that the vigorous and unintermitting assaults of these tormenting pests conveyed the moral lesson of man's helplessness, since, with all our boasted strength, we are unable to repel these feeble atoms of creation. "How," he says, "can I possibly give an idea of the torment we endured from the sand-flies? As we dived into the confined and suffocating chasms, or waded through the close swamps, they rose in clouds, actually darkening the air; to see or to speak was equally difficult, for they rushed at every undefended part, and fixed their poisonous fangs in an instant. Our faces streamed with blood, as if leeches had been applied, and there was a burning and irritating pain, followed by immediate inflammation, and producing giddiness, which almost drove us mad, and caused us to moan with pain and agony."

At the Pine portage Captain Back engaged the services of A. R. McLeod, in the employ of the Hudson's Bay Company, and who had been fixed upon by Governor Simpson, to aid the expedition. He was accompanied by his wife, three children, and a servant; and had just returned from the Mackenzie River, with a large cargo of furs. The whole family were attached to the party, and after some detentions of a general and unimportant character, they arrived at Fort Chipewyan on the 29th of July. Fort Resolution, on Great Slave Lake, was reached on the 8th of August.

The odd assemblage of goods and voyageurs in their encampment are thus graphically described by the traveller, as he glanced around him.

"At my feet was a rolled bundle in oil-cloth, containing some three blankets, called a bed; near it a piece of dried buffalo, fancifully ornamented with long black hairs, which no art, alas! can prevent from insinuating themselves between the teeth, as you laboriously masticate the tough, hard flesh; then a tolerably clean napkin, spread by way of table-cloth, on a red piece of canvas, and supporting a tea-pot, some biscuits, and a salt-cellar; near this a tin plate, close by a square kind of box or safe of the same material, rich with a pale, greasy hair, the produce of the colony at Red River; and the last the far-renowned *pemmican*, unquestionably the best food of the country for expeditions such as ours. Behind me were two boxes containing astronomical instruments, and a sextant lying on the ground, whilst the different corners of the tent were occupied by a washing apparatus, a gun, an Indian shot-pouch, bags, basins, and an unhappy-looking japanned pot, whose melancholy bumps and hollows seemed to reproach me for many a bruise endured upon the rocks and portages between Montreal and Lake Winnipeck. Nor were my crew less motley than the furniture of the tent. It consisted of an Englishman, a man from Stornaway, two Canadians, two Metifs or half-breds, and three Iroquois Indians. Babel could not have produced a worse confusion of unharmonious sounds than was the conversation they kept up."

Having obtained at Fort Resolution all possible information, from the Indians and others, relative to the course of the northern rivers of which he was in search, he divided his crew into two parties, five of whom were left as an escort for Mr. McLeod, and four were to accompany himself in search of the Great Fish River, since appropriately named after Back himself.

On the 19th of August they began the ascent of the Hoar Frost River, whose course was a series of the most fearful cascades and rapids. The woods here were so thick as to render them almost impervious, consisting chiefly of stunted firs, which occasioned infinite trouble to the party to force their way through; added to which, they had to clamber over fallen trees, through rivulets, and over bogs and swamps, until the difficulties appeared so appalling as almost to dishearten the party from prosecuting their journey. The heart of Captain Back was, however, of too stern a cast to be dispirited by difficulties, at which less

persevering explorers would have turned away discomfited, and cheering on his men, like a bold and gallant leader, the first in the advance of danger, they arrived at length in an open space, where they rested for awhile to recruit their exhausted strength. The place was, indeed, one of barrenness and desolation; crag was piled upon crag to the height of 2000 feet from the base, and the course of the river here, in a state of contraction, was marked by an uninterrupted line of foam.

However great the beauty of the scenery may be, and however resolute may be the will, severe toil will at length relax the spirits, and bring a kind of despondency upon a heart naturally bold and undaunted. This was found particularly the case now with the interpreter, who became a dead weight upon the party. Rapid now succeeded rapid; scarcely had they surmounted one fall than another presented itself, rising like an amphitheatre before them to the height of fifty feet. They, however, gained at length the ascent of this turbulent and unfriendly river, the romantic beauty and wild scenery of which were strikingly grand, and after passing successively a series of portages, rapids, falls, lakes, and rivers, on the 27th Back observed from the summit of a high hill a very large lake full of deep bays and islands, and which has been named Aylmer Lake, after the Governor-General of Canada at that time. The boat was sent out with three men to search for the lake, or outlet of the river, which they discovered on the second day, and Captain Back himself, during their absence, also accidentally discovered its source in the Sand Hill Lake, not far from his encampment. Not prouder was Bruce when he stood on the green sod which covers the source of the Nile, than was Captain Back when he found that he was standing at the source of a river, the existence of which was known, but the course of which was a problem no traveller had yet ventured to solve. Yielding to that pleasurable emotion which discoverers, in the first bound of their transport, may be pardoned for indulging, Back tells us he threw himself down on the bank and drank a hearty draught of the limpid water.

"For this occasion," he adds, "I had reserved a little grog, and need hardly say with what cheerfulness it was shared amongst the crew, whose welcome tidings had verified the notion of Dr. Richardson and myself, and thus placed beyond doubt the existence of the Thlew-ee-choh, or Great Fish River."

On the 30th of August they began to move towards the

river, but on reaching Musk-ox Lake it was found impossible to stand the force of the rapids in their frail canoe, and as winter was approaching their return to the rendezvous on Slave Lake was determined on.

At Clinton Colden Lake, some Indians visited them from the Chief Akaitcho, who it will be remembered was the guide of Sir John Franklin. Two of these Indians remembered Captain Back, one having accompanied him to the Coppermine River on Franklin's first expedition.

At the Cat or Artillery Lake they had to abandon their canoe, and perform the rest of the journey on foot over precipitous rocks, through frightful gorges and ravines, heaped with masses of granite, and along narrow ledges, where a false step would have been fatal.

At Fort Reliance the party found Mr. McLeod had, during their absence, erected the frame-work of a comfortable residence for them, and all hands set to work to complete it. After many obstacles and difficulties, it was finished.

Dr. King joined them on the 16th of September with two laden bateaux.

On the 5th of November they exchanged their cold tents for the new house, which was fifty feet long by thirty broad, and contained four rooms, besides a spacious hall in the centre, for the reception and accommodation of the Indians, to which a sort of rude kitchen was attached.

As the winter advanced bands of starving Indians continued to arrive, in the hope of obtaining some relief, as little or nothing was to be procured by hunting. They would stand around while the men were taking their meals, watching every mouthful with the most longing, imploring look, but yet never uttering a complaint.

At other times they would, seated round the fire, occupy themselves in roasting and devouring small bits of their reindeer garments, which, even when entire, afforded them a very insufficient protection against a temperature of 102° below freezing point.

The sufferings of the poor Indians at this period are described as frightful. "Famine with her gaunt and bony arm," says Back, "pursued them at every turn, withered their energies, and strewed them lifeless on the cold bosom of the snow." It was impossible to afford relief out of their scanty store to all, but even small portions of the mouldy pemmican intended for the dogs, unpalatable as it was, was gladly received, and saved many from perishing. "Often," adds Back, "did I share my own

plate with the children, whose helpless state and piteous cries were peculiarly distressing; compassion for the full grown may, or may not, be felt, but that heart must be cased in steel which is insensible to the cry of a child for food."

At this critical juncture, Akaitcho made his appearance with an opportune supply of a little meat, which in some measure enabled Captain Back to relieve the sufferers around him, many of whom, to his great delight, went away with Akaitcho. The stock of meat was soon exhausted, and they had to open their pemmican. The officers contented themselves with the short supply of half a pound a day, but the labouring men could not do with less than a pound and three quarters. The cold now set in with an intensity which Captain Back had never before experienced,—the thermometer on the 17th of January being 70° below zero. "Such indeed, (he says,) was the abstraction of heat, that with eight large logs of dry wood on the fire I could not get the thermometer higher than 12° below zero. Ink and paint froze. The sextant cases and boxes of seasoned wood, principally fir, all split. The skin of the hands became dry, cracked and opened into unsightly and smarting gashes, which we were obliged to anoint with grease. On one occasion, after washing my face within three feet of the fire, my hair was actually clotted with ice before I had time to dry it."

The hunters suffered severely from the intensity of the cold, and compared the sensation of handling their guns to that of touching red-hot iron, and so excessive was the pain, that they were obliged to wrap thongs of leather round the triggers to keep their fingers from coming into contact with the steel.

The sufferings which the party now endured were great, and had it not been for the exemplary conduct of Akaitcho in procuring them game, it is to be doubted whether any would have survived to tell the misery they had endured. The sentiments of this worthy savage were nobly expressed—"The great chief trusts in us, and it is better that ten Indians perish than that one white man should perish through our negligence and breach of faith."

On the 14th of February Mr. McLeod and his family removed to a place half-way between the fort and the Indians, in order to facilitate their own support, and assist in procuring food by hunting. His situation, however, became soon one of the greatest embarrassment, he and his family being surrounded by difficulties, privations, and

deaths. Six of the natives near him sank under the horrors of starvation, and Akaitcho and his hunters were twelve days' march distant.

Towards the end of April Capt. Back began to make arrangements for constructing boats for prosecuting the expedition once more, and while so employed, on the 25th a messenger arrived with the gratifying intelligence that Capt. Ross had arrived safely in England, confirmation of which was afforded in extracts from the *Times* and *Herald*, and letters from the long-lost adventurers themselves. Their feelings at these glad tidings are thus described:—"In the fulness of our hearts we assembled together, and humbly offered up our thanks to that merciful Providence, who in the beautiful language of scripture hath said, 'Mine own will I bring again, as I did sometime from the deeps of the sea.' The thought of so wonderful a preservation overpowered for a time the common occurrences of life. We had just sat down to breakfast; but our appetite was gone, and the day was passed in a feverish state of excitement. Seldom, indeed, did my friend Mr. King or I indulge in a libation, but on this joyful occasion economy was forgotten; a treat was given to the men, and for ourselves the social sympathies were quickened by a generous bowl of punch." Capt. Back's former interpreter, Augustus, hearing that he was in the country, set out on foot from Hudson's Bay to join him, but getting separated from his two companions, the gallant little fellow was either exhausted by suffering and privations, or, caught in the midst of an open traverse in one of those terrible snow storms which may be said to blow almost through the frame, he had sunk to rise no more, his bleached remains being discovered not far from the Rivière à Jean. "Such," says Capt. Back, "was the miserable end of poor Augustus, a faithful, disinterested, kind-hearted creature, who had won the regard, not of myself only, but I may add, of Sir J. Franklin and Dr. Richardson also, by qualities which, wherever found, in the lowest as in the highest forms of social life, are the ornament and charm of humanity."

On the 7th of June, all the preparations being completed, McLeod having been previously sent on to hunt, and deposit casks of meat at various stages, Back set out with Mr. King, accompanied by four voyageurs and an Indian guide. The stores not required were buried, and the doors and windows of the house blocked up.

At Artillery Lake, Back picked up the remainder of his party, with the carpenters who had been employed pre-

paring boats. The lightest and best was chosen and placed on runners plated with iron, and in this manner she was drawn over the ice by two men and six fine dogs. The eastern shore of the lake was followed, as it was found less rocky and precipitous than the opposite one. The march was prosecuted by night, the air being more fresh and pleasant, and the party took rest in the day. The glare of the ice, the difficulty encountered in getting the boat along, the ice being so bad that the spikes of the runners cut through instead of sliding over it, and the thick snow which fell in June, greatly increased the labour of getting along. The cold raw wind pierced through them in spite of cloaks and blankets. After being caulked, the boat was launched on the 14th of June, the lake being sufficiently unobstructed to admit of her being towed along shore. The weather now became exceedingly unpleasant—hail, snow, and rain pelted them one after the other for some time without respite, and then only yielded to squalls that overturned the boat. With alternate spells and haltings to rest, they however gradually advanced on the traverse, and were really making considerable progress when pelting showers of sleet and drift so dimmed and confused the sight, darkening the atmosphere, and limiting their view to only a few paces before them, as to render it an extremely perplexing task to keep their course.

On the 23rd of June they fortunately fell in with a *cache* made for them by their *avante-courier*, Mr. McLeod, in which was a seasonable supply of deer and musk-ox flesh, the latter, however, so impregnated with the odour from which it takes its name, that the men declared they would rather starve three days than swallow a mouthful of it. To remove this unfavourable impression Capt. Back ordered the daily rations to be served from it for his own mess as well as theirs, taking occasion at the same time to impress on their minds the injurious consequences of voluntary abstinence, and the necessity of accommodating their tastes to such food as the country might supply. Soon after another *cache* was met with, thus making eleven animals in all that had been thus obtained and secured for them by the kind care of Mr. McLeod.

On the 27th they reached Sand Hill Bay, where they found Mr. McLeod encamped. On the 28th the boat being too frail to be dragged over the portage, about a quarter of a mile in length, was carried bodily by the crew, and launched safely in the Thlew-ee-choh or Fish River. After crossing the portage beyond Musk-ox Rapid, about four

miles in length, and having all his party together, Captain Back took a survey of his provisions for the three months of operations, which he found to consist of two boxes of maccaroni, a case of cocoa, twenty-seven bags of pemmican of about 80lbs. each, and a keg with two gallons of rum. This he considered an adequate supply if all turned out sound and good. The difficulty, however, of transporting a weight of 5000lbs. over ice and rocks by a circuitous route of full 200 miles may be easily conceived, not to mention the pain endured in walking on some parts where the ice formed innumerable spikes that pierced like needles, and in other places where it was so black and decayed, that it threatened at every step to engulf the adventurous traveller. These and similar difficulties could only be overcome by the most steady perseverance, and the most determined resolution.

Among the group of dark figures huddled together in the Indian encampment around them, Capt. Back found his old acquaintance, the Indian beauty of whom mention is made in Sir John Franklin's narrative under the name of Green Stockings. Although surrounded with a family, with one urchin in her cloak clinging to her back, and several other maternal accompaniments, Capt. Back immediately recognised her, and called her by her name, at which she laughed, and said she was an old woman now, and begged that she might be relieved by the "medicine man," for she was very much out of health. However, notwithstanding all this, she was still the beauty of the tribe, and with that consciousness which belongs to all belles, savage or polite, she seemed by no means displeased when Back sketched her portrait.—(p. 307.)

Mr. McLeod was now sent back, taking with him ten persons and fourteen dogs. His instructions were to proceed to Fort Resolution for the stores expected to be sent there by the Hudson's Bay Company, to build a house in some good locality, for a permanent fishing station, and to be again on the banks of the Fish River by the middle of September, to afford Back and his party any assistance or relief they might require.

The old Indian chief Akaitcho, hearing from the interpreter that Capt. Back was in his immediate neighbourhood, said, "I have known the chief a long time, and I am afraid I shall never see him again; I will go to him." On his arrival he cautioned Back against the dangers of a river which he distinctly told him the present race of Indians knew nothing of. He also warned him against the treachery of the Esquimaux, which he said was always masked under

the guise of friendship, observing they would attack him when he least expected it. "I am afraid," continued the good old chief, "that I shall never see you again; but should you escape from the great water, take care you are not caught by the winter, and thrown into a situation like that in which you were on your return from the Coppermine, for you are alone, and the Indians cannot assist you."

The carpenters, with an Iroquois, not being further required, were dismissed to join Mr. McLeod, and on the 8th of July they proceeded down the river. The boat was now launched and laden with her cargo, which, together with ten persons, she stowed well enough for a smooth river, but not for a lake or sea way. The weight was calculated at 3360 lbs., exclusive of the awning, poles, sails, &c., and the crew.

Their progress to the sea was now one continued succession of dangerous and formidable falls, rapids, and cataracts, which frequently made Back hold his breath, expecting to see the boat dashed to shivers against some protruding rocks amidst the foam and fury at the foot of a rapid. The only wonder is how in their frail leaky boat they ever shot one of the rapids. Rapid after rapid, and fall after fall, were passed, each accompanied with more or less danger; and in one instance the boat was only saved by all hands jumping into the breakers, and keeping her stern up the stream, until she was cleared from a rock that had brought her up. They had hardly time to get into their places again, when they were carried with considerable velocity past a river which joined from the westward. After passing no less than five rapids within the distance of three miles, they came to one long and appalling one, full of rocks and large boulders; the sides hemmed in by a wall of ice, and the current flying with the velocity and force of a torrent. The boat was lightened of her cargo, and Capt. Back placed himself on a high rock, with an anxious desire to see her run the rapid. He had every hope which confidence in the judgment and dexterity of his principal men could inspire, but it was impossible not to feel that one crash would be fatal to the expedition. Away they went with the speed of an arrow, and in a moment the foam and rocks hid them from view. Back at last heard what sounded in his ear like a wild shriek, and he saw Dr. King, who was a hundred yards before him, make a sign with his gun, and then run forward. Back followed with an agitation which may easily be conceived, when to his inexpressible joy he found that the shriek was the triumphant whoop of the crew, who had landed safely in a small bay

below. For nearly 100 miles of the distance they were impeded by these frightful whirlpools, and strong and heavy rapids.

On opening one of their bags of pemmican, the ingenuity of the Indians at pilfering was discovered, successive layers of mixed sand, stones, and green meat having been artfully and cleverly substituted for the dry meat. Fearful that they might be carrying heaps of stone instead of provision, Back had to examine carefully the remainder, which were all found sound and well-tasted. He began to fear, from the inclination of the river at one time towards the south, that it would be found to discharge itself in Chesterfield Inlet, in Hudson's Bay, but subsequently, to his great joy, it took a direct course towards the north, and his hopes of reaching the Polar Sea were revived. The river now led into several large lakes, some studded with islands, which were named successively after Sir H. Pelly, and Mr. Garry, of the Hudson's Bay Company; two others were named Lake Macdougall and Lake Franklin.

On the 28th of July they fell in with a tribe of about thirty-five very friendly Esquimaux, who aided them in transporting their boat over the last long and steep portage, to which his men were utterly unequal, and Back justly remarks, to their kind assistance he is mainly indebted for getting to the sea at all.

It was late when they got away, and while threading their course between some sand-banks with a strong current, they first caught sight of a majestic headland in the extreme distance to the north, which had a coast-like appearance. This important promontory Back subsequently named after our gracious Queen, then Princess Victoria.

"This then," observes Back, "may be considered as the mouth of the Thlew-ee-choh, which after a violent and tortuous course of 530 geographical miles, running through an iron-ribbed country, without a single tree on the whole line of its banks, expanding into five large lakes, with clear horizon, most embarrassing to the navigator, and broken into falls, cascades, and rapids, to the number of eighty-three in the whole, pours its water into the Polar Sea, in lat. 67° 11′ N., and long. 94° 30′ W., that is to say, about thirty-seven miles more south than the Coppermine River, and nineteen miles more south than that of Back's River (of Franklin) at the lower extremity of Bathurst's Inlet." (p. 390.)

For several days Back was able to make but slow progress along the eastern shore, in consequence of the solid body of drift-ice. A barren, rocky elevation of 800 feet

high was named Cape Beaufort, after the present hydrographer to the Admiralty. A bluff point on the eastern side of the estuary, which he considered to be the northern extreme, he named Cape Hay. Dean and Simpson, however, in 1839, traced the shore much beyond this. The difficulties met with here began to dispirit the men. For a week or ten days they had a continuation of wet, chilly, foggy weather, and the only vegetation, fern and moss, was so wet that it would not burn; being thus without fuel, during this time they had but one hot meal. Almost without water, without any means of warmth, or any kind of warm or comforting food, sinking knee-deep, as they proceeded on land, in the soft slush and snow, no wonder that some of the best men, benumbed in their limbs and dispirited by the dreary and unpromising prospect before them, broke out for a moment, in low murmurings, that theirs was a hard and painful duty.

Captain Back found it utterly impossible to proceed, as he had intended, to the Point Turnagain of Franklin, and after vainly essaying a land expedition by three of the best walkers, and these having returned, after making but fifteen miles' way, in consequence of the heavy rains and the swampy nature of the ground, he came to the resolution of returning. Reflecting, he says, on the long and dangerous stream they had to ascend, combining all the bad features of the worst rivers in the country, the hazard of the falls and rapids, and the slender hope which remained of their attaining even a single mile further, he felt he had no choice. Assembling, therefore, the men around him, and unfurling the British flag, which was saluted with three cheers, he announced to them this determination. The latitude of this place was 68° 13′ 57″ N., and longitude 94° 58′ 1″ W. The extreme point seen to the northward on the western side of the estuary, in latitude 68° 46′ N., longitude 96° 20′ W., Back named Cape Richardson. The spirits of many of the men, whose health had suffered greatly for want of warm and nourishing food, now brightened, and they set to work with alacrity to prepare for their return journey. The boat being dragged across, was brought to the place of their former station, after which the crew went back four miles for their baggage. The whole was safely conveyed over before the evening, when the water-casks were broken up to make a fire to warm a kettle of cocoa, the second hot meal they had had for nine days.

On the 15th of August, they managed to make their way about twenty miles, on their return to the southward,

through a breach in the ice, till they came to open water. The difficulties of the river were doubled in the ascent, from having to proceed against the stream. All the obstacles of rocks, rapids, sandbanks, and long portages had to be faced. In some days as many as sixteen or twenty rapids were ascended. They found, as they proceeded, that many of the deposits of provisions, on which they relied, had been discovered and destroyed by wolves. On the 16th of September they met Mr. McLeod and his party, who had been several days at Sand Hill Bay, waiting for them. On the 24th they reached the Ah-hel-dessy, where they met with some Indians. They were ultimately stopped by one most formidable perpendicular fall, and as it was found impossible to convey the boat further over so rugged and mountainous a country, most of the declivities of which were coated with thin ice, and the whole hidden by snow, it was here abandoned, and the party proceeded the rest of the journey on foot, each laden with a pack of about 75lbs. weight.

Late on the 27th of September they arrived at their old habitation, Fort Reliance, after being absent nearly four months, wearied indeed, but "truly grateful for the manifold mercies they had experienced in the course of their long and perilous journey." Arrangements were now made to pass the winter as comfortably as their means would permit, and as there was no probability that there would be sufficient food in the house for the consumption of the whole party, all except six were sent with Mr. McLeod to the fisheries. The Indians brought them provisions from time to time, and their friend Akaitcho, with his followers, though not very successful in hunting, was not wanting in his contributions. This old chieftain was, however, no longer the same active and important personage he had been in the days when he rendered such good service to Sir John Franklin. Old age and infirmities were creeping on him and rendering him peevish and fickle.

On the 21st of March following, having left directions with Dr. King to proceed, at the proper season, to the Company's factory at Hudson's Bay, to embark for England in their spring ships, Captain Back set out on his return through Canada, calling at the Fisheries to bid farewell to his esteemed friend, Mr. McLeod, and arriving at Norway House on the 24th of June, where he settled and arranged the accounts due for stores, &c., to the Hudson's Bay Company. He proceeded thence to New York, embarked for England and arrived at Liverpool

on the 8th of September, after an absence of two years and a half. Back was honoured with an audience of his Majesty, who expressed his approbation of his efforts—first in the cause of humanity, and next in that of geographical and scientific research. He has since been knighted; and in 1835, the Royal Geographical Society awarded him their gold medal (the Royal premium) for his discovery of the Great Fish River and navigating it to the sea on the Arctic coast.

Dr. King, with the remainder of the party, (eight men,) reached England, in the Hudson's Bay Company's ship, in the following month, October.

Of Captain Back's travels it has been justly observed that it is impossible to rise from the perusal of them without being struck with astonishment at the extent of sufferings which the human frame can endure, and at the same time the wondrous display of fortitude which was exhibited under circumstances of so appalling a nature, as to invest the narrative with the character of a romantic fiction, rather than an unexaggerated tale of actual reality. He, however, suffered not despair nor despondency to overcome him, but gallantly and undauntedly pursued his course, until he returned to his native land to add to the number of those noble spirits whose names will be carried to posterity as the brightest ornaments to the country which gave them birth.

## Captain Back's Voyage of the Terror.

In the year 1836 Captain Back, who had only returned the previous autumn, at the recommendation of the Geographical Society, undertook a voyage in the *Terror* up Hudson's Strait.

He was to reach Wager River, or Repulse Bay, and to make an overland journey to examine the bottom of Prince Regent Inlet, sending other parties to the north and west to examine the Strait of the Fury and Hecla, and to reach, if possible, Franklin's Point Turnagain.

Leaving England on the 14th of June, he arrived on the 14th of August, at Salisbury Island, and proceeded up the Frozen Strait; off Cape Comfort the ship got frozen in, and on the breaking up of the ice by one of those frequent convulsions, the vessel was drifted right up the Frozen Channel, grinding large heaps that opposed her progress to powder.

From December to March she was driven about by the fury of the storms and ice, all attempts to release her

being utterly powerless. She thus floated till the 10th of July, and for three days was on her beam-ends; but on the 14th suddenly righted. The crazy vessel with her gaping wounds was scarcely able to transport the crew across the stormy waters of the Atlantic, but the return voyage, which was rendered absolutely necessary, was fortunately accomplished safely.

I shall now give a concise summary of Captain Sir George Back's Arctic services, so as to present it more readily to the reader.

In 1818 he was Admiralty Mate on board the *Trent*, under Franklin. In 1819 he again accompanied him on his first overland journey, and was with him in all those perilous sufferings which are elsewhere narrated. He was also as a Lieutenant with Franklin on his second journey in 1825. Having been in the interval promoted to the rank of Commander, he proceeded, in 1833, accompanied by Dr. King and a party, through Northern America to the Polar Sea, in search of Captain John Ross. He was posted on the 30th of September, 1835, and appointed in the following year to the command of the *Terror*, for a voyage of discovery in Hudson's Bay.

## Messrs. Dease and Simpson's Discoveries.

In 1836 the Hudson's Bay Company resolved upon undertaking the completion of the survey of the northern coast of their territories, forming the shores of Arctic America, and small portions of which were left undetermined between the discoveries of Captains Back and Franklin.

They commissioned to this task two of their officers, Mr. Thomas Simpson and Mr. Peter Warren Dease, who were sent out with a party of twelve men from the company's chief fort, with proper aids and appliances. Descending the Mackenzie to the sea, they reached and surveyed in July, 1837, the remainder of the western part of the coast left unexamined by Franklin in 1825, from his Return Reef to Cape Barrow, where the *Blossom's* boats turned back.

Proceeding on from Return Reef two new rivers were discovered—the Garry and the Colville; the latter more than a thousand miles in length. Although it was the height of summer, the ground was found frozen several inches below the surface, the spray froze on the oars and rigging of their boats, and the ice lay smooth and solid in the bays, as in the depth of winter.

On the 4th of August, having left the boats and proceeded on by land, Mr. Simpson arrived at Elson Bay, which point Lieutenant Elson had reached in the *Blossom's* barge in 1826.

The party now returned to winter at Fort Confidence, on Great Bear Lake, whence they were instructed to prosecute their search to the eastward next season, and to communicate if possible with Sir George Back's expedition.

They left their winter quarters on the 6th of June, 1838, and descended Dease's River. They found the Coppermine River much swollen by floods, and encumbered with masses of floating ice. The rapids they had to pass were very perilous, as may be inferred from the following graphic description:—

"We had to pull for our lives to keep out of the suction of the precipices, along whose base the breakers raged and foamed with overwhelming fury. Shortly before noon, we came in sight of Escape Rapid of Franklin; and a glance at the overhanging cliffs told us that there was no alternative but to run down with full cargo. In an instant," continues Mr. Simpson, "we were in the vortex; and before we were aware, my boat was borne towards an isolated rock, which the boiling surge almost concealed. To clear it on the outside was no longer possible; our only chance of safety was to run between it and the lofty eastern cliff. The word was passed, and every breath was hushed. A stream which dashed down upon us over the brow of the precipice more than 100 feet in height, mingled with the spray that whirled upwards from the rapid, forming a terrific shower-bath. The pass was about eight feet wide, and the error of a single foot on either side would have been instant destruction. As, guided by Sinclair's consummate skill, the boat shot safely through those jaws of death, an involuntary cheer arose. Our next impulse was to turn round to view the fate of our comrades behind. They had profited by the peril we incurred, and kept without the treacherous rock in time."

On the 1st of July they reached the sea, and encamped at the mouth of the river, where they waited for the opening of the ice till the 17th. They doubled Cape Barrow, one of the northern points of Bathurst's Inlet, on the 29th, but were prevented crossing the inlet by the continuity of the ice, and obliged to make a circuit of nearly 150 miles by Arctic Sound.

Some very pure specimens of copper ore were found on one of the Barry Islands. After doubling Cape Flinders

on the 9th of August, the boats were arrested by the ice in a little bay to which the name of Boat-haven was given, situate about three miles from Franklin's farthest. Here the boats lingered for the best part of a month in utter hopelessness. Mr. Simpson pushed on therefore on the 20th, with an exploring party of seven men, provisioned for ten days. On the first day they passed Point Turn-again, the limit of Franklin's survey in 1821. On the 23rd they had reached an elevated cape, with land apparently closing all round to the northward, so that it was feared they had only been traversing the coast of a huge bay. But the perseverance of the adventurous explorer was fully rewarded.

"With bitter disappointment," writes Mr. Simpson, "I ascended the height, from whence a vast and splendid prospect burst suddenly upon me. The sea, as if transformed by enchantment, rolled its free waves at my feet, and beyond the reach of vision to the eastward. Islands of various shape and size overspread its surface; and the northern land terminated to the eye in a bold and lofty cape, bearing east-north-east, thirty or forty miles distant, while the continental coast trended away south-east. I stood, in fact, on a remarkable headland, at the eastern outlet of an ice-obstructed strait. On the extensive land to the northward I bestowed the name of our most gracious sovereign Queen Victoria. Its eastern visible extremity I called Cape Pelly, in compliment to the governor of the Hudson's Bay Company."

Having reached the limits which prudence dictated in the face of the long journey back to the boats, many of his men too being lame, Mr. Simpson retraced his steps, and the party reached Boat-haven on the 29th of August, having traced nearly 140 miles of new coast. The boats were cut out of their icy prison, and commenced their re-ascent of the Coppermine on the 3rd of September. At its junction with the Kendal River they left their boats, and, shouldering their packs, traversed the Barren Grounds, and arrived at their residence on the lake by the 14th of September.

The following season these persevering explorers commenced their third voyage. They reached the Bloody Fall on the 22nd of June, 1839, and occupied themselves for a week in carefully examining Richardson's River, which was discovered in the previous year, and discharges itself in the head of Back's Inlet. On the 3rd of July they reached Cape Barrow, and from its rocky heights were surprised to observe Coronation Gulf almost clear

of ice, while on their former visit it could have been crossed on foot.

They were at Cape Franklin a month earlier than Mr. Simpson reached it on foot the previous year, and doubled Cape Alexander, the northernmost cape in this quarter, on the 28th of July, after encountering a violent gale. They coasted the huge bay extending for about nine degrees eastward from this point, being favoured with clear weather, and protected by the various islands they met from the crushing state of the ice drifted from seaward.

On the 10th of August they opened a strait about ten miles wide at each extremity, but narrowing to four or five miles in the centre. This strait, which divides the main land from Boothia, has been called Simpson's Strait.

On the 13th of August they had passed Richardson's Point and doubled Point Ogle, the furthest point of Back's journey in 1834.

By the 16th they had reached Montreal Island in Back's Estuary, where they found a deposit of provisions which Captain Back had left there that day five years. The pemmican was unfit for use, but out of several pounds of chocolate half decayed the men contrived to pick sufficient to make a kettleful of acceptable drink in honour of the occasion. There were also a tin case and a few fish-hooks, of which, observes Mr. Simpson, "Mr. Dease and I took possession, as memorials of our having breakfasted on the very spot where the tent of our gallant, though less successful precursor stood that very day five years before."

By the 20th of August they had reached as far as Aberdeen Island to the eastward, from which they had a view of an apparently large gulf, corresponding with that which had been so correctly described to Parry by the intelligent Esquimaux female as Akkolee.

From a mountainous ridge about three miles inland a view of land in the north-east was obtained, supposed to be one of the southern promontories of Boothia. High and distant islands stretching from E. to E.N.E. (probably some in Committee Bay) were seen, and two considerable ones were noted far out in the offing. Remembering the length and difficulty of their return route, the explorers now retraced their steps. On their return voyage they traced sixty miles of the south coast of Boothia, where at one time they were not more than ninety miles from the site of the magnetic pole, as deter-

mined by Captain Sir James C. Ross. On the 25th of August they erected a high cairn at their farthest point, near Cape Herschel.

About 150 miles of the high, bold shores of Victoria Land, as far as Cape Parry, were also examined; Wellington, Cambridge, and Byron Bays being surveyed and accurately laid down. They then stretched across Coronation Gulf, and re-entered the Coppermine River on the 16th of September.

Abandoning here one of their boats, with the remains of their useless stores and other articles not required, they ascended the river and reached Fort Confidence on the 24th of September, after one of the longest and most successful boat voyages ever performed on the Polar Sea, having traversed more than 1600 miles of sea.

In 1838, before the intelligence of this last trip had been received, Mr. Simpson was presented by the Royal Geographical Society of London with the Founder's Gold Medal, for discovering and tracing in 1837 and 1838 about 300 miles of the Arctic shores; but the voyage which I have just recorded has added greatly to the laurels which he and his bold companions have achieved.

## Dr. John Rae's Land Expedition, 1846—1847.

Although a little out of its chronological order, I give Dr. Rae's exploring trip before I proceed to notice Franklin's last voyage, and the different relief expeditions that have been sent out during the past two years.

In 1846 the Hudson's Company despatched an expedition of thirteen persons, under the command of Dr. John Rae, for the purpose of surveying the unexplored portion of the Arctic coast at the north-eastern angle of the American continent between Dease and Simpson's farthest, and the Strait of the Fury and Hecla.

The expedition left Fort Churchill, in Hudson's Bay, on the 5th of July, 1846, and returned in safety to York Factory on the 6th of September in the following year, after having, by travelling over the ice and snow in the spring, traced the coast all the way from the Lord Mayor's Bay of Sir John Ross to within eight or ten miles of the Fury and Hecla Strait, thus proving that eminent navigator to have been correct in stating Boothia to be a peninsula.

On the 15th of July the boats first fell in with the ice, about ten miles north of Cape Fullerton, and it was

so heavy and closely packed that they were obliged to take shelter in a deep and narrow inlet that opportunely presented itself, where they were closed up two days.

On the 22nd the party reached the most southerly opening of Wager River or Bay, but were detained the whole day by the immense quantities of heavy ice driving in and out with the flood and ebb of the tide, which ran at the rate of eight miles an hour, forcing up the ice and grinding it against the rocks with a noise like thunder. On the night of the 24th the boats anchored at the head of Repulse Bay. The following day they anchored in Gibson's Cove, on the banks of which they met with a small party of Esquimaux; several of the women wore beads round their wrists, which they had obtained from Captain Parry's ships when at Igloolik and Winter Island. But they had neither heard nor seen anything of Sir John Franklin.

Learning from a chart drawn by one of the natives, that the isthmus of Melville Peninsula was only about forty miles across, and that of this, owing to a number of large lakes, but five miles of land would have to be passed over, Dr. Rae determined to make his way over this neck in preference to proceeding by Fox's Channel through the Fury and Hecla Strait.

One boat was therefore laid up with her cargo in security, and with the other the party set out, assisted by three Esquimaux. After traversing several large lakes, and crossing over six "portages," on the 2nd of August they got into the salt water, in Committee Bay, but being able to make but little progress to the north-west, in consequence of heavy gales and closely packed ice, he returned to his starting point, and made preparations for wintering, it being found impossible to proceed with the survey at that time. The other boat was brought across the isthmus, and all hands were set to work in making preparations for a long and cold winter.

As no wood was to be had, stones were collected to build a house, which was finished by the 2nd of September. Its dimensions were twenty feet by fourteen, and about eight feet high. The roof was formed of oil-cloths and morse-skin coverings, the masts and oars of the boats serving as rafters, while the door was made of parchment skins stretched over a wooden frame.

The deer had already commenced migrating southward, but whenever he had leisure, Dr. Rae shouldered his rifle, and had frequently good success, shooting on one day seven deer within two miles of their encampment.

On the 16th of October, the thermometer fell to zero, and the greater part of the reindeer had passed; but the party had by this time shot 130, and during the remainder of October, and in November, thirty-two more were killed, so that with 200 partridges and a few salmon, their snow-built larder was pretty well stocked.

Sufficient fuel had been collected to last, with economy, for cooking, until the spring; and a couple of seals which had been shot produced oil enough for their lamps. By nets set in the lakes under the ice, a few salmon were also caught.

After passing a very stormy winter, with the temperature occasionally 47° below freezing point, and often an allowance of but one meal a day, towards the end of February preparations for resuming their surveys in the spring were made. Sleds, similar to those used by the natives, were constructed. In the beginning of March the reindeer began to migrate northward, but were very shy. One was shot on the 11th. Dr. Rae set out on the 5th of April, in company with three men and two Esquimaux as interpreters, their provisions and bedding being drawn on sleds by four dogs. Nothing worthy of notice occurs in this exploratory trip, till on the 18th Rae came in sight of Lord Mayor's Bay, and the group of islands with which it is studded. The isthmus which connects the land to the northward with Boothia, he found to be only about a mile broad. On their return the party fortunately fell in with four Esquimaux, from whom they obtained a quantity of seal's blubber for fuel and dogs' food, and some of the flesh and blood for their own use, enough to maintain them for six days on half allowance.

All the party were more or less affected with snow blindness, but arrived at their winter quarters in Repulse Bay on the 5th of May, all safe and well, but as black as negroes, from the combined effects of frost-bites and oil smoke.

On the evening of the 13th May, Dr. Rae again started with a chosen party of four men, to trace the west shore of Melville Peninsula. Each of the men carried about 70 lbs. weight.

Being unable to obtain a drop of water of nature's thawing, and fuel being rather a scarce article, they were obliged to take small kettles of snow under the blankets with them, to thaw by the heat of the body.

Having reached to about 69° 42′ N. lat., and 85° 8′ long., and their provisions being nearly exhausted, they were obliged, much to their disappointment, to turn back,

when only within a few miles of the Hecla and Fury Strait. Early on the morning of the 30th of May, the party arrived at their snow hut on Cape Thomas Simpson. The men they had left there were well, but very thin, as they had neither caught nor shot anything eatable, except two marmots, and they were preparing to cook a piece of parchment skin for their supper.

"Our journey," says Dr. Rae, "hitherto had been the most fatiguing I had ever experienced; the severe exercise, with a limited allowance of food, had reduced the whole party very much. However, we marched merrily on, tightening our belts,—mine came in six inches,—the men vowing that when they got on full allowance, they would make up for lost time."

On the morning of the 9th of June, they arrived at their encampment in Repulse Bay, after being absent twenty-seven days. The whole party then set actively to work procuring food, collecting fuel, and preparing the boats for sea; and the ice in the bay having broken up on the 11th of August, on the 12th they left their dreary winter quarters, and after encountering head winds and stormy weather, reached Churchill River on the 31st of August.

A gratuity of 400*l.* was awarded to Mr. Rae, by the Hudson's Bay Company, for the important services he had thus rendered to the cause of science.

## Captain Sir John Franklin's Last Expedition, 1845—1851.

That Sir John Franklin, now nearly six years absent, is alive, we dare not affirm; but that his ships should be so utterly annihilated that no trace of them can be discovered, or if they have been so entirely lost, that not a single life should have been saved to relate the disaster, and that no traces of the crew or vessels should have been met with by the Esquimaux, or the exploring parties who have visited and investigated those coasts, and bays, and inlets to so considerable an extent, is a most extraordinary circumstance. It is the general belief of those officers who have served in the former Arctic expeditions, that whatever accident may have befallen the *Erebus* and *Terror*, they cannot wholly have disappeared from those seas, and that some traces of their fate, if not some living remnant of their crews, must eventually reward the search of the diligent investigator. It is possible that they may be found in quarters the least expected. There is still reason, then, for *hope*, and

for the great and honourable exertions which that divine spark in the soul has prompted and still keeps alive.

"There is something," says the *Athenæum*, "intensely interesting in the picture of those dreary seas amid whose strange and unspeakable solitudes our lost countrymen are, or have been, somewhere imprisoned for so many years, swarming with the human life that is risked to set them free. No hunt was ever so exciting—so full of a wild grandeur and a profound pathos—as that which has just aroused the Arctic echoes; that wherein their brothers and companions have been beating for the track by which they may rescue the lost mariners from the icy grasp of the Genius of the North. Fancy these men in their adamantine prison, wherever it may be,—chained up by the Polar Spirit whom they had dared,—lingering through years of cold and darkness on the stinted ration that scarcely feeds the blood, and the feeble hope that scarcely sustains the heart,—and then imagine the rush of emotions to greet the first cry from that wild hunting-ground which should reach their ears! Through many summers has that cry been listened for, no doubt. Something like an expectation of the rescue which it should announce has revived with each returning season of comparative light, to die of its own baffled intensity as the long dark months once more settled down upon their dreary prisonhouse.—There is scarcely a doubt that the track being now struck, these long pining hearts may be traced to their lair. But what to the anxious questioning which has year by year gone forth in search of their fate, will be the answer now revealed? The trail is found,—but what of the weary feet that made it? We are not willing needlessly to alarm the public sympathies, which have been so generously stirred on behalf of the missing men,—but we are bound to warn our readers against too sanguine an entertainment of the hope which the first tidings of the recent discovery is calculated to suggest. It is scarcely possible that the provisions which were sufficient for three years, and adaptable for four, can by any economy which implies less than starvation have been spread over five,—and scarcely probable that they can have been made to do so by the help of any accidents which the place of confinement supplied. We cannot hear of this sudden discovery of traces of the vanished crews as living men, without a wish which comes like a pang that it had been two years ago—or even last year. It makes the heart sore to think how close relief may have been to their hiding-place in

former years—when it turned away. There is scarcely reason to doubt that had the present circumstances of the search occurred two years ago—last year perhaps—the wanderers would have been restored. Another year makes a frightful difference in the odds:—and we do not think the public will ever feel satisfied with what has been done in this matter if the oracle so long questioned, and silent so long, shall speak at last—and the answer shall be, 'It is too late.'"

In the prosecution of the noble enterprise on which all eyes are now turned, it is not merely scientific research and geographical discovery that are at present occupying the attention of the commanders of vessels sent out; the lives of human beings are at stake, and above all, the lives of men who have nobly perilled everything in the cause of national—nay, of universal progress and knowledge;—of men who have evinced on this and other expeditions the most dauntless bravery that any men can evince. Who can think of the probable fate of these gallant adventurers without a shudder?

Alas! how truthfully has Montgomery depicted the fatal imprisonment of vessels in these regions:—

There lies a vessel in that realm of frost,
Not wrecked, not stranded, yet for ever lost;
Its keel embedded in the solid mass;
Its glistening sails appear expanded glass;
The transverse ropes with pearls enormous strung,
The yards with icicles grotesquely hung.
Wrapt in the topmast shrouds there rests a boy,
His old sea-faring father's only joy;
Sprung from a race of rovers, ocean born,
Nursed at the helm, he trod dry land with scorn;
Through fourscore years from port to port he veer'd,
Quicksand, nor rock, nor foe, nor tempest fear'd;
Now cast ashore, though like a hulk he lie,
His son at sea is ever in his eye.
*He* ne'er shall know in his *Northumbrian* cot,
How brief that son's career, how strange his lot
Writhed round the mast, and sepulchred in air,
Him shall no worm devour, no vulture tear,
Congeal'd to adamant his frame shall last,
Though empires change, till time and tide be past.
Morn shall return, and noon, and eve, and night
Meet here with interchanging shade and light;
But from that barque no timber shall decay,
Of these cold forms no feature pass away;
Perennial ice around th' encrusted bow,
The peopled-deck, and full-rigg'd masts shall grow
Till from the sun himself the whole be hid,
Or spied beneath a crystal pyramid;

As in pure amber with divergent lines,
A rugged shell embossed with sea-weed, shines.
From age to age increased with annual snow,
This new *Mont Blanc* among the clouds may glow,
Whose conic peak that earliest greets the dawn,
And latest from the sun's shut eye withdrawn,
Shall from the Zenith, through incumbent gloom,
Burn like a lamp upon this naval tomb.
But when th' archangel's trumpet sounds on high,
The pile shall burst to atoms through the sky,
And leave its dead, upstarting at the call,
Naked and pale, before the Judge of all.

All who read these pages will, I am sure, feel the deepest sympathy and admiration of the zeal, perseverance, and conjugal affection displayed in the noble and untiring efforts of Lady Franklin to relieve or to discover the fate of her distinguished husband and the gallant party under his command, despite the difficulties, disappointments, and heart-sickening "hope deferred" with which these efforts have been attended. All men must feel a lively interest in the fate of these bold men, and be most desirous to contribute towards their restoration to their country and their homes. The name of the present Lady Franklin is as "familiar as a household word" in every bosom in England; she is alike the object of our admiration, our sympathy, our hopes, and our prayers. Nay, her name and that of her husband is breathed in prayer in many lands—and, oh! how earnest, how zealous, how courageous, have been her efforts to find and relieve her husband, for, like Desdemona,

"She loved him for the dangers he had passed,
And he loved her that she did pity them."

How has she traversed from port to port, bidding "God speed their mission" to each public and private ship going forth on the noble errand of mercy—how freely and promptly has she contributed to their comforts. How has she watched each arrival from the north, scanned each stray paragraph of news, hurried to the Admiralty on each rumour, and kept up with unremitting labour a voluminous correspondence with all the quarters of the globe, fondly wishing that she had the wings of the dove, that she might flee away, and be with him from whom Heaven has seen fit to separate her so long.

An American poet well depicts her sentiments in the following lines:—

## LADY FRANKLIN'S APPEAL TO THE NORTH.

Oh, where, my long lost-one! art thou,
'Mid Arctic seas and wintry skies?
Deep, Polar night is on *me* now,
And Hope, long wrecked, but mocks my cries.
I am like thee! from frozen plains
In the drear zone and sunless air,
My dying, lonely heart complains,
And chills in sorrow and despair.

Tell me, ye Northern winds! that sweep
Down from the rayless, dusky day—
Where ye have borne, and where ye keep,
My well-beloved within your sway;
Tell me, when next ye wildly bear
The icy message in your breath,
Of my beloved! Oh, tell me where
Ye keep him on the shores of death.

Tell me, ye Polar seas! that roll
From ice-bound shore to sunny isle—
Tell me, when next ye leave the Pole,
Where ye have chained my lord the while!
On the bleak Northern cliff I wait
With tear-pained eyes to see ye come!
Will ye not tell me, ere too late?
Or will ye mock while I am dumb?

Tell me, oh tell me, mountain waves!
Whence have ye leaped and sprung to-day?
Have ye passed o'er their sleeping graves
That ye rush wildly on your way?
Will ye sweep on and bear me too
Down to the caves within the deep?
Oh, bring some token to my view
That ye my loved one safe will keep!

Canst thou not tell me, Polar Star!
Where in the frozen waste he kneels?
And on the icy plains afar
His love to God and me reveals?
Wilt thou not send one brighter ray
To my lone heart and aching eye?
Wilt thou not turn my night to day,
And wake my spirit ere I die?

Tell me, oh dreary North! for now
My soul is like thine Arctic zone;
Beneath the darkened skies I bow,
Or ride the stormy sea alone!
Tell me of my beloved! for I
Know not a ray my lord without!
Oh, tell me, that I may not die
A sorrower on the sea of doubt!

In the early part of 1849 Sir E. Parry stated, that in offering his opinions, he did so under a deep sense of the anxious and even painful responsibility, both as regarded the risk of life, as well as the inferior consideration of expense involved in further attempts to rescue our gallant countrymen, or at least the surviving portion of them, from their perilous position.

But it was his deliberate conviction that the time had not yet arrived when the attempt ought to be given up as hopeless: the further efforts making might also be the means of determining their fate, and whether it pleased God to give success to those efforts or not, the Lords of the Admiralty, and the country at large, would hereafter be better satisfied to have followed up the noble attempts already made, so long as the most distant hope remains of ultimate success.

In the absence of authentic information of the fate of the gallant band of adventurers, it has been well observed, the *terra incognita* of the northern coast of Arctic America will not only be traced, but minutely surveyed, and the solution of the problem of centuries will engage the marked attention of the House of Commons and the legislative assemblies of other parts of the world. The problem is very safe in their hands, so safe indeed that two years will not elapse before it is solved.

The intense anxiety and apprehension now so generally entertained for the safety of Sir John Franklin, and the crews of the *Erebus* and *Terror* under his command, who, if still in existence, are now passing through the severe ordeal of a fifth winter in those inclement regions, imperatively call for every available effort to be made for their rescue from a position so perilous; and as long as one possible avenue to that position remains unsearched, the country will not feel satisfied that everything has been done which perseverance and experience can accomplish, to dispel the mystery which at present surrounds their fate.

Capt. Sir James Ross having returned successful from his Antarctic expedition in the close of the preceding year, in the spring of 1845, the Lords Commissioners of the Admiralty, upon the recommendation of Sir John Barrow, determined on sending out another expedition to the North Pole.

Accordingly the command was given to Sir John Franklin, who re-commissioned the *Erebus* and *Terror*, the two vessels which had just returned from the South Polar Seas. The expedition sailed from Sheerness on the 26th of May, 1845. The following are the officers belonging to

these vessels, and for whose safety so deep an interest is now felt:—

*Erebus.*

Captain—Sir John Franklin, K.C.H.
Commander—James Fitzjames (Capt.)
Lieutenants—Graham Gore (Commander), Henry T. D. Le Vesconte, James William Fairholme.
Mates—Chas. F. des Vaux (Lieut.), Robert O'Sargent (Lieut.)
Second Master—Henry F. Collins.
Surgeon—Stephen S. Stanley.
Assistant-Surgeon—Harry D. S. Goodsir (acting).
Paymaster and Purser—Chas. H. Osmer.
Ice-master—James Reid, acting.
58 Petty Officers, Seamen, &c.
Full complement, 70.

*Terror.*

Captain—Fras. R. M. Crozier.
Lieutenants—Edward Little (Commander), Geo. H. Hodgson, John Irving.
Mates—Frederick J. Hornby (Lieut.), Robert Thomas (Lieut.)
Ice-master—T. Blanky (acting).
Second Master—G. A. Maclean.
Surgeon—John S. Peddie.
Assistant-Surgeon—Alexander McDonald.
Clerk in Charge—Edwin J. H. Helpman.
57 Petty Officers, Seamen, &c.
Full complement, 68.

Those officers whose rank is within parenthesis have been promoted during their absence.

The following is an outline of Capt. Franklin's services as recorded in O'Byrne's Naval Biography:—

Sir John Franklin, Kt., K.R.G., K.C.H., D.C.L., F.R.S., was born in 1786 at Spilsby, in Lincolnshire, and is brother of the late Sir W. Franklin, Kt., Chief Justice of Madras. He entered the navy in October, 1800, as a boy on board the *Polyphemus*, 64, Captain John Lawford, under whom he served as midshipman in the action off Copenhagen, 2nd of April, 1801. He then sailed with Captain Flinders in H.M. sloop *Investigator* on a voyage of discovery to New Holland, joining there the armed store-ship *Porpoise;* he was wrecked on a coral reef near Cato Bank on the 17th of August, 1803. I shall not

follow him through all his subsequent period of active naval service, in which he displayed conspicuous zeal and activity. But we find him taking part at the battle of Trafalgar, on the 21st of October, 1805, on board the *Bellerophon*, where he was signal midshipman. He was confirmed as Lieutenant on board the *Bedford*, 74, 11th of February, 1808, and he then escorted the royal family of Portugal from Lisbon to South America. He was engaged in very arduous services during the expedition against New Orleans in the close of 1814, and was slightly wounded in boat service, and for his brilliant services on this occasion was warmly and officially recommended for promotion. On the 14th of January, 1818, he assumed command of the hired brig *Trent*, in which he accompanied Captain D. Buchan, of the *Dorothea*, on the perilous voyage of discovery to the neighbourhood of Spitzbergen, which I have fully recorded elsewhere. In April, 1819, having paid off the *Trent* in the preceding November, he was invested with the conduct of an expedition destined to proceed overland from the shores of Hudson's Bay, for the purpose more particularly of ascertaining the actual position of the mouth of the Coppermine River, and the exact trending of the shores of the Polar Sea to the eastward of that river.

The details of this fearful undertaking, which endured until the summer of 1822, and in the course of which he reached as far as Point Turnagain, in latitude 68° 19′ N. and longitude 109° 25′ W., and effected a journey altogether of 5550 miles, Captain Franklin has ably set forth in his "Narrative of a Journey to the Shores of the Polar Sea in the Years 1819-22," and which I have abridged in preceding pages. He was promoted to the rank of Commander on the 1st of January, 1821, and reached his post rank on the 20th of November, 1822. On the 16th of February, 1825, this energetic officer again left England on another expedition to the Frozen Regions, having for its object a co-operation with Captains F. W. Beechey and W. E. Parry, in ascertaining from opposite quarters the existence of a north-west passage. The results of this mission will be found in detail in Captain Franklin's "Narrative of a Second Expedition to the Shores of the Polar Sea in 1825-7."

On his return to England, where he arrived on the 26th of Sept., 1827, Franklin was presented by the Geographical Society of Paris with a gold medal valued at 1200 francs, for having made the most important acquisitions to geographical knowledge during the preceding year, and on

the 29th of April, 1829, he received the honour of knighthood, besides being awarded in July following the Oxford degree of a D.C.L.

From 1830 to 1834 he was in active service in command of H.M.S. *Rainbow* on the Mediterranean station, and for his exertions during that period as connected with the troubles in Greece, was presented with the order of the Redeemer of Greece. Sir John was created a K.C.H. on the 25th of January, 1836, and was for some time Governor of Van Diemen's Land. He married, on the 16th of August, 1823, Eleanor Anne, youngest daughter of W. Porden, Esq., architect, of Berners Street, London, and secondly, on the 5th of November, 1828, Jane, second daughter of John Griffin, Esq., of Bedford Place.

Captain Crozier was in all Parry's expeditions, having been midshipman in the *Fury* in 1821, in the *Hecla* in 1824, went out as a Lieutenant in the *Hecla* with Parry on his boat expedition to the Pole in 1827, volunteered in 1836 to go out in search of the missing whalers and their crews to Davis Straits, was made a Captain in 1841, and was second in command of the Antarctic expedition under Sir James Ross, and on his return appointed to the *Terror* as second in command under Franklin.

Lieutenant Gore served as a mate in the last fearful voyage of the *Terror*, under Back, and was also with Ross in the Antarctic expedition. He has attained his commander's rank during his absence.

Lieutenant Fairholme was in the Niger expedition.

Lieutenant Little has also been promoted during his absence, and so have all the mates.

Commander Fitzjames is a brave and gallant officer who has seen much service in the East, and has attained to his post rank since his departure.

The *Terror*, it may be remembered, is the vessel in which Captain Sir G. Back made his perilous attempt to reach Repulse Bay in 1836.

The *Erebus* and *Terror* were not expected home unless success had early rewarded their efforts, or some casualty hastened their return, before the close of 1847, nor were any tidings anticipated from them in the interval; but when the autumn of 1847 arrived without any intelligence of the ships, the attention of H.M. Government was directed to the necessity of searching for, and conveying relief to them, in case of their being imprisoned in the ice, or wrecked, and in want of provisions and means of transport.

For this purpose a searching expedition in three divisions was fitted out by the Government in the early part of

1848. The investigation was directed to three different quarters simultaneously, viz.: 1st, to that by which in case of success the ships would come out of the Polar Sea, to the westward, or Behring's Strait. This consisted of a single ship, the *Plover*, commanded by Captain Moore, which left England in the latter end of January for the purpose of entering Behring's Strait. It was intended that she should arrive there in the month of July, and having looked out for a winter harbour, she might send out her boats northward and eastward, in which directions the discovery ships, if successful, would be met with. The *Plover*, however, in her first season, never even approached the place of her destination, owing to her setting off too late, and to her bad sailing properties.

Her subsequent proceedings, and those of her boats along the coast, will be found narrated in after pages.

The second division of the expedition was one of boats, to explore the coast of the Arctic Sea between the Mackenzie and Coppermine Rivers, or from the 135th to the 115th degree of W. longitude, together with the south coast of Wollaston Land, it being supposed, that if Sir John Franklin's party had been compelled to leave the ships and take to their boats, they would make for this coast, whence they could reach the Hudson's Bay Company's posts. This party was placed under the command of the faithful friend of Franklin and the companion of his former travels, Dr. Sir John Richardson, who landed at New York in April, 1848, and hastened to join his men and boats, which were already in advance towards the Arctic shore. He was, however, unsuccessful in his search.

The remaining and most important portion of this searching expedition consisted of two ships under the command of Sir James Ross, which sailed in May, 1848, for the locality in which Franklin's ships entered on their course of discovery, viz., the eastern side of Davis Straits. These did not, however, succeed, owing to the state of the ice, in getting into Lancaster Sound until the season for operations had nearly closed. These ships wintered in the neighbourhood of Leopold Island, Regent Inlet, and missing the store-ship sent out with provisions and fuel, to enable them to stop out another year, were driven out through the Strait by the pack of ice, and returned home unsuccessful. The subsequent expeditions consequent upon the failure of the foregoing will be found fully detailed and narrated in their proper order.

Among the number of volunteers for the service of ex-

ploration, in the different searching expeditions, were the following:—Mr. Chas. Reid, lately commanding the whaling ship *Pacific*, and brother to the ice-master on board the *Erebus*, a man of great experience and respectability.

The Rev. Joseph Wolff, who went to Bokhara in search of Capt. Conolly and Col. Stoddart.

Mr. John McLean, who had passed twenty-five years as an officer and partner of the Hudson's Bay Company, and who has recently published an interesting narrative of his experience in the north-west regions.

Dr. Richard King, who accompanied Capt. Back in his land journey to the mouth of the Great Fish River.

Lieut. Sherard Osborn, R.N., who has recently gone out in the *Pioneer*, tender to the *Resolute*.

Commander Forsyth, R.N., who volunteered for all the expeditions, and was at last sent out by Lady Franklin in the *Prince Albert*.

Dr. McCormick, R.N., who served under Capt. Sir E. Parry, in the attempt to reach the North Pole, in 1827, who twice previously volunteered his services in 1847.

Capt. Sir John Ross, who has gone out in the *Felix*, fitted out by the Hudson's Bay Company, and by private subscriptions; and many others.

Up to the present time no intelligence of any kind has been received respecting the expedition, and its fate is now exciting the most intense anxiety, not only on the part of the British government and public, but of the whole civilized world. The maritime powers of Europe and the United States are vying with each other as to who shall be the first to discover some trace of the missing navigators, and if they be still alive, to render them assistance. The Hudson's Bay Company have, with a noble liberality, placed all their available resources of men, provisions, and the services of their chief and most experienced traders, at the disposal of Government. The Russian authorities have also given every facility for diffusing information and affording assistance in their territories.

In a letter from Sir John Franklin to Col. Sabine, dated from the Whale-Fish Islands, 9th of July, 1845, after noticing that, including what they had received from the transport, which had accompanied them so far, the *Erebus* and *Terror* had on board provisions, fuel, clothing, and stores, for three years complete from that date, *i. e.* to July, 1848; he continues as follows:—"I hope my dear wife and daughter will not be over-anxious if we should not return by the time they have fixed upon; and I must beg of you to give them the benefit of your advice and ex-

perience when that arrives, for you know well, that even after the second winter, without success in our object, we should wish to try some other channel, if the state of our provisions, and the health of the crews, justify it."

Capt. Dannett, of the whaler, *Prince of Wales*, whilst in Melville Bay, last saw the vessels of the expedition, moored to an iceberg, on the 26th of July, in lat. 74° 48′ N., long. 66° 13′ W., waiting for a favourable opening through the middle ice from Baffin's Bay to Lancaster Sound. Capt. Dannett states that during three weeks, after parting company with the ships, he experienced very fine weather, and thinks they would have made good progress.

Lieut. Griffith, in command of the transport which accompanied them out with provisions to Baffin's Bay, reports that he left all hands well and in high spirits. They were then furnished, he adds, with every species of provisions for three entire years, independently of five bullocks, and stores of every description for the same period, with abundance of fuel.

The following is Sir John Franklin's official letter sent home by the transport:—

"*Her Majesty's Ship 'Erebus,'*
"*Whale-Fish Islands, 12th of July*, 1845.

"I have the honour to acquaint you, for the information of the Lords Commissioners of the Admiralty, that her Majesty's ships *Erebus* and *Terror*, with the transport, arrived at this anchorage on the 4th instant, having had a passage of one month from Stromness: the transport was immediately taken alongside this ship, that she might be the more readily cleared; and we have been constantly employed at that operation till last evening, the delay having been caused not so much in getting the stores transferred to either of the ships, as in making the best stowage of them below, as well as on the upper deck: the ships are now complete with supplies of every kind for three years; they are therefore very deep; but, happily, we have no reason to expect much sea as we proceed farther.

"The magnetic instruments were landed the same morning; so also were the other instruments requisite for ascertaining the position of the observatory; and it is satisfactory to find that the results of the observations for latitude and longitude accord very nearly with those assigned to the same place by Sir Edward Parry: those for the dip and variation are equally satisfactory, which were made by Captain Crozier with the instruments

belonging to the *Terror*, and by Commander Fitzjames with those of the *Erebus*.

"The ships are now being swung, for the purpose of ascertaining the dip and deviation of the needle on board, as was done at Greenhithe, which, I trust, will be completed this afternoon, and I hope to be able to sail in the night.

"The governor and principal persons are at this time absent from Disco, so that I have not been able to receive any communication from head quarters as to the state of the ice to the north; I have, however, learnt from a Danish carpenter in charge of the Esquimaux at these islands, that though the winter was severe, the spring was not later than usual, nor was the ice later in breaking away hereabout; he supposes also that it is now loose as far as 74° latitude, and that our prospect is favourable of getting across the barrier, and as far as Lancaster Sound, without much obstruction.

"The transport will sail for England this day. I shall instruct the agent, Lieutenant Griffiths, to proceed to Deptford, and report his arrival to the Secretary of the Admiralty. I have much satisfaction in bearing my testimony to the careful and zealous manner in which Lieut. Griffiths has performed the service entrusted to him, and would beg to recommend him, as an officer who appears to have seen much service, to the favourable consideration of their lordships.

"It is unnecessary for me to assure their lordships of the energy and zeal of Captain Crozier, Commander Fitzjames, and of the officers and men with whom I have the happiness of being employed on this service.

"I have, &c.,

(Signed) "JOHN FRANKLIN, Captain.

"The Right Hon. H. L. Corry, M.P."

It has often been a matter of surprise that but one of the copper cylinders which Sir John Franklin was instructed to throw overboard at stated intervals, to record his progress, has ever come to hand, but a recent sight of the solitary one which has been received proves to me that they are utterly useless for the purpose. A small tube, about the size of an ordinary rocket-case, is hardly ever likely to be observed among huge masses of ice, and the waves of the Atlantic and Pacific, unless drifted by accident on shore, or near some boat. The Admiralty have wisely ordered them to be rendered more conspicuous by being headed up in some cask or barrel, instructions being issued

to Captain Collinson and other officers of the different expeditions to that effect.

According to Sir John Richardson, who was on intimate terms with Sir John Franklin, his plans were to shape his course in the first instance for the neighbourhood of Cape Walker, and to push to the westward in that parallel, or, if that could not be accomplished, to make his way southwards, to the channel discovered on the north coast of the continent, and so on to Behring's Straits; failing success in that quarter, he meant to retrace his course to Wellington Sound, and attempt a passage northwards of Parry's Islands, and if foiled there also, to descend Regent Inlet, and seek the passage along the coast discovered by Messrs. Dease and Simpson.

Captain Fitzjames, the second in command under Sir John Franklin, was much inclined to try the passage northward of Parry's Islands, and he would no doubt endeavour to persuade Sir John to pursue this course if they failed to the southward.

In a private letter of Captain Fitzjames to Sir John Barrow, dated January, 1845, he writes as follows:—

"It does not appear clear to me what led Parry down Prince Regent Inlet, after having got as far as Melville Island before. The north-west passage is certainly to be gone through by Barrow's Strait, but whether south or north of Parry's Group, remains to be proved. I am for going north, edging north-west till in longitude 140°, if possible."

I shall now proceed to trace, in chronological order and succession, the opinions and proceedings of the chief Arctic explorers and public authorities, with the private suggestions offered, and notice in detail the relief expeditions resulting therefrom.

In February, 1847, the Lords of the Admiralty state, that having unlimited confidence in the skill and resources of Sir John Franklin, they "have as yet felt no apprehensions about his safety; but on the other hand, it is obvious, that if no accounts of him should arrive by the end of this year, or, as Sir John Ross expects, at an earlier period, active steps must then be taken."

Captain Sir Edward Parry fully concurred in these views, observing, "Former experience has clearly shown, that with the resources taken from this country, two winters may be passed in the Polar regions, not only in safety, but with comfort; and if any inference can be drawn from the absence of all intelligence of the expedition up to this time, I am disposed to consider it rather in

favour than otherwise of the success which has attended their efforts."

Captain Sir G. Back, in a letter to the Secretary of the Admiralty, under date 27th of January, 1848, says, "I cannot bring myself to entertain more than ordinary anxiety for the safety and return of Sir John Franklin and his gallant companions."

Captain Sir John Ross records, in February, 1847, his opinion that the expedition was frozen up beyond Melville Island, from the known intentions of Sir John Franklin to put his ships into the drift ice at the western end of Melville Island, a risk which was deemed in the highest degree imprudent by Lieutenant Parry and the officers of the expedition of 1819-20, with ships of a less draught of water, and in every respect better calculated to sustain the pressure of the ice, and other dangers to which they must be exposed; and as it is now well known that the expedition has not succeeded in passing Behring's Strait, and if not totally lost, must have been carried by the ice that is known to drift to the southward on land seen at a great distance in that direction, and from which the accumulation of ice behind them will, as in Ross's own case, for ever prevent the return of the ships; consequently they must be abandoned. When we remember with what extreme difficulty Ross's party travelled 300 miles over much smoother ice after they abandoned their vessel, it appears very doubtful whether Franklin and his men, 138 in number, could possibly travel 600 miles.

In the contingency of the ships having penetrated some considerable distance to the south-west of Cape Walker, and having been hampered and crushed in the narrow channels of the Archipelago, which there are reasons for believing occupies the space between Victoria, Wollaston, and Banks' Lands, it is well remarked by Sir John Richardson, that such accidents among ice are seldom so sudden but that the boats of one or of both ships, with provisions, can be saved; and in such an event the survivors would either return to Lancaster Strait, or make for the continent, according to their nearness.

Colonel Sabine remarks, in a letter dated Woolwich, 5th of May, 1847,—"It was Sir John Franklin's intention, if foiled at one point, to try in succession all the probable openings into a more navigable part of the Polar Sea: the range of coast is considerable in which memorials of the ships' progress would have to be sought for, extending from Melville Island, in the west, to the great Sound at the head of Baffin's Bay, in the east."

Sir John Richardson, when appealed to by the Admiralty in the spring of 1847, as regarded the very strong apprehensions expressed at that time for the safety of the expedition, considered they were premature, as the ships were specially equipped to pass two winters in the Arctic Sea, and until the close of that year he saw no well-grounded cause for more anxiety than was naturally felt when the expedition sailed from this country on an enterprise of peril, though not greater than that which had repeatedly been encountered by others, and on one occasion by Sir John Ross for two winters also, but who returned in safety.

Captain Sir James C. Ross, in March, 1847, writes, "I do not think there is the smallest reason for apprehension or anxiety for the safety and success of the expedition; no one acquainted with the nature of the navigation of the Polar Sea would have expected they would have been able to get through to Behring's Strait without spending at least two winters in those regions, except under unusually favourable circumstances, which all the accounts from the whalers concur in proving they have not experienced, and I am quite sure neither Sir John Franklin nor Captain Crozier expected to do so.

"Their last letters to me from Whale-Fish Islands, the day previous to their departure from them, inform me that they had taken on board provisions for three years on full allowance, which they could extend to four years without any serious inconvenience; so that we may feel assured they cannot want from that cause until after the middle of July, 1849; it therefore does not appear to me at all desirable to send after them until the spring of the next year" (1848).

In the plan submitted by Captain F. W. Beechey, R.N., in April, 1847, after premising "that there does not at present appear to be any reasonable apprehension for the safety of the expedition," he suggested that it would perhaps be prudent that a relief expedition should be sent out that season to Cape Walker, where information of an important nature would most likely be found. From this vicinity one vessel could proceed to examine the various points and headlands in Regent Inlet, and also those to the northward, while the other watched the passage, so that Franklin and his party might not pass unseen, should he be on his return. At the end of the season the ships could winter at Port Bowen, or any other port in the vicinity of Leopold Island.

"In the spring of 1848," he adds, "a party should be

directed to explore the coast, down to Hecla and Fury Strait, and to endeavour to communicate with the party despatched by the Hudson's Bay Company in that direction; and in connexion with this part of the arrangement, it would render the plan complete if a boat could be sent down Back's River to range the coast to the eastward of its mouth, to meet the above-mentioned party; and thus, whilst it would complete the geography of that part of the American coast, it would at the same time complete the line of information as to the extensive measures of relief which their lordships have set on foot, and the precise spot where assistance and depôts of provisions are to be found. This part of the plan has suggested itself to me from a conversation I had with Sir John Franklin as to his first effort being made to the westward and south-westward of Cape Walker. It is possible that, after passing the Cape, he may have been successful in getting down upon Victoria Land, and have passed his first winter (1845) thereabout, and that he may have spent his second winter at a still more advanced station, and even endured a third, without either a prospect of success, or of an extrication of his vessels within a given period of time.

"If, in this condition, which I trust may not be the case, Sir John Franklin should resolve upon taking to his boats, he would prefer attempting a boat navigation through Sir James Ross's Strait, and up Regent Inlet, to a long land journey across the continent to the Hudson's Bay Settlements, to which the greater part of his crew would be wholly unequal."

Sir John Richardson remarks upon the above suggestions, on the 5th of May, 1847,—"With respect to a party to be sent down Back's River to the bottom of Regent Inlet, its size and outfit would require to be equal with that of the one now preparing to descend the Mackenzie River, and it could scarcely with the utmost exertions be organized so as to start this summer. The present scarcity of provisions in the Hudson's Bay country precludes the hope of assistance from the Company's southern posts, and it is now too late to provide the means of transport through the interior of supplies from this country, which require to be embarked on board the Hudson's Bay ships by the 2nd of June at the latest.

"Moreover there is no Company's post on the line of Back's River nearer than the junction of Slave River with Great Slave Lake, and I do not think that under any circumstances Sir John Franklin would attempt that route.

"In the summer of 1849, if the resources of the party I am to conduct remain unimpaired, as I have every reason to believe they will, much of what Captain Beechey suggests in regard to exploring Victoria Land may be done by it, and indeed forms part of the original scheme. The extent of the examination of any part of the coast in 1848 depends, as I formerly stated, very much on the seasons of this autumn and next spring, which influence the advance of the boats through a long course of river navigation. As Governor Simpson will most likely succeed in procuring an Esquimaux to accompany my party, I hope by his means to obtain such information from parties of that nation as may greatly facilitate our finding the ships, should they be detained in that quarter.

"Were Sir John Franklin thrown upon the north coast of the continent with his boats, and all his crew, I do not think that he would attempt the ascent of any river, except the Mackenzie. It is navigable for boats of large draught, without a portage, for 1300 miles from the sea, or within forty miles of Fort Chipewyan, one of the Company's principal depôts, and there are five other posts in that distance. Though these posts could not furnish provisions to such a party, they could, by providing them with nets, and distributing the men to various fishing stations, do much towards procuring food for them.

"I concur generally in what Captain Beechey has said with regard to Behring's Straits, a locality with which he is so intimately acquainted, but beg leave to add one remark, viz., that in high northern latitudes the ordinary allowance of animal food is insufficient in the winter season to maintain a labouring man in health; and as Sir John Franklin would deem it prudent when detained a second winter to shorten the allowance, symptoms of scurvy may show themselves among the men, as was the case when Sir Edward Parry wintered two years in Fox's Channel.

"A vessel, therefore, meeting the *Erebus* and *Terror* this season in Behring's Straits, might render great service."—*Parl. Paper, No.* 264, *Session* 1848.

The late Sir John Barrow, Bart., in a memorandum dated July, 1847, says:—

"The anxiety that prevails regarding Sir John Franklin, and the brave fellows who compose the crews of the two ships, is very natural, but somewhat premature; it arises chiefly from nothing having been received from them since fixed in the ice of Baffin's Bay, where the last whaling ship of the season of 1845 left them, opposite to the

opening into Lancaster Sound. Hitherto no difficulty has been found to the entrance into that Sound. If disappointed, rather than return to the southward, with the view of wintering at or about Disco, I should be inclined to think that they would endeavour to enter Smith's Sound, so highly spoken of by Baffin, and which just now that gallant and adventurous Russian, Admiral Count Wrangel, has pointed out in a paper addressed to the Geographical Society as the starting place for an attempt to reach the North Pole; it would appear to be an inlet that runs up high to the northward, as an officer in one of Parry's ships states that he saw in the line of direction along that inlet, the sun at midnight skimming the horizon.

"From Lancaster Sound Franklin's instructions directed him to proceed through Barrow's Strait, as far as the islands on its southern side extended, which is short of Melville Island, which was to be avoided, not only on account of its dangerous coast, but also as being out of the direction of the course to the intended object. Having, therefore, reached the last known land on the southern side of Barrow's Strait, they were to shape a direct course to Behring's Strait, without any deviation, except what obstruction might be met with from ice, or from islands, in the midst of the Polar Sea, of which no knowledge had at that time been procured; but if any such existed, it would of course be left to their judgment, on the spot, how to get rid of such obstructions, by taking a northerly or a southerly course.

* * * * *

"The only chance of bringing them upon this (the American) coast is the possibility of some obstruction having tempted them to explore an immense inlet on the northern shore of Barrow's Strait (short of Melville Island), called Wellington Channel, which Parry felt an inclination to explore; and more than one of the present party betrayed to me a similar inclination, which I discouraged, no one venturing to conjecture even to what extent it might go, or into what difficulties it might lead.

"Under all these circumstances, it would be an act of folly to pronounce any opinion of the state, condition, or position of those two ships; they are well suited for their purpose, and the only doubt I have is that of their being hampered by the screws among the ice."

Sir James C. Ross, in his outline of a plan for affording relief, submitted to the Admiralty in December, 1847, suggested that two ships should be sent out to examine

Wellington Channel, alluded to in the foregoing memorandum of Sir John Barrow, and the coast between Capes Clarence and Walker. A convenient winter harbour might be found for one of the ships near Garnier Bay or Cape Rennell. From this position the coast line could be explored as far as it extended to the westward, by detached parties, early in the spring, as well as the western coast of Boothia, a considerable distance to the southward; and at a more advanced period of the season the whole distance to Cape Nicolai might be completed.

The other ship should then proceed alone to the westward, endeavouring to reach Winter Harbour, in Melville Island, or some convenient port in Banks' Land, in which to pass the winter.

From these points parties might be sent out early in the spring.

The first party should be directed to trace the western coast of Banks' Land, and proceed direct to Cape Bathurst or Cape Parry, on each of which Sir John Richardson proposes to leave depôts of provisions for its use, and then to reach the Hudson's Bay Company's settlement at Fort Good Hope, on the Mackenzie, whence they might travel by the usual route of the traders to the principal settlement, and thence to England.

The second party should explore the eastern shore of Banks' Land, and make for Cape Krusenstern, where, or at Cape Hearne, they will find a *caché* of provision left by Sir John Richardson, with whom this party may communicate, and whom it may assist in completing the examination of Wollaston and Victoria Lands, or return to England by the route he shall deem most advisable.

Sir James Ross was entrusted with the carrying out of this search, in the *Enterprise* and *Investigator*, and an account of the voyage and proceedings of these vessels will be found recorded in its chronological order.

The following letter from Dr. Richard King to the Lords of the Admiralty contains some useful suggestions, although it is mixed up with a good deal of egotistical remark:—

"17, *Saville Row, February*, 1848.

"'The old route of Parry, through Lancaster Sound and Barrow's Strait, as far as to the last land on its southern shore, and thence in a direct line to Behring's Straits, is the route ordered to be pursued by Franklin.' (Barrow's Arctic Voyages, p. 11.)

"The gallant officer has thus been despatched to push

his adventurous way between Melville Island and Banks' Land, which Sir E. Parry attempted for two years unsuccessfully. After much toil and hardship, and the best consideration that great man could give to the subject, he recorded, at the moment of retreat, in indelible characters these impressive thoughts: 'We have been lying near our present station, with an easterly wind blowing fresh, for thirty-six hours together, and although this was considerably off the land, the ice had not during the whole of that time moved a single yard from the shore, affording a proof that there was no space in which the ice was at liberty to move to the westward. The navigation of this part of the Polar Sea is only to be performed by watching the occasional opening between the ice and the shore, and therefore, a continuity of land is essential for this purpose; such a continuity of land, which was here about to fail, as must necessarily be furnished by the northern coast of America, in whatsoever latitude it may be found.' Assuming, therefore, Sir John Franklin has been arrested between Melville Island and Banks' Land, where Sir E. Parry was arrested by difficulties which he considered insurmountable, and he has followed the advice of that gallant officer, and made for the continuity of America, he will have turned the prows of his vessels south and west, according as Banks' Land tends for Victoria or Wollaston Lands. It is here, therefore, that we may expect to find the expedition wrecked, whence they will make in their boats for the western land of North Somerset, if that land should not be too far distant.

"In order to save the party from the ordeal of a fourth winter, when starvation must be their lot, I propose to undertake the boldest journey that has ever been attempted in the northern regions of America, one which was justifiable only from the circumstances. I propose to attempt to reach the western land of North Somerset, or the eastern portion of Victoria Land, as may be deemed advisable, by the close of the approaching summer; to accomplish, in fact, in one summer that which has not been done under two.

"I rest my hope of success in the performance of this Herculean task upon the fact that I possess an intimate knowledge of the country and the people through which I shall have to pass, the health to stand the rigour of the climate, and the strength to undergo the fatigue of mind and body to which I must be subjected. A glance at the map of North America, directed to Behring's Strait in the Pacific, Barrow's Strait in the Atlantic, and the land of

North Somerset between them, will make it apparent that, to render assistance to a party situated on that coast, there are two ways by sea and one by land. Of the two sea-ways, the route by the Pacific is altogether out of the question; it is an idea of by-gone days; while that by the Atlantic is so doubtful of success, that it is merely necessary, to put this assistance aside as far from certain, to mention that Sir John Ross found Barrow's Strait closed in the summer of 1832. To a land journey, then, alone we can look for success; for the failure of a land journey would be the exception to the rule, while the sea expedition would be the rule itself. To the western land of North Somerset, where Sir John Franklin is likely to be found, the Great Fish River is the direct and only route; and although the approach to it is through a country too poor and too difficult of access to admit of the transport of provisions, it may be made the medium of communication between the lost expedition and the civilized world, and guides be thus placed at their disposal to convey them to the hunting grounds of the Indians. Without such guides it is impossible that they can reach these hunting grounds. It was by the Great Fish River that I reached the Polar Sea while acting as second officer in search of Sir John Ross. I feel it my duty, therefore, as one of two officers so peculiarly circumstanced, at the present moment to place my views on record as an earnest of my sincerity. Even if it should be determined to try and force provision vessels through Barrow's Strait, and scour the vicinity in boats for the lost expedition, and should it succeed, it will be satisfactory to know that such a mission as I have proposed should be adopted; while, if these attempts should fail, and the service under consideration be put aside, it will be a source of regret that not only the nation at large will feel, but the whole civilized world. When this regret is felt, and every soul has perished, such a mission as I have proposed will be urged again and again for adoption; for it is impossible that the country will rest satisfied until a search be made for the remains of the lost expedition.

"The fact that all lands which have a western aspect are generally ice-free, which I dwelt largely upon when Sir John Franklin sailed, must have had weight with the gallant officer; he will therefore, on finding himself in a serious difficulty, while pushing along the eastern side of Victoria Land, at once fall upon the western land of North Somerset, as a refuge ground, if he have the opportunity. The effort by Behring's Strait and Banks' Land is praiseworthy in attempt, but forlorn in hope. In the former

effort, it is assumed that Sir John Franklin has made the passage, and that his arrest is between the Mackenzie River and Icy Cape; in the latter, that Sir James Ross will reach Banks' Land, and trace its continuity to Victoria and Wollaston Land, and thus make the 'passage.' First, We have no reason to believe that Sir John Franklin and Sir James Ross will be more fortunate than their predecessors, and we cannot trust to their success. Secondly, We are unable to assume that Sir James Ross will reach Banks' Land; Sir E. Parry was unable to reach it, and only viewed it from a distance; much less are we able to assume that the gallant officer will find a high road to Victoria Land, which is altogether a *terra incognita*.

"Mr. T. Simpson, who surveyed the Arctic coast comprised between the Coppermine and Castor and Pollux Rivers, has set that question at rest, and is the only authority upon the subject. 'A further exploration,' remarks Mr. Simpson, from the most eastern limit of his journey, 'would necessarily demand the whole time and energies of another expedition, having some point of retreat much nearer to the scene of operations than Great Bear Lake, and Great Bear Lake is to be the retreat of Sir John Richardson.

"What retreat could Mr. Simpson have meant but Great Slave Lake, the retreat of the land party in search of Sir John Ross? and what other road to the unexplored ground, the western land of North Somerset, could that traveller have meant than Great Fish River, that stream which I have pointed out as the ice-free and high road to the land where the lost expedition is likely to be found,—to be the boundary of that passage which for three-and-a-half centuries we have been in vain endeavouring to reach in ships?"

Captain Sir W. E. Parry, to whom Dr. King's proposal was submitted by the Admiralty, thus comments on it:—

"My former opinion, quoted by Dr. King, as to the difficulty of ships penetrating to the westward beyond Cape Dundas (the south-western extremity of Melville Island), remains unaltered; and I should expect that Sir John Franklin, being aware of this difficulty, would use his utmost efforts to get to the southward and westward before he approached that point, that is, between the 100th and 110th degree of longitude. The more I have considered this subject (which has naturally occupied much of my attention lately), the more difficult I find it to conjecture where the expedition may have stopped, either with

or without any serious accident to the ships; but as no information has reached us up to this time, I conceive that there is some considerable probability of their being situated somewhere between the longitude I have just named; how far they may have penetrated to the southward, between those meridians, must be a matter of speculation, depending on the state of the ice, and the existence of land in a space hitherto blank on our maps.

"Be this as it may, I consider it not improbable, as suggested by Dr. King, that an attempt will be made by them to fall back on the western coast of North Somerset, wherever that may be found, as being the nearest point affording a hope of communication, either with whalers or with ships sent expressly in search of the expedition.

"Agreeing thus far with Dr. King, I am compelled to differ with him entirely as to the readiest mode of reaching that coast, because I feel satisfied that, with the resources of the expedition now equipping under Sir James Ross, the energy, skill, and intelligence of that officer will render it a matter of no very difficult enterprise to examine the coast in question, either with his ships, boats, or travelling parties; whereas an attempt to reach that coast by an expedition from the continent of America must, as it appears to me, be extremely hazardous and uncertain. And as I understand it to be their lordships' intention to direct Sir James Ross to station one of his ships somewhere about Cape Walker, while the other proceeds on the search, and likewise to equip his boats specially for the purpose of examining the various coasts and inlets, I am decidedly of opinion, that, as regards the western coast of North Somerset, this plan will be much more likely to answer the proposed object, than any overland expedition. This object will, of course, be the most easily accomplished in case of Sir James Ross finding the western coast of North Somerset navigable for his ships.

"In regard to Dr. King's suggestion respecting Victoria Land and Wollaston Land, supposing Sir John Franklin's ships to have been arrested between the meridians to which I have already alluded, it does seem, by an inspection of the map, not improbable that parties may attempt to penetrate to the continent in that direction; but not being well acquainted with the facilities for reaching the coast of America opposite those lands in the manner proposed by Dr. King, I am not competent to judge of its practicability."

Nearly the whole of the west coast of North Somerset

and Boothia was (it will be found hereafter) explored by parties in boats detached from Sir James Ross's ships in 1849.

I append, also, the most important portions of Sir James Ross's remarks on Dr. King's plan.

"Dr. King begins by assuming that Sir John Franklin has attempted to push the ships through to the westward, between Melville Island and Banks' Land (although directly contrary to his instructions); that having been arrested by insurmountable difficulties, he would have 'turned the prows of his vessels to the south and west, according as Banks' Land tends for Victoria or Wollaston Land;' and having been wrecked, or from any other cause obliged to abandon their ships, their crews would take to the boats, and make for the west coast of North Somerset.

"If the expedition had failed to penetrate to the westward between Banks' Land and Melville Island, it is very probable it would have next attempted to gain the continent by a more southerly course; and supposing that, after making only small progress (say 100 miles) to the S. W., it should have been then finally stopped or wrecked, the calamity will have occurred in about latitude $72\frac{1}{2}^{\circ}$ N. and longitude 115° W. This point is only 280 miles from the Coppermine River, and 420 miles from the Mackenzie, either of which would, therefore, be easily attainable, and at each of which abundance of provision might be procured by them, and their return to England a measure of no great difficulty.

"At the point above mentioned, the distance from the west coast of North Somerset is probably about 360 miles, and the mouth of the Great Fish River full 500; at neither of these places could they hope to obtain a single day's provisions for so large a party; and Sir John Franklin's intimate knowledge of the impossibility of ascending that river, or obtaining any food for his party in passing through the Barren grounds, would concur in deterring him from attempting to gain either of these points.

"I think it most probable that, from the situation pointed out, he would, when compelled to abandon his ships, endeavour in the boats to retrace his steps, and passing through the channel by which he had advanced, and which we have always found of easy navigation, seek one whale ships which annually visit the west coast of Baffin's Bay.

"It is far more probable, however, that Sir John Franklin, in obedience to his instructions, would endeavour to

push the ships to the south and west as soon as they passed Cape Walker, and the consequence of such a measure, owing to the known prevalence of westerly wind, and the drift of the main body of the ice, would be (in my opinion) their inevitable embarrassment, and if he persevered in that direction, which he probably would do, I have no hesitation in stating my conviction he would never be able to extricate his ships, and would ultimately be obliged to abandon them. It is therefore in latitude 73° N. and longitude 105° W. that we may expect to find them involved in the ice, or shut up in some harbour. This is almost the only point in which it is likely they would be detained, or from which it would not be possible to convey information of their situation to the Hudson's Bay Settlements.

"If, then, we suppose the crews of the ships should be compelled, either this autumn or next spring, to abandon their vessels at or near this point, they would most assuredly endeavour, in their boats, to reach Lancaster Sound; but I cannot conceive any position in which they could be placed from which they would make for the Great Fish River, or at which any party descending that river would be likely to overtake them; and even if it did, of what advantage could it be to them?

"If Dr. King and his party, in their single canoe, did fall in with Sir John Franklin and his party on the west coast of North Somerset, how does he propose to assist them? he would barely have sufficient provision for his own party, and would more probably be in a condition to require rather than afford relief. He could only tell them what Sir John Franklin already knows, from former experience, far better than Dr. King, that it would be impossible for so large a party, or indeed any party not previously provided, to travel across the Barren grounds to any of the Hudson's Bay Settlements."

"All that has been done by the way of search since February, 1848, tends," persists Dr. King, "to draw attention closer and closer to the western land of North Somerset, as the position of Sir John Franklin, and to the Great Fish (or Back) River, as the high road to reach it."

Dr. King has twice proposed to the Admiralty to proceed on the search by this route. "It would," he states, "be the happiest moment of my life (and my delight at being selected from a long list of volunteers, for the relief of Sir John Ross, was very great) if their lordships would allow me to go by my old route, the Great Fish River, to

attempt to save human life a second time on the shores of the Polar Sea. What I did in search of Sir John Ross is the best earnest of what I could do in search of Sir John Franklin."

A meeting of those officers and gentlemen most conversant with Arctic voyages was convened by the Lords Commissioners of the Admiralty on the 17th of January, 1849, at which the following were present:—Rear-Admiral Sir Francis Beaufort, K.C.B., Captain Sir W. E. Parry, R.N., Captain Sir George Back, R.N., Captain Sir E. Belcher, R.N., Colonel Sabine, R.A., and the Rev. Dr. Scoresby.

A very pretty painting, containing portraits of all the principal Arctic voyagers in consultation on these momentous matters, has been made by Mr. Pearse, artist, of 53, Berners Street, Oxford Street, which is well worthy of a visit. The beautiful Arctic Panorama of Mr. Burford, in Leicester Square, will also give a graphic idea of the scenery and appearance of the icy regions; the whole being designed from authentic sketches by Lieut. Browne, now of the *Resolute*, and who was out in the *Enterprise* in her trip in 1848, and also with Sir James Ross in his Antarctic voyage.

The expedition under Sir James Ross having returned unsuccessful, other measures of relief were now determined on, and the opinions of the leading officers again taken.

Admiral Sir Francis Beaufort, in his report to the Lords Commissioners of the Admiralty, on November 24, 1849, observes:—

"There are four ways only in which it is likely that the *Erebus* and *Terror* would have been lost—by fire, by sunken rocks, by storm, or by being crushed between two fields of ice. Both vessels would scarcely have taken fire together; if one of them had struck on a rock, the other would have avoided the danger. Storms in those narrow seas, encumbered with ice, raise no swell, and could produce no such disaster; and, therefore, by the fourth cause alone could the two vessels have been at once destroyed; and even in that case the crews would have escaped upon the ice (as happens every year to the whalers); they would have saved their loose boats, and reached some part of the American shores. As no traces of any such event have been found on any part of those shores, it may therefore be safely affirmed that one ship at least, and both the crews, are still in existence; and therefore the

point where they now are is the great matter for consideration.

"Their orders would have carried them towards Melville Island, and then out to the westward, where it is therefore probable that they are entangled amongst islands and ice. For should they have been arrested at some intermediate place, for instance, Cape Walker, or at one of the northern chain of islands, they would undoubtedly, in the course of the three following years, have contrived some method of sending notices of their position to the shores of North Somerset or to Barrow's Strait.

"If they had reached much to the southward of Banks' Land, they would surely have communicated with the tribes on Mackenzie River: and if, failing to get to the westward or southward, they had returned with the intention of penetrating through Wellington Channel, they would have detached parties on the ice towards Barrow's Strait, in order to have deposited statements of their intentions.

"The general conclusion, therefore, remains, that they are still locked up in the Archipelago to the westward of Melville Island. Now, it is well known that the state of the weather alternates between the opposite sides of Northern America, being mild on the one when rigorous on the other; and accordingly, during the two last years, which have been unusually severe in Baffin's Bay, the United States whalers were successfully traversing the Polar Sea to the northward of Behring's Straits. The same severe weather may possibly prevail on the eastern side during the summer of 1850, and if so, it is obvious that an attempt should be now made by the western opening, and not merely to receive the two ships, if they should be met coming out (as formerly), but to advance in the direction of Melville Island, resolutely entering the ice, and employing every possible expedient by sledging parties, by reconnoitring balloons, and by blasting the ice, to communicate with them.

"These vessels should be intrepidly commanded, effectively manned, and supplied with the best means for travelling across the ice to the English or to the Russian settlements, as it will be of the greatest importance to be informed of what progress the expedition has made; and for this purpose likewise the *Plover* will be of material service, lying at some advanced point near Icy Cape, and ready to receive intelligence, and to convey it to Petropaulouski or to Panama.

anticipate any greater difficulties in this navigation than those encountered in other parts of the North Polar Sea; and, even in the event of not succeeding in reaching Banks' Land in the summer of the present year, it may be possible to make such progress as to afford a reasonable hope of effecting that object in the following season (1851). Indeed it is possible that, from the well-known fact of the climate being more temperate in a given parallel of latitude, in going westward from the Mackenzie River, some comparative advantage may be derived in the navigation of this part of the Polar Sea.

"It is of importance to the security of the ships and of their crews that they should winter in some harbour or bay not at a distance from land, where the ice might be in motion during the winter; and it will be desirable, should no land be discovered fit for this purpose, in the space at present unexplored between Point Barrow and Banks' Land, that endeavours should be made to reach the continent about the mouth of the Mackenzie River, or further eastward, towards Liverpool Bay, where there is reason to suppose sufficient shelter may be found, and in which neighbourhood, it appears, there is generally no ice to be seen from the shore for about six weeks in the months of August and September. Sir John Franklin's Narrative of his Second Journey, that of Messrs. Dease and Simpson, and the Admiralty Charts, will furnish the requisite hydrographical information relative to this line of coast, so far as it has been attained.

"The utmost economy should be exercised in the use of provisions and fuel during the time the ships are in winter quarters; and if they should winter on or near the continent, there would probably be an opportunity of increasing their stock of provisions by means of game or fish, and likewise of fuel, by drift or other wood, to some considerable amount.

"If the progress of the ships in 1850 have been considerable—for instance, as far as the meridian of 120° W.—the probability is, that the most practicable way of returning to England will be, still to push on in the same direction during the whole season of 1851, with a view to reach Barrow's Strait, and take advantage, if necessary, of the resources left by Captain Sir James Ross at Whaler Point, near Leopold Harbour; if not the same season, at least after a second winter. If, on the other hand, small progress should have been made to the eastward at the close of the present summer, it might be prudent that when half the navigable season of 1851 shall have expired,

very little more information than before he left England, and I cannot contemplate, without serious apprehension, leaving that opening without still further search in the ensuing spring, in case of the missing crews having fallen back to the eastern coast of North Somerset, where they would naturally look for supplies to be deposited for them, in addition to the chance of finding some of those left by the *Fury*. For the purpose of further pursuing the search by way of Barrow's Strait, perhaps two small vessels of 150 or 200 tons might suffice, but they must be square rigged for the navigation among the ice. Of course the object of such vessels would be nearly that which Sir James Ross's endeavours have failed to accomplish; and the provisions, &c., left by that officer at Whaler Point, as well as any which may be deposited in that neighbourhood by the *North Star*, would greatly add to the resources, facilitate the operations, and lessen the risk of any attempt made in that direction.

"If, however, there be time to get ships to Behring's Strait by the first week in August, 1850, which would perhaps require the aid of steam-vessels to accomplish with any degree of certainty, I recommend that the *Enterprise* and *Investigator* be forthwith equipped and despatched there, with instructions to push through the ice to the E.N.E. as far as possible in the ensuing season, with the hope of meeting with at least one of the ships, or any of the parties which may have been detached from them. This attempt has never yet been made by any ships, and I cling very strongly to the belief that such an effort might be attended with success in rescuing at least a portion of our people.

"My reason for urging this upon their Lordships is, that the admirable instructions under which the *Plover*, assisted by the *Herald*, is acting, embraces only the search of the coast line eastward from Icy Cape; since the boats and baidars cannot effect anything except by creeping along, as opportunities offer, between the ice and the land, so that this plan of operations meets only the contingency of parties reaching, or nearly reaching, the land; whereas the chance of rescue would, as it appears to me, be immensely increased by ships pushing on, clear of the coast, towards Banks' Land and Melville Island, as far at least as might be practicable in the best five or six weeks of the season of 1850."

Captain Parry says—"Although this is the first attempt ever made to enter the ice in this direction, with ships properly equipped for the purpose, there is no reason to

anticipate any greater difficulties in this navigation than those encountered in other parts of the North Polar Sea; and, even in the event of not succeeding in reaching Banks' Land in the summer of the present year, it may be possible to make such progress as to afford a reasonable hope of effecting that object in the following season (1851). Indeed it is possible that, from the well-known fact of the climate being more temperate in a given parallel of latitude, in going westward from the Mackenzie River, some comparative advantage may be derived in the navigation of this part of the Polar Sea.

"It is of importance to the security of the ships and of their crews that they should winter in some harbour or bay not at a distance from land, where the ice might be in motion during the winter; and it will be desirable, should no land be discovered fit for this purpose, in the space at present unexplored between Point Barrow and Banks' Land, that endeavours should be made to reach the continent about the mouth of the Mackenzie River, or further eastward, towards Liverpool Bay, where there is reason to suppose sufficient shelter may be found, and in which neighbourhood, it appears, there is generally no ice to be seen from the shore for about six weeks in the months of August and September. Sir John Franklin's Narrative of his Second Journey, that of Messrs. Dease and Simpson, and the Admiralty Charts, will furnish the requisite hydrographical information relative to this line of coast, so far as it has been attained.

"The utmost economy should be exercised in the use of provisions and fuel during the time the ships are in winter quarters; and if they should winter on or near the continent, there would probably be an opportunity of increasing their stock of provisions by means of game or fish, and likewise of fuel, by drift or other wood, to some considerable amount.

"If the progress of the ships in 1850 have been considerable—for instance, as far as the meridian of 120° W.—the probability is, that the most practicable way of returning to England will be, still to push on in the same direction during the whole season of 1851, with a view to reach Barrow's Strait, and take advantage, if necessary, of the resources left by Captain Sir James Ross at Whaler Point, near Leopold Harbour; if not the same season, at least after a second winter. If, on the other hand, small progress should have been made to the eastward at the close of the present summer, it might be prudent that when half the navigable season of 1851 shall have expired,

no further attempts should be made in proceeding to the eastward, and that the remaining half of that season should be occupied in returning to the westward, with a view to escape from the ice by way of Behring's Strait after the winter of 1851-52, so as not to incur the risk of passing a third winter in the ice.

"During the summer season, the most vigilant look-out should be kept from the mast-heads of both ships night and day, not only for the missing ships, but for any detached parties belonging to them; and during the few hours of darkness which prevail towards the close of each season's navigation, and also when in winter quarters, signals, by fires, blue lights, rockets, or guns, should be made as the means of pointing out the position of the ships to any detached parties belonging to the missing Expedition. And in the spring, before the ships can be released from the ice, searching parties might be sent out in various directions, either in boats or by land, to examine the neighbouring coasts and inlets for any trace of the missing crews."

Captain Sir George Back also comments, (1st of December, 1849,) on these intentions, in a letter to the Secretary of the Admiralty :—

"You will be pleased, Sir, to impress on my Lords Commissioners, that I wholly reject all and every idea of any attempts on the part of Sir John Franklin to send boats or detachments over the ice to any point of the mainland eastward of the Mackenzie River, because I can say from experience, that no toil-worn and exhausted party could have the least chance of existence by going there.

"On the other hand, from my knowledge of Sir John Franklin (having been three times on discovery together), I much doubt if he would quit his ship at all, except in a boat; for any attempt to cross the ice a long distance on foot would be tempting death; and it is too laborious a task to sledge far over such an uneven surface as those regions generally present. That great mortality must have occurred, and that one ship, as Sir F. Beaufort hints at, may be lost, are greatly to be feared; and, as on all former expeditions, if the survivors are paralysed by the depressing attacks of scurvy, it would then be impossible for them, however desirous they might be, to leave the ship, which must thus become their last most anxious abode.

"If, however, open water should have allowed Sir John Franklin to have resorted to his boats, then I am persuaded he would make for either the Mackenzie River, or, which

is far more likely, from the almost certainty he must have felt of finding provision, Cape Clarence and Fury Point.

"I am aware that the whole chances of life in this painful case depend on food; but when I reflect on Sir John Franklin's former extraordinary preservation under miseries and trials of the most severe description, living often on scraps of old leather and other refuse, I cannot despair of his finding the means to prolong existence till aid be happily sent him."

Dr. Sir John Richardson on the same day also sends in his opinion, as requested, on the proposed despatch of the *Enterprise* and *Investigator* to Behring's Strait:—

"It seems to me to be very desirable that the western shores of the Archipelago of Parry's Islands should be searched in a high latitude in the manner proposed by the hydrographer.

"If the proposed expedition succeeds in establishing its winter quarters among these islands, parties detached over the ice may travel to the eastward and south-eastward, so as to cross the line of search which it is hoped Mr. Rae has been able to pursue in the present summer, and thus to determine whether any traces of the missing ships exist in localities the most remote from Behring's Strait and Lancaster Sound, and from whence shipwrecked crews would find the greatest difficulty in travelling to any place where they could hope to find relief.

"The climate of Arctic America improves in a sensible manner with an increase of western longitude. On the Mackenzie, on the 135th meridian, the summer is warmer than in any district of the continent in the same parallel, and it is still finer, and the vegetation more luxuriant, on the banks of the Yucon, on the 150th meridian. This superiority of climate leads me to infer, that ships well fortified against drift-ice, will find the navigation of the Arctic Seas more practicable in its western portion than it has been found to the eastward. This inference is supported by my own personal experience, as far as it goes. I met with no ice in the month of August, on my late voyage, till I attained the 123rd meridian, and which I was led, from that circumstance, to suppose coincided with the western limits of Parry's Archipelago.

"The greater facility of navigating from the west has been powerfully advocated by others on former occasions; and the chief, perhaps the only reason why the attempt to penetrate the Polar Sea from that quarter has not been resumed since the time of Cook is, that the length of the previous voyage to Behring's Strait would considerably

diminish the store of provisions; but the facilities of obtaining supplies in the Pacific are now so augmented, that this objection has no longer the same force."

Captain F. W. Beechey, writing from Cheltenham, on the 1st of December, 1849, says :—

"I quite agree with Sir Francis Beaufort in what he has stated with regard to any casualties which Sir J. Franklin's ships may have sustained, and entirely agree with him and Sir Edward Parry, that the expedition is probably hampered amongst the ice somewhere to the south-westward of Melville Island; but there is yet a possibility which does not appear to have been contemplated, which is, that of the scurvy having spread among the crew, and incapacitated a large proportion of them from making any exertion towards their release, or that the whole, in a debilitated state, may yet be clinging by their vessels, existing sparingly upon the provision which a large mortality may have spun out, in the hope of relief.

"In the first case, that of the ships being hampered and the crews in good health, I think it certain that, as the resources of the ships would be expended in May last, Sir John Franklin and his crew have abandoned the ships, and pushed forward for the nearest point where they might reasonably expect assistance, and which they could reasonably reach.

"There are consequently three points to which it would be proper to direct attention, and as the case is urgent, every possible method of relief should be energetically pushed forward at as early a period as possible, and directed to those points, which, I need scarcely say, are Barrow's Strait, Behring's Strait, and the northern coast of America.

"Of the measures which can be resorted to on the northern coast of America, the officers who have had experience there, and the Hudson's Bay Company, will be able to judge; but I am of opinion that nothing should be neglected in that quarter; for it seems to me almost certain that Sir John Franklin and his crew, if able to travel, have abandoned their ships and made for the continent; and if they have not succeeded in gaining the Hudson's Bay outposts, they have been overtaken by winter before they could accomplish their purpose.

"Lastly, as to the opinion which naturally forces itself upon us, as to the utility of the sending relief to persons whose means of subsistence will have failed them more than a year by the time the relief could reach them, I would observe, that a prudent reduction of the allowance may

have been timely made to meet an emergency, or great mortality may have enabled the survivors to subsist up to the time required, or it may be that the crews have just missed reaching the points visited by our parties last year before they quitted them, and in the one case may now be subsisting on the supplies at Leopold Island, or be housed in eastward of Point Barrow, sustained by depôts which have been fallen in with, or by the native supplies; so that, under all the circumstances, I do not consider their condition so utterly hopeless that we should give up the expectation of yet being able to render them a timely assistance.

"The endeavours to push forward might be continued until the 30th of August at latest, at which time, if the ships be not near some land where they can conveniently pass a winter, they must direct their course for the mainland, and seek a secure harbour in which they could remain. And on no account should they risk a winter in the pack, in consequence of the tides and shallow water lying off the coast.

"Should the expedition reach Herschel Island, or any other place of refuge on the coast near the mouth of the Mackenzie or Colville Rivers, endeavours should be made to communicate information of the ships' position and summer's proceedings through the Hudson's Bay Company or Russian settlements, and by means of interpreters; and no opportunity should be omitted of gaining from the natives information of the missing vessels, as well as of any boat expeditions that may have gone forward, as well as of the party under Dr. Rae.

"If nothing should be heard of Sir John Franklin in 1850, parties of observation should be sent forward in the spring to intercept the route the ship would have pursued, and in other useful directions between winter quarters and Melville Island; taking especial care that they return to the ship before the time of liberation of the ships arrive, which greatly depends upon their locality.

"Then, on the breaking up of the ice, should any favourable appearance of the ice present itself, the expedition might be left free to take advantage of such a prospect, or to return round Point Barrow; making it imperative, however, either to ensure their return, so far as human foresight may be exercised, or the certainty of their reaching Melville Island at the close of that season, and so securing their return to England in 1852.

"If, after all, any unforeseen event should detain the ships beyond the period contemplated above, every exer-

tion should be used, by means of boats and interpreters, to communicate with the Mackenzie; and should any casualty render it necessary to abandon the vessels, it should be borne in mind that the reserve-ship will remain at her quarters until the autumn of 1853, unless she hears of the safety of the ships and boats in other directions; while in the other quarter, Fort Macpherson, at the entrance of the Mackenzie, may be relied upon as an asylum.

"The *Plover*, or reserve-ship, should be provided with three years' provisions for her own crew, and for contingencies besides. She should be placed as near as possible to Point Barrow, and provided with interpreters, and the means of offering rewards for information; and she should remain at her quarters so long as there can be any occasion for her presence in the Arctic Seas; or, if she does not hear anything of the expedition under Captain Collinson, as long as her provisions will last."

Sir John Richardson offers the following advice for this expedition:—"If," he says, "it should winter near the mouth of the Yucan or Colville, that river may be ascended in a boat in the month of June, before the sea ice begins to give way. The river varies in width from a mile and a half to two miles, and flows through a rich, well-wooded valley, abounding in moose deer, and having a comparatively mild climate. A Russian trading post has been built on it, at the distance of three or four days' voyage from the sea, with the current; but as the current is strong, from nine to twelve days must be allowed for its ascent, with the tracking line. It would be unsafe to rely upon receiving a supply of provisions at the Russian post, as it is not likely that any stock beyond what is necessary for their own use is laid up by the traders; and the moose deer being a very shy animal, is not easily shot by an unpractised hunter; but the reindeer abound on the neighbouring hills, and are much more approachable. The white-fronted goose also breeds in vast flocks in that district of the country, and may be killed in numbers, without difficulty, in the month of June.

"If the expedition should winter within a reasonable distance of the Mackenzie, Captain Collinson may have it in his power to send despatches to England by that route.

"The river opens in June, and as soon as the ice ceases to drive, may be ascended in a boat, with a fair wind, under sail, or with a tracking line.

"The lowest post at present occupied by the Hudson's Bay Company on this river is Fort Good Hope. The

site of this post has been changed several times, but it is at this time on the right bank of the river, in latitude 66° 16′ N., and is ten or eleven days' voyage from the sea. At Point Separation, opposite to the middle channel of the delta of the river, and on the promontory which separates the Peel and the Mackenzie, there is a case of pemmican (80 lbs.) buried, ten feet distant from a tree, which has its middle branches lopped off, and is marked on the trunk with a broad arrow in black paint. A fire was made over the pit in which the case is concealed, and the remains of the charcoal will point out the exact spot. This hoard was visited last year by a party from Fort Macpherson, Peel's River, when all was safe.

"Eight bags of pemmican, weighing 90lbs. each, were deposited at Fort Good Hope in 1848, and would remain there last summer for the use of any boat parties that might ascend the river in 1849; but it is probable that part, or the whole, may have been used by the Company by next year.

"A boat party should be furnished with a small seine and a short herring net, by the use of which a good supply of fish may often be procured in the eddies or sandy bays of the Mackenzie. They should also be provided with a good supply of buck-shot, swan-shot, duck-shot, and gunpowder. The Loucheux and Hare Indians will readily give such provisions as they may happen to have, in exchange for ammunition. They will expect to receive tobacco gratuitously, as they are accustomed to do from the traders.

"The Mackenzie is the only water-way by which any of the Hudson's Bay Company's posts can be reached from the Arctic Sea. There is a post on the Peel River, which enters the delta of the Mackenzie, but no supplies can be procured there. To the eastward of the Mackenzie no ship-party would have a chance of reaching a trading post, the nearest to the sea being Fort Resolution, on Great Slave Lake, situated on the 61st parallel of latitude, and the intervening hilly country, intersected by numerous lakes and rapid rivers, could not be crossed by such a party in less than an entire summer, even could they depend on their guns for a supply of food. Neither would it be advisable for a party from the ships to attempt to reach the posts on the Mackenzie by way of the Coppermine River and Fort Confidence; as, in the absence of means of transport across Great Bear Lake, the journey round that irregular sheet of water would be long and hazardous. Bear Lake River is more than fifty miles long, and Fort

Norman, the nearest post on the Mackenzie, is thirty miles above its mouth. Mr. Rae was instructed to engage an Indian family or two to hunt on the tract of country between the Coppermine and Great Bear Lake in the summer of 1850; but no great reliance can be placed on these Indians remaining long there, as they desert their hunting quarters on very slight alarms, being in continual dread of enemies, real or imaginary.

"A case of pemmican was buried on the summit of the bank, about four or five miles from the summit of Cape Bathurst, the spot being marked by a pole planted in the earth, and the exact locality of the deposit by a fire of driftwood, much of which would remain unconsumed.

"Another case was deposited in the cleft of a rock on a small battlemented cliff, which forms the extreme part of Cape Parry. The case was covered with loose stones; and a pile of stones, painted red and white, was erected immediately in front of it. This cliff resembles a cocked-hat in some points of view, and projects like a tongue from the base of a rounded hill, which is 500 or 600 feet high.

"Several cases of pemmican were left exposed on a ledge of rocks in latitude 68° 35′ N., opposite Lambert Island, in Dolphin and Union Strait, and in a bay to the westward of Cape Krusenstern, a small boat and ten pieces of pemmican were deposited under a high cliff above high-water mark, without concealment. The Esquimaux on this part of the coast are not numerous, and from the position of this hoard, it may escape discovery by them; but I have every reason to believe that the locality has been visited by Mr. Rae in the past summer. A deposit of larger size, near Cape Kendall, has been more certainly visited by Mr. Rae."

Capt. Sir J. C. Ross, writes from Haslar, 11th February, 1850:—

"With respect to the probable position of the *Erebus* and *Terror*, I consider that it is hardly possible they can be anywhere to the eastward of Melville Island, or within 300 miles of Leopold Island, for if that were the case, they would assuredly, during the last spring, have made their way to that point, with the hope of receiving assistance from the whale-ships which for several years previous to the departure of that expedition from England had been in the habit of visiting Prince Regent Inlet in pursuit of whales; and in that case they must have been met with, or marks of their encampments have been found by some of the numerous parties detached from the *Enterprise* and *Investigator* along the shores of that vicinity during the

only period of the season in which travelling is practicable in those regions.

"It is probable, therefore, that during their first summer, which was remarkably favourable for the navigation of those seas, they have been enabled (in obedience to their orders) to push the ships to the westward of Banks' Land, and have there become involved in the heavy pack of ice which was observed from Melville Island always to be setting past its westernmost point in a south-east direction, and from which pack they may not have been able to extricate their ships.

"From such a position retreat to the eastward would be next to impossible, whilst the journey to the Mackenzie River, of comparatively easy accomplishment, together with Sir John Franklin's knowledge of the resources in the way and of its practicability, would strengthen the belief that this measure will have been adopted by them during the last spring.

"If this be assumed as the present position of the *Erebus* and *Terror*, it would manifestly be far more easy and safe to afford them relief by means of an expedition entering Behring's Strait, than from any other direction, as it would not be necessary for the ships to depart so far from the coast of North America as to preclude their keeping up a regular communication with the Russian settlements on the River Colville, or those of the Hudson's Bay Company near the mouth of the Mackenzie, whilst the whole space between any position in which the ships might winter, and Banks' Land could be thoroughly examined by travelling parties early in the spring, or by boats or steam launches at a more advanced period of the following season."

Mr. W. Snow, in a letter from New York, dated 7th of January, 1850, suggests a plan for a well-organized expedition of as many men as could be fitted out from private funds. "For instance, let a party of 100 picked men, well disciplined and officered, as on board a ship, and accompanied with all the necessary food, scientific instruments, and everything usual on such expeditions, proceed immediately, by the shortest and most available routes, to the lands in the neighbourhood of the unexplored regions. If possible, I would suggest that they should proceed first to Moose Fort, on the southern part of Hudson's Bay, and thence by small craft to Chesterfield Inlet, or otherwise by land reach that quarter, so as to arrive there at the opening of summer. From this neighbourhood let the party, minus ten men, be divided into three separate detach-

ments, each with specific instructions to extend their researches in a northerly and north-westerly direction. The westernmost party to proceed as near as possible in a direct course to the easternmost limits of discovery yet made from Behring's Strait, and on no account to deviate from that course on the western side of it, but, if necessary, to the eastward. Let the central party shape a course as near as possible to the position of the Magnetic Pole; and the easternmost division direct to Prince Regent Inlet, or the westernmost point of discovery from the east, and not to deviate from that course easterly. Let each of these detachments be formed again into three divisions, each division thus consisting of ten men. Let the first division of each detachment pioneer the way, followed on the same track by the second and the third at stated intervals of time. On the route let the pioneers, at every spot necessary, leave distinguishing marks to denote the way, and also to give information to either of the other two principal detachments as may by chance fall into their track. To second the efforts of the three detachments, let constant succours and other assistance be forwarded by way of Moose Fort, and through the ten men left at Chesterfield Inlet; and should the object for which such an expedition was framed be happily accomplished by the return of the lost voyagers, let messengers be forwarded with the news, as was done with Captain Back, in the case of Captain Ross. Let each of the extreme detachments, upon arriving at their respective destinations, and upon being joined by the whole of their body, proceed to form plans for uniting with the central party, and ascertaining the results already obtained by each by sending parties in that direction. Also, let a chosen number be sent out from each detachment as exploring parties, wherever deemed requisite; and let no effort be wanted to make a search in every direction where there is a possibility of its proving successful.

"If a public and more extensive expedition be set on foot, I would most respectfully draw attention to the following suggestions:—Let a Land Expedition be formed upon a similar plan, and with the same number of men, say 300 or more, as those fitted out for sea. Let this expedition be formed into three great divisions: the one proceeding by the Athabasca to the Great Slave Lake, and following out Captain Back's discoveries; the second, through the Churchill district; or, with the third, according to the plan laid out for a private expedition alone; only

keeping the whole of their forces as much as possible bearing upon the points where success may be most likely attainable.

"Each of these three great divisions to be subdivided and arranged also as in the former case. The expense of an expedition of this kind, with all the necessary outlay for provisions, &c., I do not think would be more than half what the same would cost if sent by sea; but of this I am not a competent judge, having no definite means to make a comparison. But there is yet another, and, I cannot help conceiving, a more easy way of obviating all difficulty on this point, and of reducing the expense considerably.

"It must be evident that the present position of the Arctic voyagers is not very accessible, either by land or sea, else the distinguished leader at the head of the expedition would long ere this have tracked a route whereby the whole party, or at least some of them, could return.

"In such a case, therefore, the only way to reach them is by, if I may use the expression, *forcing* an expedition on towards them; I mean, by keeping it constantly upheld and pushing onward. There may be, and indeed there are, very great difficulties, and difficulties of such a nature that, I believe, they would themselves cause another great difficulty in the procuring of men. But, if I might make another bold suggestion, I would respectfully ask our government at home, why not employ picked men from convicted criminals, as is done in exploring expeditions in Australia? Inducements might be held out to them; and by proper care they would be made most serviceable auxiliaries. Generally speaking, men convicted of offences are men possessed of almost inexhaustible mental resources; and such men are the men who, with physical powers of endurance, are precisely those required. But this I speak of, merely, if sufficient free men could not be found, and if economy is studied."

Mr. John McLean, who has been twenty-five years a partner and officer of the Hudson's Bay Company, and has published an interesting narrative of his adventures and experience, writing to Lady Franklin from Canada West, in January, 1850, suggests the following very excellent plan as likely to produce some intelligence, if not to lead to a discovery of the party.

"Let a small schooner of some thirty or forty tons burden, built with a view to draw as little water as possible, and as strong as wood and iron could make her, be despatched from England in company with the Hudson's

Bay ships. This vessel would, immediately on arriving at York Factory, proceed to the Strait termed Sir Thomas Roe's Welcome, which divides Southampton Island from the mainland; then direct her course to Wager River, and proceed onward until interrupted by insurmountable obstacles. The party being safely landed, I would recommend their remaining stationary until winter travelling became practicable, when they should set out for the shores of the Arctic Sea, which by a reference to Arrowsmith's map appears to be only some sixty or seventy miles distant; then dividing in two parties or divisions, the one would proceed east, the other west; and I think means could be devised of exploring 250 or 300 miles in either direction; and here a very important question presents itself,—how and by what means is this enterprise to be accomplished?

"In the first place, the services of Esquimaux would be indispensable, for the twofold reason, that no reliable information can be obtained from the natives without their aid, and that they alone properly understand the art of preparing snow-houses, or 'igloes,' for winter encampment, the only lodging which the desolate wastes of the Arctic regions afford. Esquimaux understanding the English language sufficiently well to answer our purpose, frequent the Hudson's Bay Company's post in Labrador, some of whom might be induced (I should fain hope) to engage for the expedition; or probably the 'half-breed' natives might do so more readily than the aborigines. They should, if possible, be strong, active men, and good marksmen, and not less than four in number. Failing in the attempt to procure the natives of Labrador, then I should think Esquimaux might be obtained at Churchill, in Hudson's Bay; the two who accompanied Sir John in his first land expedition were from this quarter."

An expedition of this kind is to be sent out by Lady Franklin this spring under the charge of Mr. Kennedy. There are various ways of accomplishing this object, the choice of which must mainly depend on the views and wishes of the officer who may undertake the command. Besides the northern route, or that by Regent Inlet, it is possible to reach Sir James Ross and Simpson's Straits from the south, entering Hudson's Bay, and passing up the Welcome to Rae Isthmus, or again by entering Chesterfield or Wager Inlet, and gaining the coast by Back's or the Great Fish River.

By either of these routes a great part of the exploration must be made in boats or on foot. In every case the main points to be searched are James Ross's Strait and Simp-

son's Strait, if indeed there be a passage in that direction, as laid down in Sir John Franklin's charts, though contradicted by Mr. Rae, and considered still doubtful by some Arctic navigators.

The following extract from the *Geographical Journal* shows the opinion of Franklin upon the search of this quarter. Dr. Richardson says (*Journal of Geographical Society*, vol. vi. p. 40),—"No better plan can be proposed than the one suggested by Sir John Franklin, of sending a vessel to Wager River, and carrying on the survey from thence in boats."

Sir John Franklin observes (*ibid.* p. 43),—"The Doctor alludes in his letter to some propositions which he knew I had made in the year 1828, at the command of his present Majesty (William IV.) on the same subject, and particularly to the suggestion as to proceeding from Repulse or Wager Bay. * * * A recent careful reading of all the narratives connected with the surveys of the Wager and Repulse Bays, and of Sir Edward Parry's Voyage, together with the information obtained from the Esquimaux by Sir Edward Parry, Sir John Ross, and Captain Back, confirm me in the opinion that a successful delineation of the coast east of Point Turnagain to the Strait of the Fury and Hecla, would be best attained by an expedition proceeding from Wager Bay, the northern parts of which cannot, I think, be farther distant than forty miles from the sea, if the information received by the above-mentioned officers can be depended on."

Dr. McCormick particularly draws attention to Jones' and Smith's Sounds, recommending a careful examination of these to their probable termination in the Polar Sea :—

"Jones' Sound, with the Wellington Channel on the west, may be found to form an island of the land called 'North Devon.' All prominent positions on both sides of these Sounds should be searched for flag staves and piles of stones, under which copper cylinders or bottles may have been deposited, containing accounts of the proceedings of the missing expedition; and if successful in getting upon its track, a clue would be obtained to the fate of our gallant countrymen."

The Wellington Channel he considers affords one of the best chances of crossing the track of the missing expedition.

To carry out this plan efficiently, he recommended that a boat should be dropped, by the ship conveying the searching party out, at the entrance to the Wellington Channel in Barrow's Strait; from this point one or both sides of

that channel and the northern shores of the Parry Islands might be explored as far west as the season would permit of. But should the ship be enabled to look into Jones' Sound, on her way to Lancaster Sound, and find that opening free from ice, an attempt might be made by the Boat Expedition to push through it into the Wellington Channel. In the event, however, of its proving to be merely an inlet, which a short delay would be sufficient to decide, the ship might perhaps be in readiness to pick up the boat on its return, for conveyance to its ultimate destination through Lancaster Sound; or as a precaution against any unforeseen separation from the ship, a depôt of provisions should be left at the entrance to Jones' Sound for the boat to complete its supplies from, after accomplishing the exploration of this inlet, and to afford the means, if compelled from an advanced period of the season or other adverse circumstances, of reaching some place of refuge, either on board a whaler or some one of the depôts of provisions on the southern shores of Barrow's Strait.

Mr. Penny, in charge of the *Lady Franklin*, before sailing, observed:—

"If an early passage be obtained, I would examine Jones' Sound, as I have generally found in all my early voyages clear water at the mouth of that sound, and there is a probability that an earlier passage by this route might be found into Wellington Strait, which outlet ought by all means to be thoroughly examined at the earliest opportunity, since, if Sir J. Franklin has taken that route, with the hope of finding a passage westward, to the north of the Parry and Melville Islands, he may be beyond the power of helping himself. No trace of the expedition, or practical communication with Wellington Strait, being obtained in this quarter, I would proceed in time to take advantage of the first opening of the ice in Lancaster Sound, with the view of proceeding to the west and entering Wellington Strait, or, if this should not be practicable, of proceeding farther westward to Cape Walker, and beyond, on one or other of which places Sir John Franklin will probably have left some notices of his course."

The Government has seen the urgent necessity of causing the Wellington Channel to be carefully examined; imperative orders were sent to Sir James Ross to search it, but he was drifted out of Barrow's Strait against his will, before he received those orders by the *North Star*.

I have already stated that Sir John Franklin's instructions directed him to try the first favourable opening to the south-west after passing Cape Walker; and failing in that,

to try the Wellington Channel. Every officer in the British service, as a matter of course, follows his instructions, as far as they are compatible with the exigencies of the case, be it what it may, nor ever deviates from them without good and justifiable cause. If, then, Sir John Franklin failed in finding an opening to the south-west of Cape Walker, it is reasonable to suppose he obeyed his instructions, and tried the Wellington Channel. The second probability in favour of this locality is, that Sir John Franklin expressed to many of his friends a favourable opinion of the Wellington Channel, and, which is of far more consequence, intimated his opinion officially, and before the expedition was determined upon, that this strait seemed to offer the best chance of success.

Moreover, Capt. Fitzjames, his immediate second in command in the *Erebus*, was strongly in favour of the Wellington Channel, and always so expressed himself.—See his letter, before quoted, to Sir John Barrow, p. 203.

Who can doubt that the opinion of Capt. Fitzjames, a man of superior mind, beloved by all who knew him, and in the service "the observed of all observers," would have great weight with Sir John Franklin, even if Sir John had not been himself predisposed to listen to him. What adds confirmation to these views is, that in 1840, a few years prior to the starting of the expedition, Col. Sabine published the deeply interesting "Narrative of Baron Wrangel's Expedition to the Polar Sea, undertaken between the years 1820 and 1823," and that in his preface the translator points to the Wellington Channel as the most likely course for the successful accomplishment of the north-west passage. "Setting aside," he says, "the possibility of the existence of unknown land, the probability of an open sea existing to the north of the Parry Islands, and communicating with Behring Strait, appears to rest on strict analogical reasoning." And again he adds, "all the attempts to effect the north-west passage, since Barrow's Strait was first passed in 1819, have consisted in an endeavour to force a vessel by one route or another through this land-locked and ice-encumbered portion of the Polar Ocean."

No examination has made known what may be the state of the sea to the north of the Parry Islands; whether similar impediments may there present themselves to navigation, or whether a sea may not there exist offering no difficulties whatever of the kind, as M. Von Wrangel has shown to be the case to the north of the Siberian Islands, and as by strict analogy we should be justified in expecting.

Colonel Sabine is an officer of great scientific experience, and from having made several Polar voyages, he has devoted great attention to all that relates to that quarter. He was in constant communication with Sir John Franklin when the expedition was fitting out, and it is but reasonable to suppose that he would be somewhat guided by his opinion.

We have, then, the opinions of Franklin himself, Colonel Sabine, and Captain Fitzjames, all bearing on this point, and we must remember that Parry, who discovered and named this channel, saw nothing when passing and repassing it, but a clear open sea to the northward.

Lieut. S. Osborn, in a paper dated the 4th of January, 1850, makes the following suggestions:—

"General opinion places the lost expedition to the west of Cape Walker, and south of the latitude of Melville Island. The distance from Cape Bathurst to Banks Land is only 301 miles, and on reference to a chart it will be seen that nowhere else does the American continent approach so near to the supposed position of Franklin's expedition.

"Banks' Land bears from Cape Bathurst N. 41° 49′ E. 302 miles, and there is reason to believe that in the summer season a portion of this distance may be traversed in boats.

"Dr. Richardson confirms previous reports of the ice being light on the coast east of the Mackenzie River to Cape Bathurst, and informs us that the Esquimaux had seen 'no ice to seaward for two moons.'

"Every mile traversed northward by a party from Cape Bathurst would be over that unknown space in which traces of Franklin may be expected. It is advisable that such a second party be despatched from Cape Bathurst, in order that the prosecution of Dr. Rae's examination of the supposed channel between Wollaston and Victoria Lands may in no way be interfered with, by his attention being called to the westward."

In March, 1848, the Admiralty announced their intention of rewarding the crews of any whaling ships that brought accurate information of the missing expedition, with the sum of 100 guineas or more, according to circumstances. Lady Franklin also about the same time offered rewards of 2000*l.* and 3000*l.*, to be distributed among the owner, officers, and crew discovering and affording relief to her husband, or making extraordinary exertions for the above object, and, if required, bringing Sir John Franklin and his party to England.

In March, 1850, the following further rewards were offered by the British Government to persons of any country:—

1st. To any party or person who, in the judgment of the Board of Admiralty, shall discover and effectually relieve the crews of H.M. ships *Erebus* and *Terror*, the sum of 20,000*l*., or,

2nd. To any party, or parties, &c., who shall discover and effectually relieve any portion of the crews, or shall convey such intelligence as shall lead to the relief of any of the crew, the sum of 10,000*l*.

3rd. To any party or parties who shall by virtue of his or their efforts, first succeed in ascertaining their fate, 10,000*l*.

In a despatch from Sir George Simpson to Mr. Rae, dated Lachine, the 21st of January, 1850, he says:—

"If they be still alive, I feel satisfied that every effort it may be in the power of man to make to succour them will be exerted by yourself and the Company's officers in Mackenzie River; but should your late search have unfortunately ended in disappointment, it is the desire of the Company that you renew your explorations next summer, if possible.

"By the annexed correspondence you will observe that the opinion in England appears to be that our explorations ought to be more particularly directed to that portion of the Northern Sea lying between Cape Walker on the east, Melville Island and Banks' Land to the north, and the continental shore or the Victoria Islands to the south.

"As these limits are believed to embrace the course that would have been pursued by Sir John Franklin, Cape Walker being one of the points he was particularly instructed to make for, you will therefore be pleased, immediately on the receipt of this letter, to fit out another exploring party to proceed in the direction above indicated, but varying the route that may have been followed last summer, which party, besides their own examination of the coast and islands, should be instructed to offer liberal rewards to the Esquimaux to search for some vestiges of the missing expedition, and similar rewards should be offered to the Indians inhabiting near the coast and Peel's River, and the half-bred hunters of Mackenzie River, the latter being, perhaps, more energetic than the former; assuring them that whoever may procure authentic intelligence will be largely rewarded.

"Simultaneously with the expedition to proceed towards Cape Walker, one or two small parties should be despatched

to the westward of the Mackenzie, in the direction of Point Barrow, one of which might pass over to the Youcon River, and descending that stream to the sea, carry on their explorations in that quarter, while the other going down the Mackenzie might trace the coast thence towards the Youcon. And these parties must also be instructed to offer rewards to the natives to prosecute the search in all directions.

"By these means there is reason to believe that in the course of one year so minute a search may be made of the coast and the islands, that in the event of the expedition having passed in that direction, some trace of their progress would certainly be discovered.

"From your experience in Arctic discovery, and peculiar qualifications for such an undertaking, I am in hopes you may be enabled yourself to assume the command of the party to proceed to the northward; and, as leaders of the two parties to explore the coast to the westward of the Mackenzie, you will have to select such officers of the Company's service within the district as may appear best qualified for the duty: Mr. Murray, I think, would be a very fit man for one of the leaders, and if one party be sent by way of the Youcon, he might take charge of it. In the event of your going on this expedition, you will be pleased to make over the charge of the district to Chief Trader Bell during your absence.

"In case you may be short-handed, I have by this conveyance instructed Chief Factor Ballenden to engage in Red River ten choice men, accustomed to boating, and well fitted for such a duty as will be required of them; and if there be a chance of their reaching Mackenzie River, or even Athabasca, before the breaking up of the ice, to forward them immediately.

"Should the season, however, be too far advanced to enable them to accomplish the journey by winter travelling, Mr. Ballenden is directed to increase the party to fourteen men, with a guide to be despatched from Red River immediately after the opening of the navigation, in two boats, laden with provisions and flour, and a few bales of clothing, in order to meet, in some degree, the heavy drain that will be occasioned on our resources in provisions and necessary supplies in Mackenzie River. The leader of this party from Red River may, perhaps, be qualified to act as the conductor of one of the parties to examine the coast to the westward."

On the 5th of February, 1850, another consultation took place at the Admiralty among those officers most ex-

perienced in these matters, and their opinions in writing were solicited. It is important, therefore, to submit these as fully as possible to the consideration of the reader.

The first is the report of the hydrographer of the Admiralty, dated the 29th of January, 1850:—

"*Memorandum by Rear-Admiral Sir Francis Beaufort, K.C.B.*

"The Behring's Strait expedition being at length fairly off, it appears to me to be a duty to submit to their Lordships that no time should now be lost in equipping another set of vessels to renew the search on the opposite side, through Baffin's Bay; and this being the fifth year that the *Erebus* and *Terror* have been absent, and probably reduced to only casual supplies of food and fuel, it may be assumed that this search should be so complete and effectual as to leave unexamined no place in which, by any of the suppositions that have been put forward, it is at all likely they may be found.

"Sir John Franklin is not a man to treat his orders with levity, and therefore his first attempt was undoubtedly made in the direction of Melville Island, and not to the westward. If foiled in that attempt, he naturally hauled to the southward, and using Banks' Land as a barrier against the northern ice, he would try to make westing under its lee. Thirdly, if both of these roads were found closed against his advance, he perhaps availed himself of one of the four passages between the Parry Islands, including the Wellington Channel. Or, lastly, he may have returned to Baffin's Bay, and taken the inviting opening of Jones' Sound.

"All those four tracks must therefore be diligently examined before the search can be called complete, and the only method of rendering that examination prompt and efficient will be through the medium of steam; while only useless expense and reiterated disappointment will attend the best efforts of sailing vessels, leaving the lingering survivors of the lost ships, as well as their relatives in England, in equal despair. Had Sir James Ross been in a steam vessel, he would not have been surrounded by ice and swept out of the Strait, but by shooting under the protection of Leopold Island, he would have waited there till that fatal field had passed to the eastward, and he then would have found a perfectly open sea up to Melville Island.

"The best application of steam to ice-going vessels would be Ericson's screw; but the screw or paddles of any of

our moderate-sized vessels might be made to elevate with facility. Vessels so fitted would not require to be fortified in an extraordinary degree, not more than common whalers. From the log-like quiescence with which a sailing vessel must await the crush of two approaching floes, they must be as strong as wood and iron can make them; but the steamer slips out of the reach of the collision, waits till the shock is past, and then profiting by their mutual recoil, darts at once through the transient opening.

"Two such vessels, and each of them attended by two tenders laden with coals and provisions, would be sufficient for the main lines of search. Every prominent point of land where notices might have been left would be visited, details of their own proceedings would be deposited, and each of the tenders would be left in proper positions as points of rendezvous on which to fall back.

"Besides these two branches of the expedition, it would be well to allow the whaling captain (Penny) to carry out his proposed undertaking. His local knowledge, his thorough acquaintance with all the mysteries of the ice navigation, and his well-known skill and resources, seem to point him out as a most valuable auxiliary.

"But whatever vessels may be chosen for this service, I would beseech their lordships to expedite them; all our attempts have been deferred too long; and there is now reason to believe that very early in the season, in May or even in April, Baffin's Bay may be crossed before the accumulated ice of winter spreads over its surface. If they arrive rather too soon, they may very advantageously await the proper moment in some of the Greenland harbours, preparing themselves for the coming efforts and struggles, and procuring Esquimaux interpreters.

"In order to press every resource into the service of this noble enterprise, the vessels should be extensively furnished with means for blasting and splitting the ice; perhaps circular saws might be adapted to the steamers, a launch to each party, with a small rotary engine, sledges for the shore, and light boats with sledge bearings for broken ice fields; balloons for the distribution of advertisements, and kites for the explosion of lofty fire-balls. And, lastly, they should have vigorous and numerous crews, so that when detachments are away, other operations should not be intermitted for want of physical strength.

"As the council of the Royal Society, some time ago, thought proper to remind their lordships of the propriety of instituting this search, it would be fair now to call on

that learned body for all the advice and suggestions that science and philosophy can contribute towards the accomplishment of the great object on which the eyes of all England, and indeed of all the world, are now entirely fixed."

Captain Beechey, writing to the Secretary of the Admiralty, 7th of February, 1850, says:—

"The urgent nature of the case alone can justify the use of ordinary steamers in an icy sea, and great prudence and judgment will be required on the part of their commanders, to avoid being disabled by collision and pressure.

"I would also add, as an exception, that I think Leopold Island and Cape Walker, if possible, should both be examined prior to any attempt being made to penetrate in other directions from Barrow's Strait, and that the bottom of Regent Inlet, about the Pelly Islands, should not be left unexamined. In the memorandum submitted to their lordships on 17th January, 1849, this quarter was considered of importance; and I am still of opinion, that, had Sir John Franklin abandoned his vessels near the coast of America, and much short of the Mackenzie River, he would have preferred the probability of retaining the use of his boats until he found relief in Barrow's Strait, to risking an overland journey *viâ* the before-mentioned river; it must be remembered, that at the time he sailed, Sir George Back's discovery had rendered it very probable that Boothia was an island.

"An objection to the necessity of this search seems to be, that had Sir John Franklin taken that route, he would have reached Fury Beach already. However, I cannot but think there will yet be found some good grounds for the Esquimaux sketch, and that their meaning has been misunderstood; and as Mr. M'Cormick is an enterprising person, whose name has already been before their lordships, I would submit whether a boat expedition from Leopold Depôt, under his direction, would not satisfactorily set at rest all inquiry upon this, now the only quarter unprovided for."

Captain Sir W. E. Parry states:—

"I am decidedly of opinion that the main search should be renewed in the direction of Melville Island and Banks' Land, including as a part of the plan the thorough examination of Wellington Strait and of the other similar openings between the islands of the group bearing my name. I entertain a growing conviction of the probability of the missing ships, or at least a considerable portion of the

crews, being shut up at Melville Island, Banks' Land, or in that neighbourhood, agreeing as I do with Rear-Admiral Sir Francis Beaufort, in his report read yesterday to the Board, that 'Sir John Franklin is not a man to treat his orders with levity,' which he would be justly chargeable with doing if he attached greater weight to any notions he might personally entertain than to the Admiralty instructions, which he well knew to be founded on the experience of former attempts, and on the best information which could then be obtained on the subject. For these reasons I can scarcely doubt that he would employ at least two seasons, those of 1845 and 1846, in an unremitting attempt to penetrate directly westward or south-westward towards Behring's Strait.

"Supposing this conjecture to be correct, nothing can be more likely than that Sir John Franklin's ships, having penetrated in seasons of ordinary temperature a considerable distance in that direction, have been locked up by successive seasons of extraordinary rigour, thus baffling the efforts of their weakened crews to escape from the ice in either of the two directions by Behring's or Barrow's Straits.

"And here I cannot but add, that my own conviction of this probability—for it is only with probabilities that we have to deal—has been greatly strengthened by a letter I have lately received from Colonel Sabine, of the Royal Artillery, of which I had the honour to submit a copy to Sir Francis Baring. Colonel Sabine having accompanied two successive expeditions to Baffin's Bay, including that under my command which reached Melville Island, I consider his views to be well worthy of their lordships' attention on this part of the subject.

"It must be admitted, however, that considerable weight is due to the conjecture which has been offered by persons capable of forming a sound judgment, that having failed, as I did, in the attempt to penetrate westward, Sir John Franklin might deem it prudent to retrace his steps, and was enabled to do so, in order to try a more northern route, either through Wellington Strait or some other of those openings between the Parry Islands to which I have already referred. And this idea receives no small importance from the fact (said to be beyond a doubt) of Sir John Franklin having before his departure expressed such an intention in case of failing to the westward.

"I cannot, therefore, consider the intended search to be complete without making the examination of Welling-

ton Strait and its adjacent openings a distinct part of the plan, to be performed by one portion of the vessels which I shall presently propose for the main expedition.

"Much stress has likewise been laid, and I think not altogether without reason, on the propriety of searching Jones' and Smith's Sounds in the north-western part of Baffin's Bay. Considerable interest has lately been attached to Jones' Sound, from the fact of its having been recently navigated by at least one enterprising whaler, and found to be of great width, free from ice, with a swell from the westward, and having no land visible from the mast-head in that direction. It seems more than probable, therefore, that it may be found to communicate with Wellington Strait; so that if Sir John Franklin's ships have been detained anywhere to the northward of the Parry Islands, it would be by Jones' Sound that he would probably endeavour to effect his escape, rather than by the less direct route of Barrow's Strait. I do not myself attach much importance to the idea of Sir John Franklin having so far retraced his steps as to come back through Lancaster Sound, and recommence his enterprise by entering Jones' Sound; but the possibility of his attempting his escape through this fine opening, and the report (though somewhat vague) of a cairn of stones seen by one of the whalers on a headland within it, seems to me to render it highly expedient to set this question at rest by a search in this direction, including the examination of Smith's Sound also."

I beg to cite next an extract from the letter of Dr. Sir John Richardson to the Secretary of the Admiralty:—

"*Haslar Hospital, Gosport, 7th of February*, 1850.

"With respect to the direction in which a successful search may be predicated with the most confidence, very various opinions have been put forth; some have supposed either that the ships were lost before reaching Lancaster Sound, or that Sir John Franklin, finding an impassable barrier of ice in the entrance of Lancaster Sound, may have sought for a passage through Jones' Sound. I do not feel inclined to give much weight to either conjecture. When we consider the strength of the *Erebus* and *Terror*, calculated to resist the strongest pressure to which ships navigating Baffin's Bay have been known to be subject, in conjunction with the fact that, of the many whalers which have been crushed or abandoned since the commencement of the fishery, the crews, or at least the greater part of them, have, in almost every case, succeeded in reaching

other ships, or the Danish settlements, we cannot believe that the two discovery ships, which were seen on the edge of the middle ice so early as the 26th of July, can have been so suddenly and totally overwhelmed as to preclude some one of the intelligent officers, whose minds were prepared for every emergency, with their select crews of men, experienced in the ice, from placing a boat on the ice or water, and thus carrying intelligence of the disaster to one of the many whalers which remained for two months after that date in those seas, and this in the absence of any unusual catastrophe among the fishing vessels that season.

"With respect to Jones' Sound, it is admitted by all who are intimately acquainted with Sir John Franklin, that his first endeavour would be to act up to the letter of his instructions, and that therefore he would not lightly abandon the attempt to pass Lancaster Sound. From the logs of the whalers year after year, we learn that when once they have succeeded in rounding the middle ice, they enter Lancaster Sound with facility: had Sir John Franklin, then, gained that Sound, and from the premises we appear to be fully justified in concluding that he did so, and had he afterwards encountered a compact field of ice, barring Barrow's Strait and Wellington Sound, he would then, after being convinced that he would lose the season in attempting to bore through it, have borne up for Jones' Sound, but not until he had erected a conspicuous landmark, and lodged a memorandum of his reason for deviating from his instructions.

"The absence of such a signal-post in Lancaster Sound is an argument against the expedition having turned back from thence, and is, on the other hand, a strong support to the supposition that Barrow's Strait was as open in 1845 as when Sir W. E. Parry first passed it in 1819; that, such being the case, Sir John Franklin, without delay and without landing, pushed on to Cape Walker, and that, subsequently, in endeavouring to penetrate to the south-west, he became involved in the drift ice, which, there is reason to believe, urged by the prevailing winds and the set of the flood tides, is carried towards Coronation Gulf, through channels more or less intricate. Should he have found no opening at Cape Walker, he would, of course, have sought one further to the west; or, finding the southerly and westerly opening blocked by ice, he might have tried a northern passage.

"In either case, the plan of search propounded by Sir Francis Beaufort seems to provide against every contin-

gency, especially when taken in conjunction with Captain Collinson's expedition, *viâ* Behring's Strait, and the boat parties from the Mackenzie.

"I do not venture to offer an opinion on the strength or equipment of the vessels to be employed, or other merely nautical questions, further than by remarking, that the use of the small vessels, which forms part of Sir Francis Beaufort's scheme, is supported by the success of the early navigators with their very small craft, and the late gallant exploit of Mr. Shedden, in rounding Icy Cape and Point Barrow, in the *Nancy Dawson* yacht.

"And further, with respect to the comparative merits of the paddles and screw in the Arctic seas, I beg leave merely to observe, that as long as the screw is immersed in water it will continue to act, irrespective of the temperature of the air; but when, as occurs late in the autumn, the atmosphere is suddenly cooled below the freezing point of sea water, by a northerly gale, while the sea itself remains warmer, the paddles will be speedily clogged by ice accumulating on the floats as they rise through the air in every revolution. An incident recorded by Sir James C. Ross furnishes a striking illustration of the powerful action of a cold wind; I allude to a fish having been thrown up by the spray against the bows of the *Terror*, and firmly frozen there, during a gale in a high southerly latitude. Moreover, even with the aid of a ready contrivance for topping the paddles, the flatness or hollowness of the sides of a paddle steamer renders her less fit for sustaining pressure; the machinery is more in the way of oblique beams for strengthening, and she is less efficient as a sailing vessel when the steam is let off."

*Memorandum enclosed in Dr. M'Cormick's Letter of the* 1*st of January,* 1850.

"In the month of April last, I laid before my Lords Commissioners of the Admiralty a plan of search for the missing expedition under the command of Captain Sir John Franklin, by means of a boat expedition up Jones' and Smith's Sounds, volunteering myself to conduct it.

"In that plan I stated the reasons which had induced me to direct my attention more especially to the openings at the head of Baffin's Bay, which at the time were not included within the general scheme of search.

"Wellington Channel, however, of all the probable openings into the Polar Sea, possesses the highest degree of interest, and the exploration of it is of such paramount import-

ance, that I should most unquestionably have comprised it within my plan of search, had not Her Majesty's ships *Enterprise* and *Investigator* been employed at the time in Barrow's Strait for the express purpose of examining this inlet and Cape Walker, two of the most essential points of search in the whole track of the *Erebus* and *Terror* to the westward; being those points at the very threshold of his enterprise, from which Sir John Franklin would take his departure from the known to the unknown, whether he shaped a south-westerly course from the latter, or attempted the passage in a higher latitude from the former point.

"The return of the sea expedition from Port Leopold, and the overland one from the Mackenzie River, both alike unsuccessful in their search, leaves the fate of the gallant Franklin and his companions as problematical as ever; in fact, the case stands precisely as it did two years ago; the work is yet to be begun; everything remains to be accomplished.

"In renewal of the search in the ensuing spring, more would be accomplished in boats than in any other way, not only by Behring's Strait, but from the eastward. For the difficulties attendant on icy navigation, which form so insuperable a barrier to the progress of ships, would be readily surmounted by boats; by means of which the coast line may be closely examined for cairns of stones, under which Sir John Franklin would most indubitably deposit memorials of his progress in all prominent positions, as opportunities might offer.

"The discovery of one of these mementos would, in all probability, afford a clue that might lead to the rescue of our enterprising countrymen, ere another and sixth winter close in upon them, should they be still in existence; and the time has not yet arrived for abandoning hope.

"In renewing once more the offer of my services, which I do most cheerfully, I see no reason for changing the opinions I entertained last spring; subsequent events have only tended to confirm them. I then believed, and I do so still, after a long and mature consideration of the subject, that Sir John Franklin's ships have been arrested in a high latitude, and beset in the heavy polar ice northward of the Parry Islands, and that their probable course thither has been through the Wellington Channel, or one of the Sounds at the northern extremity of Baffin's Bay.

"This appears to me to be the only view of the case that can in any way account for the entire absence of all

tidings of them throughout so protracted a period of time (unless all have perished by some sudden and overwhelming catastrophe).

"Isolated as their position would be under such circumstances, any attempt to reach the continent of America at such a distance would be hopeless in the extreme: and the mere chance of any party from the ships reaching the top of Baffin's Bay at the very moment of a whaler's brief and uncertain visit would be attended with by far too great a risk to justify the attempt, for failure would ensure inevitable destruction to the whole party; therefore their only alternative would be to keep together in their ships, should no disaster have happened to them, and by husbanding their remaining resources, eke them out with whatever wild animals may come within their reach.

"Had Sir John Franklin been able to shape a south-westerly course from Cape Walker, as directed by his instructions, the probability is, some intelligence of him would have reached this country ere this (nearly five years having already elapsed since his departure from it). Parties would have been sent out from his ships, either in the direction of the coast of America or Barrow's Strait, whichever happened to be the most accessible. Esquimaux would have been fallen in with, and tidings of the long-absent expedition have been obtained.

"Failing in penetrating beyond Cape Walker, Sir John Franklin would have left some notice of his future intentions on that spot, or the nearest accessible one to it; and should he then retrace his course for the Wellington Channel, the most probable conjecture, he would not pass up that inlet without depositing a further account of his proceedings, either on the western or eastern point of the entrance to it.

"Therefore, should my proposal meet with their Lordships' approbation, I would most respectfully submit, that the party I have volunteered to conduct should be landed at the entrance to the Wellington Channel, or the nearest point attainable by any ship that their Lordships may deem fit to employ in a future search, consistently with any other services that ship may have to perform; and should a landing be effected on the eastern side, I would propose commencing the search from Cape Riley or Beechey Island in a northerly direction, carefully examining every remarkable headland and indentation of the western coast of North Devon for memorials of the

missing expedition; I would then cross over the Wellington Channel, and continue the search along the northern shore of Cornwallis Island, extending the exploration to the westward as far as the remaining portion of the season would permit, so as to secure the retreat of the party before the winter set in, returning either by the eastern or western side of Cornwallis Island, as circumstances might indicate to be the most desirable at the time, after ascertaining the general extent and trending of the shores of that island.

"As, however, it would be highly desirable that Jones' Sound should not be omitted in the search, more especially as a whaler, last season, reached its entrance and reported it open, I would further propose, that the ship conveying the exploring party out should look into this opening on her way to Lancaster Sound, if circumstances permitted of her doing so early in the season; and, if found to be free from ice, the attempt might be made by the boat expedition to push through it to the westward in this latitude; and should it prove to be an opening into the Polar Sea, of which I think there can be little doubt, a great saving of time and distance would be accomplished. Failing in this, the ship should be secured in some central position in the vicinity of the Wellington Channel, as a *point d'appui* to fall back upon in the search from that quarter.

(Signed) R. M'Cormick, R.N.

"*Twickenham, 1st of January,* 1850."

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*Outline of a Plan of an Overland Journey to the Polar Sea, by the Way of the Coppermine River, in Search of Sir John Franklin's Expedition, suggested in* 1847.

"If Sir John Franklin, guided by his instructions, has passed through Barrow's Strait, and shaped a south-westerly course, from the meridian of Cape Walker, with the intention of gaining the northern coast of the continent of America, and so passing through the Dolphin and Union Strait, along the shore of that continent, to Behring's Strait;

"His greatest risk of detention by the ice throughout this course would be found between the parallels of 74° and 69° north latitude, and the meridians of 100° and 110° west longitude, or, in other words, that portion of the north-west passage which yet remains unexplored, occupy-

ing the space between the western coast of Boothia on the one side, and the island or islands forming Banks' and Victoria Lands on the other.

"Should the *Erebus* and *Terror* have been beset in the heavy drift ice, or wrecked amongst it and the broken land, which in all probability exists there, whilst contending with the prevalent westerly winds in this quarter;

"The Coppermine River would decidedly offer the most direct route and nearest approach to that portion of the Polar Sea, and, after crossing Coronation Gulf, the average breadth of the Strait between the Continent and Victoria Land is only about twenty-two miles.

"From this point a careful search should be commenced in the direction of Banks' Land; the intervening space between it and Victoria Land, occupying about five degrees, or little more than 300 miles, could, I think, be accomplished in one season, and a retreat to winter quarters effected before the winter set in. As the ice in the Coppermine River breaks up in June, the searching party ought to reach the sea by the beginning of August, which would leave two of the best months of the year for exploring the Polar Sea, viz., August and September.

"As it would be highly desirable that every available day, to the latest period of the season, should be devoted to the search, I should propose wintering on the coast in the vicinity of the mouth of the Coppermine River, which would also afford a favourable position from which to recommence the search in the following spring, should the first season prove unsuccessful.

"Of course the object of such an expedition as I have proposed is not with the view of taking supplies to such a numerous party as Sir John Franklin has under his command; but to find out his position, and acquaint him where a depôt of provisions would be stored up for himself and crews at my proposed winter quarters, where a party should be left to build a house, establish a fishery, and hunt for game, during the absence of the searching party.

"To carry out this plan efficiently, the Hudson's Bay Company should be requested to lend their powerful co-operation in furnishing guides, supplies of pemmican, &c., for the party on their route and at winter quarters. Without entering into details here, I may observe, that I should consider one boat, combining the necessary requisites in her construction to fit her for either the river navigation or that of the shores of the Polar Sea, would be quite sufficient, with a crew one-half sailors, and the

other half Canadian boatmen; the latter to be engaged at Montreal, for which place I would propose leaving England in the month of February.

"Should such an expedition even fail in its main object —the discovery of the position of the missing ships and their crews, the long-sought-for Polar passage may be accomplished.

(Signed) R. M'Cormick, R.N.

"*Woolwich*, 1847."

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*Copy of a letter from Lieutenant Sherard Osborn to the Lords Commissioners of the Admiralty.*

"*Ealing, Middlesex, 4th January*, 1850.

"My Lords,—A second attempt to reach Sir John Franklin's expedition being about to be tried during the present year, I take the liberty of calling your attention to the enclosed proposition for an overland party to be despatched to the shores of the Polar Sea, with a view to their traversing the short distance between Cape Bathurst and Banks' Land. My reasons for thus trespassing on your attention are as follows:

"1st. General opinion places the lost expedition to the west of Cape Walker, and south of the latitude of Melville Island.

"The distance from Cape Bathurst to Banks' Land is only 301 miles, and on reference to a chart it will be seen that nowhere else does the American continent approach so near to the supposed position of Franklin's expedition.

"2nd. As a starting point, Cape Bathurst offers great advantages; the arrival of a party sent there from England may be calculated upon to a day; whereas the arrival of Captain Collinson in the longitude of Cape Barrow, or that of an eastern expedition in Lancaster Sound, will depend upon many uncontrollable contingencies. The distance to be performed is comparatively little, and the certainty of being able to fall back upon supplies offers great advantages. Captain Collinson will have 680 miles of longitude to traverse between Cape Barrow and Banks' Land. An Eastern Expedition, if opposed by the ice (as Sir James Ross has been), and unable to proceed in their vessels farther than Leopold Harbour, will have to journey on foot 330 miles to reach the longitude of Banks' Land, and if any accident occur to their vessels they will be in as critical a position as those they go to seek.

"3rd. Banks' Land bears from Cape Bathurst N. 41° 49′

E. 302 miles, and there is reason to believe that in the summer season a portion of this distance may be traversed in boats.

"4th and 5th. Dr. Richardson confirms previous reports of the ice being light on the coast east of the Mackenzie River to Cape Bathurst, and informs us that the Esquimaux had seen no ice to seaward for two moons.

"6th. Every mile traversed northward by a party from Cape Bathurst would be over that unknown space in which traces of Franklin may be expected.

"7th. It is advisable that such a second party be despatched from Cape Bathurst, in order that the prosecution of Dr. Rae's examination of the supposed channel between Wollaston and Victoria Lands may in no way be interfered with by his attention being called to the westward.

"8th. The *cachés* of provisions made at different points of the Mackenzie and at Cape Bathurst, would enable a party to push down to their starting point with great celerity directly the River Mackenzie opens, which may be as early as May.

"I would also remind your Lordships that the proposed expedition would carry into execution a very important clause in the instructions given to Sir James Ross; viz., that of sending exploring parties from Banks' Land in a south-westerly direction towards Cape Bathurst or Cape Parry.

"In conclusion, I beg to offer my willing services towards the execution of the proposed plan; and seeking it from no selfish motives, but thoroughly impressed with its feasibility, you may rest assured, my lords, should I have the honour of being sent upon this service, that I shall not disappoint your expectations.

"I have, &c.,

(Signed) "Sherard Osborn, Lieut., R.N."

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*Copy of a letter from Colonel Sabine, R.A., to Captain Sir W. Edward Parry.*

"*Castle-down Terrace, Hastings,*
"15*th of January*, 1850.

"There can be little doubt, I imagine, in the mind of any one who has read attentively Franklin's instructions, and (in reference to them) your description of the state of the ice and of the navigable water in 1819 and 1820, in the route which he was ordered to pursue; still less, I think, can there be a doubt in the mind of any one who had the

advantage of being with you in those years, that Franklin (always supposing no previous disaster) must have made his way to the south-west part of Melville Island either in 1845 or 1846. It has been said that 1845 was an unfavourable season, and as the navigation of Davis' Strait and Baffin's Bay was new to Franklin, we may regard it as more probable that it may have taken him two seasons to accomplish what we accomplished in one. So far, I think, guided by his instructions and by the experience gained in 1819 and 1820, we may reckon pretty confidently on the first stage of his proceedings, and, doubtless, in his progress he would have left memorials in the usual manner at places where he may have landed, some of which would be likely to fall in the way of a vessel following in his track. From the west end of Melville Island our inferences as to his further proceedings must become more conjectural, being contingent on the state of the ice and the existence of navigable water in the particular season. If he found the ocean, as we did, covered to the west and south, as far as the eye could reach from the summit of the highest hills, with ice of a thickness unparalleled in any other part of the Polar Sea, he would, after probably waiting through one whole season in the hope of some favourable change, have retraced his steps, in obedience to the second part of his instructions, in order to seek an opening to the north which might conduct to a more open sea. In this case some memorial of the season passed by him at the south-west end of Melville Island, and also of his purpose of retracing his steps, would doubtless have been left by him; and should he subsequently have found an opening to the north, presenting a favourable appearance, there also, should circumstances have permitted, would a memorial have been left.

"He may, however, have found a more favourable state of things at the south-west end of Melville Island than we did, and may have been led thereby to attempt to force a passage for his ships in the direct line of Behring's Strait, or perhaps, in the first instance, to the south of that direction, namely, to Banks' Land. In such case two contingencies present themselves: first, that in the season of navigation of 1847 he may have made so much progress, that in 1848 he may have preferred the endeavour to push through to Behring's Strait, or to some western part of the continent, to an attempt to return by the way of Barrow Strait; the mission of the *Plover*, the *Enterprise*, and the *Investigator*, together with Dr. Rae's expedition, supply, I presume (for I am but partially acquainted with

their instructions), the most judicious means of affording relief in this direction. There is, however, a second contingency; and it is the one which the impression left on my mind by the nature and general aspect of the ice in the twelve months which we ourselves passed at the south-west end of Melville Island, compels me, in spite of my wishes, to regard as the more probable, viz., that his advance from Melville Island in the season of 1847 may have been limited to a distance of 50, or perhaps 100 miles at farthest, and that in 1848 he may have endeavoured to retrace his steps, but only with partial success. It is, I apprehend, quite a conceivable case, that under these circumstances, incapable of extricating the ships from the ice, the crews may have been, at length, obliged to quit them, and attempt a retreat, not towards the continent, because too distant, but to Melville Island, where certainly food, and probably fuel (seals), might be obtained, and where they would naturally suppose that vessels despatched from England for their relief would, in the first instance, seek them. It is quite conceivable also, I apprehend, that the circumstances might be such that their retreat may have been made without their boats, and probably in the April or May of 1849.

"Where the Esquimaux have lived, there Englishmen may live, and no valid argument against the attempt to relieve can, I think, be founded on the improbability of finding Englishmen alive in 1850, who may have made a retreat to Melville Island in the spring of 1849; nor would the view of the case be altered in any material degree, if we suppose their retreat to have been made in 1848 or 1849 to Banks' Land, which may afford facilities of food and fuel equal or superior to Melville Island, and a further retreat in the following year to the latter island as the point at which they would more probably look out for succour.

"Without disparagement, therefore, to the attempts made in other directions, I retain my original opinion, which seems also to have been the opinion of the Board of Admiralty, by which Ross's Instructions were drawn up, that the most promising direction for research would be taken by a vessel which should follow them to the south-west point of Melville Island, be prepared to winter there, and, if necessary, to send a party across the ice in April or May to examine Banks' Land, a distance (there and back) less than recently accomplished by Ross in his land journey.

"I learn from Ross's despatches, that almost immediately after he got out of Port Leopold (1849), he was entangled in

apparently interminable fields and floes of ice, with which, in the course of the summer, he was drifted down through Barrow Strait and Baffin's Bay nearly to Davis' Strait. It is reasonable to presume, therefore, that the localities from whence this ice drifted are likely to be less encumbered than usual by accumulated ice in 1850. It is, of course, of the highest importance to reach Barrow Strait at the earliest possible period of the season; and, connected with this point, I learnt from Captain Bird, whom I had the pleasure of seeing here a few days ago, a very remarkable fact, that the ice which prevented their crossing Baffin's Bay in 72° or 73° of latitude (as we did in 1819, arriving in Barrow Strait a month earlier than we had done the preceding year, when we went round by Melville Bay, and nearly a month earlier than Ross did last year) was young ice, which had formed in the remarkably calm summer of last year, and which the absence of wind prevented their forcing a passage through, on the one hand, whilst, on the other, the ice was not heavy enough for ice anchors. It was, he said, not more than two or two-and-a-half feet thick, and obviously of very recent formation. There must, therefore, have been an earlier period of the season when this part of the sea must have been free from ice; and this comes in confirmation of a circumstance of which I was informed by Mr. Petersen (a Danish gentleman sent to England some months ago by the Northern Society of Antiquaries of Copenhagen, to make extracts from books and manuscripts in the British Museum), that the Northmen, who had settlements some centuries ago on the west coast of Greenland, were in the habit of crossing Baffin's Bay in the latitude of Upernavic in the spring of the year, for the purpose of fishing in Barrow Strait, from whence they returned in August; and that in the early months they generally found the passage across free from ice.

"In the preceding remarks, I have left one contingency unconsidered; it is that which would have followed in pursuance of his instructions, if Franklin should have found the aspect of the ice too unfavourable to the west and south of Melville Island to attempt to force a passage through it, and should have retraced his steps in hopes of finding a more open sea to the northward, either in Wellington Strait or elsewhere. It is quite conceivable that here also the expedition may have encountered, at no very great distance, insuperable difficulties to their advance, and may have failed in accomplishing a return with their ships. In this case, the retreat of the crews, supposing it

to have been made across land or ice, would most probably be directed to some part of the coast on the route to Melville Island, on which route they would, without doubt, expect that succour would be attempted."

Mr. Robert A. Goodsir, a brother of Mr. H. D. Goodsir, the assistant-surgeon of Sir John Franklin's ship, the *Erebus*, left Stromness, as surgeon of the *Advice*, whaler, Capt. Penny, on the 17th of March, 1849, in the hopes of gaining some tidings of his brother; but returned unsuccessful after an eight months' voyage. He has, however, published a very interesting little narrative of the icy regions and of his Arctic voyage.

In a letter to Lady Franklin, dated Edinburgh, 18th of January, 1850, he says:—"I trust you are not allowing yourself to become over-anxious. I know that, although there is much cause to be so, there is still not the slightest reason that we should despair. It may be presumptuous in me to say so, but I have never for a moment doubted as to their ultimate safe return, having always had a sort of presentiment that I would meet my brother and his companions somewhere in the regions in which their adventures are taking place. This hope I have not yet given up, and I trust that by next summer it may be fulfilled, when an end will be put to the suspense which has lasted so long, and which must have tried you so much."

The Arctic regions, far from being so destitute of animal life as might be supposed from the bleak and inhospitable character of the climate, are proverbial for the boundless profusion of various species of the animal kingdom, which are to be met with in different localities during a great part of the year.

The air is often darkened by innumerable flocks of Arctic and blue gulls (*Lestris Parasiticus*, and *Larus glaucus*), the ivory gull or snow bird (*Larus eburneus*), the kittiwake, the fulmar or petrel, snow geese, terns, coons, dovekies, &c. The cetaceous animals comprise the great Greenland whale (*Balæna mysticetus*), the sea unicorn, or narwhal (*Monodon monoceros*), the white whale or beluga (*Delphinus leucos*), the morse or walrus (*Trichecus rosmarus*), and the seal. There are also plenty of porpoises occasionally to be met with, and although these animals may not be the best of food, yet they can be eaten. Of the land animals I may instance the Polar bear, the musk-ox, the reindeer, the Arctic fox, and wolves.

Parry obtained nearly 4000lbs. weight of animal food during his winter residence at Melville Island; Ross

nearly the same quantity from birds alone, when wintering at Port Leopold.

In 1719, the crews of two Hudson's Bay vessels, the *Albany* and *Discovery*, a ship and sloop, under the command of Mr. Barlow and Mr. Knight, were cast on shore on Marble Island, and it was subsequently ascertained that some of the party supported life for nearly three years. Mr. Hearne learnt the particulars from some of the Esquimaux in 1729. The ship it appeared went on shore in the fall of 1719; the party, being then in number about fifty, began to build their house for the winter. As soon as the ice permitted in the following summer the Esquimaux paid them another visit, and found the number of sailors much reduced, and very unhealthy.

Sickness and famine occasioned such havoc among them that by the setting in of the second winter, their number was reduced to twenty. Some of the Esquimaux took up their abode at this period on the opposite side of the harbour, and supplied them with what provisions they could spare in the shape of blubber, seal's flesh, and train oil.

The Esquimaux left for their wanderings in the spring, and on revisiting the island in the summer of 1721, only five of the crews were found alive, and these were so ravenous for food, that they devoured the blubber and seal's flesh raw as they purchased it of the natives, which proved so injurious in their weak state that three of them died in a few days. The two survivors, though very weak, managed to bury their comrades, and protracted their existence for some days longer.

"They frequently," in the words of the narrative, "went to the top of an adjacent rock, and earnestly looked to the south and east, as if in expectation of some vessels coming to their relief. After continuing there a considerable time, and nothing appearing in sight, they sat down close together and wept bitterly. At length one of the two died, and the other's strength was so far exhausted, that he fell down and died also in attempting to dig a grave for his companion. The skulls and other large bones of these two men are now lying above ground close to the house."

Sir John Richardson, speaking of the amount of food to be obtained in the Polar region, says, "Deer migrate over the ice in the spring from the main shore to Victoria and Wollaston Lands in large herds, and return in the autumn. These lands are also the breeding places of vast flocks of snow geese; so that with ordinary skill in hunting, a large supply of food might be procured on their shores, in the months of June, July, and August. Seals are also nume-

rous in those seas, and are easily shot, their curiosity rendering them a ready prey to a boat party." In these ways and by fishing, the stock of provisions might be greatly augmented—and we have the recent example of Mr. Rae, who passed a severe winter on the very barren shores of Repulse Bay, with no other fuel than the withered tufts of a herbaceous andromada, and maintained a numerous party on the spoils of the chase alone for a whole year. Such instances forbid us to lose hope. Should Sir John Franklin's provisions become so far inadequate to a winter's consumption, it is not likely that he would remain longer by his ships, but rather that in one body, or in several, the officers and crews, with boats cut down so as to be light enough to drag over the ice, or built expressly for that purpose, would endeavour to make their way eastward to Lancaster Sound, or southward to the main land, according to the longitude in which the ships were arrested.

We ought not to judge of the supplies of food that can be procured in the Arctic regions by diligent hunting, from the quantities that have been actually obtained on the several expeditions that have returned, and consequently of the means of preserving life there. When there was abundance in the ships, the address and energy of the hunting parties was not likely to be called forth, as they would inevitably be when the existence of the crews depended solely on their personal efforts, and formed their chief or only object in their march towards quarters where relief might be looked for. This remark has reference to the supposition that on the failure of the stock of provisions in the ships, the crews would in separate parties under their officers seek for succour in several directions.

With an empty stomach the power of resisting external cold is greatly impaired; but when the process of digestion is going on vigorously, even with comparatively scanty clothing, the heat of the body is preserved. There is in the winter time, in high latitudes, a craving for fat or oleaginous food, and for such occasions the flesh of seals, walrusses, or bears, forms a useful article of diet. Captain Cook says that the walrus is a sweet and wholesome article of food. Whales and seals would also furnish light and fuel. The necessity for increased food in very cold weather, is not so great when the people do not work.

Mr. Gilpin, in his Narrative in the Nautical Magazine for March, 1850, writes thus:—

"About the 20th of June a small water bird, called the doveky, had become so numerous, and so many were daily shot by those who troubled themselves to go after them, that shooting parties from each ship, consisting of an officer and marine, were established at Whaler Point, where they remained the whole week, returning on board on Saturday night. In a week or so after this the coon, a much heavier bird, became more plentiful than the little doveky, and from this time to the middle of August, so successful and untiring were our sportsmen, that the crew received each a bird per man a day.

"The account kept on board the *Investigator* showed the number of birds killed to have amounted to about 4000, and yielding near 2500lbs. of meat. But more than this was obtained, as many were shot by individuals for amusement, and not always noted."

Mr. Goodsir, surgeon, when in the *Advice* whaler, on her voyage up Lancaster Sound, in the summer of 1849, speaking of landing on one of the Wollaston Islands, on the west side of Navy Board Inlet, says he disturbed about half a dozen pairs of the eider duck (*Somateria mollissima*). Their eggs he found to be within a few hours of maturity. There were besides numerous nests, the occupants of which had probably winged their way southwards. Two brent geese (*Anser bernicla*), and a single pair of arctic terns (*Sterna arctica*), were most vociferous and courageous in defence of their downy offspring wherever he approached. These were the only birds he saw, with the exception of a solitary raven (*Corvus corax*) not very high overhead, whose sharp and yet musically bell-like croak came startling upon the ear.

Mr. Snow, in his account of the voyage of the *Prince Albert*, p. 162, says (speaking of Melville Bay, at the northern head of Baffin's Bay), "Innumerable quantities of birds, especially the little auk (*Alca alle*) and the doveky (*Colymbus grylle*), were now seen (August 6th) in every direction. They were to be observed in thousands, on the wing and in the water, and often on pieces of ice, where they were clustered together so thick that scores might have been shot at a time by two or three fowling pieces."

In passing up Lancaster Sound a fortnight later several shoals of eider ducks and large quantities of other birds were also seen. See *ante*, p. 49, *et seq.*

## A BALLAD OF SIR JOHN FRANKLIN.

"The ice was here, the ice was there,
The ice was all around."—*Coleridge.*

WHITHER sail you, Sir John Franklin?
Cried a whaler in Baffin's Bay;
To know if between the land and the Pole,
I may find a broad sea-way.

I charge you back, Sir John Franklin,
As you would live and thrive,
For between the land and the frozen Pole
No man may sail alive.

But lightly laughed the stout Sir John,
And spoke unto his men;—
Half England is wrong, if he is right;
Bear off to westward then.

O, whither sail you, brave Englishman?
Cried the little Esquimaux.
Between your land and the polar star
My goodly vessels go.

Come down, if you would journey there,
The little Indian said;
And change your cloth for fur clothing,
Your vessel for a sled.

But lightly laughed the stout Sir John,
And the crew laughed with him too;
A sailor to change from ship to sled,
I ween, were something new!

All through the long, long polar day,
The vessels westward sped;
And wherever the sail of Sir John was blown,
The ice gave way and fled.

Gave way with many a hollow groan,
And with many a surly roar;
But it murmured and threatened on every side,
And closed where he sailed before.

Ho! see ye not, my merry men,
The broad and open sea?
Bethink ye what the whaler said,
Bethink ye of the little Indian's sled!
The crew laughed out in glee.

Sir John, Sir John, 'tis bitter cold,
The scud drives on the breeze,
The ice comes looming from the North,
The very sunbeams freeze.

Bright Summer goes, dark Winter comes—
We cannot rule the year;
But long ere Summer's sun goes down,
On yonder sea we'll steer.

The dripping icebergs dipped and rose,
And floundered down the gale;
The ships were staid, the yards were manned,
And furled the useless sail.

The Summer's gone, the Winter's come,
We sail not on yonder sea;
Why sail we not, Sir John Franklin?
—A silent man was he.

The Winter goes, the Summer comes,
We cannot rule the year;
I ween, we cannot rule the ways,
Sir John, wherein we'd steer.

The cruel ice came floating on,
And closed beneath the lee,
Till the thickening waters dashed no more,
'Twas ice around, behind, before—
My God! there is no sea!

What think you of the whaler now!
What of the Esquimaux?
A sled were better than a ship,
To cruise through ice and snow.

Down sank the baleful crimson sun;
The northern-light came out,
And glared upon the ice-bound ships,
And shook its spears about.

The snow came down, storm breeding storm,
And on the decks was laid;
Till the weary sailor, sick at heart,
Sank down beside his spade.

Sir John, the night is black and long,
The hissing wind is bleak;
The hard, green ice is strong as death:—
I prithee, captain, speak.

The night is neither bright nor short,
The singing breeze is cold,
The ice is not so strong as hope,
The heart of man is bold!

What hope can scale this icy wall,
High over the main flag-staff?
Above the ridges the wolf and bear
Look down with a patient, settled stare,—
Look down on us and laugh.

The Summer went, the Winter came—
We could not rule the year;
But Summer will melt the ice again,
And open a path to the sunny main,
Whereon our ships shall steer.

The Winter went, the Summer went,
The Winter came around;
But the hard, green ice was strong as death,
And the voice of hope sank to a breath,
Yet caught at every sound.

Hark! heard you not the sound of guns?
And there, and there again?
'Tis some uneasy iceberg's roar,
As he turns in the frozen main.

Hurra! hurra! the Esquimaux
Across the ice-fields steal:
God give them grace for their charity!
Ye pray for the silly seal.

Sir John, where are the English fields,
And where the English trees,
And where are the little English flowers,
That open in the breeze?

Be still, be still, my brave sailors!
You shall see the fields again,
And smell the scent of the opening flowers,
The grass, and the waving grain.

Oh! when shall I see my orphan child?
My Mary waits for me;
Oh! when shall I see my old mother,
And pray at her trembling knee?

Be still, be still, my brave sailors!
Think not such thoughts again!
But a tear froze slowly on his cheek—
He thought of Lady Jane.

Ah! bitter, bitter grows the cold,
The ice grows more and more;
More settled stare the wolf and bear,
More patient than before.

Oh! think you, good Sir John Franklin,
We'll ever see the land?
'Twas cruel to send us here to starve,
Without a helping hand.

'Twas cruel, Sir John, to send us here,
So far from help or home;
To starve and freeze on this lonely sea;
I ween, the Lords of the Admiralty
Had rather send than come.

Oh! whether we starve to death alone,
Or sail to our own country,
We have done what man has never done—
The open ocean danced in the sun—
We passed the Northern Sea!

## THE GOVERNMENT AND PRIVATE SEARCHING EXPEDITIONS AFTER SIR JOHN FRANKLIN.

I shall now proceed to furnish an account of the principal researches which have been made for Franklin's vessels, merely premising that it will be as brief as is consistent with intelligibleness.

Early in January, 1850, the *Enterprise*, Captain Collinson, and the *Investigator*, Captain M'Clure, again started to pursue the search. They passed through the Strait of Magellan in April, and made for the Sandwich Islands, which the *Enterprise* left on the 30th of June. The *Investigator* arrived there three days after, and pursued her course to Behring's Strait, reaching Cape Lisburne, within the Strait after an unparalleled passage of only twenty-six days. The *Enterprise* pushed to seventy miles eastward of Point Barrow, when she was stopped by the ice; and the difficulty of finding a harbour induced Captain Collinson to return, and winter at Hong Kong; which he again left in April, 1851, to prosecute the search. Meantime, the *Investigator*, after having quitted Cape Lisburne, was seen both by the *Herald* and *Plover*, for the last time, on the 5th August, 1850, under press of canvass, with a strong south-west wind. To a signal of recall, she is reported to have replied—"Important duty;" "Own responsibility." As regards the *Investigator*, all is conjecture. But who can say that, a few days after Lieutenant M'Clintock left Melville Island, some of the officers and men of Captain M'Clure's ship may not have arrived at that rendezvous? There it was that the ships from the east and from the west hoped to exchange numbers. The ships from the east never reached the rendezvous; but as a detached party did, probably the *Investigator*, or a detachment, may have reached, ere this, Melville Island from the west.

The efforts begun thus early in 1850 were vigorously followed up in the spring of the same year; several vessels started to renew the search by way of Lancaster Sound. Captain Austin, in the *Resolute*, and Captain Ommanney, in the *Assistance*, attended by two screw steamers, the *Intrepid*, Lieutenant Cator, and the *Pioneer*, Lieutenant Osborne. The veteran, Sir John Ross, volunteered, aided by the Hudson's Bay Company, to join the search in his yacht, the *Felix*. Captain Penny, an experienced commander in the whaling service, received orders from the Admiralty to equip two vessels, the *Lady Franklin*, and

a tender, the *Sophia*, in charge of Captain Stewart. And that no portion of the polar regions might be left unsearched, Lady Franklin herself, by her private means, sent a small schooner, the *Prince Albert*, in command of Captain Forsyth, R.N., to examine Regent Inlet, for which the other vessels had not provided; so that, in the summer of 1850, not less than eight British vessels were assembled within Lancaster Sound, besides the two American schooners, the *Advance*, Lieutenant de Haven, and the *Rescue*, Lieutenant Griffin; which the munificent liberality of Mr. Grinnel, of New York, had contributed to this noble object; upon which at least fourteen vessels were thus employed in the Arctic seas.

In the autumn, Captain Forsyth having found Regent Inlet blocked up with ice, returned to England, bringing tidings of some traces of Franklin's expedition having been discovered at Point Riley, at the mouth of Wellington Channel; and also a rumour picked up by Sir John Ross's Esquimaux interpreter, respecting an attack of treacherous natives on certain ships at one of the many places called Ommanak, to which little or no credence has been given.

The various searching vessels got into winter quarters in the bays of Cornwallis Land, and Griffith Island, at the southern extremity of Wellington Channel, excepting the American ones, which being caught in the pack ice, were drifting helplessly during the whole winter; and carried a linear distance of more than 1000 miles, not being liberated till they were south of Cape Walsingham, in Baffin's Bay, in the month of June, 1851. Captain Austin's ships were locked in the ice for nearly a year.

In the early spring, the travelling parties from the ships began their operations over the ice, and thoroughly searched the shores north and south of Barrow's Strait, to the amount, in the aggregate, of over 2000 miles. Captain Ommanney visited Cape Walker, and the land trending west, up to 100° 42′ W., and was gone from his vessel sixty days. During some of this time the thermometer indicated a temperature of 71° below the freezing point. Captain Ommanney gives his decided opinion, that vessels would be unable to navigate along the coast he explored, from the appearance of fixed ice and shoals, and from the southerly trending of the land where it was supposed to lie in a westerly direction. Another sledge party travelled along the eastern shore of the land, explored on the west side by Captain Ommanney's party. The mercury in the thermometer carried by this party was frequently

frozen: and their chronometer was stopped from excessive cold. In this travelling sails were occasionally hoisted on the sledges, and large kites were also attached. When the wind was high, these aids propelled the sledge very rapidly, and the whole of the party then rode; but when the wind fell, the sledges, with their provisions and stores, had to be dragged by main force over the ice by the men harnessed to them.

Another party examined Cornwallis Island, which lies on the western side of Wellington Channel, Bathurst Island, Byam Martin Island and Straits, and the coast north-west of Bathurst Island, to the 76° lat.

Lieutenant Osborne reached in the same direction to 100° 25′. Lieutenant M'Clintock visited Winter Harbour, in Melville Island, and rounded Cape Dundas into Liddon Gulf, as far as Bushnan Cove, returning across the island to Winter Harbour, bringing back as a trophy part of the broken cart-wheel left by Sir E. Parry, in 1820. This extraordinary journey, which occupied eighty days, and involved a distance of 760 miles, gave no traces of the missing navigators, but produced unmistakable evidence of the great abundance of animal life on the Parry Islands, for the travellers fell in with a great number of hares, deer, and musk oxen, bears and foxes, as well as birds in great abundance. They travelled when the cold was so intense that bottles of water, carried by the men in their breasts, froze after an hour or so; salt pork broke like suet, and rum thickened.

Other parties examined the islands lying east of Melville Island, with the like ill success.

Sledge parties from Captain Penny's vessels proceeded up Wellington Channel, to examine both its sides. On the 30th May, Captain Stewart, commanding one of these parties, arrived at a northern dividing channel, which leads from Wellington into Queen Victoria's Channel. Here, to his great astonishment, he found an open sea; but unfortunately, the want of a boat stopped his further progress. Ducks and sea-fowl, of various kinds, were swimming on the water, and snipe were flying about the beach. The entrance to Wellington Strait was barred against the entrance of vessels by a firm and impassable barrier of ice, the evident accumulation of several seasons. Captain Penny's party discovered and explored Queen's Channel, which is, without doubt, a prolongation of Wellington Strait into the great Polar Basin. In this new channel Penny met with wood and other foreign substances adrift, and polar bears, deer, walruses, and whales

in great numbers. It is highly probable that Franklin has passed north through this passage.

Some jealousies and petty differences having taken place between the naval commander of the expedition, Captain Austin, and the civilian, Mr. Penny, the latter was induced to return home in the autumn of 1851. Sir John Ross followed shortly after; and Captain Austin and his ships arrived on the 7th October, after an absence from England of about eighteen months.

The American expedition consisted of two brigantines, the *Advance*, of 144 tons, and the *Rescue*, of 91 tons. They left New York on the 25th May, 1850. The unfortunate result of their ice-drift I have already alluded to. With the exceptions of Captain Back and Sir James Ross, there is no other like record of a Polar drift, and this is without parallel as to distance and exposure.

On Sept. 13, 1851, Griffith's Island, the greatest westing, was observed by the *Advance* and the *Rescue*, when they attempted to return, but were frozen in opposite Wellington Channel. Then commenced the northern drift, and the vessels were carried to 75° 30′—the greatest northing ever yet attained in that meridian of latitude. Afterwards, about the latter end of November, they re-entered Lancaster Sound, under the influence of the drift.

The ice then closed upon them, and they were amid all the horrors of a Polar winter, but it was subject to repeated disruptions effected by wind, storm, or drift. During the months of November, December, January, and February, the darkness was perpetual (a Polar night)—and the discomfort of such a home, thus ice-bound, can be better imagined than described.

The men were then prepared with knapsacks for any immediate emergency, no one knowing when the fearful pressure of the ice would crush the little barks. Previous to this, however, and preparatory for it, the *Rescue* was deserted, about November 5, to save fuel, &c., the thermometer being 40° below zero.

Meantime constant exposure to wet and cold here introduced scurvy, and in a short time, notwithstanding the usual preventives, the disease assumed in some cases an alarming form. Lieut. de Haven became severely afflicted, but by pouring hot water on dried apples, with some seasoning of lemon juice, a preparation for a drink was made, which soon restored the health of the officers and crew.

Lieut. de Haven's was the most severe attack, and afforded a singular illustration of one of the peculiar fea-

tures of the disease. A small wound on his finger, made when a school-boy, and many years ago healed and forgotten, was reopened by the disease.

In the spring (May) the *Rescue* was recovered with the loss of bowsprit and cutwater. Both vessels had withstood the crushing of the ice wonderfully well. Their small size enabled them to rise when the crushing began, and their prodigious strength saved them from being destroyed by the pressure.

On the 13th of January, 1851, they entered Baffin's Bay (the *Rescue* then invisible), and drifted out of sight of land, being about 90 miles off.

June 10.—They emerged from the ice, after over nine months drifting in it, (about 300 days,) during all which time they had been imprisoned, without the power to get out. During this time they calculated they had drifted full 1060 miles.

Lieut. de Haven determined to proceed north after he had emerged from the ice, in June, as before stated; but in his effort to pass through the Melville Bay barrier he was, July 25, again beset with ice, and frozen up.

The icebergs were more numerous than ever known before at that time, and he became enveloped in them. He was in the midst of a grand, magnificent circus of icebergs, the amphitheatre of which was 200 feet high.

From this imprisonment he escaped August 19, when the north winds blew him out. Then, after refreshing at the Greenland ports, he set sail for the United States.

Mr. Kane, the surgeon to this expedition, and one of the most intelligent of the various recent Arctic explorers, is very sanguine still that Franklin may be found.

"I should say (he observes, in a letter to Mr. Grinnell) that he is now to be sought for north and west of Cornwallis Island. As to the chance of the destruction of the party by the casualties of ice, the return of our own party, after something more than the usual share of them, is the only fact that I can add to what we knew when we set out. The snow hut, the fire and light from the moss lamp fed with blubber, the seal, the narwhal, the white whale, and occasionally abundant stores of migratory birds, would sustain vigorous life. The scurvy, the worst visitation of explorers, deprived of permanent quarters, is more rare in the depths of a Polar winter than in the milder weather of the moist summer, and our two little vessels encountered both seasons without losing a man."

During the months of June, July, August, and September, 1852, Dr. John Rae was engaged, under orders

from the Hudson's Bay Company, in examining the coasts of Victoria and Wollaston Islands and Dease and Simpson's Straits. During the three months he was absent, he supported his party of seventeen men almost entirely on the animal food they obtained, which was abundant; the dry meat they had with them being principally given to their dogs. They fell in with bears, deer in high condition, large flocks of geese, golden plovers, and quantities of salmon.

Twenty-one deer were shot on the coast, and many more could have been killed, if necessary.

A distance of nearly 1100 miles was surveyed.

In October, 1852, the *Prince Albert* arrived at Aberdeen from a voyage of seventeen months duration in the Arctic regions. This little vessel had been fitted out a second time, for that quarter, principally at the expense of Lady Franklin; and, although some geographical discoveries were made, nothing was accomplished towards the main objects of the voyage. A sledge party from this vessel traversed a distance of nearly 1200 miles, during which they visited Cape Walker, and the north coast of Somerset Land.

By the last accounts from Behring's Strait, up to August, 1852, Commander Maguire had taken the *Plover* up safely into a harbour at Cape Barrow, which he named Moore Harbour; being situate further north, it was better adapted for watching and communicating with the exploring vessels, or parties from them. After a minute examination of about 1000 lbs. of the preserved meats on board this vessel, supplied by Mr. Goldner, it was found in a pulpy, decayed, and putrid state, and totally unfit for men's food, and 10,570 lbs. were, therefore, thrown overboard into the sea, as a nuisance, in July last.

It is satisfactory, however, to find animal life equally abundant in this sea as in other parts of the Arctic regions; and the commander states, that after entering the ice, on their approach to Point Barrow, they found the sea literally covered with birds, most of them excellent eating, and the crews were nearly supplied with them from two guns in each boat; about 100 loons being obtained daily. When skinned they eat very well, and one for each man made a good mess for the day. Further to the southward the walrus was numerous, and, to the northward, seals were found in great abundance. Driftwood was met with, although not so plentiful as at Port Clarence and some other places.

Moore Harbour is about 500 miles in advance of the *Plover's* old winter quarters; Point Barrow lies about 156° W. long. the westernmost extremity of Melville Island; the farthest point yet reached by the expeditions working through Lancaster Sound, is in about 115° long. W.; consequently there yet lies between the advanced posts of expeditions working west, and those working east, about 40 degrees of longitude unexplored. Banks' Land remains unexplored between the 110th and 120th degrees longitude; but all the coasts in the vicinity of the common course of Arctic navigators, that is, through Baffin's Bay, Lancaster Sound, Barrow's Strait, thence westerly as far as Melville Island, the shores of Boothia Gulf and Regent Inlet, Peel Sound, and the coasts of Prince of Wales' Land, Russell Island, of which Cape Walker forms the north eastern promontory, and all the Arctic coasts of the continent of North America, have been thoroughly searched.

The *Isabel* screw schooner of 170 tons and 30-horse power, fitted and provisioned for a five years' cruise, having in June, 1852, through the failure of Captain Beatson's intended expedition to Behring's Strait, been thrown upon the hands of Lady Franklin, that lady offered the vessel to Commander Inglefield, R.N., for service, in any route he might consider most judicious. Captain Inglefield left England in July, to explore the head of Baffin's Bay, and examine its large sounds and straits, and accomplished in four months more than any other arctic navigator had done. By this voyage Whale Sound was pretty clearly ascertained to be an entrance into the Polar Sea; and the commander of the *Isabel* believes he had actually entered the Great Basin, and was checked in his course towards Behring's Strait by continued heavy gales, which drove him back into Whale Sound. This sound lies in the north-east part of Baffin's Bay. The *Isabel* then penetrated Jones' Sound on the west side of Baffin's Bay as far west as the 84th degree of longitude; but meeting with no traces of Franklin, the vessel was then steered to communicate with Sir E. Belcher's squadron at Beechey Island, and returned home.

On the 25th of August, after having been blown back three times, Captain Inglefield entered Whale Sound. Twenty-five miles inside this opening in the coast he found a settlement of natives, who were strong, healthy, and vigorous, having an ample store of blubber and flesh laid by in their winter underground hovels. They had numerous dogs and sledges. Ascending an eminence of

nearly 1,000 feet, he found that the north side of the Sound was composed of a group of islands, some of considerable dimensions. Two small openings, so marked at least on the charts, were discovered to be extensive inlets stretching away to the northward and north eastward. Far as the eye could reach an unbroken horizon met the gaze, and no sign of ice or obstruction into an open strait or inland sea could be detected. These two inlets were named after Sir Roderick Murchison and Sir Francis Beaufort. Taking advantage of the open state of the ice, Captain Inglefield dashed boldly on to the northward, in the direction of Smith's Sound, making Cape Alexander on the 26th.

"We had no sooner," says the commander, "fairly opened the Sound, than I involuntarily exclaimed, this must lead into the great Polynia of the Russians; and as the eye strained forward into the clear expanse of apparently open water, which now occupied from seven to eight points of the compass due north of our position, I could not but admit to my own mind that a great sea was beyond.

"This strait marked so narrow on our charts, by measurement I found to be about thirty-six miles across, and now I pushed eagerly on to a further view of this noble inlet."

The natural snow-clad aspect of the bleak cliffs that surround the head of the bay, seemed changed by the presence of a more genial clime, the side of Cape Alexander itself being streaked with bright green grasses and moss, and the neighbouring hills to the northward were black instead of snow-capped, evidently of secondary formation. The discoveries made by Captain Inglefield comprise 600 miles of new coast line. He also remained within the arctic circle two months later than the Government expedition under Captain Austin the previous year, having reached it three months later; and yet accomplished (independent of sailing) 1,474 miles under steam, bringing home with him still sixty-six tons of fuel.

Sir Francis Beaufort, the hydrographer to the Admiralty, in his report, speaking of these important surveys performed, says of Smith's Sound, "This may well be called a valuable discovery, for Baffin merely saw a break in the coast, and Ross and Parry could only just perceive the looming of the mountains at the distance of ninety miles.

"Murchison Strait was likewise another important geographical discovery, for Whale Sound, with which it is connected, was supposed to be only a deep fiord, whereas

it now appears to be a wide passage, and to be the limits of the continent of Greenland.

"In the third place, the ice having prevented Captain Austin from entering Jones' Sound, but which seemed to him to be only a deep bay, now turns out to be another channel to the northward, through the great cluster of Parry Islands."

The results of this interesting voyage have furnished many facts possessing an important bearing on the present and future searching expeditions; and confirm the following opinions thrown out by Mr. Petermann.

1. That Sir John Franklin has not been wrecked, and has not perished in the northern part of Baffin's Bay, and along its western shore.

2. That the Polar Seas even in very high latitudes, are perfectly navigable during a certain period of the year.

3. That this period of navigableness in the comparatively high latitudes is not in the middle of summer, (when the seas through which access is to be had are usually encumbered with ice,) but at the end of the summer season, or at its beginning, before the great ice masses are dislodged from the coast and drifted southward.

4. That certain animals, fit for food, are more or less abundant even in the highest latitudes.

Bearing the preceding points in mind, and assuming that Sir J. Franklin has gone up Wellington Channel, and there found before him a sea of considerable extent, and navigable like that to the north of Baffin's Bay, the question arises, how is it possible that nearly eight years have now passed without Sir John Franklin's having been able to pass out of that sea into the sea situated to the north of Behring's Strait, in the direction of either the American or the Siberian shores? The most feasible solution of this question that suggests itself to me, is that a tract of land may have hitherto prevented his progress in that region. There are reasons for conjecturing that such a tract of land may extend from the land seen by Captain Kellett, to the north of Behring's Straits, as far as the eastern coasts of Greenland, without a single opening. At all events it admits of scarcely any doubt that the sea to the north of Baffin's Bay can have no connexion with the Polar Basin, nor even with the sea beyond.

All this has been done, an immense line of coast investigated, and yet the question is not set at rest, though the desired object appears to be nearer attainment than ever. This spring opens with the fact, that of the many vessels employed in the search, there can be but eight in the

Arctic regions, namely, Sir Edward Belcher's fleet of four vessels, with the depôt-ship at Beechey Island. The *Investigator*, which has passed three winters in the ice, and should Captain McClure have succeeded in fulfilling his intentions, now probably somewhere to the north of Melville Island. The *Enterprise*, whose whereabouts is uncertain, with the depôt-ship, *Plover*, Captain Maguire, which has been moved farther north to Moore Harbour, Point Barrow; the *Rattlesnake* and *Phœnix* steamers are on their way to Behring's Strait; while the American expedition has just quitted to aid in the eastern search. Lady Franklin has also fitted out and despatched once more the *Isabel*, under the command of Mr. Kennedy, to proceed northward and eastward of Behring's Strait.

## HOPES AND FEARS, AND PRESENT COURSE OF OPERATIONS FOR CONCLUDING THE SEARCH.

In an ably written and interesting letter from Lady Franklin to the President of the United States, expressing her sincere and profound gratitude for the service which has already been rendered to the Arctic cause by the United States Government, she says, "The result of the late operations of the allied squadrons, though falling short of our hopes and expectations, are neither insignificant nor devoid of great encouragement for the future. They prove, in the first place, that the missing ships escaped all the catastrophes which the faint-hearted and despairing had predicted of them in their outward voyage, and arrived in safety at the first winter quarters, where were the graves of those men belonging to the discovery ships, and buried, apparently with great care and decorum; attesting that the ships' companies were not only in life, but, as other unmistakeable signs combine to prove, in circumstances of security, comfort, and plenty, and full of vigour. Again, the future field of search has been narrowed, and the exploration of Captain Austin's officers over the ice, carried on with a spirit and perseverance which makes me proud that they are my countrymen, having shown that our ships could not have pursued a south-west course; while the discoveries of Captain Penny, conducted with equal energy and spirit, in a north-west direction, leave no room to doubt that the clear water he there came upon was the first opened by my husband's ships, and that they pursued their way towards Behring's Strait in a high northern latitude. Thus our future efforts have a more confined and definite aim. It may be affirmed that the lost navigators are now

to be looked for with every hope of success, in the space lying between 100° and 180° of west longitude and any parallel of latitude north of 75°. It would appear, therefore, that to secure the completeness of the search, it should be commenced simultaneously at both ends, and that no single expedition going up Wellington Channel should be considered to have exhausted its work till it emerged in Behring's Strait, or, in other words, accomplished a north-west passage; nor any expedition starting from Behring's Strait deem its object attained till it comes out in Wellington Channel or Baffin's Bay; or, in other words, performed the north-west passage. We derive infinite comfort from the proofs which the late expeditions have given us, that considerable resources exist in those northern portions of the Arctic regions which have now been approached, for the support of human life, and very satisfactory, also, is the additional experience gained in confirmation of all former evidence, that the Arctic climate is in itself favourable to health, and that the loss of life attending the expeditions is, in spite of the risks and accidents incidental to them, far less than the average in any other quarter of the globe. With these facts before us, and with no proof or even sign of any sudden calamity having overtaken them and cut short their progress, it seems not presumptuous, but within the bounds of a reasonable and modest calculation of probabilities, to conclude the lost navigators have only not been found because they were already beyond the reach of the efforts which have been made to come upon their track, limited as their efforts have hitherto been to the duration of a single season. The discovery ships were years ahead of all their pursuers, and, while the latter had advanced hardly beyond the starting post, they were struggling towards the goal. If misfortune has indeed overwhelmed them,—and how shall I dare refuse to believe in such a possibility?—it has been in the strenuous ardent pursuit of their duty, and not in the early and timid abandonment of it, as they would seem to imply who gratuitously suppose that our brave countrymen turned back at the end of a single winter, and perished on their way home. It was the known determination of my husband, and is recorded by him in his last letter from the borders of the ice, to renew his attempts year after year, and if foiled in one direction to try another. * * * I cannot but regard the rescue of my husband and his companions, and the accomplishment of the new passage, as nearly identical objects. Had the researches which have hitherto been made in vain been

subjected to no other restrictions than the accomplishment of the one object or the other, so long as the lives of those employed were not necessarily sacrificed, we might not perhaps have had to mourn over a series of bitter disappointments. It is only by having the same objects in view as the original expedition, and pursuing it with the same steadfast perseverance, that we can hope to solve the mystery."

Another searching expedition, consisting of the same vessels as before, fitted out again by Mr. Grinnell, has just left the American shores, (April, 1853.)

The former surgeon, now *Lieutenant* Kane, is in charge of it. A more judicious selection could not have been made.—Though before serving in but a subordinate capacity, he signally distinguished himself for his intelligence and energy. In one essential qualification he stands especially pre-eminent; that qualification is faith. He firmly believes that Sir John is yet a living man, and that he can be rescued from his place of confinement by human means. His heart is thoroughly in the enterprise, and his zeal, I am sure, will not fail so long as a vestige of hope remains.

Unsuccessful as the previous expeditions have been, there is yet strong reason for continued efforts. The discoveries which have been thus far made have rendered it absolutely certain that Sir John Franklin wintered in 1845-6 on Beechey Island, at the mouth of Wellington Channel. It is doubted whether he proceeded in the spring westward, or northward up the channel. His instructions expressly enjoined the former course, but an extensive search by means of sledges, in that direction, extending to 103° 25′ along the south shore, and to 114° 20′ along the north shore, has afforded no indication that such was the course actually pursued; still, it is very possible that the two missing ships may be blocked up in some of the passages or inlets which have not been explored. But the opinion entertained generally by the officers of both the English and American expeditions is, that Sir John prosecuted his course by the open sea north-west of the Wellington and Victoria Channels, and is shut up in the almost boundless region of water, ice, and land that extends between Victoria Channel and the high and extensive lands north of West Georgia, considered by some to be a continuation of the range of mountains seen off Cape Jakan on the coast of Asia. That there is a great polar basin with a higher temperature than that of the Arctic zone, abounding with animal life, and ample means for human subsistence, was plainly set forth by Captain

Penny, two years ago, as his decided conviction. This opinion is substantiated by Captain Inglefield, who lately returned from a short steamer cruise in the Arctic Ocean, and has presented a report of his observations to the Royal Geographical Society of London. That gallant navigator attained the latitude of 78° 35′, about 120 miles farther north than the highest point ever before reached. He passed through a channel some thirty-five miles in width, and found an immense extent of open water before him; but was prevented from proceeding forward by a tremendous gale which his little steamer was poorly adapted to encounter. It is Captain Inglefield's opinion that Baffin's Bay is misnamed, and is in fact an arm of communication between the Atlantic and the Arctic Oceans.

The probabilities of the safety of Sir John Franklin's expedition then are rather strengthened than weakened by the past explorations. If it was at the outset improbable that the two ships should have simultaneously perished, it is still more improbable that they could have been so utterly lost as not to leave some remnant of wreck behind that would disclose their fate.

No such remnant has been discovered either by the vessels in search, or by the sledging parties which have examined the coasts for hundreds of miles. The disappearance of the *Erebus* and *Terror* cannot be satisfactorily accounted for either by storm or starvation. I rejoice that this humane search has not yet been abandoned; and especially that our countrymen are least of all disheartened. The liberality of Messrs. Henry Grinnell and George Peabody in fitting out a second American expedition reflects honour upon the American name. The present administration also deserves credit for its interest and co-operation in the undertaking. May the enterprise be as successful in its result as it has been noble in its aim!

We have conclusive evidence, from the marks of the encampment at Cape Riley and Beechey Island, that this was the winter quarters of Franklin's ships in 1845-46, and from the inscription on one of three graves found on the island, the vessels were here as late as April, 1846; indeed, Sir John Ross and others say to *September*, 1846, but no subsequent traces have been found of their course, and what is singular, after a diligent search made in all the quarters that it has yet been possible to reach, no records of their track have been discovered,—although it was strictly enjoined on them by the Admiralty that such should be left at every depôt, or prominent position.

I shall not allude here to the many idle stories that have been set afloat from time to time, now of the reported safety of the party, then of their murder by Esquimaux; of clairvoyant discoveries, pigeon expresses, fictitious balloon despatches, and other imaginary accounts,—all of which have been mischievous fabrications, or, what is worse, unpardonable and cruel hoaxes. I envy not the feelings of those who can promulgate such statements, and trifle with the nearest and dearest feelings of the many relatives of nearly 140 men, who are so eagerly on the look out for intelligence. May such unprincipled conduct never at least recoil upon themselves—may they be spared the harrowing feelings of disappointment resulting from such false alarms.

There is a later and more important circumstance, which has, however, been brought very prominently forward by the Admiralty, and a fresh impulse thus given to the intense interest felt by the public in the fate of the missing expedition, by the strange mariner's tale of two ships seen on an iceberg, in the spring of 1851, off the coast of Newfoundland. Of the truth of the tale, as far as the veracity of the relators is concerned, there seems to be no reason to doubt. But the question suggests itself, —was, what they saw, a reality or an optical delusion? and if the former, were the two ships so strangely situated the *Erebus* and *Terror?*

Lastly, even if, on this point, a satisfactory conclusion can be arrived at, another string of questions follows :— Were the navigators on board the ships, or were the ships forsaken? In either supposition, what has become of the ships? In the latter hypothesis, in what direction, from the indication afforded by their appearance, ought further search to be made for the missing crews?

The following is Captain Penny's opinion on the subject of these ships said to have been seen on the ice :—

"You ask me what I think of the two ships seen upon the iceberg. I think they were 'country ships,' as we whalers call them—formations upon an iceberg which deceive even practised eyes.

"To place ships in such a position, by the process of freezing into an iceberg, would require thirty to forty years, and floe ice would have been broken up with the western ocean swell before it had even reached Cape Farewell. Not a piece of sufficient size would be found to contain even one ship, much less two. No iceberg of one-fourth of a mile would reach such a position; it must have been two pieces of icebergs, and the vessel being five

miles distant, could not observe the water over the detached ice.

"We have the experience of the eleven whalers wintered on the ice; they all broke from their icebergs long before they reached Cape Farewell."

In confirmation of this opinion of Captain Penny, regarding the effect of optical illusions in the regions of ice, we may recur (says the *Athenæum*) to an interesting circumstance which occurred to Mr. Goodsir, showing that the phenomena of refraction in the Arctic regions exceed the marvellous deception of the mirage. When that gentleman was on his first voyage in search of his brother, who accompanied Sir John Franklin as surgeon, and when his ship was running along the south shores of Lancaster Sound, he was standing on the forecastle, examining with a telescope every part of the coast most anxiously, when with a thrill of joy he recognised a flagstaff and ensign. He gazed earnestly at it, and so distinctly did it show itself that he could even make out the waving of the flag. Unwilling, however, to trust to his own vision only, without saying a word he put the telescope into the hands of a man who was standing near him, that he might look at the point a-head. The man did so, and, with a start, exclaimed that a flag was flying. Overjoyed, Mr. Goodsir snatched the glass back, and applied it again to his eye. For an instant—for an instant only—he saw the wished-for signal; then it faded, then reappeared; now distorted into a broken and disjointed column—now into an upturned and inverted pyramid—till at last the image became resolved into its real form—that of a hummocky piece of ice. Many other instances might be adduced to show how constantly the Arctic explorer is perplexed by meteorological phenomena which thus deceive the vision.

Before Sir John Franklin left England, he gave a dinner to a few friends at the Admiral Keppel Hotel, at Greenhithe; and he then stated, that he must not be looked for in England for seven years. This can be confirmed by the worthy landlord, and some of the officers then present on the occasion. Couple the before-mentioned remark with Franklin's parting words to Sir John Ross, that he (Franklin) did not intend to seek a winter quarters, but push on, and throw his vessels in the drift pack, and then abandon them, and attempt the passage over land, lends additional support to the tale of the two vessels seen on the iceberg.

Now, those who have been in the polar regions can

readily account to the size and formation of the berg in question, described as about five miles long by about thirty feet in the highest part. The fantastic appearance of a berg is mostly occasioned by the drift blowing over the ice to the shore, and there meeting with obstruction from the high land on the sea-coast. In the course of time the snow-drift forms a gentle slope from the surface of the level ice to the top of the headland. When the disruption takes place, the ice carries with it the accumulated drift; and when it is detached from the shore, it bears the impress of the part from which it has been broken; and this snow-drift, by condensation, or the washing of the sea, becomes solidified. It may be remembered, that the two ships were described as being on a shelving part of the ice, and that the berg appeared much higher beyond them. If the ships had been frozen in a short distance from the shore, the ice beyond them inland would be elevated. It is a pity that Captain Coward, of the *Revolution*, did not endeavour to board them, which would not have been difficult.

On the 31st of May, 1845, we have a pleasant account of the expedition and its commander, in a letter from Captain Fitzjames to Mr. Barrow, of the Admiralty.

He writes thus:—

"Sir John Franklin is delightful, active, energetic, and evidently even now persevering. What he has been we all know. I think it will turn out that he is nowise altered. He is full of conversation and interesting anecdotes of his former voyages. I would not lose him for the command of the expedition, for I have a real regard—I may say, affection—for him, and believe this is felt by all of us. I have not seen much of Crozier yet, but what I have seen I like, and I think he is just made for a second to Sir John Franklin. In our mess we are all very happy; we have a most agreeable set of men, and I could suggest no change, except that I wish you were with us."

Again, on the 1st of July:—"The only difficulty I had was to get Sir John to shorten sail when it was wanted. He is full of life and energy, with good judgment and a capital memory,—one of the best I know. His conversation is delightful, and most instructive; and of all men he is the most fitted for the command of an enterprise requiring sound sense and great perseverance. I have learnt much from him, and consider myself most fortunate in being with such a man; and he is full of benevolence and kindness withal."

The following extract of a letter from Lieutenant Fair-

holme, of the *Erebus*, will also serve to show the pleasant anticipations of success which prevailed throughout the party; and the happy terms on which they were with each other:—

"On board, we are as comfortable as it is possible to be. I need hardly tell you how much we are all delighted with our captain. He has, I am sure, won not only the respect but the love of every person on board, by his amiable manner and kindness to all; and his influence is always employed for some good purpose, both among the officers and men. He has been most successful in his selection of officers, and a more agreeable set could hardly be found.

"Sir John is in much better health than when we left England, and really looks ten years younger. He takes an active part in everything that goes on; and his long experience in such services as this makes him a most valuable adviser. July 10th.—The transport is just reported clear; so I hope that we may be able to swing the ships to-morrow, and get away on Saturday. We are very much crowded; in fact, not an inch of stowage has been lost, and the decks are still covered with casks, &c. Our supply of coals has encroached seriously on the ship's stowage; but as we consume both this and provisions as we go, the evil will be continually lessening."

It may be interesting to know the official account of the fresh provisions supplied by the Admiralty to these ships; it was as follows:—Preserved meat, in tins, 32,018lbs.; soup, pints, 17,416; gravy, pints, 2176; vegetables, 8076lbs.; potatoes, 2632lbs. This is besides the usual naval rations of salt provisions for three years.

The annexed account of their additional resources is so important, as being the latest intelligence, that I cannot abridge it:—

"Robert Martin, now master and commander of the whale ship *Intrepid*, of Peterhead, solemnly and sincerely declares, that on the 22nd day of July, 1845, when in command of the whale ship *Enterprise*, of Peterhead, in lat. 75° 10′ long. 66° W., calm weather, and towing, the *Erebus* and *Terror* were in company. These ships were alongside the *Enterprise* for about fifteen minutes. The declarant conversed with Sir John Franklin and Mr. Reid, his ice master. The conversation lasted all the time the ships were close. That Sir John, in answer to a question by the declarant, if he had a good supply of provisions, and how long he expected them to last, stated that he had provisions for five years, and if it were necessary he could

'make them spin out seven years;' and he said further, that he would lose no opportunity of killing birds, and whatever else was useful that came in the way, to keep up their stock, and that he had plenty of powder and shot for the purpose. That Sir John also stated that he had already got several casks of birds salted, and had then two shooting parties out—one from each ship. The birds were very numerous; many would fall at a single shot; and the declarant has himself killed forty at a shot with white peas. That the birds are very agreeable food, are in taste and size somewhat like young pigeons, and are called by the sailors 'roches.'

"That on the 26th or 28th of the said month of July two parties of Sir John's officers, who had been out shooting, dined with the declarant, on board the *Enterprise*. There was a boat with six from each ship. Their conversation was to the same effect as Sir John's. They spoke of expecting to be absent four, or five, or perhaps six years. These officers also said that the ships would winter where they could find a convenient place, and in spring push on as far as possible, and so on year after year, as the determination was to push on as far as practicable.

"That on the following day an invitation was brought to the declarant, verbally, to dine with Sir John, but the wind shifted, and the *Enterprise* having cut through the ice about a mile and a half, the declarant was obliged to decline the invitation. That he saw the *Erebus* and *Terror* for two days longer; they were still lying at an iceberg, and the *Enterprise* was moving slowly down the country. That so numerous were the birds mentioned, and so favourable was the weather for shooting them, that a very large number must have been secured during the time the declarant was in sight of the two ships. That from the state of the wind and weather for a period of ten days, during part of which declarant was not in sight of the two ships, the best opportunity was afforded for securing the birds. That the birds described are not to be found at all places on the fishing ground during the whaling season, but are met with in vast numbers every season on certain feeding banks and places for breeding; and it was considered at the time by the declarant a most fortunate circumstance that the *Erebus* and *Terror* had fallen in with so many birds, and that the state of the weather was so favourable for securing large numbers of them. The declarant has himself had a supply of the same description of birds, which kept fresh and good during three months,

at Davis's Straits, and the last were as good as the first of them."

In a letter published in the *Times*, in January of last year, from Mr. Sutherland, surgeon of the *Sophia*, the tender to the *Lady Franklin*, Captain Penny, he states, "had Sir John Franklin any wish to increase his stock of provisions by the use of the birds called 'roches,' he could obtain them in thousands where the *Enterprise* of Peterhead parted with him; and as to stowage, the daily allowance of 138 men would soon make room for a few casks of salted birds. Moreover, he would also learn that sea-fowl will keep in the Arctic regions during the three short months of summer, if they be exposed to the cold and a free current of air. And there is no doubt his ingenuity would suggest to him what the Esquimaux have practised for thousands of years — to wit, preserving masses of animal substances, such as whale's flesh, by means of ice, during the summer months, when it may be easily obtained, for their use during winter."

There is probably more danger to be apprehended from the well-known energy and zeal of the explorers than from any other cause. Franklin left our shores feeling that the eyes of the civilized world were on him, and that it was hoped and expected he would accomplish what our most learned hydrographers regard as feasible; although failure has characterized so many attempts to pass from the Atlantic to the Pacific Ocean, round the north coast of America. Franklin is well aware that if he succeed his fame will be heralded abroad; and he will not abandon his enterprise as long as strength remains.

> "Fame is the spur that the clear spirit doth raise,
> To scorn delights and live laborious days."

He will not give up the struggle with mighty icebergs and thick-ribbed ice as long as the smallest chance of obtaining the much-desired prize remains. It is recorded that when attempts were made to dissuade Sir Martin Frobisher from engaging in the discovery of a north-west passage, he answered, "It is the only thing in the world that is left yet undone, whereby a notable mind might be made famous and fortunate."

Sir John Franklin, in the narrative of his first Arctic journey, writing then of Sir Edward Parry, uses observations which may be applied with equal force, and but slight alteration, to his own case now:—

"His task," he observes, "is doubtless an arduous one,

and if ultimately successful, may occupy two, and perhaps three seasons; but confiding, as I do, from personal knowledge, in his perseverance and talent for surmounting difficulties, the strength of his ships, and the abundance of provisions with which they are stored, I have very little apprehension of his safety. As I understand his object was to keep the coast of America close on board, he will find in the spring of the year, before the breaking up of the ice can permit him to pursue his voyage, herds of deer flocking in abundance to all parts of the coast, which may be procured without difficulty; and even later in the season, additions to his stock of provisions may be obtained on many parts of the coast, should circumstances give him leisure to send out hunting parties. With the trawl, or seine-nets, also, he may almost everywhere get abundance of fish, even without retarding his progress. Under these circumstances, I do not conceive that he runs any hazard of wanting provisions, should his voyage be prolonged even beyond the latest period of time which is calculated upon. Drift-wood may be gathered at many places in considerable quantities; and there is a fair prospect of his opening a communication with the Esquimaux, who come down to the coast to kill seals in the spring, previous to the ice breaking up; and from whom, if he succeeds in conciliating their good-will, he may obtain provision, and much useful assistance."

In June, 1851, Mr. John Hilton, in an interesting letter, published in the *Manchester Guardian*, suggested the desirability of trying the route between Spitzbergen and Nova Zembla; and the following are extracts from his communication:—

"Upon an inspection of the globe, and bearing in mind the foregoing remarks, I think your readers will agree with me in stating that the most favourable route for ascertaining the fate of our missing countrymen is for the ships proceeding north, say between Spitzbergen and Nova Zembla, and then, as the ice permits, so as to come down towards the southward again in about long. 130° W., sending out boats daily east and west, and finally making their egress by Lancaster Sound or Behring's Straits. It appears, in my opinion, to be an erroneous idea the public entertain of the North Polar Sea being an impenetrable barrier of ice. Perhaps the following statement may assist in removing much prejudice and doubt of the practicability of a North Polar passage. The idea of a North Polar passage to the East Indies was first suggested in the year 1527, by Robert Thorne, a merchant of Bristol,

who, in a letter addressed to Dr. Ley, states:—'It is as probable that the cosmographers should be mistaken in the opinion of the Polar regions being impassable from extreme cold, as it has been found they were in supposing the countries under the line to be uninhabitable from excessive heat.' In the year 1609, Jonas Poole, in the *Amity*, made an unsuccessful attempt to penetrate to the North Pole, and, in concluding the account of his voyage, states—'I assure myself a passage may be attained this way by the Pole, as any unknown way whatsoever, by reason the sun doth give a great heat in this climate, and the ice is nothing so huge as I have seen in lat. 73° N.' In 1615, Fotherby, upon the termination of his voyage, says:—'Although I have not attained my desire, yet, forasmuch as it appears not yet to the contrary, but that there is a spacious sea betwixt Groinland and Spitzbergen, although much pestered with ice;' and, with perseverance, he believed a passage might be attained. In the year 1773, the Royal Society made application, through the Earl of Sandwich, to his Majesty King George the Third, for an expedition to try how far navigation was practicable towards the North Pole, and which his Majesty was pleased to direct should be undertaken. Captain C. J. Phipps, afterwards Earl of Mulgrave, had the honour of being entrusted with the conduct of this expedition. Like previous voyagers, they did not attain their object. In 1606, Baffin advanced as high as lat. 81° N. In 1751, Captain M'Cullam attained the lat. 83° 30′ N., where he found an open sea and fair weather. In 1754, Captain Wilson, in the month of June, advanced to lat. 83° N., and as high as 81° found the sea clear of ice as far as he could see. At the same time, Captain Guy, after four days of foggy weather, was carried to the same spot; and Mr. Stevens, a most accurate observer, was driven off Spitzbergen by a southerly wind which blew for several days, and until he reached the latitude 84° 30′ N. during the whole of which time he met with very little ice, and did not find the cold excessive. Captain Sir W. E. Parry, in his attempt to reach the North Pole in 1827, found the ice more broken up to the northward than to the southward, and which caused him to abandon the attempt of reaching the Pole by travelling over the ice.

"I was informed personally, by a sailor who sailed with Captain Scoresby, senior, that he well remembered their being North of 83°, and at that time there was no ice in sight, and a very heavy swell on. A very distinguished Arctic writer of the present day, relates the case of a whale, har-

pooned by a Greenland ship, getting away, and being afterwards taken on the east coast of America with the Greenlander's harpoon in her. Sir John Franklin, during his overland route from the Coppermine River towards the eastward, and when in lat. 68° N. and long. 110° W., saw great quantities of driftwood; and the fact of such being found about Spitzbergen and the Greenland coast, not only proves the existence of a North Polar passage, but the certainty of there being an open communication every season, or thereabouts, or how could the wood flow with the current? Would not its progress be staid, supposing the North Polar sea to be an impenetrable barrier of ice? Again, where must the whale abovementioned have obtained fresh air during her passage across, if this impenetrable barrier existed? Captain Sir W. E. Parry states the drift of the ice to be about the rate of four miles per diem towards the southward,—is it reasonable to suppose that sufficient ice can form during the summer months to supply the drift?

"Taking the above facts into consideration, it cannot be denied that the North Polar route offers the most favourable plan for ascertaining the fate of our unfortunate countrymen; and from personal observations made in 1849, I can assert that, in Davis Straits, we found less ice to the northward than we met towards the southward. This is easily accounted for from the fact of the current in the Greenland sea setting to the S.W., and in Behring's Strait it flows N.E., again proving the existence of a communication between the Atlantic and Pacific Oceans by a North Polar passage."

In January, 1852, Mr. Augustus Petermann, an eminent geographer, published in the *Athenæum* his enlarged views on the same subject, which, with some valuable data on the abundance of animal life in the Arctic regions, he has since published in a separate form.* In this pamphlet he states, that a line drawn from Melville Island to the Herald and Plover Islands (north of Behring's Strait) and another from Melville Island to Spitzbergen on the American side, would, with the Siberian coasts and islands on the Asiatic side, include the space in which Franklin must have been arrested, a space of fearful extent, when it is considered that the whole of the regions hitherto explored by the various expeditions sent in search of him, are scarcely one-third of those which remain unexplored.

The very fact that no suitable expedition has been sent

* "The Search for Franklin." Longmans and Co. 1852.

out in that direction, and that never a fair attempt has been made in any vessel, or by any nation, to proceed northwards in that sea, ought to have stimulated to such an expedition. If only one of the eleven vessels engaged in the search for Sir John Franklin, in the summer of 1850, in Baffin's Bay and Lancaster Sound alone, had been despatched in that direction, it would probably have eclipsed, in geographical discovery alone, all Polar expeditions as yet undertaken; for the possibility of reaching the North Pole through the Spitzbergen sea, will not now long remain a matter of doubt, or a desideratum.

When it is considered that no ice whatever in that region is met with till Bear Island is reached, a distance of 1500 miles from Woolwich, and that thence to the 80th parallel there is another distance of only 500 miles, and that such a distance could be performed by a steamer in less than a fortnight, and at a most trifling cost, if compared with the millions which have been spent in Arctic and Antarctic undertakings; and if, at such trifling risk, a problem can be solved, which, irrespectively of Franklin's expedition, is of the highest geographical interest, and discoveries would probably be made of great importance to the whale fishery;—then, indeed, it must be looked on as a disgrace in the history of Arctic navigation that such a small undertaking has not long since been accomplished beyond Wellington Channel, but that it forms the true head of Baffin's Bay, and is, in fact, a mere *cul de sac* for those who would enter it in the hope of getting into the Polar basin.

Fatal errors (observes Captain Charles Wilkes of the United States Navy) have been made in attempting the search in vessels, it being quite evident to the simplest mind, that if ships can track Sir John, he certainly would be enabled to get out. Therefore, it always has appeared to me absurd nonsense and a waste both of time, energy, and money to keep vessels, the scene of whose operations must be limited to the line of the fast ice.

The futile attempts of search around the icy bays is no less so. The only and true course is a thorough exploration over the ice by sledges or boats, making the advance, *in all directions*, under a well organized plan and on a regular base of operations, but particularly to the westward from Wellington Channel, where his trail was struck. The end in view of a future search ought to be to examine narrowly the Arctic region, which must and will result in the discovery of some tidings, either affirmative or negative, of the fate of this gallant man and his companions. It behoves the

government of Great Britain to consider the search as now but *begun*, and it ought and must be continued as becomes a great nation, under whose flag and in whose service Sir John and his companions have risked, and are if alive enduring, great privations. The cost is nothing compared with the glory of effecting their rescue, worth tenfold the efforts hitherto made to find and effect a north-west passage.

No one who has not had personal communication with the brave men who have been engaged in this work of mercy, can perhaps appreciate the immense exertion of their labours in that severe climate; yet the responsibility of sending forth more good lives is certainly relieved by this fact, that out of the ten vessels engaged the last three years on the eastern side, including the Americans, but one man died, nor did any casualty occur either to the ships themselves, or to the various boating and sledge parties. Indeed not more than twelve deaths have occurred during all the Arctic voyages of discovery of the present century, out of some 1500 men employed, and scarcely half of these are fairly attributable to the severity of the climate, or the perils and dangers encountered.

The disappearance of the *Erebus* and *Terror* cannot be satisfactorily accounted for, either by storm or starvation.

The following extract from a letter, dated Hong-Kong, March 28, 1852, bears upon this subject:—"There have been here no less than thirty-seven whalers from the Arctic Seas. It may interest you to know, that they almost all believe that Sir John Franklin is safe, and that he has got through the ice barriers into inner waters, where he will not be reached until a mild season arrives, which they assert the present will be. They say Franklin will not suffer for want of food, and give strange accounts of the Esquimaux vibrating from the Asiatic to the American continent, and back again, carrying their boats, made of skins and whalebone, over the ice, and launching them when they meet with open water. They all confirm the fact, that the whales found in Behring's Strait, and in Baffin's Bay are the same species; proving the existence of a passage; for a whale of the Arctic species has never been seen to the south of the 22nd degree of latitude; so they cannot have doubled either of the Capes (of Good Hope or Cape Horn), and the whale is under the necessity of making his presence known, by coming to the surface to blow."

With the copious and valuable materials before us in

the many important works published last year on this subject, the Admiralty papers, and the reports of the commanders and officers of the various searching expeditions, we may come to some reasonable conclusion respecting the course followed by Sir John Franklin, and the probability of his being discovered, if he and his party are still alive.

It appears to be the belief of almost all the distinguished naval officers, that Sir John did not follow a western course past Melville Island, or a south-western one by any of the inlets that lead to the American shore. This opinion is confirmed by the extensive and unavailing search which has been made in these directions. The existence of his first winter quarters, in 1845-6, at Beechey Island, at the entrance of Wellington Strait, renders it highly probable that his course was along that Channel; and if it was, that he would either emerge into the Polar basin if one does exist, or would push his way westward to Behring's Strait, or eastward round Greenland, if it is an island, and does not reach the Pole.

It may be supposed, says Dr. Rae, by many, that to continue the search for Sir John Franklin would be a useless waste of time, labour, and money, but with this supposition I cannot agree, and my opinion is founded on a personal experience, which few persons have had an opportunity of acquiring, and which leads me to believe that a part or all of Sir John's party may still exist. In 1846-7, I wintered at Repulse Bay, with a party of twelve men, only two of whom, before arriving there, had ever practised deer shooting, and two others were fishermen. We had little or no fuel, that could be properly so called; the mud with which our storehouse was plastered never dried, but only froze, and it was so cold inside that a man, one night, got his knee frost-bitten, although he had one of his companions under the blankets with him. Yet we suffered no privation as regarded food, except that during the shortest days, we took only one meal *per diem*, as a precautionary measure, not knowing how late it might be in the spring before the reindeer migrated northward.

That we were not much the worse for our exposure to cold and low diet may be inferred from the fact, that, in the spring, we traced about 500 miles of new coast, forming the shores of Committee Bay, in doing which I and one of my men travelled on foot upwards of 1000 miles, and were, on our return (although rather low in flesh), as sound and well as when we started.

When leaving York Factory, Hudson's Bay, in June, 1846, we had not more than four months' provisions with us; when we returned to that place, after an absence of fourteen months and twenty-three days, we had still a third of our original stock of provisions on hand, showing that we had by our own exertions, in a country previously totally unknown to us, obtained the means of subsistence for twelve months. Why may not Sir John Franklin's party do the same? If he has been providentially thrown on or near a part of the coast where reindeer and fish are at all numerous, surely out of so many officers and men, sportsmen may be found, after some practice, expert enough to shoot the former, and fishermen to seize or net the latter, or take them with hook and line set under the ice.

Dr. Rae and his party, when in Repulse Bay, shot 162 deer, which, with 200 partridges and a few salmon, were stored in their snow-built larder for their winter stock. A couple of seals, which had been shot, produced oil enough for their lamps, and by nets set in the lake, under the ice, a few more salmon were now and then caught. In the beginning of March the reindeer began to migrate northward, and although they were very shy one was shot.

From all these circumstances of improved food and fuel, it is impossible to doubt that Sir John Franklin's party may still be living in this northern region. They may, it is true, have ere this perished, but our hope is that they still exist in some narrow sea, imprisoned by walls of ice, where succour may yet reach them. But whether our hopes are fallacious or not, the public feeling—the feeling of humanity—is, that the fate of Sir John Franklin should be ascertained, and as soon as possible. The public mind will never be satisfied till an expedition from this or from some other country, shall throw light upon their fate.

The expeditions by land and sea, of the past three years, have at least been attended with these beneficial results—exclusive of the very important geographical discoveries made of land to the north of Behring's Strait, of extensive open waters and available channels in Wellington Strait and Jones' and Smith's Sounds, Regent Inlet, and the discovery of an outlet westward, thence to Victoria Strait (making North Somerset an island); Baffin's Bay, all the southern shores of the Parry Islands, Victoria Land, and the coasts of Arctic America; proving beyond a doubt that Franklin and his party have not been cast on any of these shores. The inference is, therefore,

stronger than ever, that the ships have penetrated far into the Arctic Seas, through the Victoria Channel and some of the subsidiary straits communicating with the Polar Sea.

Capt. Penny, in a letter to the Admiralty, on his return from the Arctic Seas in the autumn of 1851, stated that the high northern latitude once reached, comparative open water would be found. The climate improved, and in proof of this he states, that within Victoria Channel, at Point Surprise, lat. 76° 2′, long. 95° 55′, he found ducks on the 17th of May, full a month earlier than in the lower latitude; while the sea was even then so free from ice, that the water washed their very feet as they stood on the point. The quantity of drift-wood was comparatively large, and among this was found a piece of English elm. Walruses and seals were also seen and killed by Capt. Penny's party.

From all the information we have received, there can no longer be a question that Franklin has passed up Wellington Strait, and, in all probability, penetrated so far to the westward as to be beyond the reach of any means of rescue that we have hitherto been able to supply.

The important inquiry arises, therefore,—In what manner could so large a party have found the means of subsistence for so long a period? It would be folly to dogmatise on a subject over which so much uncertainty must necessarily hang, and perhaps idle to expect that the whole party can be still in life; but to infer, from the calculated duration of the stores supplied to them on leaving England, that by this time they must all necessarily have perished, and thereon to base the inhuman counsel of abandoning all further concern in their fate, is, I do not hesitate to say, a conclusion wholly unwarranted by our experience of the resources of these Arctic latitudes, scanty and precarious as they undoubtedly are.

Let us not forget that the existence which our missing friends may now be supposed to be leading in the unknown recesses of the Arctic Seas, involves, after all, and at the worst, hardly any greater danger or privation—perhaps even less—than that of the many hundreds of their fellow-countrymen scattered over the famishing territories of the Hudson's Bay Company.

To meet the desponding feelings with which some are too apt to regard the fate of the missing expedition, the following facts may be brought forward:—

1st. That Sir John Franklin's party would not wait to increase their stock of provisions until the approach of

want, but would avail themselves from the very *first* of the resources of the country, in fish, animals, and birds, and thus husband their own stores.

These resources are well known to be in certain quarters abundant; and I may add the obvious argument that where Esquimaux live, other men may exist also.

2nd. As to the want of fuel, if even the sacrifice of one of the ships was not resorted to, this might be met by the chance supply of drift-wood and of blubber, the usual fuel of the Esquimaux.

In his second journey to the westward, Franklin found at Garry's Island, off the mouth of the Mackenzie, numbers of moose, and rein-deer, and foxes; several kinds of gulls, dotterel, geese, cranes, and swans, were flocking around its shores.

During the autumn, their fishing was so successful, that the nets yielded daily from 300 to 800 fish of the kind called herring-salmon, and occasionally trout, carp, and other fish.

Sir John Richardson, speaking from the experience of his boat voyages, on this occasion, says:—"There is such an abundance of drift timber on almost every part of the coast, that a sufficient supply of fuel for a ship might easily be collected." And he adds, "should the course of events ever introduce a steam vessel into those seas, it may be important to know that, in coasting the shores between Cape Bathurst and the Mackenzie, firewood sufficient for her daily consumption may be gathered."

The Parry group of islands seem to abound in animals: when Sir E. Parry wintered here, at Melville Island, in 1819-20, they were most numerous, and the visit of Lieut. M'Clintock and his party last year, proves that they are still as plentiful, and as easily to be procured.

Parry's party, in a few hunting excursions, obtained 3 musk oxen, 24 deer, 63 hares, 53 geese, 59 ducks, 144 ptarmigan, many gulls and other birds, amounting in weight to nearly 4000 lbs. of meat, or about $3\frac{1}{2}$ lbs. per month to each man. One of the musk oxen he killed weighed 700 lbs. Several bears and foxes were also seen.

Lieut. M'Clintock, in his long and unparalleled sledge-journey, found that musk oxen, rein-deer, hares, and ptarmigan, still abound on Melville Island. His party killed four oxen out of about fifty seen, one rein-deer out of thirty-four seen, two bears and a wolf, seven hares out of eighty or ninety seen. The hares, he observes, were as tame as any one most anxious to procure game could wish.

Twenty ptarmigan were shot. Had it been his object, he remarks, he could easily have shot two-thirds of all the oxen he saw. The hares were often met with in flocks of twenty or thirty. The deer approached them within 100 yards, with more of curiosity than fear,—and even after one was shot, the herd trotted round the party two or three times, before they finally deserted their fallen companion.

All the other islands about this quarter are equally well supplied. In perusing, as I have done most carefully, the several Arctic Blue Books, just published by Parliament, giving detailed accounts of the various exploring sledge parties, I have been particularly struck with the quantity of game which was fallen in with in all directions.

Austin Island, and the shores southward and westward of Cape Walker, have also numerous animals, and are frequented by birds. So are Beaufort, Bathurst, and Cornwallis Lands. In Wellington and Victoria Channels animal life is even more abundant, and there is little doubt Sir John Franklin took every opportunity of replenishing his stock while wintering at the entrance in 1845-46.

Captain Penny and his officers found bears, seals, reindeer, walruses, and hares, plentiful on these shores. Thousands of ducks and sea-fowl of all sorts were seen. They killed, during their short journey—three ptarmigan, four bears out of thirty-five seen, three seals, a walrus, and fourteen hares, and one reindeer; a herd of twenty or thirty deer was seen.

The following is a list of the animals killed by H.M.S. *Assistance*, and her tender, the *Intrepid*, between the date of their arrival at Whalefish Islands, June 15, 1850, and the time of leaving Baffin's Bay, on their return home, in August, 1851, or a little more than a year. Animals—thirteen bears, which were seen in great numbers in all directions; twenty-two foxes, mostly taken in traps about the winter quarters of the ships. They were both numerous and well fed, and seen by all the travelling parties about the Parry group. Nine hares—these were in good condition, weighing upwards of ten pounds. They were found at Cornwallis Land, Griffith's Island, at Cape Walker, the shores of Wellington Channel, and Wolstenholme Sound, in Baffin's Bay. Four musk oxen, and one deer, on Melville Island. Three lemmings, a seal, and two narwhals, or sea-unicorns.

Of birds, the number was very great—being, in all, 3174 birds.

Now, if we average these birds at one pound weight

each, and suppose the animals procured to yield another 3000 lbs., we have about 17 lbs of animal food for division daily amongst the crews.

Captain Beechey, in his account of the voyage of Captain Buchan, tells us of the immense flocks of birds found on the shores and bays of Spitzbergen, where millions are on the wing at a time, and so close together, that thirty have fallen at a single shot. The explorers of the rich mines of fossil ivory who go forth annually from Siberia to the northern islands, maintain themselves solely by hunting and fishing.

In the recently published work of Dr. Sir John Richardson, the old companion of Franklin, he repudiates the idea of the vessels being so utterly lost that no traces can be discovered of them.

"That the ships were not suddenly wrecked by a storm, or overwhelmed by the pressure of the ice, may be concluded from facts gathered from the records of the Davis's Strait Whale Fishery, by which we learn, that of the many vessels which have been crushed by the ice, in the course of several centuries, the whole or greater part of the crews have almost always escaped with their boats. It is, therefore, scarcely possible to believe, that two vessels, so strongly fortified as the *Erebus* and *Terror*, and found by previous trials to be capable of sustaining so enormous a pressure, should both of them have been so suddenly crushed as to allow no time for active officers and men, disciplined and prepared for emergencies of the kind, to get out their boats. And having done so, they would have had little difficulty in reaching one of the many whaling vessels out there, or some of the searching ships that have been employed for several years past. Moreover, had the ships been wrecked, some fragments of their spars or hulls would have been found floating by the whalers, or being cast on the shores which have been searched, would have been met with by either Europeans or natives. Neither are any severe storms recorded as having occurred then or there, nor did any unusual calamity befal the fishing vessels that years.

"The present Admiral Sir John Ross, was more than four years absent and unheard of in the Arctic regions, yet he returned safe, with as many of his people as would probably have survived the ordinary contingencies of life had they suffered no severity. Why then, should we utterly despair of those who, incomparably better provided, have entered on another year of absence? If a body of men lived out, whilst unheard of, more than four

years, why might not another body better set out, survive a fifth or a sixth year? The good hand of a gracious providence being with them, they may survive this further trial, and Britain may yet be privileged to welcome back her all but lost sons to the land of their fathers."—*Scoresby.*

In the early part of the 17th century, Barentz, who had been sent out by the Dutch to discover the north-west passage, was wrecked, and with his companions, fifteen in number, passed the entire winter in the 76th parallel of latitude, deriving a subsistence by eating foxes, which were abundant. They left their winter quarters on the breaking up of the ice in two open boats; and after the most desperate exertions, continued during two months, they reached Kilduin, in Lapland, a distance of upwards of 1000 miles, with the loss of only two men.

Such instances as these are full of cheering hope with regard to our missing navigators.

The shores of Wolstenholme Sound are frequented by deer, bears, seals, walruses, foxes, hares, lemmings, wolverine, and all the varieties of sea fowl. At the Cary Islands about 1000 loons were obtained in a couple of days by the boats of the *Assistance* to preserve for the ship's company. Dovekies and rotges were also in abundance.

In Lancaster Sound and its inlets, shoals of eider duck, brent geese, and large quantities of other birds, are continually met with.

In Regent Inlet and Boothia Peninsula, Sir John Ross, when wintering in 1829-33, obtained vast quantities of food from animals indigenous to the country, and this almost through the entire year. Whales, seals, and narwhals were numerous. The Esquimaux in the vicinity of their winter quarters, caught eighteen or twenty seals in a couple of days; two musk oxen and very many bears of a large size were killed. Hares and foxes were exceedingly common, and formed an every-day dish on their table. Grouse, ducks, and various water birds, were obtained without the least difficulty, and a tolerable sportsman was always able to bring home two or three brace of grouse and a leash of hares.

Salmon of one or two pounds weight were taken in the lakes by thousands, and 4000 or 5000 were frequently netted at a draught. At all points of the inlet which they visited—Felix and Victoria Harbours, Batty and Garry Bays, Finny Point, Cascade Beach, &c., animals were equally plentiful.

When the *Enterprise* and *Investigator* wintered at Port

Leopold, in 1848-9, shooting parties of two men from each ship were stationed at Whaler Point; and so plentiful were the dovekies and loon, that a bird per man was served out regularly to the ships' crews. From a record kept on board the *Investigator*, it appears that 4000 birds were killed, yielding 2500lbs. of meat; but many were shot by individuals, of which no register was kept. More than one hundred foxes were caught, and liberated again, after copper collars had been fixed round their necks.

Dr. Scoresby states, that Captain Parker, in the *Truelove*, in 1833, captured twenty-eight whales, and lost fifteen others, between Cape York and Cape Kater, in Regent inlet; and they found the sea there in the month of July literally swarming with life. The numbers of the larger kind of arctic animals seen, as whales, narwhals, walruses, seals, bears, &c., were such as to have excited unmixed amazement, whilst birds innumerable of various species, almost covered the water.

Sir John Richardson, in his recently published account of his searching journey, adduces statistics to show the abundance of game which rewarded the efforts of his hunting parties in the winter of 1848-49. To the middle of April in the latter year, there were received into the storehouse attached to their winter quarters, 5191 fish, 13,810 lbs. of fresh venison, 9220 lbs. of half-dry venison, 360 lbs. of pounded meat, 353 lbs. of rein-deer fat, and 625 rein-deer tongues.

Mr. Isbister tells us that one of the last winters he passed in the Hudson's Bay Company territories was on the borders of the Arctic Sea, near the mouth of the Mackenzie; and from their fisheries alone they found no difficulty in maintaining a large party of Europeans and natives, whom the novelty of the event had attracted around him.

Sir John Franklin, in his account of his first journey to the shores of the Polar Sea, gives ample details and particulars of the numerous birds and animals which he met with in the Hudson's Bay Company's territories, and along the northern shores and islands of Arctic America. He speaks, too, of Mr. Isbister's making light of a long and fatiguing solitary journey, in search of a party of trading Indians, when at one time he was four days without food of any kind for himself or his dogs; and when, on the point of killing one of the dogs to satisfy his hunger, he happily met with a beaten track, which led him to some Indian lodges, where he was supplied with food.

In the barren grounds between Fort Enterprise and the mouth of the Coppermine, more than two hundred deer were shot in a very short time, and large flocks of waveys (*Anas hyperborea*) were met with, many of which fell to their guns.

Their fishery at Fort Enterprise yielded 1200 white fish, weighing from two to three pounds each. Geese and ducks they also found abundant—indeed, too plentiful—for it is made a subject of complaint that the hunters were apt to waste upon them their ammunition given for killing deer.

About two dozen musk oxen were slain at various times, and a bear or two. The hunters could often even beat down young geese with their sticks; forty excellent salmon and white fish were taken at a draught near the Bloody Falls.

They learnt from the Esquimaux, as well as from their own experience, that reindeer frequent the coast during summer, that fish are plentiful at the mouths of the rivers, and seals abundant, whilst drift-wood was found all along the shores.

In Bathurst Inlet, and Austin and Melville Sounds, they shot many deer; and bears and seals were plentiful, if they had required to take them. The shallows were covered with shoals of capelin; and their nets produced, from time to time, a great variety of fish, particularly salmon-trout, round fish, herrings, and so forth. They also killed several swans, cranes, and gray geese.

Sir John Richardson, speaking of the amount of food to be obtained in these regions, says:—

"Deer migrate over the ice in the spring, from the main shore to Victoria and Wollaston lands, in large herds, and return in the autumn. These lands are also the breeding-places of vast flocks of snow geese; so that, with ordinary skill in hunting, a large supply of food might be procured on their shores, in the months of June, July, and August. Seals are also numerous in those seas, and are easily shot, their curiosity rendering them a ready prey to a boat party."

Dr. Rae, in searching Wollaston Land, in May, last year, found abundance of drift wood about the shores. Many partridges were seen, but, as they were shy, only eleven were shot by himself and his two men; these birds were very large, and fine eating. Deer were very numerous, and several hares were seen; but as they had abundance of provisions with them, no attempt was made to approach them

The inhabitants of thirteen Esquimaux lodges, whom they met with at Cape Hamilton, were all very fat, having abundance of seal's flesh and fat, large quantities of which were carefully deposited in seal-skin bags under the snow.

The Esquimaux, according to Dr. Richardson, assemble on the various headlands, from the Mackenzie eastward, to chase the black and white whales.

Whales are found in great numbers on all the coasts in the vicinity of Behring's Strait, and the whalers have captured them in high north latitudes.

On the Herald Islands and newly-discovered lands to the northward, innumerable black and white divers (common to this sea) deposit their eggs, and bring up their young.

Of the resources of the northern shores of Siberia, we have unfortunately very scanty materials for forming an accurate judgment. From the scattered notices occurring under this head, in the valuable work of Professor Bauer, of St. Petersburgh, drawn chiefly from official sources, sufficient information may, however, be gathered, to warrant us in inferring that they are little if at all inferior to those of the corresponding Arctic coast of America. This much at least, we know, that every summer sends forth parties of adventurous explorers from Siberia, maintaining themselves—as only they can maintain themselves in these latitudes—by hunting and fishing, for the purpose of working the rich mines of fossil ivory, found in such abundance in the neighbouring islands, which have been described as one vast deposit of the remains of the mammoth.

A writer in a professional paper concludes an excellent letter on the subject with these words:—"Starving I consider out of the question—having plenty of ammunition; fuel could not fail, as one of the ships could have been sacrificed to its necessity. And had they both been wrecked—which I consider highly improbable—some remnant would have turned up to indicate the sad calamity. Scurvy, and diseases incident to long voyages, may have rendered his sick numerous, and difficult to transport; but weighing all these contingencies, I cannot help expressing a strong conviction, even at this late moment, that many, indeed most of this gallant band, are still in existence, and will live to receive the hearty congratulations of their friends and countrymen."

In conclusion, then, I may adopt the sentiments beau-

tifully expressed by a recent writer in one of the quarterlies, who has dealt with the whole subject in a masterly manner :—

"Such are the hopes which we fondly cherish, that our distinguished exile, and his gallant crew, are still preserved to their friends and their country; yet it is but a *hope*—a faint hope, too—to which we cling with failing grasp and with bitter tears. Time has worn it to a shadow, evanescent to the eye of Reason, yet looming brightly on the horizon of Fancy. Still we must not depair. When Hope quits the earth, she often alights again, embalmed and invigorated, amid the prayers of the faithful. In the chronicles of the ocean, when the wrecked mariner has been cast among its raging billows, an unseen hand has often guided him to a happy shore; and in the annals of mortal suffering, when hearts have sunk, and hands have failed, a meteor ray has often flashed upon the soul, and an arm of strength been commissioned to deliver.

"In asking, then, with the poet—where are the friends whom we mourn? let us accept of the consolation which he offers, when it shall appear that God has not aided the efforts of the resolute :—

"Where is he? where? Silence and darkness dwell
About him; as a soul cut off from men:
Shall we behold him yet a citizen
Of mortal life? Will he return to tell
(Prisoner from Winter's very citadel
Broken forth) what he before has told, again
How to the hearts and hands of resolute men,
God aiding, nothing is impossible?
Alas! the enclosure of the stony wave
Is strong, and dark the depths of polar night;
Yet One there is omnipotent to save,
And this we know, if comfort still we crave,
*Into that dark he took with him a light—*
*The lamp that can illuminate the grave.*"

"Still, then, the question is asked, does Franklin now survive? Captains Ommanney and Austin, experienced Arctic navigators, are clearly of opinion that neither he nor any portion of the crews are now living; and they ground such opinion upon two considerations—first, that even a second year's residence in the Arctic circle impairs the mind and debilitates the body of Europeans; and secondly, that it must have been impossible for the crews to procure sufficiency of food after their stock was ex-

hausted. Captain Penny is of a contrary opinion, but the weight of evidence appears to be against him.

"To expect, therefore, a favourable result now seems like hoping against hope. A mystery like that which rests upon the fate of the *President*, but a mystery, alas! in which reasonable conjecture supplies the place of facts, rests also upon the lot of our gallant countrymen. To them, if no more, may be applied in *spirit*, if not *literally*, the words of Collins's beautiful hymn—

'How sleep the brave who sink to rest
By all their country's wishes blest!
When Spring, with dewy fingers cold,
Returns to deck their hallowed mould,
She there shall dress a sweeter sod
Than Fancy's feet have ever trod.
By fairy hands their knell is rung,
By forms unseen their dirge is sung;
There Honour comes, a pilgrim grey,
To bless the turf that wraps their clay;
And Science shall awhile repair
To dwell a weeping hermit there.'

"But whether they return or not return, whether they remain in their prison of ice, from which there is no escape, or have perished amid the storms and rigours of a polar winter—whether they have reached a more genial climate, where the remnant of life can be spent without pain, or are doomed to drag out a weary existence under the united pressure of hunger and cold, ever looking for deliverance, and never finding it—whatever be their condition, their adventures, chronicled as they may yet be by themselves, or painted by others, in the lights and shadows of fancy, will ever be a subject of romantic interest, and their fate a source of unmingled joy or of deep lamentation.

"Nor will it be in England alone that this interest will be felt, and this sympathy awakened. Nations whom political differences have estranged, and parties who, on every other subject, are at variance, have, with united hearts, striven to discover the adventurous exiles; and as hope languished, and despair succeeded, the general anxiety for their safety and return increased in the same proportion. He who sacrifices his life for his country, has but his countrymen to mourn his loss. He who makes the sacrifice for science and philanthropy, is lamented throughout a wider sphere. The tears of the Old World and the New are shed over his tomb, and universal humanity bewail the departed sage. The fate of the Arctic traveller

has, therefore, excited an interest coextensive with civilization. Though the territory of ice and snow would have belonged to England, the problem of a North-West passage would have been solved for humanity; and though the glory of the deed would have illustrated but a British name, the mysteries of the Polar regions would have been unveiled for the instruction of the world."

LONDON:
SAVILL AND EDWARDS, PRINTERS, 4, CHANDOS-STREET,
COVENT GARDEN.