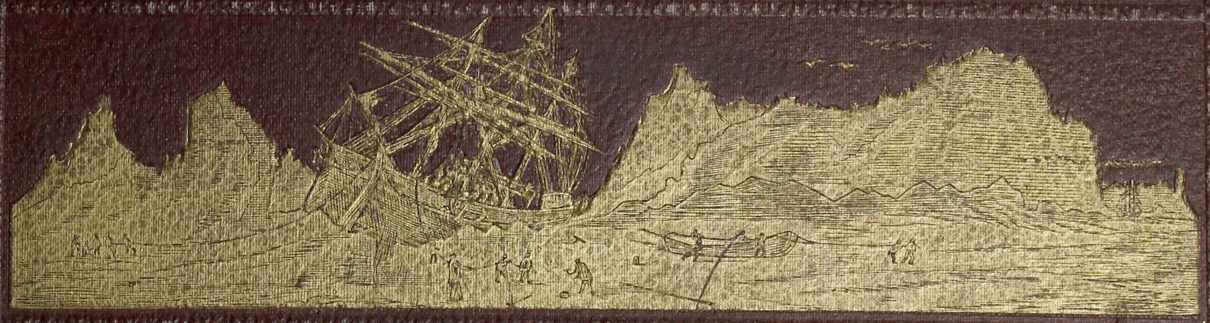
ARCTIC EXPEDITIONS

FROM

BRITISH AND FOREIGN SHORES

FROM THE EARLIEST

TO THE EXPEDITION OF 1875.



ARCTIC EXPEDITIONS

FROM

BRITISH AND FOREIGN SHORES.

THE ALERT HOMEWARD BOUND

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ARCTIC EXPEDITIONS

FROM

BRITISH AND FOREIGN SHORES

FROM THE EARLIEST TIMES

TO

THE EXPEDITION OF 1875-76

BY

D. MURRAY SMITH, F.R.G.S.

Numerous Coloured Illustrations, Maps, and other Engravings

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ARCTIC EXPEDITIONS

FROM

BRITISH AND FOREIGN SHORES.

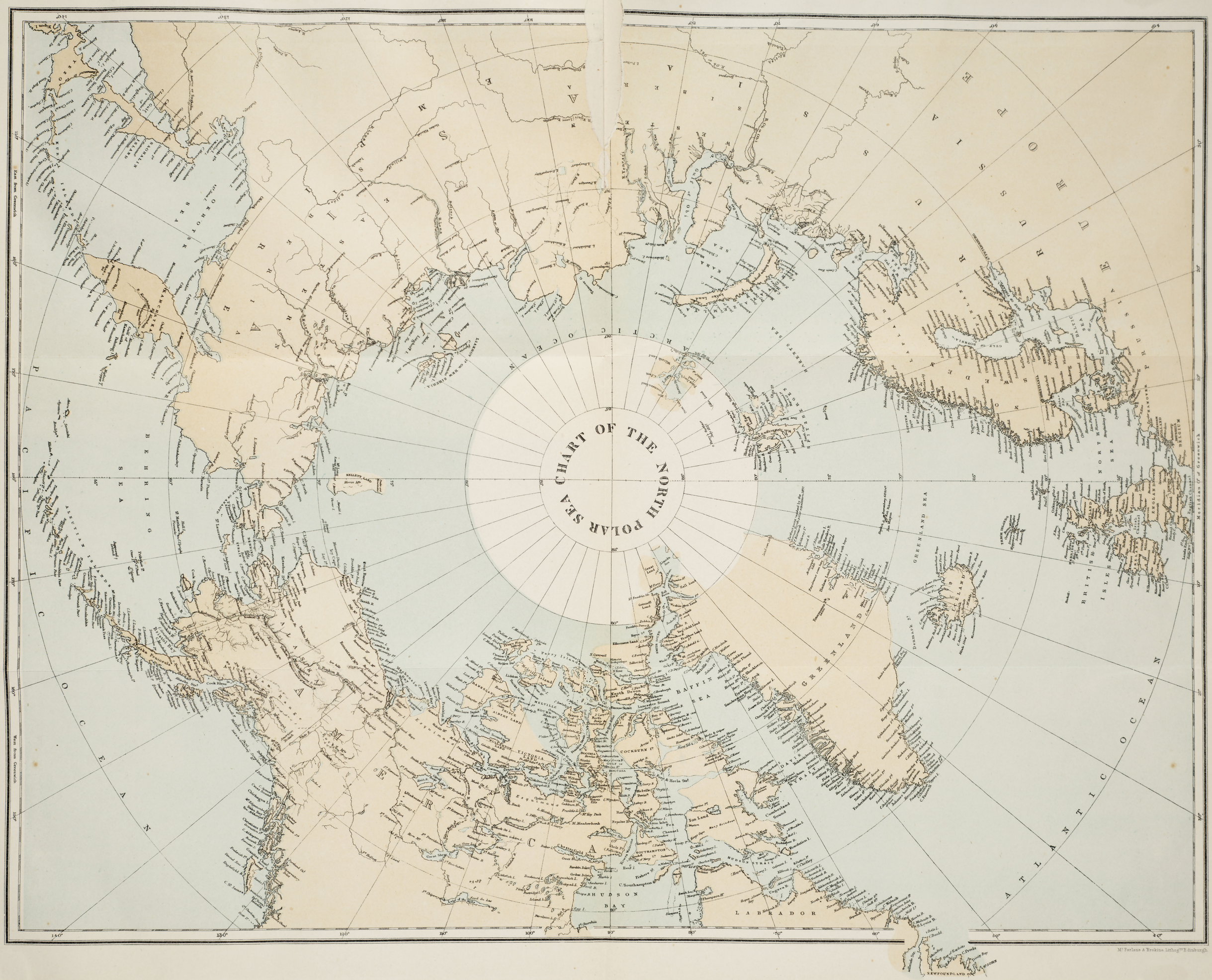
CHART OF THE NORTH POLAR SEA
ARCTIC OCEAN
PACIFIC OCEAN
ATLANTIC OCEAN
BERING SEA
OKHOTSK SEA
ALASKA
BAFFIN SEA
GREENLAND SEA
GREENLAND
LABRADOR
HUDSON BAY
BRITISH ISLES
NORTH SEA
BALTIC SEA
NEWFOUNDLAND
Mac Farlane & Erskine, Lithogrs Edinburgh

EXPLORATION, DISCOVERY, AND ADVENTURE IN THE POLAR SEAS.

INTRODUCTION.

"THE SEA IS ENGLAND'S GLORY!" sings a minstrel of our own day, and the truth of his song comes home to the heart of the whole British nation. The sea and all its associations have ever been dear to Englishmen. The sight of a Jack Tar on shore—whether steering a donkey through a country fair, walking through fashionable streets on a summer day smoking a long pipe and protecting his complexion under an open umbrella, or otherwise poking harmless fun at Madame Decorum—is always pleasant and mirth-provoking. When we have a holiday, it is to the sea we fly to enjoy it. The songs that are sung in England with equal approbation in hamlet and in hall, are the songs of the ocean. No reported calamity stirs the national sympathy more deeply than a story of gallant rescue, of self-sacrifice, or of "hair-breadth 'scape," at sea. In our schooldays, it was in making ships that we tested the metal of the first pocket knife we ever possessed; and, down to his latest year, it is the music of the sea that is the spell and inspiration under which the "roving Englishman" passes restless from land to land—from the dark north to "far Cathay" and the broad shining waters of Indian seas. Through every valley of our isle, as through the hollows of an ocean shell, the irresistible voice of the waves passes inland, murmurs in the ears of lads in remote parsonages and in country schoolrooms—draws them as with the song of the syren, and wooes them to the shore. And not in the ears of youth alone is the tone of the ever-sounding sea alluring. To many a noble and ambitious spirit, fretting at the sameness and tameness, the conventionalities and restrictions of modern life, the sea brings welcome emancipation, and comforts with the stormy but unflattering solace of its winds and waves.

"Once more upon the waters! Yet once more!
And the waves bound beneath me as a steed
That knows its rider! Welcome to their roar!
Swift be their guidance, wheresoe'er it lead!
Though the strained mast should quiver as a reed,
And the rent canvas, fluttering, strew the gale,
Still must I on!"

The spirit of our old sea-king fathers is strong in England still; and the nation glows and thrills to-day over stories of ocean adventure—of devotion among messmates, of discipline stronger than death, of perils courageously braved, of scenes of wonder and mystery discovered—with a sympathy as full, and an admiration as hearty and as high, as filled our fathers' spirits when they read the stories of Cook's voyages in the wondrous southern seas, of the splendid battles of the Baltic or the Nile, or the crowning sea-fight that "was in Trafalgar's Bay."

The peculiar elements of uncertainty and constant danger which surround the ventures of those who "go down to the sea in ships, and do business upon the great waters," and the close neighbourhood and familiar intercourse in which they daily and nightly dwell with the great forces of nature—nothing but a board between them and the merciless ocean, the winds of heaven for their companions, no roof above them but that eternal ceiling "fretted with golden fire"—impart to the employments of the mariner a character of romance and poetry unknown in the ordinary occupations of landsmen, and to which the continual succession of new scenes, strange incidents, and everchanging phases of danger from tempest, collision, fire, and exposure to the last extremity of hunger and thirst, add a perpetual, a fearful, and a fascinating variety. Enter a fishing village, and you may see in the distant and wistful expression of the eyes of the fisher folk—an expression as of men accustomed to search and dwell upon the far horizon of lonely seas—an index of the romantic element in the calling they pursue. The Merchant Service, also, is not without its character of romance, and the loyalty of captains to their owners when a valuable freight has been in danger, has shown itself in deeds of heroism and self-sacrifice unsurpassed in any other department of naval life. All honour to him who is "the last man to leave his ship," and who so often, rather than that his character for courage and faithfulness should in the last dreadful moment be doubted, has refused to leave his vessel, and chosen rather to go down with her when—

"Rose from sea to sky the wild farewell;"

thus carrying his sailing certificate into the next world undishonoured!

But if there is much to be said in praise of our fishermen and merchant

seamen, and of the hardihood, heroism, and romance of their lives, what shall we say of our men-of-war—of them who tread the deck "where Blake and mighty Nelson fell?" It is difficult to name the Royal Navy without getting into heroics on the subject; and this is very far from the purpose at present in hand. It is to the quality of the romance and the adventurous character of naval life in its different departments, that an inquiry is at present instituted. And though our modern ironclad looks more like a floating gasometer than a craft fitted to "walk the waters like a thing of life;" though "boarding" and "cutting out" are now pretty much among the lost arts of naval warfare, and though victory in the sea-fights of the future will be due as much to science and engineering skill as to personal intrepidity and resource, yet it is certain that the romance of the navy did not pass away with the three-decker and the trim frigate. That romance has not vanished—it has only altered its character, and courage and naval genius have as full play in the new, as in the old condition of naval affairs.

But of all departments of naval enterprise, that of Arctic Discovery has been, and remains, the most fascinating, whether regarded from the point of view of the possible results to be gained, or the exceptional, even wonderful, conditions under which these results are often sought. The ambition of the Arctic explorer is not the gain desired by the merchantman, nor the glory of conquest which allures the naval commander. Discovery is his aim, and the passion for adventure in the remotest, most singular, and most dangerous of all the earth's seas, warms him in the pursuit of that object. The rarest and best of the qualities brought into play in naval life, are required in the highest perfection for the successful prosecution of his enterprise. The most indomitable courage, the most watchful foresight, the most skilful management of resources and of men, are required on the commander's part; while his officers and crew are called upon to observe the most perfect discipline, the most complete self-denial, and to undergo perhaps the hardest and most continuous exertion required of men under any conditions, and in any region of the globe. Yet the labours of Arctic voyagers are not wholly unrelieved by enjoyment. They have new lands to discover, new seas to penetrate; and, in their progress towards these ends, above and around them extends the most weird and wonderful scenery of the world. Blue ice-mountains that take the rosy hues of the dawn and the sunset, float around them; in the summer, the unsetting sun rolls round the heaven above them, from which the colours of the sunrise are seldom absent; and the sky shows them the strangest pictures of mirage, of double suns enclosed within circle and cross —the geometry of the polar heavens—of ghostly moon-haloes. The aurora, with its waving spears of many-coloured light, streams from horizon to zenith; the corona raises its luminous pyramid above the west long after sunset; the constellations shine with a jewelled lustre unknown in more

familiar skies. Then the very trials and hardships of the unearthly cruise draw officers and men together in close fellowship and friendship, and the best traits of character are brought strongly out under enterprises and sufferings in which the safety of each depends upon the faithfulness of all.

Such, faintly shadowed forth, are some of the chief conditions under which Arctic exploration is prosecuted; and, as we think of them, we recall the quaint but eloquent words in which old Samuel Purchas—parson of St Martin's, by Ludgate, London, and compiler of a most curious and valuable collection of voyages—speaks of the character and the labours of Polar explorers: "How shall I," says this old writer, with simple but kindly and eloquent feeling—"How shall I admire your heroicke courage, ye marine worthies, beyond all names of worthinesse! that neyther dread so long eyther presence or absence of the sunne; nor those foggy mysts, tempestuous winds, cold blasts, snowes and hayle in the ayre; nor the unequal seas, which might amaze the hearer, and amate the beholder, where the Tritons and Neptune's selfe would quake with chilling feare, to behold such monstrous icie ilands rending themselves with terrour of their own massiness, 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 rend the ears of others while they rend themselves with crashing and splitting their congealed armours."

It is a little singular that no department of naval achievement and adventure is at once so fascinating, so romantic in itself, and yet so unfamiliar to the million readers of England, as the department of Exploration, Adventure, and Discovery in the Polar Seas. This anomaly it is now proposed to do away with. It is to trace the history of every famous Arctic expedition that has left British or foreign shores, from the earliest times to our own; to note the gradual progress of the successive discoveries in the Polar seas, where yet much remains to be discovered; and to record the stirring adventures, disastrous reverses, triumphant successes, and deeds of heroic courage and perseverance, in the very face of death under a hundred forms at once, for which the annals of Arctic discovery are illustrious—that is the purpose of the present work.

PART I.

CHAPTER I.

THE NORSE SEA-KINGS—EARLY NORSE NAVIGATORS—DISCOVERY OF ICELAND—DISCOVERY OF GREENLAND—THE GATE TO THE POLAR REGIONS.

THE navigators of Britain and America may be said, generally, to trace their descent from the Norsemen (North-men), who inhabited Scandinavia, an ill-defined region on the north-west shores of Europe, and including the regions now known as Denmark, and the southern coasts of Norway and Sweden. So rapidly did this robust race multiply and increase in their native provinces, that at a very early period their country became over-populated, and it became necessary for those of them who were not sufficiently provided for at home, to put forth in the vessels which necessity had early taught them to construct, and to roam the seas in search of a means of subsistence. This they generally succeeded in finding *in the shape of booty*, on the shores of some richer and less warlike country than their own. For centuries these ocean freebooters were the scourge and the terror of Western Europe. Brave, daring, brilliant in the rapidity with which they planned, and the skill with which they executed their piratical expeditions, the Norsemen—known later, some of them, as the Normans—soon enriched themselves with the spoils of every maritime country in Northern Europe. During the eighth, ninth, and tenth centuries, the seas swarmed with their terrible war-ships, and from one end of Europe to the other, they made the coasts of those countries, now the most powerful, a prey to their depredations. During the space of two hundred years, they almost incessantly ravaged England, and frequently subdued it. They invaded Scotland and Ireland, and made incursions on the coasts of Livonia, Courland, and Pomerania. They spread like a devouring flame over Lower Saxony, Friesland, Holland, Flanders, and the banks of the Rhine, as far as Mainz. They penetrated into the heart of France, having long before ravaged the coasts; they found their way inland, up the Somme, the Seine, the Loire, the Garonne, and the Rhone. Within the space of thirty years, they frequently pillaged and burned Paris,

Amiens, Orleans, Poitiers, Bordeaux, Toulouse, Saintes, Angoulême, Nantes, and Tours. In due time Rollo, a Danish chieftain, landed with a swarm of these Normans on the shores of France; captured a maritime province of that country, called it Normandy, after the name of its new proprietors—Neustria had been its name previously,—and commenced to consolidate his forces there, and prepare to take advantage of any other opening that might present itself. To the brave there are always opportunities, and accordingly in 1066, hearing there was an opening in England, these terrible Normans, under Duke William, swarmed over in a thousand war-ships to the British shores, defeated the English at the battle of Hastings, and seized the country —which they have held ever since to this day.

Such were the stirring people who sent forth the earliest voyagers to the Northern Seas. But as the earliest voyages were not productive in any special degree of results, with which our purpose is concerned, we shall have only a very few words to say about these early navigators.

It cannot be said that the earliest of these Norse voyagers were gentlemen of any very eminent social status. Among the first of them was Naddod the Viking, who, in sailing to the Faroe Isles, was driven away westward by an easterly gale, until he discovered (in 861) a great island covered with snow, and to which he therefore gave the name Snowland. Another adventurer, named Gardar, visited the island three years after, found it a tolerable, even a pleasant region, wintered upon it, gave it his own name (Gardar's-holm), and returning to his native Sweden, spread abroad such a glowing account of its fair woods and fertile soil, that he inflamed the mind of one of his countrymen, one Floki, to set out and find the new island. Floki found it, wintered upon it, observed that its bays and fiords seemed to be always full of ice, and consequently gave it a new name—Iceland, which name it still retains.

And with the discovery towards the close of the ninth century of that lonely island,

"Placed far amid the melancholy main,"

we have made the first step towards the discovery of lands that lie still farther to the north—the first step towards the discovery of the North-West Passage—of the North Pole itself.

About a hundred years later, another Norseman, named Thorwald, having qualified himself for adventure on sea by previously committing murder on land, set sail for Iceland. He was followed shortly afterwards by his son Eric, who it appears had also been guilty of murder and of many irregularities, and who, sailing westward, landed, in 982, on a strange shore, and wintered on an inlet on the coast, which was named after him, Eric's Sound. Finding the country a pleasant one, its coasts abounding in fish, its valleys rich in meadowland, and its hills covered with verdure, he

named the unknown shore Greenland, and in time he induced a colony of Icelanders to settle with him there. And thus we achieve the second step in our advance towards the North.

A regular and thriving trade had at the close of the tenth century sprung up between Iceland and Norway. In 1001, two Norsemen engaged in this trade—one of them named Lief, being the son of that Eric, who had landed upon and given name to Greenland—sailed far to the westward, having heard of land in that direction, and made wonderful discoveries. They struck a land unvisited by Norse voyagers before, and to different parts of its coast they gave different names. They ascended a river, the banks of which were covered with shrubs, bearing delicious fruits. The temperature of the air seemed soft and mild to Lief, son of Eric the Greenlander, the soil appeared to be fertile, and the river abounded with fish, especially salmon. The land they discovered is supposed to have been either Newfoundland or the shore of Canada, near the mouth of the St Lawrence ; and thus the discovery of America by Columbus in 1492, was anticipated by the Greenland colonists, though in the latter case the discovery was barren, no permanent colony having been founded on the great continent.

We have thus in recording the discovery successively of Iceland, Greenland, and the eastern coast of North America, gradually led our readers, as the early explorers were gradually led, to the very entrance of the arena of Polar Discovery—to the mouth of that spacious inlet of the North Atlantic Ocean, between Greenland on the east, and the coasts of North America on the west, which afterwards came to be known as Davis' Strait, and through which so many exploring expeditions have passed northward in search of the North-West Passage, and to what is now considered to be the goal of all Arctic research—the supposed open Polar Sea.

Hitherto the discoveries achieved upon the northern fringe of the Atlantic have been, so to speak, the results of chance. We now enter upon an era when northern discovery had become a definite aim, and when special expeditions fitted out as completely as the very imperfect knowledge of the time permitted, were despatched to the north to realise an idea which the maritime nations of Northern Europe have not ceased to cherish for nearly four centuries, and towards the realisation of which each successive expedition has contributed in a greater or less degree.

CHAPTER II.

THE EAST—ITS WEALTH AND THE DESIRABILITY OF OBTAINING A SEA-ROUTE TO INDIA AND CHINA—PORTUGUESE ROUTE TO INDIA ROUND CAPE OF GOOD HOPE—SPANISH ROUTE ROUND CAPE HORN—ENGLAND WITHOUT A ROUTE TO THE EAST.

THE East, the immemorial region of "barbaric pearl and gold," has in all ages been esteemed the land of unimagined riches, and "the wealth of the Indies" has passed into the language of proverb. In the western world, the earliest knowledge of the teeming riches of the East was obtained from the Bible. The building of the Temple of Solomon shows an accumulation of gold, obtained from Ophir—a name which is believed by many high authorities to have been applied to the great Asiatic peninsulas, Hindostan and China,—which created the impression among the nations of the west, that the wealth of the eastern world was beyond the glory of dreams. "And King Solomon made a navy of ships in Ezion-geber, which is beside Eloth, on the shore of the Red Sea, in the land of Edom. And Hiram sent in the navy his servants, shipmen that had knowledge of the sea, with the servants of Solomon. And they came to Ophir, and fetched from thence gold, four hundred and twenty talents, and brought it to King Solomon." Now as the talent weighed rather more than 113½ pounds, by an easy computation we discover that this merely occasional and temporary draw upon Ophir, realised about £2,500,000 of our money. But the western estimate of the wealth of Ophir or the East, was not formed alone from the narratives of Scripture. After the aspiring spirit of Mahomet had raised his country from insignificance to imperial greatness, Arabian caravans traded to India and China, and the veritable gold of Ophir, which had covered the Temple of Solomon without and within, was brought in lavish abundance by Arab merchants, to enrich the palaces of the Califs of Damascus, and was carried to Western Europe by that branch of the dynasty of the Ommiades which, founding an independent califate in Cordova, laid the foundations of the Moorish Empire in Spain.

From this it will readily appear that access to the East—the land whose soil was gold, whose rocks were precious stones—has been an eminently desirable object in all ages. The great Alexander of Macedon was dazzled by the glitter of the distant Ophir, and marched his conquering legions east-

ward, to be stopped, however, by the Indus, on the western frontier of India. In later days, the Mahometans brought the spices, the gold, the jewels of the far East to Syria, whence the Crusaders, witnessing all this magnificence, carried back to Western Europe a knowledge of Eastern luxury. This knowledge begot desire, and gradually among European nations a love of luxury and a passion for the products of far climes sprang up. To satisfy this desire, the most eastern maritime nations of Europe—the republics of Venice and Genoa—cultivated a trade with the East, in order to supply the markets of the West, and rose to greatness and splendour upon the profits of that trade. "In the middle of the thirteenth century Marco Polo, the famous navigator, brought back to Western Europe such glowing accounts of the East, as verified all the traditionary tales of Cipango and Cathay." About that time men's minds were awaking from the torpidity of the Middle Ages. The age of chivalry died with the last crusade. Trade and manufactures were calling into existence all over Western Europe a race of practical men, whose minds had shuffled off the coil of worn-out, exploded ideas. The last news from the East aroused cupidity and awakened enterprise; and there was a spirit in the very air, of vague and blind desire to reach the wonders and the wealth of the mysterious East. When such a spirit is abroad, the Unknown is sure to reveal itself sooner or later, and become the Known. At that period there was much mercantile activity in Portugal; her navigators were accustomed to coast along the western shores of Africa. Enterprise in this direction was encouraged by the Portuguese king, until coasting farther and still farther south, his navigators reached the southern extremity of the African continent, rounded the Cape of Good Hope, and—stood away eastward for the El Dorado of the Indies. Thus one nation solved for itself the problem of how to reach the land of diamonds. Another nation had already solved for itself the same problem, but in a very different way.

When Columbus set sail upon his marvellous voyage it was to seek that for which all the maritime powers of Europe were dreaming and languishing —a sea-route to the East. When he sailed, he sailed for *India;* when he discovered the shore of the New World, he believed he had touched the eastern coasts of the *Indies.* The error, of course, was discovered in due time; but in the meanwhile the Spaniards were not slow to take full advantage of the glorious discovery that placed them in the van of European nations. Soon the eastern coasts of America, or rather of South America, were explored, until at length the Spanish captains rounding the southern extremity of the American continent by the Straits of Magellan, found themselves in the Pacific, and with a clear way westward to the goal of their desires.

Two routes had now been found to the wished-for Indies—the Portuguese route round Africa and eastward, and the Spanish route round South

America and westward—although this latter was not prosecuted to any great extent as a commercial highway. It must be carefully noted that each of these nations monopolised its own route, and treated as pirates any navigators not belonging to their respective nations, who attempted to pass by either route for the purpose of discovery or trade.

Both routes were thus closed to England.

But the astounding discovery of Columbus had aroused, as with an electric shock, the ambition and the energies of all maritime powers, and, as might be expected, England, the chosen home of the old sea-rovers of the north, was fully alive to the quick-coming changes of the time, and to the *vast advantages of a monopoly of some sea-passage to the East.* But where was such a route to be found?

CHAPTER III.

A NORTH-WEST PASSAGE TO INDIA FOR ENGLAND SUGGESTED—EXPEDITIONS IN SEARCH OF IT—SEBASTIAN CABOT—THORNE'S EXPEDITION—"TRINITIE" AND "MINION"—SIR HUGH WILLOUGHBY AND RICHARD CHANCELLOR—STEPHEN BURROUGH—MARTIN FROBISHER'S VOYAGES—JOHN DAVIS—HALL AND KNIGHT—HENRY HUDSON—WILLIAM BAFFIN—"NORTH-WEST FOX"—ESTABLISHMENT OF THE HUDSON'S BAY COMPANY—HEARNE'S JOURNEY.

It has been already stated that the two most easterly maritime powers of Europe, the republics of Genoa and Venice, rose to great affluence and power through their trade with the East. Both powers produced capable and ambitious navigators in numbers enough and to spare, and consequently it was not unusual for mariners of these republics to take service under foreign powers. Thus Genoa gave Christopher Columbus to Spain, and Venice gave to England John Cabot and his son Sebastian.

It was within the closing years of the fifteenth century that the Cabots arrived in England, and settled in Bristol, even then a flourishing seaport. The elder Cabot, being a skilful pilot and intrepid navigator, was taken under the patronage of Henry VII., and encouraged to make voyages of discovery by the grant of a patent, bearing date 5th March 1496, in virtue of which "he had leave to go in search of unknown lands, and to conquer and settle them;" the king reserving to himself one-fifth part of the profits.

Sebastian Cabot, 1496.—To the genius of Sebastian Cabot is due the credit of originating the idea of a new sea-passage to India, by a north-west route through the Polar seas; and it was at this navigator's suggestion that England entered at once upon Arctic research, and upon the era of her naval greatness; for from that date to the present, England has won almost all the laurels due to discovery, both in the Arctic seas and elsewhere, and has maintained without a rival her supremacy among maritime powers.

An extract from a curious old document, written by Sebastian Cabot, and given in "Hakluyt's Voyages," will best explain his views about the practicability of a North-West Passage: "When the news were brought that Don Christoval Colon (Columbus), the Genoese, had discovered the coasts of India, of which there was great talk in all the court of King

Henry VII., who then reigned; insomuch that all men, with great admiration, affirmed it to be a thing more divine than human to saile by the West into the East where spices grow, by a way that was never known before; by his fame and report, there increaseth in my heart a great flame of desire to attempt some notable thing; and understanding by reason of the sphere (globe), that if I should sail by way of north-west I should by a shorter tract come into India, I thereupon caused the king to be advertised of my device, who immediately commanded two caravels to be furnished with all things appertayning to the voyage, which was, as far as I remember, in the year 1496, in the beginning of summer; I began therefore to sail toward the north-west, not thinking to find any other land than that of Cathay (China), and from thence to turn toward India; but after certaine days, I found that the land ranne toward the north, which was to me a great displeasure. Nevertheless, sailing along by the coast to see if I could find any gulf that turned, I found the land still continued to the 56th degree under our pole. And seeing that there the coast turned to the east, despairing to find the passage, I turned back again, and sailed downe by the coast of that land toward the equinoctiall (ever with intent to find the said passage to India), and came to that part of this firm lande which is nowe called Florida, where my victuals failing, I departed from thence and returned into England, where I found great tumults among the people, and preparations for warres in Scotland, by reason whereof, there was no more consideration had to this voyage."

Leaving the English and the Scots to conduct their "warres" as best pleased them, Cabot accepted the invitation of the king of Spain, to repair to that country, and become "one of the council for the affairs of the New Indies." In the service of the king of Spain, Cabot made several voyages, and a number of discoveries, among which was that of the Rio de la Plata or River of Silver, which falls into the South Atlantic on the east coast of South America. In 1548, however, he returned to England, and was introduced to the young King Edward VI., who was so much delighted with the bearing and the conversation of the veteran voyager, that he created him, by patent, pilot-major, and settled on him a pension for life of 500 marks (£166, 13s. 4d.) per annum—a great sum in those days—"in consideration of the good and acceptable services done and to be done." "Never," says Sir John Barrow, "was a reward more deservedly bestowed. Placed at the head of the 'Society of Merchant Adventurers,' by his knowledge and experience, his zeal and penetration, he not only was the means of extending the foreign commerce of England, but of keeping alive that spirit of enterprise, which even in his lifetime was crowned with success, and which ultimately led to the most happy results for the nation that had so wisely and honourably enrolled this deserving foreigner in the list of her citizens."

Thorne's Expedition, 1527.—During the reign of Henry VIII., the spirit of discovery and of foreign enterprise that had been dormant in England for thirty years, was once more aroused, and from that day to this it has never slept. The first expedition undertaken solely by Englishmen, was at the suggestion of Master Robert Thorne, of Bristol, who is said to have exhorted King Henry VIII., "with very weighty and substantial reasons to set forth a discovery even to the North Pole!" In compliance with Thorne's suggestion, as we learn from the "Chronicles" of Hall and Grafton, "King Henry VIII. sent two fair ships well manned and victualled, having in them divers cunning men to seek strange regions, and so they set forth out of the Thames, the 20th day of May, in the nineteenth yere of his raigne, which was the yere of our Lord 1527." Of this expedition not much is known. One of the ships having sailed very far north-westward, was cast away on entering into a dangerous gulf between the north of Newfoundland and Greenland, the other returned home in October; "and this," says Hakluyt, "is all that I can hitherto learn or find out of this voyage, by reason of the great negligence of the writers of those times."

"Trinitie" and "Minion," 1536.—Of the disastrous cruise of the "Trinitie" and the "Minion," in 1536, the sad history has been preserved. This voyage, says the old chronicler already named, was set on foot by "Master Hore of London, a man of goodly stature and of great courage, and given to the studie of cosmographie." The undertaking being favoured by the king, a number of gentlemen were encouraged to accompany Hore in his voyage of discovery to the north-west parts of America, many of whom were of the Inns of Court and of Chancery. "The whole number that went in the two tall ships, were about six score persons, whereof thirty were gentlemen, which were all mustered in warlike manner at Gravesend, and after the receiving of the sacrament, they embarked themselves in the end of April 1536." A record of this voyage, of which we give only the briefest outline, was communicated to Hakluyt by Mr Oliver Dawbeney, merchant of London. The vessels had been several days at anchor on the coast of Newfoundland, before any of "the natural people of the country" had been seen; but at length Dawbeney "spied a boat with savages of those parts, rowing down the bay towards them." He called upon his companions below to come up and behold the strange sight, and they, obeying perhaps a natural instinct, under the circumstances, manned a boat to meet and to take the savages. No more impolitic step could have been taken. The natives returned, landed, and fled, and the pursuers found in their camp "a fire and the side of a beare, on a wooden spit." Soon after this the voyagers "grew into great want of victuals." Had they conciliated the savages, they need have suffered no inconvenience from this cause. As it was, "such was the famine that

increased amongst them from day to day, that they were forced to seek to relieve themselves of raw herbes and rootes, that they sought on the maine (land). But the famine increasing, and the relief of herbs being to little purpose, the (one) fellow killed his mate while he stooped to take up a roote for his reliefe, and cutting out pieces of his body whom he had murthered, broyled the same on the coles, and greedily devoured them." This practice of secret murder and cannibalism, carried on by a number of the men, "in the fieldes and deserts here and there," at length became known to the officers, who had believed that the missing men had either been killed by savages or devoured by wild beasts. But still the famine increased, until the men "agreed amongst themselves, rather than all should perish, to cast lots who should be killed." The same night, however, there arrived a French ship in that port "well furnished with vittaile, and such was the policy of the English, that they became masters of the same, and changing ships and vittailing them they set sayle to come to England." So ended in complete disaster and almost unparalleled crime, an expedition which, had it been led by an experienced navigator, and conducted with ordinary policy—especially with regard to the natives,—might have achieved notable and valuable results.

Sir Hugh Willoughby and Richard Chancellor, 1553.—The return of Sebastian Cabot, after his successes in the service of Spain, infused into the minds of the merchants of England that spirit of adventure for which they have ever since remained distinguished. In addition to his other honours, Cabot was appointed Grand Pilot of England, and "Governour of the mysterie and companie of the marchants adventurers for the discovery of regions, dominions, islands, and places unknown." In this capacity he suggested a voyage for the discovery of a North-East passage to Cathay in 1553, and the ordinances and instructions drawn up by him in furtherance of this object are equally wise and well-expressed. This expedition, the first regular enterprise of the kind undertaken by England, consisted of three vessels—the "Bona Esperanza," admiral of the fleet, 120 tons burthen, commanded by Sir Hugh Willoughby, captain-general of the fleet; the "Edward Buonaventure," 160 tons, commanded by Captain Richard Chancellor; and the "Bona Confidentia," 90 tons, commanded by Master Cornelius Durfourth. Thirty-five persons, including six merchants, sailed in the first vessel; fifty, including two merchants, in the second; and twenty-eight, including two merchants, in the third. So confident of success were the promoters of the expedition, that they caused the ships to be sheathed with lead, as a protection against the worms, which, as they understood, were destructive of wooden sheathing in Indian seas. On the day appointed for the sailing of the expedition from Ratcliffe, which was the 20th May, the adventurers "saluted one his wife, another his children, and another his

kinsfolkes, and another his friends dearer than his kinsfolkes;" after which the ships dropped down to Greenwich, where the court then was. The great ships were towed down by the boats, "the mariners being all apparelled in watchet or skie-coloured cloth. The courtiers came running out, and the common people flockt together, standing very thick upon the shoare; the Privie Consel, they lookt out at the windowes of the court, and the rich ran to the toppes of the towers; the shippes hereupon discharge their ordnance, and shoot off their pieces after the manner of warre, and of the sea, insomuch that the toppes of the hills sounded therewith, the valleys and the waters gave an echo, and the mariners they shouted in such sort that the skie rang again with the noise thereof."

The voyage thus bravely begun ended in dire calamity, for Sir H. Willoughby, and the majority of his companions, who with the whole of the merchants, officers, and ship's company, together with those of the "Bona Confidentia," to the number of seventy persons, all miserably perished from the effects of cold and hunger, on a barren and uninhabited part of the eastern coast of Lapland. It fared better with Master Richard Chancellor in the "Edward Buonaventure." This stout mariner succeeded in reaching Wardhuys in Norway, where he met with "certaine Scottishmen," who earnestly attempted to dissuade him from prosecuting his voyage. But he minded not the speeches of the Scots, and determined to push on, and either "to bring that to pass which was intended, or els to die the death." In this resolute spirit, Chancellor continued to forge toward the north, till he came "to the place where he found no night at all, but a continual light and brightness of the sunne shining clearly upon the huge and mighty sea." At length, we are told, he entered into a very great bay, and seeing a fishing-boat, inquired of the people "what country it is, and what people, and of what manner of living they were;" but these men seeing the large ship, were greatly alarmed and fled. At last, however, they were overtaken, and immediately fell on their knees, offering to kiss Chancellor's feet. The Englishman treated them with politic kindness, and the report being spread abroad of the arrival of a strange people, "of singular gentleness and courtesie," the inhabitants brought them presents of provisions, and entered readily and fearlessly into trade with them.

The voyagers soon learned that the coast they had reached was that of Russia, the reigning monarch of which was named Ivan Vasilovich. With the view of furthering the interests of the London merchants, Master Chancellor there and then undertook a journey of fifteen hundred miles from the coast to Moscow the capital, to see the king. Here he was well received, and it is to his discreet and able representations, that England is indebted for the firm foundation of that commerce with Russia, which is still maintained between the countries.

Chancellor returned to England with a letter from the Czar addressed to the English king, and the prospects of vast profit which a trade with Russia held out, were regarded as some compensation for the melancholy fate of Willoughby and his companions. The captain of the "Edward Buonaventure" and two comrades were appointed commissioners from Philip and Mary, who were then on the English throne, to open up commercial relations with the Czar and his people; and, setting out on a new expedition, they arrived at Archangel, from which they travelled again to Moscow, to be again well received and to make a profitable voyage. On his disastrous voyage homewards, however, Chancellor weathered the storms of the passage only to be wrecked and drowned (10th November 1556) in Pitsligo Bay, on the east coast of Scotland; but the Russian ambassador whom he brought with him from the Czar, arrived safely in London, and entered into commercial treaties with the "merchant adventurers" of England, which have been of the greatest benefit to both countries.

Stephen Burrough, 1556.—Meantime the "Companie of Merchants Adventurers," of which Cabot was governor, were so anxious to follow up the attempt to find out a North-East route to India, that without waiting the result of Chancellor's second voyage, they fitted out a small vessel next year (in 1556) to make discoveries by sea to the eastward. The vessel, the "Searchthrift," commanded by Stephen Burrough, being ready for sea, set sail on the 29th April, passed the North Cape on the 23d May, and reached the mouth of the Petchora on the 15th July. In latitude 70° 15′, they encountered much ice; but on the 25th they fell in with a strange and monstrous object, which seems to have inspired greater terror even than the ice. It was the first whale that our navigators had seen. The incident is thus recorded in Hakluyt: "On St James his day, bolting to the windwards, we had the latitude at noon in seventy degrees twenty minutes. The same day at a south-west sunne, there was a monstrous whale aboord of us, so nere to our side, that we might have thrust a sworde or any other weapon in him, which we durst not do, for fear he should have overthrowen our shippe; and then I called my company together, and all of us shouted, and with the crie that we made he departed from us. There was as much above water of his back as the breadth of our pinnace, and at his falling down, he made such a terrible noise in the water, that a man would greatly have marvelled, except he had known the cause of it; but, God be thanked! we were quickly delivered of him."

Continuing his course to the north-east, Burrough passed Nova Zembla and Waigatz, but was at length stopped by fog and ice. He returned to England in 1557, and was appointed Comptroller of the Royal Navy in reward for his discoveries.

Martin Frobisher, 1576.—But though considerable progress was thus being made in the direction of a North-East passage to India, the idea of a *North-West* passage had not been lost sight of, and now the time had come when the famous search for this sea-way, which has only been found out within our own day, was practically to commence. The first great navigator who made himself illustrious in this famous quest was MARTIN FROBISHER. It was his opinion that the discovery of a North-West passage "was the only thing of the world that was left yet undone, whereby a notable mind might be made famous and fortunate;" and having obtained the countenance and assistance of Dudley, Earl of Warwick, and of other friends, he was enabled to fit out a squadron of three small vessels, the united burthen of which was only seventy-five tons. With this expedition he set sail on the 8th June 1576. The vessels passed Greenwich, where the court was residing at the time, and the great Queen Elizabeth bade the voyagers farewell, "by shaking her hand at them out of the window!" Reaching the south of Greenland, the floating ice obliged him to stand to the south-west, when sighting the coast of Labrador, he steered northwards and discovered an opening to the north of Labrador (lat. 63° 8′ N.), to which the name Frobisher's Strait was given, but which is now known to be an inlet of Davis' Strait. While in this region, the Captain descried "a number of small things floating in the sea afarre off," which he at first took to be "porpoises or seals or some kind of strange fish." They turned out, however, to be natives in their skin-covered boats. These strangers approached with hesitation, and one of them being persuaded to go on board, was presented by Frobisher with a bell and a knife. The Captain then had the native sent on shore in a boat, with five of a crew. Orders had been given to the sailors not to go on shore. These orders they chose to disobey, and the result was they were seized by the natives, and none of them ever heard of more. This loss deeply afflicted Frobisher, and a few days afterwards, having enticed a native close to his barque by ringing a bell and holding it out, the commander "caught the man fast and plucked him with maine force, boat and all, into his barke out of the sea." With this "strange infidel, whose like was never seene, read, or heard of before," Frobisher set sail for England, where he arrived on the 2d October, "highly commended of all men for his great and notable attempt, but specially famous for the great hope he brought of the passage to Cathaia."

Frobisher had brought home with him a quantity of mica, which was reported to contain a considerable proportion of gold. The excitement caused by this event was intense, and a new voyage was set on foot for the following year, in which we are told by Master George Best, Frobisher's lieutenant, that "the captain was specially directed by commission, for the searching more of this gold ore, than for the searching any further discovery of the passage."

The second voyage undertaken in 1577, in one of her Majesty's vessels of 180 tons, and two smaller craft of 30 tons each, is unusually interesting though not productive in geographical discovery. Coasting along the south of Greenland, he saw no creature "but little birdes." Sailing for that strait they had visited the previous year, they landed on an island, and obtained a great quantity of the supposed gold ore. On the top of a high hill, "they made," says the quaint chronicler, "a columne or crosse of stones heaped up, of a good height togider in good sort, and solemnly sounded a trumpet, and said certaine prayers, kneeling about the enseigne, and honoured the place by the name of Mount Warwicke."

Immediately after returning to their boats, they saw a number of natives waving a flag on Mount Warwick, and apparently anxious for a conference. Two men from each side were appointed to confer together, and one native having received goods from the Englishmen, for which some return was expected, he "for lacke of better merchandise, cut off the tayle of his coat, and gave it unto the general for a present." On this, which was not a civil return, the general and the master seized the savages; but the ground being slippery, they missed their grasp, and the natives running away, "lightly recovered their bow and arrows," and attacked the unarmed general and the master, driving them to their boats, and wounding the former. The sailors in the boats now began to fire, on which the savages ran away, and the English after them. "One Nicholas Gonger, a good footman, and unencumbered with any furniture, having only a dagger at his backe, overtooke one of them, and being a Cornish man, and a good wrestler, shewed his companion such a Cornish trick, that he made his sides ake against the ground for a moneth after; and so being stayed he was taken away, but the other escaped." Thus they had obtained no food from the natives hitherto, for the natives were "more ready to eat them than to give them wherewithal to eat." They took in a quantity of glittering ore on the southern side of Frobisher's Strait, "but upon tryall made it proved no better than blacklead, and verified the proverb—all is not gold that glistereth." They took a full cargo of the ore, however, amounting to two hundred tons, and their commission being now accomplished, set sail homewards and arrived in safety. A third voyage was undertaken in 1578, for the two-fold purpose of collecting ores and founding a colony. This expedition was barren of results, and we hear no more of Martin Frobisher as an explorer in northern seas.

John Davis, 1585.—In continuing our chronological account of Arctic Exploration, we now come to record the discoveries of JOHN DAVIS, one of the most remarkable of the "ancient mariners," a man shrewd, brave, indomitable, yet kindly withal, ever seeking and ever giving sympathy—a man impressionable to all the ever-varying appearances of nature, as every true

sailor is, a man with a soul far reaching and widely receptive, with a heart true and an honour unstained. His name is immortalised in Davis' Strait, of which he was the discoverer, but he has won even a higher if more modest immortality, in having been the discoverer of those great whaling and sealing stations, which have been the source of so much profit to his country. And those Arctic fisheries which he had the good fortune to open up, are valuable to England in a far higher sense than as producing enormous wealth in oil, skins, and furs every year; for it is amid these dangerous seas, with winds, currents, floating icebergs, nipping floes, and ever recurring shallows to guard against, that England's most skilful pilots and navigators are reared.

Davis belonged to Sandridge, in Devonshire, the most renowned of the maritime counties of Britain, the most prolific in high-souled gentlemen—in the great spirits that made the naval glory of England illustrious beyond compare, in

"The specious times of great Elizabeth."

The merchants of London and of the western counties, who were still satisfied that the discovery of the North-West passage to the ever-wished-for East was a thing yet to be accomplished, and which already might have been achieved, had not former voyagers been diverted from the original objects of their expeditions, at length resolved to fit out a new adventure toward the north. William Sanderson, merchant of London, was entrusted to superintend the outfit, and John Davis received the appointment of captain and chief-pilot. The expedition consisted of two barques—the "Sunshine," 50 tons, and carrying twenty-three persons, and the "Moonshine," 35 tons, and carrying nineteen persons. Four of the individuals in the "Sunshine" were musicians, and they had an opportunity before all was done, of tuning up their "flutes and soft recorders," amid the strangest of scenes, and to the oddest of audiences, as we shall see.

On the 7th June 1585, the barques dipped their flags, and bade adieu to Dartmouth, and by the 19th July they were among the ice on the western side of Greenland, and first heard "the mighty great roaring" of the northern sea, produced by the "rowling together of great islands of ice." "The lothsome views of the shore," says Davis, "and the irksome noise of the ice *was such as that it bred strange conceipts in us,* so that we supposed the place to be waste and void *of any sencible or vegetable creatures,* whereupon I called the same Desolation. So coasting this shore (Greenland), towards the south in the latitude of 60°, I found it to trend towards the west. I still followed the leading thereof, in the same height; . . . and we past all the ice, and found many green and pleasant isles, bordering upon the shore, but the mountains of the maine were still covered with great quantities of snowe. I brought my ship among these isles, and there moored to refresh ourselves in our wearie travell, in the latitude of 64° or thereabouts. The

people of the country having espied our shipps, came down unto us in their canoes, holding up their right hand to the sun, and crying 'Yliaout!' would strike their brestes. We doing the like, the people came aboard our shipps—men of good stature, unbearded, small eyed, and of tractable conditions, by whom as signes would furnish, we understood that towardes the North and West there was a great sea; and using the people with kindness in giving them nayles and knives, which of all things they most desired, and finding the sea free from ice, supposing ourselves to be past all danger, we shaped our course West-Nor'-West, thinking thereby to pass for China." The air was moderate like April weather in England, and it was cold only when the wind blew from the land or ice, but when it came over the open sea, "it was very hote."

In his course north-west, Davis discovered an archipelago of islands, and to one of the inlets in which he anchored, he gave the name of Gilbert's Sound. Here, we are told, a multitude of natives approached in their canoes, on which the musicians began to play, and the sailors to dance—making tokens of friendship. The simple and harmless natives soon understood their meaning, and were so delighted with their treatment and the music, that they flocked round them in vast numbers. The sailors shook hands with them, and won so far on their goodwill, that they obtained from the "salvages" whatever they wished—canoes, clothing, bows, spears, and in short whatever they asked for.

Continuing to sail to the north-west, the adventurers on the 6th August discovered land in 66° 40′; the sea being altogether free from ice. Here they anchored under a hill, to which they gave the name of *Mount Raleigh*—"the cliffs whereof were orient as gold." The foreland to the north of their anchorage was called *Cape Dyer*, that to the south, *Cape Walsingham*, while to the sound itself they gave the name of *Exeter Sound*. All these names are retained in use to the present day. They mark the prominent features of the east coast of the land known as Cumberland Island, in the middle of Davis' Strait, and on its west coast. Other results of this first voyage, were the discovery of the wealth of those northern seas, in whales, seals, deer-skins, and other articles of peltry; and the discovery of a wide open passage to the westward, which Davis dared not explore as the time for the open navigation was drawing to a close, and he was not provisioned for a winter among the ice—such a thing, indeed, being at this early stage of exploration unknown. On the return of Davis, in September, to Dartmouth, these results were esteemed highly promising, and the Exeter and London merchants fitted out a second expedition, adding to the little squadron a vessel of 120 tons, named the "Mermaid."

Davis left Dartmouth on his second voyage on May 7, 1586, and arriving again on the west coast of Greenland, renewed his intercourse with the

natives, who came off to the ships in as many as a hundred canoes at a time, bringing with them seal and stag skins, white hares, seal fish, "samon peale and cod, dry caplin, with other fish and birds such as the country did yield." "In latitude about 66°, the 'Mermaid,' the chief ship of the squadron," says Davis, "found many occasions of discontentment, and being unwilling to proceed, she there forsook me. Then," continues the fine old skipper, "considering how I had given my faith and most constant promise to my worshipful good friend, Master William Sanderson, . . . and also knowing that I should lose the favour of Master Secretary, if I should shrinke from his direction, in one small bark of thirty tons, *alone without further comfort or company,* I proceeded on my voyage." To find a North-West Passage being his great aim, Davis coasted along the west shores of the strait that bears his name, until the season for navigation was closing, when he returned south, and was fortunate enough to catch a number of "great cod," which supplemented his slender supplies, and so sailed for England. Part of the fish that had been caught, Davis showed to "Master Secretary," and the result was that next year 1587, a third expedition consisting of two ships to try their fortune on the newly discovered fishing-ground, and a pinnace for discovery, were fitted out for the intrepid voyager.

Sailing from Dartmouth for the third time (May 19), for the strait he had discovered, Davis reached latitude 67° 40′, on the 24th June. He had left the two ships to prosecute the fishing, and sailed north for discoveries. He continued beating north "to the latitude of 75°, in a great sea, free from ice, coasting the western shore of Desolation. The people came continually rowing out unto me in their canoes, twenty, forty, and one hundred, at a time, and would give me fish dried, Samon, Samon peale, cod, Caplin, Lumpe, stone base, and such like, besides divers kinds of birds as Partrig, Fesant, Gulls, sea-birdes, and other kinds of fleshe. I still laboured by signs to know of them what they knew of any sea towards the north, they still made signs of a great sea as we understood them. Then I departed from that coast, thinking to discover the north parts of America. And after I had sailed toward the west near forty leagues, I fell upon a great bank of ice. The wind being north, and blew much, I was constrained to coast towards the south, not seeing any shore west from me. Neither was there any ice towards the north, *but a great sea, free, large, very salt and blue, and of an unsearchable depth.* So coasting towards the south, I came to the place where I left the ships to fishe, but found them not. Thus being forsaken, and left in this distress, referring myself to the merciful providence of God, I shaped my course for England, and unhoped for of any, God alone relieving me, I arrived at Dartmouth. By this last discovery, it seemed most manifest that the passage was free and without impediment toward the north; but by reason of the Spanish fleet, and unfortunate time of Master Secretary's

death, the voyage was omitted, and never since attempted." And so ends the Arctic adventures of "J. Davis of Sandrudg, by Dartmouth, Gentleman." Sir John Ross, writing of the three voyages of the stout-hearted Dartmouth captain, says: "The discoveries which he made in the course of his three voyages, proved of great commercial importance; since to him, more than to any preceding or subsequent navigator, has the whale fishery been indebted. Let not his name be slightly passed over! In talent he has not had many rivals; and it is ignorance probably rather than ingratitude, which fails to thank him for the debts owed him by British Commerce!"

Weymouth, Hall and Knight, 1602-1607.—The successive voyages to the north of Weymouth (1602), and of James Hall and John Knight (1605-1607), contain but little to interest the non-professional reader. They reached no high latitudes—they made no important discovery, and it was not till the advent of Henry Hudson, that English discovery in the frozen seas was again resumed with that ability and perseverance, which deserve and command success.

Henry Hudson, 1607.—It is to be remembered that during the whole of the fifteenth century, the Spaniards and Portuguese—kings, nobles, and merchant and other adventurers—had been reaping golden harvests from their monopoly of trade with the Orient. But the English could not see with indifference the whole of the lucrative commerce carried on with the eastern world by these two nations. The successful expeditions of Sir Francis Drake in 1578, and of Candish in 1586, had only too clearly proved to England, the immense value of the trade with the East. The Spanish galleons from the Indies, which the English navigators captured during the war with Spain, were so richly laden, that the captain who could succeed in taking one of them was made wealthy for the remainder of his days. It was not, therefore, to be expected that England should cease to cherish the hope that a shorter route than those of Cape Horn or the Cape of Good Hope, was to be found to the land of spices and of gold, by going "north-about." Already, however, several attempts had been made to force a route, both by a north-east and a north-west passage. The former was found to be closed effectually by fields of ice—the latter was still undiscovered. In this position of affairs it was resolved to try a new route, and see what could be done by steering direct for the North Pole itself. With this view the merchants of London organised a new expedition in the beginning of the seventeenth century, selecting as their commander, Henry Hudson, an experienced and intrepid seaman, well skilled in the theory as well as the practice of navigation, and in the use of nautical instruments.

It was the 1st May 1607 when Hudson, with ten men and a boy, in a

small barque, neither the name nor the tonnage of which is on record, set sail from Gravesend. The little barque and its slender crew did a wonderful deal of work. By the 13th June he was running along the east coast of Greenland—a course that had never previously been selected by any British explorer. On the 22d he had reached the very high latitude of 72° 38′, and pursuing his way, he gratified his desire to see that part of Greenland, which was "to any Christian unknowne, and we thought it might as well have been open sea as land, and by that means our passage should have been the larger to the pole." This land is now known as Hudson's Land, and the cape which here projects (latitude 73°), and which he named Cape Hold-with-Hope, still retains the same name. This cape had little or no snow on it, the air was temperate on their approach to it, and great rain-drops fell. From this land he steered his small craft away north-eastward toward Newland (Spitzbergen) which the Dutch had discovered eleven years before. This land was reached in latitude about 78°, and in running along its shore, they felt no great degree of cold, "yet there was great store of ice to the westward, which obliged them to stand to the northward between the land and the ice." On the 11th July, they found themselves by observation in latitude 79° 17′. At this point they found much driftwood among the ice; and they saw plenty of seals, and some bears, one of which was killed, and many of the people (the ten men and a boy) made themselves sick with eating bear's flesh unsalted. In 80° 23′ they entered a deep bay of Spitzbergen, and going on shore found morses' teeth, whale bones, deer's horns, etc. It was hot on shore, and they drank water to slake their thirst. On the 31st July, finding his stores exhausted, he bore up for England, arriving in the Thames 15th September.

Hudson's attempt to find a north-east passage by Nova Zembla, in his second voyage, was vain and fruitless, though his observation as to the growth of the ice in these regions shows the sagacity of this navigator. "It is no marvell," he says, "that there is so much ice in the sea toward the pole, so many sounds and rivers being in the lands of Novaya Zemblya and Spitzbergen to engender it; besides the coasts of Pechora, Russia, and Greenland, with Lappia, as by proofes, I find by my travell in these parts; by means of which ice I suppose there will be no navigable passage this way." His third voyage was vagrant and aimless, and its only result was the discovery of the Hudson River.

The fourth voyage which terminated so tragically was undertaken in 1610. Sir John Wolstenholm and Sir Dudley Digges, and some others, being convinced of the existence of the North-West Passage, fitted out an expedition at their own expense, and gave the command to Hudson. The vessel was the "Discovery," 55 tons. She was intended only to make a single summer voyage, and therefore was provisioned only for six months. She left 17th April 1610, and was off the mouth of Frobisher's Strait by 9th June; but on

account of the ice and contrary winds was compelled to ply to the westward for nearly a month. This passage leading westward was Hudson's Strait, which, however, had partly been discovered by Davis. Continuing to ply west they arrived at the western extremity of the strait, which is formed by the north-west point of Labrador—named by Hudson *Cape Wolstenholm.* The islands in the neighbourhood were named *Digges' Islands.* From this point a large sea opened out to the south—Hudson's Bay—but at this stage of the voyage, Hudson's own narrative ends, and the remainder of the fortunes of the "Discovery" are chronicled by one Abacuk Pricket. This worthy begins by stating that Hudson being beset with ice, and almost despairing whether he should ever get clear of it, called the ship's company together, and taking out his chart showed them that he had entered the strait (Hudson's Strait) over three hundred miles farther than any Englishman had been before. He now left it to their own choice, whether to proceed or return. Some were of one mind, some of another; but adds the chronicle, "there were some who then spake words which were remembered a great while after!"

The mate and boatswain, who had used improper language on the occasion referred to, were afterwards removed from office, and others appointed in their places. Another source of disaffection was, that having entered a bay on Michaelmas day, and to which the name Michaelmas Bay was given, the master gave orders to weigh anchor and set sail, while some wanted to remain for a time and rest. On the 10th November they were frozen in, and by this time their six months' provisions were finished—the Arctic winter was before them, and they had no prospects of food to enable them to bear up against it. The dreadful result was mutiny, and this is how, according to the story of the not too credible Abacuk, the tragic climax was brought about.

Hudson had taken into his house in London a young man named Greene, who, though an abandoned profligate himself, was of respectable parentage. Greene accompanied Hudson to sea, but quarrelled with the surgeon, and others of the crew. Meantime the provisions of the vessel being nearly exhausted, Hudson preparing to leave the bay in which they had wintered, called the men together, and divided what was left among them. There was no more than about a pound of bread per day for each man for a fortnight, "and he wept when he gave it unto them." They had five cheeses which were also divided among them, and which afforded them three pounds and a half for seven days. Then they stood to the north-west, and on the 18th June fell in with ice, and on the 21st, they being still in the ice, Wilson the boatswain, and Greene, whom Hudson had taken into his house with the view of saving him from ruin, came to Pricket, who was lying lame in his cabin, and told him that they and the rest of their associates, meant to turn the captain and all the sick into the boat, and set them adrift to shift

for themselves. They also said there were not fourteen days' victuals left for the whole crew; that they had not eaten anything the last three days, and were therefore resolved "either to mend or end; and what they had begun they would go through with or die." Immediately afterwards, five or six more of the mutineers entered Pricket's room, and the whole of them having sworn an oath "to do nothing but to the glory of God and the good of the action in hand, and harm to no man," they went on deck to put their oath into practice by practically murdering the captain and their sick shipmates. As soon as Hudson came out of his cabin, he was seized and bound, and he and the sick and lame hurried into the boat and cut adrift among the ice. Of Hudson and the castaways with him, no more has ever been heard. They were, in all likelihood, soon swamped among the ice, and thus spared the torture and slow death of starvation. Pricket thereafter took charge of the master's cabin and chest. Greene, with some other mutineers, was killed in a fight with the natives; and the survivors, after many perils, reached Ireland. No official inquiry was ever made into the truth or falsehood of Pricket's story.

William Baffin, 1615.—In 1615 an expedition was undertaken, which is of special interests, not so much from its actual results as from the circumstance that he whom Admiral Sherard Osborne estimates as "the ablest, the prince, of Arctic navigators—William Baffin"—took part in it. Sir Thomas Button had previously (in 1612) commanded an expedition for the discovery of the North-West Passage; but he met with no noteworthy success, and the record of his voyage was not published, probably for the best of all reasons, that there was nothing of interest to record. In the same year (1612), James Hall undertook a voyage to Greenland, on the coast of which, however, he was mortally wounded by an Esquimaux, "who, with his dart, strook him a deadly wound upon the right side, which our surgeon did think did pierce his liver." This assault seems to have been an act of vengeance for an insult received in a former voyage. After the death of the captain, the expedition returned. In 1614, a vessel was fitted out for Captain Gibbons, who was described by Sir Thomas Button, with whom he had sailed, as being "not short of any man that ever yet he carried to sea." His only discovery was that of the bay in lat. 57°, on the coast of Labrador, in which he was imprisoned by the ice for five months, and to which his own ship's company are said to have given in derision the name of "Gibbons his hole." But the complete failure of Gibbons did not discourage the "merchant adventurers" from prosecuting discovery in the north-west, and Robert Bylot, who had been employed on the three former voyages under Hudson, Button, and Gibbons, was appointed master of the "Discovery," with William Baffin as mate and associate. Reaching Resolution Island at the mouth of Hudson's Strait, they followed up the passage to Salisbury Island, discovered Mill Islands, to which they

gave this name from the grinding of the masses of ice in the neighbourhood against one another. They pursued their course to lat. 65° 26′, long. 86° 10′ W., and then, concluding that they were in a great bay, and that therefore there was no passage in this direction westward, they tacked and returned homeward without further search.

Again, in 1616, the "Discovery"—this being her fifth voyage in search of a North-West Passage—was fitted out under the command of Robert Bylot, and with Baffin as pilot. The vessel set sail 26th March, was in Davis' Strait, in lat. 65° 20′; on the coast of Greenland by the 19th April, whence they ran north to 70° 20′. Continuing to push northward, it froze so hard, says Baffin, "that on Midsummer Day our shrouds, roapes, and sailes were so frozen that we could scarce handle them." On the 2d July they reached a "fair cape" in lat. 76° 35′, which they named Sir Dudley Digge's Cape; and on the 4th they found themselves in a large sound, in which they saw so many whales that they named it *Whale Sound.* It lies in lat. 77° 30′, a point far beyond Davis' farthest, which was Hope Sanderson, or Sanderson his Hope (of a north-west passage), in lat. between 72° and 73°. But the intrepid Baffin was not to be stopped by *Whale Sound* at the then extraordinary high latitude of 77° 30′. He still pushed north, and discovered a great sound running to the north of 78°, and to which he gave the name *Sir Thomas Smith's Sound,* so naming it after the Right Worshipful Sir Thomas Smith, Knight, the chief of the "merchant adventurers" who had fitted out the "Discovery" for this, the fifth time.

And here it may be as well to state that in discovering *Smith's Sound,* Baffin opened up a field which, from his own time to the present, has been regarded by explorers as leading to what is supposed to be the key of the position in the Polar seas. This sound led Parry to his highest latitude. Dr Kane, the great American explorer, reached its southern entrance; his successors, Hayes and Hall, passed through it northward into Kennedy Channel, and to what is still believed by many to be the southern shore of the open Polar Sea; and through this very gate to the North Pole, opened up by Baffin two hundred and fifty years ago, the great English Expedition, now (1875) in the Polar seas, will fight its way in its two steamers to a decisive conflict with the circumpolar ice—a conflict, the victory in which means the discovery of the North Pole itself.

But the splendid achievement of Baffin and Bylot in this voyage was not to end with the discovery of the gate of the North Pole. Standing away south-westward, on the 12th July they opened out another great sound in 74° 20′, which they named *Sir James Lancaster Sound,* another discovery which, like *Smith's Sound,* was destined to become illustrious, and to gather round it all the fascination of romance in the future adventures of Arctic explorers. "Here," says Baffin, "our hope of passage began to be less every day than

other, for from this sound to the southward we had a ledge of ice between the shore and us (thus precluding any search for a *west* passage), but clear to the seaward. We kept close by this ledge of ice till the 14th day, in the afternoone, by which time we were in lat. of 71° 16′, and plainly perceived the land to the southward of 70° 30′. Then we, having so much ice round about us, were forced to stand more eastward." In this way they sailed and drifted down to 65° 40′, when, says Baffin, "we left off seeking to the west shore, because we were in the indraft of *Cumberland Isles*," where he knew no hope of a west passage was to be looked for. It is interesting to read the quaint remarks with which the simple but great navigator closes his record of this most famous voyage. "Now," he says, "seeing that we had made an end of our discovery, and the year being too farre spent to goe for the bottome of the bay to serch for dressed finnes (whalebone), therefore wee determined to go for the coast of Greenlande, to see if we could get some refreshing for our men." Like every great navigator, his first care was for the health of his crew. And by this time scurvy had set in among the sailors. One man had died, and three were sick in their hammocks. They therefore stood for the shore, and, anchoring in Cockin Sound (lat. 65° 45′), found abundance of scurvy grass, which they boiled in beer, and, mixing it with sorrel and orpen, both very plentiful, made good salads. The sick men perfectly recovered in the space of eight or nine days. They then put up for England, and arrived in Dover Roads on the 30th August.

"North-West Fox," 1631.—The voyage of Captain Luke Fox, who styled himself, somewhat affectedly, "North-West Fox," was undertaken in 1631; but though the navigator's record of it is interesting from the oddness and occasionally the witty and unexpected remarks with which it is enlivened—for Fox was a man of talent as well as eccentricity—the voyage itself was wholly without result in the way of advancing geographical knowledge, and therefore deserves no more than a passing notice here. In the same year Captain James set out from Bristol for Hudson's Strait; but his description of his misfortunes and sore trials, besides being of questionable reliability, includes nothing important in the way of discovery. "Captain James's history of his voyage," says Barrow, "may be called a book of 'Lamentation, and weeping, and great mourning;' it is one continued strain of difficulties, and dangers, and complainings from the first making of the ice off Cape Farewell till his return to the same point." With this dismal tale it is fortunate we are not called upon to deal.

In the course of our History of Arctic Discovery, it will be necessary to make mention frequently of the Hudson's Bay Company, and as the formation of this Company took place at about the point of time we have now

reached in our chronological survey, it may be of advantage to state the circumstance which led to it. After the discovery of Hudson's Bay the value of the fisheries of that immense inland sea soon became famous. To the value of these fishing-grounds the French, after having possessed themselves of Canada, showed themselves to be by no means indifferent. One of the first Frenchmen to pass over from Canada to the shores of this inland sea was one M. Grosseliez, a bold and enterprising man who, seeing the advantage that might be derived to the French settlements in North America, by possessing themselves of the ports and harbours of Hudson's Bay, prevailed on some of his countrymen at Quebec, about the middle of the seventeenth century, to fit out a ship for the purpose of exploring the coasts of that bay, and proceeded on the expedition himself. Having explored the bay in the neighbourhood of Nelson River, he deputed his brother-in-law to repair to France and lay before the Government a representation of the advantages which might be derived from an establishment on its coasts. The proposal of M. Grosseliez was treated as visionary; but so strongly convinced was he of its advantages that he set out for France himself, where, however, he met with no better success than his brother-in-law. The English minister at Paris—Mr Montague—hearing of the proposal of Grosseliez and of its rejection, sent for the Frenchman to explain his views, and derived so much satisfaction from them that he gave Grosseliez a letter to Prince Rupert in England. Here the French-Canadian met with a most flattering reception. He was immediately engaged to go out in one of his Majesty's ships, not merely to form a settlement in Hudson's Bay, but also to prosecute the oft-attempted passage to China by the north-west. To the command of this vessel Captain Gillam was appointed. He set sail in 1668 with Grosseliez, and is said to have proceeded as far up Davis' Strait as 75°. On his return into Hudson's Bay he entered Rupert's River, 29th September, and prepared to pass the winter there. The river was not frozen over before the 9th December, and the cold is said to have ceased as early as the month of April. Here Captain Gillam laid the foundation of the first English settlement, by building a small stone fort, to which he gave the name of *Fort Charles.*

But Prince Rupert's action in the direction of forming a settlement and trading-station on the great bay did not end here. He obtained from King Charles a charter dated 1669, and granted to himself and several other adventurers therein named, for having, at their own cost and charges, undertaken an expedition to Hudson's Bay, "for the discovery of a new passage into the South Sea, and for the finding of some trade for furs, minerals, and other considerable commodities." The charter stated that they had already made such discoveries as encouraged them to proceed further in pursuance of their said design; and that by means thereof great advantage might probably arise to the king and his dominions; and therefore his Majesty, for

the better promoting of their endeavours for the good of his people, was pleased to confer on them, exclusively, all the land and territories in Hudson's Bay, together with all the trade thereof, and all others which they should require, etc.

The body of gentlemen and merchants thus incorporated turned their chief, if not their whole, attention to the establishment of forts and factories, and to extend their trade with the Indians, from whom they obtained the most valuable furs for articles of very trifling cost, to the entire neglect of discovery or any scientific pursuit. The Company thus rapidly acquired wealth, and in this prosperous state of affairs the North-West Passage seems to have been entirely forgotten, not only by the adventurers who had obtained their exclusive charter under this pretext, but also by the nation at large; for, with the exception of the resultless voyages of Wood and Flawes (1676), of Knight and Scroggs (1719-1722), Middleton (1741), and Moor and Smith (1746), we hear little more of Arctic Exploration for about a century.

Hearne, 1769.—But as the chief condition upon which the Hudson's Bay Company obtained their charter was "for the discovery of a new passage into the South Sea," it was necessary that they should either make some little exertion in aid of geographical discovery, or allow their legal right to the privileges conferred upon them to lapse. Accordingly, they undertook to make discoveries to the north-west of their inland sea by land, partly to explore a large river reported to run from that direction, on which a certain copper mine which figures largely in several of the explorations of America during the close of the last and the beginning of the present century was reported to exist, and partly for the sake of geographical science. For this service Samuel Hearne, a servant of the Company, was considered well qualified, and accordingly he set out on his journey from Fort Prince of Wales on 6th November 1769, crossed the Seal River, and travelled over the Barren Grounds. The weather, however, began to be exceedingly cold, soon all his provisions were expended and no supplies were to be obtained; the chief of the Indians who accompanied him wished to return, and ultimately leaving, Hearne was obliged to retrace his steps after reaching no farther than about the 64th degree of latitude. He arrived at the factory on the 11th December, having thus been absent only thirty-five days. Another abortive attempt was made in the spring of the following year, 1770; this second failure being due to a want of forethought and to imperfect preparations for a journey so important. Indeed, these ventures were undertaken in a careless, half-hearted way, which practically insured their failure—and they would have been altogether unworthy a place in our history were it not that they prepare the reader for one of the most daring and most fascinating expeditions ever undertaken by man,

namely, that of Franklin from the Hudson's Bay forts to the shores of the Polar Sea at the mouth of the Coppermine River (1819-1822); an expedition the unparalleled trials and sufferings of which might have been obviated had Hearne accomplished his preliminary journey successfully, and taken proper notes of his routes, observations of latitude, etc., as aids to those who were to follow him.

Setting out again in December 1770, to discover the situation of the copper mine, Hearne reached the Coppermine River on the 13th July; but gives neither the route to the stream nor the latitude of the spot at which he struck it. No sooner had he reached the river than a tragedy occurred which, though it wrought no harm to Hearne, was the cause of the acutest suffering, and might have proved the total destruction of Franklin and his gallant companions. The Indians that accompanied Hearne as his guides and hunters lived in constant hostility to the Esquimaux, and they now prepared to attack the latter in their tents. They approached their sleeping victims on the 17th July, about one o'clock in the morning. When the Indians found that all was quiet in the Esquimaux encampment, "they rushed forth from their ambuscade and fell on the poor unsuspecting creatures, unperceived till close at the very eaves of their tents, when they soon began the bloody massacre, while I," says Hearne, "stood neuter in the rear." The Esquimaux camp included about twenty persons, men, women, and children, who were all put to death in the most barbarous and inhuman manner — the Hudson's Bay Company's agent standing by and not even volunteering a remonstrance with the Indians in his employment, and with whom, from his connection with the Company, upon whom the Indians were dependent for supplies, it is natural to suppose he would have had considerable influence. The memory of this massacre was fresh in the minds of the Esquimaux, when Franklin came with his Indian guides to explore their country and to purchase their hospitality and good offices. Having reached and, in a slight, imperfect, and uncertain way, surveyed what he believed to be the sea at the mouth of the Coppermine River—although it is doubtful whether he did actually reach the sea—Hearne commenced his return journey.

CHAPTER IV.

SUMMER CRUISE BY SPITZBERGEN ROUTE—HORATIO NELSON ACTS AS CAPTAIN'S COCKSWAIN IN THE "CARCASS"—NELSON'S ADVENTURES IN THE SPITZBERGEN SEAS—CAPTAIN COOK IN THE ARCTIC REGIONS—CONCLUDING POLAR EXPEDITIONS OF THE EIGHTEENTH CENTURY.

Captain C. J. Phipps, 1773.—We have now arrived at the period when Arctic exploration, with the view to discover a route to the East Indies by the North Pole, first attracted royal attention. The route by the North Pole, first suggested, as we have seen, by Robert Thorne, merchant, Bristol, was suffered to remain without investigation from the days of Baffin to the year 1773, when the Earl of Sandwich, then First Lord of the Admiralty, in consequence of an application which had been made to him by the Royal Society, laid before George III. a proposal for an expedition to try how far navigation was practicable in a due direction, and the King was pleased to direct that it should be immediately undertaken, "with every encouragement that could countenance such an undertaking, and every assistance that could contribute to its success." Two of the strongest ships that could be obtained—the "Racehorse" and the "Carcass"—were selected as being best fitted for the purpose, and the command was given to Captain Constantine John Phipps, son of the first Lord Mulgrave, and who afterwards acceded to that title. Captain Skiffington Lutwidge was second in command; and the comparative completeness of this first royal expedition to the Polar seas may be estimated from the circumstances that two masters of Greenland ships were employed as pilots, and that an astronomer, recommended by the Board of Longitude, was employed and supplied with instruments of various kinds, and of the best description then in use.

The "Racehorse" and "Carcass" sailed from the Nore on the 10th June 1773. On the 27th they had an observation of the sun at midnight, which gave the lat. 74° 26′; and they soon afterwards reached the latitude of the south part of Spitzbergen, with a fair wind, without an increase of cold, and without any appearance of ice, or sight of land. Standing in toward the land on the 29th, they found the coast formed of "high barren black rocks, without the least marks of vegetation; in many places bare and pointed, in other parts covered with snow, appearing even above the clouds; the valleys

between the high cliffs were filled with snow or ice. This prospect would have suggested the idea of perpetual winter, had not the mildness of the weather, the smooth water, bright sunshine, and constant daylight, given a cheerfulness and novelty to the whole of this striking and romantic scene." On the 5th July, the latitude of Magdalena Hoek, on the west coast of Spitzbergen, was ascertained to be 79° 34′; and on the following day the expedition fell in with the main body of the ice, along which they stood, to ascertain whether it joined the land of Spitzbergen, or was so detached as to afford an opportunity of passing eastward. But the pilots and officers thought it impracticable to proceed in that direction, and predicted that they would soon be beset where they were, as this was about the spot where the most of the old discoverers had been stopped. On the 9th, having reached lat. 80° 36′, and having run along the edge of the ice from east to west above ten degrees, Captain Phipps "began to conceive that the ice was one compact impenetrable body." Stopped by ice towards the west, he now made several attempts to push his way eastward, but was arrested by finding the ice "locked in with the land, without any passage either to the northward or the eastward. Making a fourth, and a determined, effort, however, Captain Phipps passed Moffen Island, and, working in among the loose ice, reached as far north as 80° 48′, when he was stopped by the main body of the ice, which extended in a line nearly east and west.

At this stage of the expedition, a singular adventure took place, which brings the name of England's greatest naval hero into prominence, and is perhaps the first instance in which the bearer of it is known to have distinguished himself in his profession. A number of the officers from the "Racehorse" landed on a low, flat island in the mouth of Waygat Strait, near the *Seven Islands*, for the purpose of exploration. They found a number of large fir-trees lying on the shore, sixteen or eighteen feet above the level of the sea, and some of which had been torn up by the roots, others cut down with an axe, and notched for twelve-feet lengths. This timber, grown perhaps in the interior of Siberia, and swept downward by some swollen river of that region to the shores of the North Sea, whence it had drifted hither to Spitzbergen, was in no way decayed, nor were the marks of the hatchet in the least effaced. The beach appeared to them to be formed of old timber, sand, and whale bones, and the interior of the island seemed covered with moss, scurvy grass, sorrel, and a few ranunculuses, then in flower. In their wanderings, the officers came upon two reindeer feeding on the moss. One of these animals they killed, and found it fat and high in flavour. Returning to their boat, with only this deer to show for their sportsmanship, some of the officers caught sight of a walrus, or, as the huge double-tusked animal was named in those days, a sea-horse. The temptation to "bag" this monster of the Arctic seas was not to be resisted. Several

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of the officers fired, but the walrus, which cares for nothing under a rifle bullet, was evidently more provoked than hurt by the muskets of the "Racehorse's" officers. It raised its head leisurely, surveyed the enemy, then diving out of sight, in an inconceivably short time it reappeared, together with a herd of its fellows, and boldly charged the boat. Shots, blows with boat-hooks, and with such other weapons as were available, were of no effect in keeping the enraged monsters at a distance. It was known that if, for a moment, one of them could get his tusks over the gunwale, the boat would be crushed up like a nut in the jaws of a gorilla, and the officer staff of the "Racehorse" would be sent to the bottom, and would run the gantlet of a score of walruses on their way thither. And so near were these immense creatures to achieving this aim that one of them had wrested an oar from one of the men, and the staving in or upsetting of the boat was now merely a question of a few minutes' time. At this moment a cheer is heard coming across the smooth, mist-covered waters, and one of the boats of the "Carcass," attracted by the sound of the musketry, came rapidly forging its way. The "Carcass" crew were bending to their oars with a will, and in the stern of their boat, tiller in hand, stood a mere vision of a petty officer, a child almost in years, delicate-looking as a girl, but eager as flame itself, seeing everything at a glance out of those wide and wonderful eyes, and steering his vessel with unswerving precision into the very midst of the scene of action. The walruses, beholding the approach of this unexpected contingent, and subjected to a volley from the new-comers at close quarters, plainly concluding that they had been deprived of their legitimate prey, dived, and made off. And who was the boy-officer of the relieving boat? Horatio, afterwards Lord Nelson and Bronte, the hero of Trafalgar.

As Nelson in his later years was always ready to acknowledge the value of the training he received in Captain Phipps' expedition toward the North Pole, it will not be out of place here to give some account of how he came to be connected with that expedition. Born in 1758, at the age of twelve he was appointed midshipman on board the "Raisonnable," 64 guns, commanded by his uncle, Captain Suckling. Afterwards he was sent in a West India ship, under Mr John Rathbone, who had formerly been in the navy, in the "Dreadnought," with Suckling. "From this voyage," writes Nelson, "I returned to the 'Triumph,' at Chatham, in July 1772; and, if I did not improve in my education, I came back a practical seaman (at twelve years of age), with a horror of the royal navy, and with a saying then constant with seamen, 'Aft the most honour, forward the better man!' It was many weeks before I got in the least reconciled to a man-of-war, so deep was the prejudice rooted, and what pains were taken to instil this principle in a young mind! However, as my ambition was to be a seaman, it was always held out as a reward, that if I attended well to my navigation,

I should go in the cutter and decked longboats, which were attached to the commanding officer's ship at Chatham. Thus by degrees I became a good pilot for vessels of that description from Chatham to the Tower of London, down to the Swin and the North Foreland, and confident of myself amongst rocks and sands, which has been many times since of great comfort to me. In this way I was trained until the expedition towards the North Pole was fitted out, when, although no boys were allowed to go in the ships (as of no use), yet nothing could prevent my using my interest to go with Captain Lutwidge in the 'Carcass;' and, as I fancied I was to fill a man's place, I begged I might be his cockswain, which, finding my ardent desire for going with him, Captain Lutwidge complied with, and has continued the strictest friendship to this moment. Lord Mulgrave (Captain Phipps), whom I then first knew, maintained his kindest friendship and regard to the last moment of his life. When the boats were fitting out to quit the two ships, I exerted myself to have the command of a four-oared cutter *raised upon*, which was given me, with twelve men; and I prided myself that I could navigate her better than any other boat in the ship."

Young Nelson, the captain's cockswain, only fifteen years of age, but already a good seaman and skilful pilot, performed his work well in command of his cutter and twelve men. But the contempt for danger, the unconsciousness of which distinguished him throughout his life, led him into at least one scrape, which went very near cutting short the hero of the Nile and the Baltic. "One night," says Southey, "during the mid-watch, he stole from the ship with one of his comrades, taking advantage of a rising fog, and set out over the ice in pursuit of a bear. It was not long before they were missed. The fog thickened, and Captain Lutwidge and his officers became exceedingly alarmed for his safety. Between three and four in the morning the weather cleared, and the two adventurers were seen, at a considerable distance from the ship, attacking a huge bear. The signal for them to return was immediately made; Nelson's comrade called upon him to obey it, but in vain; his musket had flashed in the pan, their ammunition was expended, and a chasm in the ice, which divided him from the bear, probably preserved his life. 'Never mind,' he cried, 'do but let me get a blow at this devil with the butt-end of my musket, and we shall have him.' Captain Lutwidge, however, seeing his danger, fired a gun, which had the desired effect of frightening the beast; and the boy then returned, somewhat afraid of the consequences of his trespass. The captain reprimanded him sternly for conduct so unworthy of the office which he filled, and desired to know what motive he could have for hunting a bear. 'Sir,' said he, pouting his lip, as he was wont to do when agitated, 'I wished to kill the bear, that I might carry the skin to my father.'"

Meantime the progress made by Captain Phipps' expedition was not

very encouraging. On the 30th July the weather was exceedingly mild, fine, and clear. "The scene," writes the captain, "was beautiful and picturesque; the two ships becalmed in a large bay, with three apparent openings between the islands that formed it, but everywhere surrounded with ice as far as we could see, with some streams of water; not a breath of air; the water perfectly smooth; the ice covered with snow, low and even, except a few broken pieces near the edges; the pools of water in the middle of the pieces were frozen over with young ice."

At the close of July the ships were beset in the ice, which on the 1st of August began to press in fast and afforded not the smallest opening. Formerly flat and almost level with the water's edge the ice was now in many places forced higher than the mainyard by the pieces squeezing together They now tried to cut a passage out, but the ice being in some parts twelve feet thick, they met with but little success. There was but one alternative, either to wait the event of the weather upon the ships, or to betake themselves to the boats. The likelihood that it might be necessary to sacrifice the ships had been foreseen; the boats accordingly were adapted, both in size and number, to transport, in case of emergency, the whole crew; and there were Dutch whalers upon the coast, in which they could all be conveyed to Europe. As for wintering where they were, that dreadful experiment had been tried too often. The days of the improved construction of winter quarters had not yet arrived. No time was to be lost; the ships had driven into shoal water, having but fourteen fathoms. Should they, or the ice in which they were fast, take the ground, they must inevitably be lost. Captain Phipps had sent for the officers of both ships, and told them his intention of preparing the boats for going away. They were immediately hoisted out, and the fitting began. Canvas bread-bags were made in case it should be necessary suddenly to desert the vessels. On the 7th August they began to haul the boats over the ice—Nelson having command of his four-oared cutter. The men behaved exceedingly well. They seemed reconciled to the thought of leaving the ships, and had full confidence in their officers. About noon the ice appeared rather more open near the vessels; and as the wind was easterly, though there was but little of it, the sails were set and they got about a mile to the westward. Whatever exertions were made, it could not be possible to get the boats to the water's edge before the 14th; and if the situation of the ships should not alter by that time, it would not be justifiable to stay any longer by them. The commander, therefore, resolved to carry on both attempts together, moving the boats constantly, and taking every opportunity of getting the ships through. On the morning of the 10th August, "the wind," writes Captain Phipps, in his "Journal of a Voyage towards the North Pole," "springing up in the N.N.E. in the morning, we set all the sail we could upon the ship, and forced her through a great deal

of very heavy ice: she struck often very hard, and with one stroke broke the shank of the best bower anchor. About noon we had got her through all the ice and out to sea. I stood to the N.W. to make the ice, and found the main body just where we left it. At three in the morning, with a good breeze easterly, we were standing to the westward between the land and the ice—both in sight; the weather hazy." Captain Phipps' summer cruise to Spitzbergen was now practically at an end. He had coasted along the edge of the ice in the latitude of about 80°, seeking east and west for a passage to the north, but finding none. The season was now far advanced, and as fogs and gales were now constantly to be expected, it was resolved to bear up for England, at the shores of which the "Racehorse" and "Carcass" duly arrived on the 25th September. The ships were paid off, and young Nelson immediately joined the "Sea-Horse," 20 guns, and sailed for the East Indies in the squadron commanded by Sir Edward Hughes.

Of practical results, so far as Arctic exploration is concerned, the cruise of Captain Phipps was sufficiently barren. He states that the summer was uncommonly favourable for his purpose, because it "afforded him the fullest opportunity of ascertaining, repeatedly, the situation of that wall of ice, extending for more than twenty degrees, between the latitudes of eighty and eighty-one, without the smallest appearance of any opening." But it has since been abundantly proved that there are very few years in which there are not many openings in the wall of ice, which usually stretches between the eastern coast of Greenland and the most northern parts of Spitzbergen; and consequently the summer in which Captain Phipps tried here for a north passage to the Pole, instead of being favourable, was peculiarly and exceptionably unfavourable, as will be seen in the history of more recent expeditions in this direction.

Captain Cook, 1776-1779.—The destruction of the Spanish Armada by the English fleet under Lord Howard of Effingham and by a series of terrific tempests which crushed the ribs of the Spanish galleons against the rocky coasts of the Western Isles and of Ireland in 1588, had irretrievably ruined the maritime power of Spain, and had thus thrown all the seas open to England, which from this time became unquestionably the leading naval power of the world. There was now no longer a monopoly of trade with India and China, or rather, the monopoly of the commerce of these countries which had previously been enjoyed by Spain and Portugal, now passed in effect into the hands of England; and the trade between Britain and the East was further confirmed to British merchants by the formation of the East India Company by royal patents of Elizabeth in 1600. But though we had now been in command of the route to India by the Cape of Good Hope for many years, Englishmen had never lost sight of Sebastian Cabot's idea

of discovering a north passage to the East, and thus reaching India by a much shorter and less expensive route. In search of this route many endeavours in different directions had been made. It was now resolved to try for the unknown after a new plan. A North-West Passage from the Atlantic to the Pacific had been sought for by many navigators. It was now resolved to seek for a passage from the Pacific to the Atlantic. The famous Captain Cook, who had already twice circumnavigated the globe, and had revealed almost a new world in the discovery of the various archipelagoes of the Pacific, and who was believed by his countrymen to be able to carry out any naval enterprise, however difficult, to a successful issue, was accordingly selected to command the new expedition. The two vessels fitted out for this purpose were the "Resolution," in which Captain Cook sailed, and the "Discovery." As an incentive to discovery in the Polar seas, a reward, in terms of the Act of 18 Geo. II., of £20,000 had been offered to ships belonging to any of his Majesty's subjects, which should succeed in making a North-West passage, but it excluded the king's own ships, and a further condition was that the passage was to be one leading through Hudson's Bay. This Act was now so amended that the reward was offered to ships of the royal navy as well as to merchantmen, and might be claimed for "any northern passage" between the two great oceans. Cook's expedition, therefore, started with the double incentive to success, of honour and reward.

The "Resolution" and "Discovery" sailed from Plymouth Sound, 12th July 1776; and, after making various discoveries in the southern hemisphere, the Pacific, and the two coasts of Asia and America, they entered Behring's Strait, 9th August 1779. Several attempts were made to penetrate the ice, but fortunately without success; for it is certain that had Cook been beset in the wide and shelterless icy gulfs of the north-east coast of America, his expedition would have met the fate of Sir Hugh Willoughby in Lapland—would have perished to a man. His vessels were not fitted for such severe navigation, nor were his preparations at all suitable for spending a winter among the ice. After cruising about between the coasts of Asia and America and finding the ice fields advancing upon him from the north, Captain Cook stood away southward and finally reached the Sandwich Islands where, as is well known, this great navigator lost his life.

Concluding Expeditions of the Eighteenth Century.—Exploration in the eighteenth century may be said to have been brought practically to a close with the expedition of Captain Phipps, as the subsequent endeavours to reach high northern latitudes are comparatively resultless, and are not considered worthy of separate notice. In order, however, to connect our narrative of the history of the exploration of the last and of the present century, a few words about the expeditions referred to will suffice.

In 1776, Lieutenant Pickersgill was directed to proceed to Davis' Strait in the armed brig "Lion," for the twofold purpose of protecting the British whale fishers, who, since about the year 1625, had resorted to the Arctic seas, and to obtain such information as might be useful to the vessel which was to be sent out in the following year to look for Captain Cook about the time he might be expected to approach the eastern side of America, in the event of his having discovered a passage eastward from the Pacific. He penetrated no higher up Davis' Strait than 68° 10′, and, after a voyage, in which he added nothing to the geographical knowledge of his time, he returned to England in the autumn. He was superseded in the command of the "Lion" by Lieutenant Walter Young, who ran up the Strait as far as 72° 42′, and who, without assigning any reason whatever, except the number of the ice islands among which he found himself, turned his vessels southward, and bore up for England, where he arrived before the open season of the Polar seas was over. In 1789, Alexander Mackenzie, a servant of the Hudson's Bay Company, set out, under the auspices of that Company, to travel to the shores of the Polar Sea. He succeeded in discovering and descending the river which bears his name; but his journal is so unsatisfactory and equivocal that it remains an unsettled question to this day whether he actually penetrated to the mouth of the Mackenzie River in the Arctic Sea or was arrested on the shores of some lake or enlargement of its channel. In 1790, Mr Charles Duncan was employed to conduct an expedition for the discovery of the North-West Passage up Rowe's Welcome, one of the northern inlets of Hudson's Bay. Duped and frustrated by the Hudson's Bay Company, he was obliged to return, after two attempts to attain his purpose. His expedition was entirely fruitless; and thus ends the last expedition of the eighteenth century for the discovery of the North-West Passage.

It has been observed as something very remarkable "that our early adventurers, at a time when the art of navigation was in its infancy, the science but little understood, the instruments few and imperfect, in barks of twenty-five or thirty tons burden, ill-constructed, ill-found, and apparently ill-suited to brave the mountains of ice between which they had to force their way, and the dark and dismal storms which beset them, that these men should have succeeded in running through the straits to high latitudes, and home again, in less time than Mr Duncan required to reach one of the Hudson's Bay Company's establishments, the route to which was then as well known as that to the Shetland Islands."

CHAPTER V.

OUTBREAK OF AMERICAN WAR—THE FRENCH REVOLUTION—PROCLAMATION OF PEACE—ARCTIC EXPLORATION RESUMED—GROUP OF FAMOUS EXPLORERS—FRANKLIN'S FIRST ARCTIC VOYAGE—THE "DOROTHEA" AND "TRENT" SENT TO EXPLORE A PASSAGE ACROSS THE POLE—EARLY LIFE AND CAREER OF FRANKLIN.

Two years after the return of Captain Phipps from his summer cruise to Spitzbergen, an incident occurred which conclusively put an end to Arctic exploration for over forty years. Toward the close of the last century, the commerce and manufactures of our American colonies had already become great; and (in 1770) the taxes on industry imposed upon them, and maintained with blind obstinacy by the king and his ministers, were felt to be no longer bearable. The colonists had indulged themselves in an expectation that the people of Great Britain, from a consideration of the dangers and difficulties of war, would have preferred peace and a reconciliation; but when they were convinced of the fallacy of these hopes, they turned their attention to the means of self-defence. Prudence, policy, and reciprocal interest urged the expediency of concession on the part of England; but pride, false honour, and misconceived dignity drew in an opposite direction. Undecided claims and doubtful rights, which, under the influence of wisdom and forbearance, might have been easily compromised, imperceptibly widened into an irreconcilable breach. Hatred at length took the place of affectionate kinship, and the calamities of war were soon to supersede the benefits of commerce. Careful, however, not to strike the first blow, and thus incur the obloquy of having commenced hostilities, the Americans conducted their opposition to the measures of Government with exquisite address. They avoided every kind of outrage and violence, and preserved peace and good order among themselves, but at the same time made every possible preparation for the outbreak, which they perceived was inevitable. Bands of militia were being trained in the different districts, arms and ammunition were collected and stored in safe and convenient centres. Desirous of destroying a magazine of arms and powder, which had been formed at Concord, about twenty miles from Boston, the English general sent an expedition of grenadiers and infantry towards Concord in the spring of 1775. A troop of militia had

assembled at Lexington to oppose them. "Disperse, rebels!" cried Major Pitcairn to the militia, as he rode up in front of the royal troops, "throw down your arms and disperse!" The Lexington men still continuing to stand firm, Pitcairn rode nearer, fired his pistol in their faces, and ordered his men to advance. That pistol shot was the short and sharp inauguration of a cannonade that was to last for many years. There was now work enough for our fleet; and active service, which had prize-money and promotion to bestow, left no room for discovery and scientific research.

But with the outbreak of the American war the waning century had not delivered itself of its last message of woe to mankind. In 1789 took place the terrific explosion of the French Revolution, in which, said Burke, "the French proved themselves the ablest architects of ruin that had hitherto appeared in the world." From the date of the fall of the Bastile to that of Waterloo, Europe was one wide battlefield. Our fleets were now on every sea, striking our enemies in their colonies, harassing their commerce, and blockading their ports. From the Baltic and the Mediterranean the broad pendant of the British commodore was never absent. Around our own shores, too, an ever-watchful fleet constantly cruised, for Napoleon had threatened invasion. During all this time, the navy, to which the splendid victories of Nelson brought so much distinction, was the profession held in highest favour in England; and cadets from the noblest families were in every one of the king's ships before the war was brought to a close. One consequence of this love for the sea was that, when peace was proclaimed after Waterloo in 1815, the navy contained a great number of young officers of the highest ability and possessed of a boundless ambition to attain distinction. The conclusion of the wars with America and France in 1815 put an end temporarily to their hopes of earning fame in active service, and it was therefore with eagerness that many of these enterprising spirits heard proposals to resume certain schemes of exploration, which, laid aside on the outbreak of the war, began again to engage men's minds, now that Napoleon was safely caged in St Helena, and the war was at an end. Of these schemes, that of the discovery of a North-West Passage to the Pacific was the first and most important. This great question, which had engaged the attention of almost all the northern powers of Europe, in which much money had been ventured, many lives and vessels lost, and on which the public curiosity had been so deeply excited, it was now proposed to set at rest at once and for ever.

In view of all that had hitherto been attempted in the direction of discovering a North-West Passage, it was sufficiently evident that the great obstacle in the way of a route to the Pacific was the quantity of ice with which the northern seas were encumbered. It was not *land* that blocked the progress of the Arctic navigator. Between Nova Zembla and Spitz

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bergen, and between Spitzbergen and Greenland, no land had been seen to the north; while both Hudson's and Baffin's Bays showed numerous openings, which, if free from ice, might lead to the west. The ice, then, was the barrier, and any great change in its position, or any considerable modification in the degree of its compactness, might be a ground on which to base some hope of a passage. Again, the experience in seamanship obtained in every ocean during the forty years' war, and the great improvements that had been introduced in the construction of vessels, afforded some ground to expect that the obstacles that had been found insurmountable by our early voyagers in their weak vessels, and with their untrained and altogether inadequate crews, might be overcome by powerful ships, properly manned and equipped. And as there was also an opinion that this body of ice was merely a belt, beyond which, if it could be broken through, the sea would be found clear and navigable, vessels of the last-mentioned description were more likely to reach it than any that had hitherto made the attempt, with the exception of those under Captain Phipps, which were thought to have gone out in a peculiarly unfavourable season. "At all events," says Captain Beechey, "whatever arguments might have been founded upon the subject, and there were many, it was generally acknowledged that the time had arrived when the matter should be decided, or, at least, that the attempt should receive the benefit of that advancement of science and art which had been bestowed upon other experiments; and it was evident that it required only some little impetus to set the machine in motion for this attempt to become a great national undertaking."

In 1817, two years after the proclamation of the general peace, accounts of a change in the Polar ice, particularly favourable to the undertaking, were brought to England by our whalers. The Polar Sea was described as being remarkably open. This intelligence finally decided Government to send out in the following year a great expedition of four ships, two of which were to try to reach the Pacific by a northern route across the Pole, while the other two were to search for a western route through Baffin's Bay. This great twofold expedition is famous as including among its officers the most brilliant group of discoverers ever engaged on any similar mission. Among them were the two Rosses, Franklin, Parry, Buchan, Beechey, and George Back.

The four ships selected to form the expedition were the "Dorothea," "Trent," "Isabella," and "Alexander." Of these, the "Dorothea" and "Trent," commanded respectively by Captain Buchan and Lieutenant John Franklin, were directed to sail for Spitzbergen, and thence to seek for a passage northward to the Pole. Of Captain David Buchan of the Royal Navy, there is little to relate. For several years he had been serving on the coast of Newfoundland, and a short time previously to his appointment to the command of the Polar expedition—15th January 1818—he had distinguished

himself in charge of an expedition into the interior of that island. Though never engaged on any subsequent Arctic voyage of discovery, he continued to take a deep interest in every venture of the kind; and he afforded Franklin much assistance in fitting out his land expeditions. He was lost in his passage home in the "Upton Castle" Indiaman in 1838.

John Franklin, perhaps the greatest of all Arctic explorers, was born at Spilsby, in Lincolnshire, in 1786. He is described as a boy of well-knit muscular frame, with black eyes and dark hair, a frank and broad English countenance, lofty forehead, and well-formed chin, indicative of no ordinary amount of resolution. He first saw the sea on the Lincolnshire coast, and the first look of the ocean was a revelation which disclosed to him what he resolved should be his career. He had heard of the sea in his father's home at Spilsby; he had read of it in the old grammar-school of Louth; he had been told how upon that ocean the son of a country parson in an adjoining county was humbling the pride of England's enemy; and he now saw it and accepted it as his fate. He was a sailor from the moment he first beheld the sea.

With the view of disgusting him with a sailor's life, he was sent on board a merchant-ship, like Cook, Dampier, and Nelson; but the hardships of the merchant service failed to damp his enthusiasm, and the increasing change, the novelty and excitement of the profession were to him an unfailing charm. But Franklin's spirit aspired to something more adventurous than life in a merchant vessel. In his early years England was being thrilled with Nelson's great exploits, and the Royal Navy exercised a fascination over the minds of all young sailors. Franklin, boy as he was, felt the influence, and in 1800 he obtained an appointment as midshipman in the "Polyphemus," of 64 guns. Within a year the Lincolnshire boy shared in the terrible sea-fight off Copenhagen, in which the "Polyphemus" led the attack in the most gallant style. Soon after this first action Franklin was transferred to the discovery-ship, the "Investigator," commanded by the distinguished explorer Captain Flinders, a relative of the Franklin family. Here our hero obtained his early training in those scientific branches of his profession, his accomplishment in which, in his later days, contributed so much to his success as an explorer. For more than two years, as we learn from Admiral Sherard Osborne, the "Investigator"—an old, leaky, crazy vessel, such as in our days would not be deemed fit for the work of a collier—struggled along the coast of that island-continent of the Southern Ocean, which Flinders appropriately named "Australia." "It was a school of hardship and painful labour, yet not devoid of interest to the ardent young sailor, and in all probability it was in making these, the first discoveries of many a mile of coast, many a reef, many a haven, that Franklin's mind became first imbued with that sincere love of geographical exploration and maritime

discovery, which subsequently formed so prominent a feature in his professional career."

Flinders, Admiral Osborne informs us, was exactly the man to awaken such feelings in one so intelligent as John Franklin. He had been one of that company of navigators who won for England the honour of having really explored the great South Sea. He could tell of Otaheite, and of how our rough uncared-for seamen of that day forsook their king and their country, the pleasures and the duties of civilised life, for the love of its warm-hearted people. He had witnessed the ferocity of the Sandwich islanders, and could thrill his listeners with that awful hour of murder and cannibalism when Cook, the greatest of England's navigators, fell. He had weathered many a danger upon the inhospitable shores of the then unknown Australia, and had often navigated in high southern latitudes. He had in a small boat circumnavigated the stormy coasts of Van Diemen's Land, and shared with Bass the honour of discovering the strait which bears the name of the latter. The clever, modest, and unassuming Flinders formed the character of, and imparted much of his knowledge and information to, the youth, whose destiny it was in after-years to fall as the discoverer of the North-West Passage.

The old "Investigator" was at last condemned in 1803, and Franklin in company with his captain and shipmates transferred themselves to H.M.S. "Porpoise," for a passage to England. Sailing round the north coast of Australia the "Porpoise," in the darkness of the night of August 18, struck upon a reef, and in a few minutes was staved and dismasted. Franklin now found himself one of ninety-four souls, on a sandbank at a distance from the Australian shore of 180 miles. Help was not to be obtained nearer than at Port Jackson, distant 750 miles. Thither Captain Flinders proceeded in an open boat, and by a miracle succeeded in obtaining the means of returning and rescuing all his officers and crew.

But the adventures of the homeward voyage were not yet over. Having succeeded in reaching China, Franklin resolved upon returning home in one of the Honourable East India Company's ships from Canton. It had been arranged, for safety against French men-of-war, that a number of vessels should make the voyage in company; and on the 31st January 1804 a magnificent fleet of fifteen East Indiamen put to sea from Canton river, Franklin sailing in the "Earl Camden," Captain Dance, who acted as commodore of this famous argosy laden with "millions of pounds' worth" of silks and other products of China. Most of the vessels were painted with port-holes to resemble line-of-battle ships; and though they were not armed like men-of-war, their owners had furnished them with guns and men enough to make a good show of resistance in the event of their being attacked by French cruisers. On the 14th of February, sailing well together, they were shaping

their course for Malacca Strait, when a very surprising valentine came sailing over the waters to meet them in the shape of the "Marengo," a notorious French seventy-four, backed by three smart frigates, and commanded by Admiral Linois, one of the most intrepid French privateers of the day. Linois knows he has caught the great prize of these waters—the famous China fleet, with wealth enough on board to make himself and his followers independent for life. He bears down upon what he supposes to be the defenceless fleet of merchantmen, but is astounded to find, when he gets near enough, that the harmless traders are armed ships ranged in order of battle and ready from their hundred port-holes to give him a true British welcome. The Frenchman is considerably taken aback. He heaves to, uncertain whether this ship-shape squadron are really sheep in wolves' clothing, and half expecting that in the course of the night they will make sail, separate, and flee; but daylight finds them all as they had passed the night—at their quarters, guns shotted, and more prepared to do battle for the red flag that streams from their mizzen-peaks than on the previous day. Linois, more puzzled than ever, still hesitates, until the English bear away under easy sail. He then essays to cut off the rearmost ships. But the commodore is on the alert. He promptly throws out the signal, "Tack! bear down, and engage the enemy!" A cheer runs round the fleet of merchant sailors who at once prepare for action. This is altogether too much for the Frenchman, who now makes all sail away. Commodore Dance directs a general chase, and now is seen the singular spectacle of a French squadron of men-of-war, perfectly equipped, led by one of the most distinguished of the French admirals of that day, retreating before a fleet of armed merchant-ships!

Before another year had passed Franklin was signal midshipman on board the "Bellerophon," 74, and on the ever memorable 21st October 1805 he fought under Nelson at Trafalgar. "We see the Lincolnshire boy," says Osborne, "pass through all the phases from childhood to manhood, from the skylarking middy to the steady, trustworthy lieutenant—tempered in a school of patient perseverance, and not spoilt by constant success. He saw the failure at Flushing; he marked how the under-estimating of a foe brought down upon his profession the mischances of the American war; and in the disastrous attempt to capture New Orleans he was for the first time wounded."

Such was the man who at the age of thirty-one was appointed to the command of the "Trent," the attendant ship of the "Dorothea," commissioned to find a way across the Pole to the Pacific. How ignorant were the English Admiralty of that day of the all but impossible nature of the task!

CHAPTER VI.

FRANKLIN'S FIRST ARCTIC CRUISE—OBJECTS OF THE EXPEDITION OF THE "DOROTHEA" AND "TRENT"—HARD WEATHER WITHIN THE ARCTIC CIRCLE—THE FIRST ICE—THE SUN AT MIDNIGHT—SPITZBERGEN—FIRST VIEW OF THE PACK OR MAIN BODY OF THE ICE—THE ICE-BLINK—ARCTIC SCENERY—FIRST ENCOUNTER WITH THE WALRUS—A BAD NIGHT AMONG THE ICE—THE FIRST BEAR—DESPERATE ADVENTURE WITH BEAR—CUNNING OF BEARS—HABITS OF THE WALRUS—NARROW ESCAPE FROM A WALRUS HERD—THE CHANGING CONDITIONS OF THE ICE—CORAL BROUGHT UP FROM THE SEA-BOTTOM—CHARGING THE PACK—VESSELS RENDERED USELESS FOR MAIN OBJECTS OF THE EXPEDITION—CONCLUSION OF VOYAGE.

THE "Dorothea" (370 tons) and the "Trent" (a brig of 250 tons) were two stout but ugly whaling vessels, and to fit them in some degree for the hard knocks which were to be expected in the Polar Sea, as much wood and iron as could well be added to their original hulls was bolted on to and into them at Shadwell Dock. The expedition, says Captain Beechey—who sailed as lieutenant under Franklin and writes the account of the voyage—besides having for its object the determination of a geographical question of importance, was also of a scientific nature; and, being the only one of that description that had been fitted out by England since navigation had become, in the modern sense, scientific, a variety of suggestions and inventions, likely to prove useful on a service of such novelty, were submitted to the Admiralty and other departments of the Government. The peculiarity of the proposed route afforded opportunities of making some useful experiments upon the elliptical figure of the earth; on magnetic phenomena; on the refraction of the atmosphere in high latitudes under ordinary circumstances, and over extensive masses of ice; on the temperature and specific gravity of the sea at the surface and at various depths; and on meteorological and other interesting phenomena; to all of which Captain Buchan was to pay particular attention.

Two years' provisions and numerous stores, in addition to those usually supplied to men-of-war, were embarked in each ship, and the expedition being complete in its equipment, and having dropped down the Thames, Captain Buchan received his instructions and set sail on the 25th April.

The port of Lerwick was reached on the 1st and left on the 10th of May; on the 14th the Arctic circle was crossed, and on the 18th the expedition had reached the parallel of 72° 36′ N. Up to this period the weather had been so moderate that the ships had not so much as reefed a topsail; but the aspect of the sky now became changed, sail after sail was gradually reduced, as the breeze freshened, until storm staysails only were presented to the increasing gale and the ships were burying their gunwales deep in the wave. A cold wind now swept down from the north coating the sails and cordage with ice and covering the decks with snow. The curiously formed snow-flakes that fell were examined with much curiosity. They were crystallised nearly as hard as hailstones, and were formed into figures of from four to twelve rays and into other regular figures, some of which were of the most delicate and beautiful appearance.

Cherie Island, a small uninhabited isle in lat. 74° 33′ N., and long. 17° 44′ E., nearly midway between Spitzbergen and Norway, was seen on the 24th, deeply buried in snow, and shortly afterwards was observed an extensive field of ice sweeping from the northern extremity of the island—round the horizon in the direction of Spitzbergen in a compact body. From the neighbourhood of Cherie or Bear Island the expedition stood away northward toward the South Cape of Spitzbergen. In shaping this course it was necessary to pass through a wide belt of loose ice that had been disengaged from the main body. To such of the crew as had not before visited the Arctic regions the scene that now presented itself was novel and interesting; and the huge masses of ice, as they floated in succession past the vessels, were regarded with peculiar attention, partly on account of their grotesque shapes, but chiefly because they enabled the voyagers to form some judgment of the nature of the barrier which might ultimately present itself to their progress. The streams through which the course of the vessels lay consisted of small floes and pieces of ice, sufficiently detached in general to admit of a ship sailing between them, but occasionally interposing material obstructions to their passage. The progress of a vessel through such a maze of frozen masses is one of the most interesting experiences of the young Arctic explorer, and many of the officers and men of the "Dorothea" and "Trent" remained out of their beds at a late hour to enjoy the novel scene. There was also, at this time, an additional motive for remaining up. Very few in the expedition 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 along the northern horizon, was an object of imposing grandeur, which detained upon the deck numbers of the crews who would have beheld with indifference the less imposing effect of an iceberg. The novelty of the appearance of the floating masses was wonderfully heightened by the singular and beautiful effect produced by the very low altitude at which the sun cast

his ruddy beams over the icy surface of the sea. The rays were too oblique to illuminate more than the inequalites of the floes, and falling thus partially on the grotesqûe 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, grottoes, and caves glittering here and there as if with coloured gems and gold.

The streams of ice between which the vessels at first pursued their winding course became gradually narrower until it became necessary to charge the ice that hampered the way; but some of the masses were immovable, and the vessels glanced off and ran into the opposite bank of the channel. The ice-stream was crossed, however, during the night of the 25th, and on the following day the southern promontory of Spitzbergen was in sight; its dark, pointed mountain-summits rising majestically above beds of snow and giving a blank and dreary aspect to the coast. A heavy gale from the south-west struck the ships on the 28th, and parted them. The "Trent" ran before the gale, but towards the evening of that day the sight of many heavy pieces of ice led Franklin to conjecture that the *pack* was not far distant, and that consequently there was danger ahead. He therefore gave orders to round-to until the wind should moderate.

Rigorous Arctic weather now came on. The snow fell in heavy showers and several tons weight of ice accumulated on the sides of the "Trent," and received an additional layer every time the brig made a plunge. Everything was covered with a ragged, icy fringe; and "so great was the accumulation about the bows," says Beechy, "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." When the fog cleared off in the morning it was perceived that the ice in which the brig had been beset, was really, as had been feared, part of the main body or *pack*, and that they had all reason to be devoutly thankful for Franklin's precaution in rounding-to the previous evening before the vessel had actually driven on to the pack; for had they encountered this main body of ice in thick weather and whilst running before a gale of wind, there would have been very little chance of saving either the vessel or her crew.

Having again fallen in with the "Dorothea" at Magdalena Bay, the appointed place of rendezvous on the west coast of Spitzbergen, the expedition, according to Government instructions, now stood away to the northward and again saw the main body of ice, quite compact as before, and extending round the northern horizon "in one vast unbroken plain, con-

nected so closely with the shore as to leave no passage whatever for a vessel." This immense barrier of ice which had hitherto closed the door to all northern discovery, and into which Phipps had vainly endeavoured to find an inlet in 1773, was examined by Franklin and his officers with intense curiosity. It was found to be composed of masses too heavy to be turned aside by the bows of the vessels, and too thick and broad to be operated upon by the ice-saws, with which the expedition was provided, with any chance of success. But, nevertheless, it was not the solid continent of ice described by Phipps, and hopes were still entertained that some opening into it would present itself before long, and enable the ships to advance. Meanwhile it was resolved to occupy the present time by taking a survey of Magdalena Bay, which was accordingly done.

The head of the bay is marked by a lofty pyramidal mountain of granite, called Rotge Hill, from the myriads of the small birds called rotges which frequent its base. These birds were so numerous that an uninterrupted line of them was seen extending half-way across the bay to a distance of three miles, and so close together that a single shot brought down thirty of them. This living cloud was estimated to be six yards broad and as many deep, so that, allowing sixteen birds to the cubic yard, there must have been nearly four millions of birds on the wing at one time. This number seems large, but when we add that the little rotges rise in such numbers as completely to darken the air, and that their chorus is distinctly audible at the distance of four miles, the estimate will not be thought overstated.

The principal features of Magdalena Bay are its four immense glaciers, formed upon the land by accumulations of frozen snow, and gradually creeping down upon the shore and casting off immense masses of ice (icebergs) from time to time. The largest of the glaciers, "Waggon Way," presented a perpendicular surface of three hundred feet, and was a thousand feet in length. Nevertheless, upon so gigantic a scale is all nature around, that this glacier does not create much astonishment in the mind of the beholder until he approaches within the influence of the *ice-blink*, or luminous haze which is invariably radiated by large frozen masses. Within this influence the wall of ice has an awfully grand appearance, heightened by a sense of the personal danger to which so near an approach exposes the spectator; for large pieces occasionally break away from this body and do much mischief. The soft blue tint of the surface of the ice is here also clearly discerned, whilst the long sparkling icicles pendant from the roofs of the caverns into which it is hollowed, add greatly to the interest of its appearance. On a perfectly calm day, when the blink of the ice is strong, a curious illusion is produced by the combined effect of the appearance of the ice below the water with the reflection of the ice-walls that tower above it. The sea presents a white creamy appearance. The seals sporting on its surface seem

to be swimming in a thick milky substance; and the ripple, as it sweeps along, rises in long white lines, so that it is only in looking perpendicularly upon the water that the transparency is perceived, and the illusion detected.

But it is in the region within the Arctic circle that nature seems especially to delight in illusions, and rapid, and marvellous changes. In cloudy or misty weather, when the hills are clothed with newly fallen snow, nothing can be more dreary than the appearance of the shores of Spitzbergen. But on the other hand, it is impossible to conceive a more brilliant and lively effect than that which is produced on a fine day, when the sun shines forth and blends its rays with that peculiarly soft, bright atmosphere which overhangs a country deeply bedded in snow, and with a sky more intensely, purely blue than is seen in any other region. On such a day the winds are light, and the shores teem with living objects. All nature acknowledges the glorious sunshine. Such a day rose over the "Dorothea" and "Trent," in Magdalena Bay, on the 4th June 1818. The various amphibious animals and the myriads of birds which had resorted to the place, seemed to enjoy in the highest degree the change to sunny weather. From an early hour in the morning until the period of rest returned, the shores around reverberated with the cheerful cries of auks, willocks, divers, cormorants, gulls, and other aquatic birds, the huge-bearded walruses basked in the sun and mingled the roar, by which they express gratification and contentment, with the husky bark of the seal. When the hour of sunset arrived, all sounds of bird and beast at once ceased, and perfect silence prevailed, interrupted only by the reverberated boom of a burst iceberg, or the crash of some falling fragment of rock split off from the main mass by the action of the frost.

"In the day time," says Beechey, "the presence of our expedition was not disregarded. The birds shunned us in their flight, and every noise which was occasionally made, sounding strange to the place, sent to a greater distance the sea-gulls that were fishing among the rocks, and kept on the alert whole herds of animals, many of which would otherwise have been lost in sleep; causing them to raise their heads when anything fell upon our deck, and to cast a searching look over the bay, as if to inquire whence so unusual a disturbance proceeded. When we first 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 assunder with their tusks. The wounds that were inflicted only served to increase their rage, and, I frankly admit, that when I considered how many miles we were from our vessel, and what might be the result of this onset, I wished we had the support of a second boat; we continued, however, to keep them off with our firearms, and fortunately came off without any accident. When we afterwards came to anchor, we went

better provided, and succeeded in killing several of these animals upon the ice at the head of the bay."

Some of the walruses captured were found to be fourteen feet in length, and nine feet in girth. In the inside of several, round granite pebbles, larger than walnuts, and occasionally over twenty in number, were found. The hide was so tough that a bayonet was the only weapon that could pierce it.

Leaving Magdalena Bay on the 7th, the expedition revisited the main body of the ice, but found it as firm and compact as it had been when before examined. Coasting along the margin of the ice, the breeze suddenly deserted the vessels, and, as there was a heavy swell rolling up from the south-west, they were driven into the pack. A light breeze springing up from over the ice, they were released from their most perilous situation, and regained the open sea. In an hour's time, however, they were again becalmed, and again were they driven among the ice. The swell had now materially increased, and rolled in upon the pack most furiously. The great masses along the margin of the ice were at one moment wholly immersed in the sea, and the next soared up on the crest of a roller, while the broken fields beyond the margin rose and fell in the most threatening manner as the advancing wave forced its way along. This see-saw motion was alarming not only in appearance, but in fact; and must have proved fatal to any vessel that 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, called *brash ice*—which extended to the depth of five feet.

In this dangerous situation Franklin endeavoured to get the bow, the strongest part, of the "Trent," placed 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 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 have rescued any person from the confused moving mass of brash ice which covered the sea in every direction. As the "Trent" advanced, the brash ice thickened until it became impenetrable. In this most perilous position on the edge of the pack, the vessel passed the night. To add to the danger and discomfort, she was found to leak, and the well was discovered nearly full of water. Fortunately a north breeze took the brig into the open sea next morning, and, meeting the "Dorothea," the two

made sail westward to reconnoitre the state of the ice in that direction. Nothing was to be done on this tack, for, meeting with a number of whalers, the expedition learned that the ice was quite compact to the west, and that fifteen vessels were beset in it. Captain Buchan and Lieutenant Franklin now shaped their course to the east, and kept near the land of Spitzbergen.

On the 10th June they made Prince Charles' Island, and on the following evening they were close to the ice off Cloven Cliff. The pack was still impenetrable, but it was some satisfaction to observe that the margin was removed several miles to the northward of its former position, and that there was a channel of water between it and the land. As the season was advancing, it was necessary at once to take advantage of this channel to get to the northward, and so carry out, in part at least, the instructions of the Admiralty. The ships accordingly passed Cloven Cliff, a remarkable isolated rock which marks the north-western angle of Spitzbergen. For some time the expedition steered along an intricate channel between the land and the ice, but scarcely had they passed Red Bay, so named from the colour of its cliffs, when, at two in the morning of the 12th June, the further advance of the vessels was stopped, and the channel by which they had entered became so completely closed up as to preclude the possibility of retreating. There was now danger and threatened destruction on every side. The ice pressed in heavily upon the brigs; a "nip" was imminent, which might either cut the vessels through or close above or below them; the water was shallow, with a rocky bottom, and a drift with the ice would have torn away the hulls of both. It was on this part of the coast of Spitzbergen that Hudson, Baffin, Poole, and almost all the early voyagers, had been stopped. Both vessels were now hauled into small bays in the floe formed by the change of tide, and secured there by ice anchors, and thus they remained for thirteen days. While thus moored to the ice the leak of the "Trent," formed by a bolt-hole having been left open, was found, and the opening effectually closed. A travelling party set out from the "Dorothea" to reach the shore at a distance of three or four miles; but they had not traversed half the distance when they were enveloped in a fog, lost their way, and after vain efforts to find their way back to the ship, had sat down on the ice to die—which they must have done within a few hours from the effects of fatigue and exposure—when a rescuing party found them and conducted them back.

Time now hanging heavy on the hands of the expedition, they resolved to have some sport. They burnt a quantity of walrus fat to attract any stray bears that might be ranging the ice in the neighbourhood. About midnight one of these ferocious animals was seen to draw his huge carcase out of the water and slowly approach the ships. The sight of the tall masts seemed to alarm him a little, for he occasionally hesitated, threw up his head, and seemed half inclined to turn round and be off. But the smell of the burnt

fat was too enticing, and he came on within range of the muskets. "On receiving the first shot," says Beechey, "he sprang round, uttered a terrific growl, and half raised himself upon his hind legs, as if in expectation of seizing the object that had caused him such excruciating pain; and woe to any human being who had at that moment been within reach of his merciless paws! The second and third balls laid him writhing upon the ice, and the mate of the "Dorothea" jumped down out of the vessel and endeavoured to despatch him with the butt-end of his musket. His gun, however, broke short off and for a moment left him at the mercy of his formidable antagonist, who showed, by turning sharply upon his assailant and seizing him by the thigh, that he was not yet mastered; and he would most certainly have inflicted a most serious wound, had it not been for the prompt attack of two or three of the sailors, who had followed the mate. The animal was by no means one of the largest of his species, being only six feet in length, and three feet four inches in height. His stomach was quite empty, *with the exception of a garter, such as is used by Greenland sailors to tie up their boat stockings!*" Alas! poor Greenlander!

An extraordinary bear adventure which took place in Nova Zembla during the second voyage of Barentz, is related in "Purchas his Pilgrimes," and may be inserted here.

"The 6th of September some of our men went on shore, upon the firme land to seek for stones, which are a kind of diamond, whereof there are many also in the States' Island, and while they were seeking the stones, two of our men lying together in one place, a great leane white beare came suddenly stealing out, and caught one of them fast by the neck; who not knowing what it was that tooke him by the necke, cryed out and sayed 'Who is it that pulls me so by the necke?' Wherewith the other that lay not farre from him, lifted up his head to see who it was; and, perceiving it to be a monstrous beare, cryed out and sayed, 'Oh mate! it is a beare;' and therewith presently rose up and ran away.

"The beare at the first falling upon the man bit his head in sunder, and suckt out his blood; wherewith the rest of the men that were on the land, being about twenty in number, ranne presently thither, either to save the man, or else to drive the beare from the body; and having charged their pieces, and bent their pikes, set upon her, that still was devouring the man, but perceiving them to come towards her, fiercely and cruelly ranne at them and got another of them out from the company, which she tore in pieces, wherewith all the rest ran away. We perceiving out of our ship and pinnasse that our men ranne to the sea-side to save themselves, with all speed entered into their boats and rowed as fast as we could to relieve our men. Where, being on land, we beheld the cruell spectacle of our two dead men that had been so cruelly killed and torne in pieces by the beare. We, seeing

that, encouraged our men to goe back again with us, and with pieces, curtelaxes, and halfe-pikes, to set upon the beare, but they would not all agree thereunto; some of them saying, our men are already dead, and we shall get the beare well enough though we oppose ourselves into so open danger; if we might save our fellowes' lives, then we would make haste; but now we need not make such speed, but take her at an advantage, for we have to doe with a cruell, fierce, and ravenous beast. Whereupon three of our men went forward, the beare still devouring her prey, not once fearing the number of our men, and yet they were thirtie at the least; the three that went forward in that sort were Cornelius Jacobson, William Geysen, and Hans Van Miflen, William Barentz, purser; and, after that the sayd master and pylat had shot three times, and mist, the purser, stepping somewhat further forward, and seeing the beare to be within the length of a shot, presently levelled his piece, and discharging it at the beare, shot her into the head, between the eyes, and yet she held the man still fast by the necke, and lifted up her head with the man in her mouth; but she began somewhat to stagger, wherewith the purser and a Scottish man drew out their curtelaxes and strooke at her so hard that their curtelaxes burst, and yet she would not leave the man; at last William Geysen went to them, and with all his might strooke the beare upon the snout with his piece, at which time the beare fell to the ground, making a great noise, and William Geysen leaping upon her cut her throat."

Moored to their ice-floe, unable on the one hand to reach land, and on the other to work their way into the open sea, the officers and men of the "Dorothea" and "Trent" found their most interesting occupation in watching the habits of the strange animals who sported about in the pools around the ships or basked on the ice in the sun. On one occasion a walrus rose in one of the pools close to the ship, and finding everything quiet, dived down and brought up its young, which it held to its breast by pressing it with its flipper. In this manner it moved about the pool, keeping in an erect posture, and always directing the face of its progeny toward the vessel. On the slightest movement on board, the mother released her flipper and pushed the young one under water; but when everything was again quiet, brought it up as before, and for a length of time continued to play about the pool to the great amusement of the seamen, who would have it that the old walrus was instructing her infant in the mysteries of British sea-craft.

The following story told by Lieutenant Beechey of the "Trent" attests the very great cunning of the Polar bear: "Bears, when hungry, seem always on the watch for animals sleeping upon the ice, and endeavour by stratagem, to approach them unobserved; for, on the smallest disturbance, the animals dart through holes in the ice, which they always take care to be near, and thus evade pursuit. One sunshiny day a walrus, of nine or ten

feet in length, rose in a pool of water not very far from us, and after looking round, drew his greasy carcase upon the ice, where he rolled about for a time, and at length laid himself down to sleep. A bear which had probably been observing his movements, crawled carefully upon the ice on the opposite side of the pool, and began to roll about also, but apparently more with design than amusement, as he progressively lessened the distance that intervened between him and his prey. The walrus, suspicious of his advances, drew himself up, preparatory to a precipitate retreat into the water, in case of a nearer acquaintance with his playful but treacherous visitor; on which the bear was instantly motionless as if in the act of sleep, but after a time began to lick his paws and clean himself, and occasionally to encroach a little more upon his intended prey. But even this artifice did not succeed; the wary walrus was far too cunning to allow himself to be entrapped, and suddenly plunged into the pool, which the bear no sooner observed than he threw off all disguise, marched toward the spot, and followed him in an instant into the water, where I fear he was as much disappointed in his meal as we were of the pleasure of witnessing a very interesting encounter."

Unfavourable weather continuing to prevail, the vessels remained moored to the floe and subject to occasional "nips" from the freezing water. The "Dorothea" was subjected to enormous pressure, and the field of ice to which she had been attached being rent and thrown up, one fragment was found to bear the exact impression of the planks and bolts of the vessel's bottom.

In the Arctic seas the ordinary agencies of nature are limited in the most curious manner. While it was blowing a gale of wind at sea, the ships moored to the ice-field were so perfectly becalmed that the vane at the mast-head was scarcely agitated. There was also a most marked difference in the state of the atmosphere over the packed ice and that over the open sea. Over the ice the sky was perfectly cloudless; while the sea was overcast with stormy-looking clouds, which passed heavily along with the gale, until they reached a line nearly perpendicular to the edge of the packed ice. But at this point or line of demarcation of the two atmospheres, it was curious to mark the rapid motion of the clouds to the right or left, and how immediately they became condensed or were dispersed on arriving at it; and although masses of clouds were continually borne towards the spot by the impetuosity of the tempest, the line of termination did not encroach upon that of the serene atmosphere overhanging the pack. This contrast between the two atmospheres, so remarkable in cloudy weather especially, is termed the ice-blink, and enables the experienced mariner to judge of the nature and position of the ice even at a distance.

On the north-west coasts of Spitzbergen the effect of a south-west gale is

first to pack the ice closely, and then to drive it bodily to the northward. But as soon as the gale abates, the ice shows wonderful elasticity—the floes separate, the prevailing current resumes its wonted course, and the ice, breaking up in every direction, may be seen travelling at a great rate. Accordingly, when on the 23d a north-east breeze sprang up, the leader of the expedition took immediate advantage of it to extricate the vessels that had been beset for thirteen days. In the hope, however, that this north wind would disclose some opening into the ice, the vessels after regaining the open sea kept close to the edge of the pack. Approaching Cloven Cliff the ice was found drifted close down upon the land, and a calm ensuing, the vessels were again stationary and idle. Several herds of walrus being seen on the loose ice near the pack, permission was given to the boats to go in pursuit of them.

At the time of the expedition under consideration, walrus were much more numerous on the western coast of Spitzbergen than in Baffin's Bay, or in any other quarter of the northern seas with which voyagers of that day were familiar; and it was their habit to congregate in herds numbering over a hundred animals, on the large pieces of ice near the edge of the main body. In these situations, says Beechey, they appear greatly to enjoy themselves, rolling and sporting about, making the air resound with their bellowing, which bears some resemblance to the bellowing of a bull. These diversions generally end in sleep, during which these wary animals take the precaution of appointing a sentinel to warn them of danger. So universal is the observance of this precaution that Captain Beechey scarcely ever saw a herd, however small, in which he did not notice one of the party on the watch, stretching his long neck in the air every half minute, to the utmost extent of its muscles, to survey the ground about him. In the event of any alarming appearances, the sentinel immediately seeks his own safety; and as these animals always lie huddled upon one another, the motion of one is immediately communicated to the whole group, which is instantly in motion toward the water. The pell-mell, head-and-heels rush to the water is a most ludicrous scene when the herd is a large one. From the unwieldy figure of the animals the state of fear into which they are thrown, and their lying so closely packed together, they tumble over one another, get angry, and in their endeavour to regain their feet, flounder about in each other's way, till having at last scrambled to the edge of the ice, they plunge into the water head first when they can, but in any and every position possible in which they may have been able to walk, roll, or stumble to the edge of the ice. The *gallop* of the sea-horse is probably the most awkward motion that is exhibited by any animal tribe, from the great difficulty of bringing the hind feet forward, arising from the immense weight of the animal and the great disproportion between the length of their bodies and their legs. In order to facilitate the

bringing up of the hinder parts of the body, the head is alternately lowered and raised, and the pliant, blubber-covered body heaved forward with a wavy motion, which reminds one of the hurried movement of a large caterpillar—a ludicrous association, that tends to heighten the grotesque effect.

On the evening of the 27th the walrus herds having squatted on the ice to enjoy the fine sunny evening and rest themselves after their exertions during the recent gale, the boats properly manned and equipped were sent off in pursuit of them. One herd was marked as giving its mind so entirely up to the enjoyment of "life's glad moments," that it could be approached without any alarm being raised. A number of men had landed on the sheet of ice on which the playful creatures were disporting, but at the discharge of the first musket the entire herd commenced such a furious stampede that they nearly overturned the whole of the party from the "Trent" placed to cut off their line of retreat. On went the walrus through the broken ranks of the seamen, until, reaching the edge, they performed their slow and ungainly summersault into the sea. Their impetuous charge had somewhat bewildered the men, and what with the extreme toughness of their skin and the respectful distance at which the sailors were obliged to keep to avoid the lashing heads and tusks of the animals, the herd escaped to the sea almost uninjured. One, however, was desperately wounded on the head with a ball, and the mate of the brig, being determined if possible to secure him, resolutely struck his tomahawk into the beast's skull, but the enraged animal, with a toss of his head, sent the weapon whirling in the air, and then lashing his neck, as though he would destroy with his immense tusks everything that came in his way, effected his escape to the water. The seamen followed and pushed off in their boats, but the walrus, finding themselves more at home now than on the ice, in their turn became the assailants, and the affair began to assume a serious aspect. They rose in great numbers on all sides, snorting with rage and rushing at the boats, and it was with the utmost difficulty they were prevented upsetting them or staving them in by placing their tusks upon the gunwales, or striking at them with their heads. "It was the opinion of our people," says Captain Beechey, "that in this assault the walruses were led on by one animal in particular, a much larger and more formidable beast than any of the others; and they directed their efforts more particularly towards him, but he withstood all the blows of their tomahawks without flinching, and his tough hide resisted the entry of the whale lances, which were unfortunately not very sharp, and soon bent double. The herd were so numerous and their attacks so incessant, that there was not time to load a musket, which indeed was the only mode of seriously injuring them. The purser fortunately had his gun loaded, and the whole crew being now nearly exhausted with chopping and sticking at their assailants, he snatched it up, and thrusting the muzzle down the throat of the leader, fired into his body.

The wound proved mortal, and the animal fell back amongst his companions, who immediately desisted from the attack, assembled round him, and in a moment quitted the boat, swimming away as hard as they could with their leader, whom they actually bore up with their tusks, and assiduously preserved from sinking. Whether this singular and compassionate conduct, which in all probability was done to prevent suffocation, arose from the sagacity of the animals, it is difficult to say, but there is every probability of it; and the fact must form an interesting trait in the history of the habits of the species."

Walrus-hunting, stalking reindeer, and shooting wildfowl, with which the bay abounded, occupied the time till the 6th July, when, finding that the ice had been driven northward, Buchan put to sea and sailed in that direction as far as 80° 15′; the ships in their progress, however, being often heavily struck by masses of ice. On the 7th an opening was discovered, and Captain Buchan crowding all sail on the "Dorothea," pushed boldly into it, followed by Franklin in the "Trent." The ships continued to advance rapidly along the narrow channels between the floes, trimming their sails at each turn of the canal, and receiving occasional assistance from a light line cast to the men, who had gone out on the ice, and whose exertions were necessary to check the bow or quarter of the vessel, and otherwise assist the helm when the turnings of the channel were abrupt, or to prevent the vessels falling to leeward when their way had been deadened by the resistance of some heavy piece of ice against which they had struck. "A proficient in the art of marine drawing," says Beechey, "might here have found a beautiful subject for his pencil. The endless and ever varying forms of the ice; the glassy smooth canals winding among the floes, and reflecting the bright blue colour of their banks; the vessels in various positions, trimming their sails to maintain their course; groups of figures busily occupied upon the ice; and many other objects which would have presented themselves to a practised eye, would have supplied materials for a picture, which I shall not spoil by attempting to describe."

So rapid and unexpected are the climatic changes in these seas, however, that before the evening of the same day the channels had all but closed. Determined not to be beaten when there yet remained the smallest chance of pushing north, Captain Buchan ordered out his men, and commenced warping the vessels through the ice wherever the smallest opening presented itself. This was done by fixing large ropes by iron hooks driven into the ice, and heaving upon them with the windlass; a party of men being employed at the same time in freeing the forefoot of each vessel, by removing obstructions in the channel with saws. At last progress was finally arrested by the closing of the channels in latitude 80° 37′ N., the most northerly position reached by the expedition.

The vessels now began to drift with the ice to the southward, and though two most laborious days were spent in dragging to the north, the labour was thrown away, for the current set so fast to the southward, that ground was gradually being lost, and the latitude by observation was found to be 80° 20′. Here the vessels were again beached.

In order to understand more completely wherein the danger of the navigation of those seas consists, it will be necessary, at this stage, to describe as briefly as possible what were the principal characteristics of the ice, and the changing conditions to which they were subject. Westerly and southerly winds were prevailing, and occasionally, as at the change of the tide, the ice-fields would be subjected to such a pressure, that their edges would meet, crush together, and be crumbled to atoms; the bay or newly formed ice would slide upon and form a layer *over* the field that was in contact with it; immense hummocks would be overset and sometimes forced under water; and in other parts, again, fragments would be piled up thirty or forty feet in height. As nothing made of wood can withstand these "nips," a vessel, if caught, must either be crushed or rise and allow the ice to advance under it, until its opposing fields meet. Unless a vessel is very heavily laden, and lies low in the water—in which case it will be cut in two or buried altogether, crew and all, unless the latter are alert enough to leap upon the advancing ice—the wedge-like shape of a vessel is favourable to her rising. On the evening of the 10th, the "Trent" sustained a nip which threw her up four feet, and made her heel over four streaks; and on the 15th and 16th, both vessels were again squeezed and suffered damage, especially the "Dorothea," which was a longer and more wall-sided vessel than the "Trent." On that occasion an ice-field fifteen feet in thickness was broken up, and the pieces piled upon each other to a great height, until they upset, rolling over with a tremendous crash. The vessels fortunately rose to the pressure, else they must have had their sides staved in. As it was, the "Trent" received great damage upon her 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 stern-post was moved three inches, and her timbers cracked to a most serious extent. The "Dorothea" suffered still more severely. A number 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 the hull. The vessels only righted and settled in the water to their proper draft at the next change of tide.

Sounding on the 19th, they found 300 fathoms, and brought up with the lead several specimens of living zoophites, a star-fish, a lobster, a piece of sponge, and *a branch of dead coral attached to a stone.*

How came that coral into these high latitudes was a question which much puzzled the officers of both ships. It was of a species the growth of

which is generally limited to mild waters, yet here it was found at a very great depth, and in latitude 80° N. There was no known current in the Atlantic, by which this branch of coral could have been transported from the place of its growth to the shores of Spitzbergen; and even if there was such a current, the uninjured and perfect condition in which it was found, was conclusive proof that it could not have been so transported. The inference, therefore, seems to be, that the specimen was reared near where it was found, and that either the coral insect is capable of enduring a greater degree of cold, and has a wider range of habitation than is generally supposed, or else that the temperature of the Polar region has undergone a very considerable modification. As we proceed in our history, we shall have to return to this most interesting subject, and shall have to state a number of surprising facts which seem to point to the conclusion that the climate of the lands and seas within the Arctic circle was at one time considerably more temperate than it subsequently became.

The weather cleared up on the 19th, but the prospect of advancing to the north was as unpromising as ever. It was therefore resolved that the ships should endeavour to force their way out from the ice to the open sea, from which they were now about thirty miles distant. They therefore loosed from the ice-floe to which they had been attached, and commenced warping the ships in the desired direction; but, after five hours' hard labour, they had only advanced southward one mile. It took nine days' constant work, day and night, to extricate the ships.

Hopeless of finding a northern route close to the shores of Spitzbergen, Captain Buchan resolved to track the ice along westward to Greenland; but he had not proceeded far when a south-west gale arose, and, being thus unable to proceed on a western tack, the ships were put about. After this change of course, scarcely an hour had elapsed when the main body of the ice, which had been lost sight of for a short time, was seen close upon the lee-beam, with the sea beating furiously upon it. Everything was done to wear the ships off the pack in vain; they settled gradually down upon the danger, and were soon in the thick of the large masses of ice which skirt the pack in windy weather, and from which the exploring brigs received many a shock, that made all their timbers shiver. The "Dorothea," which had been more to leeward than the "Trent" when the gale sprung up, was now so close to the ice, that in order to escape immediate shipwreck, it became necessary for her to charge the pack (a practice which had been resorted to by whalers in extreme cases), and take refuge in it. It was a desperate necessity, and rendered all the more ominous from the circumstance, that in making direct for the ice-pack, the "Dorothea" was rapt away out of sight of her consort by an enveloping shroud of foam and spray dashed up to an immense height from the edge of the ice. Franklin soon found that nothing

was to be done with the "Trent" but to follow the example of the "Dorothea;" and he therefore made every preparation in his power to mitigate the first shock of the encounter with the ice. In order to avert the effect of the first concussion, 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 hides, were hung round the vessel, especially about the bows." The masts, at the same time, were secured with additional ropes, and the hatches were battened down. These precautions having been made, the brig was now nearing the breakers, and it was resolved to put her before the wind, and drive her fairly in amongst them. The line of furious breakers in front extended uninterruptedly as far as the eye could reach—great masses of ice heaving and falling with the waves, dashing together with the utmost violence, raising a din and clamour overriding the hoarse song of the storm, and rendering it almost impossible for the officers to make their orders heard by the crew. "No language, I am convinced," says Beechey, "can convey an adequate idea of the terrific grandeur of the effect now produced by the collision 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 charms of a calm and silvery atmosphere presents itself, bounded by a dark 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."

Meantime, throughout the crew, the greatest calmness, resolution, and self-control prevailed, and the last orders given before the supreme moment should arrive were executed with the utmost promptitude and steadiness. The brig now wore round before the wind, hung for an instant on the rising wave, and then dashed away before the gale in amongst the churning breakers thundering on the pack. "Steady! Hold on for your lives!" and every man instinctively secures his own hold, and with his eyes fixed upon the trembling masts, awaits in breathless anxiety the moment of concussion.

The brig cuts her way through the light ice, is lost for a moment among the breakers, and then, with a shock that throws every man down upon the deck, that bends the masts like whip shafts, and is followed by the cracking of the timbers below, the "Trent" meets the pack. She staggers under the shock, and seems to recoil, but the next wave, curling up under her counter, drives her about her own length within the margin of the ice. Here she gives one roll, and immediately is thrown broadside to the wind by the succeeding wave, which beats furiously against her stern, and brings her lee side in contact with the main body of ice, leaving her weather side exposed at the same time to a piece of ice twice her own size. Thus thrown broadside on, she is prevented from penetrating sufficiently far into the ice to escape the effect of the gale, and is placed where, so to speak, she is assailed by battering-rams, every one hammering at her with such Titanic, unrelenting blows that it is evident she must founder if this continue. Literally tossed from pillar to post, from pack to floe, there is nothing to do but helplessly to abide the issue, for the men can scarcely keep their feet, much less render assistance to the vessel. The motion is so great that the ship's bell, which, in the heaviest gale of wind, had never struck of itself, now began to toll like a passing measure, but the dismal sound was promptly stilled, and the bell muffled. It was now evident that the brig must be got further within the ice, or she must go to pieces. This could only be done by setting more head-sail, though at the risk of the masts, already tottering with the pressure of that which was spread. A reef was accordingly let out of the fore-topsail-yard, while the jib was dragged half way up its stay by means of the windlass. The additional pressure thus gained lifted the fore part of the vessel into the desired position, and forging her way leeward, she split a small field of ice fourteen feet thick, which had hitherto impeded her progress, and effected a passage for herself between the pieces.

Though now in a position of comparative safety, the "Trent" continued to be beaten by the ice, until after a lapse of four hours the gale began to moderate. The cloud of spray that had continued to circle round her, rendering every object invisible at the distance of a few fathoms, now cleared off, and Franklin had the gratification to observe the "Dorothea"—for the first time she had been seen since she entered the ice—still afloat. By signals, however, he soon learned that Captain Buchan's ship had sustained most serious injuries. It was now the chief aim to extricate both vessels from the ice, and, after infinite labour, they were both taken out to the open sea. But though now unfettered by ice, the prospects of the expedition were very different from those of the previous day. Both vessels were now disabled, one of them in a foundering condition, and, as far as regarded the main object of the expedition, it was now clear that both the "Dorothea" and the "Trent" were no longer of any use. The vessels made for Fair Haven,

in Spitzbergen, reaching a secure anchorage in South Gat. Here the vessels were inspected, and it was found that the "Dorothea" had the greater part of her timbers broken, and several of her beams sprung. The larboard side had been forced in so much that several spare oak planks, four and five inches thick, which were stowed in the wing, were found broken in several places. The spirit-room, which was built in the centre of the ship, was forced in, and casks bedded in the ground tier of the hold had their staves broken. She was practically a wreck.

The open season had not yet concluded, however, and it was resolved to make the best use of the few days still at the disposal of the expedition in surveying Fair Haven and the neighbouring coasts of Spitzbergen. The survey, which brought to light a number of interesting facts regarding this remote land on the threshold of the unknown region, and in the course of which several remarkable adventures were experienced, will be briefly summarised in the following chapter.

CHAPTER VII.

SPITZBERGEN—DISCOVERY OF THE ISLAND BY BARENTZ—FATE OF THE DISCOVERER—THE "DOROTHEA" AND "TRENT" IN SOUTH GAT OFF THE WEST COAST—DESCRIPTION OF THE ISLAND—ITS SURVEY, AND THE ADVENTURES OF THE SURVEYORS—EARLY ATTEMPTS AT COLONISATION—CONCLUSION OF THE VOYAGE OF "DOROTHEA" AND "TRENT."

BEFORE proceeding with the survey of Spitzbergen and the final adventures of Franklin and his companions of the "Dorothea" and "Trent," it will be proper in the first place to briefly sketch the discovery and the early history of the island.

Before the close of the sixteenth century the Dutch, who had already become a great commercial nation, had resolved to seek a "north-about" route to the East, by which their capital might find its way into the Indies more readily and advantageously than by competing with the Spanish and Portuguese in their long and expensive voyages through the South Seas. With this view they fitted out a number of expeditions, of which, however, those of William Barentz more immediately concern us at the present time. With two ships under his command, Barentz left Holland on the 5th June 1594, and, steering north and north-east, discovered a part of Nova Zembla, in lat. 73° 25′ N., on the 4th of the following month. Coasting along the west side of the island and coming to its north-west extremity, named by him Cape Nassau, he thought he perceived land toward the E.N.E. He sailed in this direction for several leagues, until he arrived at a large body of ice too close for his vessel to enter, and having no visible termination either to northward or southward. Unable to proceed farther in this direction, he returned to Nova Zembla, rejoined the other exploring vessels, which the States-General had sent out during the same summer on a voyage of discovery, and which had passed the Waygat Strait and opened up the Kara Sea, between Nova Zembla and the north shores of Russia, and with them returned to Holland, arriving in the Texel, 18th September. Next year the States-General sent forth an expedition of seven ships, to which Barentz was appointed chief pilot. Again reaching Waygat Island, between Nova Zembla and the mainland, they were visited by a number of Russians who had come across from the continent in search of train oil, walrus tusks,

and geese, and were informed by them that in a few weeks the frost would set in and freeze the sea so hard that they would be able to travel over the strait to the Russian shores. Barentz was also informed that if he would sail eastward for five days he would be able to round a promontory beyond which he would find an open sea leading to the south-east—by which open sea was doubtless meant the mouth of the great river Obi. The attempt was made, but finding the sea encumbered with ice and very close, the ships were obliged to return, and after numerous difficulties succeeded in regaining Holland.

These two expeditions having proved unproductive of any valuable results, the States-General were unwilling to fit out any more vessels wholly at the Government expense; but anxious that discovery should still be prosecuted eastward along the shores of North Europe, they offered a reward to any person or persons who should discover the northern passage to China, provided that passage "could be sayled." Thus encouraged, a company of merchants fitted out two vessels for discovery in 1596, appointing Barentz pilot of one of them, and John Cornelison Ryp, master and factor of the other. The ships left Amsterdam on the 10th May, and on the 4th June reached the latitude of 71° N., at which point of their progress a strange sight appearing in the heavens astonished the voyagers. This was that remarkable and beautiful phenomenon of the Arctic heavens named Parhelia, which in the voyages of later explorers, it will be necessary to refer to at greater length. In this instance it consisted of two "mock suns," which are thus quaintly described: "On each side of the sunne there was another sunne and two raine-bowes, that past cleane thorow the three sunnes, and then two raine-bowes more, the one encompassing round about the sunnes, and the other crosse thorow the great rundle; the great rundle standing with the uttermost point elevated above the horizon 28°." In other words, those were two parhelia and four circles, two of which passed through the sun and its parhelia, the third encompassed them, and the fourth passed vertically through the centre.

Continuing their voyage they arrived at Cherie or Bear Island, about a hundred geographical miles south of Spitzbergen. A party landed on the island, and having collected a quantity of the eggs of geese, were returning to the ships when they encountered an immense white bear, which fought with them while "four glasses ranne out," and swam away with a hatchet which had been struck into his back, but was afterwards killed, and found to be thirteen feet long. Bear Island was found to be much encumbered with ice. Progress in the desired eastward direction being most effectually barred, the voyagers stood away north, and on the 19th June reached the latitude of 80° 11′, when they found they had much land to the eastward of them. On this land they killed another bear and collected an immense

number of goose eggs. This land was Spitzbergen; and this is the first authenticated account of its discovery. Barentz entered and anchored in a bay running north and south, the latitude of the bay (79° 42′ N.), as well as the description of it, corresponding with that of Fair Haven. After remaining two days at anchor, Barentz steered to the north-west, but was stopped by that great barrier of ice which from that day to the present time has formed the chief obstacle to progress toward a higher latitude. He then sailed along the west coast of Spitzbergen southward, and arrived off Bear Island on the 1st July. Here Barentz and Ryp, the master of the companion vessel, differed in opinion as to the best course to be steered, but finally it was agreed that the ships should part company; that Ryp should endeavour to find a passage on the eastern coast of Spitzbergen, and that Barentz should continue his route eastward to Nova Zembla. There is no account of the further proceedings of Ryp, but he was no doubt stopped by the Polar ice, and compelled to sail southward for Cola, on the north coast of Lapland, where we shall subsequently hear of him.

Pursuing the course he had determined on, Barentz sailed eastward for Nova Zembla. The record of the subsequent proceedings of this intrepid commander and his devoted crew, and of their terrible sufferings in the first Arctic winter ever faced by Europeans, forms one of the most exciting episodes in the whole story of discovery in those seas. The brave Dutchman arrived off the coast of Nova Zembla on the 17th July, and sailed north along its west coast until, on the 7th August, he passed Cape Comfort, and found himself on a lee-shore running east and west, fronting the Polar pack, which, when it drifts south, is forced full upon it. He beheld all this coast much encumbered with heavy ice, some of which was aground in twenty fathoms water; and he had several hairbreadth escapes from the squeezing together of the floes and the disruption of the bergs.

Vainly endeavouring to force his way east along the north coast of the island into open water, the commander, on the 25th August, gave up all hopes of being able to proceed on his voyage, and thought now only of how he could best get back and return home. Repulsed by the ice, he drew near the land, which he had scarcely reached before the ice enclosed his vessel. His boats were crushed and the ship narrowly escaped a similar fate. A storm sprung up from the north, making the coast a lee-shore for the vessel, and thus placing her in the most imminent peril. The northern wind had set him down to the eastward of Nova Zembla, and there was so much ice to the north of him that it was almost hopeless to think of returning in that direction, while, judging from appearances, he had as little to expect from attempting a southward route. He found himself in an inlet, which he named Ice Haven, but which is now known as Barentz Bay. Here he nearly lost his vessel by the enormous pressure of the ice, which lifted

her four feet on one occasion, broke the rudder, and otherwise damaged her. The winter also began to set in, and there seemed to be no alternative but to secure the vessel where she lay, and make the best preparation he could for passing the winter there. This determination, which the discovery of a quantity of driftwood on the shore not far from the vessel encouraged him to form, was finally resolved upon on the 11th September, and preparations were at once made to build a house "to keep and defend ourselves both from the cold and the wild beastes." While this tabernacle in the wilderness was being built, the carpenter died, but the loyal Dutchmen, though somewhat discouraged by this melancholy event, continued working away cheerfully at their house, while the cold of the swift-coming winter was so intense that, to use the expression of their historian, "as we put a naile into our mouths (as carpenters use to do), there would ice hang thereon when we took it out again, and make the blood follow." The bears also were a serious inconvenience to them, by obliging the foraging parties to go armed and in great strength. Yet amid all difficulties the house was gradually reared. A chimney was fixed in the centre of the roof, a Dutch clock was set up and made to strike the hours, bed-places were placed along the walls, and as the surgeon had wisely prescribed bathing as one of the preservatives of health, a wine-cask with a square opening cut in the side of it, by way of entrance, was set up in a corner and used as a bath. "The journal of the proceedings of these poor people during their cold, comfortless, dark, and dreadful winter," says Barrow, "is intensely painful and interesting. No murmur escapes them in their most hopeless and afflicted situation, but such a spirit of true piety, and a tone of such mild and subdued resignation to divine Providence, breathe through the whole narrative, that it is impossible to peruse the simple tale of their sufferings, and contemplate their forlorn situation, without the deepest emotion for the unhappy fate of so many wretched beings, cut off from all human aid, and almost from all hope of their ever being able to leave their dark and dismal abode."

On the 12th October the house was finished, on the 24th the whole party had moved into it, and on the 3d November the upper limb of the sun showed itself above the horizon at noon for the last time that season, and the house these mariners had reared for themselves in this out-of-the-world region—where the ever-threatening chill of death was a more dreadful enemy from its silence, its abiding presence, and the treachery with which it first soothed and then destroyed its victims, than the raging snow-storms, or the ferocious brutes that prowled around the door—was to become practically their prison for ten long months. During the long Arctic night the bears do not give much trouble. They vanish with the sun and return only with his reappearance. But prior to the 3d November they had caused much annoyance. On one occasion three of these animals surprised some of the men,

who were employed in dragging articles from the ship to the house. The arms of the party attacked consisted of only two halberts. These were seized by Barentz and Gerrit de Vèer (the latter is the writer of the journal of this first winter sojourn in the Arctic regions), who stood forth to defend themselves. The rest of the party fled to the ship; in doing which one of the men fell into a cleft in the ice, and the greatest apprehensions were entertained for his safety. De Veer and the master joined the man who had fallen, and succeeded in getting into the ship with him; but the bears seeing them running gave chase and followed them to the ship, which they would at once have entered only that "they were for a time diverted" by pieces of wood being thrown upon the ice, which they "ranne after as a dog useth to doe at a stone that is cast at him." Meanwhile the crew below endeavoured to strike a light to enable them to use their matchlocks, but failed. The enraged brutes now entered the ship and attacked the few men who remained upon the deck of the vessel. Most fortunately, the largest of these ferocious beasts received a wound on the snout with a halbert, which occasioned him so much pain that he withdrew from the vessel, and was immediately followed by the others. "And we thanked God that we were so well delivered from them."

When the bears had disappeared with the sun, white foxes began to come about the ship. These were often caught in traps, and afforded many a welcome mess of fresh meat, which in taste resembled "conies' flesh and seemed as dainty as venison" to the Dutchmen.

The cold increased as the winter advanced until it became all but insupportable. Some idea of its intensity may be formed from such facts as that the beer and all the spirits were frozen solid, "even our sacke, which is so hot (alcoholic ?), was frozen very hard;" the walls and roof of the house were covered two inches thick with ice, and the clothes on the backs of the people, even near the fire, were covered with white frost. The men resorted to every expedient to moderate the effect of the deadly cold by clothing themselves in dresses and cloaks made from the furs of the animals they had killed, and by keeping up a good fire of wood. They even heated stones and billets of wood and laid these upon their bodies; but this only gave a partial relief; for even with such applications, and while sitting before a large fire, the side of their bodies turned from the heat was covered with hoar frost. "Yet," says Beechey, "amidst all this misery and intense suffering, the spirits of the party never drooped, nay, they even derived consolation from the increase of the bitterly cold temperature they were forced to endure, declaring that 'the cold beginning to strengthen was a sign the days were beginning to lengthen'—a pleasing recollection which 'put us in good comfort and eased our paine.'"

Towards the new year, the weather—if the unceasing and blood-congeal-

ing cold in which these men lived can strictly be called weather of any kind—continued extremely severe. Much snow had fallen, and their house was at this time completely buried, so that the inmates were obliged to unhang their door and cut their way out. This was undoubtedly the best thing that could have happened to them, as it must have rendered the apartment less penetrable to the cold than any contrivance they could themselves have resorted to. The frost was, however, so intense on the outside that no one dared venture from the house for several days, although their fuel was nearly exhausted. "Yet amidst all this suffering did those hardy people retain their cheerfulness, and even Twelfth Day was not suffered to pass without its usual festivities; for on that night they prayed their master that they might be 'merrie,' and said, 'we were content to spend some of the wine that night, which we had spared, and which was our share every second day; and whereof for certain days we had not drunk, and so that night we made merrie, and *drunke to the three kings,* and therewith we had two pound of meale, whereof we made pancakes with oyle, and every man a white bisket, which we sopt in wine; and so supposing that we were in our owne countrey, and amongst our friends, it comforted us, as well as if we had made a great banquet in our owne house.'"

"A certain rednesse of the skie" seen on the 16th January was the welcome harbinger of the return of the sun to these northern latitudes. "On the 24th January," says De Veer, "it was faire cleare weather with a west wind; then I and Jacob Hemskerk, and another with us, went to the seaside, on the south side of Nova Zembla, where, contrary to our expectation, I first saw the edge of the sunne, wherewith we went speedily home againe, to tell William Barentz and the rest of our companions that joyful newes." On the 27th they "saw the sunne in its full roundnesse above the horizon, which made us all glad, and we gave God hearty thankes for His grace shewed unto us that that glorious light appeared to us again."

As the day-light lengthened the cold increased, the frost became more severe and the snow more frequent. Yet while it was light those of the party who were still strong enough to face the cold were in the habit of walking out "to stretch their limbs," and to drag fuel to the house. This, however, could only be done at considerable risk, for with the return of the daylight the bears renewed their visits and appeared to have become more ferocious than ever. They followed the people to the door of their house and attempted to force it. One of them was killed in the act of entering the room where the people slept. On opening this animal there was found in the stomach "part of a buck with the hair and skinne and all, which not long before she had torn and devoured." The ice broke away from the bay at the close of February only to close up again in March with such a tremendous reaction that it was piled up along the coast, as though there

had been whole towns made of ice with towers and bulwarks round about them. The cold chill continued extreme, and the snow falling abundantly, the party were shut up in their hut during the greater part of the month of April. On the 30th of this month the sun was first seen at midnight just above the horizon.

It was the month of June before they could set about repairing their two boats, so weak had the men become from their long privations. To repair the ship was out of the question, as she was completely bilged and remained still fast in the ice. On the 13th of the month everything was in readiness for their departure; previously to which, however, Barentz drew up in writing a statement detailing the names and the misfortunes of the party and all that had befallen them in that wretched abode. This document was left in a conspicuous place in the house to which they now bade farewell. All that remained was to get the sick down to the boats. Among these was Barentz, the able leader of this band, who had been ill for some time, and who, with a seaman named Adrianson, had to be drawn to the sea-side on a sledge. It was the intention of the mariners to return by the way they had come, along the west shore of the island. They had not proceeded far, however, when a misfortune befell them, which overwhelmed them with grief and despair. Barentz, in whom "they reposed themselves next under God," gradually sank on the 20th June. On being told that Adrianson was so sick that he could not live, he spoke and said, "I think I shall not live long after him." Then turning to Gerrit De Veer, his chief shipmate and old companion, he said, "'Gerrit, give me some drinke;' and he had no sooner drunke but he was taken with so sodain a qualme that he turned his eyes in his head and died." Adrianson, his companion in suffering, died on the same day.

Of the subsequent adventures of the discoverers of Spitzbergen—the men who were the first Europeans to spend a winter in high Arctic latitudes — Sir John Barrow remarks as follows: "There are numerous instances on record of extraordinary voyages being performed in rough and tempestuous seas in open boats, with the most scanty supply of provisions and water, but there is probably not one instance that can be compared to that in question, where fifteen persons, in two open boats, had to pass over a frozen ocean more than eleven hundred miles, 'in the ice, over the ice, and through the ice,' exposed to all the dangers of being at one time overwhelmed by the waves, at another of being crushed to atoms by the whirling of large masses of ice, and to the constant attack of ferocious bears, enduring for upwards of forty days' severe cold, fatigue, famine, and disease; and yet, excepting the two who died, and who entered the boats in a state of sickness and debility, the rest arrived in good health and spirits at Cola, where they had the satisfaction of meeting with their old friend and com-

panion Jan Cornelis Ryp, who had deserted them to go to the northward the year before. They had learned, indeed, at Kilduyn, that three Dutch ships were at Cola; and a Laplander, whom they sent overland, returned with a letter from Cornelis Ryp; but they could scarcely flatter themselves that it was the same who had sailed with them from Holland. He now took them on board his ship, and on the 29th October, they all arrived safely in the Maes, to the great joy of their friends, who had given them up for lost."

Having thus traced the discovery of Spitzbergen, and the fate of Barentz, among whose successors in exploration by the Spitzbergen route the chief were Hudson, Baffin, and Phipps, we return to the "Dorothea" and "Trent," which, in the last chapter, we left, after their extrication from the pack, securely moored in South Gat, south of Dane's Island, in the extreme north-west. The damage which the vessels, especially the "Dorothea," had sustained from tempest and repeated collision with the ice, was such as to render the further prosecution of the voyage impossible. This being evident, the next consideration was whether something more might not yet be accomplished by a boat expedition over the ice; but upon consultation with Lieutenant Franklin, and examination into the resources of the ships for such an enterprise, these were found so inadequate to the purpose that the project was speedily given up. Captain Buchan was thus reluctantly compelled to abandon all further attempt at discovery, and to proceed to England as soon as the necessary repairs of the vessels should be completed.

While these repairs were going forward, the officers of the expedition were employed in making a hasty survey of the island, or rather of that north-west and best known part of it, on the coast of which the "Dorothea" and "Trent" were stationed. Mr Fisher, the astronomer of the expedition, was directed to fix his observatory on Dane's Island, and to commence his observations on the pendulum, on the dip and the variation of the needle; and Lieutenants Franklin and Beechey were told off to construct a plan of the port and the adjacent islands, and to assist Mr Fisher in determining the geographical position of the observatory.

Spitzbergen (Ger. *Spitz*, pointed; *bergen*, mountains) is the name applied to a group of islands in 76° 30′—80° 30′ N.; 10° 40′—21° 40′ E., and so called from the peaked form of the mountains, which are the most striking feature of the principal islands of the group. This group consists of West Spitzbergen, forming two portions connected by a narrow isthmus, North-East Land, the name of which indicates its position with respect to the principal island, and Barentz Land and Edge Island on the south-east. Around the coast, but especially on the west and north, are numerous islands and islets. From the South Gat, between Dane's Island and West Spitzbergen, Franklin and Beechey were led to all parts of the coast which could be con-

veniently reached by a boat—by which, however, must be understood a very limited area in the extreme north-west. Here the exploring party found the shores in general very steep; for, with the exception of here and there a narrow flat bordering upon the sea, they speedily rise into mountains of from two thousand feet and upwards in height, increasing to considerably over four thousand feet inland. These hills are for the most part inaccessible, either on account of the abruptness of the ascent, or from the treacherous nature of their surfaces, upon which large stones and fragments of the mountains are so poised, that the smallest additional weight precipitates them to the bottom of the hill. The mountains traverse the main island (West Spitzbergen) in a north and south direction, in an extensive range, and terminate in remarkably sharp peaks. Branching off from this main chain are lateral ridges with less pointed peaks; while on the off-shore islands the elevations are rounded. "At the northern entrance of Magdalena Bay," says Beechey, "the termination of one of these remarkable ridges which branch off from the large chain, traversing the island throughout in a north and south direction, our specimens consisted of granite, with predominant white felspar, mica slate, and gneiss, with black mica. Those of Dane's Island were mica slate and gneiss, passing into perfect granite, with black mica and specimens intermediate between these two, together with some quartz. There were also found here two specimens of coal (probably alluvial), the one glance coal, the other a slaty variety. On the eastern side of South Gat, which separates Dane's Island from the mainland, we found mica slate and gneiss, of the same varieties as at Dane's Island. Upon Amsterdam Island (immediately north of Dane's Island) Vogel Sang afforded specimens of granite with red felspar, gneiss with black mica, common quartz, and a large-grained white felspar, with a little admixed quartz." Owing to the action of the winter frosts upon the water received in abundance in summer, these rocks are constantly subject to disintegration, and at their bases a tolerably good soil is found, several varieties of Alpine plants, grasses and lichens grow and flourish, especially where the aspect is southern.

All the valleys of Spitzbergen which have not a southern aspect are occupied either with glaciers fully formed or with immense beds of snow, which are practically glaciers in the process of formation. These snow-beds afford almost the only feasible mode by which the summits of the mountain ridges can be gained. Even these are very steep, and in descending by them, extreme care is necessary to avoid being precipitated from the top to the bottom, especially where the snow has been hardened by successive thawing and freezing. This process glazes the surface so highly "that," says Beechey, "when the sun shines, they reflect a brilliant lustre, and give to the coast a curious and pleasing aspect, which, though upon an

incomparably more extensive scale, brings to the recollection of those persons who have visited Quebec the singular effect produced by the mass of tinned roofs and steeples which used to crown the heights of that place."

Franklin and his officers had a singular proof of the dangers attending locomotion on the glaciers in the narrow escape of one of the most active of the "Trent's" seamen in an attempt to descend one of these icy plains. The curious and alarming incident is best related in the words of Lieutenant Beechey, an eye-witness: "While some observations were being made upon the beach, a sailor of the name of Spinks had obtained leave to accompany a party in pursuit of a herd of deer that were browsing upon the hills. The ardour of the chase led the party beyond the limits of the prescribed range; and when the signal was made for their return to the boat, some of them were on the top of the mountain. Spinks, an active and zealous fellow, anxious to be first at his post, thought he could outstrip his comrades by descending the snow which was banked against the mountain at an angle of about 40° with the horizon, and rested against a small glacier on the left. The height was about two thousand feet, and, in the event of his foot slipping, there was nothing to impede his progress until he reached the beach, either by the slope or the more terrific descent of the face of the glacier. He began his descent by seating himself and digging his heels into the snow, the surface of which had been glazed and rendered hard by the process before mentioned. He got on very well at first, but presently his foot slipped, or the snow was too hard for his heel to make any impression, and he began to descend at a rapid pace, keeping his balance, however, by means of his hands. His speed becoming accelerated, in a very short time his descent was fearfully quick; the fine snow flew about him like dust, and there seemed to be but little chance of his reaching the bottom in safety, especially as his descent now appeared to take the direction of the iceberg. We ran with all our strength to render him the earliest assistance, and for a moment, having lost sight of him behind a crag of the mountain, we expected nothing less than that his lifeless body would be found at the foot of this icy precipice; but Spinks, with great presence of mind and dexterity, to use his own expression, 'by holding water first with one hand and then the other,' contrived to escape the danger, and, like a skilful pilot, to steer his vessel into a place of refuge, amidst a bed of soft snow which had recently been drifted against the hill. As soon as he could extricate himself from the depth into which he had been plunged by the force he had acquired, he made his way towards us, rubbing his chafed sides, and holding together his tattered garments, and, to our great satisfaction, laughing heartily at the figure he supposed he must cut, for he had worn away two pairs of trousers and something more. The danger being over, we cordially joined in his laugh, yet in

our hearts congratulated ourselves upon his miraculous escape, for he was a great favourite with all his officers, as well as his equals in the ship.

"A clever, self-possessed and courageous sailor like Spinks was inevitably destined to earn distinction in Arctic exploration. He afterwards volunteered his services with Sir John Franklin, and became coxswain of Captain Back's boat in the dangerous navigation which was conducted along the northern coast of America. Captain Back spoke highly of Spinks' conduct on that occasion, and states that, in addition to zeal and perseverance, he possessed an unusual degree of good humour, and was of the utmost use in keeping up the spirits of his fellow boatmen, and in diverting their minds from the difficulties and privations which attended that service, either by giving a cheerful and ludicrous turn to every little incident, or in recounting his own real or supposed adventures. The value of such a character under the distressing circumstances attending Captain Franklin's journey to the Polar Sea can be estimated only by those who were present; and it is a great satisfaction to learn that, on his return to England, he was promoted to the rank of gunner, and appointed to H.M.S. 'Philomel,' where he became no less a favourite. He unfortunately died not long afterwards at Gibraltar; and the respect and esteem of his shipmates, officers as well as seamen, was manifested by the marked attention that was paid to his funeral. As an old shipmate of my own, I am happy of an opportunity of paying this tribute, though indeed small, to his memory." *Vale* Spinks!

In the vicinity of South Gat, the channel between Dane's Island and Spitzbergen in which the "Dorothea" and "Trent" were anchored, while the country around was being surveyed by the officers of the expedition, there are several glaciers, the largest being about ten thousand feet in length, by two or three hundred feet in perpendicular height. These, like the glaciers of Magdalena Bay already noticed, all occur between steep mountains. None of them have a southern aspect, but all occupy such valleys as are either very obliquely inclined to the noonday sun, or are entirely screened from it by the surrounding hills. The heat of the sun acting upon the hills and lofty plains partially melts the snows with which these are covered, and gives rise to streams of water, which in their descent into the deeply-cut and shadowy valleys percolate the snow beneath, and enter a region of perpetual frost, where the whole mass speedily becomes converted into an icy substance more or less opaque, according to the suddenness and prevalence of the thaw of the exposed parts. The streams of water referred to are small in volume, but when it is considered that they are called into existence almost daily from June to October, it is evident that a large accumulation of ice must annually take place. This accumulation goes on from year to year, until, in process of time, the glacier attains such a magnitude that its further increase is only prevented by the breaking away of its own overgrown dimensions.

It has been observed that the vast mass of the glaciers creeps gradually downward into the sea, and it is at its sea-face that the mass breaks up, the detached pieces floating away in the form of bergs or ice-mountains.

As it is impossible to tell when the glacier-faces may break up, boats run great danger in approaching them. On two occasions Beechey witnessed avalanches on the most magnificent scale. The first was occasioned by the discharge of a musket at about half a mile from the glacier. Immediately after the report of the gun, a noise resembling thunder was heard in the direction of the iceberg, and in a few seconds more an immense piece broke away and fell headlong into the sea. The crew of the launch, supposing themselves beyond the reach of its influence, quietly looked upon the scene, when, presently, a sea rose and rolled towards the shore with such rapidity that the crew had not time to take any precautions, and the boat was, in consequence, washed upon the beach and completely filled by the succeeding wave. As soon as their astonishment had subsided they examined the boat, and found her so badly stove that it became necessary to repair her in order to return to the ship. They had also the curiosity to measure the distance the boat had been carried by the wave, and found it ninety-six feet.

On another occasion the surveying party from the "Trent" were viewing the same glacier, and had approached tolerably near, when a similar avalanche occurred; but as the party were well out from shore, and as they immediately attended to the direction of the boat's head, they rode over the wave without accident. "This occurred," says Beechey, "on a remarkably fine day, when the quietness of the bay was first interrupted by the noise of the falling body. Lieutenant Franklin and myself had approached one of these stupendous walls of ice, and were endeavouring to search into the innermost recess of a deep cavern that was near the foot of the glacier, when we heard a report as if of a cannon, and, turning to the quarter whence it proceeded, we perceived an immense piece of the front of the berg sliding down from a height of two hundred feet at least into the sea, and dispersing the water in every direction, accompanied by a loud grinding noise, and followed by a quantity of water, which, being previously lodged in the fissures, now made its escape in numberless small cataracts ever the front of the glacier. We kept the boat's head in the direction of the sea, and thus escaped the disaster which had befallen the other boat; for the disturbance occasioned by the plunge of this enormous fragment caused a succession of rollers which swept over the surface of the bay, making its shores resound as they travelled along it, and at a distance of four miles was so considerable, that it became necessary to aright the 'Dorothea,' which was then carreening, by immediately releasing the tackles which confined her. The piece that had been disengaged at first disappeared under water, and nothing was seen but a violent boiling of the sea and a shooting up of clouds of spray, like that

which occurs at the foot of a great cataract. After a short time it reappeared, raising its head full a hundred feet above the surface, with water pouring down from all parts of it; and then, labouring as if doubtful which way it should fall, it rolled over, and after rocking about some minutes, at length became settled. We now approached it, and found it nearly a quarter of a mile in circumference, and sixty feet out of the water. Knowing its specific gravity, and making a fair allowance for its inequalities, we computed its weight at 421,660 tons. A stream of salt water was still pouring down its sides, and there was a continual cracking noise, as loud as that of a cart whip, occasioned, I suppose, by the escape of fixed air."

The gloomy and forbidding aspect of Spitzbergen, especially of its north-western coasts, with their cold granite peaks, their glacier-filled valleys and silent, icy bays, is rendered additionally melancholy from the remains of graves with which they abound. For two hundred and fifty years these shores have been frequented by whalers from Holland, Norway, Denmark, Russia, France, and Britain; and as it was early perceived that it would have been a great convenience to reduce the whale-blubber to oil on the coasts on which the fishery was prosecuted, a number of attempts have been made to form settlements in the region. Early in the seventeenth century, the Russia Company offered large rewards to any persons who would pass one entire year on the island. Being unable to find volunteers, they obtained from the Government the promise of a reprieve to criminals under the extreme sentence of the law who would undertake to perform this office; and a number of such persons actually accepted the condition, and were accordingly carried to Spitzbergen. But when they arrived on the spot and were landed, they were so struck with horror at the desolate appearance of their intended abode, and with the hopeless prospect which it presented, that they begged to be taken back again, declaring they would rather undergo the penalty of their crimes than subject themselves to the lingering death which must inevitably attend their wintering on so wretched a place. They were accordingly taken back, and their reprieves obtained. A party of nine British seamen, who were shortly afterwards left behind in this miserable country by a whaler, were all found dead the following year, with their bodies cruelly disfigured and torn by bears and foxes. Again, in 1630, a party of eight seamen from the same whaler were sent on shore at a place called Black Point to procure a supply of venison, the district near this point being frequented by herds of reindeer. Having taken fourteen deer, and being overcome with fatigue, the party resolved to pass the night on shore, and return to their vessel on the following day. But during the night one of those sudden changes of wind, which in these regions alters the whole aspect of affairs in an hour or two, took place. The party on shore found themselves separated from their ship by an immense quantity of ice, and a thick fog settling down

on the shores, and continuing for several days, return to their vessel within the time at which she was bound to sail was impossible. They then determined to make for Green Harbour, on the west coast of the south part of Spitzbergen, where they expected to find several European vessels at anchor, and where it had been arranged their own ship should call before finally leaving the island. But coasting along the shore in their small boat, these castaways only reached Green Harbour after an interval of seventeen days, by which time every vessel had left the bay. A last hope remained in reaching Bell Sound on the south, but before they reached this inlet the last of the whalers had departed. A full sense of the horror of their situation now arose in their minds. The dark and bitter Arctic winter of ten months' duration was before them, and only the instinct of self-preservation was strong enough to excite them to immediate action. "Arousing ourselves from this lethargy," writes one of these seamen, "and impressed with the hopelessness of our situation if we in any way gave way to despair, we at once set about taking the most effectual measures for preserving our lives during the long and severe winter which was before us." Their first care was to provide a store of provisions, and they were fortunate enough to kill nineteen deer and four bears towards the necessary supply. Their next want was a house; and in Bell Sound they found not only a supply of brick, lime, plank, etc., which had been left at the establishment, but also a spacious shed, built of stout materials, and roofed with tiles, which had been erected for the use of the British Company's artificers. It was too large for them to live in, being fifty feet by forty-eight, but they very wisely built their house within it, the latter structure being formed of two sides of brick and two of stout plank, nailed a foot apart, and filled in with sand, while its ceiling consisted of stout layers of plank. A dim light was admitted through the chimney, to which it found access by the removal of a few tiles from the outer roof. This inner dwelling was divided into four cabins, and the door was fortified against the cold wind by the application of a mattress which had been found.

Had these seamen not been fortunate enough to reach Bell Sound, where during the summer months a British whaling-station was maintained, and where it was natural to expect, the Company would have left at least a quantity of building materials, it is quite improbable that they could have survived the winter. As it was, the shed within which they had reared their hut afforded them protection from the onset and immediate severity of the icy storm, and formed a covered space in which they could take exercise when snowed up, or otherwise prevented from going abroad; and, no doubt, it was owing to their good fortune in discovering the shed not only that their lives were all preserved, but that none of them were afflicted with scurvy.

The early autumn was employed in making beds and winter clothing,

from the skins of the bears and deer they had taken, and which they sewed with bone needles, and thread made from the yarn of rope. On the 12th September all their arrangements were finished, and on the same day a quantity of ice driving into the bay brought in two walruses upon it. These were captured, and their carcasses made a welcome addition to the supply of provisions. On examination this supply was found to be too scanty to last them half through the winter, without having recourse to the refuse of whale-blubber—after the oil had been extracted from it. It had therefore been arranged that they should subsist upon this loathsome food four days a week, and feast upon bears' flesh and venison the remainder of the week. From the 14th October to the 3d February they did not see the sun; and from the 1st to the 20th December (O.S.) there did not appear to be any daylight whatever. "The New Year set in so extremely cold, that if they touched a piece of metal it would stick to their fingers like bird-lime; if they exposed themselves to the air large blisters were raised upon their skin, and when, from necessity, they went to fetch snow or water, they returned sore as if they had been beaten with sticks."

The return of the sun was witnessed on the 3d February, and on the occasion the simple historian of this trying sojourn on Spitzbergen exclaims with pardonable warmth: "Aurora smiled once again upon us, with her golden face, for now the glorious sun, with his glittering beams, began to gild the highest tops of the lofty mountains; the brightness of the sun, and the whiteness of the snow, both together, were such as would have revived a dying spirit." The men were soon able to go out into the open air, and animals began to revisit the bleak shores of Bell's Sound. Two bears were seen upon the ice, and one of them was killed and eaten. Toward the beginning of March their provisions had run very low; but about that time the bears came about in such numbers that they succeeded in killing a sufficient number of them, to relieve all anxiety on the question of scarcity of food for the rest of the season. Sea-fowl now appeared on the shores, and on their arrival the white foxes began to come forth from their holes. The men caught many of these by means of traps and whalebone springs, and found them nutritious eating, and a pleasant change from the flesh of bear or walrus.

On the 24th May the ice broke up, and the men, who had retreated to their hut to find shelter from a gale that was blowing, were seated around their fire wondering when the hour of deliverance should come, when, to their inexpressible delight, they heard themselves hailed in the English tongue, and rushing out, found that a vessel had arrived in the Sound, and that a party of their countrymen were coming up towards them from the shore. Thus after ten months' residence on this desolate island, and after enduring all the severities of winter in a climate of 77° of north latitude,

these seamen were restored to the world in good health, and without the loss of a single individual of their number.

The attempts of the Dutch to colonise Amsterdam Island, on the coast of Spitzbergen, and Jan Mayen's Land, between Greenland and Spitzbergen —both of which attempts proved fatal to all the members of the respective parties—are pathetic and most interesting episodes in the history of Arctic exploration and adventure. In all enterprises of this nature, however, there is but little variety. The nature of the perils encountered and the means by which starvation is averted until, at last, the wretched men are struck down with scurvy, are the same in every case. There is too much to tell and too many important modern expeditions to describe, to permit of our giving in detail the narratives of more of these early undertakings, in which there is necessarily so much repetition of similar incidents.

The survey of the north-west coasts of Spitzbergen having been completed so far as it was possible to do so within the very limited time during which the "Dorothea" and "Trent" were being repaired in Dane's Gat and refitted for the homeward voyage, the Buchan and Franklin expedition to find a route to the North Pole was practically at an end. On the 30th of August the "Dorothea" and "Trent" put to sea, arrived in England on the 22d October, and were soon afterwards paid off at Deptford. "Thus," says Beechey, "terminated the third endeavour made under the auspices of the British Government to reach the Pole—an attempt in which was accomplished everything that human skill, zeal, and perseverance, under the circumstances, could have effected, and in which dangers, difficulties, and hardships were endured, such as have rarely been met with in any preceding or subsequent voyage." In thus concluding his narrative Captain Beechey seems to over-estimate the importance of the expedition in which he acted as second officer of the "Trent." The enterprise was carried out with courage and skill undoubtedly; but the record of it is interesting not so much for its own intrinsic importance, or for the value of the discoveries in which it resulted, as because it was the first expedition of the present century, and thus forms the natural prelude to the narratives of the far more stirring, and, in their results, vastly more important expeditions of the later heroes of Arctic exploration.

PART II.

CHAPTER I.

CAPTAIN J. ROSS'S FIRST ARCTIC VOYAGE—ROSS AND PARRY IN THE "ALEXANDER" AND "ISABELLA"—EARLY LIFE OF ROSS—EARLY LIFE OF PARRY—JOHN SACKHEUSE, AN ESKIMO, JOINS THE EXPEDITICN AS INTERPRETER—EXPEDITION STARTS—FIRST NATIVES SEEN—ESKIMO BELLES AT A BALL ON DECK—TRACKING—DISCOVERY OF MELVILLE BAY—A WHALING ADVENTURE—NIPPED IN THE ICE-FLOE—A NARROW ESCAPE.

It will be remembered that in 1818 when the "Dorothea" and "Trent," under Captain Buchan and Lieutenant Franklin, were commissioned to search for a north passage to the Pole by the Spitzbergen route, the "Alexander" and the "Isabella" were also put in commission to sail as companion exploring vessels up Davis' Strait in search of a north-west passage to the Indies. This expedition was commenced by Captain John Ross, who sailed in the "Isabella," and who was ably seconded by Lieutenant W. E. Parry in the "Alexander." Of the early career of these famous seamen it will be interesting to supply a brief sketch.

Rear-Admiral Sir John Ross was born at Balsaroch, in Wigtonshire, entered the Royal Navy when he was only nine years of age, and served in the Mediterranean until he was twelve, and afterwards in the Channel. He was in the expedition to Holland, and also under Sir James Saumarez. In 1808, though having then only the rank of Lieutenant, he acted as Captain of the Swedish fleet. He rose to be Commander in 1812. During his war services he was wounded thirteen times in three actions. He was the author, among other works, of "Letters to Young Sea Officers," "Memoirs and Correspondence of Admiral Lord de Saumarez," a "Treatise on Navigation by Steam," a "Memoir of Admiral de Krusenstern," etc. He was promoted to the rank of Rear-Admiral in July 1851, and died in November 1856.

Rear-Admiral Sir W. Edward Parry, the son of Dr C. Parry, of Bath, was born there in 1790. He entered the Navy in 1803, joining the "Ville de Paris." Zealous in his profession, intelligent and ambitious, he early

recommended himself to notice, and in January 1810 he was promoted to the rank of Lieutenant, and appointed to the "Alexander," employed in protecting the Spitzbergen whale fishery. Here, while scarcely out of his teens, he became familiar in the responsible rank of first officer with the navigation of that frozen ocean amid whose dangers and difficulties he was destined to earn celebrity. Subsequently serving in the "Hogue," he assisted in destroying twenty-seven of the enemy's vessels, three of which were heavy privateers; but this, with a few skirmishes with Danish gun-boats, are the only actions with the enemy in which it was his lot to engage. "On his return to England in 1817," writes his old friend and messmate, Rear-Admiral F. W. Beechey, "the extraordinary changes reported to have taken place in the state of the Polar Sea, determined the Government to equip an expedition for Arctic discovery. Then was the turning point of Parry's life. Like most men of enterprise, he seized the occasion, and determined to devote himself to Arctic adventure. There are but few who have not, at some time, the chance of distinction, and Parry took advantage of his. We accordingly find him in command of the 'Alexander,' and, under the orders of Sir John Ross, leaving England in quest of the North-West Passage, by way of Davis' Strait." After a varied and most interesting career, the most important years of which are chronicled in his own narratives of his voyages, which in value rival those of Cook, he died at Ems, July 8th, 1853, and was buried at Greenwich.

The "Isabella," 385 tons, and the "Alexander," 252 tons, were commissioned on the 15th January 1818, and were docked at Deptford for the purpose of being prepared for the voyage. While the ships were still in dock, Captain Ross received an addition to his complement of men in the person of a very interesting character, who afterwards became well known in London and in Edinburgh—John Sackheuse, an Eskimo, of South East Bay, Greenland. He had secreted himself on board the "Thomas and Ann" of Leith (Captain Newton) in May 1816, when that vessel was on the Greenland coast. On being discovered in the vessel, he entreated to be permitted to remain on board and to be taken to Britain; and accordingly he was brought in the "Thomas and Ann" to Leith. In the same ship he returned to Greenland in the following year; and on his arrival on his native shore, he discovered that his only near relative had died in his absence. This loss was an additional reason why he should not return to dwell with the Eskimos; and continuing in the ship to which, in this strange way, he had attached himself, he again made the homeward voyage with the Leith vessel in the autumn of 1817. During his residence in Leith in the winter of 1817, he had been taken notice of by Mr Nasmyth, the artist, who introduced him to Sir James Hall. The Eskimo, Sackheuse, was very desirous of being appointed on the Arctic expedition which Captain Ross was to command; and

THE WHALE IN MELVILLE BAY.

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his wishes to this effect having been communicated to the Admiralty by Captain Basil Hall, he was engaged to accompany the expedition as interpreter. Captain Ross had several conversations with Sackheuse. "He informs me," says Ross, "that he had, through the missionaries, been converted to Christianity, and the strong desire he had to see the country these good men came from had induced him to desert his own; but that it was his intention to return when he had learned the Scriptures and the art of drawing. He related several traditions current in his country respecting a race of people who were supposed to inhabit the north; adding, that it was for the purpose of communicating with them, and converting them to Christianity, that he had volunteered for our expedition. His utility to us in communicating with the natives will be apparent in the course of this narrative. He returned, like the rest of the crew, in perfect health during the passage home; often repeating that when he had got more instructions on religion he would return to the *wild people,* and endeavour to convert them to Christianity."

The equipment and inspection of the expedition being completed, the ships dropped down the Thames early in April, and sailed away northward for Lerwick, in Shetland, where they arrived on the 30th of the month. Steadily but slowly making their way westward during the month of May, the vessels passed Cape Farewell, the southmost point of Greenland, and soon after (26th May) saw the first iceberg in lat. 58° 36′ N., long. 51° W. It was covered with snow, seemed to be eight or nine miles distant, and a thousand feet long, though of inconsiderable height. "Imagination," says Captain Ross, "presented it in many grotesque figures: at one time it looked something like a white lion and horse rampart, which the quick fancy of sailors, in their harmless fondness, naturally enough shaped into the lion and unicorn of the king's arms, and they were delighted, accordingly, with the good luck it seemed to augur. And truly our first introduction to one of these huge masses, with which we were afterwards to grow so familiar, was a sort of epoch in our voyage that might well excuse a sailor's divination, particularly when the aspect with which it was invested tended to inspire confidence, and keep up the energies of the men; a feeling so requisite for an enterprise like ours, where even their curiosity might be chilled for want of excitement. 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 were novel and interesting."

The progress of the vessels in their course north up Davis' Strait and Baffin's Bay was unmarked by any incident which, to readers of the present day, would be regarded as important from its novelty or scientific value.

Captain Ross found it expedient to give a wide berth to the Middle Pack—the ice-floes, more or less, which occupy the middle of the great inlet known in its different reaches as Davis' Strait and Baffin's Bay—and held his way northward along the comparatively free and open water, which offers a sea-way at most times of the year along the west coast of Greenland. Thus, with land visible on the east, and with the sea-ice on the west, he kept on to the north, at the head of a fleet of forty sail of whalers, until passing Disco Land he arrived on the 29th June off Four Island Point in lat. about 70° 54′, long. 54° 10′ W. The following day being Sunday, the crews, as was their custom, attended divine service; and on the Monday, the weather being moderate, Captain Ross ordered John Sackheuse, the Eskimo interpreter, to proceed on shore and communicate with the natives. The prospect from the mast-head was that of interminable ice, weak and decaying, however, in the neighbourhood of the ships. Sackheuse returned with seven natives in their canoes or cayacks, bringing a small supply of birds. The village of the natives stood on the south side of the bay, and appeared to consist of a few huts made of sealskins, sufficient for the residence of about fifty persons. Being desirous of procuring a sledge and dogs, Captain Ross offered them a rifle musket for one completely fitted, which they promised to fetch—with much honest principle, however, refusing to accept the rifle till they had brought the sledge. They soon returned, however, bringing the sledge and dogs in a boat managed by five women, dressed in deerskins. This larger kind of boat is called an oomiack, and is rowed by women standing. Two of these women, who were taller than the rest, were the daughters of a Danish resident and an Eskimo mother. They were all of the colour of mulattoes. "We soon became intimate with our visitors," says Captain Ross, "and invited them into the cabin, where they were treated with coffee and biscuit, and had their portraits taken. After leaving the cabin, they danced Scotch reels on the deck with our sailors to the animating strains of our musician. Sackheuse'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 ceremonies. An Eskimo master of ceremonies to a ball on the deck of one of His Majesty's 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 Sackheuse, 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, about eighteen years of age, and by far the best looking of the group, was the object of Jack's particular attentions; which being observed by one of our officers, the latter 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 presented it to him in return; rewarding him, at the same time, with an eloquent smile, which could leave no possible doubt on our Eskimo's mind that he had made an impression on her heart. After the ball, coffee was again served, and at eight o'clock the party left us, well pleased with their entertainment, and promising to come back with a skin boat, an article which I conceived might be useful on the ice. I permitted Sackheuse to escort them, chiefly that he might hasten their movements, and search for specimens of natural history."

Sackheuse was not so punctual in his return to the vessel as might have been desired. On the following day there were signs of the breaking up of the ice towards the north, and a light breeze having sprung up, Captain Ross was impatient to proceed. A boat was then sent to shore to bring off the interpreter. But it was no want of loyalty to his commander that detained the Eskimo among his countrymen and countrywomen. On the previous day he had overloaded his gun, whether with the idea of making a magnificent display of his prowess as a marksman under the eyes of the belle, whose pewter ring adorned his finger, is not known. "Plenty powder—plenty kill," said Sackheuse, in excuse for his imprudence. The recoil of the overloaded weapon was so violent that it broke his collar bone, and he was thus rendered unable to row back in his canoe to the ship. He was brought on board, and put under the care of the surgeon.

On July 3d the "Isabella" and "Alexander" were off Sanderson's Hope, and in sight of the Woman's Islands of Baffin; and thus, after a lapse of two hundred years, the track of that great discoverer was at last being followed up, and his discoveries, which had been at first doubted, and then denied and expunged from the charts during the eighteenth century, were at last verified by Captain Ross.

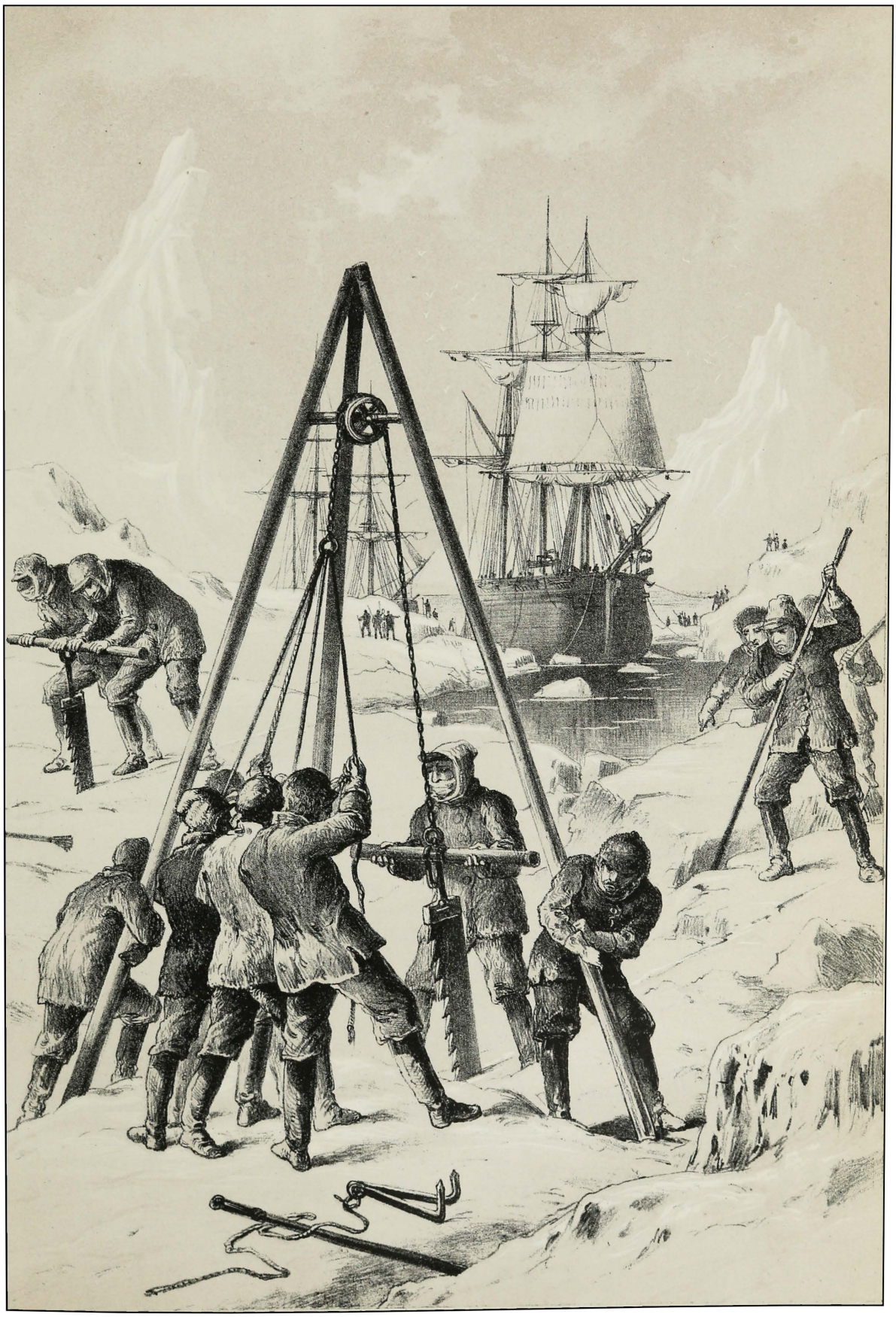
For the next fortnight the progress was slow, owing to continuous fogs. On the 18th July the weather cleared, and land could be seen on the east; but no passage through the ice could be observed. On the same day a large bear was seen making its way towards one of the ships. One of the "Alexander's" men, who was straying at some distance on the ice, first discovered the animal, and went to meet it; but soon perceiving he was no match for a creature so huge, so powerful, active, and fierce, he prudently halted, till a number of officers and seamen joined him. The bear, noting in his turn that prudence before such a reinforced enemy was the better part of valour, now turned tail, and led his pursuers a tedious hunt after him in vain.

On the 21st the weather cleared, land was again seen, and an open passage through the ice presented a way to the north. Red Head was now passed in lat. 75° 12′—the highest latitude to which ships employed in the whale-fishing were, up to that time, known positively to have penetrated. The whole of the

23d was employed in tracking through the ice, a process which becomes necessary when the channel is too narrow to allow a vessel to beat or be towed against the wind. In executing this service, the whole ship's company was sent on the ice, and a rope was thrown to them, one end of which was fastened to the end of the foremast. The men having hold of the other end, then pulled the ship a-head, marching to music, the musician always leading the way. As it sometimes happened that a hole covered with snow, or a weak part was found, the men occasionally tumbled in; but as they never let go the rope, they were immediately pulled out. When this accident happened to the fiddler, it afforded the sailors great amusement, and they never failed to exercise their wit on the occasion.

Captain Ross now records one of the chief discoveries made in this notable voyage: "The shore between lat. 75° 12′ and 76° formed a spacious bay, in the midst of which rose a remarkable spiral rock. This I named Melville's Monument, in grateful remembrance of the late Viscount, from whom I received my first commission in His Majesty's Navy. To the bay itself I gave the name of Melville's Bay, from respect to the present first Lord of the Admiralty. It is situated between lat. 75° 12′ and 76° 0′, and abounds with whales, many of which were taken by the ships which were persevering enough to follow us."

Thus it was only in the wake of Captain Ross' expedition of 1818 that the whalers first penetrated so far north as *Melville Bay*, as it is now always named. But for many years subsequently this icy inlet was regarded as a place of terror by the whalers. Protected on the north by the abutting peninsula of Cape York, the ice formed in this bay is not exposed to the general drift down Baffin's Bay, but usually remains in the condition of fixed ice firmly adhering to the coast, and often extending to a distance of thirty to fifty miles from it. In this region the prevailing winds in the early part of the season are from the north, in which case the drifting pack is blown off shore, and leaves a lane of open water along the fixed ice, or *land-floe*, as it is called, of Melville Bay. "When the wind is from the south," says Mr Clements R. Markham, writing in 1873, "the pack drifts into Melville Bay; but in that case the land-floe is a source of protection, for, as the drifting ice presses against it, the land ice, being oldest, almost invariably proves the stronger of the two. A dock can then be cut in the land ice, and a ship may ride in safety until the pressure eases off. Thus, 'by sticking to this land-floe,' as the whalers say, of Melville Bay, a vessel is never at the mercy of the drifting pack, and though there may frequently be long detention, ground is seldom lost, and final success is the reward of perseverance. . . . But Melville Bay used to be a place of dread and anxiety for the whaling fleet; for when a southerly wind brought the drifting pack in violent and irresistible contact with the land-floe, the ships, slowly creeping along its edge,



CUTTING A PASSAGE FOR THE SHIPS.

were frequently crushed like so many walnuts. In 1819 as many as fourteen ships were smashed to pieces in this way; in 1821, eleven; and in 1822, seven. The year 1830 was the great season of disaster for the whalers, when nineteen ships were entirely destroyed, occasioning a total loss to their owners of £142,600. On June 19th—of that year—a fresh gale from the south-south-west drove masses of ice into Melville Bay, and nipped the whole fleet against the land floe, about forty miles to the southward of Cape York. In the evening the gale increased, and the floes began to overlap each other. A huge floe then came down upon the devoted ships, and a scene of indescribable destruction ensued. In a quarter of an hour several fine ships were converted into shattered fragments; the ice, with a loud grinding noise, tore open their sides, masts were seen falling in all directions, great ships were squeezed flat and thrown broadside on to the ice, and one whaler—the "Rattler"—was literally turned inside out. The men only just had time to jump on the ice. But it must be understood that there is little or no danger of loss of life in Melville Bay. The shipwrecked sailors took refuge on board their more fortunate consorts, for even in 1830 the "Cumbrian" and several other ships escaped by digging deep docks in the land ice. Even if a solitary whaler is destroyed, when no other is in sight, the retreat in boats to the Danish settlements is perfectly safe and easy. When the fearful catastrophe occured in 1830, there were a thousand men encamped on the ice; the clusters of tents were a scene of joyous dancing and frolic, for Jack had got a holiday; and the season was long remembered as the year of "Baffin's Fair." Such is the character of the bay, the discovery of which, on July 24, 1818, by Captain Ross, we have just recorded.

A whaling adventure was the cause of considerable excitement to the expedition in its passage across Melville Bay. The monster was first harpooned by the "Isabella's" boat, the harpoon striking in the back, behind the left fin, and the wound appearing at first to be mortal. But the creature appears only to have been stunned. He soon recovered himself, and carried the boat to the edge of the ice, where he was lost. He soon after reappeared about a mile and a half distant, with the harpoon in his back. As the "loose fish" remained near the surface, and appeared to suffer from the wound, the young officers of both ships, who each commanded boats, pulled with emulation to the spot where each expected him to rise, waiting for the moment of his appearance with anxiety. Fortune favoured Mr James Ross, midshipman in the "Isabella," and the commander's nephew the animal rising nearest his boat, and receiving in succession three well-planted harpoons. The capture was now certain, and as the whale was much exhausted, and therefore obliged to remain at the surface, and thus expose himself to the lancers, his end was near. As he breathed, the blood rose in a column from the blow-hole. The people in the boats, aware of their danger, retired and

left him to spend his fury on the water. He was soon towed on board, and was found to be forty-six feet in length. Nine tons of blubber, intended to be used as light and fuel, should the vessels be obliged to winter in the ice, were obtained from him.

In the beginning of August there was but little progress made, as every channel was thickly encumbered. On the right (to the east) was the land ice; on the left, out to sea, there was much newly-formed ice of the colour of the water, and which is known as *bay-ice.* The expedients made use of in these comparatively early days of Arctic exploration to open up a way through the frozen water are interesting from their very primitive and simple character, and afford an additional instance of the fact, that before the employment of steam vessels in these seas, the old mariners were obliged to creep where a modern explorer finds it easy to run. On the morning of the 4th August the seamen were sent to track the ship, but the bay or newly formed ice was so strong that it became necessary to break it "by suspending a boat from the jibboom; this being constantly rolled by two seamen, raised a wave ahead of the ship that effected this purpose; thus gradually making way for her advance." After having sailed all day, Captain Ross moored to the ice at midnight, but was obliged to cast off in order to escape from an iceberg which he saw bearing down upon him. The little auks were exceedingly plentiful in the neighbourhood in which the vessels now found themselves—off Cape Melville, at the north extremity of Melville Bay—and many of them were shot for food, as was also a huge gull, two feet five inches in length, and which, when killed, disgorged one of the little auks entire. On the following day not less than two hundred little auks were shot 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 commonly of small shrimps, found very plentifully in this quarter.

The trials and extraordinary dangers of Arctic navigation are well illustrated in one of the adventures of the following day. After two o'clock, a small opening was seen ahead, and as it gave some hopes of forcing a passage, Captain Ross resolved to attempt it. The ships were accordingly tracked with great labour for about a mile through bay-ice to the narrowest part of a floe, which obstructed the ships' passage, into a pool ahead. Through this intervening strip of floe, or small ice-field, a passage had to be cut with the great saws, working over a block suspended between poles. In this way, and by means of warping, some slight progress was gained. "As it appeared likely," says Captain Ross, "that our people would be at work throughout the night, an extra allowance of provisions was served out. Their labours were incessant till half-past one, when, being almost worn out by exertion, I allowed them to rest till five. At half-past six the ice began to move, and

the wind increasing to a gale, the only chance left for us was to endeavour to force the ship through it to the north, where it partially opened; but the channel was so much obstructed by heavy pieces that our utmost efforts were ineffectual; the floes closed in upon us, and at noon we felt their pressure most severely. A floe on one side of the 'Isabella' appeared to be fixed, while another, with a circular motion, was passing rapidly along. The pressure continuing to increase, it became a trial of strength between the ship and the ice; every support threatened to give way, the beams in the hold began to bend, and the iron tanks settled together. At this critical moment, when it seemed impossible for the ship to sustain the accumulating pressure much longer, she rose several feet; while the ice, which was more than six feet thick, broke against her sides, curling back on itself. The great stress now fell upon her bow, and, after being again lifted up, she was carried with great violence towards the 'Alexander,' which ship had hitherto been, in a great measure, defended by the 'Isabella.' Every effort to avoid their getting foul of each other failed; the ice-anchors and cables broke one after another, and the sterns of the two ships came so violently into contact as to crush to pieces a boat that could not be removed in time. The collision was tremendous, the anchors and chain-plates being broken, and nothing less expected than the loss of the masts. But at this eventful instant, by the interposition of Providence, the force of the ice seemed exhausted; the two fields suddenly receded, and we passed the 'Alexander,' with comparatively little damage. The last things that hooked each other were the two bower anchors, which, being torn from the bows, remained suspended in a line between the two ships until that of the 'Alexander' gave way. Neither the masters, the mates, nor those men who had been all their lives in the Greenland service, had ever experienced such imminent peril; and they declared that a common whaler must have been crushed to atoms. Our safety must, indeed, be attributed to the perfect and admirable manner in which the vessels had been strengthened when fitting for service."

But their troubles were not yet at an end, for, as the gale increased, the ice began to move with greater velocity, while a continued thick fall of snow kept from their sight a further danger that awaited them till it became imminent. A large field of ice was now discovered at a small distance, bearing fast down upon them from the west, and it thus became necessary to saw docks for refuge, in which service all hands were immediately employed. The ice, however, was found too thick for their nine-feet saws, and no progress could be made. This circumstance proved fortunate, for it was soon after perceived that the field in which they attempted to cut the docks was drifting rapidly on a reef of icebergs which lay aground. The topsails were therefore close-reefed, in order that the ships might run, as a last resource, between two bergs, or into any creek that might be found among them, when

suddenly the ice-field acquired a circular motion, so that every exertion was now necessary to warp along the edge, that being the sole chance they had of escaping the danger of being crushed on an iceberg. In a few minutes, that part of the field into which they had attempted to cut docks came into contact with the berg with such rapidity and violence as to be dashed up against the fixed ice-mountain to the height of more than fifty feet, when, breaking, this lofty rampart tumbled back on the lower part of the ice-field with a terrible crash, overwhelming with its ruins the very spot in which they had attempted to find safety. Soon afterwards the vessels succeeded in clearing the reef of bergs, and thus again found themselves secure. Officers and men, who in this moment of incalculable danger and excitement had behaved with the utmost coolness and fortitude, had now a brief rest. Extra allowances of preserved meat and grog were served out, and the spare hands were told off to repair damages. While these were being attended to, Captain Sabine of the Royal Artillery, who was appointed to the expedition in the capacity of astronomer and naturalist, accompanied by Messrs Bushnan and Skene (midshipmen), and Mr Beverley, assistant-surgeon, were sent to examine the nearest shore, which appeared to be about six miles distant. Mr Bushnan discovered that the land was surrounded by water, and the name of Bushnan Island was accordingly given to it. It was found to be utterly desolate, but piles of stone, resembling in appearance and arrangement the Eskimo graves that had been seen in other localities on the Greenland coast, indicated that the island had been recently inhabited; and the stem of a heath bush burned at one end was found, and was recognised by Sackheuse as the instrument with which the natives trim their lamps. Little vegetation beyond a few specimens of the ranunculus and two or three specimens of a short grass were found, and there was nothing in the dead waste and solitude of this sterile island, with its few rude graves, to prepare the expedition for the very curious and interesting intercourse with the previously unknown natives of the west coast of North Greenland, a narrative of which is given in our next chapter.

CHAPTER II.

INTERCOURSE WITH AN UNKNOWN TRIBE OF ESKIMOS—THE ARCTIC HIGHLANDS—CAPTAIN ROSS'S GREAT DELUSION—CONCLUSION AND RESULTS OF ROSS AND PARRY'S VOYAGE.

THE "Isabella" and "Alexander" had not advanced far after their miraculous escape from being crushed between the ice-field and the berg, near the north entrance to Melville Bay, when the explorers were astounded to behold a number of men at some distance on the ice, hallooing, as it appeared, to the ships. Standing in towards the shore, Captain Ross discovered that these men were natives, drawn on rudely-fashioned dog-sledges, in which they continued to drive backwards and forwards on the ice with great rapidity. It was now time to call Sackheuse, the Eskimo interpreter, to the front. This important official shouted out to the natives in his own language; some words were heard in return, to which a reply was again made in Eskimo, but neither party appeared in the least to understand the other. "For some time," says Captain Ross, "they continued to regard us in silence, but, on the ships tacking, they set up a simultaneous shout, accompanied by many strange gesticulations, and went off in their sledges with amazing velocity towards the land. After they had attained the distance of a mile or more, they halted for about two hours. As soon as this was observed, the ship was tacked, and a boat sent to place an observation-stool, of four feet in height, on the ice, on which various presents, consisting of knives and articles of clothing, were left. Either, however, they did not see it, or it did not attract their attention; and a second boat was therefore sent, with directions to leave one of the Eskimo dogs, with some strings of blue beads round his neck, near the same place." After ten hours, the dog was found sleeping on the spot where he had been left; and the presents were still untouched. A single sledge appeared for a short time at a great distance, and afterwards drove rapidly away.

Captain Ross's contrivances for drawing the natives into intercourse with him were exceedingly ingenious. "Being extremely anxious," continues the commander of the expedition, "to communicate with the natives, I caused a pole to be prepared, on which a flag was fixed, with a representation of the sun and moon painted over a hand holding a sprig of heath (the

only shrub seen on the shore). This pole being carried to an iceberg, midway between the ships and the shore, was there erected, and a bag containing presents, with a device of a hand painted on it, was fastened to the pole, within reach, and left there—the ships in the meantime being moored in a convenient situation for observing what might take place. The gale had now entirely subsided, the weather became beautiful, and the water calm; circumstances that necessarily detained us in our present situation, which, notwithstanding the imperious nature of our orders to proceed with all possible despatch, we should have been unwilling to leave, while any chance of a communication with a people, hitherto unknown, remained. About ten o'clock, on the day after the natives were first seen, we were rejoiced to see eight sledges, driven by them, advancing by a circuitous route toward the place where we lay; they halted about a mile from us and the people alighting, ascended a small iceberg, as if to reconnoitre. After remaining, apparently in consultation, for nearly half-an-hour, four of them descended, and came towards the flagstaff, which, however, they did not venture to approach. In the meantime a white flag was hoisted at the main in each ship, and John Sackheuse despatched, bearing a small white flag, with some presents, that he might endeavour, if possible, to bring them to a parley. This was a service which he had most cheerfully volunteered, requesting leave to go unattended and unarmed, a request to which no objection could be made, as the place chosen for the meeting was within half-a-mile of the 'Isabella.' It was equally advantageous to the natives. A canal, or small chasm in the ice, not passable without a plank, separating the parties from each other, and preventing any possibility of an attack from these people except by darts."

"In executing this service, Sackheuse displayed no less address than courage. Having placed his flag at some distance from the canal, he advanced to the edge, and, taking off his hat, made friendly signs to those opposite to approach. This they partly complied with, halting at a distance of three hundred yards, where they got out of their sledges, and set up a loud simultaneous halloo, which Sackheuse answered by imitating it. They ventured to approach a little nearer, having nothing in their hands but the whips with which they guide their dogs; and, after satisfying themselves that the canal was impassable, one of them in particular seemed to acquire confidence. Shouts, words, and gestures were exchanged for some time to no purpose, though each party seemed in some degree to recognise the other's language. Sackheuse, after a time, thought he could discover that they spoke the Humooke dialect, drawling out their words, however, to an unusual length. He immediately adopted that dialect, and holding up the presents, called out to them, *Kahkeite*, 'Come on!' to which they answered, *Naakrie naakreiai-plaite*, 'No no—go away,' and other words, which he

made out to mean that they hoped we were not come to destroy them. The boldest then approached to the edge of the canal, and, drawing from his boot a knife, repeated, 'Go away; I can kill you.' Sackheuse, not intimidated, told them he was also a man and a friend, and, at the same time, threw across the canal some strings of beads and a checked shirt; but these they beheld with great distrust and apprehension, still calling, 'Go away; don't kill us.' Sackheuse now threw them an English knife, saying, 'Take that.' On this they approached with caution, picked up the knife, then shouted and pulled their noses. These actions were imitated by Sackheuse, who, in return, called out, 'Heigh yaw!' pulling his nose with the same gesture. They now pointed to the shirt, demanding what it was, and when told it was an article of clothing, asked of what skin it was made. Sackheuse replied it was made of the hair of an animal which they had never seen; on which they picked it up with expressions of surprise. They now began to ask many questions; for, by this time, they found the language spoken by themselves and Sackheuse had sufficient resemblance to enable them to hold some communication.

"They first pointed to the ships, eagerly asking, 'What great creatures are these? Do they come from the sun or the moon? Do they give us light by night or by day?' Sackheuse told them that he was a man, and that he had a father and mother like themselves; and pointing to the south, said that he came from a distant country in that direction. To this they answered, 'That cannot be, there is nothing but ice there.' They again asked, 'What creatures these were?' pointing to the ship; to which Sackheuse replied, that they were houses made of wood. This they seemed still to discredit, answering, 'No, they are alive, we have seen them move their wings.' Sackheuse now enquired of them, what they themselves were; to which they replied, they were men, and lived in "that" direction, pointing to the north; and that they had come here to fish for sea-unicorns. It was then agreed that Sackheuse should pass the chasm to them, and he accordingly returned to the ship to make his report and to ask for a plank.

"During the whole of this conversation," writes Captain Ross, giving one of the most interesting accounts of a savage race in the whole range of the narratives of exploration, "I had been employed with a good telescope, in observing their motions; and beheld the first man approach with every mark of fear and distrust, looking frequently behind to the other two, and beckoning them to come on, as if for support. They occasionally retreated, then advanced again, with cautious steps, in the attitude of listening, generally keeping one hand down by their knees, in readiness to pull out a knife, which they had in their boots; in the other hand they held their whips, with the lash coiled up; their sledges remained at a little distance, the fourth man being apparently stationed to keep them in readiness for

escape. Sometimes they drew back the covering they had on their heads, as if wishing to catch the most distant sounds; at which time I could discern their features, displaying extreme terror and amazement, while every limb appeared to tremble as they moved. Sackheuse was directed to entice them to the ship, and two men were now sent with a plank, which was accordingly placed across the chasm. They appeared still much alarmed, and requested that Sackheuse only should come over. He accordingly passed to the opposite side, on which they earnestly besought him not to touch them, as, if he did, they should certainly die. After he had used many arguments to persuade them that he was flesh and blood, the native who had shown most courage, ventured to touch his hand; then pulling himself by the nose, set up a shout, in which he was joined by Sackheuse and the other three. The presents were then distributed, consisting of two or three articles of clothing and a few strings of beads; after which Sackheuse exchanged a knife for one of theirs."

The hope of getting some important information, as well as the interest naturally felt for these poor creatures, made Captain Ross impatient to communicate with them himself, and he therefore desired Lieutenant Parry to accompany him to the place where the party were assembled. The two chief officers, provided with additional presents, consisting of looking-glasses and knives, together with some caps and shirts, proceeded towards the spot where the conference was being held between the interpreter and the savages. "By the time we reached it," says Ross, "the whole were assembled; those who had originally been left at a distance with their sledges, having driven up to join their comrades. The party now therefore consisted of eight natives, with all their sledges, and about fifty dogs, two sailors, Sackheuse, Lieutenant Parry, and myself; forming a group of no small singularity; not a little, also, increased, by the peculiarity of the situation, on a field of ice far from the land. The noise and clamour may easily be conceived; the whole talking and shouting together, and the dogs howling, while the natives were flogging them with their long whips to preserve order. Our arrival produced a visible alarm, causing them to retreat a few steps towards their sledges; on this Sackheuse called to us to pull our noses, as he had discovered this to be the mode of friendly salutation with them. This ceremony was accordingly performed by each of us, the natives during their retreat, making use of the same gesture, the nature of which we had not before understood. In the same way we imitated their shouts as well as we could, using the same interjection, *heigh yaw!* which we afterwards found to be an expression of surprise and pleasure. We then advanced towards them while they halted, and presented the foremost with a looking-glass and a knife, repeating the same presents to the whole as they came up in succession. On seeing their faces in the glasses, their astonishment appeared

extreme, and they looked round in silence for a moment at each other and at us; immediately afterwards they set up a general shout succeeded by a loud laugh, expressive of extreme delight, as well as surprise, in which we joined, partly from inability to avoid it, and willing also to show that we were pleased with our new acquaintances.

"The impression made by this ludicrous scene on Sackheuse was so strong, that some time after he made a drawing of it—being the first specimen we had witnessed of his talents for historical composition." His practice in the art of design had hitherto been confined to make copies of such prints of single figures or ships as he could procure. Sackheuse, though an Eskimo, was a man of many talents. His accomplishment in drawing was very considerable. His copies were remarkable for their fidelity, and the grouped drawing of the conference on the ice, that has just been described, is very correct, and is not—especially in the figures of the natives—without humour. In executing this picture, we have Captain Ross's authority for the fact that he received no hint or assistance of any kind. The work is entirely his own, and is, at least, 'a good representation of the objects introduced.'"

Having now acquired confidence, the natives advanced, offering their "knives, sea-unicorns' horns, and sea-horse teeth" for the English knives, glasses, and beads, which were taken in exchange. They were then instructed by Sackheuse to uncover their heads, as a mark of goodwill and respect to us; and with this ceremonial, which they performed immediately, and of which they appeared to comprehend the meaning, the friendship between the parties was established.

Of the subsequent incidents of this interview Captain Ross's account is so curious and so admirable for its simplicity and evident truthfulness, that we may be excused quoting the principal part of it: "As we were anxious to get them to the ship as soon as possible, I desired Sackheuse to persuade them to accompany us; they accordingly consented, on which their dogs were unharnessed and fastened to the ice, and two of the sledges were drawn along the plank to the other side of the chasm. Three of the natives were left in charge of the dogs and the remaining sledges; the other five followed us, laughing heartily at seeing Lieutenant Parry and myself drawn towards the ship on the sledges by the seamen. One of them, by keeping close to me, got before his companions, and thus we proceeded together till we arrived within a hundred yards of the ship, where he stopped. I attempted to urge him on, but in vain; his evident terror preventing him from advancing another step till his companions came up. It was apparent that he still believed the vessel to be a living creature, as he stopped to contemplate her, looking up at the masts, and examining every part with marks of the greatest fear and astonishment; he then addressed her, crying out in words perfectly intelligible to Sackheuse, and in a loud tone, 'Who are you? what are you?

where do you come from? is it from the sun or the moon?' pausing between every question, and pulling his nose with great solemnity. The rest now came up in succession, each showing similar surprise, and making use of the same expressions, accompanied by the same extraordinary ceremony. Sackheuse now laboured to assure them that the ship was only a wooden house, and pointed out the boat, which had been hauled on the ice to repair; explaining to them that it was a smaller one of the same kind. This immediately arrested their attention. They advanced to the boat, examined her, as well as the carpenters' tools and the oars, very minutely; each object in its turn exciting the most ludicrous ejaculations of surprise. We then ordered the boat to be launched into the sea, with a man in it, and hauled up again, at the sight of which they set no bounds to their clamour. The ice-anchor, a heavy piece of iron, shaped like the letter S, and the cable, excited much interest. The former they tried in vain to remove, and they eagerly inquired of what skins the latter were made.

"By this time the officers of both ships had surrounded them, while the bow of the 'Isabella,' which was close to the ice, was crowded with the crew; and, certainly, a more ludicrous, yet interesting scene was never beheld, than that which took place whilst they were viewing the ship; nor is it possible to convey to the imagination anything like a just representation of the wild amazement, joy, and fear which successively pervaded the countenances, and governed the gestures of these creatures, who gave full vent to their feelings. I am sure it was a gratifying scene which never can be forgotten by those who witnessed and enjoyed it."

After much persuasion, the natives were taken on board, where their wonder at everything they saw knew no bounds. They showed, by attempting to lift every object they saw, however heavy, that they had no idea of the weight of timber or iron; they heard with utter indifference the music of a violin and a flute, and they could not be persuaded to eat either biscuits or salt meat, both of which they seemed to consider very poor stuff. After being loaded with presents, they took their departure, promising to return "after they had eaten and slept," by which phrase they expressed, as nearly as they could, the idea of "to-morrow."

On the morning of the 11th August the "Isabella" and "Alexander" were able to advance seven miles to the westward, and were fortunate enough to find a station of safety under the lee of an immense iceberg, which lay aground in one hundred and fifty fathoms. The situation of the expedition was now in lat. about 75° 55′ N.; long. about 65° 32′ W. On this day, Captain Ross, conversing with the Eskimo interpreter, learned that the natives, in their alarm at beholding the ships of the strangers, had sent their women and children to the mountains; that their original intention in coming to the ships was to beseech the mysterious visitors to "go away and not destroy them"—this

constant fear of destruction being a suggestive commentary on the life of continual apprehension which these creatures led in this inhospitable region—and that they had watched the ships for some time, expecting to see the great winged creatures fly either to the sun or moon, from one of which they concluded the vessels had flown to their shores.

Some slight progress was made on the 13th, the vessels again finding shelter close to an iceberg. While working towards this station, Parry saw land from the mast-head bearing W.S.W.; the atmosphere was wonderfully clear, and all distant objects seemed strangely raised by refraction. The sun delineated the features of the horizon in a distinct and beautiful manner, and the reflections of light on the icebergs were peculiarly splendid—emerald, sapphire, and orange, being the prevailing colours. Vast numbers of whales were here seen. They came up alongside the ship to respire, and betrayed no sign of alarm; a number of sea-unicorns (narwhals) were also seen, and in the mornings and evenings the open pools in the ice swarmed with little auks, hundreds of which were shot daily. On this and on the following day, intercourse was renewed with the natives, but nothing novel was observed in their habits or manners until two of them were asked to give specimens of their dancing. This request was forthwith complied with; and as a preliminary to the exhibition proper, one of the two performers began immediately to distort his face and turn up his eyes in such a hideous fashion, that Captain Ross, believing him to have been taken suddenly ill, was about to call for the surgeon, when the Eskimo, having concluded this introduction to his performance, proceeded to execute a variety of extraordinary gestures and attitudes, accompanied by the most violent and soul-harrowing distortions of countenance. The gestures and actions were not wanting in that reprehensible element, for which the Nautch of India and the Can-can of the most polished nation in the world are notorious. The body was kept generally in a stooping posture, with the hands resting on the knees. In a short time the performer burst into the song of "Amnah Ayah," which seems to be, in a sense, the national hymn of the Eskimos, and which we shall have occasion, in recording the observations of a later explorer, to describe. Meantime the second performer, who had hitherto been looking on in silence, seemed to catch an inspiration from the notes of the well-loved air, and gave expression to his feelings by, in his turn, making the most hideous faces, and by adding to the monotonous "Amnah Ayah" the chorus of "Hejaw-hejaw." "After this had continued with increasing energy for some minutes, the tune was suddenly changed to a shrill note, in which the words 'Wehee-wehee' were uttered with great rapidity. They then approached each other by slipping their feet forward, grinning, and in great agitation, until their noses touched, when a savage laugh ended this extraordinary performance."

On the evening of the 15th August, the pool in which the ships were lying widened to several miles in extent, and soon the auks were seen flying towards it in immense clouds that covered the whole surface of the water. These sea-fowl came to feed on the same small marine animals which here form the staple food of the whale. Two boats were despatched from each ship to procure a supply of the birds, for the purpose of preserving in ice, and at midnight the boats of the "Isabella" returned with about fifteen hundred. So close packed was the flock of auks that fifteen fell to every shot. The boats sent by Lieutenant Parry from the "Alexander" were equally fortunate, and from this time three birds were served out daily to each man, and were found to make excellent soup, not unlike that made from hare.

At four o'clock on the following day the ice appeared to be comparatively open; and eager to pursue the main object of the expedition as soon as a way should open up before him, Captain Ross gave orders to make sail. With a fine breeze from the north, the ships proceeded westwards along the margin of the ice, which appeared attached to the land, and in about two hours arrived at a barrier of icebergs stretching from the northernmost land in sight towards the west. There were, however, narrow channels among the bergs, and working through among these, Ross discovered and named Cape York, and continued to steer west by north along the land, and at a distance of four miles from it. In the neighbourhood of Cape York the sea was seen washing the shore unencumbered with ice. A very singular phenomenon was also here observed by Ross for the first time. The cliffs along the shore seemed to be covered with crimson snow. On sending a boat ashore to examine this apparent freak of nature, it was found that the snow was penetrated down to the rock—a depth in many places of ten or twelve feet—with a deep crimson colouring matter. On subjecting the snow to examination under a microscope magnifying a hundred and ten times, this colouring matter appeared to consist of very minute round particles, all of the same size, and all of a deep red colour. The general opinion of those who examined the snow was that the crimson colouring matter was vegetable in its nature, probably the seeds of some plant; and this impression was strengthened by the circumstance that the summits of the hills, six hundred feet above the cliffs, were clothed with vegetation of yellowish green and reddish brown colours.

Passing the Cape Dudley Digges of Baffin, a magnificent glacier, filling up a space of four square miles, extending a mile into the sea, and rising inland to the height of a thousand feet, was discovered. Wolstenholme Island was soon in sight to the northward; and as the two vessels were now steering for it with a fine breeze and with an open sea before them, the explorers began to indulge high hope of at last attaining the grand object of their enterprise, and of sailing right on until they should open the sea that was supposed to wash over the North Pole. Wolstenholme Sound, which

was found to be completely blocked up with ice, was passed at two p.m. The entrances to the inlet, and the general trend and outline of the land, were found to agree in all important particulars with the account of these given by their discoverer, Baffin. Two hours later Whale Sound was discovered, or rather rediscovered, for hitherto Ross had been strictly following in the track of Baffin. To the northward of Whale Sound the land appeared to be very mountainous, and to take a westerly direction. At nine P.M. the weather became very clear, and Carey's Islands were discovered. Continuing on the same northward course all night, Ross found himself abreast of the westernmost of the Carey Islands on the morning of the 19th.

We now approach the climax of Captain Ross's enterprise—that stage of his expedition where he reached his furthest, northwards, and where he reluctantly, but with a confidence as full and dogmatic as it was misplaced, came to the conclusion that no northward passage was to be found through Smith's Sound. As every movement of the "Isabella" and "Alexander" became at this point of the greatest interest, it will be necessary to follow Captain Ross's own narrative closely until we find him turning his bows southward on his homeward voyage, in the full conviction that the instructions he had received from the Admiralty could not by possibility be carried out.

Passing the westmost of the Carey Islands on the morning of the 19th, Ross stood to the north-east, to get a better view of Whale Sound and the land near it, and he soon convinced himself, on evidence that we now know to have been insufficient, that there was no navigable passage in that direction. He afterwards resumed a westward course, and saw Hackluit's Island of Baffin "very near to the mainland." At night a fresh breeze sprang up, and the commander "had hopes of being able to examine the great bay which appeared to the north, and through which a passage might possibly be found." From this statement it might be inferred, that when Ross reached these high latitudes he was cherishing the preconceived idea that he would be certain to be stopped by land. In search of the "passage" northward, he bore up under all sail in that direction, advancing sixteen miles, partly through loose ice. At ten he signalled Lieutenant Parry; and having delivered to him some additional sealed instructions, to be opened in the event of the ships parting company, he bore up again to make out the situation of the land. Carey's Islands were now in sight on the south-east. "It continued clear," says Ross, "until near one in the morning; and the sun, passing in azimuth below the Pole, along the tops of the mountains, gave us an excellent view of the bottom of this bay. Smith's Sound, discovered by Baffin, was distinctly seen, and the capes forming each side of it were named after the two ships—'Isabella' and 'Alexander.' I considered the bottom of the Sound to be about eighteen leagues distant; but its entrance was completely blocked up

by ice. A thick fog soon came on, and we again hauled to the westward." Soundings on the night of the 19th gave 192 fathoms. Grey mud, stones, and chocolate-coloured clay, in which worms were found, were brought up; and, says the commander, "the large icebergs, which we passed in great numbers, were also a proof that the water was not shallow"—and a proof also, by inference, that the explorer was not so near what he supposed to be the north shore of the bay as he imagined.

On the morning of August 20th, Ross reckoned himself to be in lat. 76° 54′ N.; and "*having determined there was no passage farther to the northward,*" he stood under easy sail for ten miles to the *south-west* under pressure of a gale. The gale abating, he again hauled to the *north-north-east,* advancing upon the threshold of the unknown with the utmost caution—keeping the lead going, and having look-out men posted at the mast-heads, yard-arms, and jib-boom end. He ran in the direction stated from nine in the morning till four, "when it suddenly cleared, and we saw the nearest land at a distance of six leagues, bearing north-west. To the north-eastward there appeared a bay, but the land was distinctly seen beyond it, forming a chain of mountains from Smith's Sound to the westward." It was Ross's intention to have examined this bay, "which was evidently the northernmost," in order to determine more accurately its geographical position; but a firm field of ice, with an outer rampart of icebergs driven upon it by southerly gales, occupied its surface. Approaching the icebergs as near as he could with safety, Ross signalled Parry, and gave him directions to proceed with a party to a convenient iceberg and make observations. As results of these, the dip of the magnetic needle was found to have increased from 85° 44′ 33″ to 86° 9′ 33″ since the preceding day, and the magnetic force, as ascertained by the oscillations, was found to have increased about one forty-eighth part, evidence which went to prove that an approach was being made toward the Magnetic Pole.

Before recording the great mistake which practically brought Ross's expedition to a comparatively fruitless termination, it is necessary, in justice to this able navigator, to state the circumstances that seemed to afford an apparent basis for the illusion in which the mistake had its origin. In the middle of the month of August peculiar weather prevailed, and the most singular atmospheric effects astonished the explorers with their strangeness, beauty, and novelty. Occasionally the waters were cloaked with fogs which were in general extremely thick, and of a very white appearance, while in the zenith the blue sky was apparent. The thermometer was usually at the freezing point, and as soon as the fog reached the ships it froze upon the ropes and coated them with ice until they attained the thickness of a man's arm. At every evolution of the ships, when the ropes had to be worked to move the sails, the ice cracked off from the ropes and covered the decks

with icy fragments. In the absence of these fogs, which shrouded the distance, and veiled or disguised every object, the atmosphere was beautifully clear. But even then the element of uncertainty did not vanish from the prospects; for in the most lucid air the objects on the horizon were often raised into the strangest, most fantastic shapes, by the power of refraction, while at other times they were as strangely depressed and flattened. Objects all around — mountains, icebergs, ice-floes — were continually varying in shape. The ice on the horizon had sometimes the appearance of an immense wall broken into breaches here and there, as if it had suffered from the assaults of a beleaguering army of giants. At other times the ice-fields were transfigured into the forms of lofty ramparts, from which citadels and glittering spires arose. Fragments of ice assumed the appearance of trees, and so puzzling and unaccountable were the phenomena of the atmosphere, that while the ice-field on the right rose into the resemblance of a snow-clad forest, that on the left was depressed and its features lengthened so as to assume the appearance of long, low islands. "We were often able," says Ross, with unconscious *naïveté*, "to see land at an immense distance, and we have certain proof (!) that the power of vision was extended beyond one hundred and fifty miles. I made many observations with my sextant on the phenomena just described, and often found the same object increase in its altitude, half-a-degree in the course of a few minutes." The high rock of Cape Dudley Digges was observed to increase in altitude from 2° to 5° within an hour; in half-an-hour more it decreased to the appearance of a speck in the water, soon afterwards becoming like a long, low island, remaining so for several hours, and eventually resuming its natural shape. "While the moon was in sight," continues Ross—who, like all great sailors, had a quick eye and apprehensive soul to all the wonders of the sea and sky —"she had the appearance of following the sun round the horizon; and while these bodies were passing along the tops of the mountains, the snow which covered these, and which had naturally a yellow tinge, had then the lustre of gold, and the reflection of them upon the sky produced a rich green tint, so delicately beautiful, as to surpass description. On the other hand, the rays of the sun, darting over the tops of the mountains, came in contact with the icebergs, which appeared like so many edifices of silver, adorned with precious stones of every variety."

In such a changeful region, in which an unexperienced Arctic navigator like Ross was practically surrounded not so much by solid and permanent forms, as by mere illusory phantasms, one could conceive it to be a very risky matter to dogmatise upon any natural feature of the distant scenery, however deep-rooted in the earth it might for the time seem to be. In speculating on the indestructibility of the "cloud-capped towers," one should be conscious of the "baseless fabric of a vision." Yet Captain Ross, an

excellent and accomplished navigator, a man of considerable intellectual power, a Scotchman, and one not given to accept his facts on the endorsement of his imagination, seems at this greatest crisis of his voyage to have thrown national caution overboard, and to have inconsiderately rushed at a conclusion, which was definitely proved to be false and baseless by his own first lieutenant in the following year.

The observations on the dip of the needle, and the strength of the magnetic force, were being made on the 20th August. Lieutenant Robertson and other officers were stationed at the mast-head to look out for the direction of the coast. These officers, we are informed, reported "that they had seen the land completely round this bay at different times; as did also the officers of the 'Alexander,' who were at the mast-head of that ship at the same time." This was evidently the conclusion to which the commander had himself come. It is curious, in the light of facts with which we have now been familiar for the last fifty years, to glance for a moment at the apparently unassailable arguments upon which Captain Ross founded a theory altogether erroneous. "On the 19th August," he says, "at fifty minutes past midnight, the ship being nearly on the seventy-seventh degree of north latitude, ten leagues to the westward of Cape Saumarez, which forms the east side and the bottom of this bay, the land was distinctly seen. On the 20th and 21st, when off Cape Clarence, at the distance of six leagues, the land which forms the west side and the bottom of this bay, was also distinctly seen by the above mentioned officers and myself, *and by those two observations the coast is determined to be connected all round.* At each of these periods this immense bay was observed to be covered with field-ice; besides which a vast chain of large icebergs was seen to extend across it. These were apparently aground, and had probably been driven on shore there by southerly gales. It was also observed that the tide rose and fell only four feet, and the stream of it was scarcely perceptible. From these several considerations it appears perfectly certain that the land is here continuous, and that there is no opening at the northernmost parts of Baffin's Bay, from Hakluit's Island to Cape Clarence. Even if it be imagined, by those who are unwilling to concede their opinions while there is yet a single yarn of their hypothesis holding, that some narrow strait may exist through these mountains, it is evident that it must for ever be unnavigable, and that there is not even a chance of ascertaining its existence, since all approach to the bottoms of these bays is prevented by the ice, which fills them to so great a depth, and appears never to have moved from its station."

Of these brave words it is unnecessary to say anything further than that Ross, and those of his officers who were of his opinion, were completely deceived. The air-drawn rampart of mountains which he believed stretched across the mouth of Smith's Sound, and closed all the north-west shores of

Baffin's Bay, was a mere weather-gleam, a line of Alps, built only of water-blink and shadow, an unsubstantial pageant through which, and far beyond, Lieutenant Parry penetrated in the following year.

Having thus to his own satisfaction finished his work in the extreme north of Baffin's Bay, Captain Ross shaped his course to the westward and southward. He caused accurate bearings to be made of the different headlands at the entrance to Smith's Sound; and having named the lofty cape on the west side of "the bay" Cape Clarence, he shaped his course on the morning of the 21st August towards the next opening which appeared in view to the westward. Two days afterwards, he stood in to examine the Jones' Sound of Baffin, and in the evening he made out to his satisfaction the north and south points of the land across the bottom of this bay, or inlet, which answered Baffin's description of Jones' Sound. At midnight, a ridge of very high mountains was seen to extend nearly across the bottom of it, and joining another from the south, which was not quite so high. This "ridge of very high mountains" was afterwards sailed over by various explorers of Jones' Sound. On the 26th, Coburg Island, Cape Leopold, and Princess Charlotte's Monument, at the mouth of Jones's Sound, were discovered and named. On the 30th, Captain Ross found himself in the opening of Lancaster Sound, and sailed some distance westward with the view of exploring it. This part of his voyage was in no sense thorough or satisfactory. He had come to the conclusion, apparently on the most insufficient grounds, that this great Sound was only an "inlet." This inlet he describes as being enclosed on the north, west, and south by the Cunningham, Croker, and Martin Mountains. The Croker Mountains he believed formed an impassable barrier westward, yet we know that Parry, in the following year, sailed over the spot which his predecessor supposed them to occupy. From this point, however, Captain Ross's expedition loses interest for us. Ross continued to sail southward, coasting along Byam Martin's Land, Baffin's Land, and its peninsula Cumberland, giving names to numerous islands, inlets, etc., but making no important discovery, and experiencing no surprising adventure. On the 14th of November he arrived on the coast of England, and cast anchor in Grimsby Roads.

The chief results of Ross's first Arctic voyage are that he vindicated the claims of Baffin as a great discoverer, and removed the suspicion that had continued to cloud the fame of that famous navigator for two hundred years, and that, by penetrating beyond the dreaded Melville Bay into the north water, south of the entrance to Smith Sound, he opened up a new and most productive whale-fishing ground, which British whalers have not failed to frequent every summer from his day to our own.

PART III.

CHAPTER I.

IN SEARCH OF THE NORTH-WEST PASSAGE—PARRY'S FIRST EXPEDITION, 1819—ENTERS LANCASTER SOUND—DISCOVERY OF PRINCE REGENT'S INLET—STEERING WESTWARD.

CAPTAIN ROSS's first Arctic voyage was undertaken "for the purpose of exploring Baffin's Bay, and ascertaining the probabilities of a north-west passage to the Pacific;" but this commander having failed to carry out the instructions he had received from the Admiralty, and, instead of ascertaining the probability of a passage by either Smith's, Jones's, or Lancaster Sounds, having merely looked in at the doors of these great openings, the actual "Search for the North-West Passage" during the present century—the search that called into activity the best energies of a score of famous explorers, and demanded the sacrifice of Franklin and the crews of the "Erebus" and "Terror," before it yielded up the secret that had so long lain hid in its gloomy, ice-locked straits—cannot, strictly speaking, be said to have commenced until immediately after the return of the "Isabella" and "Alexander," when a new expedition, with this definite end in view, was organised and despatched to the Polar seas, under the leadership of Captain Ross's first officer, Lieutenant Parry.

In the narrative of his first Arctic voyage, Captain Ross leads readers to infer that when he left the three great sounds leading north and west of the extreme north of Baffin's Bay unexplored, in the full but unwarranted conviction that these openings were not really sounds, but only inlets backed by lofty and continuous ridges of mountainous land, he did so only after consulting all his officers, and obtaining the additional weight of their unanimous opinions in support of his own. But such an inference is not justified by the facts of the case. In the private journal of one of the officers on board the "Alexander," the following suggestive passage occurs in reference to the withdrawal of the vessels of the expedition from the mouth of Lancaster Sound: "Not any ice was to be seen in any direction, and at seven o'clock,

the weather being remarkably fine and clear, land was not to be discerned between N. 27° W., and N. 44° E. At this time our distance from the northern land was estimated at seven or eight leagues; but alas! the sanguine hopes and high expectations excited by this promising appearance of things were but of short duration, for about three o'clock in the afternoon the "Isabella" tacked, very much to our surprise indeed, as we could not see anything like land at the bottom of the inlet, nor was the weather well calculated at the time for seeing any object at a great distance, it being somewhat hazy. When she tacked, the "Isabella" was about three or four miles ahead of us." Several passages in Parry's journal, and in his private letters written soon after his arrival with the vessels in British waters, expresses the same conviction that open water extended before them in Lancaster Sound, and the same regret that a north-west passage had not been sought in that direction. Writing to his friends at home on his arrival at Shetland, he says: "That we have not sailed through the North-West Passage; our return in so short a period is, of course, a sufficient indication; *but I know it is in existence, and not very hard to find.* This opinion of mine, which is not lightly formed, must, on no account, be uttered out of our family; and I am sure it will not, when I assure you that every future prospect of mine depends upon its being kept a secret." Again, writing from London, November 18, 1818, he thus describes an interview which he had had with Lord Melville, then First Lord of the Admiralty: "About three o'clock Lord Melville saw us" (Franklin and himself). "He conversed with me upon our expedition, and, what was more interesting to me, upon what yet remained to be done. You must know that, on our late voyage, we entered a magnificent strait, from thirty to sixty miles wide, upon the west coast of Baffin's Bay, and—*came out again,* nobody knows why! You know I was not sanguine, formerly, as to the existence of a north-west passage, or as to the practicability of it, if it did exist. But our voyage to this Lancaster Sound, as Baffin calls it, has left quite a different impression, for it has not only given us every reason to believe that it is a broad passage into some sea to the westward (probably that of Hearne and Mackenzie); but, what is more important still, that it is, at certain seasons, practicable; for, when we were there, there was not a bit of ice to be seen. This truth has been fully communicated to Lord Melville by Mr Barrow" (successor to his father, Sir John Barrow, in the secretaryship to the Admiralty), "who had, with his usual discernment, immediately discovered it, without any information from me on the subject. Lord Melville conversed with me pretty freely on the probability of a passage there." The results of this interview were, that in the following month (December), two vessels were selected to form another Arctic expedition, to start in the approaching spring, and that, on the 16th January, Lieutenant Parry was, to his intense gratification, appointed to its command.

The vessels chosen to form the new expedition, and which had been selected by Parry himself, prior to his appointment to their command, were the "Hecla" and "Griper." The "Hecla" was a bomb of 375 tons, built in a merchant's yard at Hull in the year 1815, of large scantling, and having a capacious hold; the "Griper" was a gun-brig of 180 tons. Both ships were taken into dock about the middle of December, and their thorough repair, and the great strengthening they underwent to fit them for Arctic service, were directly supervised by Lieutenant Parry himself. The total number of individuals forming the expedition, including Parry himself and Lieutenant Liddon, who commanded the "Griper," was ninety-four; and as the Admiralty agreed to grant to every man engaged in the expedition double the current pay of the Navy, the ships were speedily manned with a full complement of excellent seamen, including nearly the whole of those who had served on the former expedition under Ross. Captain Sabine joined the new expedition, to perform the duties he had discharged with so much credit in the previous one—those of astronomer and naturalist—and among the officers were Lieutenants F. W. Beechey and H. P. Hoppner; while among the midshipmen were J. C. Ross and J. Bushnan, of whom we have had occasion already to make mention.

The object of the expedition, as stated in the Admiralty instructions, was to "endeavour to discover a North-West Passage from the Atlantic to the Pacific Ocean." With this end in view, Lieutenant Parry was instructed to make the best of his way to the entrance of Davis's Strait, from which locality, if he should find the ice sufficiently open to permit his approach to the western shores of the strait, and his advance to the northward as far as the opening into Lancaster Sound, he was to proceed to explore the bottom of that sound. If no westward passage was found in this direction, Parry was to proceed to and examine successively Jones's and Smith's Sounds. The ships were fully furnished with provisions and stores for two years; and on the 4th May 1819, the "Hecla" was towed down the Thames to Northfleet, to be followed on the next day by the "Griper." The latter vessel, however, showing bad sailing qualities from the commencement, it was not till the 12th that the "Hecla," taking the slower vessel in tow, ran with her through Yarmouth Roads. Thus was the nineteenth century search for the North-West Passage commenced, under a commander whose good luck it was to achieve the most important results after spending an entire winter in a previously unknown region, and undergoing adventures and making himself familiar with experiences of which the scientific world of that time could not have formed any distinct conception.

The vessels rounded the northern point of the Orkneys on the 20th May. The first "stream" of ice was fallen in with early on the morning of the 18th June, and soon after icebergs were seen. On the 23rd, the ships being then

CAPTAIN ROSS.

THE THIRD WINTER IN VICTORIA HARBOUR.

in lat. 62° 43′, long. 61° 38′, the ice of Davis's Strait, in bergs and loose streams, was seen to the west-north-west; and from this point, to avoid a too early collision with the great enemy of the Arctic explorer, a northern course was steered, and the ice kept well to the westward. Unable to force a passage westward through the ice of Davis's Strait, Parry kept on his course northward along the east fringe of it without meeting with any strikingly novel experience, until, on the 21st July, clear weather having set in, the land called by Davis, Hope Sanderson, and the Woman's Islands on the west coast of Greenland (lat. about 72° 40′ N.), were seen on the east. The vessels now found themselves in the midst of numerous very high icebergs, of which Parry counted, from the crow's-nest, as many as eighty-eight, while the smaller bergs were almost innumerable. Taking advantage of this clear weather, with which he had not been blessed for fourteen days previously, Parry tacked immediately to the westward to examine the ice, and try for a passage westward into the entrance of Lancaster Sound, toward which his hopes of a successful voyage allured him. He accordingly, on the 21st, ran into the middle-ice of Baffin's Bay before a moderate south-east breeze, and found himself soon among floes or ice-fields of considerable extent, and of from six to seven feet in thickness.

Progress was slow. Parry was without the powerful aid of steam. Boring was impossible, and he had occasionally to heave the ships through between the ice-masses with hawsers. As an indication of the average rate of advance through the ice toward the desired sound, it may be stated that on the 25th July, Parry, having made the "Griper" fast astern of the "Hecla," and having manned the capstan of the latter with the crews of both vessels to warp forward the ships by means of winding on the ropes of ice anchors planted in the ice in advance, all the progress that was made after eleven hours' laborious exertion was only four miles. On the 29th there was so much clear water that the ships had a perceptible pitching motion, which was hailed with pleasure as an indication of an open sea. On the following day the open water continued, and the vessels now seemed all at once to have got into the headquarters of the whales, no less than eighty-two of which were seen during the day. At noon the latitude was found to be 74° 01′, the longitude 75° 59′ W. A breeze springing up from the N.N.W. in the afternoon, the "Hecla" made all sail ahead to make the land, and early in the evening the mountainous land about Possession Bay, at the southern entrance to Lancaster Sound, was distinctly seen, and Parry beheld with exultation the gate to the unknown region open before him, and inviting him to enter. "Sir James Lancaster's Sound," writes Parry, "was now open to the westward of us, and the experienee of our former voyage had given us reason to believe that the two best months in the year for the navigation of these seas were yet to come."

Making the best use of the time at his command, Lieutenant Parry urged on westward, and found himself in lat. 74° 25′, long. 80° 4′ on the 3d August. A favourable breeze springing up from the east, a crowd of sail was set to carry the ships with all rapidity to the westward, through the hitherto unknown sound. The supposed Croker Mountains, which Ross had believed he had seen closing all passage through the sound to the westward, were nowhere to be seen. Hope and open water were in front—the mirage and the timidity that had closed the voyage of the explorer of the previous year having vanished together. "It is more easy," says Parry, "to imagine than to describe the almost breathless anxiety which was now visible in every countenance, while, as the breeze increased to a fresh gale, we ran quickly up the sound. The mast-heads were crowded by the officers and men during the whole afternoon; and an unconcerned observer, if any could have been unconcerned on such an occasion, would have been amused by the eagerness with which the various reports from the crow's-nest were received, all, however, hitherto favourable to our most sanguine hopes." The course was nearly due west, with a wind continually freshening. Only one drawback was at this time felt—the painfully bad sailing qualities of the consort-ship, the "Griper." The only ice now met with consisted of a few large bergs, very much washed by the sea; and the weather being remarkably clear, so as to allow Parry to run on with perfect safety, he was, by midnight, in a great measure relieved from his anxiety respecting the supposed continuity of land at the bottom of this magnificent inlet, having reached the longitude of 83° 12′, where the two shores were still above thirteen leagues apart, without the slightest appearance of land to the westward for four or five points of the compass.

The advance on the 4th August was in the highest degree exciting. Still bearing up to the westward, with a haze covering and concealing the land on the south, the sea was in the morning as free from ice as any part of the Atlantic, and the explorers began to flatter themselves that they had fairly entered the Polar Sea. This pleasing prospect was rendered the more flattering by the sea, which had been yellowing for some time previously, now assuming the true deep colour of the ocean. In the evening, however, ice was reached extending for miles in a direction nearly parallel to the course of the ships; but as clear water could be seen over it to the southward, Parry still continued to hope that it would prove only a detached stream. Towards midnight, however, the sun then shining with noon-day brightness, the ice was seen joining a compact and impenetrable body of floes, which lay across the whole breadth of the strait, thus forbidding, in the meantime, any further advance westward. The expedition had now arrived in longitude about 90° W.; that westward reach of Lancaster Sound, extending immediately to the south of North Devon Island had been discovered and

named by Parry, Barrow Strait; and two islands, at the western opening of that now historic strait, were also discovered by the gallant navigator, and named Leopold Islands, in honour of His Royal Highness Prince Leopold of Saxe-Coburg. Immediately to the eastward of these islands there was a strong "water-sky"—a certain darkness in the sky which invariably indicates the presence of open water in the direction in which it is seen in these seas—but to the *westward* of the islands a bright ice-blink shone, indicating the certain existence of a great ice-field, and affording little hope, for the present, of finding a passage in the desired direction. A glance at the map will show that the "Hecla" and "Griper" had now reached that part of Lancaster Sound immediately to the north of the mouth of the as yet undiscovered Prince Regent's Inlet.

On the 5th, the weather being calm and foggy, a number of the officers and men amused themselves in the boats endeavouring to kill some of the white whales which were swarming about the vessels; but the creatures were wary enough to avoid danger, and to dive before the boats could approach them within forty yards. Mr Fisher, the assistant-surgeon of the "Hecla," described the whales as being from eighteen to twenty feet in length, and stated that he had several times heard them emit a shrill ringing sound, "not unlike that of musical glasses when badly played." This sound was most distinctly heard when they happened to swim directly beneath the boat, even when they were several feet under water, and ceased altogether on their coming to the surface. A number of narwhals, called by the sailors "sea-unicorns," were also seen here for the first time.

There being in the meantime no hope of a passage to the westward, Parry perceived with interest, during the clear weather which immediately succeeded the fog, that there was *a large open space to the southward*, where no land was visible; and for this opening, over which a dark "water-sky" was looming, he now directed his course. Driven onward by a breeze from the N.N.W., the vessels slowly forged southward, and it was soon discovered that they were entering an inlet not less than ten leagues wide at its mouth, and with no land visible in its mid-channel. At this time (6th August) Parry thus clearly states his position in the entrance of what has since been known as Prince Regent's Inlet: "The western shore of the inlet, which extended as far as we could see to the S.S.W., was so encumbered with ice, that there was no possibility of sailing near it; I therefore ran along the edge of the ice, between which and the eastern shore there was a broad and open channel, with the intention of seeking, in a lower latitude, a clearer passage to the westward than that we had just been obliged to abandon, lying between Prince Leopold's Isles and Maxwell's Bay. The headland which forms the western point of the entrance into this inlet was honoured by the name of Cape Clarence, after His Royal Highness the Duke of

Clarence; and another to the south-eastward of this was named after Sir Robert Seppings, one of the surveyors of His Majesty's Navy." Continuing his southward course along the edge of the land-ice of the western shore, Parry found that he was gradually being forced to near the eastern shore; and by midnight of the 7th, the channel in which he was sailing was narrowed to about five miles. The weather was beautifully serene and clear, and the sun, for the second time this season, just dipped, at midnight, below the northern horizon, and then reappeared in a few minutes. A dark sky to the south-west had given hopes of finding a westerly passage to the south of the ice along which Parry was sailing, more especially as the inlet began to widen considerably as he advanced in that direction, but he was soon to experience disappointment. On the 8th the prospect from the crow's-nest began to assume a very unpromising appearance, the whole of the western horizon, from north round to south by east, being completely covered by ice, consisting of heavy and extensive floes, beyond which no indication of water was visible.

The distance Parry sailed to the southward in this inlet was 120 miles—lat. 71° 53′, long. 90° 3′ W.—and he saw no reason to doubt the practicability of ships penetrating much further to the south, by watching the occasional openings in the ice, if the "determining the geography" of this part of the Arctic regions were considered worth the time. To himself, this result did not appear to be worth the trouble; and on the morning of the 9th he put his helm about, and returned to the north to prosecute his search for a passage westward from Barrow Strait. On the evening of the 11th the boats succeeded in harpooning a narwhal, to the great delight of the Greenland sailors of the expedition, who took so much delight in the sport to which they had been accustomed, that they could with difficulty be restrained from striking at a whale under any circumstances. On the 12th of August, Parry makes the following memorable entry in his journal: "This being the anniversary of the birthday of His Royal Highness the Prince Regent, it naturally suggested to us the propriety of honouring the large inlet, which we had been exploring, and in which we still were sailing, with the name of PRINCE REGENT INLET."

On the 13th, the vessels had sailed clear out of the inlet, and were again off Leopold's Islands in Barrow Strait, recommencing their search in the old quarter for an outlet westward. After beating about in the vain endeavour to find such a passage through the ice, the vessels neared the northern shore of the great strait, and there found a comparatively open channel running westward along the edge of the land ice. On the 21st, there was nothing to impede the progress of the ships but the want of wind; the great opening of Lancaster Sound, through which they had proceeded from Baffin's Bay, being now so perfectly clear of ice that it was almost impossible to believe it to

be the same part of the sea, which, but a day or two before, had been completely covered with floes to the utmost extent of view. Very slowly was progress made for some time; for Parry was navigating an unknown sea, in foggy weather, though without the obstruction of ice. He crept on, however, through the strange waters and along the sterile coast, giving names to the more salient features of the shore—among them Radstock Bay and Beechey Island, so called after his own lieutenant. A breeze sprang up on the 22d, and all sail was made to the westward. The coast of North Devon was at length passed, and a magnificent channel, running northward between it and a great island to the westward, was discovered and named by Parry, Wellington Channel. "The arrival off this grand opening," says Parry, "was an event for which we had long been looking with anxiety and impatience; for the continuity of the land to the northward had always been a source of uneasiness to us, principally from the possibilty that it might take a turn to the southward and unite with the coast of America. The appearance of this broad opening, free from ice, and of the land on each side of it, more especially that on the west, leaving scarcely a doubt on our minds of the latter being an island, relieved us from all anxiety on that score; and every one felt that we were now finally disentangled from the land which forms the western side of Baffin's Bay, and that, in fact, we had actually entered the Polar Sea. . . . Though two-thirds of the month of August had now elapsed, I had every reason to be satisfied with the progress which we had hitherto made. I calculated upon the sea being still navigable for six weeks to come, and probably more, if the state of the ice would permit us to edge away to the southward in our progress westerly. Our prospects, indeed, were truly exhilarating; the ships had suffered no injury; we had plenty of provisions; crews in health and spirits; a sea, if not open, at least navigable; and a zealous and unanimous determination in both officers and men to accomplish, by all possible means, the grand object on which we had the happiness to be employed."

CHAPTER II.

CORNWALLIS AND BATHURST ISLANDS DISCOVERED—DISCOVERY OF MELVILLE ISLAND.

On the 23d August the "Hecla" and "Griper" were in full sail westward, through that part of Lancaster Sound which extends immediately to the south of Cornwallis and North Devon Islands. The magnificent inlet of Wellington Channel extended away to the northward, and was as open and navigable as any part of the Atlantic. It lay, however, at right angles to the course which Parry had resolved to pursue, and although its wide and free area was in the highest degree tempting to the explorer, he had sufficient determination to push on due west in search for the passage, the discovery of which was the object of the expedition. If, however, the sea to the westward, which was the direct course, had been obstructed by ice, and the wind had been favourable, such was the inviting appearance of Wellington Channel, in which no impediment whatever was visible, that Parry would have been induced to run through it, as a degree more or less to the northward made little or no difference in the distance he would have to run to Icy Cape, at the western extremity of the supposed passage. But there was no necessity for altering the original plan. The western course was open as well as the northern, and Parry decided to follow out his proper route, and turn neither to the right hand nor the left.

Nothing could have been more animating than the quick and unobstructed run across the entrance to Wellington Channel, from Beechey Island to Cape Hotham. "Most men," says Parry, "have probably, at one time or another, experienced that elevation of spirits which is usually produced by rapid motion of any kind; and it will readily be conceived how much this feeling was heightened in us, in the few instances in which it occurred, by the slow and tedious manner in which the greater part of our navigation had been performed in these seas." At noon of the 23d, the vessels had reached lat. 74° 20′, long. 94° 43′, when Griffith Island was discovered and named. Opposite to this island the shores of Cornwallis Island, which bounded the Sound on the north, rose with a gradual ascent from a sandy beach with one conspicuous headland, which was named Cape Martyr. On the morning, and again in the evening, of this day, much ice

had been met with, but a passage on both occasions was found by "boring," and the ships persevered in their westward course. On the 25th Bathurst Island was discovered and named; and during this day it was remarked, not without some degree of unpleasant feeling, that not a single bird, or any other living creature, made its appearance. Everything was still and quiet in this solitary sea, from which the brown deserted islands reared their heads in silence. For the most part the sea was covered with ice in a com pact and undivided body, but a channel of sufficient breadth was still left open between the ice-field and the shore, under the lee of Bathurst Island. The weather was at this time remarkably serene and clear, and, although a line of ice was seen to the southward, lying in a direction nearly east and west, or parallel to the course we were steering, yet the space of open water was still so broad, and the prospect from the mast-head so flattering, that Parry thought the chances of the two ships parting company—a contingency that had always been apprehended, owing to the bad sailing qualities of the "Griper"—were now greater than they had ever been. He accordingly furnished Lieutenant Liddon of the "Griper" with special instructions, fixing upon a place of rendezvous for a certain date in the event of separation, and again stretched away westward. Leaving Bathurst Island behind, Parry now discovered a smaller island farther west, to which he gave the name, Byam Martin Island. On the 28th considerable delay was caused by the closing in of the ice, and there was for the time no passage westward. Advantage was taken of the enforced idleness of the expedition to examine Byam Martin Island—Captain Sabine and Messrs Ross, Edwards, and Fisher being despatched in a boat for this purpose. While this was being done, the vessels continued "to stand off-and-on by the lead, which seems a very safe guide on this coast, firing guns frequently, till five P.M., when we were not sorry to hear our signals answered by muskets from the boat." The officers reported on their return that they had landed on a sandy beach, near the east point of the island, which they found to be more productive, and altogether more interesting, than any other part of the Polar regions they had yet visited. Remains of Eskimo houses were found in four different places. These occupied a small ravine near the sea, and they consisted of rude structures of stones placed upon each other in a circular or rather elliptical form. They were from seven to ten feet in diameter, and attached to each of them was a smaller circle generally four or five feet in diameter, which had probably been the fire-place. The stones were moss-covered, and the huts had the appearance of having been deserted for a number of years.

It had been remarked that during the advance of the ships to these high latitudes, the compasses became more and more untrustworthy for the purposes of navigation. They became too sluggish to traverse, and at last it was resolved to abandon their use in the meantime. On the 29th a dense

fog settled down around the ships, and Parry's hope to find a channel among the ice, by which to pass Byam Martin Island, and push on westward did not seem likely to be realised. Lieutenant Parry's description of his difficulties, under these circumstances, has the advantage of being clear and graphic. "At four A.M. on the 29th the current was tried by mooring a boat to the bottom, but none could be detected. About this time the fog partially cleared away for a little while, when we observed that the ice was more open off Cape Gillman (south coast of Byam Martin Island) than when we had before attempted to pass in that direction. At five o'clock, therefore, we made sail for the point with a light easterly breeze; but at seven, when we had proceeded only two or three miles, the fog came on again as thick as before: fortunately, however, we had previously been enabled to take notice of several pieces of ice, by steering for each of which in succession we came to the edge of a floe, along which our course was to be pursued to the westward. As long as we had this guidance, we advanced with great confidence; but as soon as we came to the end of the floe, which then turned off to the southward, the circumstances under which we were sailing were, perhaps, such as have never occurred since the early days of navigation. To the northward was the land; the ice, as we supposed, to the southward; the compasses useless; and the sun completely obscured by a fog, so thick that the "Griper" could only now and then be seen at a cable's length astern. We had literally, therefore, no mode of regulating our course but by once more trusting to the steadiness of the wind; and it was not a little amusing, as well as novel, to see the quartermaster conning the ship by looking at the dog-vane."

The fog was so dense that at times the slowly advancing vessels, from which land and ice were alike concealed, had no guide whatever to steer by. Under such circumstances the very best use was made of the brief intervals of clear weather which occurred. During one of these intervals, and while Parry was sailing on the course which he knew by the bearings of the land to be the right one, it was observed that the "Griper" was exactly astern of the "Hecla," at the distance of about a quarter of a mile. The weather was not quite so thick as to prevent the officers in the advance ship seeing the "Griper" at that distance, and the quarter-master was directed to stand aft, near the taffrail, and to keep her constantly astern of the "Hecla," by which means the latter contrived to steer a tolerably straight course westward. The "Griper," on the other hand, naturally kept the "Hecla" right ahead, and thus, however ridiculous it may appear, "it is nevertheless true," says Parry, "that we steered one ship entirely by the other for a distance of ten miles out of sixteen and a half, which we sailed between one and eleven P.M."

On the 2d September, when the "Hecla" and "Griper" were off the coast of a new land lying to the west of Byam Martin Island, and to which

Parry afterwards gave the name of Melville Island, in honour of Lord Melville, head of the Admiralty, a star was seen—the first that had been visible for two months. This solitary monitor brought with it a warning that the brief and bright Arctic summer was on the wane, and that if any distinctive success in the navigation of the Polar seas was to be achieved this season, it must be won within the next few days, for winter was coming, and had already sent his *avant-courière* to give warning of his approach. The navigation continued to be difficult from prevalent fogs, and from the loose ice through which the vessels were to force their way. The main body of the ice was about three miles distant from the shores of Melville Island, and the space between the ice-field and the land was thickly covered with loose ice-blocks. At the distance of half-a-mile from the shore there were many large masses of ice aground; and it was here that the method, so often resorted to in the subsequent part of the voyage, of placing the ships between these masses and the land, in case of the ice closing suddenly upon the vessels, first suggested itself to Parry's mind. An excursion to the shore was not productive of any very valuable results. No traces of inhabitants could be found. Deer were seen, though none were shot, and there were abundant traces of the musk-ox. At the top of a hill a bottle containing papers giving a sketch of the fortunes and successes of the expedition down to date, was buried, and a mound of stones and sand, in the middle of which a boarding-pike was set up to attract attention, raised above it. The visit to the shore being over, the voyage to the westward was resumed. Parry examined the southern coast of Melville Island with intense interest. He knew he was looking on a scene that had never before been seen by civilised man. He knew also that in a few weeks, if he were not fortunate enough to discover a north-west passage, he would have to winter in some creek or inlet of that coast, and that consideration was sufficient to invest the barren shores with a singular and exceptional interest. Throughout his whole career this famous navigator showed that he was naturally a leader of men. He was endeared to his crews alike by the nobleness of his nature and by the wisdom of his conduct. In this voyage he had his usual good fortune in securing the affectionate regard of his officers. This regard he knew how to maintain as well as evoke. The more striking features of the coasts he discovered were often named after his own officers, as some little recognition for zeal and loyalty to their captain; and we find that in these days of early September in 1819, he had named Point Ross, Skene Bay, Cape Palmer, and Beverley Inlet after four of the officers of the "Hecla" and "Griper." The sunset of the evening of the 3d September was "extremely beautiful, the weather being clear and frosty, and the sky without a cloud. The moon rising soon after, afforded a spectacle no less pleasing, and far more sublime. Her horizontal diameter appeared to be very much elongated when just

above the horizon, owing to the unequal refraction of the upper and lower limbs."

Continuing to feel his way westward along the southern shore of Melville Island—tacking between the shallows of the low shores on the north and the sea-ice that extended in a broad unbroken field on the south—Parry had the great satisfaction of crossing the meridian of 110° west of Greenwich on the night of Saturday, 4th September, and of earning for himself, his officers, and men, the bounty of five thousand pounds, which Government, by a recent Act of Parliament, and with the view of encouraging the search for a North-West Passage, had voted to be given as a reward to such of his Majesty's subjects as should first penetrate so far to the westward within the Arctic Circle. On the following day (Sunday) after divine service had been performed, the commander, with what feelings of pride may well be imagined, assembled the officers, seamen, and marines of the "Hecla," and announced to them officially, that their exertions had so far been crowned with success, as to entitle them to the first prize in the scale of rewards granted by his Majesty's Order in Council, above mentioned. "I took this opportunity," Parry remarks, "of impressing upon the minds of the men the necessity of the most strenuous exertions, during the short remainder of the present season; assuring them that if we could penetrate a few degrees farther to the westward, before the ships were laid up for the winter, I had little doubt of our accomplishing the object of our enterprise before the close of the next season." He addressed a letter to the same effect to Lieutenant Liddon of the "Griper," and directed a small addition to be made to the usual allowance of meat, and some beer to be served, as a Sunday's dinner, in celebration of this substantial triumph of the expedition. The success was further commemorated by the men conferring the name of Bounty Cape upon a headland, which had just been passed.

A determined struggle with the ice had already been maintained for a number of days, and now, with a fresh gale blowing from the north, the ice continued to oppose an impenetrable barrier to all progress westward. Under these circumstances Parry resolved to beat up along the shore in search of a tolerable roadstead where he could drop anchor and await one of those changes in the weather and in the condition of the ice, which, at certain seasons of the year are here as frequent as they are unexpected in their occurrence. Such a roadstead was at length found and named the "Bay of the Hecla and Griper." Its recommendations were, that its bottom afforded good holding ground, consisting of mud and sand, from which the lead was with difficulty extricated; that it was completely sheltered from every wind round from east-north-east to south-west, and that it was more free from ice than any part of the southern coast of the island yet seen. No sooner had the anchorage been taken up than Captain Sabine, with a staff of assistants,

was sent ashore to examine the country. The locality they visited proved barren and unproductive; flocks of ducks, with gulls and tern, were seen, and tracks of deer and musk-ox were observed. The rocks were found to be composed of sandstone, but granite, flint, and coal were also found. It was not until dropping anchor in this bay that Parry named this island—the largest of the group he had recently discovered—Melville Island, in honour of Viscount Melville, First Lord of the Admiralty. It is with justifiable satisfaction that Parry concludes the narrative of this part of his voyage. "The Bay of the Hecla and Griper," he states, "was the first spot where we had dropped anchor since leaving the coast of Norfolk; a circumstance which was rendered the more striking to us at the moment, as it appeared to mark in a very decided manner the completion of one stage of our voyage. The ensigns and pendants were hoisted as soon as we had anchored, and it created in us no ordinary feeling of pleasure to see the British flag waving for the first time in these regions, which had hitherto been considered beyond the limits of the habitable part of the world."

CHAPTER III.

LAST ATTEMPTS TO PUSH WESTWARD—LOST IN THE SNOW—RESOLVE TO SEEK A STATION FOR THE WINTER—ENTER WINTER HARBOUR—LIFE ON SHIPBOARD IN WINTER—SHORTEST DAY—CHRISTMAS.

THE exploring vessels had been moored comfortably enough in the "Bay of the Hecla and Griper" on the 5th September, but not to rest there in idleness. The open season was now rapidly wearing to a close, and one last effort must be made to seek a winter station further west. Accordingly the anchors were weighed next morning, and the ships rounding Cape Hearne, at the west extremity of the bay, proceeded westward along the shore until they were stopped by a compact body of ice extending completely in to the shore. The commander then issued orders to make fast to a floe for the night, for the season had now so far advanced as to make it necessary to secure the ships every night from ten till two o'clock, the weather being too dark during that interval to allow them to be under way in this unknown sea, in which navigation, unaided by compasses, was so uncertain and perilous. No clear water could be seen from the crow's-nest or from the hills of the shore next day; and on the 8th, the ice having a threatening appearance, Parry resolved to take them inshore and moor them inside the line of bergs which lined the coast and afforded protection from the encroachment of the sea-ice. In this position the vessels remained till the 13th.

During this time an incident occurred which gave rise to the greatest alarm in both ships, and promised to surround the expedition with gloom. Mr Fife, Greenland master of the "Griper," went ashore early on the morning of the 10th with a party of six men, in the hope of coming upon some reindeer and musk-oxen, whose tracks had been seen in a ravine near where the "Griper" lay. The party were instructed to return on the same day, and the quantity of provisions supplied to them for the day was accordingly small. The day passed, but neither Fife nor any of his men returned. Night came down, wild, stormy, and bitterly cold, but the wanderers did not return. Morning dawned, but the return of light failed to bring back the lost men. The fact of their absence was now for the first time communicated to Parry, who recommended Lieutenant Liddon to send out a search-party for the missing men, and accordingly Messrs Reid, Beverley, and Wake-

ham volunteered for this service, and were sent out on search. They had scarcely got well away, however, when thick snow began to fall, and it became so dark, especially on the hills along which they had to travel, that the search-party themselves lost their way, and would have been unable to return that night had they not fortunately got sight of the signal rockets fired from the ships after dark. These signals guided them back to the "Griper," at which they arrived at ten o'clock, exhausted with cold and fatigue, and without any intelligence of the missing men.

On the morning of the 11th Lieutenant Hoppner was sent ashore with the "Hecla's" fore-royal-mast, rigged as a flag-staff. This he erected on a conspicuous hill four or five miles inland, hoisting upon it a large ensign, which might be seen at a considerable distance in every direction. During the day, however, the snow fell so thick that no advantage could be expected from this contrivance, and another night came without the absent party appearing. On the 13th the excitement and alarm on both ships were unbounded, and Parry ordered four parties, under the command of careful officers, to set out in search of the missing men. These parties were provided with a number of pikes, having small flags attached, which they were directed to plant at regular intervals, and which were intended to answer the double purpose of guiding themselves on their return, and of directing the absent party, should they meet with them, to the ships. To each pike a bottle, containing directions for the guidance of the lost men and acquainting them that provisions would be found at the large flag-staff on the hill, was fixed. When these four parties left the ships the wind was blowing hard from the westward, snow was continuing to fall, and the thermometer was standing at 28°, or 4° below freezing-point. This severe weather continued unchanged throughout the whole day, and the sun was going down for the third time behind the western hills, since Fife and his companions had gone away, when the officers of the "Hecla" beheld with intense satisfaction the signal which betokened the return of the party, or a part of them, being hoisted on the "Griper's" mast. Four men of Fife's party had been found, and the tale they had to tell well illustrates the constant dangers of Arctic exploration. On setting out with Fife three days before, they lost their way, and wandered about aimlessly and hopelessly till ten o'clock the next day, when they descried the large flag-staff at a great distance. At this time the whole of Fife's party (seven in number) were together; but they were now to separate, for Fife mistook the flag-staff for a smaller one which had been erected some days previously on a spot at some considerable distance eastward from where the ships were stationed. He accordingly commenced to walk away, accompanied by two of his men, in a direction westward from the flag-staff, in the belief that by so doing he would reach the vessels. The other four men resolved to make for the flag-staff. They halted during a

part of the night, made a sort of hut of stones and turf to shelter them from the weather, and kindled a little fire with gunpowder and moss to warm their feet. They had never been in actual want of food, for they had been lucky enough to catch a number of grouse, which they ate raw. In the morning they once more set forward towards the flag-staff, which they reached within three or four hours after Lieutenant Beechey had left some provisions on the spot. These they at once made use of, eating some bread and drinking a little rum and water, which they described as appearing to them in their exhausted condition "perfectly tasteless and clammy." After this refreshment they renewed their journey towards the ships, and had not proceeded far when they came upon footsteps, which directed them to the search-party, by whom they were conducted to the "Griper." Soon after the arrival of the four rescued men, another party came in with the information that Mr Fife and his two companions had been found, and were on their way to the ships. Fresh hands were immediately sent to bring them in, and they arrived on board at ten P.M., after an absence of ninety-one hours, and having been exposed during three nights to the inclemency of the first wintry weather the expedition had experienced. Almost the whole of this party were much exhausted by cold and fatigue, and several of them were severely frost-bitten in their toes and fingers. They were at once taken in hand by the surgeons, and recovered in a few days. "Before midnight," says Parry, "we had still greater reason than ever to be thankful for the opportune recovery of our people, for the wind increased to a hard gale about half-past eleven, at which time the thermometer had fallen to 15°, making altogether so inclement a night as it would have been impossible for them, in their already debilitated state, to have survived. In humble gratitude to God for this signal act of mercy, we distinguished the headland to the westward of the ships by the name of Cape Providence."

On the night of the 15th, a strong current was observed to set towards the westward, and as the ice had opened in that direction, the "Hecla" and "Griper" cast off from shore on the morning of the 16th, and made all sail west. At noon they were abreast of Cape Providence, with another headland, which was named Cape Hay, looming up about ten miles in advance. Considerable progress was afterwards made toward the west. The last observations taken on this part of the coast gave lat. 74° 23′, long. 112° 29′, and although a position several miles westward of this was reached, it could not be held against the ice, which rose in lofty fields in front of the vessels, and pressing inshore, threatened on many occasions to crush them against the ramparts of grounded ice, with which the shore was lined. During the next few days the vessels were engaged in a constant and severe contest with the ice, now advancing in the wished-for direction, and again beaten back. At length the advanced period of the season, the unpromising

appearance of the ice to the westward, which rose in lofty fields, over which a clear view could not be obtained even from the mast-head, and the risk to the ships with which the navigation was continually attended, forced upon Parry the necessary conclusion, that the time had now come when it was absolutely necessary to look for winter quarters. Whenever the wind blew less than a gale, the formation of new, or "young" ice, went on with such astonishing rapidity that had the weather continued calm for four-and-twenty hours together, it seemed extremely probable that the vessels would have been frozen up at sea, and wholly defenceless against the motions and the changes of the ice. From these considerations, Parry considered it his duty to invite the opinions of his senior officers as to the expediency of immediately seeking a harbour in which the ships might lie securely during the ensuing winter. The opinions of the officers concurred with his own, and the commander then determined, whenever the ice and weather would permit, to run back eastward into the "Bay of the Hecla and Griper," in which neighbourhood alone he had any reason to believe that a suitable harbour might be found.

Immense labour and continuous peril for a number of days were incurred in carrying out this programme; but at length, on the 24th September, the vessels sailed into the Bay, and prepared to cut a canal through the ice, four or five inches in thickness, which covered the inlet of the bay in which it was resolved to winter the ships, and to which the name of Winter Harbour was afterwards given. The ice covered this inner harbour in a continuous and level floe, and as soon as the crews had breakfasted, Parry proceeded with a small party of men to sound and mark with boarding-pikes upon the ice the most direct channel to the anchorage. "This operation," says Parry, "was performed by first marking out two parallel lines, distant from each other a little more than the breadth of the larger ship. Along each of these lines a cut was then made with an ice-saw, and others again at right angles to them, at intervals of from ten to twenty feet; thus dividing the ice into a number of rectangular pieces, which it was again necessary to subdivide diagonally, in order to give room for their being floated out of the canal. On returning from the upper part of the harbour, where I had marked out what appeared to be the best situation for our winter quarters, I found that considerable progress had been made in cutting the canal, and in floating the pieces out of it. To facilitate the latter part of the process, the seamen, who are always fond of doing things in their own way, took advantage of a fresh northerly breeze by setting some boat's sails upon the pieces of ice, a contrivance which saved both time and labour." In the evening, the anchors were weighed, and the vessels warped up the canal. At night an extra allowance of half a pound of fresh meat per man was issued; and the food of the men continued to be supplemented to this extent till their labours

were ended, and the vessels warped up into their permanent quarters in Winter Harbour. The consummation of their labours, which was achieved at half-past one P.M. on September 26th, was hailed with three loud and hearty cheers from both ships' companies. The ships were anchored in five fathoms, a cable's length from the beach, and after buffeting about among the moving ice for two months, something like a fixed home was thus established for Parry and his companions in the frozen waters of Winter Harbour.

The position in which we now have to regard the crews of the "Hecla" and "Griper," in a region of the earth hitherto unknown to human society; on the eve of a Polar winter, the rigours of which they could not as yet even guess at; cut off from all communication with the civilised world; their very existence itself dependent on their loyalty to their officers and their faithfulness to each other and to the common cause, is singular in itself, and interesting from the circumstance that the trial to which they were now about to subject themselves was the first experiment of the kind attempted in the present century. Their commander at least seems to have been deeply impressed with the responsible and exceptional character of his situation. "Having now," he says, "reached the station where, in all probability, we were destined to remain for at least eight or nine months, during three of which we were not to see the face of the sun, my attention was immediately and imperiously called to various important duties, many of them of a singular nature, such as had, for the first time, devolved on any officer in His Majesty's Navy, and might indeed be considered of rare occurrence in the whole history of navigation. The security of the ships and the preservation of the various stores were objects of immediate concern. A regular system to be adopted for the maintenance of good order and cleanliness, as most conducive to the health of the crews during the long, dark, and dreary winter, equally demanded my attention."

With these objects in view, operations were at once commenced to render the ships tolerably habitable during the winter. All the upper masts were dismantled, and the lower yards were lashed fore and aft amidships, at a sufficient height to support the planks of the housing intended to be erected over the ships, the lower ends of which rested on the gunwale, and the whole of which, forming a framework resembling a high-pitched roof, was covered over with canvas, and afforded a sufficient shelter from snow and wind. The boats, spars, running rigging, and sails, were removed on shore, in order to give as much room as possible on the upper deck to enable the men to take exercise on board when rigour of weather forbade walking on shore. As soon as the ships were secured and housed over, Parry gave his whole attention to arrangements for promoting the health and comfort of the officers and men. The berths and bed-places were kept as warm and dry as possible, although, from the condensation of vapour, and of the steam from the

coppers, upon the beams and planks, perfect dryness could scarcely be attained. Among the means employed to prevent this condensation of vapour on the timbers was a thick screen fixed round the galley, and dropping within eighteen inches of the deck, which served to intercept the steam from the coppers, and prevent it from curling along the beams, and condensing upon them into drops. This screen was especially useful at the time of drawing off the beer which the "Hecla's" men were in the habit of brewing from essence of malt and hops, and which continued to be served for several weeks as a substitute for part of the usual allowance of spirits. The steam arising from the brewing was found so annoying during the cold weather that, though the beer was valuable as an antiscorbutic, it was resolved eventually to shut up the brewery. As everything in the future was so completely uncertain to the explorers, it was deemed advisable to reduce the regular allowance of bread to two-thirds. "A pound of Donkin's preserved meat, together with one pint of vegetable or concentrated soup, per man, was substituted for one pound of salt beef weekly; a proportion of beer and wine was served in lieu of spirits, and a small quantity of sour kraut and pickles, with as much vinegar as could be used, was issued at regular intervals. The daily proportion of lime juice and sugar was mixed together, and, with a proper quantity of water, was drank by each man in presence of an officer appointed to attend to this duty. The latter precaution may appear to have been unnecessary to those who are not aware how much sailors resemble children in all those points in which their own health and comfort are concerned. Whenever any game was procured, it was directed to be served in lieu of, and not in addition to, the established allowance of other meat, except in a few extraordinary cases, when such an indulgence was allowed; and in no one instance, either in quantity or quality, was the slightest preference given to the officers."

The most rigid economy was adopted in the use of fuel; not a pound more of which was expended than barely sufficed for the preservation of the health of the crews. A search was made around the harbour for turf or moss, and a small quantity of the latter was found and used, but it was too wet to effect any saving of coals, and at this season of the year there was no inexpensive means of drying it. A few lumps of coal were picked up on the shores, but no vein of coal, for which a careful examination was made, could be found. Great attention was paid to the clothing of the men, who were regularly mustered morning and evening for inspection by the commander, accompanied by Lieutenant Beechey, and Mr Edwards, the "Hecla's" surgeon. Being now situated in enforced leisure and inactivity, and with a long and dull winter before them, it was necessary to contrive some plans for the amusement of the officers and crews of the expedition. Parry, who was an excellent amateur actor, accordingly proposed to the

officers to get up a play occasionally on board the "Hecla" as the readiest means of preserving among the crews that cheerfulness and good humour which had hitherto subsisted, and which was found to contribute much to the general health. This proposal was taken up with enthusiasm by both ships; and Lieutenant Beechey having been elected stage-manager, the first performance was fixed to come off on the 5th November. In these amusements Parry himself took a part, considering that an example of cheerfulness, by giving direct countenance to everything likely to promote that feeling, was not the least essential part of his duty in the circumstances. A weekly newspaper was also established, called the *North Georgia Gazette and Winter Chronicle,* edited by Captain Sabine, and the articles in which were the original contributions of the officers. Thus every known precaution and preparation for passing the winter with some tolerable degree of comfort had been taken. The arrangements were completed not a day too soon, for on the very night of the arrival of the ships in Winter Harbour, the thermometer fell to 1° below zero; and on the following day the bay was observed from the hills to be quite frozen over, and before the end of October the sea was entirely covered with one uniform surface of solid and motionless ice.

The effect of the keen air of the Polar regions in sharpening the appetite made the sportsmen of the expedition not a little solicitous about occasionally supplementing, or at least, varying the regular allowances, by drawing upon the natural resources of the island. Several deer and a few coveys of grouse were seen; but so destitute is the surface of the country of everything like cover, that only three deer fell to the muskets of the hunters, prior to the whole herd leaving the island, before the close of October. The deer yielded from a hundred and twenty to a hundred and seventy pounds of meat each, and a fawn killed weighed eighty-four pounds. After the migration of the deer, only a few wolves and foxes were left to bear the explorers company during the winter. One solitary specimen of game of another sort was seen on the 1st of October. On that day Captain Sabine's servant, having been at some distance from the ships to examine a fox-trap, was pursued by a large white bear, which followed his footsteps all the way to the ships. The marksmen at once turned out and Bruin was struck by a number of balls, but managed to make his escape after all. "This bear," says Parry, "which was the only one we saw during our stay in Winter Harbour, was observed to be more purely white than any we had before seen, the colour of these animals being generally that of a dirtyish yellow, when contrasted with the whiteness of the ice and snow." A deer-stalking adventure, which occurred early in October, had a serious, and might have had a tragic, termination. Parry had given orders that all hunting, or other parties sent out over the ice should make it an invariable rule to be back on

board before sunset. On the 10th, a number of deer were seen near the ships, and a party sent out after them had so far the good fortune to wound a stag, and being led on by the ardour of pursuit, forgot or neglected to return till very late, when serious apprehension had for some time been felt for their safety. John Pearson, a marine belonging to the "Griper," who was the last to return on board, had gone away without mittens and with a musket in his hand. The result was that, in the exposure to the cold of the evening, his hands were severely frost-bitten. A search party sent out to seek for him, found him at the bottom of a bank of snow, down which he had fallen, in that state of torpor and drowsiness which, after exposure to the severe cold of these regions, is the invariable precursor of death. With difficulty he was conducted on board, and when he was brought in his fingers had stiffened, and were bent and fixed—the form they had taken in carrying the musket. The frost-bite was so severe that three of his fingers had to be amputated a few days after. The effect of exposure to intense frost, in benumbing the mental as well as the physical faculties, "was," says Parry, "very striking in this man, as well as in two of the young gentlemen who returned after dark, and of whom we were anxious to make inquiries respecting Pearson. When I sent for them into my cabin, they looked wild, spoke thick and indistinctly, and it was impossible to draw from them a rational answer to any of our questions. After being on board for a short time, the mental faculties appeared gradually to return with the returning circulation, and it was not till then that a looker-on could easily persuade himself that they had not been drinking too freely. To those who have been much accustomed to cold countries this will be no new remark; but I cannot help thinking (and it is with this view that I speak of it) that many a man may have been punished for intoxication, who was only suffering from the benumbing effects of frost; for I have more than once seen our people in a state so exactly resembling that of the most stupid intoxication, that I should certainly have charged them with that offence, had I not been quite sure that no possible means were afforded them on Melville Island to procure anything stronger than snow-water. In order to prevent, as far as possible, the recurrence of any similar danger, Lieutenant Parry issued an order to the effect that in the case of any members of the crews being absent from the ships without leave after dark, the expense of all rockets and other signals used in such cases to guide them back, should in future be charged against the wages of the offending party. But, as from fog, snow-drift, and the natural darkness of mid-winter, there would be constant danger of being lost, even at mid-day, Parry caused finger-posts, pointing towards the ships, to be erected on all the hills within two or three miles of the harbour.

From many tokens it was now evident that winter was fast closing in upon this colony of Englishmen, housed in their vessels on the shore of Mel-

ville Island. All the water they used now was obtained from snow, artificially dissolved. The snow for this purpose was dug out of the drifts, which had formed upon the ice round the ships, and dissolved in the coppers, after which it was strained, and found pure and wholesome. The last covey of ptarmigan that were seen this season were observed on the 15th October; and on the same day a herd of fifteen deer were seen to the southward. They were all lying down at first, except one large one, probably a stag, which afterwards seemed to guard the rest in their flight—going frequently round them, and sometimes striking them with his horns to make them go on, which otherwise they did not seem much inclined to do. A northern gale, accompanied by a constant snow-drift, blew during the 16th, and a striking peculiarity of this Arctic weather was that while the air was perfectly clear overhead, the boat-house, at the distance of three or four hundred yards, could scarcely be seen from the ship. Of course, in this dark weather, no one was allowed to leave the vessels. "Indeed," says Parry, "when this snow-drift occurred (as it frequently did during the winter) with a hard gale, and the thermometer very low, I believe that no human being could have remained alive after an hour's exposure to it." In order, therefore, to secure the means of rapid communication between the ships, as well as from the ships to the house on shore, a line was kept stretched between the various points. In the middle of October the cold was intense. On the 18th, a thermometer placed in the sun at noon rose only to –9° (nine degrees below zero); while in the shade the temperature was –16°. The 20th October was one of the finest days which ever occur in this climate, the weather being clear, with little or no wind; and, though the thermometer remained steadily at between –15° and -16° even at noon, it was neither trying nor unpleasant. The ships' sportsmen were out during the whole day, but returned without having seen any living animal—the southern migration of deer and birds having by this time taken place. In the evening the aurora borealis was observed, forming a broad arch of irregular white light extending from N.N.W to S.S.E., the centre of the arch being ten degrees to the eastward of the zenith. It is described as having been brightest near the southern horizon; and frequent but not vivid coruscations were seen shooting from its upper side towards the zenith. Between two and three P.M. on the following day, the weather being still remarkably fine and clear, a brilliantly-coloured parhelion was seen on each side of the sun near the horizon, at the distance from it of twenty-three degrees, and looking like the legs of a rainbow resting on the land. On the 26th, there was sufficient daylight for reading and writing, from half-past nine till half-past two, in Parry's cabin, the stern windows of which exactly faced the south. About this period, nothing could exceed the beauty of the sky to the south-east and south-west, at sunrise and sunset. "Near the horizon there was gener-

ally a rich bluish-purple, and a bright arch of deep red above, the one mingling imperceptibly with the other." The weather about this time is said to have been remarkably mild; the mercury having stood at or above zero for more than forty-eight hours. On the 29th, however, the thermometer registered 24° below zero, on which occasion it was observed that the smoke from the funnels would not rise, but skimmed horizontally along the housing. So intense had the cold now become that to touch any metallic substance in the open air, with the naked hand, was now found to be a painful experiment, the feeling produced by which exactly resembled that produced by the opposite extreme of intense heat. Whenever the flesh was allowed to touch metal the skin came off. For this reason the greatest caution was required in using the sextants or other instruments, particularly the eye-pieces of the telescopes, which, if allowed to touch the face, occasioned an intense burning pain. The inconvenience was only remedied by covering the parts of the instruments likely to come in contact with the skin, with soft leather.

On the 4th of November, the sun was seen for the last time till the 8th February—an interval of ninety-six days; and it was probably in anticipation of this somewhat depressing event that the commander of the expedition had arranged that the theatre should be opened, for the first time, on the following day. Accordingly, on the following day, the *Royal Arctic Theatre* was opened, and "Miss In Her Teens" was performed, Parry sustaining the part of *Fribble.* The amusement derived from the performance fully justified the anticipations that had been formed of the value of such entertainments in such circumstances. With the play itself the men were delighted; while even the bustle and the novelty of fitting up the theatre, and taking it to pieces again, which occupied the men for a day or two, both before and after each performance, had a salutary effect in engaging the men in a labour amusing in itself, and performed in the most cheerful and willing manner. "I dreaded," writes Parry, "the want of employment as one of the worst evils that was likely to befall us."

During these dark, sunless days of midwinter, the circumstances of the situation of the expedition being such as had never before been experienced by the crews of any ships of the British navy, Parry's account of the routine, which was followed with little variation from day to day, is of the greatest interest; and all the more so from the circumstance, that in these later years, and especially since the improvements made by M'Clintock in sledge-travelling, the conditions under which Arctic life now transacts itself on shipboard, even during the hundred days' darkness of winter, are so materially altered, that a sketch of life on board the "Hecla" in 1819-20 is not without its value as a memorial of a variety of naval life which has now passed away.

"The officers and quarter-masters," says Parry, "were divided into four watches, which were regularly kept, as at sea, while the remainder of the ship's company were allowed to enjoy their night's rest undisturbed. The hands were turned up at a quarter before six, and both decks were well rubbed with stones and warm sand before eight o'clock, at which time, as usual at sea, both officers and men went to breakfast. Three quarters of an hour being allowed after breakfast for the men to prepare themselves for muster, we then beat to divisions punctually at a quarter past nine, when every person on board attended on the quarter-deck, and a strict inspection of the men took place, as to their personal cleanliness, and the good condition, as well as sufficient warmth, of their clothing. The reports of the officers having been made to me, the people were then allowed to walk about, or more usually, to run round the upper deck, while I went down to examine the state of that below. . . . The state of this deck may be said, indeed, to have constituted the chief source of our anxiety, and to have occupied by far the greatest share of our attention at this period. Whenever any dampness appeared, or, what more frequently happened, any accumulation of ice had taken place during the preceding night, the necessary means were immediately adopted for removing it; in the former case, usually by rubbing the wood with cloths, and then directing the warm air pipe towards the place; and in the latter, by scraping off the ice. . . . We returned to the upper deck, where I personally inspected the men; after which they were sent out to walk on shore, when the weather would permit, till noon, when they returned on board to their dinner. When the day was too inclement for them to take this exercise, they were ordered to run round and round the deck, keeping step to a tune on the organ, or not unfrequently, to a song of their own singing. . . . The officers, who dined at two o'clock, were also in the habit of occupying one or two hours in the middle of the day in rambling on shore, even in our darkest period, except when a fresh wind and a heavy snow-drift confined them within the housing of the ships. It may be well imagined, that at this period there was but little to be met with in our walks on shore, which could either amuse or interest us. The necessity of not exceeding the limited distance of one or two miles, lest a snow-drift, which often rises very suddenly, should prevent our return, added considerably to the dull and tedious monotony, which day after day presented itself. To the southward was the sea, covered with one unbroken surface of ice, uniform in its dazzling whiteness, except that, in some parts, a few hummocks were seen thrown up somewhat above the general level. Nor did the land offer much greater variety, being almost entirely covered with snow, except here and there a brown patch of bare ground in some exposed situation, where the wind had not allowed the snow to remain. When viewed from the summit of the neighbouring hills, on one of those calm and clear days

which not unfrequently occurred during the winter, the scene was such as to induce contemplations which had, perhaps, more of melancholy than of any other feeling. Not an object was to be seen on which the eye could long rest with pleasure, unless when directed to the spot where the ships lay, and where our little colony was planted. The smoke which there issued from the several fires, affording a certain indication of the presence of man, gave a partial cheerfulness to this part of the prospect; and the sound of voices, which, during the cold weather, could be heard at a much greater distance than usual, served now and then to break the silence which reigned around us, a silence far different from that peaceable composure which characterises the landscape of a cultivated country; it was the death-like stillness of the most dreary desolation, and the total absence of animated existence. Such, indeed, was the want of objects to afford relief to the eye or amusement to the mind, that a stone of more than usual size appearing above the snow, in the direction in which we were going, immediately became a mark, on which our eyes were unconsciously fixed, and towards which we mechanically advanced. . . . We had frequent occasion, in our walks on shore, to remark the deception which takes place in estimating the distance and magnitude of objects, when viewed over an unvaried surface of snow. It was not uncommon for us to direct our steps towards what we took to be a large mass of stone at the distance of half-a-mile from us, but which we were able to take up in our hands after one minute's walk. . . . In the afternoon, the men were usually occupied in drawing and knotting yarns, and in making points and gaskets—a never-failing resource where mere occupation is required, and which it was necessary to perform entirely on the lower deck, the yarns becoming so hard and brittle when exposed on deck to the temperature of the atmosphere, as to be too stiff for working, and very easily broken. . . . At half-past five in the evening, the decks were cleared up, and at six we again beat to divisions, when the same examination of the men and of their berths and bed-places took place as in the morning; the people then went to their supper, and the officers to tea. After this time, the men were permitted to amuse themselves as they pleased, and games of various kinds, as well as dancing and singing occasionally, went on upon the lower deck till nine o'clock, when they went to bed, and the lights were extinguished. In order to guard against accidents by fire, where so many fires and lights were necessarily in use, the quarter-masters visited the lower deck every half-hour during the night, and made their report to the officers of the watches that all was, in this respect, safe below; and to secure a ready supply of water in case of fire, a hole was cut twice a day in the ice, close alongside each ship. It is scarcely necessary to add, that the evening occupations of the officers were of a more rational kind than those which engaged the attention of the men. Of these, reading and writing were the principal employ-

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

During the dark days, the theatrical entertainments were arranged to take place regularly every fortnight, and continued to prove a source of genuine amusement to all, whether players, stage carpenters, or merely auditors. There were only one or two volumes of plays on board, so that the stock of available pieces was soon exhausted. But this was no great hardship. The expedition, which was complete in so many departments, was not unfurnished with a poet and playwright, and soon a musical entertainment, which was named the "North-West Passage" was put together, and performed to the great gratification and satisfaction of all concerned. The "North-West Passage" is described by Parry as "expressly adapted to our audience; and having such a reference to the service on which we were engaged, and the success we had so far experienced, as at once to afford a high degree of present recreation, and to stimulate, if possible, the sanguine hopes which were entertained by all on board, of the complete accomplishment of our enterprise." Serious fears were at one time felt that this amusement would have to be stopped by the severity of the weather. Arctic theatricals are often carried on under exceptional disadvantages. Certain of the costumes expose the wearers to the all-searching cold, and we could fancy the sufferings of a young officer doomed to personate a sea-nymph or a shepherdess with the temperature on the stage at several degrees below zero. Captain Lyon, who took the "Hecla" into the Polar seas in 1821-23, played *Dick Dowlas* in the "Heir-at-Law," going through the last act with two of his fingers frost-bitten.

An important epoch came round in the shortest day, the 22d December, for now the hopes of the frost-bound people turned toward the Arctic summer, and the liquid seas it would bring with it. On this day the light was sufficiently clear, and lasted sufficiently long, to allow the officers to walk out very comfortably for two hours. There was usually in clear weather a beautiful arch of bright red light overspreading the southern horizon for an hour or two at this season of the year, the light increasing in strength as the

sun neared the meridian. Although the day was short, and still sunless, the reflection of light from the snow, and the unusual brilliancy of the Arctic moonlight, were at all times sufficient to prevent the explorers experiencing anything like the gloomy night which occurs in more temperate climates. Especial care was taken, during the time the sun was below the horizon, to preserve the strictest regularity in the time of the meals, and in the various occupations which engaged the men during the day; and this, together with the gradual and imperceptible manner in which the darkest season wore on, prevented this night-in-day kind of life, in reality so novel, from causing any actual inconvenience, or even from appearing unnatural or surprising.

The shortest day of the year, with all its crowding reflections and mustering hopes, was scarcely over, when the famous 25th was at hand, and the hundred Englishmen of the "Hecla" and "Griper" found themselves about to celebrate Christmas for the first time in a region completely out of keeping with the jollity, the hospitality, comfort, and plenty with which they had always previously associated the most famous of English holidays. "To mark the occasion in the best manner which circumstances would permit," writes the leader of the expedition, "divine service was performed on board the ships; and I directed a small increase in the men's usual proportion of fresh meat as a Christmas dinner, as well as an additional allowance of grog, to drink the health of their friends in England. The officers also met at a social and friendly dinner, and the day passed with much of the same kind of festivity by which it is usually distinguished at home. A piece of English roast beef which had been on board since the preceding May, and which had been preserved during that time without salt, and merely by the cold of the atmosphere, formed part of the officers' dinner."

On the 30th December the thermometer fell to −43°, or to 75° below the freezing point of Fahrenheit. This was the lowest temperature that had yet been experienced. The weather, however, was fine, calm, and clear, and the colours of the sunless southern sky at noon were observed to be remarkably prismatic. But the Arctic climate is subject to strange variations, and on the following day, the 31st, the wind sprang up, and the thermometer, rising with the wind, registered +5° at midnight, or only 27° below freezing point, thus closing the year with milder weather than the explorers had experienced during the eight preceding weeks.

CHAPTER IV.

THE NEW YEAR—FIRST APPEARANCE OF SCURVY—EXTREME COLD—ESCAPE FROM WINTER HARBOUR—CONCLUSION OF VOYAGE, AND RETURN TO ENGLAND.

THE extraordinarily mild weather with which the new year was ushered in on the southern shores of Melville Island was not of long continuance, for as the wind moderated the thermometer fell. On the 1st of January a pale halo was seen around the moon, with three paraselenæ, or false moons, seen above and at each side of the real one. These false moons were very luminous, but were not tinged with the prismatic colours; and the ghostly feeling of their colour and strange figure was intensified on the following day, when the same appearance was again visible in the sky, with the addition of a vertical stripe of white light proceeding from the upper and the lower "limbs," or sides of the real moon, and forming, with part of a horizontal circle passing through the latter, the appearance of a cross. On the same day, the commander of the expedition was alarmed by hearing from the surgeon that the gunner of the "Hecla" was suffering from scurvy. The cause that had superinduced the disease was found to be the dampness of the gunner's bed-place. Measures were immediately taken to have all the bed-places and clothes dried periodically, and the whole magazine of anti-scorbutics which the "Hecla" carried, consisting of preserved vegetable soups, lemon juice and sugar, pickles, preserved currants and gooseberries, and spruce beer, were brought to bear upon the disease that had thus invaded the ship. Parry began also at this time to raise a small quantity of mustard and cress in his cabin, in small shallow boxes, filled with mould, and placed along the stove-pipe; by which means, even in the severest winter weather, he could generally secure a crop at the end of the sixth or seventh day after sowing the seed, which, by keeping several boxes at work, would give two or three scorbutic patients nearly an ounce of fresh salad each daily. The mustard and cress thus raised were colourless, from being grown in the dark, but they had all their natural aromatic pungency of taste, and salads composed of them were found to be a perfect specific for scurvy. The gunner, taken in hand in this vigorous and business-like manner, soon recovered the use of his legs, and, after the ninth day, declared himself fit to "run a race."

On the 11th, the thermometer sank to 49° below zero, the most intense degree of cold that the explorers had yet experienced; but, as the weather was calm, the crews were able to walk on the shore for an hour without inconvenience, the sensation of cold depending much more on the strength of the wind at the time than on the absolute temperature of the atmosphere as indicated by the thermometer. "In going from the cabins to the open air," says Parry, "we were constantly in the habit for some months of undergoing a change of from 80° to 100°, and in several instances of 120°, of temperature, in less than one minute;" but no distressing sensation or pain in the lungs was felt in passing out into the cold, or returning into the warm atmosphere. "And what is still more extraordinary," continues the commander, "not a single inflammatory complaint, beyond a slight cold, which was cured by common care in a day or two, occurred during this particular period."

The most splendid displays of the aurora borealis were seen during the month of January, and the appearance of the sky became daily more and more interesting till the 3d February, when the sun made his first appearance above the horizon after his long absence during the dreary Arctic night of winter. When first seen from the main-top, a column of pale red light extended from the upper part of the sun's disc to about 3° of altitude. The breadth of this column, which was at times intensely bright, at other times scarcely perceptible, and which was visible for three-quarters of an hour before and after noon, was equal to that of the sun's diameter, and its brightness was much more intense near the sun than at the other extremity.

As the sun continued to rise in his lengthening daily course, the cold became more intense, and frost-bites were common among the men, though no very serious case occurred. The distance at which sounds were heard in the open air, during the continuance of the extreme cold, was often the cause of surprise. "We have, for instance," Parry states, "often heard people distinctly conversing, in a common tone of voice, at the distance of a mile; and to-day (11th February), I heard a man singing to himself, as he walked along the beach, at even a greater distance than this." In this very severe weather, two of the "Hecla's" marines were tempted to indulge much too freely in spirits, an offence which it was the commander's duty to prevent under any circumstances, but which, if permitted to pass unnoticed in the present situation of the expedition, might have been attended with the most serious consequences, not only to the health, but to the discipline of the crews. Parry was, therefore, under the necessity of subjecting the offenders to a punishment of thirty-six lashes each. On the 15th, the thermometer registered 55° below zero, the most intense degree of cold felt during the sojourn of the ships in Winter Harbour. Though this temperature was 87° below that at which water freezes, not the slightest inconvenience was suffered from exposure to the open air, as long as the weather was perfectly

calm; but in walking against a very light air of wind, a smarting sensation was experienced all over the face, accompanied by a pain in the middle of the forehead, which soon became rather severe. On this day the officers amused themselves by freezing some mercury by simply exposing it to the atmosphere, and beating it out on an anvil. When thus frozen, the mercury was not very malleable, but broke under the hammer after two or three blows. On the 16th, the weather continuing about equally severe, the play arranged for performance for the evening was duly acted; "but it must be confessed that it was almost too cold for either actors or audience to enjoy it, especially for those of the former who undertook to appear in female dresses." As the month wore on, the explorers were cheered by the sun's light for about eight hours daily. On the 22d, the weather was fine and clear; and though the thermometer stood at 23½° below zero in the sun, walking along the shore was a great enjoyment. "With our present temperature," writes Parry, "the breath of a person, at a little distance, looked exactly like the smoke of a musket just fired, and that of a party of men employed upon the ice to-day resembled a thick white cloud."

On the 24th, at a quarter-past ten, when the men were running round the decks for exercise, and luckily were, on that account, well clothed, the house on shore, which was used chiefly for making astronomical observations, was discovered to be on fire. All the officers and men of both ships instantly went off to extinguish it; and having, by great exertion, pulled off the roof with ropes, and knocked down a part of the sides, so as to allow snow to be thrown upon the flames, they succeeded in getting it under after three-quarters of an hour, and, fortunately, before the fire had reached that end of the house where the two clocks, together with the transit and other valuable instruments, were standing in their cases. Having removed these, and covered the ruins with snow, to prevent any further outbreak of fire, the men returned on board till more temperate weather should permit of their digging out the rest of the things, which were subsequently found uninjured. The ships' companies were then mustered, to show that they had put on dry clothes before sitting down to dinner. "The appearance which our faces presented at the fire," says Parry, "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 amimation. Notwithstanding this precaution, which, however, saved many frost bites, we had an addition of no less than sixteen men to the sick lists of both ships in consequence of this accident. Among these there were four or five cases which kept the patients confined for several weeks; but John Smith of the artillery, who was Captain

Sabine's servant, and who, together with Sergeant Martin, happened to be in the house at the time the fire broke out, was unfortunate enough to suffer much more severely. In their anxiety to save the dipping-needle, which was standing close to the stove, and of which they knew the value, they immediately ran out with it; and Smith, not having time to put on his gloves, had his fingers in half-an-hour so benumbed, and the animation so completely suspended, that on his being taken on board by Mr Edwards (the surgeon), and having his hands plunged into a basin of cold water, the surface of the water was immediately frozen by the intense cold thus suddenly communicated to it; and, notwithstanding the most humane and unremitting attention paid to them by the medical gentlemen, it was found necessary, some time after, to resort to the amputation of a part of four fingers on one hand and three on the other."

The month of March was memorable to the explorers on account of the surprising and very beautiful atmospheric phenomena then seen. Of these, as forming a distinct and peculiar element of the sky-scenery of the Arctic regions, and as being seen almost daily at this time of the year, it is necessary here to give some brief sketch. Near noon, on the 4th of March, a halo appeared round the sun, at the distance of 22° 17′ from it, consisting of a circle, nearly complete, and glowing with prismatic colours. "Three parhelia, or mock suns, were distinctly seen upon this circle; the first being directly over the sun, and one on each side of it, at its own altitude. The prismatic tints were much more brilliant in the parhelia than in any other part of the circle; but red, yellow, and blue, were the only colours which could be traced, the first of these being invariably next the sun in all the phenomena of this kind observed. From the sun itself, several rays of white light, continuous but not very brilliant, extended in various directions beyond the halo, and these rays were more bright after passing through the circle than within it. This singular phenomenon remained visible nearly two hours. On the 8th, a similar halo, with three parhelia, was again visible, and phenomena of this kind continued to be seen almost daily."

On the evening of the 19th March, the officers performed the farces of the "Citizen" and the "Mayor of Garratt," Parry sustaining the parts of *Old Philpot* in the former, and *Mathew Mug* in the latter. This was the last night of the theatrical season; for the severity of the winter weather had, by this time, so far mitigated, that there was now no longer any want of occupation for the men. The ice continued to remain firm, however; and although in April and early in May the snow had melted in certain localities, little could yet be done in preparation for continuing the voyage, or returning to England. On the 1st June, Lieutenant Parry, accompanied by twelve officers and men, and furnished with provisions for three weeks, set out on a travelling tour into the interior of Melville. He returned on the 15th, after a

journey remarkable for nothing except the admirable spirit and courage with which, in the face of constant hardships, it was performed.

During the absence of Parry, the equipment of the ships for sea had been actively carried on by Lieutenants Beechey and Liddon, and by the middle of June both vessels were nearly ready to sail. With the view of occupying the time of the officers and men, Parry directed that a hunting party should be organised in each ship, under Lieutenants Beechey and Hoppner, to remain out on the island for a number of days, at the distance of ten or twelve miles, as it was found that the scanty game that were now observed from day to day were too wild to be approached from the ships; and that especially the deer that were now migrating from the south to the feeding places in the remote north, could, by no means, be got at from the ships. Three deer, each yielding about sixty pounds of fresh meat, together with numerous birds and hares, made up a good bag for the first two or three days; and the leader resolved to continue the hunting parties, the officers of which were instructed not only to supervise the camping out of the parties, etc., but also to keep a careful watch on the condition of the ice, and immediately to report any decided change that might take place. The men were delighted to be sent on these hunting excursions, from which they invariably returned in the best possible health, though often rather thinner than when they went out. The heads and hearts of the deer were considered the lawful perquisites of those who killed them; and no Highland sportsman, that ever stalked over a Scottish forest, was keener in the hunt than were the Jack Tars let loose upon Melville Island from the "Hecla" and "Griper." The deer gradually became wild, however, and stratagem was often required to bring them down. Lieutenant Beechey killed one by lying down quietly and imitating the voice of a fawn, when the deer immediately came up to him within gun-shot. The horns of the deer killed at this early part of the season were covered with a soft skin, having a downy pile or hair upon it; the horns themselves were soft, and at the tips flexible and easily broken.

Meantime the ice was melting all over the district, both in Winter Harbour and on the island, which, for many miles round, had now become so familiar to the explorers. Pools were observed all over the surface of the ice, and large cracks were seen extending from the land for some distance seaward. It was remarked, that when any hard substance, broken down into small pieces, was laid upon the ice, it soon made a deep hole for itself by the heat it absorbed and radiated, and which melted the ice; but it was curious to note how directly contrary was the effect produced upon the ice by a quantity of straw which was put out upon it in the early part of May, and which, "by preventing the access of warmth, had now become raised above the general surface more than two feet; affording a strong practical example of the principle on which straw is made use of in ice-houses, and, what was at that

time of more importance to us, a proof how much the upper surface of the ice had been insensibly wasted by dissolution."

The melting of the ice in the harbour went on so rapidly in the early part of July that Parry was greatly surprised on the 6th, to find that in several of the pools of water around the "Hecla," holes had been wasted quite through to the sea beneath. On examining several of these holes, it was discovered that the average thickness of the ice, in the upper part of the harbour where the ships were lying, was much less than the explorers had yet dared to hope—being only two feet. On the 14th, owing to the breaking up of a number of ice partitions separating holes and pools, a boat passed for the first time between the ships and the shore, and on the following day communication in the same way was established between the ships. The vessels had now been quite ready for sea for some days, and a continuous and anxious look-out was kept from the crow's-nest for any alteration in the ice that might favour escape from Winter Harbour. The Arctic summer was now rapidly advancing, and the whole character of the scenery of bleak Melville Island was about to undergo a wonderful transformation. The snow had now disappeared, except in the hollows and ravines, and the walks which the winter-bound sailors were now able to take, when the weather had become really mild and pleasant, and to them—accustomed to the rigour of a winter severe enough to freeze the liquid and nimble mercury into a bullet that could be fired from a musket through a deal board—as warm as the summer of any temperate climate, were an unfailing source of pleasure. Game were now comparatively plentiful, fresh meat was obtainable every day, and the abundant supply of fresh sorrel from the shore provided the expedition with the most wholesome of vegetables, and so improved their health and spirits, that their condition was now as good and efficient as when they left England.

On the 18th July, there was an open passage all round the shores of Winter Harbour, though the middle of the bay was still filled with ice. On the 20th, the "Hecla," freed at last from the ice, now fairly rode at anchor in open water. The "Griper" had been equally fortunate, and both ships now only waited the widening of the passage leading out to the open sea. Day after day brought new hopes, and also new disappointments, for the ice at the entrance continued to remain firm. At this time it was one of Parry's most anxious cares to conceal from his men, by stratagems of various kinds, the fact that was never absent from his own mind, that if the vessels were detained in the harbour but a few weeks longer, all hope of escape this season must be abandoned. At length, on the last day of July, the wind shifting to the W.S.W. at eleven P.M., the whole body of the ice in the harbour was perceived to be moving slowly out to the south-eastward, breaking away, for the first time, at the points which formed the entrance to the harbour.

At one P.M. on the 1st August, everything being in readiness, the "Hecla" weighed and ran out of Winter Harbour, in which she had been confined for over ten months, and sailed westward along shore towards Cape Hearne, generally at the distance of half-a-mile from the land. On the 3d, Parry arrived off Cape Providence at eleven P.M., and had just got far enough to see that there was a free and open channel beyond the westernmost point of Melville Island, when his progress was almost entirely stopped for want of a breeze to enable him to take advantage of it. The calm continued till the 5th, when a breeze sprang up from the eastward. All sail was made, and the "Hecla" ran before the wind for two hours without obstruction, until ice, in very extensive and heavy floes, was seen to close in with the land in advance, a little to the westward of Cape Hay. Having run the "Hecla" in-shore, under shelter of a projecting point which intervened between the vessel and the threatening ice, Parry here found himself imprisoned by adverse winds and drifting ice for several days. On the 8th he distinctly saw high and bold land towards the south-west, and at the distance of from sixteen to eighteen leagues from the station in which the ships were lying. "This land," says Parry, "which extends beyond the 117th degree of longitude, and is the most western yet discovered in the Polar Sea to the northward of the American Continent, was honoured with the name of Banks' Land, out of respect to the late venerable and worthy President of the Royal Society."

On the 9th a musk ox was killed on the beach near the ships. When first brought on board, the carcass of this animal smelt very strongly of musk, and of the flesh, the heart especially had a musky flavour. It yielded 421 lbs. of beef, which was served to the crews as usual, instead of the customary salt provisions, and was much relished, notwithstanding its peculiar flavour. The meat was fat, and when hung up in quarters, "looked as fine as any beef in an English market." About this time a seal was killed, eaten, and found to be very tender and palatable, by the people in the "Griper."

After being detained for twelve days on this unsheltered shore, with a sea of ice in front, and threatening every moment to close in and crush the vessel, or effectually seal it up on shore for another year, and without the slightest hope of making a westward passage through the solid and wide-spreading floes that lay close around, Lieutenant Parry resolved to run back eastward for a few miles, and then steer southward along the outer edge of the ice, and thus seek a westward passage in a lower latitude. The station in which the vessels were still lying on the 16th August was in lat. 74° 26′, and in long. 113° 46′, with Cape Dundas a few miles to the westward. Casting off from the shore, the "Hecla" left this station, and ran close along the edge of the ice to the eastward. On the 17th, she was obliged to seek

shelter in a little harbour (long. 112° 38′), formed, as usual, by the grounded ice, some of which was fixed to the bottom in ten or twelve fathoms. Here both vessels were hemmed in till the 23d, when they were worked eastward as far as Cape Providence, in the neighbourhood of which, among ice that was at once heavy and loose, the vessels received by far the heaviest shocks they had experienced during the voyage. Parry now finally reviewed the situation in which the expedition was placed. It was now the 23d August, and the 7th September he considered it reasonable to regard as the limit beyond which the navigation of this part of the Polar Sea could not be carried on. The direct distance to Icy Cape, the supposed termination of the North-West Passage, was between eight and nine hundred miles, and during the whole of this open season all the distance he had advanced in this direction was only sixty miles. What, then, were the chances of his completing the passage this year with apparently endless icy seas before him, and with the Arctic winter coming upon him in a fortnight? "We had experienced," he says, "during the first half of the navigable season, such a continued series of vexations, disappointments, and delays, accompanied by such a constant state of danger to the ships that I felt it would no longer be deemed justifiable in me to persevere in a fruitless attempt to get to the westward." Besides this consideration, the stores of provisions and fuel were much reduced, and though the health of officers and men was still as sound as when the expedition left England, yet the stores of lemon-juice, and of the other remedies for scurvy, were nearly exhausted. In these circumstances, Parry resolved to consult the officers of both vessels, who unanimously agreed with him in the opinion that any further attempt to penetrate to the westward, in the latitude in which they now lay, would be fruitless, and that it would be expedient to return to England rather than risk another winter in these seas. This resolution having been arrived at both by commander and officers, no time was lost in carrying it out, for there was yet danger in being overtaken by the fast approaching winter while still in the Polar Sea. Accordingly, all sail was made eastward on the 26th August for Barrow's Strait and Lancaster Sound. Running along the south shores of this great passage, Parry named the large island on the west of Prince Regent's Inlet, North Somerset; while to the great land on the north side of Lancaster Sound he gave the name of North Devon.

On the morning of the 1st September the vessels were abreast of the flagstaff on Possession Bay, at the eastern extremity of Lancaster Sound, and on the evening of the 5th, they had reached River Clyde Inlet, on the east coast of Baffin Land (along which they were coasting), and in lat. 70° 20′ N. While standing off in this inlet, they perceived four canoes, containing Eskimos, paddling towards them. The canoes were taken up at the men's desire, intimated by signs, and they themselves came up on board without

hesitation. They consisted of one old and three young men. "As soon as they came on deck," writes Parry, "their vociferations seemed to increase with their astonishment, and, I may add, their pleasure; for the reception they met with seemed to create no less joy than surprise. Whenever they received a present, or were shown anything that excited fresh admiration, they expressed their delight by loud and repeated ejaculations, which they sometimes continued till they were quite hoarse, and out of breath with the exertion. This noisy mode of expressing their satisfaction was accompanied by a jumping which continued for a minute or more, according to the degree of the passion which excited it, and the bodily powers of the person who exercised it—the old man being rather too infirm, but still doing his utmost, to go through the performance."

Having purchased a few skins and ivory knives from the Eskimos, the officers of the "Hecla" took them down to the cabin, where Lieutenant Beechey sketched the portrait of the oldest of the visitors. Here the natives carried on an active barter of their clothes, spears, and whalebone, with great enthusiasm, but with perfect honesty, receiving English knives, etc., in exchange. Next day Parry, with a party of officers and men, landed on one of the islands of the inlet, and was soon visited by the old man and one of the younger natives from the mainland, who came as before to sell their seal-skin dresses, etc. Parry held up a looking-glass to each of the Eskimos, and then gave it into the hands of each. The younger native was quite in raptures, and literally jumped for joy for nearly a quarter of an hour; but the old man, having had one smile at his own queer face, returned the glass, and fixed his attention upon a sailor who was opening a canister of preserved meat, by cutting the case with a hatchet struck by a mallet. He begged hard for the mallet, but could scarcely be persuaded to taste the meat. Neither he nor his younger companion could be prevailed upon to touch any rum, after once smelling it.

The Englishmen now visited the little Eskimo settlement, consisting of two tents, on the mainland. "As soon as we came in sight of the tents," writes Parry, "every living animal there—men, women, children, and dogs—were in motion, the latter to the top of the hill out of our way, and the rest to meet us with loud and continued shouting; the word *pilletay* (give me!) being the only articulate sound we could distinguish amidst the general uproar. Besides the four men whom we had already seen, there were four women, one of whom, being about the same age as the old man, was probably his wife; the others were about thirty, twenty-two, and eighteen years of age." Two of the women had infants slung at their backs, and there were in all nine children, the eldest twelve years of age.

The usual bartering again went on, the natives receiving knives, axes, brass kettles, needles, etc., for their simple commodities. The women

begged hard for presents—there appeared to be a premium upon officers' buttons—but all bargains contracted were faithfully and honestly carried out by the natives. The stature of these people was much below the usual standard ; though one of the younger men was about five feet six inches in height. "One of them, we thought," says Parry, "bore a striking resemblance to our poor friend John Sackheuse, well-known as the Eskimo who accompanied the former expedition, the want of whose services we particularly felt on this occasion, and whose premature death had been sincerely lamented by all who knew him, as an intelligent and amiable man, and a valuable member of society."

Parry and his party remained for four or five hours on the mainland, near the natives' settlement. Having completed the observations, which formed part of his purpose in visiting the mainland, he took leave of the Eskimos. "The old man seemed quite fatigued with the day's exertions, but his eyes sparkled with delight, and we thought with gratitude too, on being presented with another brass kettle, to add to the stores with which we had enriched him. He seemed to understand us when we shook him by the hand. The whole group watched us in silence, as we went into the boat, and, as soon as we had rowed a few hundred yards from the beach, quietly retired to their tents."

The homeward course was now resumed, and prosecuted without further adventure, and toward the close of October the "Hecla" was in British waters, and on the 29th of that month, Lieutenant Parry, accompanied by Captain Sabine and Mr Hooper, landed in safety at Peterhead, whence they, without delay, proceeded southward toward London.

PART IV.

CHAPTER I.

FRANKLIN'S GREAT JOURNEY, 1819-22—ARRIVAL AT YORK FACTORY—SCENERY OF STEEL RIVER — SLEDGE JOURNEY TO ATHABASCA LAKE — DEPART FOR GREAT SLAVE LAKE.

WHILE Parry was, as we have seen, engaged in making the splendid discoveries of Lancaster Sound, Prince Regent's Inlet, Wellington Channel, and the whole range of the most northern islands of the Polar Sea, north of America, his friend, Lieutenant John Franklin, was conducting an expedition, intended to co-operate with his own. This expedition of Franklin's—the famous land journey from the shores of Hudson's Bay to those of the Polar Sea—is in some respects the most extraordinary enterprise of the kind ever undertaken by man. The narrative of this great journey, "adds," says Sir John Barrow, "another to the many splendid records of enterprise, zeal, and energy of our sailors;" and the late Admiral Sherard Osborne, himself a distinguished Arctic explorer, whose achievements it will be our duty to chronicle in their place, has said of it: "It is indeed a tale which should be in the hands of those sailors of England who desire to emulate the deeds and fame of such men as himself and his followers. It is an Iliad in prose, and replete with pictures of rare devotion to the most ennobling of causes, the advancement of human knowledge. A generous and chivalrous spirit breathes through every page, and sheds a lustre not only on every act of the leader, but likewise of those who were his comrades and friends in many a sad hour of need and danger. Those terrible marches; the laborious exploration of the regions around the mouths of the Mackenzie and Coppermine rivers; the long, bitter starvation of the winter; the murder of Hood; the destruction of the assassin and the cannibal . . . are all tales which should be household words by every English fireside."

We have already stated that on the 18th November, 1818, both Parry and Franklin had an interview with Lord Melville, then Secretary of the Admiralty. To Parry, the result of this interview, as we have seen, was his

appointment to the command of the "Hecla" and "Griper;" to Franklin, the result was his appointment to the command of an overland expedition to explore the shores of the North American Continent, from the mouth of the Coppermine River to the eastward. The gentlemen nominated to accompany Franklin—the names of all of whom are now famous—were Dr John Richardson, surgeon in the Royal Navy; Mr George Back, who had sailed as mate in the "Trent" with Franklin, in 1818; and Robert Hood, midshipman. The main objects of the expedition were to determine the latitudes and longitudes of all bays, rivers, harbours, headlands, etc., on the northern coast of America, from the mouth of the Coppermine River to the coast on the east side of the Continent; to place conspicuous marks at places where ships might enter, or to which a boat could be sent; and to deposit information as to the nature of the coast, for the use of Lieutenant Parry, in the event of the commander of the "Hecla" and "Griper" being able to find a North-West Passage along the American shore. Franklin was further instructed to register the temperature of the air, at least three times a day, to note the state of the wind and weather, the dip and the variation of the magnetic needle, the intensity of the magnetic force, etc. He received ample credentials and letters of recommendation from the Governors of the Hudson's Bay Company, and of the North-West Company—the rival fur-trading companies of British North America—and he had the gratification of reading the orders sent by these Governors to their agents and servants in North America, instructing these persons to do their utmost, by every means and in every way, to promote the objects of the expedition, and to respond liberally to all its requirements.

The group of explorers forming the expedition, and consisting of Franklin and Richardson, Back and Hood, with one attendant, John Hepburn, an English seaman of the best type, embarked at Gravesend, on board the "Prince of Wales," a ship belonging to the Hudson's Bay Company, on the 23d May 1819—though the voyage across the Atlantic cannot be said to have begun until the beginning of July—and arrived at York Flats, Hudson's Bay, on the 30th August. Immediately on the arrival of the "Prince of Wales," Mr Williams, the Governor of York Factory—the "post" or station of the Company, seven miles inland from Hudson's Bay—came on board, and informed the explorers that he had already received information of the equipment of the expedition, and assured them that the instructions that had been sent to him from the committee of the Hudson's Bay Company, were to the effect that every possible assistance was to be given to the expedition, and that he would have the greatest pleasure in carrying out these instructions to the letter. Franklin accompanied Mr Williams to York Factory, and there saw several partners of the North-West Company, to whom he presented his credentials, and from whom he obtained ready

promises of assistance, in compliance with the expressed desire of the Government of that day, and of the London agent of the North-West Company.

Having explained the objects of the expedition to the gentlemen of both Companies, Franklin asked each of them to state his opinion as to the best route to the shores of the Polar Sea, at the mouth of Coppermine River, where the actual work of exploration would commence. The opinions of all the officers of both Companies were so decidedly in favour of the route which ran west-south-west from York Factory to Cumberland House, and thence northward through the chain of the Companies' "posts" to the Great Slave Lake, that Franklin resolved upon taking this line, and communicated his intention to the Governor (Mr Williams), with a request that he would furnish the means of conveyance for the party.

The route by Cumberland House and the chain of lakes to the Great Slave Lake, and thence to the head-waters of the Coppermine River, is really a water-way, though the portages separating the line of streams and lakes are almost numberless. Mr Williams, therefore, presented the expedition with one of the largest of the Company's boats, and on the 9th September 1819, the expedition prepared to start. When the stores were brought down to the beach, however, it was found that the boat could not contain all of them, and consequently the whole of the bacon, and part of the flour, rice, tobacco, and ammunition, were left behind, and returned into the store, the Governor undertaking to forward them in the following season. The explorers embarked at noon, and were honoured with a salute of eight guns and three cheers from the Governor and all the inmates of the fort, who had assembled to witness their departure. Franklin gratefully returned their cheers, and then made sail up the Hayes River, delighted at having at last commenced his voyage into the interior of America. At sunset the voyagers landed, and pitched the tents for the night, having only advanced twelve miles. A fire was soon lighted, supper speedily prepared and more speedily despatched, and the travellers, laying themselves down in their buffalo robes, under their canvas roof, enjoyed a night of sound repose.

The advance up the numberless streams, over the lakes, and across the ever-recurring portages, over which boat and cargo had to be carried with infinite labour, the men having often to make half-a-dozen journeys over the same portage, carrying heavy loads each alternate journey, is somewhat monotonous in incident, and can only be summarised in the briefest form here. Often the current of the stream was too rapid to allow of the use of oar or sail, and progress could only be made by the crew getting out upon the banks and "tracking" or dragging the boat by a line, to which they were harnessed. Had the shores been level and firm, we could conceive how this mode of advance, though in the last degree tedious and laborious,

might have been tolerable to brave and much-enduring men; but when we read in Franklin's ably-written narrative that the shores were often lofty, rocky, and interrupted with ravines and the channels of tributary streams; that the ropes by which the boat was dragged often broke; that the rapids were often so strong that the officers had to leap out of the water to keep the head of the boat to the stream, and so prevent her being swept downward; that portages, over rough rocks, on which the boat was frequently damaged, had to be crossed almost daily; and that for these, and other reasons, all the progress made after a long day of the severest toil was sometimes no more than two miles; the endurance, the patience, and courage of these explorers seems to us beyond calculation.

The actual work of exploration, which was the object of the expedition, did not commence till Franklin arrived at Great Slave Lake; and the toils, sufferings, and adventures of the explorers on their journey to this inland sea from Hudson's Bay must not detain us. But it would show scant sympathy with noble and self-sacrificing achievement if some few details of the conditions under which progress was made were not here given, once for all, before we transfer the scene to the remoter regions near the Polar Sea, where the main incidents of this remarkable enterprise took place. With this view, we summarise the narrative of the journey up the rivers during the first few days after the expedition started, and when the new and wild life upon which Franklin had launched must still have had for him something, at least, of the fascination of novelty.

On the morning of the 13th September, an attempt was made under sail to stem the current of Steel River, along which the boat was now being tracked, but as the course of the stream was serpentine, the sails were found to afford little assistance, and tracking was resumed. "Steel River," writes Franklin, "presents much beautiful scenery. It winds through a narrow, but well-wooded valley, which at every turn disclosed to us an agreeable variety of prospect, rendered more picturesque by the effect of the season on the foliage, now ready to drop from the trees. The light yellow of the fading poplars formed a fine contrast to the dark evergreen of the spruce, whilst the willows, of an intermediate hue, served to shade the two principal masses of colour into each other. The scene was occasionally enlivened by the bright purple tints of the dog-wood, blended with the browner shades of the dwarf-birch, and frequently intermixed with the gay yellow flowers of the shrubby cinquefoil. With all these charms, the scene appeared desolate from want of the human species. The stillness was so great that even the twittering of the cinereous crow caused us to start. Our voyage to-day was sixteen miles on a south-west course." There was much rain during the night and in the morning, so that the party were kept under canvas longer than usual. Setting out, they reached the head of Steel River, and being joined in the morn-

ing by three of the Company's boats, they entered Hill River in company. The water in this river was so low, and the rapids so bad, that the officers were obliged several times to jump into the water, and assist in lifting the boats over the large stones that impeded the navigation. Length of voyage on this day only six miles and three-quarters. The four boats commenced operations together at five o'clock the following morning, but Franklin's boat being overladen, he found that he was unable to keep pace with the others, and therefore proposed to the gentlemen in charge of the Company's boats that they should relieve him of part of his cargo. "This they declined doing," says Franklin, "notwithstanding that the circular, with which I was furnished by Governor Williams, strictly enjoined all the Company's servants to afford us every assistance. In consequence of this refusal we dropt behind, and our steersman, who was inexperienced, being thus deprived of the advantage of observing the route followed by the guide, who was in the foremost boat, frequently took a wrong channel. The tow-line broke twice, and the boat was only prevented from going broadside down the stream, and breaking to pieces against the stones, by the officers and men leaping into the water, and holding her head to the current until the line could be carried again to the shore. . . . We encamped at sunset, completely jaded with toil. Our distance made good this day was only twelve miles and a quarter." On the following day, only eleven miles were made, and on the 17th, tracking having commenced very early, a ridge of rock extending across the stream was reached. From this place the boat was dragged up several narrow rocky channels until the Rock Portage was reached, where the stream, pent in by a range of small islands, forms several cascades. In ascending the river, the boats and cargoes are carried over one of these islands, and having performed the operations of carrying, launching, and re-stowing the cargo, the oars were plied for a short distance to Rock House, one of the posts or depôts of the Hudson's Bay Company. Here Franklin was informed that he was now about to encounter a series of rapids more difficult and more numerous than those he had just passed, and that unless his boat was lightened the winter would put a stop to his progress before he could reach Cumberland House, or any other "post," at which he could find shelter during mid-winter. He was therefore obliged to leave part of his cargo, consisting of sixteen "pieces," at the depôt of Rock House, to be forwarded to him in the following season by the Athabasca canoes.

Knee Lake was reached on the 25th. Trout River was entered early on the morning of the 27th; and in the course of the day, three portages and several rapids were passed. Still keeping up with the Company's boats, the explorers spent the whole of the 2d October in carrying their cargo over a portage thirteen hundred yards in length; and in launching the empty boat over three several ridges of rock which obstruct the channel, and produce as many

THE ICE BREAKING UP

cascades. "I shall long remember," writes Franklin, "the rude and characteristic wildness of the scenery which surrounded these falls; rocks piled on rocks hung in rude and shapeless masses over the agitated torrents which swept their bases; whilst the bright and variegated tints of the mosses and lichens, that covered the face of the cliffs, contrasting with the dark green of the pines which crowned their summit, added both beauty and grandeur to the scene."

Governor Williams, from York Factory, had come up with the expedition, and with the Company's boats, in the beginning of October; and on the 23d of that month the small fleet arrived in front of Cumberland House on Pine Island Lake, one of the principal stations of the Hudson's Bay Company. The margin of the lake was found incrusted with ice; and the boats had to break through a considerable space of it to reach the landing-place. When Franklin considered that this ice was the effect of only a few days' frost at the commencement of winter, he was convinced of the impracticability of advancing further by water till the following season, and he, therefore, resolved to accept Governor Williams' invitation to remain at the station during the winter. Besides Cumberland House, there was also a station of the North-West Company at this place, and Franklin lost no time in seeing its chief officer, and presenting his credentials. He was received with hospitality, and with the kindest offers of assistance, when he should resume the course of his journey. The conversations which Franklin had with the officers of both ports, convinced him of the necessity of proceeding, during the winter, into the Athabasca department, the residents of which are best acquainted with the nature and resources of the country to the north of the Great Slave Lake; and whence only could he procure guides, hunters, and interpreters to accompany him during the actual work of exploration. He had previously written to the partners or agents of the North-West Company in the Athabasca department, requesting their assistance in forwarding the expedition, and stating what he would require. But when he reflected on the accidents likely to occur in delaying these letters, he resolved to go forward himself as soon as he could. He communicated his intention to Governor Williams, and to the officers of the North-West Company at Cumberland House, and requested to be furnished with the means of conveyance for three persons—himself, Mr Back, and Hepburn, the seaman, by the middle of January.

Accordingly, on the 18th January 1820, Franklin, with his two companions, having been furnished with two sledges, the dogs and drivers being provided by the two companies, set out on their overland journey towards the Athabasca country. On the 26th, they had reached the half-way point between Cumberland and Carlton House. The night of the 28th was miserably cold; and as the travellers walked on, they were obliged to keep

constantly rubbing the exposed parts of their faces to prevent their being frost-bitten. When they camped, so intense was the cold that the newly-made tea froze in the tin pots before they could drink it; and even a mixture of spirits and water became quite thick by congelation as soon as made. Yet after they lay down, they slept soundly, and felt no inconvenience, or even uneasiness, on account of the wolves that were howling around them within view. On the 31st, they reached Carlton House (lat. 52° 50′, long. 106° 12′), and were regaled by the Company's agent there with a substantial dish of hot buffalo steaks, which to them was a feast of the gods after the dried meat of the journey.

On February 8th, the journey northward from Carlton House was commenced; and on the 26th March, Fort Chepewyan, on Athabasca Lake, was reached. "Thus terminated," writes Franklin, "a winter's journey of 857 miles, in the progress of which there was a great intermixture of agreeable and disagreeable circumstances. Could the amount of each be balanced, I suspect the latter would much preponderate; and amongst these the initiation into walking in snow-shoes must be considered as prominent. The suffering it occasions can be but faintly imagined by a person who thinks upon the inconvenience of marching with a weight of between two and three pounds constantly attached to galled feet and swelled ankles. Perseverance and practice only will enable the novice to surmount this pain."

On the day after his arrival at Fort Chepewyan, on Athabasca Lake, Franklin called upon Mr Macdonald, the gentleman in charge of the Hudson's Bay establishment there, called Fort Wedderburn, and delivered to him Governor Williams' circular-letter, instructing all agents and servants of the Company to do everything within their power to contribute all necessary supplies to the expedition, and to forward its progress by every possible means. "Our first object," writes Franklin, "was to obtain some certain information respecting our future route; and, accordingly, we received from one of the North-West Company's interpreters, named Beaulieu, a half-breed, who had been brought up amongst the Dog-Ribbed and Copper Indians, some satisfactory information, which we afterwards found tolerably correct, respecting the mode of reaching the Coppermine River—which he had descended a considerable way—as well as of the course of that river to its mouth. The Copper Indians, however, he said, would be able to give us more accurate information as to the latter part of its course, as they occasionally pursue it to the sea. He sketched on the floor a representation of the river, and a line of coast, according to his idea of it. Just as he had finished, an old Chepewyan Indian, named Black Meat, unexpectedly came in, and instantly recognised the plan. He then took the charcoal from Beaulieu, and inserted a track along the sea coast, which he had followed in returning from a war excursion, made by his tribe against the Eskimos. He detailed several par-

ticulars of the coast and the sea, which he represented as studded with well-wooded islands, and free from ice, close to the shore, in the month of July, but not to a great distance. He described two other rivers to the eastward of the Copper-mine River, which also fall into the Northern Ocean—the Anatessy, which issues from Rum Lake, and the Fish River, which rises near the eastern boundary of the Great Slave Lake."

Here, then, was something like palpable ground for Franklin to go upon in working out his great object. The shores of the Polar Sea, it appeared, were accessible, and these shores were indented by two known rivers flowing from the south, and hitherto unexplored by Europeans. It was clear that, in the light of this intelligence, Franklin should send on in advance to the agents of the two Companies at the depôts on Great Slave Lake, and inform them of the nature of his mission, of the time at which his expedition would be likely to arrive at their stations, and of the nature of the assistance he would require at their hands. He accordingly wrote to Mr Smith, of the North-West Company, and Mr M'Vicar, of the Hudson's Bay Company, the gentlemen in charge of the ports at Great Slave Lake, explaining the object of the expedition, describing the proposed route, and soliciting any information they possessed, or could collect, from the Indians respecting the countries he had to pass through, etc. As the Copper Indians frequented the establishments on the Lake, he particularly requested that these should be made acquainted with the object of his visit, and that some of them should be engaged as guides and hunters to accompany the expedition. The letters were despatched by two Canadian voyagers.

On the 10th May, anemones first appeared in flower at Fort Chepewyan. Leaves were noticed bursting from the trees, and musquitoes were found in the warm rooms. In the same month, gentlemen belonging to both the trading Companies began to assemble from their different posts in the department, bringing their winter's collections of furs to be forwarded to the main depôts. Every one was now fully occupied at the Fort, and Franklin had some difficulty in interesting the officers in his expedition. He made a requisition on the Companies for eight men each, and whatever useful stores they could supply; but he learned, with regret, that the spare stores were very limited, and that the men, especially those of the Hudson's Bay Company, were unwilling to engage with him, except at an extortionate rate of wages. Difficulties of this sort generally diminish or disappear in time. On the 13th July, Mr Richardson and Mr Hood arrived from Cumberland House, where Franklin had left them in January. These gentlemen had brought all the stores they could procure from the establishments at Cumberland and Isle à la Crosse. At the latter place they had received ten bags of pemmican from the North-West Company, which proved to be mouldy and so totally unfit for use, that it had to be thrown away. They got no pemmican

from the Hudson's Bay Post, as the Canadian voyagers belonging to that Company, being themselves destitute of provisions, had consumed the supplies intended for the explorers. "In consequence of these untoward circumstances," says Franklin, "the canoes arrived with only one day's supply of this most essential article. The prospect of having to commence our journey from hence, almost destitute of provisions, and scantily supplied with stores, was distressing to us, and very discouraging to the men. It was evident, however, that any unnecessary delay here would have been very imprudent, as Fort Chepewyan did not, at the present time, furnish the means of subsistence for so large a party, much less was there a prospect of our receiving any supply to carry us forward. We, therefore, hastened to make the necessary arrangements for our speedy departure."

Besides the four officers, the party consisted of sixteen Canadian voyagers —the crew, so to speak, of the expedition—two interpreters, and the invaluable John Hepburn, the English seaman. On the morning of the 18th July, the stores were distributed to the three canoes with which Franklin had been furnished. The stock of provisions did not amount to more than sufficient for one day's consumption, exclusive of two barrels of flour, three cases of preserved meats, some chocolate, arrow root, and portable soup, which had been brought from England to be kept in reserve for the journey to the coast the following season. Seventy pounds of the flesh of the moose deer, and a little barley, were all that could be obtained from the fort. But the very near prospect of short commons did not seem to depress the spirits of the Canadians, who loaded the canoes cheerfully; and, on the sign being given for starting, paddled away from the shore across the Athabasca Lake to the accompaniment of a lively boat song. Passing out at the north-west extremity of the Lake, the canoes entered Slave River, which connects Lake Athabasca with Great Slave Lake, and descended this magnificent river rapidly. On the 25th, the expedition reached the establishment of the North-West Company on Moose Deer Island in Great Slave Lake. On the same island was a post of the Hudson's Bay Company, but both stations were extremely bare of provisions. Sailing northward across the Lake without much delay, Franklin landed at Fort Providence, where it was arranged he was to meet Mr Wentzel, of the North-West Company. This gentleman's duties, in the interests of the Company, were the management of the Indians, the superintendence of the Canadian voyagers, the collection and distribution of provisions, and the issue of the other stores. Mr Wentzel had agreed to accompany the expedition in its march of exploration to the Coppermine, and he it was who had engaged a number of Indian hunters, under their chief, to hunt for the expedition, and keep them supplied with moose-meat. These Indians, upon whom the success of the expedition so much depended, were hunting in the neighbourhood of Fort Providence, on the arrival of the

expedition; and now the time had come when the first interview between the explorers and their dusky allies was to take place.

"As we were informed," says Franklin, "that external appearances made lasting impressions on the Indians, we prepared for the interview by decorating ourselves in uniform, and suspending a medal round each of our necks. Our tents had been previously pitched, and over one of them a silken union flag was hoisted. Soon after noon, on July 30th, several Indian canoes were seen advancing in a regular line; and on their approach, the chief was discovered in the headmost, which was paddled by two men. On landing at the fort, the chief assumed a very grave aspect, and walked up to Mr Wentzel with a measured and dignified step, looking neither to the right nor to the left at the persons who had assembled on the beach to witness his debarkation; but preserving the same immovability of countenance until he reached the hall, and was introduced to the officers. When he had smoked his pipe, drank a small portion of spirits and water himself, and issued a glass to each of his companions, who had seated themselves on the floor, he commenced his harangue, by mentioning the circumstances that led to his agreeing to accompany the expedition—an engagement which he was quite prepared to fulfil. He was rejoiced, he said, to see such great chiefs on his lands; his tribe was poor, but they loved white men, who had been their benefactors; and he hoped our visit would be productive of much good to them. The report which preceded our arrival, he said, had caused much grief to him. It was at first rumoured that a great medicine chief accompanied us, who was able to restore the dead to life; at this he rejoiced. The prospect of again seeing his departed relatives had enlivened his spirits; but his first communication with Mr Wentzel had removed these vain hopes, and he felt as if his friends had a second time been torn from him. He now wished to be informed exactly of the nature of our expedition."

"In reply to this speech, which I understood had been prepared for many days, I endeavoured to explain the objects of our mission in a manner best calculated to insure his exertions in our service. With this view I told him that we were sent out by the greatest chief in the world, who was the sovereign also of the trading companies in the country; that he was the friend of peace, and had the interest of every nation at heart. Having learned that his children in the north were much in want of articles of merchandise, in consequence of the extreme length and difficulty of the present route, he had sent us to search for a passage by the sea, which, if found, would enable large vessels to transport great quantities of goods more easily to their lands. That we had not come for the purpose of traffic, but solely to make discoveries for their benefit, as well as that of every other people. That we had been directed to inquire into the nature of all the productions of the countries we might pass through, and particularly respecting their inhabi-

tants. That we desired the assistance of the Indians in guiding us, and providing us with food. Finally, that we were most positively enjoined by the great chief to recommend that hostilities should cease throughout this country, and especially between the Indians and the Eskimos, whom he considered his children in common with other natives , and by way of enforcing the latter point more strongly, I assured him that a forfeiture of all the advantages that might be anticipated from the expedition would be a certain consequence if any quarrel arose between his party and the Eskimos ; I also communicated to him that owing to the distance we had travelled, we had now few stores more than were necessary for the use of our own party. A part of these, however, should forthwith be presented to him, and on his return he and his party should be remunerated with cloth, ammunition, tobacco, and some useful iron materials, besides having their debts to the North-West Company discharged."

The chief, whose name was Akaitcho or Big-Foot, courteously replied, briefly repeating his assurances of friendship and his desire to serve the white chiefs. After he and his guides had communicated all the information they possessed, Franklin placed his medal round the chief's neck, and the officers presented theirs to Akaitcho's brother and to the two guides. These badges of honour and pledges of friendship being bestowed in presence of all the hunters, were highly gratifying to them ; but they studiously avoided any great expression of joy, as such an exposure would have been unbecoming the dignity which the senior Indians assume during a conference. Franklin then presented to the chief, the two guides, and the seven hunters who had engaged to accompany the expedition, a quantity of cloth, together with blankets, tobacco, knives, daggers, etc., and a gun each.

The Indians set out on the morning of August 1, intending to wait for the expedition at the mouth of the Yellow Knife River, which flows north from Great Slave Lake, and the explorers waited behind to pack up their stores, an operation not to be transacted with comfort in presence of the Indians, who begged for everything they saw. The stores at this time consisted of two barrels of gunpowder, 140 lbs. of ball and small-shot, four fowling-pieces, a few old trading guns, eight pistols, twenty-four Indian daggers ; some packages of knives, chisels, axes, nails, and fastenings for a boat ; a few yards of cloth ; some blankets, needles, looking-glasses, and beads, and some fishing-nets. The provisions consisted of two casks of flour, 200 dried reindeer tongues, some dried moose-meat, portable soup, and arrowroot—sufficient in all for ten days' consumption. The expedition now included twenty-eight persons, comprising sixteen Canadian voyagers to work the canoes and transport the baggage, the wives of three of these taken along to make shoes and clothes for the men at the winter establishment, three interpreters, Michel Teroahauté, an Iroquois, Mr Wentzel, and

the English explorers. On the afternoon of the 2d August, the expedition moved forward in four canoes from Fort Providence, the most northern post of the North-West Company, heartily glad that the time had at last arrived when their course was to be directed towards the Coppermine River, through a line of country that had not previously been visited by any European. On the 5th August, the canoes still continuing the ascent of Yellow Knife River, it was found that the issue of dried meat for breakfast had exhausted the entire stock, and at the recommendation of Akaitcho, the Indian hunters were furnished with ammunition, and sent on in advance to where the reindeer were expected to be found, to procure a supply of provisions. During the next six days considerable inconvenience was felt from the scarcity of food, but on the 11th, an Indian met the party, and informed them that the hunters had made several fires—which were the appointed signals that reindeer had been killed. A supply of meat was obtained on the 13th; and on August 19th they arrived at the spot where the Indians recommended that the winter establishment should be erected. Of this locality Franklin says: "We soon found that the situation the Indians had chosen possessed all the advantages we could desire. The trees were numerous, and of a far greater size than we had supposed them to be in a distant view, some of the pines being thirty or forty feet high, and two feet in diameter at the root. We determined on placing the house on the summit of the bank, which commands a beautiful prospect of the surrounding country. The view in the front is bounded, at the distance of three miles, by round-backed hills; to the eastward and westward lie the Winter and Round Rock Lakes, which are connected by the Winter River, whose banks are well clothed with pines, and ornamented with a profusion of mosses, lichens, and shrubs. In the afternoon we read divine service, and offered our thanksgiving to the Almighty for His goodness in having brought us thus far on our journey—a duty which we never neglected when stationary on the Sabbath."

The total length of the voyage from Fort Chepewyan to the spot which had been selected for their winter establishment—the spot in which Franklin built his dwelling and store-houses, and which he named Fort Enterprise—was 553 miles.

CHAPTER II.

WINTER SETTLEMENT AT FORT ENTERPRISE — EXCURSIONS TO COPPERMINE RIVER—WANT OF AMMUNITION.

On the morning of the 20th August, the voyagers were divided into two parties, the one to cut wood for building a store-house at Fort Enterprise, the other to bring in the carcasses of the deer which the Indian hunters should kill. An Indian was despatched to Akaitcho with orders for him to repair to Fort Enterprise at once, and bring whatever provisions he had collected, as Franklin and his officers were eager to set out without delay on an exploring excursion to the Coppermine River. In the evening the carcasses of seven reindeer were brought in, and the women that accompanied the expedition immediately commenced drying the meat in preparation for the projected excursion to the stream that was to conduct the explorers to the shores of the Polar Sea. Meantime the conviction that the open season, during which alone exploration could be carried on, was rapidly drawing to a close, was forced by a hundred circumstances upon Franklin's mind. Fort Enterprise, his new home in this remote wilderness, soon became familiar to him in all its aspects; but to whatever feature of it he now turned his eyes—to the wild uplands that stretched away to the west, to the hills on the north that pointed the way to the Coppermine, to Winter Lake that extended eastward from the foot of the hill of Fort Enterprise on the east, or to Winter River that bounded it on the south—he saw everywhere, in the falling leaf, the browning heath, the darkening moss, the pools with their icy film in the morning, and in the windy sky, with its shifting rain shadows, evidences that the brief summer of the north was waning fast. On the 23d, the rain was so heavy that all operations at the fort were stopped—the sound of axe and hammer ceased at the store-house, and the meat carriers were forced to remain under their tent. The following day was fine, but cold—the thermometer rising only to 42° at noon, and falling to 31° before midnight. On the 25th, the signs of the approach of winter were visible, palpable, and altogether undeniable. There was ice in the hollows underfoot, and overhead flocks of wild-fowl were seen flying away southward from before the benumbing and blood-congealing monarch that was now beginning to wake up and reassert himself in the far north. These tokens

increased the leader's anxiety to be off as soon as possible to the banks of the Coppermine. In due time Akaitcho returned, but he had stored up only fifteen deer during his absence. It appears that he had heard of the death of his brother-in-law, and he and his hunters spent several days in bewailing his loss—thus starving the living to show their respect for the dead. Worse than this, the death of the chief referred to was the cause of the removal, to a great distance, and entirely out of the proposed route to the Coppermine, of another party of Akaitcho's tribe, which had been sent forward to prepare an ample store of provisions on the banks of that river. But worst of all was Akaitcho's point-blank refusal to accompany Franklin in his projected excursion. When the chief heard that this excursion was to be carried out at once, he sought an interview with Franklin, and began a gloomy harangue to the effect that the very attempt to reach the Coppermine that season would be rash and dangerous, as the weather was cold, the leaves were falling, some geese had passed to the southward, and the winter would shortly set in. He considered that the lives of all who went on such a journey would be forfeited, and, therefore, he would neither go himself nor permit the hunters to go. There was no wood to be had, he said, in an eleven days' march, so that there would be no fire to cook with, or to make the camping-places comfortable. Then the explorers might get blocked up with ice in the next moon; and if they survived all these preliminary dangers and hardships it really would not much matter, as they would be quite effectively killed by starvation on the return journey, as all the reindeer had already migrated from the banks of the river. Expostulation had only the effect of reconciling him to the disaster which he so clearly foresaw. "I have," concluded the chief, "said everything I can urge to dissuade you from going on this service, on which it seems you wish to sacrifice your own lives, as well as the Indians who might attend you; however, if, after all I have said, you are determined to go, some of my young men shall join the party, because it shall not be said that we permitted you to die alone, after having brought you hither; but from the moment they embark in the canoes, I and my relatives shall lament them as dead."

Thus encouraged, Franklin had a conference with his officers, who all agreed that the descent to the sea by the Coppermine should not be attempted that season, but that a party should be sent to ascertain the distance of the stream, its general character, volume, etc., and the nature of its banks. Accordingly, Franklin resolved to despatch Messrs Back and Hood in a light canoe on that service as soon as possible. They were ready to start on the 29th, accompanied by St Germain the interpreter, eight Canadian voyagers, and one Indian. They were furnished with blankets, two tents, and a few instruments; and they started in the best of spirits.

Akaitcho and his hunters now went away to their hunting grounds, and

Franklin and Dr Richardson, having not much to do, determined on making a walking tour to the Coppermine, leaving Mr Wentzel in charge of the men, and to superintend the buildings. They started on September 9th, under the guidance of Keskarrah the Indian, and attended by the seaman John Hepburn, and a Canadian. In the course of the afternoon, after they had walked a number of miles in a bee-line, straight from the top of one hill to the top of another, Keskarrah killed a deer, and loaded himself with the head and skin, while the others carried each away a few pounds of the meat. The Indian guide offered the raw marrow from the hind legs of the animal to the others as a great treat. All the party ate of the raw marrow, and thought it very good, except Franklin, who adds, however, "I was also of the same opinion, when I subsequently conquered my then too fastidious taste." He was destined to eat, with gratitude, if not with relish, of dishes much more questionable than raw marrow.

On the morning of the 12th the guide pointed out the Coppermine River in the distance, and the travellers pushed on towards it. "At noon," says Franklin, "we arrived at an arm of Point Lake, an extensive expansion of the (Coppermine) river, and observed the latitude, 65° 9′ N. We continued our walk along the south end of this arm for about a mile farther, and then halted to breakfast amidst a cluster of pines. Here the longitude, 112° 57′, was observed. After breakfast we set out and walked along the east side of the arm, towards the main body of the lake, leaving Samandré (the Canadian) to prepare an encampment amongst the pines against our return. We found the main channel deep, its banks high and rocky, and the valleys on its borders interspersed with clusters of spruce-trees. The latter circumstance (as evidence of abundance of firewood) was a source of much gratification to us. The temperature of the surface water was 41°, that of the air being 43°. Having gained all the information we could collect from our guide, and from personal observation, we retraced our steps to the encampment; and on the way back Hepburn and Keskarrah shot several waveys (*Anas hyporborea*), which afforded us a seasonable supply, our stock of provisions being nearly exhausted. These birds were feeding in large flocks on the crowberries, which grew plentifully on the sides of the hills. We reached the encampment after dark, found a comfortable hut prepared for our reception, made an excellent supper, and slept soundly, though it snowed hard the whole night. . . . We did not quit the encampment on the morning of the 13th September until nine o'clock, in consequence of a constant fall of snow; but at that hour we set out on our return to Fort Enterprise, and, taking a somewhat different route from the one by which we came, kept to the eastward of a chain of lakes. Soon after noon the weather became extremely disagreeable; a cold northerly gale came on, attended by snow and sleet; and the temperature fell very soon from 43° to

34°. The waveys, alarmed at the sudden change, flew over our heads in great numbers to a milder climate. We walked as quickly as possible to get to a place that would furnish some fuel and shelter; but the fog occasioned us to make frequent halts, from the inability of our guide to trace his way. At length we came to a spot which afforded us plenty of dwarf birches, but they were so much frozen, and the snow fell so thick, that upwards of two hours were wasted in endeavouring to make a fire, during which time our clothes were freezing upon us. At length our efforts were crowned with success, and, after a good supper, we laid, or rather sat, down to sleep, for the nature of the ground obliged us to pass the night in a semi-erect position, with our backs against a bank of earth. The thermometer was at 16° at six P.M."

The travellers started next morning at daybreak, the thermometer then standing at 18°. They moved on very slowly at first, as they had to wait for Franklin, who was suffering from an ankle that had some time previously been sprained, and which had been very painful for some days past, owing, no doubt, to the unusual exertion of the journey. As they proceeded, they had to ford a rivulet, and the effect of the cold water on Franklin's ankle was magical. The pain immediately passed away, and he was able to walk with ease for the remainder of the day. Another night spent camping out in the open, frosty air; and the travellers, starting at sunrise, pushed right on to Fort Enterprise, where they arrived at eight P.M., after a hard walk of twenty-two miles over uneven and slippery ground. Arrived at home, they enjoyed a fragrant supper of hot deer-steaks, which restored their strength. Messrs Back and Hood had already returned from their visit to the Coppermine, after a journey undistinguished by any striking discovery or special adventure.

During the brief expedition of Franklin and Richardson to the Coppermine, Mr Wentzel had made great progress in the erection of the winter-house at Fort Enterprise, which was now being roofed in. By the 30th September it was nearly completed, when a heavy fall of rain washed the greater part of the mud off the roof, which had consequently to be re-covered. Besides the party of men constantly employed at the house, two men were appointed to fish, and others were occasionally employed in bringing home the meat from the hunting grounds. This latter employment, though very laborious, was always eagerly undertaken by the Canadians, who never failed to use their prescriptive right to help themselves to the fattest and most delicate parts of the deer. At the close of September the reindeer, quitting the outlying barren grounds, began to crowd in near the house, on their way to the woods. The success of the hunters was now very gratifying, but the necessity for sending an extra number of hands to bring in the meat interfered with the building operations. In the meantime, the party

continued to live in canvas tents, which proved very chilly habitations, although fires were kept burning in front of them. "On the 6th of October, the house being completed," writes Franklin, "we struck our tents and removed into it. It was merely a log building, fifty feet long and twenty-four wide, divided into a hall, three bedrooms, and a kitchen. The walls and roof were plastered with clay, the floors laid with planks rudely squared with the hatchet, and the windows closed with parchment of deer skin. The clay, which, from the coldness of the weather, required to be tempered before the fire with hot water, froze as it was daubed on, and afterwards cracked in such a manner as to admit the wind from every quarter; yet, compared with the tents, our new habitation appeared comfortable; and, having filled our capacious clay chimney with fagots, we spent a cheerful evening before the invigorating blaze. The change was peculiarly beneficial to Dr Richardson, who having, in one of his excursions, incautiously lain down on the frozen side of a hill when heated with walking, had caught a severe inflammatory sore throat, which became daily worse whilst we remained in the tents, but began to mend soon after he was enabled to confine himself to the more agreeable warmth of the house. We took up our abode at once on the floor, but our working party, who had shown such skill as house carpenters, soon proved themselves to be, with the same tools (the hatchet and crooked knife), excellent cabinetmakers, and daily added a table, chair, or bedstead, to the comforts of our establishment. The crooked knife, generally made of an old file, bent and tempered by heat, served an Indian or Canadian voyager for plane, chisel, and auger. With it the snow-shoe and canoe timbers are fashioned, the deals of their sledges reduced to the requisite thinness and polish, and their wooden bowls and spoons hollowed out. Indeed, though not quite so requisite for existence as the hatchet, yet without its aid there would be little comfort in these wilds."

By the middle of October the weather had become much colder, and all the lakes in the neighbourhood of Fort Enterprise were frozen over. The deer now began to leave the district for better sheltered pastures farther south. But even had they stayed longer near the winter settlement of the explorers, it would have been but of little advantage to them, for their ammunition was now almost completely expended. "We had, however," says Franklin, "already secured in the store-house the carcasses of 100 deer, together with 1000 lbs. of suet, and some dried meat; and had, moreover, 80 deer stowed up at various distances from the house. The necessity of employing the men to build a house for themselves, before the weather became too severe, obliged us to put the latter *en cache*, as the voyagers term it, instead of adopting the more safe plan of bringing them to the house. Putting a deer *en cache* means merely protecting it against the

wolves, and still more destructive wolverines, by heavy loads of wood or stones."

The total want of ammunition would have proved fatal to the expedition as an enterprise, and to Franklin and his companions as well. Had the servants of the Hudson's Bay Company and the North-West Company been both able and willing to redeem their promises to forward the stores that had been left behind by Franklin at different stations, and the further supplies of stores with which they had pledged themselves to furnish him, the expedition need not have been at any time in want of a sufficient supply of this, as of other necessaries. But that there had been a want either of inclination or ability on the part of the officers at the different posts to forward stores was now sufficiently evident, and Franklin's practical intellect led him at once to the conclusion that some energetic measure should at once be taken to have a supply of necessaries sent to Fort Enterprise without delay. "Ammunition," he says, "was essential to our existence, and a considerable supply of tobacco was also requisite, not only for the comfort of the Canadians, who use it largely, and had stipulated for it in their engagements, but also as a means of preserving the friendship of the Indians. Blankets, cloth, and iron-work were scarcely less indispensable to equip our men for the advance next season." Meantime Mr Back had volunteered to go and make the necessary arrangements for transporting the stores that were to have been sent from Cumberland House, and to endeavour to obtain some additional supplies from the establishments on Great Slave Lake. If any accident should have prevented the forwarding of the expedition's stores to Great Slave Lake, and the establishments there were unable to supply deficiency, he was, if he found himself equal to the task, to proceed to Fort Chepewyan on Lake Athabasca. Accordingly, Mr Back and Mr Wentzel, accompanied by two Canadians and two Indians, with their wives, set out for Fort Providence, on Great Slave Lake, on the 18th October. The object of sending Wentzel with Back was that the former might assist the latter in obtaining from the traders, on the score of old friendship, what stores and provisions they might refuse to Franklin's necessities.

On the 26th October Akaitcho and his party arrived at Fort Enterprise, the hunting in the surrounding district being now over for the season, the deer having retired southward to the shelter of the woods. A second house had in the meantime been built for the men, and was thirty-four feet long, eighteen feet wide, and divided into two apartments; so that the buildings now erected at the Fort consisted of three structures—the officers' house, the men's house, and the store-house, the three buildings forming the three sides of a quadrangle. But the arrival of Akaitcho and his hunters was an inconvenience where the accommodation was so limited, though the necessity of issuing them daily rates of provisions was a far more serious considera-

tion. Franklin had no ammunition to give them, and therefore it was in vain to send them out to hunt; and although it was customary for them to subsist themselves during this period of the year by fishing or snaring the deer, without making use of fire-arms, yet on this occasion they did not seem inclined to exert themselves, and were quite content to be indolent so long as the Fort remained well stocked with provisions. Meantime Franklin exerted himself to keep his people profitably employed. In the beginning of October a party had been sent to the westward to search for birch to make snow-shoe frames, and the Indian women were afterwards employed in netting the shoes and preparing leather for winter clothing for the men. Robes of reindeer skin were also obtained from the Indians and issued to the men who were to travel, as they were not only a great deal lighter than blankets, but also much warmer, and altogether better adapted for a winter in this climate. The finest of them were made of the skins of young fawns.

Fishing, which had been carried on until the 5th of October, when the season was too far advanced, and the weather too severe to continue it, had been a profitable employment of one or two of the Canadians. One thousand two hundred white fish, of from two to three pounds each, together with a number of grayling, "round fish," trout, pike, and carp, had been caught. The fish froze as they were taken out of the nets, and became in a very short time like solid masses of ice. They were then readily split open with a blow of a hatchet and cleaned. If the fish, after having been hard frozen, were held before the fire and thawed, they recovered their animation. "This," says Franklin, "was particularly the case with the carp, and we had occasion to observe it repeatedly, as Dr Richardson occupied himself in examining the structure of the different species of fish, and was, always in the winter, under the necessity of thawing them before he could cut them. We had seen a carp recover so far as to leap about with much vigour, after it had been frozen for thirty-six hours." From the 12th to the 16th of the month, the weather was warm for the season, and the deer reappeared in the neighbourhood of Fort Enterprise, much to the surprise of the Indians, who accounted for their unusual return, by the unusual mildness of the season. In order to take advantage of this singular occurrence, Franklin caused some of his pewter cups to be melted down into bullets, five of which were given to each of the hunters, none of whom, however, were successful, except Akaitcho, who killed two deer.

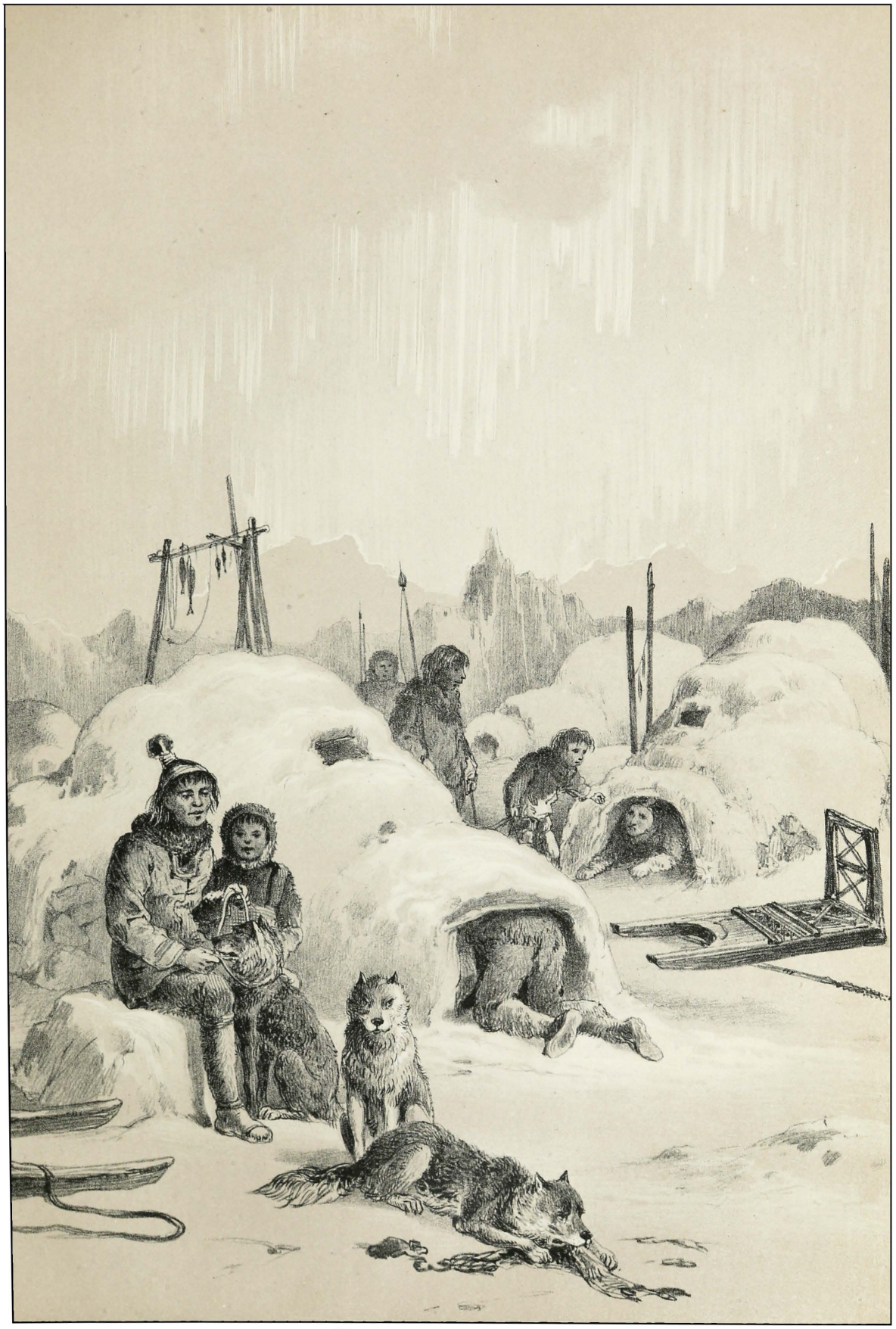
Mr Back had now been absent for a considerable time, and the officers at the fort had become anxious to hear of his having arrived at Fort Providence. The uneasiness and solicitude of Franklin on this subject was intensified by the gloomy forebodings of the Indians, who comforted Franklin by continually asserting that Back and his party must either have fallen through

the ice, and perished, or that they had been waylaid and cut off by the Dog-rib Indians. Painful uncertainty on this subject continued till the 23d, when Belanger, one of the Canadians who had accompanied Back, came in to Fort Enterprise. He had walked for the last thirty-six hours, leaving his Indian companions encamped in the last woods—they being unwilling to accompany him across the barren grounds during the storm that had prevailed for several days, and was raging with unusual violence on the morning of his arrival. When Belanger came in out of the tempest his locks were matted with snow, and he was encrusted with ice from head to foot, "so that," says Franklin, "we scarcely recognised him when he burst in upon us. We welcomed him with the usual shake of the hand, but were unable to give him the glass of rum which every voyager receives on his arrival at a trading post. As soon as his packet was thawed, we eagerly opened it to obtain our English letters. The latest were dated on the preceding April. They came by way of Canada, and were brought up in September to Slave Lake by the North-West Company's canoes. We were not so fortunate with our stores. Of ten 'pieces' or bales, of ninety pounds weight, which had been sent from York Factory by Governor Williams, five of the most essential had been left at the Grand Rapid, on the Saskatchewan, owing, as far as we could judge from the accounts that reached us, to the misconduct of the officer to whom they were intrusted, and who was ordered to convey them to Cumberland House. Being overtaken by some of the North-West Company's canoes, he had insisted on their taking half of his charge, as it was intended for the service of Government. The North-West gentlemen objected that their canoes had already got a cargo in, and that they had been requested to convey our stores from Cumberland House only, where they had a canoe waiting for the purpose. The Hudson's Bay officer, upon this, deposited our ammunition and tobacco upon the beach, and departed, without any regard to the serious consequences that might result to us from the want of them."

During the month of December the cold was more intense than the travellers had ever yet felt, 57° below zero being registered by the thermometer on one occasion, while the mean temperature of the month was 29° 7′ below zero. But though the weather was intensely cold, the atmosphere was generally calm, and the wood-cutters and others went about their ordinary occupations, without making use of any extraordinary precautions. They wore reindeer shirts, leathern mittens lined with blanket, and furred caps, but none of them used or required any protection for the face. The principal occupation of the officers at this time was writing up their journals, visiting the woodmen at their work, or walking along the river. The diet at this time consisted almost entirely of reindeer meat, varied twice a week by fish, and occasionally by a little flour. There were no vegetables used. On

the Sunday mornings a cup of chocolate was made; but the greatest luxury their stores afforded was tea, without sugar, which was regularly served out twice a day. Candles, of a rude description, were made out of reindeer tallow, with a strip of cotton shirt for a wick; and Hepburn became skilful in the manufacture of soap from wood-ashes, fat, and salt.

On the 15th of January 1821, seven of the men belonging to the expedition arrived from Fort Providence with two kegs of rum, one barrel of powder, sixty pounds of lead, two rolls of tobacco, and some clothing. The ammunition and a small present of rum were sent to Akaitcho. On the 27th, Mr Wentzel arrived with two Eskimo interpreters, whose unpronounceable native names had been changed to Augustus and Junius. Only Augustus could speak English. On the 5th of March, the people returned from Slave Lake, bringing with them the remainder of the stores belonging to the expedition, consisting of a cask of flour, thirty-six pounds of sugar, a roll of tobacco, and forty pounds of powder; and on the 17th, Mr Back arrived from Fort Chepewyan, having performed a journey of more than a thousand miles on foot since he had left the winter quarters of the expedition. In concluding his account of this memorable journey, Mr Back states that he had the pleasure of meeting his friends at Fort Enterprise, after an absence of nearly five months, during which time he had travelled 1104 miles on snow shoes, having no other covering at night in the woods than a blanket and deer skin, with the thermometer frequently at -40°, and once at -57°, and sometimes passing two or three days without tasting food.



ESKIMO SNOW HUTS & AURORA BOREALIS.

CHAPTER III.

DEPARTURE FROM FORT ENTERPRISE FOR THE POLAR SEA—DOWN THE COPPERMINE RIVER—REACH THE SEA—DEPARTURE OF INDIANS—THE ARCTIC VOYAGE—POINT TURNAGAIN—THE RETURN VOYAGE—THE LAND JOURNEY ON THE BARREN GROUNDS—DESTITUTION.

PREPARATIONS for commencing the journey to the Polar Sea, by way of the Coppermine River, kept Franklin and his party anxiously, if not busily, employed during the months of April and May 1821. But the most important of the preparatory measures—the programme of arrangements for supplying the expedition with provision on its outward march from Fort Enterprise to the sea, and also on its return—could not be successfully carried on without the willing and efficient co-operation of the Indian chief, Akaitcho, and his troop of hunters. The arrangement agreed upon from the first was that the Indians should, upon certain specified terms, attend upon the explorers, and supply them and their Canadian boatmen and interpreters with reindeer meat in sufficient quantity. This could only be done by the hunters going on in advance, after having been supplied with ammunition, stores, and presents at Fort Enterprise, and depositing the meat at different points, previously agreed upon, of the projected route. By the terms of this agreement, however, it was evident that the Englishmen and the Canadian voyagers were entirely at the mercy of Akaitcho and his men, and that the success of the expedition, and the lives of the whole party, were in their hands. This view of the situation was fully appreciated by Akaitcho, and the more clearly this sensible chief perceived the fact of Franklin's complete dependence upon him, the more clearly also did he perceive that his claims upon Franklin's stores, etc., were irresistible. In dealing with the noble savage of the prairie, it has been found to be advisable not to concede more in the end than has been promised at the beginning, as such concession usually leads to the loss of everything. And Akaitcho, though a man of much penetration, and having even some dark notion of the obligations of justice and honour, evinced much of the distrust, suspicion, and greed, which are so characteristic of North American Indians generally. Franklin, however, might willingly have yielded to the avarice of the chief those presents,

etc., to which no lawful claim entitled him, had he not been himself disappointed by the agents of the Hudson's Bay and North-West Companies. The explorer gave all he could spare to his Indian ally, and might have given more, had he received all the stores that should by this time have been sent up to him from the posts of Cumberland House, Fort Chepewyan, and Fort Providence. Akaitcho, however, with the distrust of his race, did not believe in the oft-asserted poverty of the "White Chief," and tedious, indeed, is the narrative of their frequent disputes.

With these disputes we shall not burden our pages. It is enough to state that at last Akaitcho, having received notes from Franklin, to be drawn upon the North-West and Hudson's Bay Companies as soon as the expedition should have been concluded, declared himself satisfied at last; and, assuring Franklin that he would exert himself to the utmost to keep the expedition supplied with meat, set out in advance of the explorers, apparently resolved to carry out honourably the terms of the agreement. Without having received such an assurance from Akaitcho, it would have been in the last degree foolhardy in Franklin to have commenced his journey.

On the 4th June a party under the command of Dr Richardson, and consisting of twenty-three persons, including fifteen voyagers, and a few hunters and Indian women, started from Fort Enterprise, and took their way northward by the land route. On the 14th June a second party, with two canoes laid upon trains, and each dragged by four men, assisted by dogs, set forward to strike the water route at Winter Lake, a short distance from the fort. After the departure of the latter party, Franklin equally distributed the remaining stores, the instruments, and a small stock of dried meat, amounting only to eighty pounds, among Hepburn, three Canadians, and two Eskimos. With this third party, to which two Indian hunters were attached, Franklin "quitted Fort Enterprise, most sincerely rejoicing that the long-wished-for day had arrived, when we were to proceed towards the final object of the expedition." At Martin Lake, immediately to the north of Winter Lake, Franklin came up with the canoe party already mentioned, and was sadly disappointed to learn from his hunters who had gone on in advance, and killed two deer, that the meat they had put *en cache* here beneath a pile of stones, had been destroyed by wolverines, and he was thus obliged at the outset of his journey to break upon his scanty stock of dried meat to provide supper for his party. This circumstance, of no great moment in itself, is stated here as an example of disappointments in finding supplies, to which, for one reason or another, the expedition was henceforth to be subject almost daily. The wind changed from south-east to north-east in the evening, and the weather became extremely cold, the thermometer standing at 43° at nine P.M. The few dwarf birches that could be collected after supper afforded but a poor and comfortless fire, and the travellers

retired, under covering of their blankets, to pass a miserable night. Next day they were glad to start at five in the morning to travel over the ice. By the time they had reached the end of the lake, the wind had increased to a perfect gale; and in trudging on in this wild weather, Franklin, who, like every other member of the party, carried his bundle on his back, dropped through the ice into the lake, but was extricated without much injury. Thus, with the ever present chances of being starved to death from failing to find meat, and of being drowned by falling through the weakening ice, the explorers pushed onwards. They came up with Dr Richardson's party on the 21st, and were deeply disappointed to learn from him that Akaitcho and his party had expended all the ammunition they had received at Fort Enterprise, without having contributed any supply of provision. The Doctor, however, had, by the help of his two hunters, collected and prepared 200 lbs. of dried meat, which was now all the store for the journey.

Pursuing his northward journey, and subjected daily to trials and sufferings of a nature never experienced in civilised communities, Franklin had, by the 12th July, passed through the Coppermine country, travelling down the river and past the mountains of that name, and now found himself on the frontier of the Eskimo district, extending along the Polar Sea, and inhabited by tribes that had for many years been at war with the Coppermine Indians. It was necessary now to conduct the expedition with every precaution, lest such of the Eskimos as might be met with, finding their lands invaded by white strangers accompanied by their enemies the Coppermine Indians—for Akaitcho and his hunters belonged to that tribe—should take fright and retire, without giving Franklin the information and the assistance so valuable for the further progress of his enterprise. Accordingly, on the 12th, when the tents were pitched on the shore of the Coppermine, a strict watch was appointed, consisting of an officer, four Canadians, and an Indian, and directions were given for the rest of the company to sleep with their arms by their side. It was desirable to open up communication with the Eskimos as soon as possible, and Franklin therefore resolved to send forward his Eskimo interpreters, Augustus and Junius, both of whom were glad to undertake the service. These men proposed to set out armed only with pistols concealed in their dress, and furnished with beads, looking-glasses, and other articles, that they might conciliate their countrymen by presents. "We felt great reluctance," writes Franklin, "in exposing our two little interpreters, who had rendered themselves dear to the whole party, to the most distant chance of injury; but this course of proceeding appeared, in their opinion, and in our own, the only chance of gaining an interview." Though not insensible to the danger, they cheerfully prepared for their mission, clothing themselves in Eskimo dresses, made, with the view of being used for this purpose, at Fort Enterprise. Augustus was instructed to dis-

tribute his presents, and to state that the white men had come to make peace between them and all their enemies, and also to discover a sea-way, by which every article they were in need of might be brought to their shores in large ships. He was not to mention that the explorers were accompanied by Indians. Thus instructed, the interpreters set out on their mission. Two days having elapsed without anything having been seen or heard of them, Franklin resolved to proceed on his journey, and search for them, taking care to persuade Akaitcho and his Indians—much against their will—to remain behind until sent for. It may be as well to state here, that though the interpreters spent much time interviewing the Eskimos, numerous bands of whom were seen from the 15th to the 18th July, no advantage resulted to the expedition from the interviews, Lieutenant Franklin receiving from these timorous savages neither information nor assistance.

But during this time Akaitcho's hunters became restless in the land of their enemies, and declared their intention of leaving the expedition forthwith. The appearance of so many Eskimos terrified them so much that they resolved to commence a retreat inland at once, lest they should be surrounded, and their retreat cut off. Franklin in vain offered remuneration to any amount to such of the Indians as might consent to proceed with the expedition, and upon whom he could trust to provide food for his party on the return journey. Indeed, the commander had much difficulty in persuading the Indians to promise to wait at the Copper Mountains for Mr Wentzel and the four men whom he intended to discharge as soon as he reached the sea.

A great dread of the sea voyage now seems to have fallen upon the Canadians. Of these, especially, the Indian interpreters, St Germain and Adam, were reduced to an abject state of terror, and came to Franklin begging their discharge, on the plea that now they were of no use, as the Indians were now on the point of leaving. But as these two were the only individuals of his own party upon whose skill in hunting he could rely, after the departure of the Indians, Franklin refused to listen to their request, contenting himself with reading over to them the agreements, which both had signed, to accompany the expedition wherever it went, and to return with it. On the morning of the 18th July the Indians declared their intention of starting away at once toward the south. Franklin was careful to remind them of their solemn promise to have a deposit of provision stored up at Fort Enterprise in anticipation of his return in September; and he received a renewal of their assurances on this point. After parting with the Indians, the leader embarked with his party, and proceeded at once toward the sea, which was only nine miles distant down the Coppermine. "After passing a few rapids," writes the narrator of this extraordinary journey, "the river became wider, and more navigable for canoes, flowing between banks

of alluvial sand. . . . The river is here about a mile wide, but very shallow, being barred nearly across by sand-banks, which run out from the mainland on each side to a low alluvial island that lies in the centre, and forms two channels. Of these, the westernmost only is navigable, even for canoes, the other being obstructed by a stony bar. The islands to seaward are high and numerous, and fill the horizon in many points of the compass; the only open space, seen from an eminence near the encampment, being from N. by E. to N.E. by N. Towards the east the land was like a chain of islands, the ice apparently surrounding them in a compact body, leaving a channel between its edge and the main (land) of about three miles. The water in this channel was of a clear green colour, and decidedly salt. Mr Hearne could have tasted it only at the mouth of the river when he pronounced it merely brackish. . . . We felt a considerable change of temperature on reaching the sea-coast, produced by the winds changing from the southward to the north-west. Our Canadian voyagers complained much of the cold, but they were amused by their first view of the sea, and particularly with the sight of the seals that were swimming about near the entrance of the river; but these sensations gave place to despondency before the evening had elapsed. They were terrified at the idea of a voyage through an icy sea in bark canoes. They speculated on the length of the journey, the roughness of the waves, the uncertainty of provisions, the exposure to cold where we could expect no fuel, and the prospect of having to traverse the barren grounds to get to some establishment. The two interpreters (St Germain and Adam) expressed their apprehensions with the least disguise, and again urgently applied to be discharged; but only one of the Canadians made a similar request. Judging that the constant occupation of their time, as soon as we were enabled to commence the voyage, would prevent them from conjuring up so many causes of fear, and that familiarity with the scenes on the coast would in a short time enable them to give scope to their natural cheerfulness, the officers endeavoured to ridicule their fears, and happily succeeded for the present. The manner in which our faithful Hepburn viewed the element to which he had been so long accustomed contributed not a little to make them ashamed of their fears."

After discharging Mr Wentzel and four Canadians, Franklin's expedition consisted of twenty persons. Wentzel now received his last instructions and commissions. Franklin informed him of his probable future course, and mentioned to him that if the expedition reached a point far distant from the mouth of the Coppermine, at the time when the advanced season should put a stop to further progress, he should perhaps be unable to return to the river, and would at once strike southward across the barren grounds from the coast, and make his way to some established post. In that case he would certainly make first for Fort Enterprise. Wentzel was therefore to make

certain on his return that the Indians had provided, or should immediately provide, a store of meat at the fort.

After Mr Wentzel's party had been provided with ammunition, about 1000 balls remained for the use of the expedition, with a proportionate quantity of powder. A bag of small-shot was missed, however, and it was afterwards found that the Canadians had secreted and distributed it among themselves, in order that, when a time of scarcity should come, they might be able to bring down ducks and geese, without being under the necessity of sharing these with the officers. This was not the first instance in which the voyagers had shown disloyalty to the common cause—a disloyalty that entailed the most terrible results on the expedition before all was done.

On the 20th of July, the explorers, after having travelled 334 miles from Fort Enterprise to the mouth of the Coppermine River, were ready to launch upon the Polar Sea in their two frail bark canoes. They were delayed for another day by a gale, and, as they had only provisions for fifteen days' consumption, the Englishmen would willingly have gone dinnerless to bed so as to save a meal, had they not been desirous of satisfying the appetites, and keeping up the spirits of the Canadians, upon whom such an act of enforced self-denial at the commencement of such a voyage, would have had a most depressing effect. Among the stores there was neither bread nor vegetables and a little salt was all that could be had to eat with the dried meat. On the morning of the 21st, the canoe voyage of exploration eastward, along the unknown northern coast of America, was begun. "Beren's," "Sir Graham Moore's," and "Lawford's" Islands were successively discovered and named as the explorers proceeded eastward along the coast. "Jameson's Islands" and "Cape Barrow" were discovered and named on the 25th, and on the following day, being driven by drifting ice, which pressed strongly against the feeble sides of one of the canoes, into a harbour, to the south of Cape Barrow, they named the bay, in which they found themselves imprisoned, "Detention Harbour," the entrance to which was found, by observation, to be in lat. 67° 53′, long. 110° 41′. "Hood River," so named in honour of one of Franklin's officers, was discovered at the close of the month, and its entrance found to be in lat. 67° 19′, long. 109° 44′. After coasting Arctic Sound, and the other inlets of Coronation Gulf, into the head of which "Back River" flows, the canoes were turned to the north, and again to the east, in the hope of finding a passage leading to the east coast of the Continent. Cape Croker was discovered and passed on the 12th, and the canoes now entered Melville Sound, proceeded round its shores, and left it, sailing westward by Parry Bay and Beechey Point. Melville Sound was found to be thirty miles long, from east to west, and twenty miles broad; and in coasting it the canoes sailed eighty-seven geographical miles. Mr Back now reported that both canoes had sustained serious injury, from the previous

day's cruise. It was found that fifteen timbers of the first canoe were broken, some of them in two places, and that the second was so loose in the frame that its timbers could not be secured, and there was danger of its bark separating from the gunwales, if exposed to a heavy sea. Distressing as were these circumstances, they gave Franklin less concern than the voyagers, who had hitherto behaved with great spirit and gallantry, but now openly, and in the presence of their officers, began to complain of the hardships and the hopelessness of their voyage. A number of deer and bears had in the earlier part of the voyage been shot by St Germain and Adam, the interpreters; but the good luck of these skilled hunters now mysteriously came to an end, and Franklin could not help suspecting that their recent want of success arose from an intentional cessation of effort on their part, in order that the consequent want of provisions should compel him to abandon his intention of proceeding, and return. The stores now consisted of no more than would subsist the party for three days; every day was increasing the distance which would require to be traversed in returning, and as the season was now too far advanced to permit of the expedition reaching Repulse Bay, Franklin announced that if no remarkable success was achieved in four days he would return. After this assurance the voyagers agreed to persevere for four days more.

Sailing round the eastern shore of Coronation Gulf, Franklin reached his farthest point eastward. Observations were last taken in lat. 68° 18′ N., and long. 110° 5′ W.; but the officers went along on shore to a point ten or twelve miles farther east. This point they named Point Turnagain—the headland that marks the extreme limit reached by the expedition. A rapid retreat from this inhospitable locality was now imperative, and Franklin lost no time in commencing it. A start was made on the 22d, the object being to sail across Coronation Gulf, in a southward direction, to Arctic Sound, and, entering Hood's River, which falls into that inlet, paddle up the stream, and thence strike across the barren grounds for Point Lake and Fort Enterprise. On the 25th August, after a fearfully perilous voyage, the canoes reached Hood's River, and ascended it as far as the first rapid. Here the tired explorers pitched their tents, and here terminated their voyage on the Arctic sea, during which they had sailed 650 miles along shores never previously navigated, except by Eskimos. The Canadian voyagers, more familiar with the perils of land and river travel than of an ocean voyage, gave expression to their delight in having at last turned their backs on the sea; and though the most painful and certainly the most hazardous part of the journey was yet before them, they were too happy in reflecting on the dangers they had passed to give much heed to those that were to come.

The great march inland commenced on the following day, 26th August 1821. The earlier details of this extraordinary journey need not detain us.

"Wilberforce Falls," at which Hood's River makes two leaps down a chasm 250 feet in depth, were reached on the 27th, and Franklin, having found that the upper course of the river seemed to be shallow and rapid, resolved to take his canoes asunder and construct two smaller ones out of the materials. The use of the smaller canoes, each of which was to hold three persons, was to enable the party to cross such rivers or lakes as might lie in their way, on the southward march to Fort Enterprise. The canoes were finished on the 31st, and everything was arranged to continue the journey on the following day. The leather, which had been preserved for making shoes, was equally divided among the men; two pairs of flannel socks were given to each person; and such articles of warm clothing as remained were issued to those that most required them. The men were also furnished with one of the officers' tents. "The next morning," writes Franklin, "was warm and fine. Everyone was on the alert at an early hour, being anxious to commence the journey. Our luggage consisted of ammunition, nets, hatchets, ice-chisels, astronomical instruments, clothing, blankets, three kettles, and the two canoes, which were each carried by one man. The officers carried such a portion of their own things as their strength would permit; the weight carried by each man was about ninety pounds, and with this we advanced at the rate of about a mile an hour, including rests." There was still some little comfort to be enjoyed in the early part of the journey; for the alluvial soil near the mouth of the river yielded brushwood, with which a comfortable meal might be cooked. As the travellers proceeded, however, they entered the sterile region which bears—and it is about the only thing it does bear—the name of the Barren Grounds. In this gravelly wilderness shrubs were exceedingly scarce, and as the weather now became rapidly colder, the want of good fires at night began to be severely felt. Progress was necessarily very slow, for the small stones with which the ground was covered occasioned great pain to men carrying heavy burdens, and whose feet were protected only by soft moose-skin shoes.

On the 3d September Franklin left the valley of Hood River, which curved westward, and preserving a course directly south-south-west, led the way into a level but very barren country, marked only by small lakes and marshes, and covered with stones. On the 4th, after a walk of only twelve miles, the travellers encamped at seven P.M., and the leader distributed the last piece of pemmican, which, with a little arrowroot in addition, made only a scanty meal. Heavy rains commenced at midnight, and continued without intermission till five next morning, when the wind, changing to the north-west, and soon increasing to a violent gale, brought down a heavy fall of snow. "As we had nothing to eat," says Franklin, "and were destitute of the means of making a fire, we remained in our beds all the day; but the covering of our blankets was insufficient to prevent us from feeling the

severity of the frost, and suffering inconvenience from the drifting of the snow into our tents. There was no abatement of the storm next day. Our tents were completely frozen, and the snow had drifted around them to a depth of three feet, and even in the inside there was a covering of several inches on our blankets. Our suffering from cold, in a comfortless canvas tent, in such weather, with the temperature at 20°, and without fire, will be easily imagined; it was, however, less than that which we felt from hunger."

As a voyage of discovery, Franklin's expedition of 1819-22 was now practically at an end, and there remains little to add, except the narrative of hardships, probably unparalleled in any other record of travel, which he and his companions endured on the return march to Fort Enterprise, and during his residence there, until the time of his rescue. Indeed, only a small portion of Franklin's narrative concerns itself with purely geographical discovery; for, essentially, it is a narrative of travel and adventure. Yet it must be remembered that, after reaching the Polar Sea at the mouth of the Coppermine River, he traced the hitherto unknown shores of that sea a distance of 540 miles, and thus added much to the geographical knowledge of his time. Had it been possible for man to do more, under the circumstances, he would have done it; for, as he modestly puts it, he "prosecuted the enterprise as far as it was prudent, and abandoned it only under a well-founded conviction that a farther advance would endanger the lives of the whole party, and prevent the knowledge of what had been done from reaching England."

CHAPTER IV.

ON THE BARREN GROUNDS—A CANOE LOST—SIX DAYS WITHOUT FOOD—GENEROUS SELF-DENIAL OF PERRAULT—THE LAST CANOE LOST—CROSSING THE COPPER-MINE—THE BEGINNING OF THE END.

THE terrible fear now fell upon the travellers, that the winter had set in, in all its rigour, at an unusually early period of the year, and that they were already within its grip. It was on the night of the 4th September that they encamped under pelting rain on the Barren Grounds. Snow and frost, severe enough to convert their tents into a species of ice-house, and to cover every man's sleeping-blanket to the depth of several inches with snow, and make it have the appearance of a newly-mounded grave on a wintry moor, had prevailed since that date till the morning of the 7th, and during the whole of that time they had remained within their "beds," if the living graves in which they had shivered for two days and two nights can be called by such a name, and had not eaten a single morsel. But the last dreadful moment seemed now to have come, and if any effort, however desperate, was to be of any avail to extricate them from this state of death in life, it must be made now or never. On the morning of the 7th, though the wind was still howling around them, and the cold was intense, the explorers resolved to make another attempt to push onward, as it was certain no fate that could befall them could be more awful than that which awaited them in their frozen tents. They therefore arose and prepared for their journey, though they were weak almost as infants from the effects of fasting; and their clothes were frozen stiff as boards. No fire could be made to dry their clothes, for the moss, which was at all times difficult to kindle, was now covered with ice and snow, and was entirely useless for such a purpose. They took longer this morning to pack up the frozen tents and bed-gear than they had ever done before, not only from the difficulty of getting these stiffened articles to bend and fold up, but also because, in the extremely cold and keen gale that blew, it was impossible for any one to keep his hands any length of time uncovered; while, so long as the mittens were on them, little could be done. Just as the dismal procession was about to commence its march, Franklin was seized with a fainting fit, in consequence of exhaustion and sudden exposure to the wind, and only recovered after a morsel of port

able soup had been dissolved in his mouth, and swallowed. He was unwilling at first to take this soup, as it was diminishing the small and the only meat left for the party, but a number of his men kindly and generously urged him to take it.

On the march into this barren, snow-covered waste, destitute of every sign of animal life, and vocal only with the wintry wind, the ground was covered a foot deep with snow, the margins of the lakes were encrusted with ice, and the swamps over which the explorers had to travel were frozen,—the ice, however, not being sufficiently strong to bear their weight, so that they frequently broke through, and sank knee-deep in the marshes. The Canadians, who took turns in carrying the canoes, were frequently blown down by the wind with their burdens on their backs, and as often fell from the insecure footing of the slippery stones. On one of these occasions, the largest canoe was so completely smashed as to be damaged beyond repair. This was indeed a serious misfortune, as it was feared the remaining canoe was too small to be of much use in transporting the party across the rivers. There was much reason to fear that Benoit, the Canadian who had been carrying the now ruined canoe, had broken it on purpose to be rid of the burden; and indeed this man had been heard to threaten that when it came to his turn to carry it, he would break it, and be done with it. He was closely examined on this point by Franklin, but as he stoutly denied all intention to damage it, and vowed that his fall was accidental, Franklin, who saw that no good could come of the inquiry, allowed the matter to drop. The accident could not be remedied; and it was not without a gay disregard and defiance of misfortune that Franklin called a halt and ordered a fire to be made of the bark and timbers of the damaged vessel, to cook the remainder of the portable soup and arrowroot. "This," says Franklin, "was a scanty meal after three days' fasting, but it served to allay the pangs of hunger, and enabled us to proceed at a quicker pace than before." Owing to the depth of the snow, it was found advantageous for the party to advance in Indian, or single, file, each man treading in the steps of the man in front of him, and the column always headed by one of the Canadian voyagers. It was the custom to point out a distant object to the voyager who led the column, and the man walked right on towards it, followed first by Mr Hood, who undertook to keep the leader from deviating from the true course, and afterwards by the others—all of them keeping to the one track. In the afternoon the travellers got into a more hilly country, where the ground was strewed with large stones. The surface of these stones or boulders was covered with a species of edible lichen (of the genus *Gyrophora*). Of this lichen, called by the Canadians *Tripe de Roche* (rock-tripe), a considerable quantity was gathered, and, a few partridges having been shot during the course of the day, half a one was given to each man, which, when cooked with the lichen, the material for the

fire being supplied by a few willows dug up from beneath the snow, furnished a slender supper.

After passing a comfortless night in their damp clothes, the travellers resumed their march at five on the following morning, and after walking about two miles, came to Cracroft River, flowing to the westward over a rocky channel in the latitude (nearly) of the Arctic circle, and in long. about 111° 30′ W. This river was crossed with difficulty, the canoe having been found to be of no use. Many of the party were drenched from head to foot in fording the stream, and falling among the rocks of its bed; and their wet clothes stiffening with the frost, gave them much pain in walking. One or two hunters had been sent on in advance, and the march this day was prolonged to a late hour, in order to come up with them. This, however, was not accomplished, and the travellers encamped and cooked the only meal they had that day—a partridge each, with some *tripe de roche.* There is much simple manliness in the few words with which Franklin concludes his account of this evening: "This repast," he says, "although scanty for men with appetites such as our daily fatigue created, proved a cheerful one, and was received with thankfulness. Most of the men had to sleep in the open air, in consequence of the absence of Crédit (one of the Canadians), who carried their tent; but we fortunately found an unusual quantity of roots to make a fire, which prevented their suffering much from the cold, though the thermometer was at 17°!"

Junius, one of the Eskimo interpreters, who had been absent from the camp for a whole day, seeking an easier ford over Cracroft River than that which Franklin had crossed, rejoined his companions on the afternoon of the 9th, bringing with him about four pounds of meat, the remains of a deer upon which a number of wolves had been preying. Another river was now crossed, the small canoe being managed with great dexterity by St Germain, Adam, and Peltier, who ferried over one passenger at a time, causing him to lie down flat along the bottom, and among the water that flowed in through its numerous leaks. The transport of the whole party was effected by five o'clock, and the march was resumed. The whole distance traversed on the 9th, however, was only five miles and three-quarters on a south-west course. The tents were then pitched, and, with the piece of meat brought in by Junius and two small Alpine hares shot by St Germain, supper was made. On the morning of the 10th September, the thermometer stood at 18°, and the ground, which was strewn with great boulders, was thickly covered with snow. Walking along, the men were in constant danger of breaking their legs by falling, as they often did, into the interstices between the stones. "If any one had broken a limb here," says Franklin, "his fate would have been melancholy indeed; we could neither have remained with him, nor carried him on." A thick fog had prevailed throughout the morn-

ing; but about noon the weather cleared, and, to the great joy of the whole party, a herd of musk oxen were seen grazing in a valley near. "The party instantly halted, and the best hunters were sent out; they approached the animals with the utmost caution, no less than two hours being consumed before they got within gun-shot. In the meantime we beheld their proceedings with extreme anxiety, and many secret prayers were doubtless offered up for their success. At length they opened their fire, and we had the satisfaction of seeing one of the largest cows fall. This success infused spirit into our starving party. 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. A few willows, whose tops were seen peeping through the snow in the bottom of the valley, were quickly grubbed up, the tents pitched, and supper cooked and devoured with avidity. *This was the sixth day since we had had a good meal*; the *tripe de roche,* even where we got enough of it, only serving to allay the pangs of hunger for a short time. . . . I do not think that we witnessed through the course of our journey a more striking proof of the wise dispensation of the Almighty, and of the weakness of our own judgment, than on this day. We had considered the dense fog which prevailed throughout the morning, as almost the greatest inconvenience that could have befallen us, since it rendered the air extremely cold, and prevented us from distinguishing any distant object towards which our course could be directed. Yet this very darkness enabled the party to get to the top of the hill, which bounded the valley wherein the musk oxen were grazing, without being perceived. Had the herd discovered us and taken alarm, our hunters, in their present state of debility, would in all probability have failed in approaching them." On the 12th, the snow was two feet deep, and the ground was much broken, which rendered the march extremely painful and laborious. The travellers now experienced a greater degree of faintness and weakness than they had ever done before —their strength impaired by the sudden and, for the moment, ample supply of animal food. The last of the meat was consumed that night for supper. On the following day, after a march of only six miles, the advance of the expedition was stopped by a large lake, on the borders of which the camp was made. *Tripe de roche* and a single partridge formed the supper. But the edible lichen had now become nauseous to the whole party, and in many of them its consumption caused severe pains and diarrhœtic complaints. Mr Hood was the greatest sufferer from this cause. Franklin now discovered with dismay that his Canadians, in their desire to diminish their burdens, at whatever expense, had thrown away three of the fishing-nets, and burnt the floats. These careless and selfish men knew that the expedition had brought on the nets to procure subsistence for the whole party, when the animals

should fail; and the officers could scarcely believe the fact of their having voluntarily deprived themselves of this resource, especially when each man among them had passed the greater part of his service, as voyager for the Companies, in situations in which he had to depend on fishing alone for a subsistence. The travellers were now getting weaker every day from insufficiency of food, and as they were unable to fish and so increase their store of provisions, it became necessary to reduce their burdens, and leave everything behind except ammunition, clothing, and the few instruments required to enable them to keep a straight route. Franklin therefore issued directions to deposit the dipping needle, azimuth, compass, magnet, a large thermometer, and the few books they had carried, by the side of the lake. He also incited his men to activity in hunting, by promising rewards to such of them as would kill any animals. On this occasion also, Mr Hood lent his gun to Michel, the Iroquois, who was an eager, and often successful hunter. We shall see how the savage requited the kindness of his officer.

On the morning of the 14th, the officers being assembled round a small fire, Perrault, one of the most faithful of the Canadians, approached and presented each of them with a small piece of meat, which he had saved from his allowance. "It was received," says Franklin, "with great thankfulness; and such an act of self-denial and kindness, being totally unexpected in a Canadian voyager, filled our eyes with tears." Crédit, another of the voyagers, who had been absent from the party for some time, now came rushing into the camp with the joyful intelligence that he had killed two deer in the morning. Marching at once to the place where the nearest deer lay, the party instantly halted, and sharing the carcass, prepared breakfast. The other carcass being afterwards sent for, Franklin gave orders to cross the lake, at a part where the water seemed the most smooth. The crossing of the lake was perhaps the most perilous and difficult exploit hitherto undertaken by the expedition. The frail canoe was time after time upset and whirled away by the current of its mid-channel and the rapid on the farther side. Franklin, accompanied by St Germain and a voyager named Belanger, were the first to attempt the passage, but the whole of the party were only got across on the morning of the following day. On the 17th, some deer were seen in the morning; but the hunters failed to kill any. In consequence of this failure, the travellers had no breakfast, and but a scanty supper; "but," says Franklin, "we allayed the pangs of hunger by eating pieces of singed hide." A little *tripe de roche* was also obtained. These would have satisfied them in ordinary times, but they were now almost exhausted by slender fare and travel, and their appetites had become ravenous. On the 19th, having nothing to eat for the two preceding days but a little of the rock-lichen, they were faint with hunger, and marched on with the utmost difficulty, wading through snow, two feet deep, in the teeth of a fresh breeze.

The tents were pitched at four o'clock, after a march of only four miles, and as no *tripe de roche* was to be found, the men, clearing away the snow, came upon a quantity of Iceland moss, which, on being boiled for supper, proved so bitter, that few of the party could eat more than a few spoonfuls of it. On this night the blankets were insufficient to keep them in tolerable warmth, and the slightest breeze seemed to pierce through their famished frames. "The reader," says Franklin, "will probably be desirous to know how we passed our time in such a comfortless situation: The first operation, after encamping, was to thaw our frozen shoes, if a sufficient fire could be made, and to put on dry ones. Each person then wrote his notes of the daily occurrences, and evening prayers were read. As soon as supper was prepared it was eaten, generally in the dark, and we went to bed and kept up a cheerful conversation until our blankets were thawed with the heat of our bodies, and we had gathered sufficient warmth to enable us to sleep." On the 20th, Mr Hood was so weak that he was obliged to give up his post of second man in the travelling line, and his place was taken up by Dr Richardson. The men, who on this night had nothing but a small quantity of *tripe de roche* for supper—they had been obliged to do without breakfast—now threatened to throw away their bundles and leave the expedition.

On the 23d, the starving procession, in whom the spark of life was barely kept alive by one meal a-day of the "rock-tripe," moved along very slowly, and with extreme difficulty. At this time the small canoe was being carried by a voyager name Peltier, but, as a fresh breeze was blowing, this man, with the canoe on his shoulders, was often blown down, and received several severe falls. At last he became impatient, placed his burden—already much damaged by repeated tumbles—on the ground, and refused to take it up again. It was taken up by Vaillant, another voyager. On this day it happened that both Franklin and Richardson got in advance of the voyagers, and travelled on until they found themselves alone, the men having evidently dropped behind. They retraced their steps, and found that the Canadians had halted among some willows, where they had picked up some pieces of skin, and a few bones of deer that had been devoured by wolves in the preceding spring. The famished men had made the bones brittle by burning them, and had eaten them, as well as the scraps of skin. That they had agreed upon a mutiny against the officers, whom they had contracted to accompany back to Fort Enterprise, seemed evident from the circumstance that several of them had also supplemented their desperate repast by eating their old shoes. Peltier, the former bearer of the canoe, and Vaillant, in whose charge it had been left, were among the party. Franklin questioned them about the canoe, and they answered that it had been so completely broken by another fall as to be incapable of repair, and entirely useless, and that for that reason they had thrown it away. "The anguish this intelligence occa-

sioned," exclaims Franklin, "may be conceived, but it is beyond my power to describe. Impressed, however, with the necessity of taking the canoe forward, even in the state in which these men represented it to be, we urgently desired them to fetch it, but they declined going, and the strength of the officers was inadequate to the task. To their infatuated obstinacy on this occasion, a great portion of the melancholy circumstances which attended our subsequent progress may, perhaps, be attributed. The men now seemed to have lost all hope of being preserved; and all the arguments we could use failed in stimulating them to the least exertion." The march, however, was resumed after the remains of the bones and horns of the deer had been eaten; and in the evening a narrow part of the lake was discovered and forded, and an encampment of the whole party made on the opposite side. On the following day the men became furious at the suspicion of having been deserted by the hunters, who had gone on in advance; and some of the strongest of them, throwing down their bundles, prepared to set out by themselves. The officers succeeded, however, in appeasing them, and, "after halting an hour, during which," says Franklin, "we refreshed ourselves with eating our old shoes and a few scraps of leather," the party encamped, supped upon *tripe de roche,* and enjoyed a comfortable pine-wood fire. Next morning the travellers had the great good fortune to kill five small deer out of a herd that came in sight as they were on the point of starting for the day's march, and this most seasonable and unexpected supply reanimated the despairing spirits of the men, and filled every heart with gratitude.

After a day of rest, and, on the part of the voyagers, of inconsiderate and improvident feasting, the march was resumed, and a river was reached, which was recognised from its size, to be the Coppermine. The men now deplored their folly and impatience in breaking the canoe, for its destruction was afterwards discovered to have been a voluntary act. After wandering about in the vain search for a ford, or for wood to construct a raft, during which time the voyagers—who had previously consumed their own share of the deer that had last been killed—robbed the officers of a part of their provisions, the party were again reduced to starvation, and were obliged to subsist for a time on the putrid carcass of a deer discovered in the cleft of a rock into which it had fallen in the previous spring. The lives of the party now depended on their being able to cross the Coppermine, and Franklin promised a reward of three hundred francs to the first person who should convey a line across the river, by which a raft could be managed in transporting the party. Days were spent in constructing rafts and attempting the passage; but, between the strength of opposing breezes, the want of oars, etc., every attempt was futile. At length Dr Richardson volunteered to swim across with a line round his middle, but he had got only a short distance from the bank when his arms became benumbed with cold, and he lost the power of

moving them. He still persevered, however, and turning upon his back, had nearly reached the farther side, when, to the great alarm of the officers, he was seen to sink. He was pulled ashore by the line in an almost lifeless state, and so far restored as to be able to give directions for his own treatment. He had lost all feeling in his left side, nor did he recover the full power of his left limbs till the succeeding summer. On being brought to the bank, he had been stripped, rolled in blankets, and placed in front of a fire of willows. The appearance he presented when naked was that of a living skeleton, so much was his frame wasted from want of food. "I cannot describe," writes Franklin, "what every one felt at beholding the skeleton which the doctor's debilitated frame exhibited. When he stripped, the Canadians simultaneously exclaimed, '*Ah! que nous sommes maigres!*'" One circumstance in connection with this attempt to swim the Coppermine, and thus save the whole party, must be mentioned. When Richardson was about to step into the water, he accidentally put his foot on a naked dagger, which cut him to the bone. But this most painful accident could not deter him from attempting to carry out his generous and humane undertaking.

It was only after making repeated attempts on willow rafts, and after suffering the direst pangs of hunger, that the whole party were enabled to cross the Coppermine by means of a small canoe constructed of the pieces of painted canvas in which the travellers wrapped their bedding, and which could only support one person at a time. Having now passed over the last great stream that separated the party from the known lands in the neighbourhood of Fort Enterprise, Franklin, in order that no time might be lost in procuring relief, sent forward Mr Back, accompanied by St Germain, Belanger, and Beauparlant, to search for the Indians. Back was directed to go to Fort Enterprise, and, in the event of his hunters killing any deer, part of the meat was to be placed *en cache* for the use of the main body.

On the morning of the 5th, Franklin roused every member of his party by daybreak. The weather was cold and clear, but as the tents and bedclothes were frozen, it was eight o'clock before a start could be made. The time had now come when the sufferings and the prolonged starvation to which the travellers had been subjected had so worn down their vital forces that it was evident some fatal crisis must immediately supervene, unless a place of refuge, affording food and shelter, should be reached. Mr Hood, who had long been suffering from illness, was now so feeble that he could scarcely crawl along; and Mr Richardson, still suffering from the wound he had received on the north bank of the Coppermine, was equally weak. These two gentlemen kept together, and walked slowly in the rear of the party. The track followed was that of the advance party under Mr Back. In the afternoon, when the camping-place had been selected, Crédit, the Canadian, whose turn it was that day to carry the voyagers' tent, came

staggering into camp so exhausted that he was unable to stand. The *tripe de roche* disagreed with this man, and also with Vaillant; they were, consequently, the first whose strength totally failed. Previously to setting out on the following morning, the whole party ate the remains of their old shoes, and whatever other scraps of leather they possessed, in order to strengthen them for the fatigue of the day's journey. In the course of the morning, while the straggling and feeble procession struggled on, the gale became piercingly cold, and the drift made it difficult for those in the rear to follow the track over the heights. Those in advance made frequent halts to allow the weaker men to come up, but as the cold was so extreme, the advance men were unable to remain standing still, and were obliged to tramp on before the rear could come up with them. About noon, one of the Canadians came to the front and informed Franklin that two of the voyagers, Crédit and Vaillant, were unable to come on any farther. Franklin immediately called a halt, ordered a fire to be kindled, and sent Dr Richardson back a mile and a half to visit the two Canadians. He found Vaillant much exhausted with cold and fatigue, and, encouraging him to try to struggle onward toward the fire, he left him, and went farther back to find Crédit. He observed, however, no traces of the latter, and, returning to Vaillant, whom he had left staggering and falling among the deep snow at every step, he found the unfortunate voyager lying down, unable to rise, and scarcely able to answer questions. The doctor then hurried to the front to inform Franklin of Vaillant's condition. Belanger then went back to assist his comrade. He found Vaillant lying on his back, benumbed with cold, and incapable of being roused. The stoutest of the men were now entreated by Franklin to go back and bring the dying man to the fire, but they declared themselves unequal to the task, "and, on the contrary," writes the commander, "urged me to allow them to throw down their loads and proceed to Fort Enterprise with the utmost speed." Compliance with this entreaty would have led to the loss of the whole party, for the men were totally ignorant of the route to be followed, and neither of the remaining officers who could have directed the march was strong enough to keep up with them at the pace they would have then walked. It was necessary, however, to do something to relieve the men of their burdens, and a consultation being held with Mr Hood and Dr Richardson, these gentlemen proposed to remain behind at the first spot where sufficient wood and *tripe de roche* could be obtained for ten days' consumption, that they should have one attendant, and that the remainder of the stores should be left with them, while Franklin and the voyagers should push on to Fort Enterprise, and send immediate relief to them. "I was distressed beyond description," writes Franklin, "at the thought of leaving them in such a dangerous situation, and for a long time combated their proposal; but they strenuously urged that this

step afforded the only chance of safety for the party, and I reluctantly acceded to it." The men's tent, a barrel of gunpowder, and several other articles, were accordingly left behind, and Franklin and his party then moved on.

They marched till dusk without finding any animals, any edible lichen, or any suitable place to encamp, and at night were compelled to take shelter under the lee of a hill amongst some willows, with which, after many attempts, they at last succeeded in lighting a feeble fire. But this poor comforter was too weak to warm the whole party, much less to thaw their frozen shoes; and the weather not permitting them to gather any *tripe de roche,* they had nothing to eat. The situation of the expedition was now desperate indeed. Reviewing the melancholy events of this terrible day, Franklin found it impossible to sleep, and he shuddered when he contemplated what might be the effects of this bitterly cold night upon the two Canadians, Vaillant and Crédit, that had been left behind. How miserable the situation of the party was at this time may be conceived from the statement of Franklin, that "some faint hopes were entertained of Crédit's surviving the storm, *as he was provided with a good blanket, and had some leather to eat.*"

On the following morning, the camp was broken up at nine, and the travellers moved forward, arriving before noon at a thicket of small willows, near which, on the rocks, a quantity of the edible lichen was found. Here Richardson and Hood determined to remain—Hepburn, their faithful attendant, volunteering to stay with them. The tent was accordingly pitched, a few willows collected, and all other articles deposited, except the tent, the clothing, and a small amount of ammunition, which were to be carried forward by Franklin and his party. The commander then addressed the men, and placed before them the alternative of remaining with Richardson and Hood, or going forward under his own leadership at once. All of them decided to go on with their leader. The moment of parting was a solemn one. Upon the breasts of how many of these "co-mates and brothers in exile" might not the shroud of snow be already rising! Who can realise what must have been the emotions with which the captain of this band, doomed never again to be reunited, conducted this last interview, and spoke the last words of farewell! But here, as in other trying moments, the courage and noble simplicity and trustfulness of the man bore him up. "After we had united in thanksgiving and prayers to Almighty God," writes this man, at once childlike and heroic, "I separated from my companions, deeply afflicted that a train of melancholy circumstances should have demanded of me the severe trial of parting, in such a condition, from friends who had become endeared to me by their constant kindness and co-operation, and a participation in numerous sufferings. This trial I could not have been induced to undergo, but for the reasons they had so strongly urged the day before, to which my own judgment assented, and for the sanguine hope I

felt of either finding a supply of provisions at Fort Enterprise, or meeting the Indians in the immediate vicinity of that place, according to my arrangements with Mr Wentzel and Akaitcho."

When the moment for starting came, Franklin and the Canadians, refusing to touch any of the *tripe de roche* growing in the neighbourhood of the tent of the comrades they were leaving behind, and who so much required for themselves all the nutriment within their reach, marched briskly forward, and arrived at a fine group of pines about a mile and a quarter from the tent. The leader now regretted that Richardson and Hood had not known of this sheltered spot, as they could have been well supplied with fuel here, as well as with the lichen on which they now wholly depended for subsistence. Pushing onward, Franklin found the snow very deep, and the labour of wading through it was so fatiguing for the whole party, that a halt had to be called, and an encampment made, after a march of only four miles and a half. What must have been the difficulties of that march through the snow, when a body of brave men, made desperate by hunger, and with the hope of succour in advance, were content to bring the labours of the day to close after a march of only four miles! But even in this short journey, so desperate had been the battle with the chilling, unyielding, and engulfing snow, that Belanger, the Canadian, and Michel, the Iroquois, were left far behind, and only arrived in camp at a late hour, and in a condition of complete exhaustion. Belanger, bursting into tears, declared himself unable to proceed and begged to be allowed to go back next morning to the tent, and shortly afterwards the Iroquois made the same request. The sudden collapse of these hardy and bold voyagers cast a gloom over the entire party, which their leader tried in vain to remove by assuring them that the distance to Fort Enterprise was only a four days' journey. Night closed in on these cheerless wanderers; and as there was no *tripe de roche* to be seen around the encampment, they drank an infusion of the Labrador tea-plant (*Ledum palustre*), and ate a few morsels of burnt leather for supper. They were unable to raise their tent; and as they found its weight too much for them. to carry in their weak state, they this night "cut it up, and took a part of the canvas for a cover." The night was bitterly cold; and though they lay as close to each other as possible, they found it too cold, from the want of shelter, to obtain any sleep. In the morning, Franklin, having been constrained to assent to the pitiful appeal of Belanger and Michel, wrote a note to Richardson and Hood, describing the group of pines they had passed, and advising their removal thither. The note was scarcely written, when two of the voyagers, Perrault and Fontano (the latter an Italian), were seized with a fit of dizziness, but afterwards recovered a little, and joined Franklin and his now gradually thinning party, in setting out. Before he had gone 200 yards, Perrault again staggered. A third attempt was made to

advance, when he again stopped, and shedding tears with the greatest emotion, declared himself totally exhausted, and unable to go on. He decided to return in company with Belanger and Michel, who had not yet left the last encampment. He took a friendly leave of each of the travellers, and went slowly and feebly back. Soon after, Fontano was again seized with faintness and dizziness; falling often as he made a last attempt to struggle on through the deep snow. The poor man, who had that morning been speaking to Franklin about his father, and the old times of his childhood in Italy, and had begged that if he survived, the commander would take him to England, and enable him to get home to his own country, was overwhelmed with grief, and wished to lie down and die on the spot. He was encouraged, however, to return, and rejoined Perrault and the others. He bade Franklin and the others farewell in the tenderest manner, and commenced to retrace the dismal snowy track to the last encampment.

Franklin's party was now reduced to four men besides himself—Adam, Peltier, Benoit, and Samandrè. Pushing on for about five miles, they encamped, supped on "a few morsels of leather," and, having a fire, were able to sleep. Next morning they were able to collect some *tripe de roche,* and to enjoy the only meal they had had for four days. "We derived great benefit from it," says the simple explorer; "and walked with considerably more ease than yesterday." After walking about five miles, they arrived at Marten Lake, and were delighted to find it frozen, as they were thus enabled to continue their course straight for Fort Enterprise. A few days more of almost heroic struggle against unheard of difficulties, walking in garments frozen hard and stiff, eating their spare pairs of shoes, and drinking "tea" made from the acrid Labrador weed; but cheering each other with hopeful talk and with mutual congratulations that they were now near their old winter establishment, and that shelter, food, and rest were now almost within their grasp, the weary and starving wanderers at last reached Fort Enterprise.

That they did not at once drop down on its threshold and die must remain an unaccountable mystery to every one who has traced the record of their wanderings, sufferings, and hopes. This house, which had been the centre around which their thoughts and desires clung, during a long struggle with death from cold and hunger, and which they looked forward to as to a home warm with fires, and comfortable with the materials that succour and nourish the distressed, was found to be a mere shell, bare, desolate, empty—unfurnished in every respect. "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." Would it not have been better to have died at once out on the Barren Grounds, than to suffer such a cruel blow! We can imagine with what emotions Franklin and his four comrades, after one swift

survey of this house of emptiness, turned and looked at each other. Blank misery and despair, and the hope for a speedy and a tranquil ending to this long fight for life, in which all the victories seemed to be with the enemy, must have been the feelings—might one not say the passions?—of the moment. "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 on our sending immediate relief from this place."

A note had been left in the house by Mr Back, who, readers may remember, had been sent on in advance from the banks of the Coppermine in the middle of September, to search for the Indians, and to hasten them in bringing relief to the main party of the expedition. Mr Back, who had reached Fort Enterprise only two days before Franklin, stated in his note that he was going in search of the Indians, at a part where St Germain (his hunter) considered it likely they might be found, and that, if unsuccessful in finding them, he purposed to walk to Fort Providence, and send succour from that post. His only misgiving in connection with this programme arose from a doubt whether he or his party could perform the journey to the Great Slave Lake station, in the weakened condition to which they had been reduced. In reflecting over Back's letter, it appeared evident to Franklin that any supply that could be sent up to him from Fort Providence, would be long in reaching him, and that it would not arrive in sufficient quantity to enable him to send assistance to Hood and Richardson and their party. It was vain, then, to depend on efficient help arriving from Fort Providence, and he was driven back to the alternative of seeking and finding succour from the Indians, who had agreed to be in this neighbourhood at about this time of the year. He resolved, therefore, to institute a search for Akaitcho and his hunters. But although he vainly considered himself strong enough to commence this search at once, his starving companions were absolutely incapable of proceeding, or, indeed, of undertaking any labour whatever. He decided, then, to rest two or three days at the fort, that he and his comrades might gather a little strength.

The wretched men then began to look about for some means of subsistence, and they were gratified to find several deer-skins, which had been thrown away as offal during their former residence here. Bones were gathered from the ash-heap; and "these," says Franklin—not without a certain pathetic humour—"with the skins, and the addition of *tripe de roche*, we considered would support us tolerably well for a time." An examination of the house itself was not reassuring. The parchment which had been used to serve the purpose of glass, had been torn from the windows, and the apartment which they selected as their special dwelling-place was exposed to all

the rigour of the season. They now boarded up the openings in the futile hope of excluding the wintry wind, and making a room comfortable, the temperature of which ranged from 15° to 20° below zero. Fuel was procured by tearing up the flooring of the other rooms, and water for cooking was obtained by melting the snow. While they were seated round the fire they were astonished and delighted by the arrival of their Eskimo interpreter Augustus, who had left the main party of the expedition many days previously on a hunting excursion, had lost his companions, and had pursued his own route to the fort.

When Franklin rose on the following morning, his body and limbs were so swollen that he was unable to walk farther than a few yards. Adam, the Indian interpreter, was in a still worse condition, for he was quite unable to rise without assistance. The other Canadians were able to go out and collect bones and *tripe de roche* enough for two meals. The bones were acrid and rotten, and the soup extracted from them excoriated the mouth when taken alone; but boiling the edible lichen with it made it somewhat milder to the palate. Franklin, who seems to have been curious in his cookery, though his materials were scarcely of the most choice description, says that he "even thought the mixture palatable, with the addition of salt, of which a cask had been fortunately left here in the spring." On this day, Augustus set two fishing-lines in the open water below the rapid of Winter River, in the neighbourhood of the house.

On the afternoon of the 14th October, two days after Franklin's arrival at Fort Enterprise, the Canadian, Belanger—there were two voyagers of this name belonging to the expedition—arrived at the fort with a note from Mr Back, stating that he had seen no trace of the Indians, and desiring further instructions as to the course he should pursue. There was scarce time to glance at the letter, for the condition of Belanger, this messenger from the snowy wilderness, required immediate care. On his arrival he was almost speechless, and he was covered with ice, having fallen into a rapid and narrowly escaped drowning. "He did not recover sufficiently to answer our questions until we had rubbed him for some time, changed his dress, and given him some warm soup. My companions nursed him with the greatest kindness, and the desire of restoring him to health seemed to absorb all regard for their own situation. I witnessed, with peculiar pleasure, this conduct, so different from that which they had recently pursued, when every tender feeling was suspended by the desire of self-preservation. They now no longer betrayed impatience or despondency, but were composed and cheerful, and had entirely given up the practice of swearing, to which the Canadian voyagers are so lamentably addicted." The conversation naturally turned upon the prospect and upon the means best adapted for obtaining it. The absence of all traces of the Indians on Winter River convinced Frank

lin that they were by this time on the way to Fort Providence, and that by proceeding towards that post he could overtake them, as they move slowly when they have their families with them. The route from Fort Enterprise to Fort Providence also afforded the prospect of killing deer on Reindeer Lake, in which neighbourhood they had been always found in numerous herds by Back and his party, in his journeys of the preceding winter. Upon these grounds Franklin determined to take the route as soon as he was able to Fort Providence, and he prepared a letter for Mr Back desiring the latter to join him at Reindeer Lake. With this letter Belanger departed on the 18th October, carrying with him, by way of provision for the journey, a bit of deer-hide.

Franklin was now resolved upon immediate action, and intended at first to set out with his five companions to Fort Providence. It was found, however, that Adam was afflicted with swellings in the legs—an ailment which he had hitherto concealed—and that he could not be moved. It was therefore necessary to divide the party. Peltier and Samandrè volunteered to remain with and attend Adam; Benoit and the little Eskimo, Augustus, agreed to accompany Franklin. The few simple, but necessary, preparations were soon made. Among other things the commander's wardrobe had to be seen to. "My clothes," he says, "were so much torn as to be quite inadequate to screen me from the wind, and Peltier and Samandré, fearing that I might suffer on the journey in consequence, kindly exchanged with me parts of their dress, desiring me to send them skins in return, by the Indians. Having patched up three pair of snow-shoes, and singed a quantity of skin for the journey, we started on the morning of the 20th. . . . I thought it necessary to admonish Peltier, Samandrè, and Adam to eat two meals every day, in order to keep up their strength, which they promised me they would do. No language that I can use could adequately describe the parting scene. I shall only say there was far more calmness and resignation to the Divine will evinced by every one than could have been expected. We were all cheered by the hope that the Indians would be found by the one party, and relief sent to the other."

At first setting out, Franklin, Augustus, and Benoit were so feeble that they were scarcely able to move forwards, and the descent of the bank of the river was a severe labour to men who had not tasted wholesome food for weeks. When they came upon the ice, where the snow was not so deep, they advanced with less fatigue; but after walking six hours, and having only gained four miles, they were obliged to encamp on the borders of Round Rock Lake. Augustus tried for fish here, but without success, so that the fare for supper was singed hide and weed tea. Then composing themselves to rest, the travellers lay down close to each other for warmth. But even with this precaution they felt the night bitterly cold—the wind

piercing through their famished and fleshless frames. Next day, Franklin had the ill-luck to break his snow-shoes in a fall between two rocks. This misfortune put an end, so far as he was concerned, to the excursion; and after giving his companions instructions to go on and seek for Mr Back, and, failing to find him, to push on for Fort Providence, he returned to the Fort.

The condition of the Canadians at Fort Enterprise, and their manner of life at this time, will be best understood from Franklin's own sketch: "On my return to the house, I found Samandrè very dispirited, and too weak, as he said, to render any assistance to Peltier, upon whom the whole labour of getting wood and collecting the means of subsistence would have devolved. Conscious, too, that his strength would have been unequal to these tasks, they had determined upon taking only one meal each day; so that I felt my going back particularly fortunate, as I hoped to stimulate Samandrè to exertion, and at any rate could contribute some help to Peltier. I undertook the office of cooking; and insisted they should eat twice a day, whenever food could be procured; but as I was too weak to pound the bones, Peltier agreed to do that in addition to his more fatiguing task of getting wood. We had a violent snow-storm all the next day, and this gloomy weather increased the depression of spirits under which Adam and Samandrè were labouring. Neither of them would quit their beds, and they scarcely ceased from shedding tears all day. In vain did Peltier and myself endeavour to cheer them. We had even to use much entreaty before they would take the meals we had prepared for them. Our situation was indeed distressing, but, in comparison with that of our friends in the rear, we thought it happy. *Their* condition gave us unceasing solicitude, and was the principal subject of our conversation. Though the weather was stormy on the 26th, Samandrè assisted me to gather *tripe de roche.* Adam, who was very ill, and could not now be prevailed upon to eat this weed, subsisted principally on bones, though he also partook of the soup. The *tripe de roche* had hitherto afforded us our chief support, and we naturally felt great uneasiness at the prospect of being deprived of it, by its being so frozen as to render it impossible for us to gather it. We perceived our strength decline every day, and every exertion began to be irksome. When we were once seated the greatest effort was necessary in order to rise, and we had frequently to lift each other from our seats; but even in this pitiable situation we conversed cheerfully, being sanguine as to the speedy arrival of the Indians. We calculated, indeed, that, if they should be near the situation where they had remained last winter, our men would have reached them by this day (26th October). Having expended all the wood which we could procure from our present dwelling, without danger of its fall, Peltier began this day to pull down the partitions of the adjoining houses. Though these were only distant about

twenty yards, yet the increase of labour in carrying the wood fatigued him so much, that by the evening he was exhausted. On the next day, his weakness was such, especially in the arms, of which he chiefly complained, that he with difficulty lifted the hatchet. Still he persevered, while Samandrè and I assisted him in bringing in the wood; though our united strength could only collect sufficient to replenish the fire four times in the course of the day. As the insides of our mouths had become sore from eating the bone-soup, we relinquished the use of it, and now boiled the skin, which mode of dressing we found more palatable than frying it, as we had hitherto done. On the 29th, Peltier felt his pains more severe, and could only cut a few pieces of wood. Samandrè, who was still almost as weak, relieved him a little time, and I aided them in carrying in the wood. We endeavoured to pick some *tripe de roche,* but in vain, as it was entirely frozen. In turning up the snow in searching for bones, I found several pieces of bark, which proved a valuable acquisition, as we were almost destitute of dry wood proper for kindling the fire. We saw a herd of reindeer 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 we were seated round the fire this evening, discoursing about the anticipated relief, the conversation was suddenly interrupted by Peltier's exclaiming, with joy, 'Ah! le monde!' imagining that he heard the Indians in the other room. Immediately afterwards, to his bitter disappointment, Dr Richardson and Hepburn entered, each carrying his bundle."

Peltier's disappointment, however, soon gave way to a more humane feeling, and he immediately recovered himself sufficiently to express his delight at their safe arrival. With Franklin it was different. The sudden appearance of these two comrades, recovered from the grave, and standing before him in the bare room, sent a chill to his heart. What of Hood, of Crédit, of Vaillant, Perrault, and Fontano? Had the Italian "gone home" at last? Had Hood received the step of promotion that no Admiralty or any earthly court could confer?

CHAPTER V.

DR RICHARDSON'S NARRATIVE—MICHEL, THE IROQUOIS—MURDER OF MR HOOD—SHOOTING THE ASSASSIN—THE MARCH TO THE FORT—ARRIVAL.

WHEN Dr Richardson, with the invaluable Hepburn, entered the dwelling-room of Fort Enterprise, and came face to face with Franklin and the Canadians, a mutual thrill of surprise, horror, and pity seems to have ran through each, for the evident sufferings of the other party. "We were all shocked," says Franklin, "at beholding the emaciated countenances of the doctor and Hepburn," which hunger had stripped of all the roundness and colour of health, leaving only staring bones and sickly hollows. On the other hand, the doctor, scientific to the last fibre of him, yet combining the rapid perception of the trained practitioner with the ample affection and ready sympathy of a faithful friend and officer, observed, at once with curiosity and with great distress, that the wretched inhabitants of this famished abode were reduced absolutely to skin and bone. "Speak a little more cheerfully if you can, and not in such sepulchral tones," said the doctor, who had been shocked with the deep and hollow sound of the commander's voice; "but he was unconscious," adds Franklin, "that his own voice partook of the same key." But there was no time to be lost. There was death in the house, and, if possible, the "shadow feared of man" must be driven hence; and the doctor, eminently practical under whatever degree of illness he might himself be suffering, never failed to follow his instincts in setting to work at once in relieving the distresses of others. Near the house Hepburn had shot a partridge. Richardson now tore out the feathers of it, and having held it to the fire a few minutes, divided it into six portions. "I and my three companions," says Franklin, "ravenously devoured our shares, as it was the first morsel of flesh any of us had tasted for thirty-one days. Our 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." Richardson then turned his attention to the arrangements of the room, and, after having made things a little more comfortable, he brought out his prayer-

book and Testament, which in all these wanderings he had not failed to carry with him; and some prayers and psalms, together with portions of Scripture, appropriate to the condition of men who were walking in the valley and the shadow of death, having been read, all crept under their blankets by the hearth.

The doctor and Hepburn went out in search of deer next morning; but they were too weak to hold their guns steadily, and consequently killed nothing. It was Franklin's business this day to search for skins under the snow, but he 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 him. They made up their stock to twenty-six, "but several of them," says Franklin, "were putrid, and scarcely eatable, even by men suffering the extremity of famine." Peltier and Samandrè became too weak to attend to their duty in providing wood for fuel, and Hepburn, who had remained out all day, had this laborious piece of work to do after his return. It was not till after the usual supper of singed skin and bone-soup that Richardson entered upon the narrative of the sufferings of his party, since Franklin left them many days ago in their tent, after the crossing of the Coppermine.

On the morning of the 9th October, two days after the tent was pitched for Dr Richardson and Mr Hood, Michel, the Iroquois, arrived with a note from Franklin, stating that this man and Jean Baptiste Belanger, being unable to proceed, were about to return to their tent, and that, a mile beyond their present encampment, there was a clump of pines to which he recommended them to remove. Michel stated that he had left Franklin's party on the previous day; but that, having missed his way, he had passed the night on the snow, a mile or two to the northward of the tent. Belanger, he said, was impatient, and had left the fire about two hours earlier. As the Canadian had not arrived, Michel supposed he had gone astray. This was a somewhat extraordinary story. That two castaways on the snow-ocean of an Arctic wilderness in winter, should, from any mere feeling of childish impatience, part company when both were going to the same spot, and that only a mile distant, seemed curious and unusual, and the doctor suspected that Michel, the Iroquois, was lying, and doing so, probably, to conceal a greater crime. In the meantime, however, there was no proof of the Indian's treachery; and as he now produced a hare and a partridge, which he had killed in the morning, Richardson and Hood received this unexpected supply of provision "with a deep sense of gratitude to the Almighty for His goodness," and they looked upon Michel, for the moment, "as the instrument Heaven had chosen to preserve all their lives." The Indian complained of cold, and such was the gratitude of the three men to whom he had brought this opportune supply of good food, that Mr Hood offered to share his buffalo-robe with him at night, Dr Richardson gave him one of two

shirts which he wore, and Hepburn, the attendant, exclaimed in the warmth of his heart, "How shall I love this man—if I find that he does not tell lies like the others!"

Next day, acting upon the advice of Franklin, the party moved forward to the clump of pines. The doctor, Hepburn, and Michel, carried the ammunition, and most of the other heavy articles, to the new encampment. "Michel was our guide," says Richardson, "but it did not occur to us at the time that his *conducting us* perfectly straight was incompatible with his story of having mistaken his road in *coming to us.* He now informed us that he had, on his way to the tent, left on the hill above the pines a gun and forty-eight balls, which Perrault had given to him when, with the rest of Mr Franklin's party, he took leave of him. It will be seen, on a reference to Mr Franklin's journal, that Perrault carried his gun and ammunition along with him when they parted from Michel and Belanger. After we had made a fire, and drank a little of the country tea, Hepburn and I returned to the tent, where we arrived in the evening, much exhausted with our journey. Michel preferred sleeping where he was, and requested us to leave him the hatchet, which we did, after he had promised to come early in the morning to assist us in carrying the tent and bedding. Mr Hood remained in bed all day. Seeing nothing of Belanger to-day, we gave him up for lost."

On the following morning, the 11th October, finding that Michel did not come, the doctor and Hepburn loaded themselves with the bedding, and, accompanied by Mr Hood, who was giddy, and nearly blind from weakness, set out for the pines. The Iroquois was not to be seen. Hepburn now went back for the tent, returning with it after dark, completely exhausted with the fatigue of the day. About nightfall, also, the Iroquois came into camp. He reported that he had been in chase of some deer that had passed near his sleeping-place in the morning, and although he did not come up with them, he had found a wolf which had been killed by the stroke of a deer's horn, and had brought a part of its carcass for supper. "We implicitly believed this story *then,*" says Richardson, "but afterwards became convinced from circumstances, the details of which may be spared, that it (the piece of flesh brought in by Michel) must have been a portion of the body of Belanger or Perrault. A question of moment," continues the doctor, "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 Belanger and Perrault had been sacrificed. When Perrault turned back, Captain Franklin watched him until he reached a small group of willows, which was immediately adjoining the fire, and concealed it from

view, and at this time the smoke of fresh fuel was distinctly visible. Captain Franklin conjectures 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. The circumstances are very strong. It is not easy to assign any other adequate motive for his concealing from us that Perrault turned back ; while his request overnight that we should 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), seems to indicate that he took it *for the purpose of cutting up something that he knew to be frozen.*"

From this point the conduct of Michel was singular, and it became more peculiar and ominous every day. On the morning of the 12th, he went out early, refusing the doctor's offer to accompany him. He remained out the whole day, and at night refused to sleep in the tent, but lay down by the fireside. On the 13th there was a heavy gale of wind, and the party passed the day by the fire ; but on the following day, the gale having blown over, Michel went out to hunt, but returned in a short time, and was contradictory and evasive in his answers. On the 15th, the temper of the Iroquois, from being contradictory, darkened down into surliness and moroseness. He regretted that he had not gone on with Franklin's party ; he refused to go out to hunt, and, after having been at last persuaded to go, he returned with nothing, though flocks of partridges were flying about. Hepburn and the doctor also went after the partridges, but were too weak to approach them with sufficient caution. On the 16th Michel refused either to hunt or to cut wood, and threatened to leave the party, his only difficulty being that he did not know the route to Fort Enterprise. Mr Hood and the doctor promised that if he would only hunt diligently for four days they would send Hepburn with him to Franklin, giving them a compass, with full directions as to route. The party had now been living on *tripe de roche* alone for several days, and Hood, who never partook of this weed without being made ill, was now so weak as to be scarcely able to sit up at the fireside. He complained that the least breeze of wind seemed to blow through his frame. He also suffered much from cold during the night. "We lay close to each other," says Richardson, "but the heat of his body was no longer sufficient to thaw the frozen rime formed by our breaths on the blankets that covered him."

At this period the doctor observed that with the decay of their physical strength the minds of the party also decayed, and they were no longer able to bear the contemplation of the horrors that surrounded them. Their con-

versation at this time turned chiefly upon trifles, or vain speculations upon their "future prospects in life." Their "chief prospect in life," was the prospect of ending it! But this subject they avoided speaking about. "Each of us, if I may be allowed to judge from my own case," says the doctor, "excused himself from doing so (speaking of the approach of death) by a desire not to shock the feelings of others, for we were sensible of one another's weakness of intellect, though blind to our own." On the 19th, Michel, by far the strongest of the party, refused to hunt, or to bring in wood; and when Mr Hood pointed out to him the necessity and duty of exertion, the expostulation had only the effect of rousing his evil nature, and provoking him to give expression to ideas over which he had evidently been long brooding. "It is no use hunting," said the Iroquois; "there are no animals; *you had better kill and eat me!*"

On Sunday morning, October 20th, the Englishmen urged Michel to go out and hunt, that he might, if possible, leave them some provision, as the next day had been appointed for his leaving them. But the Indian showed great unwillingness to go, and lingered about the fire, pretending to clean his gun. "After we had read the morning service," the doctor writes, "I went about noon to gather some *tripe de roche*, leaving Mr Hood sitting before the tent, at the fireside, arguing with Michel. Hepburn was employed cutting down a tree at a short distance from the tent, being desirous of accumulating a quantity of firewood before he left us (to go in company with Michel to Fort Enterprise). A short time after I went out, I heard the report of a gun, and about ten minutes afterwards, Hepburn called to me, in a voice of great alarm, to come directly. When I arrived I found poor Hood lying lifeless at the fireside, a ball having apparently entered his forehead. I was at first horror-struck with the idea that, in a fit of despondency, he had hurried himself into the presence of the Almighty Judge, by an act of his own hand; but the conduct of Michel soon gave rise to other thoughts, and excited suspicions, which were confirmed when, upon examining the body, I discovered 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 night-cap behind. The gun, which was of the longest kind supplied to the Indians, could not have been placed in a position to inflict such a wound, except by a second person." On being examined by the doctor, Michel stated that he had been sent, by Mr Hood, into the tent for the short gun, and that, while he was fetching it, the long gun had gone off, whether by accident or otherwise, he could not say. Hepburn stated to Richardson that previous to the report of the gun, Mr Hood and Michel were speaking to each other in a loud and angry tone; that Mr Hood, being seated at the fireside, was hid from him by a clump of willows; but that on hearing the report he looked up and saw

Michel rising up from behind the tent-door, or just behind where Mr Hood was seated, and then going into the tent. Thinking that the gun had been discharged for the purpose of cleaning it, Hepburn did not at once go up to the fire; and a considerable time had elapsed before Michel called to him that Mr Hood was dead.

Richardson did not dare to betray any suspicion of the evident guilt of Michel, though neither he nor Hepburn had the slightest doubt after examining the wound, that the Iroquois had murdered their companion. Bickersteith's "Scripture Help," was lying open beside the body of Hood, as if it had fallen from his hand, and it is probable that he was reading it at the instant the cowardly shot was fired. The body was removed into a clump of willows behind the tent, and there, in the evening, Dr Richardson read the funeral-service over the remains of this young and distinguished officer.

The relations that now subsisted between the doctor and Hepburn on the one hand, and Michel on the other, were of the most peculiar kind. The Englishmen knew the Indian to be the murderer, and the latter, apparently fascinated with the atrocity of his own act, was continually alluding to the death of Mr Hood, and protesting that he was incapable of any act of treachery, or violence towards him. At the same time Michel always kept himself watchful and on his guard, and always went about fully armed, and thus carrying, so to speak, the lives of his companions in his hand. He never allowed the two Englishmen to be together in his absence, and whenever Hepburn spoke, he turned upon the seaman, and asked him, if he accused him of murder. He understood English very imperfectly, yet he was sufficiently well acquainted with the language, to render it unsafe for the Englishmen to allude to the murder. The three men passed the night of this sad day in the tent together, but without sleep—each of them being on his guard. Next day, having determined to set out for the fort, they began to patch their clothes, and make other preparations for the journey. They singed the hair off a part of the buffalo-robe that belonged to Mr Hood, and boiled and ate it. In the afternoon several pigeons were killed, and shared among the three. On the morning of the 23d they set out on their journey, carrying with them the remainder of the singed robe. Hepburn and Michel had each a gun, and Richardson carried a small pistol, which Hepburn had loaded for him. "In the course of the march," says Richardson, "Michel alarmed us much by his gestures and conduct—was constantly muttering to himself, expressed an unwillingness to go to the fort, and tried to persuade me to go to the southward, to the woods, where he said he could maintain himself all the winter by killing deer. In consequence of this behaviour I requested him 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 mutter-

ing threats against Hepburn, whom he openly accused of having told stories against him. He also," continues the doctor, "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, or, as he termed us in the idiom of the voyagers, 'the French,' 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 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." In the course of the day, Michel, whose sagacity in making out routes was not inferior to that of the average Indian, took occasion several times to remark that the doctor was following the same direction that Franklin was pursuing, when he left him. He added that if he kept on walking in the direction of the setting sun, he could find his way himself. Neither Hepburn nor the doctor were in a condition to resist even an open attack, and about this time the Iroquois, who now felt confident that he could reach the fort by himself, was evidently on the point of attacking them. Their united strength was far inferior to his, and, beside his gun, he was armed with a brace of pistols, an Indian bayonet, and a knife. In the afternoon the party came to a rock on which there was a quantity of *tripe de roche.* Here Michel halted, saying that he would gather the lichen while the others went on, and that he would soon overtake them. Hepburn and the doctor were now left together for the first time since Hood's murder. A few rapid sentences passed between them. Hepburn drew Richardson's attention to a number of striking circumstances in Michel's behaviour, which the former had not himself noticed, but which confirmed his own impression that there was no safety for them except in shooting the murderer of Hood. This necessary act Hepburn would willingly have performed himself; but Richardson resolved to take the whole responsibility of the deed; "and, immediately upon Michel's coming up," says the practical doctor, "I put an end to his life, by shooting him through the head with a pistol." This operation being satisfactorily performed, the Englishmen spent one last moment in regarding the dead murderer and cannibal. "He had gathered no *tripe de roche,*" says Richardson; "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."

Onward then toward Fort Enterprise went the two friends, through the thick snowy weather, keeping themselves alive with scanty pickings of lichen and morsels of singed buffalo hide, and having on one occasion a lucky windfall, in the spine of a deer that had been picked clean by a wolverine

some months previously. They broke the spine and extracted the decayed marrow, "which, even in its frozen state, was so acrid as to excoriate the lips." The courage and faithfulness of Hepburn were never displayed more conspicuously than on this dreadful journey. On one occasion he went in pursuit of a herd of deer seen on the route. He fired, but his hand was unsteady from weakness, and he missed. He was so exhausted by this fruitless attempt that he and the doctor had to make their camp upon the spot. The night of the 27th was spent without a fire, and on the 28th, the last few hundred yards of the day's march was over large stones, "among which," says Richardson, "I fell down upwards of twenty times, and became at length so exhausted that I was unable to stand. If Hepburn had not exerted himself far beyond his strength, and speedily made the encampment, and kindled a fire, I must have perished on the spot." By the evening of the 29th, they had arrived in the near vicinity of the fort. In passing through a small clump of pines a flock of partridges was seen, and one of them killed, after several shots, by Hepburn. "We came in sight of the fort at dusk," concludes the doctor, "and it is impossible to describe our sensations when, on attaining the eminence that overlooks it, we beheld the smoke issuing from one of the chimneys. From not having met with any footsteps in the snow as we drew nigh our once cheerful residence, we had been agitated by many melancholy forebodings. Upon entering the now desolate building 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 round. Our own misery had stolen upon us by degrees, and we were accustomed to the contemplation 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."

CHAPTER VI.

TWO CANADIANS STARVED TO DEATH—ARRIVAL OF RELIEVING PARTY—FRANKLIN AGAIN DESERTED—RESCUE AT LAST—ARRIVAL AT GREAT SLAVE LAKE—MR BACK'S NARRATIVE—CONCLUSION OF VOYAGE.

It was on the 29th October, that Richardson and Hepburn, the sole survivors of the party of eight that had been left behind by Franklin, arrived at Fort Enterprise, and it was not till the evening of the following day that the doctor, who had been reduced almost to the point of death by exhaustion and excitement, found himself strong enough to recount to the leader of the expedition the events sketched in the last chapter. On the morning of the 31st, the dull routine of life, to which Franklin and the Canadians were partly inured before the arrival of their old comrades, was resumed. Attempts were made daily to kill deer; but so weak had even the strongest become that the greatest difficulty was experienced in getting within range of the game; while the ability to hold the gun steady and take sure aim was now altogether denied them. On this last day of October, the Canadians, Peltier and Samandrè, were much weaker, though Adam was a little easier, and was able to leave his bed. From this day the doctor and Hepburn took upon themselves the labour of cutting the wood, and bringing it to the house. Franklin himself was too weak to cut or carry fuel, and was obliged to content himself with the minor offices of searching for bones, cooking, and attending upon the sick Canadians. During the night the Englishmen were surprised to see Peltier and Samandrè, who had not been able to rise during the day, crossing the floor, carrying logs to replenish the fire. It was the last service they ever performed, and seems to have been an instance of that sudden access of apparent strength, which sometimes comes when death is very near. Next day there was nothing to eat but a little *tripe de roche.* Peltier could scarcely taste it, and in the afternoon, being too weak to sit, he fell off his seat upon the bed, and lay there, apparently asleep, for two hours. At the end of this time, a rattling in his throat alarmed this miserable household, and now all knew that Peltier's hour was come, and

that death, whom they had so gallantly and so long endeavoured to shut out from their famine-struck circle, had entered at last, and taken up his place by their hearth. For weeks Peltier had been repeating, at intervals, that if the Indians did not come to the rescue before the 1st of November, he would cease from that date to look for relief, and he was sure he would not survive the day when he should cease to hope. He was a true prophet, for he died starved to death, during the night that preceded the 1st November. Samandrè, Peltier's companion in suffering, who had sat up during the greater part of the 31st October, and even assisted in pounding some bones, seemed to loose all spirit, when he witnessed the death of his comrade. He became very low, and began to complain of cold and stiffness of the joints. His companions spread their blankets upon him, in the attempt to keep him warm. But all was in vain, Samandrè died in the early dawn of the 1st November.

The comparatively sudden death of these two men, due immediately to losing heart and hope, was a severe shock to Franklin and his companions. Peltier had endeared himself to each of them by his cheerfulness, his unceasing activity, and affectionate care and attentions, ever since the arrival of the party at Fort Enterprise. Community of suffering had softened the rude nature of the Canadian, and developed all that was generous and humane in his character. He had nursed Adam, the interpreter, with the tenderness of a woman. The effect of his death, and that of Samandrè, told most unfavourably upon the health of Adam, who became very low and despondent, and on that of Franklin, who from this date became too ill to be of any assistance to the doctor and Hepburn, in their work of cutting and collecting fuel. From this point, the daily record of the experiences of these wretched men becomes brief and obscure. The darkness of death seems to have been gathering above them; their intellects seem to have become clouded; and it was evident that when the last moment should come, they would have nothing more to suffer. Their death would have been literally "a falling asleep;" for the period of anguish and suffering was well-nigh past. On November 4th, they read prayers, and a portion of the New Testament, in the morning and evening, as had been their practice since Richardson's arrival; and "the performance of these duties," writes Franklin, "always afforded us the greatest consolation, serving to re-animate our hope in the mercy of the Omnipotent, who alone could save and deliver us." On the 5th, Richardson and Hepburn, who alone were now able to move about, became very weak. They came into the house frequently in the course of the day to rest themselves, and, when once seated, were unable to rise without each other's help. On this day also, Adam surprised and terrified his companions by occasionally getting up and walking about the room, with wild and ghastly looks and rambling, incoherent talk about far dis-

tant times and scenes, and matters which his comrades knew nothing about. Next day, he got up in the morning, talked of cleaning his gun, and promised his companions that, if there were any birds about, he would soon bring them something good to eat. But his tone suddenly changed, his unnatural spirits left him, and he sank down dejected, and could scarce be prevailed on to taste the vile soup of bruised bones and singed hide. "I may here remark," writes Franklin, "that owing to our loss of flesh, the hardness of the floor, from which we were only protected by a blanket, produced soreness over the body, and especially those parts on which the weight rested in lying; yet to turn ourselves for relief was a matter of toil and difficulty. However, during this period, and, indeed, all along, after the acute pains of hunger (which lasted but three or four days) had subsided, we generally enjoyed the comfort of a few hours' sleep. The dreams which, for the most part but not always, accompanied it, were usually (though not invariably) of a pleasant character, being very often about the enjoyments of feasting. In the day-time we fell into the practice of conversing on common and light subjects, although we sometimes discussed, with seriousness and earnestness, topics connected with religion. We generally avoided speaking directly of our present sufferings, or even of the prospect of relief. I observed that in proportion as our strength decayed, our minds exhibited symptoms of weakness, evinced by a kind of unreasonable pettishness with each other. Each of us thought the other weaker in intellect than himself, and more in need of advice and assistance. So trifling a circumstance as a change of place, recommended by one as being more warm and comfortable, and refused by the other, from a dread of motion, frequently called forth fretful expressions, which were no sooner uttered than atoned for, to be repeated, perhaps, in the course of a few minutes. The same thing often occurred, when we endeavoured to assist each other in carrying wood to the fire; none of us were willing to receive assistance, although our task was disproportioned to our strength. On one of these occasions, Hepburn was so convinced of this waywardness, that he exclaimed: 'Dear me, if we are spared to return to England, I wonder if we shall recover our understandings?'"

The morning of the 7th November arose in gloom above the starving hovel of Fort Enterprise, with its bewildered inmates chattering in the insanity produced by prolonged want. Adam had passed a restless night; for the image of approching death was before him throughout the long hours of the night, nor did it leave him in the morning, although the Englishmen did their utmost to cheer him, and dispel his gloomy anticipations. He was so low in the morning that he could scarcely speak. Franklin remained in bed, by his side, to cheer him as much as possible. The doctor and Hepburn had commenced to cut wood for the day; but had little more than gone out to set about this labour when they were suddenly amazed, and, for

the moment confounded, by hearing the report of a musket. "They could scarcely believe," says Franklin, "that there was really any one near, until they heard a shout, and immediately espied three Indians close to the house. Adam and I," continues the commander, "heard the latter noise, and I was fearful that a part of the house had fallen upon one of my companions—a disaster which had, in fact, been thought not unlikely. My alarm was only momentary; Dr Richardson came in to communicate the joyful intelligence that relief had arrived. He and myself immediately addressed thanksgivings to the throne of mercy for this deliverance; but poor Adam was in so low a state he could scarcely comprehend the information. When the Indians entered, he attempted to rise, but sank down again. But for this seasonable interposition of Providence, his existence must have terminated in a few hours, and that of the rest probably in a few days. The Indians had left Akaitcho's encampment on the 5th November, having been sent by Mr Back with all possible expedition, after he had arrived at their tents. They brought but a small supply of provision, that they might travel quickly. It consisted of dried deer's meat, some fat, and a few tongues."

The kindly Indians imprudently presented the food to the starving men in injudiciously liberal quantities, and Franklin, Richardson, and Hepburn fell upon it ravenously, although they were perfectly aware of the danger of eating freely, after such a long period of want. "Be moderate!" cried the doctor, as he beheld, with alarm, the avidity with which his comrades attacked the meat; but he was quite unable himself to abide by the rule which he prescribed for the others, and, like them, he devoured the food with the eagerness of a famished wild animal. So reduced were they all from want, that their strength of mind, resolution, and self-control had died within them, and they were unable in any degree to curb their animal instinct. The almost immediate consequence of their voracity was that they suffered dreadfully from indigestion, and had no rest during the whole of the following night. Adam being unable to feed himself, was judiciously treated by the Indians, and began to revive rapidly.

The youngest of the Indians, after resting an hour, set out on a return journey to Akaitcho's camp with a letter from Franklin to Mr Back, urging that officer to forward a further supply of provisions with the least possible delay; the two others remained at the Fort to take care of the invalids there, and nurse them into a condition of strength before they should attempt to move forward towards the hunting-grounds. The condition of the Fort now demanded the kindly offices of the relieving party. The room was covered with an accumulation of dirty fragments of pounded bones, etc., and in a corner were lying the ghastly dead bodies of Peltier and Samandrè. The superstition of the Indians forbade them to remain in the same room with a dead body, and Dr Richardson and Hepburn perceiving this, dragged

the corpses to a short distance outside, and covered them with snow. The Indians then set about clearing the room with an activity that seemed amazing to the sickly men. Contrasted with their own emaciated and nerveless figures, the frames of the visitors, as they moved about in the light of the blazing fire that now crackled on the hearth, seemed gigantic to Franklin and his companions, and their strength impressed them as being supernatural. The beards of the Englishmen, unshorn since they had left the shores of the Polar Sea, had grown to an enormous length, and were hideous in the eyes of the Indians, who persuaded their allies to shave and wash themselves. This agreeable duty performed, Franklin's party experienced, from the cleanness of the room and of their persons, from the nourishing food and the blazing fires, high-heaped with the wood which the Indians lost no time to collect, a degree of comfort to which for many months they had been strangers. On the 9th four large trout were caught by Crooked-Foot—by which graphic appellative one of the Indians was known—and formed a highly-prized delicacy, especially to Franklin and Richardson, who, after their first ravenous feed of meat, suffered dreadfully from indigestion and distention, and who, naturally enough, took a dislike to meat for a short time. The improved condition of affairs at the Fort may best be understood from Franklin's statement, that "though the night (of the 9th) was stormy, and our apartment freely admitted the wind, we felt no inconvenience, the Indians were so very careful in covering us up, and in keeping a good fire; and our plentiful cheer gave such power of resisting cold that we could scarcely believe otherwise than that the season had become milder."

On the 13th November the weather was stormy, and snow constantly fell. It was now six days since the Indians had arrived, and since the youngest of them had returned to Akaitcho's camp to urge the chief to forward another supply of provisions. No supply had as yet arrived, and the Indians beginning already to despond, became spiritless and morose, and refused to go out either to hunt or to fish. With their usual readiness to forbode evil, they now expressed their conviction that some mishap had befallen their companion, that he had never reached Akaitcho, and that consequently the best thing they could do was to return at once themselves, and hurry up the provisions to the Fort. Accordingly, on the evening of the 13th, having first given a handful of pounded meat to each of the men at the Fort, they stole away suddenly and secretly. Franklin and his companions were once more left in their weakness and illness without food, and there was every prospect of their having again to undergo the sufferings from which the opportune arrival of the Indians had relieved them. On the following morning, however, Hepburn, who had been out gathering wood, came in with the stirring intelligence that a party were in sight on the river

at the foot of the Fort Enterprise hill. This intelligence created the greatest excitement in the house, and each man set about cleaning the apartment, and removing the scraps of hide upon which the party had been feeding, for the Indians believed that burning deer skin was unlucky, and made them unsuccessful in hunting. The party turned out to be Crooked-Foot, with two more men and two women, who were dragging provisions. Adam, who, during the whole day, had been sunk in despondency, wonderfully recovered his spirits on the arrival of the relief party, and rising from his bed, walked about the room with an appearance of strength and activity which surprised everyone. "As it was of consequence," writes Franklin, "to get amongst the reindeer before our present supply should fail, we made preparation for quitting Fort Enterprise the next day; and accordingly, at an early hour on the 16th, having united in thanksgiving and prayer, the whole party left the house after breakfast. Our feelings in quitting the Fort, where we had formerly enjoyed much comfort, if not happiness, and latterly experienced a degree of misery scarcely to be paralleled, may be more easily conceived than described. The Indians treated us with the utmost tenderness, gave us their snow-shoes, and walked without these aids themselves, keeping by our sides, that they might lift us when we fell." The rescuing party, with the four starved men, descended Winter River, and crossed Round Rock Lake, distant about three miles from the house, and here the first halt had to be made, for Dr Richardson suffered so much in his limbs that he was unable to proceed. The Indians prepared the encampment, and cooked for the Englishmen, and fed them as if they had been children, displaying a degree of humanity and sympathy that would have done credit to the most civilised people. Pursuing their way by short marches, and slowly improving in health from day to day, the party arrived on the 26th November at the abode of the Indian chief Akaitcho. They were received in the leader's tent by the assembled Indians, who, by their looks of compassion and the profound silence they maintained, expressed their sympathy for the woeful sufferings to which they had been subjected. Not a word was said until the rescued men had tasted food. The chief showed them the most friendly hospitality, and lavished upon them the most considerate personal attentions, even cooking for them with his own hands, an office which he never performed for himself. In the course of the day the Englishmen were visited by every person in the tribe, not merely from curiosity, but from a desire to evince sympathy for their late distress. On the 1st December they set out to the southward with the Indians, and, travelling slowly in this direction, were met by Belanger, who had left them early in the season with Mr Back. The Canadian had been sent up to them by Mr Weeks, from Fort Providence, with two trains of dogs, some spirits and tobacco for the Indians, a change of dress for the Englishmen, and a little tea and sugar. He also brought letters from England, and

from Mr Back. By the former, Franklin learned the gratifying news of the successful termination of Parry's voyage up Lancaster Sound, and of his own promotion, together with that of Mr Back and the unfortunate Hood, now lying stark in his rude grave on the Barren Grounds.

On the 8th December the Englishmen set out with two sledges heavily laden with provision and bedding, drawn by two dogs, and conducted by Belanger and another Canadian. On the 11th they arrived at Fort Providence, and had the indescribable satisfaction of knowing that once more they were within the pale of civilisation. Franklin expected to have found sufficient stores at Fort Providence wherewith to reward the Indians for their kindness to his party. Only a part of the stores, however, had in the meantime arrived, and Akaitcho and his hunters had to be content for the time with what they could obtain. The philosophical Indian took his disappointment in the best possible spirit. He made an oration to Franklin, which was remarkable for its good sense. "The world goes badly," he said; "all are poor, you are poor, the traders appear to be poor, I and my party are poor likewise; and since the goods have not come in, we cannot have them. I do not regret having supplied you with provisions, for a Copper Indian can never permit a white man to suffer from want of food on his lands without flying to his aid. I trust, however, that I shall, as you say, receive what is due next autumn; and at all events," he added, in a tone of good humour, "it is the first time that the white people have been indebted to the Copper Indians." On the 15th Franklin and Richardson set out on sledges to Moose Deer Island, the station of the trading companies on Great Slave Lake, where they arrived on the 18th, and had the great pleasure of again joining Mr Back.

The narrative given by this officer of his adventures from the time that (leaving Franklin, Richardson, and the others, after the crossing of the Coppermine) he set out with Beauparlant, St Germain, and one of the Belangers—for, it will be remembered, there were two Canadians of this name—to push on in advance to Fort Enterprise, and thence to send back provisions to the main body of the expedition, was one of extreme trial and hardship. We can only glance at its principal incidents. Mr Back, with his companions, set out on the morning of the 5th October, and travelled on amidst extremely deep snow, sinking in it frequently up to the thighs—a labour which nothing but the hope of reaching the fort, and thence sending back relief to their friends, could have enabled them to support. On the night of the 6th the frost was hard and the cold intense, and though they lay close together, they remained trembling the whole night. In marching over Marten Lake, Belanger fell through the ice, and was only saved by his companions forming a rope by fastening their worsted belts together, and, by means of it, pulling him out. The night of the 7th was stormy. Starting

next morning, the party were too feeble to oppose the wind and drift, and finding it impossible to go on, encamped under the shelter of a small clump of pines. There was no rock tripe to be found, and they were obliged to allay the pangs of hunger by eating a gun cover and a pair of old shoes. At this time Back had scarcely strength to get on his legs. He rose next morning with difficulty, and commenced to stagger on, "but," writes this indomitable officer, "had it not been for the hope of reaching the house, I am certain, from the faintness which overpowered me, that I must have remained where I was. We passed the Slave Rock," continues Back, "and, making frequent halts, arrived within a short distance of Fort Enterprise. But as we perceived neither any marks of Indians, nor even of animals, the men began absolutely to despair. On a nearer approach, however, the tracks of large herds of deer, which had only passed a few hours, tended a little to revive their spirits; and shortly after, we crossed the ruinous threshold of the long-sought spot. But what was our surprise, what our sensations, at beholding everything in the most desolate and neglected state! The doors and windows of that room in which we expected to find provisions had been thrown down, and the wild animals of the woods had resorted there as to a place of shelter and retreat! . . . For the moment, however, hunger prevailed, and each began to gnaw the scraps of putrid and frozen meat that were lying about, without waiting to prepare them. A fire was afterwards made, and the neck and bones of a deer found in the house were boiled and devoured." On the 11th Back was again on his journey, for he knew his leader and the main body of the expedition were starving in the rear, and it was his duty to succour them by either finding the Indians or travelling to the nearest trading establishment, which was distant 130 miles. On the 12th the only food the travellers had consisted of scraps of deer skin and swamp tea; on the 13th they were entirely without food. On the 14th Belanger was despatched back to the fort with a note to Franklin, asking for instructions, and this day, also, the wretched men had nothing to eat. On the 16th the Canadian, Beauparlant, complained of increasing weakness, and said that he should never get beyond the next encampment, as his strength had quite failed him. He asked where the next halting place was to be, and St Germain pointed to a clump of pines near, as the only place that offered fuel. "Well, take your axe, Mr Back," said Beauparlant, "and I shall follow at my leisure; I shall join you by the time the encampment is made." The others moved on, reached the pines, and saw a number of crows perched on their higher branches. St Germain immediately knew that there must be some dead animal near. Back and he now looked about and discovered several heads of deer half buried in the snow and ice and without eyes or tongues—the previous severity of the weather having obliged the wolves and other animals to abandon them. "An expression of 'O merci-

ful God, we are saved!' broke from us both," exclaims Back, and he and St Germain "shook hands, not knowing what to say for joy." The next twenty-four hours would have terminated the existence of both had they not discovered the deer heads. A thick fog now came on, and the two became anxious for Beauparlant, who failed to come up when the encampment was made. It was impossible to see any distance in the fog, and to all intents and purposes their companion was lost to them. They fired guns, however, to which he answered; they then called out to him, and, listening, heard faint responses borne on to them out of the darkness. Back had not strength to go in search of the Canadian, and St Germain reminded him that if they left the camp in the darkness, they would themselves be lost. Next morning St Germain was sent to bring in the missing man. He returned, bringing with him a small bundle, which Beauparlant was accustomed to carry, and with tears in his eyes, told Back that their comrade was dead. He had found him stretched on his back on a sand-bank, frozen to death, his limbs all extended, and swelled enormously, and as hard as the ice that rose around him in iron mounds and ridges. "His bundle was behind him," said St Germain, "as if it had rolled away when he fell, and the blanket which he wore around his neck and shoulders, thrown on one side. Seeing there was no longer life in him, I threw your covering over him, and placed his snow-shoes on the top of it."

This melancholy incident weighed heavily on the mind of the English officer; and, weak with privation and exhaustion, he broke down altogether for a while, and gave way to grief. "Left," he says, "with one person, and both of us weak; no appearance of Belanger; a likelihood that great calamity had taken place amongst our other companions; still upwards of seventeen days' march from the nearest establishment, and myself unable to carry a burden —all these things pressed heavily on me. How to get to the Indians or to the fort I did not know; but, that I might not depress St Germain's spirits, I suppressed the feelings to which these thoughts gave rise, and made some arrangements for the journey to Fort Providence."

On the 18th, Belanger returned from his visit to Fort Enterprise with Franklin's letter to Back, and the three remained at the camp, where the deers' heads had been found, till the 25th. By that time the men, who had been on the brink of death, began to recover a little. Back himself was the weakest of the three. The soles of his feet were cracked all over, and the other parts were as hard as horn from constant walking. The remains of a deer were discovered on the 27th, and, having made up two small packets of dried meat, or rather sinews, enough to last men accustomed to fast for eight days, at the rate of one indifferent meal a day, the three men prepared to start on the 30th, the object being to rejoin Franklin. After a most painful march of three days, on the 3d November, Belanger suddenly

stopped and shouted, "Footsteps of Indians!" He had that moment discovered a recent track in the snow. The lost men, for at this time they hardly seemed to know where they were going, now knew that relief must be at hand. St Germain examined the trail, and announced that, on the day before, three persons had passed, and that he knew the remainder of the tribe must be advancing to the southward. Back now ordered an encampment to be formed, and sent St Germain forward on the newly-discovered track, with instructions to the chief Akaitcho to send immediate assistance to Franklin and his party at Fort Enterprise, and also to himself and his companion. "I was now," writes Back, "so exhausted, that had we not seen the tracks this day, I must have remained at the next encampment, until the men could have sent aid from Fort Providence. We had finished our small portion of sinews, and were preparing for rest, when an Indian boy made his appearance with meat. St Germain had arrived before sunset at the tents of Akaitcho, whom he found at the spot where he had wintered last year; but, imagine my surprise, when he gave me a note from the commander, and said that Benoit and Augustus, two of the men, had just joined them. The note was so confused, by the pencil marks being partly rubbed out, that I could not decipher it clearly; but it informed me that he had attempted to come with the two men, but finding his strength inadequate to the task, he relinquished his design, and returned to Fort Enterprise, to await relief with the others." Back, who suspected that Franklin was suffering much more acutely than the note seemed to indicate, communicated his fears to Akaitcho, who at once showed a humane and generous nature, by despatching three Indians to Fort Enterprise, loaded with meat, skins, shoes, and a blanket. With the arrival of this relieving party at the fort we are already acquainted. On the 9th, one of these Indians returned with a letter from Franklin, detailing all the fatal occurrences that had taken place, both on the Barren Grounds and at the house. Back now proposed that Akaitcho should immediately send three sledges, loaded with meat, to Fort Enterprise. By noon of the same day, two large trains, laden with meat, were despatched to the fort. Of their arrival there, and the rescue of Franklin, Richardson, Hepburn, and Adam, the story has been told.

Franklin's great journey of 1819-22 was now practically at an end. His comrade, Mr Back, after a long absence was now restored to him, and both, with the few survivors of the expedition, were now comfortably housed at the trading-station at Moose Deer Island, Great Slave Lake, where the unremitting care and attentions of the agents of the Company (for the Hudson's Bay and the North-West Company were now united), contributed much to their restoration to health. By the end of February, the swellings in their limbs subsided, and they were able to walk to any part of the island.

Their ravenous appetites gradually moderated, and they had almost regained their ordinary condition of body before the spring. In May a canoe arrived from Fort Chepewyan, bringing the whole of the stores which Franklin required for the payment of Akaitcho and his hunters. "It was extremely gratifying to us," says Franklin, "to be thus enabled, previous to our departure, to make arrangements respecting the requital of our late Indian companions. . . . It was an additional pleasure to find our stock of ammunition more than sufficient to pay them what was due, and that we could make a considerable present of this most essential article, to every individual that had been attached to the expedition." On the 26th May, they set out for Fort Chepewyan, where they arrived on the 2d June. Starting again on the 5th, they arrived at Norway House on the 4th July. On the 14th July, they arrived at York Factory, whence they took passage to England. "And," concludes Franklin, "thus terminated our long, fatiguing, and disastrous travels in North America, having journeyed by water, and by land (including our navigation of the Polar Sea), 5550 miles."

The conclusion of Franklin's disastrous expedition may be said to mark an era in Arctic exploration. In this expedition, the terrible privations and the loss of life suffered were due to the imperfect character of the arrangements made by Government for the proper maintenance of the explorers. It is true that Government instructed both the North and the Hudson's Bay Company to supply the travellers with every necessity, and that partly owing to the rivalry of these Companies preventing them from acting in concert in anything, and partly owing to the want of sufficient food supplies for their own men, they were unwilling or unable to carry out the instructions of Government. In one sense, therefore, the responsibility for Franklin's misfortunes does not rest with Government, as they commuted the office of providing for the expedition to the Canadian trading companies. On the other hand, Government should not have commuted such a grave responsibility to any company, however trustworthy, but should have made the matter of Franklin's supplies a certainty by attending to it themselves. Franklin's great journey was the last Arctic expedition in which Government failed to make the supplies of the explorers their own especial care.

PART V.

EXPEDITIONS OF PARRY AND FRANKLIN, 1821-27.

CHAPTER I.

PARRY'S SECOND EXPEDITION, 1821-23—THE OFFICERS AND CREWS—REPULSE BAY EXPLORED.

CAPTAIN PARRY'S extraordinary success, in 1819-20, in penetrating Lancaster Sound, and the channels that open up westward from it, and in actually forcing a north-west passage over a distance extending to upwards of thirty degrees of longitude, from the mouth of Lancaster Sound to Winter Harbour, on the south shore of Melville Island, was regarded by the Admiralty, and by the country, as encouragement sufficient to justify the immediate appointment of a new expedition for Arctic exploration. Reference to our narrative of "Parry's First Expedition" will show that this successful navigator, after carrying his flag far into hitherto unknown regions, was stopped by solid ice to the westward of his winter quarters in 1819-20. It was reasonable to suppose that, should the new expedition pursue the same route, it would be stopped by the same obstacle. It was therefore resolved that another route should be sought in a *lower* and, presumably, *a more temperate* latitude; and to discover and penetrate such a route was the motive and the object of the new expedition.

It was on the 30th October that Parry landed at Peterhead, after his first expedition; on the 21st December the "Hecla" and "Griper" were paid off, and, the new expedition having in the meantime been determined on, Parry received his commission for the "Fury" on the 30th December. In the previous expedition the "Griper's" bad sailing qualities had often been the cause of annoyance and delay, and for this reason she was not commissioned for the new venture; but as the "Hecla" had been found well adapted for this peculiar service, she was again selected to sail under Parry's orders,

and was recommissioned by Captain George Francis Lyon on the 4th January 1821.

So great a favourite was Parry with all who had ever sailed with him, that when he received his appointment to the command of the new expedition he had only again to hoist his pendant, and the first of the eager crowd of volunteers who offered to join were the old officers and seamen of the "Hecla" and "Griper." An interesting letter, written by Parry two days after his appointment to the command, and which is quoted from the excellent "Memoirs of Rear-Admiral Sir W. E. Parry," by his son, will serve at once as an indication of the gratification with which he accepted his new commission, and as a valuable description of the officers who were to be his companions on the voyage. Writing to his nearest relatives on the 2d January 1821, he says, "I commissioned the 'gallant Fury bomb' yesterday, and have already been overwhelmed with offers of persons to accompany me in all kinds of capacities. Two lieutenants are by my desire appointed to "Fury," Nias and Reid, who were both on the last expedition, and accompanied me on our journey across Melville Island. Lieutenant Lyon, who has lately been travelling a good deal in Africa, has been induced to accept the command of the "Hecla," with the promise of instant promotion to the rank of commander. He is spoken of by all who know him as an exceedingly clever fellow, and his drawings are the most beautiful I ever saw. Hooper (purser in the previous expedition), of course, goes with me. I hope Edwards, the surgeon, will go, but I fear he has had enough of it. I would give £100 to have him, and I know, if he would go with any one, he would go with me. [Mr Edwards did go, and showed that he had *not* 'had enough of it.'] My number of daily visitors is now about doubled, half of them coming to talk about the last, and the other half about the next, expedition. . . . 'Fury' came into dock to-day, and our men are beginning to find their way back again, being very desirous of trying a third trip." Of the officers, it is only necessary further to state that the Rev. G. Fisher sailed in the "Fury" as astronomer, but also officiated as chaplain; and that Lieutenant H. P. Hoppner again joined Parry, sailing in the "Hecla;" and Mr John Bushnan, whom we have also heard of before, sailed in the "Fury" as assistant-surveyor. Among Parry's midshipmen were James Clark Ross, who sailed with his uncle in the "Isabella" (see Ross's First Expedition), and with Parry in the previous expedition, and who was destined to be the discoverer of the Magnetic Pole, together with the gallant, but unfortunate, Francis Rawden M. Crozier, who performed his first Arctic voyage under Parry in the "Fury," and his last as captain of the ill-fated "Terror," under Franklin. There sailed, in all, sixty officers and men in the "Fury," and fifty-eight in the "Hecla." The two vessels were of exactly the same size, both were barque-rigged, and in order to increase the resources in stores, the

plan of "equalised" fore-masts and main-masts was adopted. Not only were the masts equalised in each ship, but all the dimensions of the masts in the ships, and of everything belonging to them were precisely alike in both, so that any article belonging to these four masts might be transferred from ship to ship, and at once applied to its proper use without selection, trial, or alteration of any kind. The resources of the expedition in fittings might be said, by this arrangement, to have been practicably doubled. The ships were strengthened in Deptford Docks, in the most approved manner; and, as the scientific results of the previous expedition were valuable—the observations in magnetism were the first made so near the Magnetic Pole—both vessels were furnished with the best astronomical and other instruments then known.

The ships were ready for sea on the 27th April, though the start was not made for a few days afterwards; and, while they are bowling along over the Atlantic to the scene of their first labours in Hudson Strait, we shall take occasion to glance at the official instructions which their commander had received from the Commissioners of the Admiralty.

The principal object of the expedition being to find a route westward from the Atlantic to the Pacific in some latitude lower than that of Lancaster Sound, and therefore more likely to be practicable, Captain Parry was directed to take his ships into Hudson Strait, and to sail westward until he should reach, either in Repulse Bay or elsewhere, some part of the coast which he should convince himself was part of the *continent* of North America. After having struck the coast, he was directed to keep along the line of this coast to the northward, always examining every bend or inlet which might appear to him likely to afford a practicable passage to the westward. Practically, these were the essence of the Admiralty instructions, and it was now Captain Parry's business to carry them out. He had as a preliminary, however, to inquire to what point northward the examination of the eastern coast of North America had been carried. Captain Middleton, in 1742, had reached Wager Inlet, and had described it as a river, which subsequent investigation proved it to be. Wager River or Inlet runs westward into the mainland from Rowe's Welcome—the northern outlet of Hudson's Bay running north between the mainland on the west, and Southampton Island on the east. On leaving Wager Inlet, Captain Middleton proceeded to the northward, keeping both the American coast and the shores of Southampton Island in sight, as far as Cape Hope on the American shore, and near the entrance to Repulse Bay. From Cape Hope, therefore, Parry resolved to take up the exploration of the coast northwards, and he resolved to reach this starting-point by sailing from Hudson Strait in a west-north-west direction round the north coast of Southampton Island, and on through the Frozen Strait of Middleton to Repulse Bay. With this view, he made sail out of Hudson Strait for Southampton Island, where, after having much trouble with the

ice, he arrived on August 4th, 1821. On that day, after an unobstructed run of between thirty and forty miles, he was stopped by ice, and obliged to make fast. Sail was made next day; and after a good deal of "boring," Parry found himself ten miles nearer land, after which, however, progress was found to be, for the time, impossible. The floes or icefields amid which he now found himself, were of great size, and were covered with innumerable "hummocks," with pools of water between. The hummocks, which appeared to have been formed of detached masses enclosed within the new ice of the last winter season, and "soldered" together by it, were five or six feet above the general level of the floe. The ice of this region was also distinguished for the number of stones—granite, gneiss, feldspar, and lime—found upon and embedded in it.

On the 6th, observations were taken in lat. 65° 28′, long. about 83°. The ships were now between Baffin Island on the north and the high land of Southampton Island on the south; and from this point begin the discoveries of Parry's second expedition. Detained by ice and by a west wind for five days, on the 12th the vessels advanced up Frozen Strait, heading for Repulse Bay. "Nothing," says Parry, "could exceed the fineness of the weather about this time; the climate was, indeed, altogether so different from that to which we had before been accustomed in the icy seas, as to be a matter of constant remark. The days were temperate and clear, and the nights not cold, though a very thin plate of ice was usually formed upon the surface of the sea in sheltered places, and in the pools of water among the floes." On the 15th, the weather continuing fine and clear, enabled the officers to obtain good observations by the moon and stars. The lat. was found to be 65° 28′, and the long. 84° 40′. During the whole of this night the aurora was distinctly seen glowing with a beautiful orange colour. Pushing on through Frozen Strait to the westward, Parry endeavoured to make out the land in that quarter. "The appearance of this land," he writes, "continued to perplex us more and more as we advanced, as instead of any opening corresponding to Wager River, which lies about this latitude, and the high shores by which it is bounded, we soon discovered before us a continuous line of low yellow-looking coast, extending all round, so as to meet the high land of Southampton Island to the south, as well as that to the north, and leaving no perceptible outlet to the westward." Standing across the open water, and keeping away to the southward, Parry discovered something like a small opening in the north-western corner of what otherwise appeared a large bay. This opening in the southern shore of Southampton Island, a short distance within the entrance to Frozen Strait, and which, after having been carefully surveyed, was found to offer no passage leading westward, was named the Duke of York's Bay. After the survey of this bay, the commander resumed the voyage, and on the 20th passed Passage Island on his

way through Frozen Strait. On the 21st, Parry had led the "Fury" into the middle of Repulse Bay; and on the following day, having penetrated, in search of a westward-leading passage, to the north-west extremity of that inlet, he left the "Fury," accompanied by an exploring party of officers, and signalled Captain Lyon to join him. At the same time he directed another boat to be despatched from the "Hecla," under the command of Lieutenant Palmer, to row round a small bight in the north-west corner of Repulse Bay, where alone, from the circumstance of two points overlapping each other, there was the slightest doubt of the land being continuous. Upon a point just to the east of this bight, Parry landed; but though he made many interesting discoveries, and found many Eskimo remains and relics, he failed to find what he was in search of—namely, a sea-way leading westward from the head of Repulse Bay. This bay, which since Middleton's days had been a subject of controversy, was found to be completely land-locked. This discovery was the first considerable achievement of Parry's second Arctic expedition. From twenty-two minutes past seven A.M. till twelve minutes past one P.M., when Parry left the north-west or innermost shore of Repulse Bay, the tide was constantly ebbing. It fell seven feet three inches in that time. Soon after the commander got on board, Lieutenant Palmer returned from the examination of the north-western bight, which he named Gibson's Cove, and of which he delivered to the captain a sketch, showing *the continuity of land all around it,* and giving its soundings and general outline. Palmer's report stated that he had rowed close in shore all round the bay, and had found it "terminate in a small cove, having a deep ravine running into it on the western side." The long-contested question of the continuity of land round Repulse Bay was thus settled, and the doubts and conjectures which had so long been entertained respecting this remote inlet, set at rest for ever.

CHAPTER II.

WINTER QUARTERS FOUND—WINTER ARRANGEMENTS—THE CAPTAINS' CONCERTS —THE ESKIMO NEIGHBOURS—CAPTAIN LYON'S NARROW ESCAPE.

CAPTAIN PARRY having ascertained that there was no passage leading westward through Repulse Bay, and thus satisfactorily concluded the first stage of the expedition, now proceeded to carry out the instructions he had received to keep along the line of this coast (the east coast of the north-east extremity of North America), always examining every bend or inlet which might appear likely to afford a practicable passage to the westward. The boats were accordingly hoisted up, and all sail was made back through Frozen Strait to the eastward. On the morning of the 23d August, Parry perceived that the land he was approaching, and which formed part of the north shore of Frozen Strait, had a broken appearance, and in one place appeared to consist only of islands. In order to satisfy himself whether there was "any bend or inlet" running north and west into this apparently open coast, he commissioned Captain Lyon, accompanied by the assistant surveyor, Mr Bushnan, and a party of seamen, to go and examine it, and, if necessary, to travel round the land, and thus prove its continuity. After an absence of three days, Captain Lyon returned; and though the result of his short journey was unsatisfactory, on account of bad weather, he obtained results from which sanguine hopes were entertained of finding a passage to the northward of the inlet he had examined.

The remainder of the month of August, the whole of September, and the first few days of October, were occupied in strictly carrying out the instructions of the Admiralty, and examining every part of the coast to the north of the mouth of Frozen Strait. As this part of the north-east coast of the American continent is much broken, the work was necessarily tedious, and unenlivened by any remarkable occurrence. It is sufficient to say, that the survey of the coast was thorough; and it is to Captain Parry and his officers that we are indebted for the accurate knowledge of this part of the extreme north of America which we possess.

On the 6th October, the ships, being then at the mouth of Lyon Inlet, in the south of Melville Peninsula, were got under way, the object being to

sail to the south-east, to find some secure winter quarters on the south side of Winter Island. The ships' bends were now so coated with ice about the water-line, that it had to be beaten or cut off every day to render progress possible. On the 6th, a clear run was made past Cape Edwards, at the mouth of Lyon Inlet. After rounding this cape, Parry found the sea covered with pancake ice, which, however, being thin, did not offer much resistance. As they advanced, however, the ice became much more troublesome. After much labour, the vessels reached a suitable bay on the south side of Winter Island; and before the night of the 8th October, the ships were got into their stations for the winter by sawing for two or three hundred yards through the ice. Parry had now arrived at the second stage of his enterprise; and, reviewing the events of the season, and considering the progress made, "it was impossible," he states, "not to experience considerable satisfaction. Small as our actual advance had been toward Behring's Strait, the extent of coast newly discovered and minutely explored in pursuit of our object, in the course of the last eight weeks, amounted to more than two hundred leagues, nearly half of which belonged to the continent of North America. This service, notwithstanding our constant exposure to the risks which intricate, shoal, and unknown channels, a sea loaded with ice, and a rapid tide concurred in presenting, had providentially been effected without injury to the ships, or suffering to the officers and men; and we had now once more met with tolerable security for the ensuing winter, when obliged to relinquish further operations for the season. Above all, however, I derived the most sincere satisfaction from a conviction of having left no part of the coast from Repulse Bay eastward in a state of doubt as to its connection with the continent. And as the mainland now in sight from the hills extended no further to the eastward than a north-north-east bearing, we ventured to indulge a sanguine hope of our being very near the north-eastern boundary of America, and that the early part of the next season would find us employing our best efforts in pushing along its northern shores."

The operations at sea being now at an end for the season, Parry directed his chief attention to the security of the ships, and to the various internal arrangements which experience suggested as necessary for the preservation of cleanliness, health, and comfort during the winter. The upper masts were struck, the topsails and courses were kept bent to the yards, and the rest of the bending sails were stowed on deck, and the spare spars lashed over the ships' sides to leave a clear space for taking exercise in bad weather. A watch was set to attend to the fires, and to the heating and drying of the ships between decks, and regulations similar to those adopted on Parry's first expedition were enforced to provide for the comfort and cleanliness of the crews. Having had abundant experience of the astonishing effects produced by the passions in inducing or removing symptoms of scurvy, the

disease to which crews in Arctic regions are most liable, Parry did everything in his power to provide for the rational amusement of the men. A theatre was established under the management of Captain Lyon, and schools were established in each ship. The interests of science were also carefully considered, and Mr Fisher the astronomer and Parry selected a spot for the portable observatory. This house was built of spare boat-plank; the sides, which were double, and filled with sand between, being fixed to capstan bars set upright, and sunk two feet into the ground.

In December there were continual and extraordinary displays of aurora; and in observing these, and attending to the routine of scientific observations, the officers were chiefly employed to the close of the year. The theatrical season was now in full swing. On the 24th December, Christmas Eve, the ships' companies were amused by the officers performing the two farces of "A Roland for an Oliver" and the "Mayor of Garratt." On Christmas Day divine service on board the "Fury" was attended by the officers and crews of both ships. Some little increase was made in the allowances, to mark the festive season; and among the luxuries which the Christmas dinner afforded was that of a joint of English roast beef, of which a few quarters had been preserved for such occasions, by rubbing the outside with salt. This being the season of inactivity in these early days of Arctic exploration—in our days great part of the winter season is occupied in sledge-travelling—it was somewhat difficult to find employment for all. A pleasant picture is given by the commander of the manner in which the more musical among the officers occasionally spent their evenings: "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 Captain Lyon's cabin and 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.

On the 1st January 1822 the thermometer stood at 22° below zero. A number of curious examples of the effect of intense cold came under the observation of the officers at about this time. On the 5th the cold had sunk

to -31°. On the 12th a number of bottles of wine were examined. Two or three bottles were found broken, and the wine, in perfect moulds, was found frozen in thin laminæ, not unlike the plates of white mica, and from one-eighth to two-eighths of an inch in thickness. White wine was frozen into one mass, retaining its colour and translucency, and assuming the appearance of very clear amber.

In the beginning of February an event occurred which at once turned the current of the thoughts of every officer and man into a new channel, and which had no inconsiderable effect upon the scientific results, and upon the measure of success achieved by the expedition. "On the morning of the 1st of February," writes Parry, "it was reported to me that a number of strange people were seen to the westward, coming towards the ships over the ice. On directing a glass towards them, we found them to be Eskimos, and also discovered some appearance of huts on shore, at the distance of two miles from the ships, in the same direction. I immediately set out, accompanied by Captain Lyon, an officer from each ship, and two of the men, to meet the natives, who, to the number of five-and-twenty, were drawn up in a line abreast, and still advancing slowly towards us. As we approached nearer, they stood still, remaining, as before, in a compact line, from which they did not move for some time after we reached them. Nothing could exceed their quiet and orderly behaviour on this occasion, which presented a very striking contrast with the noisy demeanour of the natives of Hudson Strait. They appeared, at a distance, to have arms in their hands, but what we had taken for bows or spears proved to be only a few blades of whalebone, which they had brought either as a peace-offering or for barter, and which we immediately purchased for a few small nails and beads. Some of the women, of whom there were three or four, as well as two children, in this party, having handsome clothes on, which attracted our attention, began, to our utter astonishment and consternation, to strip, though the thermometer stood at 23° below zero. We soon found, however, that there was nothing so dreadful in this as we at first imagined, every individual among them having a complete double suit. The whole (suits) were of deer-skin, and looked both clean and comfortable. However quietly the Eskimos had awaited our approach, and still continued to conduct themselves, there was as little apprehension or distrust in their countenances or manner as it was possible for one strange set of people to evince on meeting another. As soon, however, as we had bought all they had to sell, and made them a number of valuable presents, we expressed by signs a wish to accompany them to their huts, with which they willingly complied, and we immediately set out together. On our way, the Eskimos were much amused by our dogs, especially by a large one of the Newfoundland breed, that had been taught to fetch and carry, a qualification which seemed to excite unbounded aston-

ishment; and the children could scarcely contain themselves for joy when Captain Lyon gave them a stick to throw for the dog to bring back to them. A child of five or six years old, thus amusing itself on such a day, and in such a climate, formed by no means the least characteristic figure of our motley group."

As this tribe of Eskimos was decidedly the most intelligent with which any former Arctic explorer had established any communication, and as they were of no inconsiderable assistance to the captain in giving him directions and drawings which assisted him in his subsequent movements, it may not be out of place to devote a page or two of this narrative to an account, condensed from Parry's own description, of their manners, habits, and character. The Eskimo establishment consisted of five huts, with canoes, sledges, dogs, and above sixty men, women, and children, as regularly, and, to all appearance, as permanently fixed as if they had occupied the same spot all the winter; yet, although all the surrounding shore was scanned daily by so many keen eyes in the "Fury" and "Hecla," the village had never been seen before. If the first view of the exterior of the village created astonishment in the minds of Parry and his companions, that feeling was heightened when they entered the houses and found that in their construction "not a single material was used but snow and ice. After creeping through two low passages, having each its arched doorway, we came to a small circular apartment, of which the roof was a perfect arched dome. From this three doorways, also arched, and of larger dimensions than the outer ones, led into as many inhabited apartments, one on each side, and the other facing us as we entered. The interior of these presented a scene no less novel than interesting. The women were seated on the beds at the sides of the huts, each having her little fireplace or lamp, with all her domestic utensils about her; the children crept behind their mothers, and the dogs, except the female ones, which were indulged with a part of the beds, slunk out past us in dismay. The construction of this inhabited part of the huts was similar to that of the outer apartment, being a dome formed by separate blocks of snow, laid with great regularity and no small art, each being cut into the shape requisite to form a substantial arch, from seven to eight feet high in the centre." The Eskimos were as desirous of pleasing their visitors as the latter were to be pleased. While the Englishmen were engaged in examining every part of the huts, the behaviour of the Eskimos was in the highest degree respectful and good humoured. They eagerly received the articles that were given them, either in exchange for their own commodities or as presents, but on no occasion importuned the strangers for anything, nor did the well-known sound of "pilletay" (give me) once escape them. They also seemed to be unusually honest, and if their visitors dropped a glove or a handkerchief accidentally, they would immediately direct attention to it by

pointing. Parry invited these people to the ships, where they expressed much less surprise or curiosity than might naturally have been expected. But though they were quiet and orderly and well under self-restraint, they were by no means dull, for when Captain Lyon ordered up his fiddler on the deck of the "Hecla" they danced with the men for an hour, and then went off to their huts in high glee and good humour.

Early on the following day, the 2d February, Parry set out with a large party on a second excursion to the huts. They were received with great cordiality, and much bartering went on for some time. The Englishmen dined in the huts, and the Eskimos partook gladly of the biscuit and meat of the strangers, but did not relish their wine. After passing a pleasant and interesting day, and laying the foundation of perfect confidence and good understanding that was never afterwards interrupted, the captain and his party returned to the ships at sunset. "On the 4th," writes Parry, "a number of Eskimos came to the ships, and we took the opportunity of getting them to go through the process of building a snow hut for our amusement and information. From the quickness with which they completed this, our surprise at the sudden appearance of their village ceased, as we now saw that two or three hours would be more than sufficient to have completed the whole establishment just as we at first found it. They were then taken on board, where they derived great amusement from our organ, and from anything in the shape of music, singing, and dancing, of all which they are remarkably fond." On the following day the Eskimos again came to rebuild the snow hut in a more substantial manner, and to put a plate of ice into the roof as a window. This work they performed with great neatness and expertness, a number of the women cheerfully assisting in the labour. Visiting the natives again on the 7th, Parry found the village in the charge of the women and children, the men having gone on a sealing excursion to the north-eastern side of the island. In the following passage Parry introduces us to Iligliuk, the *belle* of the Eskimo village, and perhaps the most intelligent and talented individual of this nation with whom the English have down even to the present day made any acquaintance:

"One of the women, named Iligliuk . . . who favoured us with a song, struck us as having a remarkably soft voice, an excellent ear, and a great fondness for singing, for there was scarcely any stopping her when she had once begun. We had, on their first visit to the ships, remarked this trait in Iligliuk's disposition when she was listening for the first time to the sound of the organ, of which she seemed never to have enough; and almost every day she now began to display some symptom of that superiority of understanding for which she was so remarkably distinguished."

On the evening of the 7th a wolf was caught in one of the traps close to the ship. A party of the officers that went out to secure the stranger fired

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two shots into the trap, and afterwards, finding that the animal continued to bite at a sword that was thrust in against it, fired another shot. The trap was then sufficiently opened to get the hind legs of the animal firmly tied together, and, thinking that he was now tolerably secure, the officers decided to pull him out. He had scarcely got his head out, however, when he flew furiously at the throat of Mr Richards, midshipman of the "Hecla." Richards, not liking the tactics of the enemy, resolved upon traversing them; and, instead of allowing the wolf to seize him by the throat, he reversed the operation, and seized the animal by the neck with his utmost force. This unexpected *tu quoque* had the effect of making the wolf change his mind. He took to his heels, though two of these were tied together, and succeeded in getting clear away as safe and hearty as any animal with three shots and a sword-thrust in him has any reasonable grounds to expect. He was found dead the following day at the distance of three-quarters of a mile from the ships.

The Eskimos, whose food consisted for the most part of the flesh and blubber of the seal, and the measure of whose comforts, therefore, depended on their good fortune in seal catching, would have been reduced to want in the beginning of February had not Parry issued supplies of bread dust to them from time to time. The necessity of such supplies was sufficiently evident from the circumstance that when Parry's men took the bread dust to the village they found "some of the poor creatures actually gnawing a piece of hard sealskin with the hair on it," while in few of the huts was there any lamp alight, for the failure of the seal fishery involves a double calamity in depriving the Eskimos both of food and fuel, and the failure of oil or blubber for fuel not only involves the want of warmth and light, but the want also of the means of melting snow for drinking purposes. They were therefore compelled to slake their thirst by eating unmelted snow. Besides the bread dust, the commander sent them on the 10th February a wolf's carcass, which, raw and frozen as it was, they had not the means of cooking or even thawing. One pleasing feature in the character of these Eskimos of Winter Island was, that when the supplies were carried out to them from the ships, the grown-up natives forbore to touch a morsel until the wants of their hungry little ones had been first attended to. On the 13th February the Eskimos had the good fortune to procure three seals. One of the English officers who happened to be at the huts when this piece of good fortune occurred, describes the general outcry of joy with which the announcement of this fortunate event was received. All the women hurried to the doors of the huts, and the children rushed to the beach to meet the men dragging along the prize. "One of these little urchins, to complete the triumphant exultation with which this event was hailed, instantly threw himself on the animal, and clinging fast to it, was thus dragged to the huts. Each woman

was observed to bring her *ootkooseek*, or cooking-pot, to the hut where the seal was dissected for the purpose of receiving a share of the meat and blubber."

The Eskimo method of taking seals is described at length by Parry, and as in his second expedition this navigator's opportunities of observing Eskimo habits and manners were unusually favourable, it may be of interest to reproduce here the results of his experience before bringing the narrative of the intercourse between the Europeans and Eskimos to a close. Early on the morning of the 16th February, Parry observed a party of Eskimos equipped with spears passing the ships on their way to the open water off the shore. Knowing that his friends were going off on a seal-fishing excursion, and wishing to see with his own eyes the Eskimo method of catching the seal, Parry, accompanied by Bushnan and a few others, joined the men from the huts. The Eskimo party consisted of eight persons, but as soon as they reached the edge of the floe they separated.

"The party we at first joined," writes Parry, "were seated on a high hummock of ice, with their spears in their hands, looking out for seals. After we had talked to them for a few minutes, Okotook suddenly started up, and set off along the edge of the ice, without giving us or his own companions the least warning. The latter seemed so much accustomed to this, that they took no further notice of it than by immediately following him, and we did the same, the whole party walking at a very quick rate, and the natives constantly keeping their heads turned towards the sea to look out for seals. After being thus engaged for an hour and a half, we judged, from the motions of a party at a distance beyond us, that they had game in view. As we approached them, Okotook evidently began to be apprehensive that we, who did not understand the matter, would spoil their sport. To prevent this, he did the most civil thing that could well have been devised, which was, to send his companions one by one to the spot, and to remain with us himself, keeping us at such a distance as to allow us to see their proceedings without alarming the animal they were in pursuit of. The other seven Eskimos, now forming one party, disposed themselves into a single line, so as to make as small an appearance as possible in the direction in which they were going, and in this manner crept very cautiously towards the margin of the floe. On a sudden, they all stooped down quite low, to hide themselves, and continued thus a quarter of an hour, during which time they prepared their lines and spears; and then when the animal appeared to be again intercepted from their view, again took the opportunity of gaining a few paces upon him in the same cautious manner as before. When they had been thus occupied for a full hour, alternately creeping and stooping down, the seal, which had been lying on the ice, took the water, and they then gave up their chase. During this time, Okotook could scarcely restrain his impatience

to be nearer the scene of action; and when we produced a spy-glass, which appeared to bring his companions close to us, he had not words to express his surprise and satisfaction. In a short time he held it as steadily as we did, and explained by signs every motion he observed. As soon as they had given up the seal they had been watching, the whole party seemed, with one accord, to turn their steps homeward, in which direction, being that of the ships also, we were by this time not sorry to accompany them. We were now between three and four miles north-east of the ships, and full a mile and a half from any part of the shore. . . . As we returned towards the land, we came to a small rising on the level surface of the floe, not larger than a common mole-hill, and of much the same shape, at which one of the Eskimos immediately stopped. His companions, still walking on, called us away, explaining that what we saw was the work of a seal, and that it was probable the animal was about to complete his hole, and to come up on the ice, in which case the man would endeavour to kill him. We watched the man at the hole for more than half-an-hour, observing him constantly putting his head down towards the ice, as if in the act of listening for the seal, but without otherwise changing his position; after which he followed us on board without success." So far the seal-fishing had not been brilliantly successful; but the Eskimos had better luck a short time after. The preliminary operations in seal-fishing were, however, always the same. When the Eskimo has any reason to suppose that a seal was at work beneath, he immediately attaches himself to the place, and seldom leaves it till he has succeeded in killing the animal. For this purpose, he first builds a snow wall, about four feet in height, to shelter him from the wind, and, seating himself under the lee of it, deposits his spear, lines, and other implements upon several little forked sticks inserted in the snow, in order to prevent the smallest noise being made in moving them when wanted. But the most curious precaution to the same effect consists in tying his own knees together with a thong, so as to prevent any rustling of his clothes, which might otherwise alarm the animal. In this situation a man will sit quietly for hours together, attentively listening to any noise made by the seal, and sometimes using a thin rod of bone thrust into the ice—and the motion of which indicates the presence of the animal—in order to ascertain whether the animal is still at work below. When he supposes the hole to be nearly completed, he cautiously lifts his spear, to which the line has been previously attached; and as soon as the blowing of the seal is distinctly heard and the ice consequently very thin, he drives the weapon into him with the force of both arms, and then cuts away with his panna—a broad, two-edged knife—the remaining crust of ice, to enable him to repeat the wounds, and get the prize out. The *neitiek*, the smallest of the seal tribe, and the only variety killed in this manner, is held, while struggling, either simply by hand, or by putting the line round a spear with the point stuck into the ice.

For the *oguke,* or larger seal, the line is passed round the man's leg or arm, and for a walrus, round his body—his feet being, at the same time, firmly set against a hummock of ice, in which position these people can, from habit, hold against a very heavy strain. Boys of fourteen or fifteen years of age consider themselves equal to the killing of a *neitiek;* but it requires a full-grown person to master either of the larger animals.

Although the officers and men of the "Fury" and "Hecla" derived much amusement from, and were kept comparatively in full occupation by, their Eskimo friends, during the dreary winter months of 1822, they obtained but little information bearing upon the existence of the North-West Passage, of which they were in search. Something, however, they did learn from the savages of Winter Island. Writing on the 4th March, Parry says: "Being extremely desirous of ascertaining what the Eskimos knew of the coast to the northward of our present station, we to-day drew out roughly, on a large sheet of paper, the conformation of the land in this neighbourhood, and as far to the westward as Repulse Bay, and then requested Iligliuk to continue it to the northward." Iligliuk, who, for her high intelligence, was named "the wise woman" by the members of the expedition, readily understood the geographical drawing placed before her, and, taking the pencil in her hand, traced various indications on the coast, and marked the positions of a number of islands. In order to verify Iligliuk's chart, Captain Lyon, accompanied by a sufficient party, left the winter quarters on the 15th March—the temperature having then risen as high as zero, and a moderate breeze blowing from the north, accompanied by considerable snow-drift. The object of the travelling party under Captain Lyon was to explore the northern shores of the island on the southern shores of which the "Fury" and "Hecla" had found winter quarters. The party had no sooner started, however, than Captain Parry began to dread some mishap. From the hour of Captain Lyon's departure, the thermometer began to fall rapidly, and the wind to increase. At midnight, the mercury had sunk to 32° below zero, and a hard gale was blowing from the north-west. It was one of the wildest, bitterest nights Parry had ever experienced in the Arctic regions. The degree of cold recorded by the thermometer was not by 25° so low as the explorers had frequently withstood *in calm weather.* But the gale that raged outside was enough to chill the marrow of every living being, even though the thermometer were registering a much milder temperature. No wonder, then, that Parry and his officers, as they clustered round the comfortable fire between decks, sheltered from the blast by closed hatches, and by the snow-thatched housing that covered in the wooden walls, and made all snug within, were anxious for their absent comrades. In the Arctic regions, more frequently than in any other climate, does the traveller, seated by his glowing fire, think with solicitude upon the—

"Poor, naked wretches, wheresoe'er they be,
That bide the pelting of the pitiless storm."

"But now," writes Parry, "that some of our own companions were thus exposed, the idea came more forcibly home to our recollections, together with the utter helplessness, not to say hopelessness, of their situation. The wind and drift continued incessantly on the 16th, and as the thermometer rose no higher than –20° (or 20° below zero) during the day, our apprehensions for Captain Lyon's party were by no means diminished. To send in quest of them would have been only to incur the certainty of other men being equally exposed. Indeed this is one of the cases in which no assistance can be offered; for any persons sent out with that hope must inevitably become helpless in a short time, while the snow-drift would render it impossible to trace those whom they were intended to assist."

But while the commander was thus speculating about the fate of his first officer and the men with him, it will be well to state what the experiences of that officer and his party were. Captain Lyon started on the 15th and went away northward toward the hills that rose above the winter quarters of the ship. He had proceeded but a short distance when the wind sprang up and came right on in the faces of the travellers, laden with a thick and a continuous snow-drift. They dragged their sledge, laden with their provisions for this very remarkable excursion, with the utmost difficulty through the soft snow, in which they were wading knee-deep. The snowy wind rapidly increased to a heavy gale, and every time they rested to recover breath the whole party were frost-bitten, and had to rub each other's fast-blanching faces with snow. They struggled on for an hour or two, reached the north side of the island and pitched their tent. They passed the night literally in a snow-cavern. Next day the gale was unabated; but as it was evident that there was nothing but death before the whole party if they remained in their snow-hovel, they resolved to get out and make an attempt to reach the ships, from which they were six miles distant. "We could not see a yard of our way," says Captain Lyon in his report of the journey; "yet to remain appeared worse than to go forward, which latter plan was decided on. At thirty minutes past nine, having placed all our luggage in the tent, and erected a small flag over it, we set out, carrying a few pounds of bread, a little rum, and a spade. The wind being now on our backs, we walked very briskly, and having an occasional glimpse of a very faint sun through the drift, managed to steer a tolerable course." After a while, however, they lost their reckoning amid the whirling snow-drift, and, stupefied by cold, fatigue, and suffering, became completely bewildered. "Several of our party," continues Lyon, "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 discontinued their general custom of warning each other on observing a discolouration of the skin." They continued to stagger blindly on, helping each other as best they could; the officers cheering the men, and occasionally making a dash at members of the party that were frost-bitten and rubbing their faces to restore circulation. In what direction they were going they did not in the least know; and it was certainly by no intelligent exertion of their own, that at one P.M. on the 16th, they reached the ships. Captain Lyon thus concludes his report: "John Lee had two of his fingers so badly frost-bitten as to lose a good deal of flesh off the upper ends, and we were for many days in fear he would be obliged to have them amputated. Carr, who had been the most hardy while in the air, fainted twice on coming below; and all had severe frost-bites in different parts of the body, which recovered after the loss of skin usual in those cases." Such is a brief and faint outline of the liabilities to which sledge parties in the Polar regions are continually exposed.

CHAPTER III.

THE SHIPS RELEASED—DISCOVERY OF BARROW RIVER AND FALLS—AMONG THE WALRUSES.

CAPTAIN PARRY had taken the "Fury" and "Hecla" into winter quarters on the south shore of Winter Island in October 1821, and it was not till the beginning of the following July that the ice opened sufficiently to allow him to resume the prosecution of the object of the expedition—the examination of the eastern coast of this part of North America in search of a passage leading westward. Early on the 2d of July the ships were taken out of their winter's dock, sail was made with a fresh breeze from W.N.W., and the bows of the "Fury" and "Hecla" were turned to the north in search of new lands. The land was seen to be completely lined with ice, extending in most places from two to five miles to seaward, and firmly attached to the shores. The ice close in-shore consisted of a smooth and level strip one or two miles in width, and evidently of the previous winter's formation; the outer band of ice was "hummocky," or produced by external pressure or by the cementing together of a number of broken masses. Out to sea there was also much hummocky ice drifting rapidly about with the tides. Between the shore-ice and the ice in the offing there was a navigable passage varying in width from two or three hundred yards to two miles. Along this channel the vessels of the expedition held their way northward. Sailing slowly along the land-floe and keeping a careful look-out for the sea-ice which swept in upon the vessels threateningly with the flood-tide, Parry ran along the coast a distance of about thirty miles, and made fast to the land-ice for the night. Next day a single sledge party of Eskimos were seen on the land-ice travelling north. Mr Bushnan was sent with some of the men to meet them and bring them on board. The Eskimos proved to be a party of the tribe that had passed the winter beside the ships on Winter Island, and who had left that station on their journey northward to their summer fishing grounds forty days previously. When they came under the bows, they halted in a line, and gave their old friends three cheers. "As soon as they got on board,"

says Parry, "they expressed extreme joy at seeing us again, repeated each of our names with great earnestness, and were indeed much gratified by this unexpected rencontre. . . . Many of our officers and men cordially greeted these poor people as old acquaintances they were glad to see again, and they were loaded as usual with numerous presents." But the giving of presents to these people was a practice to be indulged only in moderation, as when they obtained anything they went off into fits of hysterical laughter or screaming, succeeded in the case of the women by convulsive fits of weeping. Their gratitude, however, was as a rule strictly confined to this somewhat painful demonstration, for they seldom thought of making any return whatever for benefits received. One of the men that had just been taken on board brought a present of a piece of sealskin to *Parree*, "being," says the commander, "the first offering of real gratitude, and without any expectation of return, that I had ever received from any of them." One of these Eskimos, named Ewerat, drew for Parry a very interesting chart of Melville Peninsula, showing a fair representation of the land, with the as yet undiscovered "Fury and Hecla Strait" bounding it on the north, and with the narrow isthmus, with which the name of Dr Rae has since been associated, on the south. This chart corroborated that which Iligliuk, "the wise woman," had already drawn for Parry. After half-an-hour's visit to the ships, the Eskimos returned to pursue their journey on shore. On the 4th July observations at noon gave lat. 66° 54′, long. 81° 44′.

On the morning of the 12th, the vessels being then in latitude about 67° 12′, the land-ice began to float off and leave the whole line of the shore entirely bare. At four P.M. sail was made with a light air of south-easterly wind, and after running four or five miles, an opening in the land, suggesting a river, was discovered. On the following morning the boats were ordered out to examine the river and cast the nets, as the place seemed a likely one for salmon. The breadth of the stream, near its mouth, varied from four or five hundred yards to one-third of a mile. "Landing on the southern shore" (of the river), writes Parry, "and hauling the boats up above high water mark, we rambled up the banks of the stream, which are low next the water, but rise almost immediately to the height of about two hundred feet. As we proceeded we gradually heard the noise of a fall of water; and being presently obliged to strike more inland, as the banks became more precipitous, soon obtained a fresh view of the stream running on a much higher level than before, and dashing with great impetuosity down two small cataracts. Just below this, however, where the river turns almost at a right angle, we perceived a much greater spray, as well as a louder sound; and having walked a short distance down the bank, suddenly came upon the principal fall, of whose magnificence I am at a loss to give any adequate description. At the head of the fall, or where it commences its principal

CAPTAIN LYON'S SLEDGE PARTY.

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descent, the river is contracted to about one hundred and fifty feet in breadth, the channel being hollowed out through a solid rock of gneiss. After falling about fifteen feet at an angle of 30° with a vertical line, the width of the stream is still narrowed to about forty yards, and then, as if mustering its whole force previous to its final descent, is precipitated in one vast continuous sheet almost perpendicular for ninety feet more." This hitherto unknown river was named after Mr Barrow, Secretary of the Admiralty. The pleasure of the walk along the fine romantic banks of the river was enhanced by the circumstance that the sportsmen of the party shot four deer by the side of the stream, and thus provided a welcome dish of venison for themselves and their comrades. On the same day Capes Penrhyn and Brown were discovered and named.

On the 15th, as the vessels continued to advance northward, it was noticed that the walruses became more and more numerous. They were seen lying upon loose pieces of drift; and shortly after noon on the day named, the boats of the "Fury" and "Hecla" were despatched to kill one or two of them, for the purpose of obtaining oil. On approaching the ice, the animals were seen lying huddled together in droves of from twelve to thirty. The whole number near the boats was about two hundred. "Most of them," writes Parry, "waited quietly to be fired at; and even after one or two discharges, did not seem to be greatly disturbed, but allowed the people to land on the ice near them, and, when approached, showed an evident disposition to give battle. After they had got into the water, three were struck with harpoons and killed from the boats. When first wounded, they became quite furious; and one, which had been struck from Captain Lyon's boat, made a resolute attack upon her, and injured several of the planks with its enormous tusks. A number of the others came round them, also repeatedly striking the wounded animals with their tusks, with the intention either of getting them away, or else of joining in the attack upon them. Many of these animals had young ones, which, when assaulted, they either took between their fore-flippers to carry off, or bore away on their backs. Both of those killed by the 'Fury's' boats were females, and the weight of the largest was fifteen hundredweight and two quarters nearly." One of these creatures being accidentally touched by an oar, took it in its flippers, twisted it out of the rower's hands, and snapped it in two. Very little oil was obtained from the carcasses, as the blubber is thin and poor at this season; but the walrus flesh was discovered to be valuable for quite a different purpose. Some quarters of this "marine beef," as it is called by Captain Cook, having been hung for steaks, was so much enjoyed that it was much sought after on every occasion on which it could afterwards be obtained. There was some prejudice against the dark colour of the meat; but "in no other respect," says Parry, "is the meat of the walrus, when fresh killed, in

the slightest degree offensive or unpalatable. The heart and liver are indeed excellent."

The Eskimo island of Ooglit was passed on the 15th; and on the following day the eastern extremity of what has since been known as the Fury and Hecla Strait, and which was laid down in the charts drawn in pencil by the Eskimos Iligliuk and Ewerat, was discovered. This discovery was looked forward to by the explorers as being likely to form the great event of the expedition, as it was believed to be the mouth of the long-sought North-West Passage; "but," exclaims Parry, "after sailing a few miles farther, it is impossible to describe our disappointment and mortification in perceiving an unbroken sheet of ice, extending completely across the supposed passage from one land to the other." This ice consisted of a floe so level and continuous, that a single glance was sufficient to assure the commander of the disagreeable fact that it was "the ice formed in its present situation during the winter, and still firmly attached to the land on every side." It had suffered no disruption as yet, although the season was now well advanced; and it was necessary to await that disruption before the explorers could hope to sail through it, and thus accomplish the circumnavigation of the north-eastern point of the American continent.

Five Eskimo canoes were now seen on the edge of the land-ice; and Captain Parry, believing that these belonged to the tribe that had wintered near the "Fury" and "Hecla," and being desirous of obtaining from them all information respecting the locality in which he now found himself, put off in a boat towards the shore. He soon found, however, that his Winter Island friends had not yet arrived; but the distribution of a few presents among the strange Eskimos, who came forward fearlessly to meet the boats, secured their goodwill. Parry persuaded them to turn back to the shore; and before he had reached it, he had obtained the information that the land toward which he was now sailing was that of Igloolik, an island on the south side of the eastern extremity of the strait through which he had expected to pass westward to the Polar Sea. On reaching the shore, Parry found eleven tents near the landing-place, and five more about half-a-mile to the northward. The tents, which varied in size according to the number of occupants, were made of seal and walrus skins, supported upon a rude tent-pole, formed of deer's horns or of bones tied together.

CHAPTER IV.

DISCOVERY OF "FURY AND HECLA STRAIT"—WINTER AT IGLOOLIK, 1822-23—OUTBREAK OF SCURVY—CONCLUSION OF VOYAGE.

THE second expedition under Captain Parry had now practically reached its farthest. The "Fury" and "Hecla" had arrived at a point in the eastern entrance to the strait that bears their name in lat. about 69° 32′, long. about 81° 23′; and in this neighbourhood, while the vessels were detained in enforced idleness, owing to the prevalence of ice to the westward, considerable time was occupied in making meteorological and other scientific observations. As the season wore on towards the middle of August, the ice that filled up the strait that Parry believed to be the North-West Passage, for which he had been so anxiously searching, and which the Eskimos of the neighbourhood described as a passage leading westward into the open sea, began to decay, but so slowly that the navigator had to exercise his utmost patience, and remain inactive and expectant. He dared not leave the spot in which his ships were lying idle, lest when the break-up of the ice should occur, he might not be here at the mouth of the passage, ready to take advantage of every hour of open navigation. "Convinced as I was," he writes, "of the expediency of pursuing this line of conduct, which in truth seemed the only practicable one, yet every hour's delay added an indescribable weight to my anxiety. . . . Stopped, as we had now been, at the very threshold of the North-West Passage for nearly four weeks, without advancing twice as many miles to the westward, suspense at such a crisis was scarcely the less painful, because we knew it to be inevitable. The decayed state of the ice, which even a fortnight before had rendered travelling extremely dangerous, could alone, therefore, under these vexatious circumstances, have prevented my despatching another party for the express purpose of deciding the question respecting the strait; for, highly as we had a right to value the repeated and concurrent testimony of so many intelligent Eskimos, it was impossible to feel satisfied on such a subject, while our own ocular evidence was still wanting." On the 14th August—the advance of

the vessels being still prevented by the ice at the mouth of the strait—a party, consisting of Captain Parry, Mr Richards, and two men from each ship, left the vessels to make their way on foot across the ice, and over the islands that lined the southern shore of the strait. On this journey, the Bouverie Islands having been discovered and traversed, Parry arrived, on the morning of the 18th, at the ultimate object of which he was in search—"the extreme northern point of the peninsula overlooking the narrowest part of the desired strait, which," he states, "lay immediately below us in about an east and west direction, being two miles in width, apparently very deep, and with a tide or current of at least two knots, setting the loose ice through to the eastward. Beyond us to the west, the shores again separated to the distance of several leagues; and for more than three points of the compass in that direction, no land could be seen to the utmost limits of a clear horizon, except one island six or seven miles distant. Over this we could not entertain a doubt of having discovered the Polar Sea; and loaded as it was with ice, we already felt as if we were on the point of forcing our way through it along the northern shores of America." After despatching one of the party to the foot of the point of the promontory on which they stood for some of the sea water, which was found extremely salt to the taste, Parry and his party celebrated their discovery by three hearty cheers, and by drinking in grog to a safe and speedy passage through the channel just discovered, and to which the commander there and then gave the name of Fury and Hecla Strait. To the promontory on which he was then standing, Parry gave the name of Cape North-East. The return journey was then commenced, and successfully completed on the 20th.

On the following morning the ships were found to be in almost clear water, the ice having rapidly broken up and drifted past to the east during the last few days. Sail was immediately made for the north-west, and after being much hampered, on the 26th the vessels had passed Cape North-East, or, in other words, had passed through the narrows of Fury and Hecla Strait. Vain, however, was the attempt to penetrate completely through the passage, which was closed to the westward of the narrows by a solid ice-field.

After beating about the eastern entrance of the strait, Parry was obliged to seek for quarters for the second winter, and found them off the island of Igloolik, on the last day of October. The winter was passed in the same manner as the previous one at Winter Island, there being little to chronicle of any moment. Parry had come to the resolution that when the ships should be again liberated, in the summer of 1823, he should send the "Hecla" home to England, and transferring her spare stores to the "Fury," should make another attempt, in that vessel, to achieve the North-West Passage by the Fury and Hecla Strait. The outbreak of scurvy among the men,

however, constrained him to abandon this intention. The surgeon declared it as his opinion that it would be unwise to keep either of the two ships out a third winter, and Parry, rather than expose his crews unnecessarily, resolved to return in company with the "Hecla." He was further confirmed in this determination by the last view he got of the strait, which was locked against him as firmly as ever by immovable ice. The ships were relieved in the middle of August, and after a most perilous voyage, in which the vessels were drifted at random down Fox Channel, Davis Strait was made, and Parry commenced at last the direct voyage homeward. He arrived at Lerwick on the 10th October 1823.

On his return Parry received a letter of congratulation from Franklin, who had the year before returned from his great land expedition; and to this letter he returned a characteristic reply, in which the following passages occur: "Your letter was put into my hand at Shetland, and I need not be ashamed to say that I cried over it like a child. The tears I shed, however, were those of pride and pleasure—pride at being your fellow countryman, brother officer, and friend; pleasure in seeing the virtues of the Christian adding their first and highest charm to the unconquerable perseverance and splendid talents of the officer and the man. . . . I cannot at present enter into any *shop* business,—I mean geographical details, but I long very much to see the connection between our discoveries. Ours are small, for our success has been small on this occasion. Briefly, the north-eastern portion of America consists of a singular peninsula, extending from Repulse Bay in $66\frac{1}{2}°$ lat. to $69\frac{3}{4}°$, and resembling a bastion at the corner of a fort, the gorge of the bastion being three days of Esquimaux journey across from Repulse Bay to Akkoolee, one of their settlements or stations on the opposite or Polar Sea side."

CHAPTER V.

PARRY'S THIRD VOYAGE, 1824-25—WINTER AT PORT BOWEN—CAUGHT IN THE ICE—THE "FURY" ABANDONED—CONCLUSION OF VOYAGE—RESULTS OF PARRY'S THREE VOYAGES.

In October 1823 Parry returned to England from his second expedition, after discovering and surveying the east coast of North America, from the parallel of 65° to 70°, and achieving the negative success of demonstrating that no north-west passage existed south of "Fury and Hecla Strait," and that that passage was impracticable, so far as his experience and observation had informed him, by being loaded with ice. The expedition, although unsuccessful, added much to existing geographical knowledge, and its results were so far valuable, as instructing future explorers that no North-West Passage was to be looked for lower than the 70th parallel. These results appeared to the Government of the time to be not only satisfactory in themselves, but promising for the future, and within two months after Parry's arrival in the country he was appointed to the command of a new expedition for the further exploration of the Polar seas. This expedition, the third and the last that Parry undertook for the discovery of the North-West Passage, was determined upon immediately after the navigator's return; and before the close of the year the famous explorer was again at the occupation—to which he was now pretty well accustomed—of fitting out his ships in Deptford dockyard.

It was no sooner decided that a new expedition was to be sent out, than the question of the special direction in which the new attempt should be made was widely discussed. Franklin's recently accomplished journey along the shores of the Polar Sea, eastward from the mouth of the Coppermine River, had brought an extensive reach of the northern shores of the American continent within the knowledge of geographers, and along these shores Parry still thought the passage might be sought with a greater chance of success, than in the higher latitude of Melville Island. In one of the numerous letters written at this time, by the famous navigator to Lord Melville, then First Lord of the Admiralty, the best route for the new expedition is discussed; and on the question of starting from the west through

Behring's Strait, or from the east as before, Parry states that, "the information lately obtained makes it less advisable than ever for England to make the attempt from any but the Atlantic side; because it is obvious, that any difficulties of a more than ordinary nature should be encountered at first, while the resources are complete, the ships uninjured, and the energy of the crews wholly unimpaired." This opinion, combined with the results of the explorer's experience at Melville Island and in "Fury and Hecla Strait," narrows the question of the most promising route to within a very limited compass. Only one opening remained unexplored—that of Prince Regent Inlet leading southward from Lancaster Sound, in the direction of the shores that had been explored by Franklin. This inlet, however, when discovered, and partly examined, by Parry in his first voyage for the discovery of a North-West Passage, had an unpromising appearance from the quantity of ice with which it was encumbered; but the channel was wide, and the well-known rapidity with which, under ordinary circumstances, changes in the state of the ice occur, even from day to day, during the summer, made it not unlikely that it would be found more favourable on a second visit. These views Parry strongly urged upon the Admiralty, and they formed the groundwork of the official instructions he received for his guidance. These instructions were simple and definite. Parry was to make the best of his way to Lancaster Sound, and, proceeding through Barrow Strait, endeavour to make a passage through Prince Regent Inlet into the sea which Franklin had discovered at the mouth of the Coppermine, and thence westward to the Pacific. The following passage of the instructions is of importance, as showing the interest taken in Arctic exploration in 1824: "His Majesty's Government having appointed two land expeditions for exploring the north coast of America, the one under Captain Lyon, to proceed from Repulse Bay across the isthmus (Rae Isthmus) to Akkoolee, and thence along the coast towards the Coppermine River, the other, under Captain Franklin, to proceed from Mackenzie River to the Icy Cape; it would be desirable, if you should reach any part of the coast, that you should mark your progress by erecting flagstaffs on a few of the most distinguishable points, which you may successively visit, and you are to bury at the foot of each staff a bottle, containing such information as you think may be useful to the land expeditions, and any particulars relative to your own proceedings, which you may think proper to add."

On the 17th January Parry was appointed to the "Hecla," and, on the same day, Captain H. P. Hoppner was appointed to the "Fury." Captain Hoppner, who was to sail under Parry's orders, was one of the most skilful Arctic navigators then in the service. He had sailed as lieutenant under Parry in the "Alexander" in 1818, in the "Griper" under Captain Liddon in 1819-20, and in the "Hecla" under Captain Lyon in 1821-23. Hooper

once more sailed with Parry as purser, and among his midshipmen were Crozier and Richards—who does not appear to have "had enough of it" even yet; while among Captain Hoppner's officers were James Clark Ross, who was now commencing his sixth year of Arctic service, and Lieutenant Thomas Austin. Sixty-two officers and men sailed in the "Hecla," and sixty in the "Fury." The expedition, which was ready to sail in the beginning of May, dropped down the Thames from Deptford on the 8th of the month, and after a brief stay at Northfleet weighed and stood out to sea on the 19th. On the 12th June the meridian of Cape Farewell, at the south extremity of Greenland, was reached, and on the 30th Captains Parry and Hoppner had the pleasure of enjoying the hospitality of the Disco officials. Standing off westward from the Danish settlement, the "main ice," or "pack," of Baffin's Bay was seen early in July. On the 13th, the expedition being then in lat. 71° 2′, long. 58° 36′, the ice was observed to be "slack" for a considerable distance within the pack. Parry had intended to cross this middle ice in a latitude one or two degrees higher; but the favourable appearance it now bore, and the fair wind and clear weather which prevailed, induced him to make the trial here. The ships were accordingly pushed several leagues within the slack margin of the pack. Progress was temporarily stopped, however, on the 1st August by a hard gale from the south-east, which pressing the ice together, in every direction, piled it up in lofty ridges, mass overlying mass. The season proved to be a wretchedly unfavourable one, and the passage of the middle ice occupied forty days. So wet and stormy was the weather that for ten weeks in July, August, and September, though the ships' companies were constantly on the watch for an opportunity of airing their bedding, they could only venture to do so once. All past obstacles, however, were soon forgotten when, on the 9th August, open water was seen ahead in the direction of the entrance to Lancaster Sound, which was reached on the following day and found to be free from ice, except that here and there "a berg was seen floating about in that solitary grandeur, of which these enormous masses, when occurring in the midst of an extensive sea, are calculated to convey so sublime an idea." On the 13th, when Parry had pushed on to within seven leagues of Cape York, the sea in advance was seen covered with young ice, for the season was now far advanced, and the thermometer had for two days past ranged only from 18° to 20°. The commander was now called upon to decide whether to advance to the westward and winter in some convenient bay, or to return to England. As the crossing of the ice in Baffin's Bay had occupied nearly the whole of the navigable season, it was clear that no success could be met with, in sailing westward, during that year. Under these circumstances Parry resolved to push on as far as the present season would permit, and give a fair trial, during the whole of the next summer, to the route he was directed, in his instructions, to pursue.

Accordingly, after beating about and experiencing much rough weather and endless difficulties with the young ice, Parry at length succeeded in entering Prince Regent Inlet on September 26th. Finding open water along the eastern shores of the inlet, he penetrated it in a southward direction. "A strong blink," he writes, "extending along the western horizon, pointed out the position of the main body of the ice, which was farther distant from the eastern shore of the inlet than I ever saw it. Being assisted by a fine working breeze, which at the same time prevented the formation of any more ice to obstruct us, we made considerable progress along the land, and at noon (on the 27th) were nearly abreast of Jackson Inlet, which we now saw to be considerably larger than our distant view of it on the former voyage had led us to suppose. . . . A few more tacks brought us to the entrance of Port Bowen, which, for two or three days past, I had determined to make our wintering-place, if, as there was but little reason to expect, we should be so fortunate as to push the ships thus far." Beating up for Port Bowen, which he found filled with "old" ice in ridged "hummocks" attached to the shores on both sides, and extending from the head of the harbour for a distance of about three miles, Parry cut an artificial dock for his vessels in the ice, and prepared to make his arrangements for the winter.

These arrangements so closely resembled those adopted in the two earlier expeditions of this explorer, that it would be repetition to describe them. And if there is little to note in the provisions made to secure the ships' companies against the winter's cold, there is as little to record in the way of incident or adventure. In the vicinity of the port there were no Eskimo families, intercourse with whom might afford the explorers at least an amusing occupation. "Indeed," writes Parry, "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 being is *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 a while forsaken."

Immediately after the ships were finally secured, the observatory was erected on shore, and arrangements were commenced for making the desirable scientific and other observations. The interest of these observations, and especially of such of these as related to magnetism, gradually increased so much, that soon the neighbourhood of the observatory assumed almost the appearance of a scattered village, so many detached houses were set up to mark the variations of the needles. As this branch of scientific investigation, however, is fully discussed in our narrative of Ross's second voyage for the discovery of the North-West Passage in 1829-33, in which expedition James Clark Ross, nephew of the commander, planted the Union Jack on the North Magnetic Pole (June 1, 1831), the reader's patience will not be here drawn upon in advance, by having the results of investigations that were only as yet tentative and partial placed before him. The amount of atmospheric refraction at low temperatures, observations for latitude and longitude, and experiments with the view of determining the rate at which sound travels at different temperatures and pressures of the atmosphere, were among the other subjects of scientific investigation during the winter of 1824-25. While the officers were engaged in these pursuits, in surveying the neighbouring coasts and country, and in noting the strange meteorological phenomena seen in Prince Regent's Inlet, the most anxious attention was paid to preserving the bodily health of the crews, and keeping their minds in constant occupation. Theatrical amusements were thought to have lost interest from the frequency with which they had been resorted to in previous voyages, and Captain Hoppner proposed to attempt a *masquerade,* in which officers and men should alike take part. The proposal seemed exactly to hit the humour of the men, and we can easily imagine, from the well-known fondness of sailors for practical joking and love of extravagant oddities of all kinds, that the proposal was received with enthusiasm. "It is impossible," writes Parry—and his description of these harmless *fêtes* forms a valuable suggestion to modern Arctic explorers—"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 humour which would not have disgraced a more refined assembly; while the latter might not have disdained, and would 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 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." More

valuable occupation, however, was found in the schools established under the superintendence of Mr Hooper, purser of the "Hecla," and Mr Mogg, clerk of the "Fury." In these schools, those of the men who were backward in "the three R's" received instruction in them, and made wonderful progress. Nor was the benefit confined to these odd pupils alone—it extended itself to the rest of the ship's company, "making," says Parry, "the whole of the lower deck such a scene of quiet, rational occupation as I never before witnessed on board a ship. And I do not speak lightly when I express my thorough persuasion that to the moral effects thus produced, were owing, in a very high degree, the constant yet sober cheerfulness, the uninterrupted good order, and even, in some measure, the extraordinary state of health which prevailed among us during this winter."

In these employments the weeks and months of the long winter sped on. Three land expeditions were undertaken by Captain Hoppner into the interior eastward from Port Bowen, and by Lieutenants Sherer and Ross along the coasts north and south from the port respectively. As these travelling parties made no striking discovery, however, it is enough merely to mention them. Towards the end of June the dovekies (*Colymbus grylle*) were seen swarming in the cracks of the ice at the mouth of the port, and were shot in great numbers; but it was not till the 20th July that the ice in the port broke up and allowed the "Hecla" and "Fury" to get clear out to sea. Parry first made sail to the western shore of Prince Regent's Inlet, but was stopped by ice, after sailing eight miles. On the following day he could perceive no opening of the ice leading towards the western land—no appearance of any channel to the southward along the eastern shore. He then made sail northward and coasted for a time in the neighbourhood of the Leopold Isles, which he had discovered in 1819. The south promontory of the southernmost island he describes as particularly picturesque and beautiful—the heaps of loose *débris* lying here and there up and down the sides of the cliff, giving it the appearance of some huge and impregnable fortress, with immense buttresses of masonry supporting the walls. Stretching southward from these islands, Parry coasted along the western shore of the inlet past Cape Seppings. On the 25th and 26th July respectively he discovered and named Elwin Bay and Batty Bay. He now perceived that the ice closed completely in with the land a short distance to the south, and having made all the way he could, he was obliged to stand off and on during the day in a channel not three-quarters of a mile wide. Towards evening this channel became more contracted, and, fearing the seaward ice, Parry made fast to some grounded ice on the beach. On the 28th, advantage was taken of a north-west wind to run down along the coast about eight or nine miles. Here Parry was stopped by the ice, which stretched close in to the shore in a closely packed and impenetrable body, as far as the eye could reach from the crow's-nest.

Anxious, however, to gain every foot of advance, the commander pushed along to the termination of the open channel, and was there preparing to anchor, when to his disappointment and alarm he observed that the sea-ice was in rapid motion towards the shore, and that his ships were in the greatest peril of being crushed between the advancing ice-field and the beach, or rather the grounded ice upon the beach. The "Hecla" was caught by the ice and drifted shorewards, the "Fury" was hauled in beside some grounded masses. On the 30th, the "Hecla" was shifted a mile and a half to the southward—the "Fury" remained where she was, there being no other available berth even so good as the bad one in which she was lying. From this most dangerous position, with the advancing ice on the one hand and a shelterless shore on the other, Parry succeeded in extricating the "Hecla;" but all the efforts of Captain Hoppner, during days and nights of incredible labour, were ineffectual in getting the "Fury" clear of the ground upon which the ice at length drove her. On several occasions the "Fury" was moved, and it was Parry's intention to get her into some harbour in which she could be refitted; but again and again was the unfortunate sloop driven aground, and her timbers stove in. During the storms which prevailed, while the "Fury" was being broken on the beach at Fury Point, Parry continued to cruise in the neighbourhood—discovering and naming Cape Garry and Cresswell Bay—ready to afford any assistance to the grounded vessel. It soon became doubtful whether such assistance would be of any avail, and on the 25th August Captain Parry, accompanied by Captain Hoppner, left the "Hecla" in two boats to go and examine the stranded vessel. "We found her," writes Parry, "heeling so much outward, that her main channels were within a foot of the water, and a large floe-piece, which was still alongside of her, seemed alone to support her below water, and to prevent her falling over still more considerably. The ship had been forced much farther up the beach than before, and she had in her bilge above nine feet of water, which reached higher than the lower-deck beams. . . . The first hour's inspection of the "Fury's" condition too plainly assured me that exposed as she was, and forcibly pressed up upon an open and stony beach, her holds full of water, and the damage to all appearance and in all probability more considerable than before, without any adequate means of hauling her off to seaward, or securing her from the further incursions of the ice, 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." Unwilling, however, to trust solely to his own opinion on the advisability of abandoning the "Fury," Parry instructed Captain Hoppner and Lieutenants Austin and Sherer, together with the carpenter, to hold a survey upon the "Fury," and report. These gentlemen formed a species of jury, who "sat upon" the unfortunate

ship, and after a careful examination, pronounced her hopelessly damaged. There was now nothing for it but to abandon her on the wild beach on which her timbers had been crushed. It was "with extreme pain and regret" that the commander now made the signal for the "Fury's" officers and men to be sent for their clothes, most of which had been put on shore with the stores. The officers and men were allowed an hour for packing up their clothes, etc., after which the "Fury's" boats were hauled up on the beach, and at two A.M. Captain Parry left her, followed by Captain Hoppner, Lieutenant Austin and "the last of the people."

The whole of the "Fury's" stores—which formed a magazine from which several subsequent expeditions obtained much-needed supplies—were of necessity left either on board the abandoned sloop or on the shore, as every square foot of space in the "Hecla" was now required for the accommodation of the double complement of officers and men, whose cleanliness and health could only be maintained by keeping the decks as clear and well-ventilated —as free from litter and lumber—as possible. What was now to be done? After the first accident happened to the "Fury," Parry expected to have been able to repair her damages, and, with many weeks of the open season still before him, to carry on sail towards the south. But as soon as the gales burst upon them, beating upon the harbourless shore, and tearing away the grounded ice which formed their protection against the floes driven in from the offing, and thus destroying all hope of repairing the damaged sloop, all the conditions of the situation were altered. Taking into consideration the little progress that had been made, the uncertain nature of the navigation of these hitherto undiscovered seas, the advanced period of the season, and the circumstance that the stores of the expedition were now diminished by about one-half, Parry felt that it would be folly to prosecute the voyage, and that his clear duty under all the circumstances of the case, and in compliance with the terms of his instructions, was to return to England at once. Accordingly, as soon as the boats were hoisted up and stowed, the "Hecla's" head was put to the north-eastward, and advantage was taken of a light air off the land, to gain an offing before the ice should again set inshore. "Fury Beach," the spot where the wreck of the sloop, with its boats and stores, was left, is in lat. 72° 42′, long. by chronometers 91° 50′.

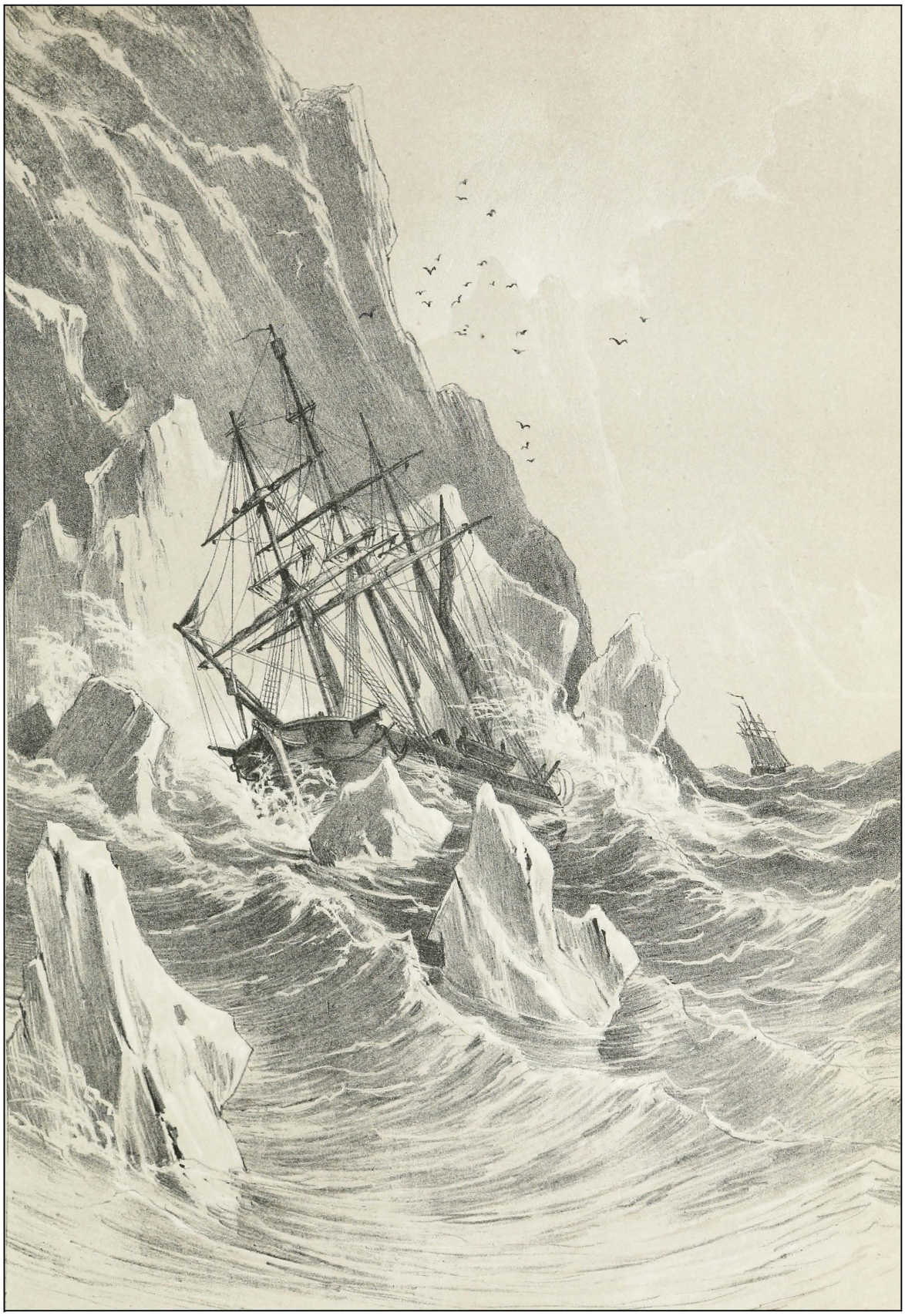
On the 27th August a breeze from the northward sprang up, and the "Hecla" was taken across the inlet to the eastern shore, and anchored in Neill's Harbour, a few miles to the south of Port Bowen, for the purpose of restowing the hold, and generally preparing her for the voyage across the Atlantic. All preparations completed, Parry weighed and stood out to sea on the 31st, and by four A.M. on the 1st September, having beat to windward of a compact body of ice which had fixed itself on the lee-shore about Cape York, he found himself in a perfectly open sea in Barrow Strait, and,

bearing along to the eastward, was entering Baffin's Bay on the 3d. After a somewhat stormy voyage, the "Hecla" made the Orkney Islands, 10th October 1825, and on the 12th Parry landed at Peterhead, and, setting off without delay for London, arrived at the Admiralty on the 16th.

Thus ends the outline of Parry's third and last voyage for the discovery of the North-West Passage—his fourth and most successful, as well as most striking voyage being undertaken for the purpose of reaching the North Pole. He had spent in all eight successive seasons in the search for the North-West Passage, and to him is due the splendid merit of the discoveries of Lancaster Sound and Barrow Strait, Wellington Channel, leading northwards, and Prince Regent Inlet, leading southward from this great westward passage, and also of the great islands, Melville Island and Banks' Land. His great experience in the Arctic seas constitutes him one of the greatest authorities on navigation in the Far North; and the general remarks on this subject with which he concludes the narrative of his third voyage may be said to embody the results of his experience as an Arctic navigator. One circumstance forced itself upon his notice in the course of his various attempts to penetrate through the ice in these regions—namely, "that the *eastern* coast of any portion of land, or, what is the same thing, the *western sides of seas* or inlets, having a trending at all approaching to north and south, are, at a given season of the year, generally more encumbered with ice than the shores which have an opposite aspect." In support of this general statement of the results of his own observation, Parry adduces the following instances: "In the great Northern Sea, between Spitzbergen and Lapland on the east and Greenland on the west, the western shores—those of Greenland—are blocked up by ice throughout the summer, so as to make it a difficult matter to approach them; while the navigation of the eastern portion of that sea may be annually performed without difficulty, even to a very high latitude, and at an early part of the season. A second equally well-known instance," says Parry—and here, as he is speaking in authority, his own words are given—"occurs in the navigation of Davis Strait, which from about Resolution Island, in lat. 61½° to the parallel of at least 70°, is usually inaccessible as late as the month of August, and a great deal of it in some summers not accessible at all; while a broad and navigable channel is found open on the eastern side of the strait (that is, on the western coast of Greenland) many weeks before that time. We experienced a third, and very striking, example of this kind in coasting the eastern shore of Melville Peninsula, in the years 1822 and 1823, the whole of that coast being so loaded with ice as to make the navigation extremely difficult and dangerous. Now, on the *eastern* side of Fox Channel (the side opposite the shore of Melville Island), there is reason to believe, as well from the account of that navigator in 1631, and of Baffin in 1615, as from our own observation, that

there is little or no ice during the summer season. . . . The last instance of the same kind, which I shall mention, is that of Prince Regent's Inlet, of which the events of this voyage furnish too striking a proof—the ice appearing always to cling to the western shore in a very remarkable manner, while the opposite coast is comparatively free from it." Taking all these facts together, Parry was deeply impressed with the idea "that there must exist in the Polar regions some general motion of the sea towards the west, causing the ice to set in that direction, when not impelled by contrary winds, or local and occasional currents, until it butts against those shores which are actually found to be most encumbered by it." In confirmation of the existence of a generally prevalent westward setting current, this navigator states several cases in which his vessels were carried to the westward, even against a strong breeze from that direction. On this interesting topic Parry concludes: "Whether the circumstances I have above stated may have any reference to the well-known fact of the western shores of lands enjoying a climate considerably more temperate than the eastern ones, in a corresponding latitude, I do not presume even to conjecture; nor indeed do I feel myself confident to offer any decided opinion as to the cause of the phenomena in question. Having stated the facts precisely as they have occurred to my notice, I shall only therefore add to these remarks by suggesting, for the consideration of others, *whether such a tendency* of the sea, as that above noticed, *may not have some connection with the motion of the earth on its axis.*" It was not until many years after Parry wrote the above that the motions of winds and currents were reduced to a science by Captain Maury of the United States Navy, and by Dr Carpenter, one of the most distinguished of English physicists. But it has now some time been known that there was truth in Parry's surmise, that the westward motion of the Polar Sea had "some connection with the motion of the earth on its axis." What that connection precisely was, was unknown to Parry, and he candidly confessed it. Perhaps nowhere is the "connection," if strictly speaking it may so be called, more clearly and briefly described than by Dr Carpenter in his pregnant essay on "Ocean-Circulation" in the *Contemporary Review* for September 1875. "Much ink," writes Dr Carpenter, "has been wasted in the discussion of a question, which the common sense of any one who rightly apprehends the fundamental principles of physics should enable him to answer at once—viz., the influence of the earth's rotation upon the movement of the water which fills its ocean basins. This influence, supposing the water to be otherwise stationary, will be simply *nil;* for the water lying under each parallel will have the same rate of rotation from west to east as the solid earth under that parallel. But suppose that a large body of water has a movement of its own, either from a lower to a higher, or from a higher to a lower parallel; it will then, according to a well-known

principle of physics, carry with it the easterly momentum of the parallel it has quitted into a parallel which has a different rate of eastward movement; and thus, if flowing from a lower to a higher latitude, it will carry with it an excess of easterly momentum, which will cause it to tend constantly towards the east; whilst if flowing from a higher to a lower latitude, it will arrive at the latter with a deficiency of easterly momentum, causing it to be (as it were) left behind, so as to tend constantly towards the west. Now the excess of easterly momentum possessed by the Gulf Stream, in virtue of its northerly flow, was rightly assigned by Captain Maury, as a principal cause of its easterly change of direction where the parallels of latitude are rapidly shortening; and I apply the same principle to explain the very strong eastward tendency of the poleward upper flow, which carries it (the Gulf Stream) not only to the shores of Norway, but past the North Cape towards Nova Zembla. But if this be true, the converse also will be true in regard to any southward movement of Arctic water; and thus we see not only why the continuation of the Greenland and Labrador current should have a westerly tendency which keeps it close to the shore of the United States, but also why the glacial underflow should approach the surface along the coast line." In other words, the Arctic water, having a southward motion of its own towards the equator, encounters as it flows the ever-increasing momentum towards the east of the lower latitudes, and thus becomes practically a vast current pressing ever the more directly westward, the lower the parallel to which it reaches.



THE LOSS OF THE FURY.

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CHAPTER VI.

FRANKLIN'S SECOND LAND EXPEDITION, 1825-27 — THROUGH THE CANADIAN LAKES—OLD FRIENDS—PRELIMINARY VOYAGE DOWN MACKENZIE RIVER—THE PLANTING OF THE UNION JACK ON THE POLAR SHORE—RETURN TO WINTER QUARTERS.

FRANKLIN arrived in England in the summer of 1822, after having accomplished his great overland journey to and from the shores of the Polar Sea. In October 1823, Parry found himself again at home after his second voyage for the discovery of the North-West Passage, and a few weeks after his return, the discoverer of the Fury and Hecla Strait was appointed to a new expedition, for the purpose of prosecuting the search for a passage by way of Prince Regent Inlet. No sooner was this new expedition resolved upon, than Franklin, thinking that Government would do well not to confine themselves to one route, in pursuing the object after which they had been striving for three centuries, laid before the Lords of the Admiralty "a plan for an expedition overland to the mouth of the Mackenzie River, and thence, by sea, to the north-western extremity of America, with the combined object, also, of surveying the coast between the Mackenzie and Coppermine rivers." In his proposals to carry out this plan, Franklin was able to show that the dangers of his previous expedition would not be incurred in the undertaking proposed, while the objects to be attained were important at once to the naval character, scientific reputation, and commercial interests of Great Britain. The application was favourably received, and Franklin was appointed to the command of the new overland expedition, and was directed to proceed at once with the preparations for its equipment. These preparations consisted mainly in organising a system whereby regular supplies of provisions would be guaranteed to the explorers, in selecting stores for their own use, and for distribution among the Indians, etc., and in superintending the construction of boats better adapted for the navigation of the ice-encumbered Polar Sea than the birch-bark canoes, which were so well adapted for the navigation of the rivers that flow into that sea. The boats were built of mahogany with timbers of ash—the largest twenty-six feet, and two others twenty-four feet in length. A fourth boat, called the "Walnut-

shell," nine feet long and four feet four inches broad, which weighed only eighty-five pounds, and could be taken apart and made up in five or six parcels, and put together again in twenty minutes, was also constructed. A large quantity of pemmican was made in England and sent out to Great Bear Lake, upon which Franklin resolved to fix his winter quarters, and arrangements were made with the Governor and Directors of the Hudson's Bay Company, and with their factors and traders, to provide the necessary depôts of provisions at the places which Franklin pointed out. Franklin's official instructions were to proceed with his party by the packet from Liverpool to New York, and thence to make the best of his way to Lake Huron, where the stores necessary for his journey had been sent in advance, and afterwards, embarking in canoes, he was to follow the water communication to the western side of the Great Bear Lake, where he was to establish his winter quarters. In the spring of 1826 he was to proceed down the Mackenzie River to the Polar Sea, and to sail westward along the coast to Icy Cape, round which he was to push on into Kotzebue's Inlet, where he would meet H.M.S. "Blossom." Meantime a party from the expedition was to be despatched to examine the intermediate coast between the Mackenzie and Coppermine rivers.

The expedition, consisting of Captain Franklin, Lieutenant Back, Dr Richardson, Mr Kendall (assistant surveyor), and Mr Thomas Drummond (assistant naturalist), accompanied by four marines, among whom was Robert Spinks, of whom the last we heard was his performing the extraordinary feat of "shooting the glacier" in Spitzbergen (p. 73), embarked on board the American packet-ship at Liverpool on the 16th February 1825. They arrived at New York on the 15th March, and were soon on their way to the Canadian lakes. They proceeded by Rainy Lake, the Lake of the Woods, Lake Winnipeg, and the Saskatchevan River, to Cumberland House, and thence through Pine Island Lake, and Lake Isle à la Crosse. "In the course of this voyage," writes Franklin, "we met the gentlemen of the Hudson's Bay Company proceeding from the interior with various brigades of canoes, carrying the returns of trade for the year to York Factory, and I had not only the satisfaction of hearing frequent news of the progress of our (advance) boats, but that the deposits of provisions I had requested, and the other arrangements I had made, were all punctually carried into effect." Resuming his voyage from Isle à la Crosse station on the 27th June, through Deep River, Clear and Buffalo Lakes, the officers of the expedition overtook the advance boats in Methye River on the 29th June. At this point the boats had advanced 1200 miles from Hudson's Bay into the interior, and Franklin and his party taking the more circuitous route by New York and Canada had travelled 2800 miles to reach the same point.

Starting on the 29th June the whole expedition advanced northwards, and on the evening of the 29th July reached Fort Resolution on Great Slave Lake. All the difficult portages on the road to Bear Lake being now passed, the Canadians requested that they should be allowed to commemorate the event by a dance, which amusement they kept up all night till daylight to the music of bagpipes relieved occasionally by a Jew's harp—the *piano* and *forte* passages being no doubt well marked. At this station Franklin was glad to meet again with his old Copper-Indian friends, Keskarrah and Humpy, the brother of Akaitcho, who had been waiting here for two months for the express purpose of seeing the "white father" once more. "These excellent men," says Franklin, "showed that their gratification equalled ours, by repeatedly seizing our hands and pressing them against their hearts, and exclaiming 'How much we regret that we cannot tell what we feel for you here!' Akaitcho had left the fort about two months previously on a hunting excursion, hoping to return with plenty of provision for our use, by the middle of August, which was as early as he thought we should arrive." The journey was resumed on the 31st, on the evening of which day the expedition arrived at the Isle of the Dead and took observations in lat. 61° 1′ N., long. 114° 18′ W. A small party of Chipewyan Indians joined the explorers at this encampment and informed them that they had supplied Dr Richardson (who had gone on in advance) with dried meat on the preceding day. "The chief was very importunate for rum," writes Franklin, "but I steadily adhered to the determination I had formed this time, on my entering the Fur Country, of not giving spirits to any Indian. A share of our supper and tea and some tobacco were offered to him, and accepted though with a bad grace. The Fur Company ceased the following season to bring any rum to this quarter, and I learned that this man was one of the few natives who were highly displeased at this judicious change."

The canoes entered the Mackenzie River on the 2d August, and on the 7th the expedition reached Fort Norman, situated 574 miles from Fort Resolution, and four days' journey from Bear Lake. From this point, had Franklin been desirous of getting at once to his winter quarters on Bear Lake, he would have journeyed eastward to its shores. But the season was yet early, and he was most desirous of obtaining some information respecting the condition of the ice, the direction of the coast, etc., to the east and west of the embouchure of the Mackenzie in the Polar Sea. Accordingly, he set off, accompanied by Mr Kendall, down the river, on the 8th August, on his preliminary visit to the sea. Meantime it was arranged that Lieutenant Back, leaving the Mackenzie, should conduct the main body of the expedition up the Bear Lake River (an affluent of the Mackenzie), eastward to the shore of the Bear Lake, and should there superintend the erection of the buildings which were to form the winter quarters of the exploring party.

A singular phenomenon, observed by Franklin on his voyage down the great stream to the Polar Sea, is thus described: "A few miles above Bear Lake River, and near its mouth, the banks of the Mackenzie contain much wood-coal, which was on fire at the time we passed, as it had been observed to be by Mackenzie in his voyage to the sea. Its smell was very disagreeable. On a subsequent trial of this coal at our winter quarters, we found that it emitted little heat, and was unfit for the blacksmith's use. The banks likewise contain layers of a kind of unctuous mud, similar perhaps to that found on the borders of the Orinoco, which the Indians in this neighbourhood use occasionally as food during seasons of famine, and even, at other times, chew as an amusement. It has a milky taste, and the flavour is not disagreeable. We use it for whitening the walls of our dwellings, for which purpose it is well adapted."

Sailing swiftly with the stream, on the 16th the party arrived at Ellice Island, in lat. 69° 14′, long. 135° 57′. From this point, which is 1045 miles from Slave Lake, the water to the northward had a sea-like appearance, and after continuing the voyage for an hour or two, Franklin had the "indescribable pleasure" of finding that the water had a decidedly salt taste, and that he had now without doubt reached the Polar Sea, and had consequently carried exploration farther in this direction than any previous navigator. Beyond this point every geographical fact ascertained was a *discovery*. "The sun was setting," says Franklin, "as the boat touched the beach, and we hastened to the most elevated part of the island to look round. Never was a prospect more gratifying than that which lay open to us. The rocky mountains were seen from S.W. to W. ½ N.; and from the latter points, round by the north, the sea appeared in all its majesty, entirely free from ice, and without any visible obstruction to its navigation. Many seals and black and white whales were sporting on its waves; and the whole scene was calculated to excite in our minds the most flattering expectations as to our own success and that of our friends in the 'Hecla' and the 'Fury.'"

At this stage of the explorer's narrative, a passage occurs, which, as giving us clear insight into the personal character of the man, is of the deepest interest. In 1823 Franklin had married Miss Eleanor Purdon, the accomplished authoress of "The Veils," "The Arctic Expedition," and other poems. A woman of an essentially noble nature, her admiration for all that was heroic in the character of her husband, was only equalled by her intelligent appreciation of his gifts and achievements. Bright and happy was the married life of this equal-mated pair. In the early spring of 1823, Franklin had agreed to sail upon the expedition on which he was now engaged. For some time before he left England, his wife had been suffering from severe illness; but her whole heart was bound up in her husband's new venture, and during the last days in which she enjoyed his companionship, she

beguiled the tedium of her sick-room by making for him a small silk Union Jack. "Never unfurl it," she said, "until you plant it on the shores of the Polar Sea." Fain would Franklin have remained with her till the period of danger should be overpast; but her magnanimous spirit was uninfluenced by affection; and in the sublime moment of parting, she felt only that duty and honour were calling her husband from her, and she joined her voice to theirs and bade him go. A few days after the expedition sailed she died. After reaching America, Franklin received the intelligence of her death; and now, six months after she had been laid in her grave, he stood, with her silken flag in his hand, upon the shores of that Polar Sea which was so constantly in her mind during the few days before she herself reached that farther shore of which all of us must become explorers. We may imagine with what emotions he unfurled this reliquary flag, thinking the while about the grave away in distant England, upon which the first summer's flowers were still in bloom. In the following passage, so admirable in its dignity and unobtrusive grief, the feelings of the man are to be measured chiefly by the apparent effort to conceal them. "During our absence (surveying the ocean from the island-height), the men had pitched the tent upon the beach, and I caused the silk Union flag to be hoisted, which my deeply-lamented wife had made and presented to me as a parting gift, under the express injunction that it was not to be unfurled before the expedition reached the Polar Sea. I will not attempt to describe my emotions as it expanded to the breeze—however natural, and, for the moment, irresistible, I felt that it was my duty to suppress them, and that I had no right, by the indulgence of my own sorrows, to cloud the animated countenances of my companions. Joining, therefore, with the best grace that I could command, in the general excitement, I endeavoured to return, with corresponding cheerfulness, their warm congratulations on having thus planted the British flag on this remote island of the Polar Sea."

Grief and mirth are next-door neighbours in this world, and live almost together. At military funerals, the despairing strains of the Dead March are separated only by a muttered prayer and a rattle of musketry from the quick-step of "The girl I left behind me;" and no sooner had Franklin planted his flag, with the hopes of his early manhood at its base, than duty called him to serve out the grog, and call upon his men to join him in three cheers for the king, and for the continued success of their expedition. "Mr Kendall and I," adds the commander, "had also reserved a little of our brandy in order to celebrate this interesting event; but Baptiste (the Canadian guide), in his delight at beholding the sea, had set before us some salt water, which, having been mixed with the brandy before the mistake was discovered, we were reluctantly obliged to forego the intended draught, and to use it in the more classical form of a libation poured

on the ground. Baptiste, on discovering that he had actually reached the ocean, stuck his feathers in his hat, and exultingly exclaimed, 'Now that I am one of the *Gens de la mer* (men of the sea), you shall see how active I shall be, and how I shall crow over the *Gens du nord*'—the name by which the Athabasca voyagers were designated."

Franklin wrote an account of his progress, embodying all necessary information respecting the distance of the nearest station of the Company, etc., for the use of Captain Parry, in the event of that navigator being successful enough to find his way into the Polar Sea, and deposited the letter under a pole erected for the purpose, on which a blue and red flag was left flying to attract attention. Having coasted about for some little distance on both sides of the mouth of the Mackenzie, and noted a few of the localities, Franklin commenced the return voyage on the 18th August to the winter quarters on Bear Lake, where he and his party arrived in safety on the 4th September.

CHAPTER VII.

BUILDING FORT FRANKLIN—CHRISTMAS AT FORT FRANKLIN—THE SUMMER VOYAGE COMMENCED—HOSTILE ESKIMOS—STOPPED FOR WANT OF SLEDGES—CONCLUSION OF VOYAGE.

ALL Franklin's preparations for passing the winter months at Great Bear Lake had been carefully made. He knew that a residence in the northern parts of America, where the party must depend for subsistence on the daily supply of fish, or on the more precarious success of Indian hunters, involved many duties requiring the superintendence of a person experienced in the management of the fisheries, and accustomed to direct the labours of working parties of Canadians and Indians. During his first overland journey he had many opportunities of gauging the qualifications of Mr Dease, chief trader of the Hudson's Bay Company, for such a post, and he had succeeded in obtaining the sanction of Government in employing that gentleman on the expedition. Mr Dease had arrived at the proposed winter quarters on Great Bear Lake, with fifteen Canadian voyagers, Beaulieu the interpreter, and four Chipewyan hunters, on the 27th July 1825. A number of the Dog-Rib Indians were already on the spot, and he immediately employed these to procure a supply of meat for the winter's consumption as well as fresh supplies for immediate use. Great Bear Lake, however, was regarded as the source from which the main supplies of the explorers were to be derived, and Mr Dease was decided in his selection of the site for the winter residence by its nearness to that part of the lake where fish had formerly been found in greatest abundance. This spot was the site of an old fort that had once been occupied as a station of the North-West Company, but had been for some time abandoned. Here the buildings of the new fort were erected without delay. They were arranged so as to form three sides of a square, and consisted of the officers' and men's houses, the interpreter's house, blacksmith's shop, and two stores. The whole was enclosed by the stockading of the original fort, which was found serviceable as a screen from the snow-drift and wintry blasts. The name of Fort Franklin had been given to the buildings previously to the arrival of the

leader of the expedition, and at the desire of the officers this name was retained. The number of persons belonging to the establishment amounted to fifty—consisting of five officers, including Mr Dease; nineteen British seamen, marines, and voyagers; nine Canadians; two Eskimos; Beaulieu and four Chipewyan hunters; three women, six children, and one Indian lad. This party was too large to obtain subsistence by fishing at one station, and two houses were therefore erected, at the distance of four and seven miles from the fort, to which parties furnished with fishing nets, etc., were sent. At the fort itself from fifteen to twenty nets were kept in use, under the management of an experienced Canadian fisherman and assistants. These yielded daily, during the summer and autumn, from 300 to 800 fish, of the kind called the "herring-salmon of Bear Lake." The men were told off in separate bands—to attend the nets, bring home the meat that the Indian hunters killed, cut, bring home, and split up fuel, etc.; and when the days shortened, a school was organised under the superintendence of the officers, and which was attended by most of the British party. The officers were employed in making and registering observations; but they had also special duties—Lieutenant Back had the general superintendence of the men, and filled up leisure time in sketching and making finished drawings; Dr Richardson combined the duties of medical officer with those of naturalist; Mr Kendall was entrusted with the construction of all the charts after the calculations had been revised by Franklin; and Mr Dease had enough to do in collecting and issuing provisions, and in keeping his Canadians and Indians up to their work.

Writing on the 23d September, Franklin thus describes the ceremony of "opening" the fort: "The chimney of the last of the buildings being completed this morning, the flagstaff erected, and all the men assembled, we commemorated these events by the festivities usual on the opening of a new establishment in this country. The first part of the ceremony was to salute the flag. The men having drawn themselves up in line, and the women and children and all the Indians resident at the fort being dispersed in groups by their side, a deputation came to solicit the presence of the officers. When we appeared, we found our guns ornamented with blue ribbons, and we were requested to advance and fire at a piece of money which was fastened to the flagstaff. The men then fired two volleys, and gave three hearty cheers, after which Wilson the piper struck up a lively tune, and placing himself at the head of his companions, marched with them round to the entrance of the hall, where they drank to his Majesty's health, and to the success of the expedition. In the evening the hall was opened for a dance, which was attended by the whole party dressed in their gayest attire. The dancing was kept up with spirit to the music of the violin and bagpipes until daylight."

For a month or two from this date, little occurred that would be considered worthy of note by readers of the present day. The occupations of the officers and men were constant, and the time seemed to pass so swiftly, that the shortest day came upon them almost unexpectedly. In all Arctic expeditions the celebration of Christmas is always interesting, and the following vivid passage describes the Christmas of 1825 at Fort Franklin: "On the evening of the 24th, the Indian hunters, women, and children, were invited to share in a game of snap-dragon, to them an entire novelty. It would be as difficult to describe the delight which the sport afforded them after they recovered their first surprise, as to convey the full effect of the scene. When the candles were extinguished, the blue flame of the burning spirits shone on the rude features of our native companions, in whose countenances were portrayed the eager desire of possessing the fruit, and the fear of the penalty. Christmas Day falling on a Sunday, the party were regaled with the best fare our stores could supply; and on the following evening a dance was given, at which were present sixty persons, including the Indians, who sat as spectators of the merry scene. Seldom, perhaps, in such a confined space as our hall, or in the same number of persons, was there greater variety of character, or greater confusion of tongues. The party consisted of Englishmen, Highlanders (who mostly conversed with each other in Gaelic), Canadians, Eskimos, Chipewyans, Dog-Ribs, Hare Indians, Cree women and children, mingled together in perfect harmony. The amusements were varied by English, Gaelic, and French songs." On the morning of the 1st January 1826, the men assembled in the hall to offer their congratulations to the officers. Divine service was afterwards read, and in the evening the New Year was welcomed with singing and dancing. While these rejoicings was going forward, the thermometer registered the very trying temperature of 49° below zero, which was lower than was felt on any other occasion during the winter.

The month of February was a very anxious one to Franklin. The produce of the nets and fishing lines had been gradually diminishing during January, until the supply did not afford more than three or four small herrings to each man. The stock of dried meat was expended, and it was feared that before the return of the deer in spring the party would be in want. Toward the close of the month, however, a number of deer were shot, and the season of plenty again set in. "The conduct of the men during the season of scarcity," writes Franklin, "was beyond all praise; and the following anecdote is worthy of record, as displaying the excellent feeling of a British seaman, and as speaking the sentiments of the whole party. Talking with Robert Spinks as to the difference of his present food from that to which he had been accustomed on board ship, I said, I was glad the necessity was over of keeping them on short allowance. 'Why, sir,' said

he, 'we never minded about the short allowance, but were fearful about having to use the provisions intended for next summer; we only care about the next voyage, and shall all be glad when the spring comes, that we may set off; besides, at the worst time, we could always spare a fish for each of our dogs.' During the period of short allowance, the three dogs under the charge of this man were kept in better condition than any of the others."

In the early summer, preparations were actively carried on for the voyage to the Polar Sea, to carry out the objects of the expedition, and on the 15th June the equipment of the boats was completed. Fourteen men including Augustus, the Eskimo interpreter, were appointed to accompany Franklin and Back in the "Lion" and "Reliance," and ten, including Ooligbuck, were told off to sail with Richardson and Kendall in the "Dolphin" and "Union." On the 20th both parties left the fort, leaving old Cotè, the fisherman, in sole charge until Mr Dease should return. The old Canadian, Cotè, sharing the enthusiasm of the whole party, would not allow the explorers to depart without giving his hearty though solitary cheer, which was returned in full chorus from the departing boats. On the 3d July, after having been a number of days on the Mackenzie River, sailing northward to the sea in company, Franklin gave Richardson his final instructions. The doctor was to take Mr Kendall and ten men and proceed in the "Dolphin" and "Union" to survey the coast between the Mackenzie and Coppermine Rivers. On reaching the latter river, he was to travel by land to the north-east arm of Great Bear Lake, where Beaulieu was under orders to meet him with a boat for the conveyance of his party to Fort Franklin. "As the parties," writes Franklin, "entertained for each other sentiments of true friendship and regard, it will easily be imagined that the evening preceding our separation was spent in the most cordial and cheerful manner. We felt that we were only separating to be employed on services of equal interest; and we looked forward with delight to our next meeting, when, after a successful termination, we might recount the incidents of our respective voyages. The best supper our means afforded was provided, and a bowl of punch crowned the parting feast. . . . By six in the morning of the 4th (July) the boats were all laden, and ready for departure. It was impossible not to be struck with the difference between our present complete state of equipment and that on which we had embarked on our former disastrous voyage. Instead of a frail bark canoe, and a scanty supply of food, we were now about to commence the sea voyage in excellent boats, stored with three months' provision. At Dr Richardson's desire, the western party (Franklin's) embarked first. He and his companions saluted us with three hearty cheers, which were warmly returned; and as we were passing round the point that was to hide them from our view, we perceived them also embarking."

On the 7th, having obtained an observation for latitude in 68° 53′ N., and having walked towards the mouth of the river, Franklin "discovered on an island which formed the east side of the bay, into which the river opened, a crowd of tents, with many Eskimos strolling among them. I instantly hastened to the boats to make preparations for opening a communication with them, agreeably to my instructions. A selection of articles for presents and trade being made, the rest of the lading was closely covered up; the arms were inspected, and every man was directed to keep his gun ready for immediate use. . . . On quitting the channel of the river, we entered into the bay, which was about six miles wide, with an unbounded prospect to seaward, and steered towards the tents under easy sail, with the ensigns flying. The water became shallow as we drew towards the island, and the boats touched the ground when about a mile from the beach. We shouted and made signs to the Eskimos to come off, and then pulled a short way back to await their arrival in deeper water. Three canoes instantly put off from the shore, and before they could reach us, others were launched in such quick succession that the whole space between the islands and the boats was covered by them. The Eskimo canoes contain only one person, and are named *kayacks;* but they have a kind of open boat capable of holding six or eight people, which is named *oomiak.* The men alone use the kayacks, and the oomiaks are allotted to the women and children. We endeavoured to count their numbers as they approached, and had proceeded so far as seventy-three canoes and five oomiaks, when the sea became so crowded with fresh arrivals that we could advance no further in our reckoning. The three headmost canoes were paddled by elderly men who most probably had been selected to open the communication. They advanced towards us with much caution, halting when just within speaking distance, until they had been assured of our friendship and repeatedly invited by Augustus to approach and receive the presents which I offered to them. Augustus next explained to them in detail the purport of our visit, and told them that if we succeeded in finding a navigable channel for large ships a trade highly beneficial to them would be opened. They were delighted with this intelligence, and repeated it to their countrymen, who testified their joy by tossing their hands aloft and raising the most deafening shout of applause I ever heard. After the first present, I determined to bestow no more gratuitously, but always to exact something, however small, in return. The three elderly men readily offered their arms and knives, as well as the ornaments they wore on their cheeks, in exchange for the articles I gave them." Franklin soon found himself surrounded by about 300 Eskimos attracted by the shouting of the three chiefs, and all of these became most anxious to share in the lucrative trade which they had seen commenced, and with endless shouting and clamour offered to sell their bows, arrows, and spears, which

they had hitherto kept concealed in their canoes. In vain did Franklin endeavour to obtain information respecting the coast. The savages were too intent upon English cutlery to trifle away time in geographical discussion. Finding his new friends becoming ever more noisy, importunate, and troublesome, Franklin resolved to leave them, and ordered the boats' heads to be turned seaward. The tide, however, was now fast ebbing, and soon both boats grounded and lay helpless and immovable. The Eskimos now consoled their benefactor by informing him, through Augustus, the interpreter, that the whole bay was alike flat, and that the British boats must consequently remain *in statu quo* and wait for the turn of the tide. Unluckily, at this stage a kayack was overset accidentally by one of the oarsmen of the "Lion," and its Eskimo owner was plunged head foremost into the shallow and muddy water, in which, from the soft nature of the bottom, he was in imminent danger of being drowned. The "Lion's" men promptly rescued him, and took him into their boat until his kayack should be righted and emptied, and Augustus, seeing him shivering with cold, wrapped him up in his own greatcoat. At first he was exceedingly angry, but afterwards reconciling himself to the inevitable, he began to amuse himself by looking about him, and he discovered that the "Lion" carried many bales, no doubt filled with wonderful goods, and that many extraordinary and magnificent articles were lying about, all of which had been concealed hitherto from the other savages by the coverings that had been carefully spread over them. He soon began to ask for everything he saw, and expressed the highest displeasure that his demands were not complied with. But much worse than this, immediately rejoining his companions, he spread among them reports of the inexhaustible riches of the "Lion," and suggested the advisability of capturing the vessels of the strangers, and making themselves independent for life in the matter of spears, knives, hatchets, and guns. The water had now ebbed so far that around the grounded boats it was only knee-deep, and the Eskimos swarmed around, slyly attempting to steal everything within their reach. Franklin now gave his men orders not to suffer any one to come alongside. The Eskimos then retired in a body, held a brief consultation, and returning, seized the "Reliance," and proceeded to drag her to the shore.

"As soon as I perceived the 'Reliance' moving under the efforts of the natives, I directed the 'Lion's' crew to endeavour to follow her; but our boat remained fast until the Eskimos lent their aid, and dragged her after the 'Reliance.' Two of the most powerful men, jumping on board at the same time, seized me by the wrists and forced me to sit between them; and, as I shook them loose two or three times, a third Eskimo took his station in front to catch my arm whenever I attempted to lift my gun or the broad dagger which hung by my side. The whole way to the shore they kept repeating the word '*teyma*,' beating gently on my left breast with their

hands, and pressing mine against their breasts. As we neared the beach two oomiaks full of women arrived, and the '*teymas*' and vociferation were redoubled. The 'Reliance' was first brought to the shore, and the 'Lion' close to her a few seconds afterwards. The three men who held me now leaped ashore, and those who had remained in their canoes, taking them out of the water, carried them to a little distance. A numerous party then, drawing their knives and stripping themselves to the waist, ran to the 'Reliance,' and, having first hauled her as far up as they could, began a regular pillage, handing the articles to the women, who, ranged in a row behind, quickly conveyed them out of sight. Lieutenant Back and his crew strenuously, but good humouredly, resisted the attack, and rescued many things from their grasp, but they were overpowered by numbers and had even some difficulty in preserving their arms. One fellow had the audacity to snatch the Canadian Vivier's knife from his breast, and to cut the buttons from his coat; whilst three stout Eskimos surrounded Lieutenant Back with uplifted daggers, and were incessant in their demands for whatever attracted their attention, especially for the anchor buttons which he wore on his waistcoat. In this juncture a young chief coming to his aid drove the assailants away. In their retreat they carried off a writing-desk and cloak, which the chief rescued, and then seating himself on Lieutenant Back's knee, he endeavoured to persuade his countrymen to desist by shouting '*teyma teyma;*' and was indeed very active in saving what he could from their depredations. The 'Lion' had hitherto been beset by smaller numbers, and her crew, by firmly keeping their seats on the cover spread over the cargo, and by beating the natives off with the butt-ends of their muskets, had been able to prevent any article of importance from being carried away. But as soon as I perceived that the work of plunder was going on so actively in the 'Reliance,' I went with Augustus to assist in suppressing the tumult; and our bold and active little interpreter rushed among the crowd on shore, and harangued them on their treacherous conduct, until he was actually hoarse. In a short time, however, I was summoned back by Duncan, who called out to me that the Eskimos had now commenced in earnest to plunder the 'Lion,' and on my return I found the sides of the boat lined with men, as thick as they could stand, brandishing their knives in the most furious manner, and attempting to seize everything that was movable; whilst another party was ranged on the outside ready to bear away the stolen goods. The 'Lion's' crew still kept their seats, but as it was impossible for so small a number to keep off such a formidable and determined body, several articles were carried off. Our principal object was to prevent the loss of the arms, oars, or masts, or anything on which the continuance of the voyage, or our personal safety, depended. Many attempts were made to purloin the box containing the astronomical

instruments, and Duncan, after thrice rescuing it from their hands, made it fast to his leg with a cord, determined that they should drag him away also if they took it."

"In the whole of this unequal contest," continues Franklin, "the self-possession of our men was not more conspicuous than the coolness with which the Eskimos received the heavy blows dealt to them with the butts of the muskets. But at length, irritated at being so often foiled in their attempts, several of them jumped on board and forcibly endeavoured to take the daggers and shot-belts that were about the men's persons; and I myself was engaged with three of them who were trying to disarm me. Lieutenant Back perceiving our situation, and fully appreciating my motives in not coming to extremities, had the kindness to send to my assistance the young chief who had protected him, and who, on his arrival, drove my antagonists out of the boat. I then saw that my crew were nearly overpowered in the fore part of the boat, and hastening to their aid, I fortunately arrived in time to prevent George Wilson from discharging the contents of his musket into the body of an Eskimo. He had received a provocation, of which I was ignorant until the next day, for the fellow had struck at him with a knife, and cut through his coat and waistcoat. . . . No sooner was the bow cleared of one set of marauders than another party commenced their operations at the stern. My gun was now the object of the struggle, which was beginning to assume a more serious complexion, when the whole of the Eskimos suddenly fled, and hid themselves behind the drift timber and canoes on the beach. It appears that by the exertions of the crew, the 'Reliance' was again afloat; and Lieutenant Back, wisely judging that this was the proper moment for more active interference, directed his men to level their muskets, which had produced the sudden panic." Very soon after, the "Lion" was also got afloat, and both boats were retiring from the beach, when the Eskimos, having recovered from their sudden terror, launched their kayacks, and were preparing to pursue. Franklin, however, instructed Augustus to tell them at once, and decisively, that the first man that came within musket range would be shot—a caution which had the desired effect.

This strange, unequal, and very exhausting struggle had lasted for several hours, and was not at an end till eight o'clock in the evening; yet the only things of any importance that had been carried off by the savage thieves were the mess canteen and kettles, a tent, a bale containing blankets and shoes, one of the men's bags, and the jib sails. The other articles lost could well be spared, and were, in fact, intended for distribution among the men who had taken them. In reviewing the contest and its results, Franklin says: "I cannot sufficiently praise the fortitude and obedience of both the boats' crews in abstaining from the use of their arms. In the first instance, I had been influenced by the desire of preventing unnecessary bloodshed, and

afterwards, when the critical situation of my party might have well warranted me in employing more decided means for their defence, I still endeavoured to temporise, being convinced that as long as the boats lay aground, and we were beset by such numbers, armed with long knives, bows, arrows, and spears, we could not use fire-arms to advantage. The howling of the women and the clamour of the men, proved the high excitement to which they had wrought themselves; and I am still of opinion that, mingled as we were with them, the first blood we had shed would have been instantly avenged by the sacrifice of all our lives." For another day the "Lion" and "Reliance" were detained near these hostile shores; but learning from Augustus (who obtained the information during a visit on shore, in the course of which the Eskimos returned a quantity of the goods they had stolen), that the tide began regularly to flow about midnight, Franklin was able, early on the morning of the 8th July, to have his boats dragged into water sufficiently deep to float them, and to resume his voyage along the shores of the Polar Sea, westward from the Mackenzie River.

On the morning of the 9th, progress was completely stopped by land-ice, or ice adhering to the shore. This ice stretched away to seaward beyond the limits of the explorers' view. The officers landed, and ascended to the top of the bank to look round, when they beheld the sea looking as firmly frozen as in winter, and close to the encampment which they now proceeded to form, the ice was piled up to the height of thirty feet. Exhausted with the exertions of the last few days, the weary explorers retired to bed, but had only just fallen asleep when they were roused by the guard calling out that a party of Eskimos were close to the tents. These natives were friendly, and informed Franklin that as soon as the wind should blow strong from the land (*i.e.*, from the south), the ice might be expected to remove from the shore, so as to open a passage for boats, and that it (the ice) would remain off shore till the stars should be seen after the long days of the Polar summer were over. "Farther to the westward," they said, "the ice often adheres to the land throughout the summer; and when it does break away, it is carried but a short distance to seaward, and is brought back again as soon as a strong wind blows down from the north upon the coast. *If there be any channels in these parts, they are unsafe for boats, as the ice is continually tossing about. We wonder, therefore,*" continued the Eskimos, "*that you are not provided with sledges and dogs, as our men are, to travel along the land when these interruptions occur.*" They further warned the explorers not to stay to the westward after the stars could be seen, because the winds would then blow strong from the sea, and pack the ice on the shore.

If this information could have been regarded as in all respects trustworthy, the wisest thing Franklin could have done would have been to put his boats about and return. But on inquiry he learned that this tribe was

usually employed during the summer in catching seals and whales, in the vicinity of the Mackenzie, and that they seldom travelled to the westward beyond a few days' journey, and were not therefore to be regarded as authorities upon the general condition of the coast between the Mackenzie and Icy Cape. Practically, however, the Eskimos were right, and the history of subsequent Arctic Exploration has established the fact that substantial progress is only to be achieved by combining the use of ships and boats with that of dogs and sledges. On this day, the 9th July, observations were obtained—lat. 69° 1′, long. 137° 35′.

On the following morning the Eskimos returned to the encampment, bringing with them pieces of dressed sealskin, sealskin boots, etc., which they were delighted to exhange for hatchets, files, ice-chisels, fire-steels, Indian awls, and fish-hooks. Presents of beads, pins, needles, and thimbles were also liberally distributed among them, and were received with noisy demonstrations. Franklin remarked that "there was in the party a great proportion of elderly persons, who appeared in excellent health, and were very active. The men were stout and robust, and taller than Augustus, or than those seen on the east coast by Captain Parry. Their cheek bones were less projecting than in the representations given of the Eskimos on the eastern coast, but they had the small eye and broad nose which ever distinguish that people. Except the young persons, the whole party were affected with sore eyes, arising from exposure to the glare of ice and snow. . . . Every man had pieces of bone or shells thrust through the septum of his nose, and holes were pierced on each side of the under lip, in which were placed circular pieces of ivory, with a large blue bead in the centre, similar to those represented in the drawings of the natives on the north-west coast of America, in Kotzebue's Voyage." Further, these natives were furnished with steel knives of Russian manufacture, and from this circumstance, as well as from their somewhat Tartar-like cast of features, as also from the facts that their style of facial decoration resembled that which was in vogue among the natives of the extreme north-west of America, seen by Kotzebue, and that they were in possession of knives of Russian manufacture, Franklin arrived at the conclusion, which to him was of vast importance under the circumstances, that communication along the shores of the Polar Sea, between the mouths of the Coppermine and Mackenzie Rivers to Icy Cape and those western shores in the neighbourhood of Kotzebue Sound, was not only possible, but was in a measure, constant and regular.

An eastern wind prevailed on the 11th, driving the loose pieces of ice on the land, while an unbroken ice-field extended to the west and formed an effectual barrier towards the west. On the morning of the 12th, heavy rain commenced, and under its effects the ice gradually loosened from the land.

In the afternoon the rain ceased and was followed by a south wind that carried the ice off-shore, and opened a sea-way westward, of which Franklin took advantage on the following morning; but after a few hours' sail, and the discovery of a wide inlet, to the headlands of which the commander gave the names of Points Sabine and King, progress was again stopped by ice. A land breeze prevailed on the 16th, and opened a passage for the boats; but was found to close after being followed up for a few hours. "The night was calm," writes Franklin, "and the ice remained in the same fixed state until six in the morning of the 17th, when, perceiving the pieces in the offing to be in motion, we launched the boats, and by breaking our way at first with hatchets, and then forcing with the poles through other streams of ice, we contrived to reach some lanes of water, along which we navigated for four hours." On the same evening the explorers reached Herschel Island, and found it inhabited by Eskimos. The strait between this island and the main shore was the only place the explorers had seen since leaving the Mackenzie in which a ship could find shelter—and even this channel was much interrupted with shoals. Lat. of island, 69° 33½′, long. 139° 3′. For a number of days after this date progress toward the west was exceedingly difficult, and on the 30th the lat. was still 69° 38′, and the long. 140° 51′. On the 2d August observations were taken in lat. 69° 43′, long. 141° 30′; and on the 4th in lat. 70° 5′, long. 143° 55′. Canning River was discovered and named on the 5th; on the following day Flaxman's Island, in lat. 70° 11′, long. 145° 50′, and on the 10th Foggy Island, in lat. 70° 16′, and long. 147° 38′, were discovered and named. Leaving the latter dreary island on the following day, the explorers set out and rowed on a northern course; but so thick was the fog that they were obliged to pause and finally to return to the island. The fog clearing off for a time in the afternoon, a second attempt was made to push on; but the same cause drove them back to the same spot—the men declaring that Foggy Island must be an "enchanted" spot. During these dark days the men were constantly wet from exposure as well as exhausted from continuous and arduous labour. "Fog," writes Franklin, "is, of all others, the most hazardous state of the atmosphere for navigation in an icy sea, especially when it is accompanied by strong breezes, but particularly so for boats where the shore is unapproachable. If caught by a gale, a heavy swell, or drifting ice, the result must be their wreck, or the throwing the provisions overboard to lighten them, so as to proceed into shoal water." Upon the enchanted island the weather continued foggy till the morning of the 16th August, when the weather becoming clear after sunrise, the explorers embarked in the highest spirits, exulting at the prospect of escaping for good from this detestable island of fogs. Passing Point Chandos, eight miles west of Foggy Island, land was lost sight of, the fog returned, and the wind freshened. As the safest measure under

such conditions, Franklin gave orders to stand out to seawards—his object being to obtain shelter by making fast to some large piece of ice. Sailing with this view, he was surprised to find himself soon among gravelly reefs, and, arriving at the same time in smooth water, he effected a landing on one of the reefs—a patch of gravel about five hundred yards in circumference, destitute of water, and with no more driftwood on it than a few willow branches sufficient to make one fire.

"The period had now arrived," writes Franklin, "when it was incumbent on me to consider whether the prospect of our attaining the object of the voyage was sufficiently encouraging to warrant the exposure of the party to daily increasing risk by continuing on. We were now only half-way from the Mackenzie River to Icy Cape; and the chance of reaching the latter depended on the nature of the coast that was yet unexplored, and the portion of the summer that yet remained for our operations." As to the conditions of navigation, he had little to expect from the remainder of a season that had been marked—as this one had been—by a succession of fogs and gales; while even already (16th August) the mean temperature of the atmosphere had shown a rapid decrease, and the approach of winter was evident from the ice of considerable thickness that now formed upon the sea every night, and from the flocks of geese that were seen hourly pursuing their course to the southward. "Till our tedious detention at Foggy Island," writes Franklin, "we had no doubt of ultimate success; and it was with no ordinary pain that I could now bring myself even to think of relinquishing the great object of my ambition, and of disappointing the flattering confidence that had been reposed in my exertions. But I had higher duties to perform than the gratification of my own feelings; and a mature consideration of all the above matters forced me to the conclusion, that we had reached the point beyond which perseverance would be rashness, and our best efforts would be fruitless." But independently of his own feelings in the matter, Franklin was not a free agent in the case; for a clause in his official instructions directed him in a manner that admitted of no misinterpretation, to commence his return on the 15th or 20th of August, "if, in consequence of slow progress, or other unforeseen accident, it should remain doubtful whether he should be able to reach Kotzebue's Inlet the same season." Taking all the circumstances of the case into consideration, Franklin wisely resolved to return to his winter quarters on Great Bear Lake. The return voyage was accordingly commenced, and concluded without serious mishap on the 21st September, on which date the commander and his party reached Fort Franklin, where they had the happiness of finding that Dr Richardson, Mr Kendall, and the members of the eastern party, had also concluded their expedition, and had returned to winter quarters safe and well.

CHAPTER VIII.

DR RICHARDSON'S NARRATIVE OF EXPLORATION EASTWARD FROM MACKENZIE RIVER.

THE exploring party, to the command of which Franklin had appointed his old comrade and brother officer, Dr Richardson, and the object of which was to examine the southern coast of the Arctic Sea eastward from the mouth of Mackenzie River, consisted of twelve men, in the "Dolphin" and "Union." We have already traced their progress to the mouth of the Mackenzie, the point at which they parted company from Franklin and Back to commence independent exploration, on the 4th July 1826.

From day to day Richardson conducted his voyage successfully and prosperously from the Mackenzie to the mouth of the Coppermine, along shores that had never previously been seen except by savage men. At this distance of time, however, and especially in consideration of the fact that for the last thirty years the interest of Arctic exploration has removed from this to another and a distant quarter of the Polar regions, it is impossible to regard the incidents of the voyage as worthy of more than merely cursory notice. These incidents were almost wholly confined to almost daily intercourse with the Eskimos who inhabited numerous and sometimes large and regularly built villages along the shore. But in all essentials Dr Richardson's Eskimos were identical with those whom Franklin met, and as we have perhaps had enough of these "dim populations" in the narrative of Franklin's westward voyage, any detailed account of Richardson's experiences among them would involve an amount of repetition, which, at this time of day, would be unendurable. The incidents that befell the "Dolphin" and the "Union" were similar to those that happened to the "Lion" and the "Reliance." The former like the latter were pestered with fleets of Eskimo kayacks, bringing savages whose chief characteristic was their intemperate greed, and who, had they not been frightened by an occasional display of fire-arms, would certainly have made a murderous attack upon the explorers. Occasionally, however, the Eskimos showed some ingenuity in their mode of pilfering. "Thus," says Richardson, "one fellow would lay hold of the boat with both hands; and while the coxswain and I were disengaging them, his

comrade on the other side would make the best use of his time in transferring some of our property into his canoe, with all the coolness of a practised thief." Another good example is given of the manner in which the Eskimos could act in concert. Three days after setting sail, Richardson had to search for a passage amongst islands, there being no longer water enough near the main shore to float his boats. The natives undertook the office of guides, and, either through accident or design, led the boats into a shallow channel where they presently grounded on a sandbank. Soon afterwards one of the natives made a forcible attempt to come into the "Dolphin," under the pretext of bartering two large knives which he held in his hands; and the dexterity he showed in getting into Richardson's boat was highly creditable. There were three kayacks between his own and the British boats, and on his giving a signal, the Eskimos in the three kayacks laid their broad paddles across from one to the other, thus bridging over the canoes and forming them into an extempore platform, across which the native darted with the agility of an acrobat, and sprang into the stern seat of the "Dolphin." His cleverness was not appreciated, however, for he was immediately emptied out again into the water. Judging from the boldness of this fellow's behaviour, and the general tenor of the conduct of the natives, Dr Richardson thought that, as a precautionary measure, it would be as well to buy up their bows, which are their most powerful weapons, and this, after some difficulty, was done. "The Eskimo bows," says Richardson, "are formed of spruce-fir, strengthened on the back by cords made of the sinews of the reindeer, and would have been prized even beyond their favourite yew, by the archers of Sherwood. They are far superior to the bows of the Indians, and are fully capable of burying 'the goose-wing of a cloth-yard shaft' in the heart of a deer." An instance is given in the course of the narrative of the force of an Indian arrow having been sufficient to break the shoulder-bone of a deer. "The jagged bone-head of the arrow was buried in the flesh, and its copper point bent up where it had struck the bone."

Dr Richardson followed the usual practice of giving names to the more striking bays, headlands, and islands of the coast as he proceeded along eastward. Many of these names still retain their places upon the last issued Admiralty Chart of the North Polar Sea—of which the map in the first part of the present work is an exact reproduction on a slightly diminished scale. The chief of these are Liverpool Bay, Cape Bathurst, Franklin Bay, Cape Parry, Dolphin and Union Strait, and Cape Krusenstern. The last-named point, in lat. 68° 23′, long. 113° 45′ W., was the most eastern part of the mainland which Richardson coasted. "By entering George IV.'s Coronation Gulf at Cape Krusenstern," says Richardson, "we connected the discoveries of this voyage with those made by Captain Franklin on his former

expedition, and had the honour of completing a portion of the North-West Passage, for which the reward of £5000 was established by his Majesty's Order in Council; but as it was not contemplated, in framing the order, that the discovery would be made from west to east, and in vessels so small as the 'Dolphin' and 'Union,' we could not lay claim to the pecuniary reward." Cape Krusenstern was discovered and named on the 7th August, "and," continues Dr Richardson, "embarking early on the 8th, and passing through several loose streams of ice, some pieces of which were 24 feet thick, we landed at nine o'clock on a bold cape to prepare breakfast. It is formed of columnar greenstone, reposing on slaty limestone, and rising precipitously from the sea to the height of 350 feet. I named this well-marked point Cape Kendall, after my highly-esteemed friend and companion, and had the pleasure of pointing out to him from its summit, the gap in the hills at Bloody Fall (a point nine miles above the mouth of the Coppermine, from which Franklin, after parting with the Indians, set out on his first voyage on the Polar Sea—page 164) through which the Coppermine River flows. Mr Kendall, having taken the necessary bearings and sketches for the completion of his chart, we descended the hill to announce to the men that a short traverse would bring us to the mouth of the Coppermine River. As we were aware of the disappointments which often spring from the premature excitement of hope, we had not previously acquainted them with our near approach to the termination of our voyage—fearing that an unfavourable bending of the coast, or an intervening body of ice, might protract it some days longer than we had expected. The gratifying intelligence that we now conveyed to them was therefore totally unexpected, and the pleasure they experienced found vent in heartfelt expressions of gratitude to the Divine Being for His protection on the voyage. At noon the latitude of Cape Kendall was ascertained to be 67° 58′ N., and its longitude by reckoning was 115° 18′ W." Re-embarking on the same day, the explorers set sail for Coppermine River, which they soon reached. They encamped on a spot within a hundred yards of the position of Captain Franklin's tents before commencing the fatal march across the Barren Grounds in his former expedition. They traced the old spot, and recognised the remains of the fires that had been made in some half-burnt wood that had lain here ever since, undisturbed.

Dr Richardson's voyage was now at an end, and the only part of his instructions that remained yet unfulfilled was that which referred to his conducting his party overland to the winter quarters at Great Bear Lake. This return journey would naturally lead them for a considerable distance up the channel of the Coppermine; but as this river, a few miles above its mouth, was totally impracticable for boats drawing more than a few inches of water, it was necessary to leave the "Union" and "Dolphin" behind, together with

all the stores, etc., not absolutely necessary for the journey. After distributing to each man his load, Dr Richardson caused the "Dolphin" and "Union" to be drawn up on shore, out of reach of any flood; and the remainder of the articles that he had brought to give the Eskimos, he packed into boxes and placed in the tents that they might be readily found by the first party of natives that passed this way. The stores consisted of "fish-hooks, lines, hatchets, knives, files, fire-steels, kettles, combs, needles, thread, blue and red cloth, gartering and beads, sufficient to serve a considerable number of Eskimos for several years." The tents were securely pitched, and the Union Jack hoisted, partly for the purpose of attracting the attention of the natives, and partly to show them the mode of erecting the tents, which might prove to be very useful in their summer journeys. On the following morning the men were marched down to take a last look of the boats, after which the march to Great Bear Lake was at once begun. On Friday 18th August 1826, his journey was completed, and after waiting for a few days for means of transport across the lake, the party arrived safely at Fort Franklin on the 1st September, "after an absence of seventy-one days, during which period we had travelled by land and water 1709 geographical or 1980 statute miles."

It will not be out of place to introduce at the close of Dr Richardson's narrative a pleasing passage which will serve to indicate the relations in which that officer stood toward the commander of the expedition. Dr Richardson had for three days been coasting along a large bay, and on the 22d July, having fully examined it, he named it Franklin Bay. "In bestowing the name of Franklin upon this remarkable bay," he says, "I paid an appropriate compliment to the officer under whose orders and by whose arrangements the delineation of all that is known of the northern coast of the American continent has been effected, with the exception of the parts in the vicinity of Icy Cape discovered by Captain Beechey. It would not be proper, nor is it my intention, to descant on the professional merits of my superior officer; but after having served under Captain Franklin for nearly seven years, in two successive voyages of discovery, I trust I may be allowed to say, that however high his brother officers may rate his courage and talents, either in the ordinary line of his professional duty, or in the field of discovery, the hold he acquires upon the affections of those under his command, by a continued series of the most conciliating attentions to their feelings, and a uniform and unremitting regard to their best interests, is not less conspicuous. I feel that the sentiments of my friends and companions, Captain Back and Lieutenant Kendall, are in unison with my own, when I affirm that gratitude and attachment to our late commanding officer will animate our breasts to the latest period of our lives."

The work of Captain Franklin's second land expedition was now complete, and a narrative of his enforced residence at Fort Franklin during the

severe weather of the mid-winter of 1826-27—the incidents of which differed little from those of the previous year—need not detain us. That this winter weather was severe may be believed from the fact that "on the evening of the 4th of January (1827) the temperature being 52° 2′ below zero, Mr Kendall froze some mercury in the mould of a pistol bullet and fired it against a door at the distance of six paces. A small portion of the mercury penetrated to the depth of one-eighth of an inch, but the remainder only just lodged in the wood." The lowest temperature, however, that Franklin experienced at his fort, was −58°, which was registered on the 7th February.

On the 20th February Franklin set out with five men of the expedition and two Indians to travel through the woods to Fort Simpson, where he arrived in safety on the 8th March. Departing from Fort Simpson on the 15th March, he arrived at Fort Resolution on Great Slave Lake on the 26th. On the 12th April he arrived at Fort Chipewyan on Athabasca Lake. "Here," says Franklin, "we welcomed the appearance of two of the large-sized swans on the 15th April as the harbingers of spring; the geese followed on the 20th; the robins came on the 7th May; the house-martins appeared on the 12th, and in the course of the week were busily employed repairing their nests; the barn or forked-tail swallows arrived on the 20th; and on the same day, the small-sized swans were seen, which the traders consider the latest of the migratory birds." Continuing his homeward journey, and providing as he proceeded for the comfortable transport of the remaining officers and men of the expedition, Franklin reached Cumberland House on the 18th June. He thence proceeded through Canada to New York, whence he embarked with Dr Richardson in a packet-ship for Liverpool, where he arrived on the 26th September. Back, Kendall, and Drummond, with the rest of the British party, arrived at Portsmouth on the 18th of October.

CHAPTER IX.

SUBSIDIARY VOYAGES OF CAPTAIN LYON AND CAPTAIN BEECHEY. LYON'S VOYAGE TO REPULSE BAY.

BEFORE concluding that part of our work which concerns itself with the expeditions of Parry and Franklin, 1821-27, it will be necessary, in order to preserve the continuity of our narrative, to sketch briefly the results of Captain Lyon's expedition to Repulse Bay, and Captain Beechey's voyage to Icy Cape. Of these two enterprises the former was intended to supplement the work done by Captain Parry in his third expedition, while the latter was undertaken for the purpose of taking up Captain Franklin and his party in the event of their being successful in forcing a passage westward along the north coast of the American continent to Icy Cape.

It will be remembered that Captain Lyon commanded the "Hecla" in Parry's second voyage for the discovery of the North-West Passage, and that the first important labour performed by that expedition was the examination of Repulse Bay. It had long been hoped that this forbidding inlet was not land-locked, but that a sea-way might exist running from the head of the inlet westward, and thus affording a "passage" in the desired direction into the Polar Ocean. The thorough survey of the bay by Captains Parry and Lyon, however, proved that it was completely surrounded by land, and that if a passage was to be found at all, it must be sought farther to the north. But in the course of their intercourse at Winter Island with the friendly and intelligent Eskimos, among whom the "wise woman" Iligliuk was the chief figure, the explorers were informed that by travelling inland from Repulse Bay for three days, a great sea would be reached. The tract of land to be crossed was the narrow isthmus (Rae Isthmus) which connects Melville Peninsula with the mainland of North America, and the sea, on the opposite side of the isthmus from Repulse Bay, was naturally supposed to be, as it really is, an arm or inlet of the Arctic Ocean. It was conceived to be an object of great interest to trace the connection of the shores of this sea with Point Turnagain, the farthest point reached by Franklin on his first expedition. If it be supposed for a moment that such

a connection had been established, then the most difficult, or rather the least known, half of the North-West Passage for which England had been seeking for three hundred years would be discovered, and the riddle of ages read. It was for the purpose of ascertaining whether such a connection between the western coast of Melville Peninsula and Point Turnagain existed, that Captain Lyon was appointed commander of the "Griper" early in 1824, and of a new Arctic Expedition.

Captain Lyon's official instructions were to the effect that he was to proceed to Repulse Bay, which he, in company with Parry, had explored in 1821-23, and there to place the "Griper" in secure quarters for the winter; and that in the spring of the following year he was to set out with a sufficient party and outfit, cross the peninsula—the three days' journey of the Eskimos—and to "proceed by land or water, as circumstances may admit, until he should arrive at Point Turnagain."

Accordingly, with forty-one officers and men all told, Captain Lyon in the "Griper" was towed down from Deptford to Greenhythe on the 10th June 1824. After a tolerable passage across the Atlantic, he entered Hudson's Strait early in August, and on the 20th he had reached the western extremity of the strait. When Parry found himself in the same position in the summer of 1821 (see page 208), he carefully weighed the comparative advantages of the two routes, by which it was possible from this point to reach Repulse Bay. The first, most direct, and by far the shortest route, was in a straight line west-north-west, across the north-east shores of Southampton Island, and through Frozen Strait into the bay; the second was round Southampton Island by the south-west, and up Sir Thomas Rowe's Welcome, between Southampton Island on the east, and the mainland on the west. Parry, as we have seen, chose the short and direct route north-west, and into Frozen Strait. On this expedition Captain Lyon sailed with Parry as commander of the "Hecla," and must no doubt have been fully informed by his superior officer of the causes which induced him to resolve to take the short and direct route to Repulse Bay. Yet we find Captain Lyon, after an interval of three years, deliberately resolving to follow the long and indirect route instead of the short and direct one which Parry had so successfully followed out from the western extremity of Hudson's Strait to Repulse Bay. *Why* Captain Lyon should have chosen the long, roundabout route, remains to this day a mystery; but it is certain that this unlucky choice led him into a series of misfortunes which all but proved fatal to the expedition. It was only rational to suppose that what had been done so easily, and with such complete success by Parry and Lyon in 1821, might have been accomplished by Lyon in 1824. Yet, although the previous voyage had given him experience of navigation in these seas, the captain of the "Griper" elected to pursue an unknown route, of the dangers of which

he could form no estimate, instead of following a known route, the dangers of which he himself had measured.

The last ten days of the month of August were spent in coasting along the east and south shores of Southampton Island. Towards the close of the month, much heavy weather was experienced. During the night of the 29th Captain Lyon stood to the south-south-west, but the wind coming round in the morning and blowing from that direction, he put the ship about and stood to the north-west by north. At four A.M., the land of Southampton Island, forming a lee-shore, was seen in the distance on the north-east. On the 30th observations were taken, and the latitude found to be 61° 50′, while the longitude was 84° 2′. With a light wind but a heavy sea from the south-west, Captain Lyon continued to sail north-north-west, and had regular soundings between seventy and fifty fathoms over the spot which according to earlier charts was occupied by Cape Southampton. At midnight the wind came fresh from the westward with rain, and as Captain Lyon feared running over a spot where land is laid down as having been discovered, he lay to until daybreak of the 31st. At ten P.M. his soundings gave thirty fathoms, but after two A.M. on the 1st September he shoaled to nineteen fathoms. At dawn land was discovered bearing north-north-west, and as he had been running for fifty miles in this direction, he feared being run into shallow water, and kept right away intending to pass the land at the distance of five or six miles. At seven A.M., observing by the whiteness of the water that he was on a bank, he rounded to and tried to anchor, but the stiff breeze and heavy sea caused the anchor to part, and he again drove to the north-east. Finding, however, that he came suddenly into seven fathoms, and that the ship could not possibly work out again to sea, he brought her up with three bower-anchors, but not before the water had shoaled to five and a half fathoms. This was between eight and nine A.M.—the ship pitching bows under, and a tremendous sea running. At noon the starboard bower-anchor parted.

There was now every reason to fear the fall of the tide, which Captain Lyon knew to be from twelve to fifteen feet on this coast, and as in this event, the total destruction of the ship was all but inevitable, the long-boat with the four smaller ones was hoisted out to be stored with a quantity of arms and provisions. "The officers," writes Lyon, "drew lots for their respective boats, and the ship's company were stationed to them. The long-boat having been (previously) filled full of stores which could not be put below, it became necessary to throw them overboard, as there was no room for them on our very small and crowded decks, over which heavy seas were constantly sweeping. In making these preparations for taking to the boats, it was evident to all that the long-boat was the only one which had the slightest chance of living under the lee of the ship, should she be

wrecked, but every officer and man drew his lot with the greatest composure, although two of our boats would have been swamped the instant they were lowered. Yet such was the noble feeling of those around me, that it was evident that, had I ordered the boats in question to be manned, their crews would have entered them without a murmur. In the afternoon, on the weather clearing a little, we discovered a low beach all around astern of us, on which the surf was running to awful height, and it appeared evident that no human powers could save us. At three P.M. the tide had fallen to twenty-two feet (only six more than we drew), and the ship having been lifted by a tremendous sea, struck with great violence the whole length of her keel. This we naturally conceived was the forerunner of her total wreck, and we stood in readiness to take the boats and endeavour to hang under her lee. She continued to strike with sufficient force to have burst any less fortified vessel at intervals of a few minutes, whenever an unusually heavy sea passed us. And as the water was so shallow, these might almost be called breakers rather than waves, for each in passing burst with great force over our gangways, and as every sea 'topped' our decks, we were continually and often deeply flooded. All hands took a little refreshment, for some had scarcely been below for twenty-four hours, and I had not been in bed for three nights. Although few or none of us had any idea that we should survive the gale, we did not think that our comforts should be entirely neglected, and an order was therefore given to the men to put on their best and warmest clothing, to enable them to support life as long as possible. Every man 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. The officers each secured some useful instrument about them for the purposes of observation, although it was acknowledged by all that not the slightest hope remained. And now that everything in our power had been done, I called all hands aft, and to a merciful God offered prayers for our preservation. I thanked every one for their excellent conduct, and cautioned them, as we should, in all probability, soon appear before our Maker, to enter His presence as men resigned to their fate. We then all sat down in groups, and, sheltered from the wash of the sea by whatever we could find, many of us 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 allowed to be in cases of danger, yet I did not believe it to be possible, that amongst forty-one persons not one repining word should have been uttered. The officers sat about wherever they could find shelter from the sea, and the men lay down conversing with each other with the most perfect calmness. 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." As the darkness came down, the vessel ceased to strike the ground—not, however, before the repeated concussions drove up the rudder, breaking the after lockers. An examination resulted in the gratifying discovery that no water was being made, and after dark, heavy rain fell, drenching everybody but also beating down the terrific gale. A light air sprang up from the northward, the vessel kept off ground all night in five fathoms water, and the exhausted crew obtained a little rest.

Captain Lyon named the anchorage on which he had spent this trying night the "Bay of God's Mercy," and a brief glimpse of the sun enabled him to determine its lat. in 63° 45′, long. 86° 32′. Subsequently the progress of the "Griper" up Sir Thomas Rowe's Welcome, in the direction of Repulse Bay, was continuously disastrous. The only variations in the fearful weather were when gale rose into hurricane, and when hurricane tempered down into gale. On the night of the 12th September, Captain Lyon states that "the hurricane blew with such violence as to be perfectly deafening; and the heavy wash of the sea made it difficult to reach the main-mast, where the officer of the watch and his people sat shivering, completely cased in snow, under a small tarpaulin before which ropes were stretched to preserve them in their places. I never beheld a darker night, and its gloom was increased by the rays of a small dark lantern, which was suspended from the mizzen-stay to show where the people sat. At dawn on the 13th, thirty minutes after four A.M., we found that the best bower-cable had parted, and as the gale now blew with terrific violence, there was little reason to expect that the other anchors would hold long. . . . At six A.M., all doubts on this particular account were at an end, for, having received two overwhelming seas, both the other cables went at the same moment, and we were left helpless, without anchors or any means of saving ourselves, should the shore, as we had every reason to expect, be close astern. And here again I had the happiness of witnessing the same general tranquillity, as was shown on the 1st of September. There was no outcry that the cables were gone, but my friend Mr Manico, with Mr Carr the gunner, came aft as soon as they recovered their legs, and in the lowest whisper, informed me that the cables had all parted. The ship, in trending to the wind, lay quite down on her broadside, and as it then became evident that nothing held her, and that she was quite helpless, each man instinctively took his station, while the seamen at the leads, having secured themselves as well as was in their power, repeated their soundings, on which our preservation depended, with as much composure as if we had been entering a friendly port." The wind providentially came round to north-north-west (*along* the land), and the "Griper's" head fell off to north-east or seaward. Two trysails were set, for the ship could bear no more, and even with that her lee gunwale lay in the water.

In a quarter of an hour the vessel was in seventeen fathoms. The decks were now so thickly covered with frozen snow and freezing sea-water, that it was impossible, while the ship lay over so much, to stand on them; and, as all hands were wet, half frozen, and half starved from want of refreshment for many hours, their situation was miserable indeed. With her head still bearing north-east, the "Griper" soon deepened the water. But at the same time there was an increase of sea and wind. So violent had the latter become that it stove in the larboard waist-boat against the sides of the ship, and also damaged the boat on the quarter. Shortly afterwards a wave filled and swept away the starboard waist-boat with her davits and her swinging boom.

"In the afternoon," writes Captain Lyon, "having well weighed in my mind all the circumstances of our distressed situation, I turned up the hands and informed them that, having now lost all our bower anchors and chains, and being therefore unable to bring up in any part of the Welcome; being exposed to the sets of a tremendous tide-way and constant heavy gales, one of which was now rapidly sweeping us back to the southward; and being yet above eighty miles from Repulse Bay, with the shores leading to which we were unacquainted; our compasses useless, and it being impossible to continue under sail with any degree of safety in these dark twelve-hour nights, with the too often experienced certainty that the ship would not beat off a lee-shore, even in moderate weather—I had determined on making southing to clear the narrows of the Welcome, after which I should decide on some plan for our future operations." Accordingly the return voyage was at last finally resolved upon, and as soon as the wild weather moderated, the "Griper" was turned south. Many days were spent in beating about the Welcome at the mercy of the incessant gales—the disabled ship being driven about helplessly in whatever direction the wind happened to blow. After many ineffectual attempts Captain Lyon ran into the Atlantic with a fair and moderate breeze on the night of the 30th September. The voyage across the Atlantic was long and trying, and it was not till the 10th November that Captain Lyon passed the Needles, running for Portsmouth Harbour. The "Griper" was paid off on the 13th December.

Thus ends the story of the subsidiary voyage of the "Griper," undertaken to supplement the work done in the expeditions of Franklin and Parry in 1821-27. Captain Lyon never reached Repulse Bay, which was to have been the scene of the commencement of his explorations, so that the actual work of the expedition was not even begun. Had Captain Lyon chosen the direct route to the bay through Frozen Strait, there is reason to believe that the enterprise would have had a more fortunate result.

CHAPTER X.

CAPTAIN BEECHEY'S VOYAGE IN THE "BLOSSOM," 1825-28.

WHEN Captain Franklin proposed to connect his important discoveries at the mouth of the Coppermine River with the farthest known point on the western side of America, by descending the Mackenzie and sailing west, and thus achieving the North-West Passage, from the Polar Sea to the Pacific by Behring Strait, Captain Beechey was appointed to the command of the "Blossom," and commissioned to sail through Behring Strait, and, pushing on to Icy Cape, take up Franklin there, and convey him to England. Captain Beechey received his appointment on 12th January 1825. The crew of the "Blossom" numbered over a hundred persons, and among her officers were Lieutenants Peard, Edward Belcher, and John Wainwright. A boat, rigged as a schooner, and decked and fitted in the most complete manner, was carried by the "Blossom" to act as tender; and all preparations having been completed, her commander weighed from Spithead on the 19th May 1825, and steered out of the channel with a fair wind.

Captain Beechey was instructed to proceed, in the first instance, to Rio Janeiro, afterwards to round Cape Horn, to steer for and survey the Society Islands, to visit Otaheite, Pitcairn's Island, and Owhyhee, and to be at the appointed rendezvous at Behring Strait not later than the 10th July 1826. With his voyage across the Atlantic and among the islands of the Pacific we are not here concerned. After touching at Kamtchatka, on the Asiatic continent, Beechey set sail north-eastward for his destination. On the 17th July the "Blossom" was close off the western extremity of St Lawrence Island, at the southern entrance to Behring Strait. On the 19th they passed King's Island, and entered Behring Strait. "We approached the strait that separates the two great continents of Asia and America," says Beechey, "on one of those beautiful still nights, well known to all who have visited the Arctic regions, when the sky is without a cloud, and when the midnight sun, scarcely his own diameter below the horizon, tinges with a bright hue all the northern circle. Our ship, propelled by an increasing breeze, glided

rapidly along a smooth sea, startling from her path flocks of lummes and dovekies, and other acquatic birds, whose flight could, from the stillness of the scene, be traced by the ear to a considerable distance. . . . As we proceeded, the land on the south side of St Lawrence Bay made its appearance first, and next the lofty mountains at the back of Cape Prince of Wales, then hill after hill rose alternately on either bow, curiously refracted, and assuming all the varied forms which that phenomenon of the atmosphere is known to occasion. At last, at the distance of fifty miles, the Eastern Cape of Asia and the Diomede Islands rose above the horizon of our masthead," and on the following morning the explorers found themselves almost alongside this group. The "Blossom" was now in the middle of Behring Strait—the famous channel through which the waters of the Pacific enter the Arctic Ocean. The strait is about fifty miles in width, and its depth in the neighbourhood of the Diomede Islands was found by Captain Beechey to be between twenty-five and twenty-seven fathoms. In the evening the fog that had prevailed in the early part of the day cleared away, and a strange and striking spectacle was revealed to the explorers. The extremities of the two great continents were distinctly seen. East Cape, the extreme point of Asia, has, from most points of view, the appearance of an island. It, together with many parts of the Atlantic shore, was entirely covered with snow, while on the mountains on the American side the snow was seen only in streaks.

Steering north-east, Beechey closed with the American shore a few miles to the northward of Cape Prince of Wales, and found the coast low, with a ridge of sand extending along it, on which a number of Eskimo huts was seen. Continuing on a north-east course, Beechey entered Kotzebue Sound—the first great inlet on the American coast, after passing northward through Behring Strait—on the 22d July. The appearance of the land around the sound was scarcely recognisable, from the distorting effects of mirage; but this peculiar phenomenon having disappeared, Beechey discovered a deep inlet in the northern shore of the sound, which he named Hotham Inlet. Chamisso Island, at the head of the sound, now became the station of the "Blossom" for a few days, and here regular intercourse was carried on between the explorers and the native Eskimos. The Eskimos of the north-western shores of America resemble those met with by Parry at Winter Island, Melville Peninsula, etc., and those with whom Franklin and Richardson had transactions on the shores east and west from the mouth of the Mackenzie River. Over Beechey's minute account of the North-West American Eskimos, in regions visited by himself for the first time, we cannot afford to linger. Once for all, however, we give his account of the native tribes met with on the shores of Kotzebue's Sound:

"We were visited by several baidars (the name given to their large boats

by the Eskimos of the North-West), containing from ten to thirteen men each, whose object was to obtain articles in exchange. They were in every respect similar to the natives of Schismareff Inlet (between Behring Strait and Kotzebue's Sound), though rather better-looking, and were all, without exception, provided with labrets—lip ornaments—either made of ivory and blue beads (as before described), of ivory alone, or of different kinds of stone, as steatite, porphyry, or greenstone. . . . One or two had small strings of beads suspended to their ears. The articles they brought off were, as before, skins, fish, fishing-implements, and knick-knacks. Their peltry consisted of the skins of the seal, of the common and Arctic fox, the common and musk rat, the marten, beaver, three varieties of ermine—one white, one with a light-brown back and yellow belly, and the third with a grey back, spotted white and yellow—the American otter, the white hare, the Polar bear, the wolf, the deer, and the badger. Their fish were salmons and herrings; their implements, lances, either of stone or of a walrus tooth fixed to the end of a wooden staff; harpoons precisely similar to the Eskimos (of Melville Peninsula, etc.); arrows and drills. . . . On the outside of these instruments there were etched a variety of men, beasts, and birds, etc., with a truth and character which showed the art to be common among them. The reindeer were generally in herds: in one picture they were pursued by a man in a stooping posture in snow-shoes; in another, he had approached nearer to his game, and was in the act of drawing his bow. A third represented the manner of taking seals with an inflated skin of the same animal as decoy; it was placed upon the ice, and not far from it a man was lying upon his belly with a harpoon, ready to strike the animal when it should make its appearance. Another was dragging a seal home upon a small sledge; and several baidars were employed harpooning whales which had been previously shot with arrows; and thus, by comparing one device with another, a little history was obtained, which gave us a better insight into their habits than could be elicited from any signs or intimations. The natives also offered us for sale various other articles of traffic, such as small wooden bowls and cases, and little ivory figures, some of which were not more than three inches in length, dressed in clothes, which were made with seams and edgings precisely similar to those in use among the Eskimos. . . . The people themselves, in their persons as well as in their manners and implements, possessed all the characteristic features of the Eskimos —large, fat, round faces, high cheek-bones, small hazel eyes, eyebrows slanting like the Chinese, and wide mouths. . . . The western Eskimos appear to be intimately connected with the tribes inhabiting the northern and north-eastern shores of America—in language, features, manners, and customs. They at the same time resemble the (Asiatic) Tschutschi, from whom they are probably descended. . . . They are a nation of fisher-

men, dwelling upon or near the sea-shore, from which they derive almost exclusively their subsistence. They construct yourts or winter residences upon those parts of the shore which are adapted to their convenience, such as the mouths of rivers, the entrances of inlets, or jutting points of land, but always upon low ground. They form themselves into communities, which seldom exceed one hundred persons; though, in some few instances, they have amounted to upwards of two hundred. . . . Their yourts or winter residences are partly excavated in the earth and partly covered with moss laid upon poles of driftwood. The natives reside in these abodes during the winter, and when the season approaches at which they commence their wanderings, they launch their baidars, and, taking their families with them, spread along the coast in quest of food and clothing for the ensuing winter. An experienced fisherman knows the places which are most abundant in fish and seals, and resorts thither in the hope of being the first occupier of the station. Thus almost every point of land and the mouths of all the rivers are taken possession of by the tribe. Here they remain and pass their time, no doubt very happily, in the constant occupation of taking salmon, seals, walruses, and reindeer, and collecting peltry (of which the beaver skins are of very superior quality), or whatever else they can procure, which may prove useful as winter store."

In his instructions, Captain Beechey was desired to await the arrival of Captain Franklin at Chamisso Island in Kotzebue Sound, but a private agreement had been made between the two commanders that Beechey in the "Blossom" should proceed northward and survey the coast in the neighbourhood, while one of his officers, taking with him a rescue crew in the barge, should keep well inshore, looking out for Franklin's party, erecting signal posts with directions, etc. Accordingly, on the 30th July, the "Blossom," attended by the barge, weighed from Chamisso Island and steered northward out of Kotzebue Sound. Having cast off the barge to attend to the special service of watching for the land party, Beechey did little more on the 1st August but drift along the coast with the current, which was always found setting to the north-west at the rate of from half-a-mile to a mile and a half per hour. On the 2d, Cape Thomson, in lat. about 68° 8′, and Point Hope, in lat. about 68° 20′, were discovered and named. Cape Lisburn of Captain Cook was shortly afterwards passed, but progress was so slow that Beechey was still in sight of it till the 9th. In the middle of the month Beechey reached Icy Cape, the farthest point reached by Captain Cook. When discovered by Cook it was much encumbered with ice, but was free from it on the occasion of the voyage of the "Blossom." The cape itself was found to be low, and the mainland north of it to Wainwright's Inlet, and south of it to Cape Beaufort, half way between Icy Cape and Cape Lisburn, is flat and covered with swampy moss.

To have prosecuted the northward voyage in the "Blossom" beyond Icy Cape would have been to expose the vessel unnecessarily to damage from passing ice or to being surrounded by, and beset in, it. But any serious accident to the vessel would have compelled Captain Beechey to leave those northern seas at once, and prevented him returning in the following year. He resolved, therefore, to send Mr Elson in advance northward in the barge to search for Captain Franklin and his party. For this kind of service the barge, from its smaller dimensions, was specially adapted. Accordingly, on the 17th August, Mr Elson parted company and went off on his own expedition. Meantime Beechey, who, in the "Blossom," had accompanied the barge for some distance, continued to steer northward, until on the 18th he saw the main body of the ice—the pack extending from east to south-west in lat. about 71°. It was loose at the edge but close within, and consisted of heavy floes. There were no living creatures near it except a few tern and kittiwakes. The temperature was about the freezing point. "At noon," says Beechey, "the sun broke through, and we found ourselves in lat. 70° 18′ N., and by the soundings, about twelve miles from land, which was not seen. By this we discovered that instead of gaining twenty miles to the eastward we had lost four, by which it was evident that a current had been running S. 58° W., a mile an hour." This circumstance was unfavourable to the prospect of much farther progress. At about this time, too, the weather, which had hitherto been fine, appeared to have broken for the season; and the dark nights beginning to lengthen, and a series of westerly gales to set in, making the whole of the coast a lee-shore, and compelling Captain Beechey to keep his ship at a distance from the land, brought home to the commander the conviction, that in order not to miss the land expedition, in event of its success, he would require to return to the rendezvous in Kotzebue Sound. The "Blossom" was consequently put about; on the 27th August Cape Krusenstern was passed, and on the following evening the vessel was again anchored off Chamisso Island to await the return of the barge.

On the 10th September Captain Beechey had the gratification of seeing the barge coming down Kotzebue Sound under a press of canvas, and the most lively anticipations were formed until she approached near enough to show that the appointed signal of success was wanting at her mast-head. The barge had been successful in penetrating to a point of the north-west coast of America in lat. 71° 23′ N., and long. 156° 21′ W., or to within 150 miles of Return Reef, where Franklin, finding it impossible to continue his westward voyage, had commenced his return to the Mackenzie. The farthest tongue of land which the barge had reached, and the most northerly point then discovered on the continent of America, was named Point Barrow. "It lies," says Beechey, "126 miles to the north-east of Icy Cape, and is

only 146 miles from the extreme of Captain Franklin's discoveries in his progress westward from the Mackenzie River." A bay to the eastward of Cape Barrow was named Elson's Bay in honour of the officer commanding the barge, and the extreme point discovered on the voyage a mile or two east of Point Barrow was named Franklin Extreme. Mr Elson's expedition in the barge added about seventy miles of coast (or, in addition to the new shores discovered by the "Blossom," 126 miles in all) to the geography of the Polar regions.

From this point it is needless to trace the discoveries and adventures of Captain Beechey in the "Blossom" during the years 1825-28. He was sent out to take up Franklin and his party in the event of that famous explorer being successful in performing the voyage from the Mackenzie River round the Polar shores to Kotzebue Sound. We know from the record of Franklin's second expedition that he was unsuccessful in this object, and that he commenced his return to Great Bear Lake on the 16th August 1826. It was now the middle of September, and the "Blossom," with her barge, was still cruising about in the neighbourhood of the appointed rendezvous, awaiting the arrival of Franklin, who by that time was far on his return voyage. Captain Beechey remained in Kotzebue Sound till the middle of October, when, convinced at last that Franklin had failed in his object, he weighed anchor, steered out of the sound, and stood away to the south through Behring Strait into the warm waters of the Pacific. From this point his voyage loses the character of an Arctic Expedition, and consequently ceases to be of direct interest to us. He returned, certainly in the summer of the following year to the north-west shores of America; but, so far as Arctic discovery is concerned, this second visit was unproductive and resultless.

PART VI.

EXPEDITIONS OF PARRY AND ROSS, 1827-33.

CHAPTER I.

PARRY'S LAST ARCTIC VOYAGE—THE HIGHEST LATITUDE EVER REACHED BY ANY EXPLORER.

THE narrative we have just concluded of the "Expeditions of Parry and Franklin, 1821-27," and of the subsidiary voyages of Captain Lyon up Rowe's Welcome in the "Griper," and of Captain Beechey through Behring Strait to Icy Cape in the "Blossom," brings us to the close of a well-defined period in Arctic exploration. Since 1819 the efforts of the great English navigators had been exclusively directed to the object of opening a north-west passage from the Atlantic to the Pacific along the north shores of the American continent. With this view the voyages of Ross, Parry, Franklin, Lyon, and Beechey, had been undertaken, and thousands of miles of coast-line had been discovered. But though these various expeditions were conducted with the utmost courage and determination, and though hundreds of miles of a passage had been tracked, the great feat of sailing from the one ocean to the other had not been accomplished. The period had now come when these endeavours were to cease for a time, and when great attempts with other objects in view were to be made. We have now, therefore, to close the narrative of exploration along the southern shores of the Polar seas and to follow Parry on his last and most famous Arctic voyage—his extraordinary attempt to reach the North Pole on sledge-boats by the Spitzbergen route, in which he carried his ensigns to a point nearer the Pole than was ever reached before, or has been since, his time.

Arrived in England—after his third voyage for the discovery of the North-West Passage—in October 1825, Captain Parry, in the spring of 1826, laid before Viscount Melville, then First Lord of the Admiralty, a plan by which he proposed to reach the North Pole, "by means of travelling with sledge-boats over the ice, or through any spaces of open water that might occur." The hopes he had formed of being able to attain this object, and the plan

which he now suggested for putting it into execution, had their origin in a proposal made by Captain Franklin, several years previously, suggesting the same means to arrive at the same object. Franklin had offered to command the enterprise himself; but, as he was now engaged exploring the north coast of America, his services were not available, and Captain Parry was appointed to the command of the expedition—his commission, to the old "Hecla," being dated 11th November 1826.

The scope and purpose of the expedition will be readily understood from the following passage in the official instructions, handed to him a few days before setting sail: "On your arrival at the northern shores of Spitzbergen, you will fix upon some safe harbour or cove, in which the 'Hecla' may be placed; and, having properly secured her, you are then to proceed with the boats, whose requirements have, under your own directions, been furnished expressly for the service, directly to the northward, and use your best endeavours to reach the North Pole; and having made such observations as are specified in your instructions for your former voyages in the northern regions, and such as will be pointed out to you by the council of the Royal Society, added to those which your own experience will suggest, you will be careful to return to Spitzbergen before the winter sets in, and at such a period of the autumn as will ensure the vessel you command not being frozen up, and thus obliged to winter there."

During the summer of 1826 the refitting of the "Hecla," to prepare her for the always-trying cruise in the Spitzbergen seas, was actively proceeded with, while the boat-sledges, in which a bold push was to be made for the North Pole across a waste of ice that always previously proved unpenetrable, were also constructed with great care. The latter were constructed at Woolwich under Parry's superintendence. They resembled what are called "troop-boats," having the floor flat, and the extreme breadth carried well forward and aft. Their length was twenty feet, and their extreme breadth seven feet. The timbers were made of tough ash and hickory, and the outside of the frame or skeleton was covered with Mackintosh waterproofing—the outer surface coated with tar. A layer of very thin fir planking, a sheet of stout felt, and over all a very thin planking of oak, were afterwards bolted on to the timbers. "On each side of the keel, and projecting considerably below it, was attached a strong 'runner,' shod with smooth steel, in the manner of a sledge, upon which the boat entirely rested when on the ice." . . . "A 'span' of hide-rope was attached to the forepart of the runners, and to this were affixed two strong ropes of horsehair, for dragging the boat—each individual being furnished with a broad leathern shoulder-belt, which could be readily fastened to or detached from the drag-ropes. The interior arrangement consisted of only two thwarts, a locker at each end for the nautical and other instruments, and for the smaller

stores; and a very slight framework along the sides for containing the bags of biscuits and our spare clothes. A bamboo mast nineteen feet long, a tanned duck sail, answering also the purpose of an awning, a spreat, one boat-hook, fourteen paddles, and a steer-oar, completed each boat's equipment." Two officers and twelve men were selected for each. Captain Parry was to command in one boat, and Lieutenant James Ross in the other. Such were the frail boats and the slender crews who were destined to make one of the most daring and adventurous voyages known in the annals of navigation.

On the 23d October 1826, Captain Parry married Isabella, fourth daughter of Sir John Stanley, afterwards Lord Stanley of Alderley, and on the occasion of the nuptials, a silk ensign, worked by the bride, was hoisted on the church tower, from which it was afterwards hauled down, not to be again unfurled, it was fondly hoped, until it should be raised to signalise the arrival of the expedition at the North Pole.

All preparations having been completed, the "Hecla" was towed down the Thames on the 25th March 1827; on the 4th she weighed from the Nore and got fairly to sea, and on the 17th she had reached the island of Soroe on the Lapland coast. Within this island lies the port of Hammerfest, and here Parry had been instructed to call for the purpose—a strange one, it seems to us, in these days—of taking on board a number of tame reindeer to draw the boats over the ice. On the 5th May the first straggling mass of ice was met with in lat. 73° 30′ N., long. 7° 28′ E., and at five on the morning of the 14th, Parry had arrived off the extreme north-west of Spitzbergen, had passed Magdalena Bay, and by ten o'clock had made Hakluyt's Headland. Acting according to his instructions, Parry now commenced to seek for a suitable harbour in which the "Hecla" might lie safely at anchor during the absence of the boats. This search proved long, tiresome, and vexatious. A number of suitable bays were passed, but it was impossible to reach them from the large fields of thick ice that covered them close in to the shore. At length, after beating eastward along the north coast of Spitzbergen for about a month, Parry arrived on the 18th June in a deep indentation on the north coast of New Friesland, named Treurenburg Bay. "On the following morning," writes Parry, "I proceeded to examine the place, accompanied by Lieutenant Ross in a second boat, and, to our great joy, found it a considerable bay, with one part affording excellent land-locked anchorage, and, what was equally fortunate, sufficiently clear of ice to allow the ship to enter. Having sounded the entrance and determined on the anchorage, we returned to the ship to bring her in; and I cannot describe the satisfaction which the information of our success communicated to every individual on board. The main object of our enterprise now appeared almost within our grasp, and everybody seemed anxious to make up,

by renewed exertions, for the time we had unavoidably lost. The ship was towed and warped in with the greatest alacrity, and at 1.40 A.M., on the 20th, we dropped anchor in Hecla Cove."

No time was now lost. On the afternoon of the 25th the two boat-sledges, named respectively the "Enterprise" and the "Endeavour"—were ready to start for the north. Parry resolved to take with him only seventy-one days' provisions, which, including the weight of the boats, etc., made up a weight of 260 lbs. per man. From what he had been able to see from the crow's-nest, the ice away to the north was exceedingly rough, and he therefore resolved to leave the reindeer behind, as they could afford no assistance among "hummocky" ice. Everything being now ready, the boats commenced their voyage at five P.M. on the 21st (having received the usual salutation of three cheers from those they left behind), and paddled away northward in open water. The boat-sledges rowed heavily with their loads, but proved perfectly safe and very comfortable. Progress was satisfactory, and Low Island and Walden Island were successively reached and passed. The land-ice, which adhered to the Seven Islands, was reached on the 23d, and Parry rowed along its margin to Little Table Island, where he arrived at ten P.M. "The prospect to the northward at this time was very favourable," writes the commander, "there being only a small quantity of loose ice in sight; and the weather still continuing calm and clear, with the sea as smooth as a mirror, we set off, without delay, at half-past ten, taking our final leave of the Spitzbergen shores, as we hoped, for at least two months. Steering due north, we made good progress, our latitude by the sun's meridian altitude at midnight being 80° 51′ 13″." It was only on the first and second days that the expedition advanced so pleasantly. At noon on the 23d the boats were stopped by the ice, and from this time onwards progress was made chiefly by dragging the boats over the rough and broken ice—a labour demanding great physical strength and endurance, and that cheerfulness of spirit and complete discipline for which the British navy has always been distinguished.

The plan of travelling and the daily routine observed from day to day, varied little throughout the whole of the excursion. And as the conditions under which Parry and his comrades were now existing—surrounded by ice, unsupported by the confidence which being in a ship would inspire them, bound northward in a general way in search of the North Pole, with their faces towards a vast and completely unknown region of the earth's surface—were singular, not to say alarming, it will be interesting to know what was their usual mode of proceeding after they had fairly entered upon the ice. It was Parry's intention to travel at night exclusively, and to rest by day—there being, of course, constant daylight in these regions in the summer season. The advantages of so doing were that in travelling at night the more intense and oppressive glare of the sun, producing the inflammation of the eyes

known as "snow-blindness," was avoided; that the warmer hours of the twenty-four were those devoted to sleep and to the drying of clothes which were almost constantly wet when in use; and that the snow, being somewhat harder at night than during the day, presented a firmer surface to the runners of the sledges. But this travelling by night and sleeping by day inverted the natural order of things, and led to the most confused notions. The men declared that they never knew night from day during the whole excursion, and even the officers and the commander, though they were furnished with pocket chronometers, were often confused as to the time of day.

"When we rose in the evening," writes Parry, "we commenced our day by prayers, after which we took off our fur sleeping-dresses, and put on those for travelling—the former being made of camblet lined with racoon skin, and the latter of strong blue box-cloth. We made a point of putting on the same stockings and boots for travelling in, whether they had 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 on 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 from five to five and a half hours, according to circumstances. After this we halted *for the night*, as we called it, though it was usually early in the morning, selecting the largest surface of ice we happened to be near, for hauling the boats on, in order to avoid the danger of its breaking-up by coming in contact with other masses, and also to prevent drift as much as possible. The boats were placed close alongside each other, with their sterns to the wind, the snow or wet cleared out of them, and the sails, supported by the bamboo masts and three paddles, placed over them as awnings, an entrance being left at the bow. 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 alter

nately 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. The temperature while we slept was usually from 36° to 45°, according to the state of the external atmosphere; but on one or two occasions, in calm or warm weather, it rose as high as 60° to 66°, obliging us to throw off a part of our fur dress. After we had slept seven hours, the man appointed to boil the cocoa roused us when it was ready, by the sound of a bugle, when we commenced our day in the manner before described."

It was on the 24th June 1827 that Parry, with his twenty-three companions in the two sledge-boats, set out to cross over an unknown sea covered with detached and drifting masses of ice to reach the extreme north latitude of 90°. Nothing could surpass the daring of the undertaking, except the unsupportably laborious means by which the explorers sought to accomplish it. At the outset, over the Polar Sea to the north of Spitzbergen, the pieces of ice were found to be of small extent and very rugged, and the party were obliged to make three and sometimes four journeys from point to point, and to launch the boats several times across narrow pools of water, in order to keep their stores, clothing, etc., together. This hard work, however, was no more than they expected to have to go through, until they had crossed the margin of the ice, and every man of the party exerted himself to his utmost in the hope of coming upon easier ground after getting upon the main or "field" ice. After a most exhausting day's work, the explorers stopped to dine at five o'clock in the morning of the 25th, "*after having made about two miles and a half of northing.*" The early dinner having been despatched, they set off again—floundering through the pools, scrambling across the chasms between the ice-blocks, clambering up the hummocks, and by main force dragging the boats after them, and returning to the point from which they set out, again and yet again, for the bags of pemmican, the cocoa, biscuit, clothes, etc.—until eleven A.M. Their day's work was now done, and their evening had now come, and they halted to sleep—their last operation before closing their eyes being to take an observation at noon, by which they ascertained that they had reached the high latitude of 81° 15′ N., or 525 geographical miles in direct line from the North Pole. Aroused at eight o'clock at night by an outrageous blast on the bugle, blown by some brawny tar who, no doubt, indulged his humour by astonishing his "mates" with a *reveille*, such as never before had been extracted from any known brass instrument, this singularly situated "company of adventurers" commenced their morning's work at half-past nine at night. "We found our way," says Parry, in his blunt and simple fashion—

too grimly earnest to be conscious of any such trifling matter as literary style—"to lie over nothing but small, loose, rugged masses of ice, separated by little pools of water, obliging us constantly to launch and haul up the boats, each of which operations required them to be unloaded, and occupied nearly a quarter of an hour. It came on to rain very hard on the morning of the 26th, and finding we were making very little progress (having advanced not more than half-a-mile in four hours), and that our clothes would be soon wet through, we halted at half-past one and took shelter under the awnings. The weather improving at six o'clock, we again moved forward, and travelled till a quarter-past eleven, when we hauled the boats upon the only tolerably large floe-piece in sight. The rain had very much increased the quantity of water lying upon the ice, of which nearly half the surface was now covered with numberless little ponds of various shapes and extent." The journey was resumed at half-past nine at night.

Parry states it as a remarkable fact that, in the course of this summer expedition, more rain fell than had fallen during the whole of the seven previous summers which he had passed in the Arctic regions *taken together*, although he had passed these seven seasons in latitudes from 7° to 15° lower than the tract in which he now found himself. This fact is corroborative of the statement made by all recent Arctic navigators, that the climate of the most remote north Polar regions hitherto reached is really milder than it is in those more southern tracts between Lancaster Sound and the northern shores of the American continent, in which, for the last three and a half centuries, we have been seeking a North-West Passage into the Pacific. He also observed that much of the ice over which he passed from day to day took a peculiar formation, owing, as he believed, to the action of the rain. The ice referred to was composed, on its upper surface, of "numberless, irregular, needle-like crystals, placed vertically, and nearly close together; their length varying in different pieces of ice, from five to ten inches, and their breadth in the middle about half an inch, but pointed at both ends. The upper surface of ice having this structure sometimes looks like greenish velvet; a vertical section of it, which frequently occurs at the margin of floes, resembles, while it remains compact, the most beautiful satin-spar. . . . At this early part of the season, this kind of ice afforded pretty firm footing, but as the summer advanced, the needles became more loose and movable, rendering it extremely fatiguing to walk over them, besides cutting our boots and feet, on which account the men called them 'penknives.' It appeared probable to us that this peculiarity might be produced by the heavy drops of rain piercing their way downwards through the ice, and thus separating the latter into needles of the form above described, rather than to any regular crystallisation when in the act of freezing."

After travelling all night the party came, on the morning of the 28th

June, to a floe, which rose in several successive tiers and was covered with high and rugged hummocks. No sooner did the explorers surmount one icy ridge than another presented itself. "Over one of these," writes Parry, "we hauled the boats with extreme difficulty by a 'standing pull,' and the weather being then so thick that we could see no pass across the next tier, we were obliged to stop at nine A.M. While performing this laborious work, which required the boats to be got up and down places almost perpendicular, James Parker, my coxswain, received a severe contusion in his back, by the boat falling upon him from a hummock; and the boats were constantly subject to very severe blows, but sustained no damage. The weather continued very foggy during the day, but a small lane of water opening out at no great distance from the margin of the floe, we launched the boats at eight in the evening, among loose drift-ice, and after some time landed on a small floe to the eastward, the only one in sight, with the hope of its leading to the northward. It proved so rugged that we were obliged to make three, and sometimes four journeys with the boats and provisions, and this by a very circuitous route, so that the road by which we made a mile of northing was full a mile and a half in length, and over this we had to travel at least five and sometimes seven times. Thus, when we halted to dine at two A.M., and after six hours' severe toil and much risk to the men and boats, we had only accomplished about a mile and a quarter in a north-north-east direction. After dining we proceeded again till half-past six, and then halted, very much fatigued with our day's work, and having made only two miles and a half of northing." Such was the stupendously laborious manner in which the expedition crept northward from day to day.

But to ensure even the most moderate progress many precautions had to be observed. As soon as the party had crossed over a pool or a channel to a floe-piece, Captain Parry and Lieutenant Ross usually went on ahead to select the easiest route for the boats, which in the meantime were being hauled up from the water on to the ice. After these leaders came a party dragging small sledges extemporised out of a number of snow-shoes which Parry had brought with him, but which could not be put to their legitimate use owing to the rugged and broken character of the ice. Upon these small sledges provisions, etc., were carried. A fair track was thus marked out across the snow and ice, and the road was in a manner made for the sledge-boats, which were dragged along on their "runners" of steel. The incidents of one day's travel, however, were repeated with hardly any variation on the next, and the painful monotony oppressed the travellers. Often Parry and Ross mounted the highest hummocks which rose to fifteen and twenty feet above the sea, to survey this singular "country," where the only "ground" was represented by loosely floating blocks and fields of ice. But the dreariness which such a view presented was beyond anything the travellers had ever before

conceived. "The eye wearied itself in vain to find an object but ice and sky to rest upon; and soon the latter was often hidden from our view by the dense and dismal fogs which so generally prevailed. For want of variety, the most trifling circumstance engaged a more than ordinary share of our attention—a passing gull, or a mass of ice of unusual form, became objects which our situation and circumstances magnified into ridiculous importance; and we have often smiled to remember the eager interest with which we regarded many insignificant occurrences. It may well be imagined, then, how cheering it was to turn from this scene of inanimate desolation, to our two little boats in the distance—to see the moving figures of our men winding with their sledges among the hummocks, and to hear once more the sound of human voices breaking the stillness of this icy wilderness."

On the 2d July the weather was calm, the sun oppressively warm, and the glare of the unsetting sun was thrown up from the snow so dazzlingly as to produce a most painful sensation in the eyes, and rendered it necessary to halt, to avoid being blinded. Advantage was taken of the warm weather to allow the men to wash themselves and dry their clothes. When the march was resumed after an hour or two, the snow was found to be so soft that the travellers sank into it to above the knees at every step. A halt was called till midnight, after which the snow was firmer but still so soft as to make the travelling very fatiguing. At first the route lay across a number of small loose pieces of ice, from five to twenty yards apart, or just sufficiently separated to render the launching and hauling up of the boats necessary without affording any facilities for making progress by water. In other cases where the chasms between the pieces were less than twenty feet wide, the boats were laid across as bridges, on which the men crossed with their baggage. On the morning of the 3d, a floe a mile in width was reached, on the level parts of which there was a layer of five inches of half-frozen snow, overlying a depth of four or five inches of snow water; "but the moment we approached a hummock," says Parry, "the depth to which we sank increased to three feet or more, rendering it difficult at times to obtain sufficient footing for one leg, to enable us to extricate the other. The pools of water had now also become very large, some of them being a quarter of a mile in length, and their depth above our knees. . . . On this kind of road we were, in one instance, above two hours in proceeding a distance of one hundred yards! We halted at half-past six A.M. to dine, and to empty our boots and wring our stockings, which to *our* feelings was almost like putting on dry ones; and again set in an hour, getting at length into a 'lane' of water one mile and a quarter long, in a north-north-east direction. We halted for the night at half-an-hour before midnight, the people being almost exhausted with a laborious day's work, and our distance made good to the northward not exceeding two miles and a quarter. We allowed ourselves

this night a hot supper consisting of a pint of soup per man, made of an ounce of pemmican each, and eight or ten birds which we had killed in the course of the last week—and this was a luxury which persons thus situated could perhaps alone duly appreciate." The animals seen on this long day's journey were a few rotges, a dovekie, a loom, a mallemucke, and two or three very small seals.

On the night of the 3d July heavy rain fell, and on setting out on the night of the 4th, the explorers found themselves surrounded by loose drift-ice, without a floe, much less an ice-field, in sight. The rain had produced a greater effect than the sun in softening the snow. Parry and Ross, in performing their pioneer duty, were often so beset in the snowy sludge, that sometimes, after trying in vain to extricate their legs, they were obliged to sit quietly down among the freezing liquid for a short time to rest themselves, and then make another attempt; while the men, in dragging the sledges by means of the shoulder-strap and rope, were often obliged "to crawl upon all-fours to make any progress at all." Observations taken on the 5th showed that latitude 81° 45′ had been reached. Rising at five P.M. on this day, Parry found the weather clear and fine, with a moderate breeze from the south. No land was in sight from the highest hummocks—all round to the horizon the wide white plain was full of loose, broken ice. The explorers hauled up their boats across several pieces scarcely large enough to bear the weight, and in these cases, they were careful to divide the baggage, so that, in case of the ice breaking or turning over, they should not lose the whole of it at once. The farther the party proceeded, the smaller were the pieces into which the ice was broken. The ice-blocks were much smaller in this high latitude than at any point between the position in which the explorers now were and the edge of the "pack" on which they had entered immediately after leaving the "Hecla." Amid this broken ice the men led a sort of amphibious existence for many days, and their labours were exhausting and severe in the extreme. But they bore up against their hardships and difficulties with great cheerfulness and goodwill—always hoping soon to reach the "main ice" to the northward of Spitzbergen, which Captain Lutwidge (of Phipps' expedition) had described as "one continued plain of smooth, unbroken ice, bounded only by the horizon."

On the 8th the ice met with was of a kind still lighter than any they had yet seen. On the 9th there was much rain; but in spite of it, the boats started at half-past seven P.M., crossing the loose masses, much of the surface of which consisted of the vertical needles or "penknives" already mentioned. After pushing on amid the rain, and through the melted snow, for an hour, "we halted," says Parry, "to save our shirts, which were the only dry clothes belonging to us." Soon after midnight, the rain being succeeded by one of the thickest fogs Parry ever saw, the travellers again proceeded, groping

their way almost yard by yard from one small detached mass to another. At half-past two A.M. on the 10th they reached a floe, which appeared at first a level, and a large one, but was found to be covered with immense ponds or rather small lakes of fresh water, too deep for wading. So great was the difficulty of getting forward with boats, baggage, etc., on this floe, that the party had to traverse some parts of it five times over. Halting at six A.M., after a most laborious day's journey of only one mile and three-quarters' distance in a north-north-west direction (in making which, however, many miles had been traversed), the latitude was found to be 82° 3′ N., the longitude 23° 17′ E.

Heavy rain fell on the 11th, but could not keep back the party, who, having discovered a lane of water, launched the boats and rowed half-a-mile, when, the rain becoming much heavier, a halt was called, and the men got under the cover of the awnings to keep their shirts dry—"which was the more necessary," says Parry, "as we had only one spare one between every two individuals." After a slight refreshment of a little rum and a mouthful of biscuit, travelling was resumed until half-past seven the following morning, when the party stopped to take supper, and have their day's sleep. As the explorers advanced northward, the birds became scarcer, and on this last day's march only one kittiwake and a boatswain (*Lestris parasiticus*) were seen. Setting off again on the evening of the 11th in the midst of a thick, wet fog, which obliged them to put on their travelling clothes dripping wet as when they had put them off before retiring to sleep, the explorers pushed on over the floes till midnight, when they halted to dine, and obtained the altitude of the sun, which placed them in latitude 82° 11′. The following day was clear and fine, the thermometer standing at about 36° in the shade, and the sky delightfully bright after the recent rains and fogs. A start was again made at seven in the evening over a floe that was so intersected by ponds and by streams running into the sea, that travelling in anything like a straight line was impossible. But if anything could have compensated for the delay thus occasioned, it would have been "the beautiful blue colour peculiar to these super-glacial lakes, which is certainly one of the most pleasing tints in nature." A resting-place was reached at six A.M. on the 13th, after "having gained only two miles and a half of northing, over a road of about four, and this accomplished by ten hours of fatiguing exertion." The latitude was now 82° 17′. On again over the broken ice at seven in the evening! Besides being much broken, and thus obliging the men to be constantly launching and hauling up the boats, much of the ice was so thin that it was dangerous to place any heavy package upon it, "and," says Parry, "it was often a nervous thing to see our whole means of existence lying on a decayed sheet, having holes quite through it in many parts, and which the smallest motion among the surrounding masses might have

instantly broken into pieces. There was, however, no choice except between this route and the more rugged though safer hummocks, which cost ten times the labour to pass over. Mounting one of the highest of these at nine P.M., we could discover nothing to the northward but the same broken and irregular surface; and we now began to doubt whether we should at all meet with the solid fields of unbroken ice which every account had led us to expect in a much lower latitude than this."

The night of the 13th was remarkably clear, with the most regular and beautiful "mackerel" sky Parry had ever seen. No land or indication of land was to be seen from the loftiest hummocks, some of which rose to forty feet in height; and a strong yellow ice-blink overspread the whole northern horizon. After five hours' unceasing labour, the explorers stopped to dine at half-an-hour past midnight, having only advanced a mile and a half due north, though they had traversed at least ten miles, making circuits and going over a great part of the ground three times with loads of stores. In this five hours' journey they had launched and hauled up the boats four times, and dragged them over twenty-five separate pieces of ice. The same kind of travelling was resumed after the midnight dinner. Many of the ice-masses were separated from each other about half the length of the boat-sledges, and in crossing from one to another the officers were stationed at the dangerous places to see that no precaution was omitted to secure the safe transport of the provisions. More than once, on the 14th, the men were obliged to ferry their provisions across a pool or channel upon a small piece of ice—the situation being such as to preclude making use of the boats. On such an occasion, had any accident occurred, such as the breaking, sinking, or overturning of the ice-piece, the provisions must have been irretrievably lost, and the whole party must have perished of want. The anxiety, therefore, with which this ferrying process was conducted, was altogether beyond description. Wherever the boats could be hauled across with the provisions in them, this mode of transport was preferred. While this was being done, on one occasion, the ice on which the boat rested began to sink, and then turned over on one side, almost upsetting the boat with the provisions in her. The moment was critical, and had not a number of the men instantly jumped upon the ice, and restored the balance by their weight, they might have been left entirely without provisions far out in the Polar Sea.

At six at night the expedition was again moving, but was delayed for twelve hours by heavy rain. "I had never before seen any rain in the Polar regions to be compared to this, which continued, without intermission, for twenty-one hours, sometimes falling with great violence and in large drops." On the 16th the weather was clear and fair, and, climbing to the top of a hummock forty feet in height, Parry was unable to see anything but ice,

with small patches of water. On this day the floes traversed were larger and the ice heavier than any the explorers had yet seen on the voyage. Their thickness did not generally exceed nine or ten feet, which is not more than the usual thickness of the floes in Baffin's Bay and Hudson's Strait, while it is a great deal less than the ordinary dimensions of the ice about Melville Peninsula, and not half the thickness of that which Parry had seen on the shores of the western extremity of Melville Island, "though," says the commander, "these places lie from eight to twenty degrees south of our present latitude." Towards midnight on the 18th there were smart showers of rain, with "dry, clear intervals between them, just as on an April day in England. This kind of weather, which continued for several hours, harassed the men very mnch, as it was too warm for working with their jackets on, and they wetted their shirt sleeves when they took them off. I think the blue sky between the clouds this night was as transparent and almost of as deep a blue as I ever saw it." Indeed the whole of the evidence adduced by Parry during this expedition, on the question of climate, goes to prove that in this, the most northern region of the Polar Sea ever visited by civilised man, the temperature of the air and of the sea were considerably higher, the ice lighter, and the climate milder than in much lower latitudes on the eastern coasts of the American continent.

From day to day the explorers continued, with noble perseverance, to push on towards the north, in the hope that, though it was now impossible they should be able to reach the North Pole during what remained of the open season, they would at least be able to reach a latitude considerably higher than had been attained by any previous expedition. On the morning of the 20th July, however, Parry made a discovery which clouded his hopes and caused him much vexation and disappointment. At noon on the day named he ascertained, by observation, that his latitude was only 82° 36′, "being less," he says, "than *five* miles to the northward of our place at noon on the 17th, since which time we had certainly travelled *twelve* miles in that direction." On the 21st the latitude was only 82° 39′, being but two miles and a quarter to the northward of the preceding day's observation, or four and a half miles to the southward of Parry's reckoning. On the 22d the expedition advanced between ten and eleven miles in a north-north-east direction; but what was the commander's disappointment to find that he had only reached latitude 82° 43′, or not quite four miles to the northward of the latitude observed on the preceding day, instead of the ten or eleven miles which had been actually traversed! The discouraging truth was now only too apparent. The travellers during their eight hours of daily rest and sleep *were being drifted to the southward* by the current prevailing in this part of the Polar Sea and by the north and north-west winds against which they had to contend. Though this fact was now sufficiently apparent to the com-

mander and his officers, the men were still unaware of it, and commenced their labour every day with the greatest cheerfulness and goodwill, though they were often heard to exclaim, laughingly—"We are a long time getting to this 83°!"

On the 23d four miles and a half were made in a north-north-east direction, over a road of seven and a half miles, most of which was traversed as usual three times, and the only notice of animal life in the journal for the day, is an entry to the effect that the travellers had "*heard* a rotge" or little auk. On the 24th two miles and three-quarters had been made, and when the travellers halted "for the night," at two A.M. on the 25th, so small was the ice around them, that it was with some difficulty a piece could be found sufficiently large to trust the boats upon while they rested. "Such," says Parry, "was the ice in the latitude of 82° 45′." On the evening of the 25th an attempt was made to resume the journey; but a snowstorm coming on, orders were given to stop, to put the awnings over the boats. At noon on the 26th, the weather having improved, Parry obtained the meridian altitude of the sun, by which he found himself in latitude 82° 40′; "so that," says the leader of the expedition, "since our last observation we had lost, by drift, no less than thirteen miles and a half; for we were now more than three miles to the southward of that observation, though we had certainly travelled between ten and eleven miles 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. Thus it appeared that for the last five days we had been struggling against a southerly drift exceeding four miles a day!"

The time had now come for Captain Parry to review the situation in which he found himself as the commander of a party of twenty-four persons, who had made their nightly bivouac for weeks upon floating ice-floes, who had now reached a sea over which no keel had ever ploughed, who had no resources except the provisions they carried with them, and of which any of the accidents to which they were constantly liable might deprive them at any moment, and whose daily efforts to push on northwards were all but neutralised by a southward drift. For some time past it had been evident to himself and his officers that the ice with which they had to contend was so broken and rough, and its drift to the southward so great, that they could not hope for anything but a very moderate share of success in travelling to the northward. Still, they had been anxious to reach the highest latitude possible under the circumstances; and with this view—although the great object of the expedition, the attainment of the latitude of 90°, had long been regarded as hopeless—they had continued their northern journeys for thirty-five days, or until half their resources were expended and the middle of the season reached. "For the last few days," says Parry, "the eighty-third

parallel was the limit to which we had ventured to extend our hopes; but even this expectation had become considerably weakened since the setting in of the last northerly wind, which continued to drive us to the southward during the necessary hours of rest, nearly as much as we could gain by eleven or twelve hours of daily labour. Had our success been at all proportionate to our exertions, it was my full intention to have proceeded a few days beyond the middle of the period for which we were provided. But this was so far from being the case that I could not but consider it as incurring useless fatigue to the officers and men, and unnecessary wear and tear for the boats, to persevere any longer in the attempt. I determined, therefore, on giving the people one entire day's rest, which they very much needed, and time to wash and mend their clothes, while the officers were occupied in making all the observations which might be interesting in this latitude; and then to set out on our return on the following day." These intentions were communicated to the men, who, though much disappointed in learning how unavailing had been their exertions, cheerfully set about their preparations for the return voyage.

The interest of Parry's last Arctic voyage reaches its climax at the time when the expedition attained its northernmost point. "This," says the commander himself, "was probably at seven A.M. on the 23d, when, after the midnight observation, we travelled, by our account, something more than a mile and a half, which would carry us a little beyond 82° 45′." This is the highest latitude ever actually reached by any Arctic explorer down to the present date, so that the name of Parry still heads the list of the explorers in Arctic seas. In lat. 82° 45′ the explorers had reached a point only 172 miles distant from the "Hecla," but in reaching this point they had traversed 292 miles, of which about 100 were performed by water previously to entering on the ice; and as by far the greater part of the distance on the ice was travelled over three, and not unfrequently five, times, the entire distance travelled may be set down at 580 geographical, or 688 statute, miles—or about the entire distance from the position of the "Hecla" to the Pole in a direct line.

The day set apart for rest previous to commencing the return voyage was warm and pleasant. The explorers displayed their ensigns and pendants during the day; "and," says Parry, "sincerely as we regretted not having been able to hoist the British flag in the highest latitude to which we had aspired, we shall perhaps be excused in having felt some little pride in being the bearers of it to a parallel considerably beyond that mentioned in any other well-authenticated record."

The return journey was commenced on the 27th at 4.30 P.M., and Parry states, that "dreary and desolate as were the scenes we were about to leave, we never turned homewards with so little satisfaction as on this occasion."

We cannot share in the commander's generous regret. He was not returning from the discovery of another Lancaster Sound, or from exploring the shores of a new Regent's Inlet (and thus bringing previously unknown regions within the compass of geographical knowledge, and pointing out new fishing grounds, in which our whalers have reaped splendid harvests for half a century), as he had done on earlier voyages; but he had carried the British flag to remoter regions than had ever been reached before, and thus conferred a lustre upon the naval renown of his country which has remained undimmed down to the present day.

It has not been our practice to describe return voyages in detail. Exploration usually terminates, and the interest of a voyage of discovery culminates, at the point where the explorers find it necessary to steer for home. Besides, the return from an Arctic enterprise is generally conducted with as much expedition as possible, and as hunger usually spurs the energies of the retreating navigator, there is but little time spent in making observations of any kind. Parry's party were not without this wholesome incentive to activity on their retreat to the "Hecla." On the 7th August, while the men were detained in the boats by rain, a fat she-bear crossed over a lane of water to visit them, and approaching the boats within twenty yards, was killed by Lieutenant Ross. "The scene which followed," says Parry, "was laughable even to us who participated in it. Before the animal had done biting the snow, one of the men was alongside of her with an open knife, and, being asked what he was about to do, replied that he was going to cut out her heart and liver to put into the pot, which happened to be then boiling for our supper. In short, before the bear had been dead an hour, all hands of us were employed, to our great satisfaction, in discussing the merits, not only of the said heart and liver, but a pound per man of the flesh; besides which, some or other of the men were constantly frying steaks during the whole day over a large fire made of the blubber." On the 11th, open water was reached, and the sea was found dashing with heavy surges against the outer masses of ice on the southern edge of the pack. On one of these masses the boats were drawn up, and the last meal the explorers were to eat on the ice upon which they had lived for forty-eight days was prepared. The boats were then launched, and sail was made for Table Island, which was reached in safety next day. On the 21st Parry and his companions reached the "Hecla" without mishap, after an absence of sixty-one days, and after travelling 1127 statute miles.

The homeward voyage of the "Hecla" commenced on the 28th August. The weather was beautifully fine, and the sun was seen by Parry, for the first time for four months, to dip his lower limb into the sea at midnight and then at once to rise again. All around the northern coast of Spitzbergen, where in May and June not a hole of clear water had been found,

not a single mass of ice was now to be seen in any direction. The voyage was prosperous and uneventful, and on the 23d September the "Hecla" reached the Orkney Isles, whence Captain Parry took passage in the revenue cutter "Chichester" to Inverness. On the 29th the famous navigator reported himself arrived, at the Admiralty, London. By a singular coincidence Captain Franklin had arrived from his second expedition to the Polar Sea on the same day as Parry, and the two great seamen, arriving at the Admiralty within ten minutes of each other, were not more surprised than delighted at this most remarkable and unexpected *rencontre.*

The "Hecla" was paid off on the 1st November, and for the last time Parry hauled down his pendant. His work as an Arctic explorer was done, although to his latest years he continued to take the greatest interest in Arctic enterprises, and continued to afford the Admiralty the most valuable advice and assistance in equipping subsequent expeditions. It is gratifying to reflect that the value of the work he had accomplished was amply and generously appreciated by all classes of his countrymen. For months after his return he was received with enthusiasm wherever he went. Distinctions were showered upon him both at home and on the Continent. He received a most generous letter from Lord Melville, the head of the Admiralty, in which his own extraordinary exertions and those of his boats' crews were duly acknowledged. The remainder of his professional career was distinguished, and some time after his death, 8th July 1855, the *Times,* in speaking of his services, said, with a truth that remains unimpeachable to the present day: "No successor on the path of Arctic adventure has yet snatched the chaplet from the brow of this great navigator. Parry is still the champion of the North!"

CHAPTER II.

ROSS'S VOYAGE, 1829-33—DISCOVERY OF A NORTH MAGNETIC POLE—FIVE YEARS AMONG THE ICE.

AFTER the return of Captain Parry from his attempt to reach the North Pole, in which, though he failed in his main object, he succeeded in reaching the highest latitude ever attained, Captain John Ross—of whose first Arctic voyage in 1818, in the "Isabella" and "Alexander," a narrative has been given—submitted to the Admiralty the plan of a voyage for the discovery of the North-West Passage by way of Prince Regent Inlet, to be undertaken in a steam vessel. The proposals of the gallant captain, though urged upon Government on three successive occasions, were not received with approval, and it was not till 1829 that, through the munificence of his friend Mr Felix Booth, he was enabled to purchase and fit out the "Victory," formerly a steam-packet running between Liverpool and the Isle of Man, and to equip her for the projected voyage. The "Victory" was a paddle-steamer, and however absurd it may appear to us to have selected a vessel of such construction for a voyage in frozen seas, it must be remembered that at the time referred to, steam-engineering was as yet in its infancy, that no steamers had previously been tried in the ice, and that, as by an ingenious contrivance the paddles could be lifted out of the water "in a minute," no apprehensions due to the form of the vessel were felt by its commander or officers. The tonnage of the steamer was originally no more than eighty tons, but after five feet and a half had been raised on her, she became capable of carrying a hundred and fifty tons, including the engine, with the necessary complement of provisions.

No sooner were the preparations for the voyage well begun, than Captain Ross received generous and disinterested offers of service from many distinguished naval officers. The following letter from Lieutenant Hoppner, who had sailed with Parry in all his voyages, except the last, is worthy to be remembered as evidence of the gallantry and generous enthusiasm of the writer: "As I feel so much interested in your noble enterprise," writes Hoppner to Ross, "I cannot help expressing myself more explicitly on the

subject next my heart. If you will accept my services, I am ready to go with you, in *any capacity,* and will make over all I am worth in the world for the advancement of your object. I promise you most implicit obedience; and will never offer an opinion unless required. Be assured of my devotion to the great and noble undertaking." Captain George Back, the tried and trustworthy companion of Franklin, also offered equally disinterested service. Meeting Captain Ross walking in Parliament Street, London, Back begged to be put upon the expedition. "Will you take me on any terms?" he asked; "I will go as draughtsman, or anything you chose to make me." Offers like these are in themselves the most valuable testimony to the character of the famous seaman to whom they were made, as well as to the spirit and courage of the naval service. In the meantime, however, Captain Ross had selected his nephew, Lieutenant James Clark Ross, who sailed in all Parry's expeditions between 1818 and 1827, as his second in command, and there was no accommodation for gentlemen-volunteers.

The "Victory" sailed from Woolwich on the 23d May 1827. From the first day the steam-engine was felt to be a failure. Primitive and rude in design, it was ineffective for speed, and had been so carelessly put together, and was constructed of material so imperfect, that it was continually getting out of working order. It seemed "as if it had been predetermined that not a single atom of all this machinery should be aught but a source of vexation, obstruction, and evil." The smaller boiler was landed as useless lumber, on the Irish coast, on the 9th June—and the whole of the removable machinery of this detestable engine was thrown out, with execrations and "curses not loud but deep," on the shore of Regent's Inlet, to allow the explorers additional space before settling down comfortably in their first winter quarters.

With the tedious catalogue of small misadventures with which Ross burdens the narrative of his departure from the British shores, we cannot here concern ourselves. It is enough to state that after a series of minor misfortunes which severely tried Ross's patience—and completely exhausts that of the readers of his "Narrative"—the "Victory" departed from the Irish coast in the middle of June, and, with a fair wind, ran in a fortnight to Cape Farewell. Disco Island was left behind at near the close of July, and early in August Captain Ross found himself at the entrance to Lancaster Sound. He had now reached the spot at which, on his former voyage, he had resolved to return, believing as he then did that there was no westward passage through the sound, but that an immense range of mountains landlocked the inlet. On August 7th land was seen on both sides of Lancaster Sound, and the course of the "Victory" was about mid-way between the two coasts. By observation at noon the latitude was found to be 73° 50′, the longitude about 74° 42′ W. Good progress west-

ward was made on the 9th, and on the 10th Ross had rounded Cape York and was heading the entrance to Regent Inlet. Standing across the mouth of the inlet, on the 11th land was made on its western shore, between Cape Seppings and Elwin Bay. At nine P.M. Batty Bay was passed, and ice was met thicker and much rougher than any that had been seen in the voyage up Baffin's Bay. The weather became thicker after midnight, but there being no appearance of danger, Captain Ross and his nephew (now Commander Ross) retired to rest, leaving the charge of the vessel to their "experienced and excellent mate, Blanky." This officer soon had occasion to prove whether the trust reposed in him was justified by his vigilance and the quality of his seamanship. "At two o'clock in the morning," writes Ross, "a heavy pack of ice which had been concealed from us by the fog, suddenly made its appearance at only three cables' length under our lee, and was only then recognised by the tremendous breakers that were surging over it. Deciding at once that the only chance for us was to weather the end next the land (the west extremity of the pack), he let fly the storm trysail sheet, and pulling the helm up, gave us notice of the danger." In wearing round to westward, however, the ship received a violent shock from a piece of ice on the larboard, which helped to bring the ship's head the right way. The pack was now on the lee-bow with the sea breaking over it, and in order to weather it all sail was set. The ship drove on and was providentially carried clear of the pack by a distance of about her own length. At once the most delightful relief was experienced, and the "Victory" came suddenly out of a turbulent sea into a reach of water as smooth almost as glass.

At six o'clock, the weather moderating, Ross set the mainsail, passed the ice, and stood towards the land. "In half-an-hour we saw the place where the 'Fury' was wrecked, with the poles of the tents standing; but we could not discern the ship, though we were sometimes willing to think that she was distinguishable. To our great mortification, however, we could not reach the spot; and we now saw that a strong southerly current or tide was hurrying us away from this unlucky place. A thick fog obliged us to wear, and return to our shelter under the ice we had just quitted." After beating about for some time an anchorage was sought for in Adelaide Harbour, on the western shore of Regent Inlet, and a few miles south-west of Fury Beach. A wind springing up from the westward, however, the "Victory" was driven out of its shelter toward the north-east, and after much trouble Ross succeeded in mooring her securely in a good ice-harbour at a spot of the coast within a quarter of a mile of the place where Parry had landed the stores of the "Fury," prior to abandoning that vessel. Being anxious to examine this interesting spot, the captain, taking with him Commander Ross, Mr Thom, the purser, and the surgeon, landed to visit it.

"We found the coast almost lined with coal," writes the captain; "and it was with no common interest that we proceeded to the only tent which remained entire. This had been the mess-tent of the 'Fury's' officers; but it was too evident that the bears had been paying it frequent visits. . . . Where the preserved meats and vegetables had been deposited, we found everything entire. The canisters had been piled up in two heaps; and though quite exposed to all the chances of the climate for four years, they had not suffered in the slightest degree. There had been no water to rust them, and the security of the joinings had prevented the bears from smelling their contents. Had they known what was within, not much of the provision would have come to our share." . . . Opening the canisters, and expecting to find the contents of each a frozen mass, Ross was agreeably disappointed. Neither in appearance nor in taste had the articles suffered any deterioration. The wine, spirits, sugar, bread, flour, and cocoa, were found to be all in equally good condition; neither the lime-juice nor the pickles, indispensable as remedies for scurvy, had suffered much, and even the sails, which had been well made up, were not only dry but seemed as if they had never been wetted.

Here, then, in the midst of what is perhaps the least sheltered region of the Arctic zone, and the least productive in material useful for food, Captain Ross had made the extraordinary "find" of a commissariat plentifully and almost completely stored with all that he should require to keep his expedition well supplied throughout the winter, even although he had not a day's rations left in the hold of the "Victory." That vessel, however, had been furnished with provisions for a thousand days, or roundly for two years and a half, and though the stores had already been liberally drawn upon, enough was left to secure the expedition against privation for at least one year. It is sometimes curious to note how Time "brings in his revenges." In 1818 Ross had declared that Lancaster Sound was closed to the westward by a rampart of mountains; in the following year Parry sailed over the district which these mountains were supposed to occupy, and proved, by opening up Lancaster Sound, Barrow's Strait, and the North-West Passage (in this latitude) as far west as Bank's Land, that Ross, in his voyage of the previous year, had been completely mistaken. It does not appear that Ross ever quite forgave the junior officer who had proved him to be in the wrong; and in the "Narrative" of his second voyage, the outline of which we are now tracing, the senior navigator argues through two or three bitter pages that Parry, when acting as his second in command in the expedition of the "Isabella" and "Alexander" in 1818, was not of the opinion that Lancaster Sound was open towards the west; and that if he did entertain such an opinion, his first duty was to communicate his impression to his superior officer. The discussion has sunk irrecoverably into the limbo of things never

again to be remembered, and it would not have been referred to here but for the curious circumstance that Ross, who is always unwilling to grant due credit to Parry, only reached Regent Inlet by sailing along the coasts that Parry had discovered, and that he lived for four years upon the stores which Parry had securely deposited, for the use of the first comer, on Fury Beach.

"We proceeded now to the beach where the 'Fury' had been abandoned," continues Ross, "but not a trace of her hull was to be seen. There were many opinions, but all were equally at liberty to conjecture what had become of the wreck. Having often seen, however, what the moving masses of ice could do on this coast, it was not difficult to guess in general what we could not explain in detail. She had been carried bodily off, or had been ground to atoms and floated away to add to the drift timber of these seas. At any rate, she was not to be found. . . . We therefore returned on board, and made preparations for embarking a sufficiency of stores and provisions to complete our equipment for two years and three months, being what we expected to want on the one hand, and to obtain on the other. I need not say that it was an occurrence not less novel than interesting, to find in this abandoned region of solitude and ice and rocks, a ready market where we could supply all our wants, and, collected in one spot, all the materials for which we should have searched the warehouses of Wapping or Rotherhithe, all ready to be shipped when we chose, and all free of cost; since it was the certainty of this supply, and a well-grounded one it proved, that had formed the foundation of the present expedition."

A list of the provisions, fittings, etc., required by the "Victory," to complete her supplies for a period of two years and three months, having been made out by the purser, Mr Thom, Ross landed with most of his officers and crew to take over such of the "Fury's" stores as were required. They took away all the canisters they could stow in the "Victory," yet the piles of these with which the shore was covered seemed scarcely to have suffered any diminution. On the following day, the 14th August, the embarkation of the stores, including ten tons of coals, was completed. The spare mizzen topmast of the "Fury" was found, and was made a prize of by the carpenter, who converted it into a boom for the "Victory," in place of one that had been lost in a gale. Anchors, hawsers, together with boatswain's and carpenter's stores, were obtained to make up deficiencies, and a number of the best sails were taken to be used as housings. From the powder magazine Ross selected as many of the patent cases—in which the gunpowder was found to be in perfect preservation—as he considered he should require; "and with this," exclaims the lucky captain, "we ended our new outfit, storing ourselves, somewhat like Robinson Crusoe, with whatever could be of use to us in the wreck."

All preparations being now completed, and a breeze springing up from

the northward, the boats—including the large decked barge of sixteen tons, to which Ross had given the name of the "Krusenstern"—were hoisted on board, and sail was made for Cape Garry. On the 15th, this cape, the farthest extremity of the coast which had yet been discovered, was passed, and from this point "our voyage," says Ross, "began to acquire its peculiar interest, since as yet we had seen nothing that was not more or less known." Pursuing a south-west course from Cape Garry along the western shore of Regent Inlet, Ross successively discovered and named Fearnall Bay, Lang River, Mount Oliver, and Hazard Inlet. Rounding this inlet, he discovered an island which he named Ditchburn, and beyond that he discovered a land appearing to be continuous in a southward direction, to which, in honour of Felix Booth, Esq., who had so generously borne the cost of fitting out the expedition, he named Boothia. "It now fell nearly calm," says Ross, "but, while the ice became thicker and heavier towards four in the afternoon, the fog cleared away, and there broke on our view a range of mountains rising beyond the land that we had been coasting, which we now saw clearly to be a low and flat tract, continuous eastward with this elevated region, and consisting, not of an uninterrupted plain, but of a series of low grounds and islets, among which we could but ill decern what was a real island, and what was connected by an isthmus with the shore." In fact Ross had now reached the eastern entrance to Bellot Strait, a channel, however, which it was left for Kennedy to discover in his voyage in the "Prince Albert," in search of Sir John Franklin, in 1851-52.

The sky continued to brighten, and the mainland appeared quite blue; but it was impossible to reach the inviting shore, owing to a tract of closely-packed ice, which extended in crescent shape along the land. This was the first time that the progress of the "Victory" had been completely obstructed, and it was only now that Ross discovered he had arrived too early in the season to push on in the desired direction. A fresh north-west wind continued to blow on the 15th, but no opening in the ice was seen. At two o'clock on the morning of the 16th the explorers got near the land, and made fast to an iceberg, about musket-shot from the beach, in three and a half fathoms water, and at the entrance of "two beautiful little harbours." At noon, Ross went on shore with all the officers, to take formal possession of Boothia Land, "and at one o'clock, being a few minutes after seven in London, the colours were displayed with the usual ceremony, and the health of the king drunk, together with that of the founder of our expedition, after whom the land was named."

Ross was in some respects an unlucky navigator. In his former voyage he had *all but* opened up Lancaster Sound, and discovered Barrow Strait, with the numerous inlets, islands, and channels, which formed such a rich harvest of discoveries for Parry in the following year, and now he was actually standing on a height overlooking the eastern entrance to a channel leading

westward into the Arctic—the Bellot Strait of Kennedy—yet he failed to discover it, and erroneously regarded it as an inlet, which he named Brentford Bay. At noon on the 17th, observations were obtained, giving lat. 71° 59′, long. 93° 32′. The dip of the magnetic needle gave 89°—the greatest dip that had yet been observed. "As the variation also was westerly," says Ross, "we expected that we should find or pass over the magnetic pole, which, under such a dip, could not be far distant."

At night the tide rose and floated the iceberg to which the "Victory" had been made fast, and Ross was obliged to cast off. Taking advantage of a light air of wind, he stood out for an opening that seemed to lead to the southward. Continuing to stand to the southward, at four o'clock on the morning of the 19th, the "Victory" was steered between two large pieces of ice which suddenly closed, so as to give the vessel a most alarming "squeeze." She escaped, however, from the stern embrace. But it was now evident to Ross that he had about reached the extreme limit of the clear water. Before noon the ice came down on the "Victory" with great violence, and it was with difficulty the rudder was unshipped in time to be saved. After being drifted about helplessly along the shore for a number of days, Ross left the ship to explore an inlet, which he had discovered in lat. 70° 55′. The inlet was a quarter of a mile wide, and soundings were obtained in fifteen fathoms. Rowing up the creek for a mile, Ross was pleased to behold it expand into a spacious opening, having twenty fathoms in the middle, and shoaling gradually to the sides. Ascending a hill, the captain had a perfect view of a harbour "not exceeded by any in the world." The discoverer named it Elizabeth Harbour, and within it he found refuge for a few days. But the season was too far advanced to remain in any harbour, except that which was to form the home of the expedition during the winter. Accordingly, though wind and current were unfavourable, Ross put out to sea, where, without achieving any noteworthy result, he was buffeted and drifted about for days. On the morning of September 11th, after having been moored all night under the lee of an iceberg, the "Victory" was pushed out from the shore to take advantage, if possible, of the fresh breeze that had sprung up from the north-west. "The attempt, however," says Ross, "was made in vain; and after three hours of hard labour, we could neither proceed nor extricate the ship, so that we were obliged to submit ourselves to the ice, which was now closely packed in the whole channel which it occupied. It was in vain that we attempted to disengage ourselves, even when it got into motion. . . . We therefore thought ourselves lucky in getting hold of a grounded iceberg; though the points of rocks were appearing all around, and close by our ship. Unfortunately, however, a wind springing up from the westward brought down an additional quantity of ice before daylight, with a great increase of pressure, when the whole

mass began to move to the eastward with frightful rapidity, carrying along with it our helpless ship, amidst a collision and a noise, from the breaking of the ice against the rocks, which was truly awful." Luckily the drift of the ice carried the "Victory" into an open channel, where she was made fast to a grounded iceberg, and thus secured for the time. The change of tide drove the explorers out of their shelter, and they were carried within three yards of some rocks which were just under water, at the narrowest part of the point. Believing that they might succeed in rounding this place, and thus getting into what seemed to be still water, they endeavoured with much labour to warp the ship into a small creek immediately beyond the rocks. This proved to be a whirlpool; and, says Ross, "having been turned round by it many times, for more than an hour, we were obliged to leave it, and trust ourselves once more to the confusion without."

On the 30th September, after forcing his way southward among a group of islets off the mainland, one of which he named Andrew Ross Island (lat. about 70° 13′ north), the captain discovered a spacious bay to the north-east, protected on the south-west by an island. In this place of security (lat. about 70°, long. G. 2° 40′), he resolved to take up his position; for he now considered that all hope of making further progress was at an end for the season. On the 1st October the harbour was surveyed, and Ross was pleased to find, that should he be frozen up in this spot, he should find it safe. And here, sure enough, he was frozen up; so satisfactorily frozen up, that he was forced to spend four terrible winters amid the ice of this region, without being able to extricate himself. Lucky it was for the adventurers in the "Victory," that they had amply provisioned themselves from the "Fury's" stores; for had they not thus been providentially supplied with the means of sustaining life, they must have perished to a man before the close of the second winter.

CHAPTER III.

THE "VICTORY" FROZEN IN—ESKIMO VISITORS—A HOSTILE RECEPTION—MUSK-OX HUNT—THE SECOND WINTER IN THE ICE—NORTH MAGNETIC POLE DISCOVERED—THE THIRD WINTER IN THE ICE—ROSS ABANDONS THE "VICTORY"—THE RETREAT TO FURY BEACH.

For several days Captain Ross indulged a faint hope that he might yet be able to force his way through the ice and proceed still farther south; but on the 8th October it had become evident to himself and his officers that they were now in what was destined to be their home for the winter. On the day named a survey was made, but not a pint of clear water was to be seen anywhere—nothing but one dazzling and monotonous, dull and wearisome, extent of snow was visible all round the horizon. "It was indeed," exclaims Ross, "a dull prospect. Amid all its brilliancy this land, the land of ice and snow, has ever been, and ever will be, a dull, dreary, heart-sinking, monotonous waste, under the influence of which the very mind is paralysed, ceasing to care or think, . . . for it is but the view of uniformity and silence and death." As it appeared to the gallant captain, the picture was no doubt dreary enough. But it applies only to that reach of Regent's Inlet in which he now found himself; for other explorers, in other tracts of these regions, and pursuing the work of exploration perhaps with a keener instinct and larger capacity, and certainly with more efficient means and facilities for carrying on the work, have found the sternest Arctic winter not without its pleasures, its useful occupations, and its fascinations of adventure.

Meantime the arrangements for rendering the "Victory" a comfortable dwelling-place were immediately commenced. On the 10th October nothing remained standing on the vessel but the lower masts with their rigging. The fuel was then measured and found to amount to 700 bushels of coal and coke—enough to supply fuel for as many days. The provisions were also examined, and the quantity was found sufficient for three years. There was only one year's allowance of spirits on board; but this was rather a matter for congratulation than otherwise, as their use, in any but the smallest quantities, and on other than occasions of emergency, is invariably

attended with pernicious effects in these regions of the extreme north. Thoroughly convinced of this fact, Ross gave orders that the usual allowance of grog should be stopped, and was gratified, and perhaps a little surprised, to find that these orders were received without remonstrance. Before the close of October the roofing in of the vessel with sails was completed, and the building of a rampart or embankment of snow around it, as a protection from the bitter winds, was being proceeded with. The upper deck was covered with snow to the depth of two feet and a half, and this coating was sprinkled with sand so as to have the appearance of a rolled gravel walk. "The surrounding bank of snow being completed, reached to the ship's gunwale, so that the union of this with the roof formed a perfect shelter from all wind, and thus excluded, very materially, the impressions of the external cold." Every yard of rigging was taken down, cleaned, marked, and stowed away, and arrangements for meals, for work outside the ship, and for carrying on an evening school for instruction in reading, writing, arithmetic, and navigation, were also completed. Reviewing all his arrangements, at the close of November, Ross states, that "the system of comfort and economy which had been planned was as perfect as could be desired; and the satisfaction of the men with these things, with each other, and with their officers, could not have been greater. Under their system of education they improved with surprising rapidity; while it was easy to perceive a decided change for the better in their moral and religious characters."

But Captain Ross's narrative of the first of his five years' sojourn in the ice is almost eventless; and as we have so much of stirring adventure, of geographical discovery, and scientific research to attract us, in the voyages of later explorers, we dare not linger over the bare annals now under consideration.

Nothing of importance occurred down to January 9th, when information was brought to Captain Ross of the appearance of Eskimos. The captain went out, and after walking some distance, saw four natives near a small iceberg, not far from land, and about a mile from the ship. As Ross approached they retreated behind the iceberg, and on his advancing still nearer, "the whole party came suddenly out of their shelter, forming in a body of ten in front and three deep, with one man detached on the land side, and apparently sitting on a sledge." These thirty Eskimos were armed with knives and spears, and they must have had a most formidable appearance. Ross and his party advanced, shouted the Eskimo salutation—*Teyma teyma, aja teyma*—and threw away their guns. This was at once a friendly greeting, and an assurance of peaceful intentions. The blameless Eskimos appreciated the amiable overture, "threw their knives and spears into the air in every direction, returning the shout *Aja,* and extending their arms to show they also were without weapons. But as they did not quit their

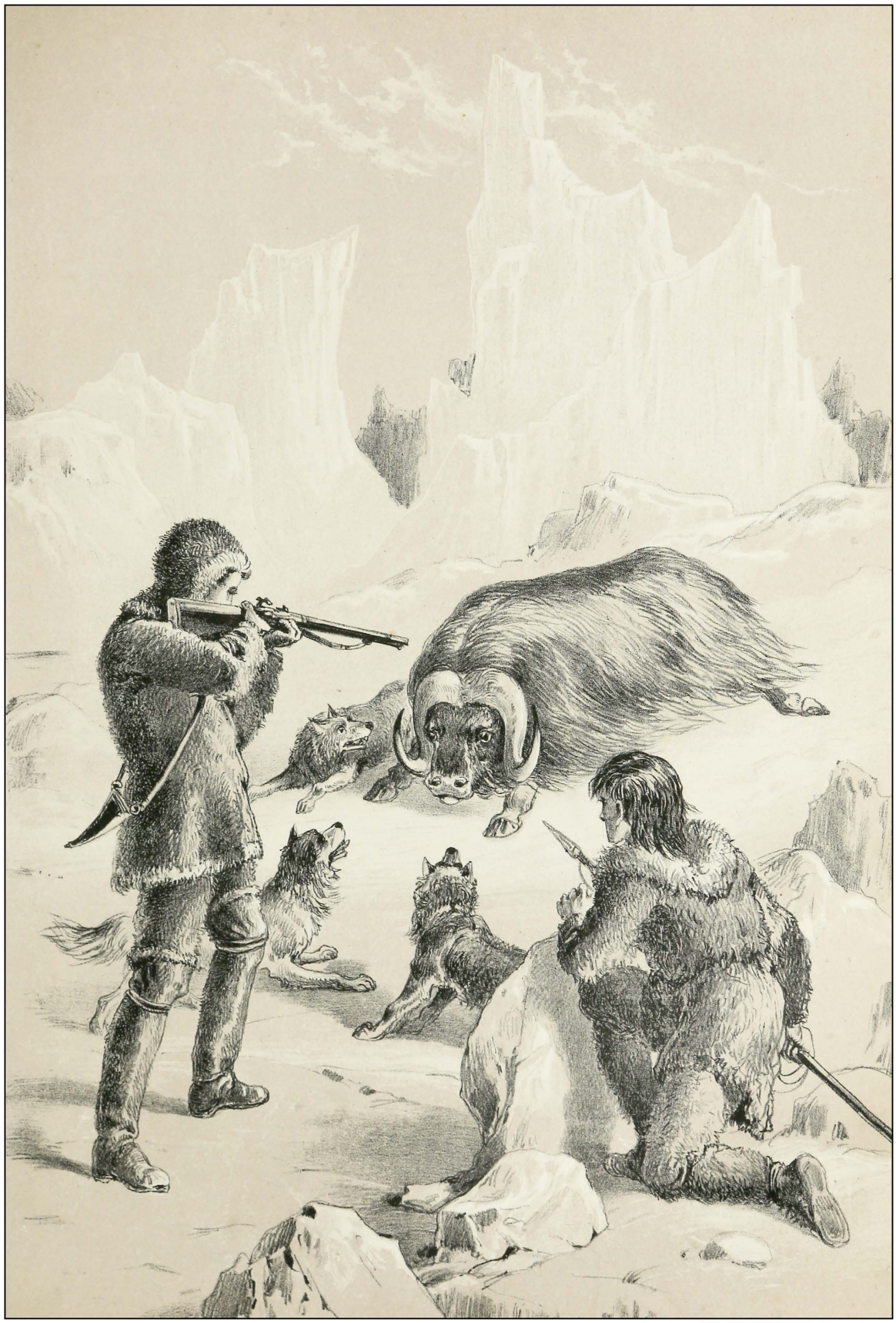
places," continues Ross, "we advanced and embraced, in succession, all those in the front line, stroking down their dress also, and receiving from them, in return, this established ceremony of friendship." Commander Ross, who was in attendance upon his uncle, and who, during his repeated voyages with Parry, had to a certain extent acquired the Eskimo language, now opened up intercourse with them. They were thirty-one in number; the eldest, Illicta, sixty-five years of age. One of them, in an encounter with a bear, it was understood, had lost a leg. All were well dressed in excellent deerskins, "the upper garments double, and encircling the body, reaching in front, from the chin to the middle of the thigh, and having a cape behind to draw over the head, while the skirt hung down to the calf of the leg in a peak not unlike that of a soldier's coat of former days. The sleeves covered the fingers; and, of the two skins which composed all this, the inner one had the hair next the body, and the outer one in the reverse direction. They had two pairs of boots on, with the hairy side of both turned inwards, and above them trousers of deerskin, reaching very low on the leg; while some of them had shoes outside of their boots, and had sealskins instead of those of deer, in their trousers."

These well-to-do savages consented to visit the ship, in which they conducted themselves much after the fashion of the natives with whom earlier explorers had been in communication. At the appearance of the snow embankment around the "Victory" they expressed no surprise — this species of snow architecture being familiar to them. A present of a piece of iron hoop was made to each man, and great was the delight with which it was received. The younger Ross did not recognise any of his former acquaintances of Winter Island or Igloolik among this tribe; but when he mentioned the names of places near Repulse Bay, Wager River, etc., they immediately recognised the names, and pointed in the direction of the localities. Captain Ross had now an opportunity of closely observing them, and he says, "We could now easily see that their appearance was very superior to our own." They were at least well clothed, and their plump and ruddy cheeks gave evidence that they were in excellent health and had abundant food. Indeed, in the matter of eating and drinking they were connoisseurs of no mean pretentions. Preserved meat was given to them, and one of them, a deeper diplomatist than his brethren, ate a small morsel of it, and faintly pronounced it "very good." On cross-examination, however, he admitted that he had said what was not true; and having obtained permission, he and the other natives threw away the meat with which they had been supplied. They were offered wine and spirits, which they evidently considered miserable drinking; but they drank off beakers of oil with much satisfaction, and were glad to think that the white people had at least one tolerable beverage among their stores. A party from the "Victory" accom-

panied the natives part of the way back to their huts, and coming to a seal-hole in the ice, the Eskimos showed their new friends the use of the spear in enlarging the hole for the insertion of a twig of birch or ash. It is their custom to sit patiently, watching at the seal-holes until they see the twig agitated. They then know that the seal has come to the hole to breathe, when immediately they strike him through the thin ice with their spears and secure him.

On the following day, 10th January 1830, Ross, with a party, set out from the ship to inspect the village of the Eskimos. The houses had the appearance of inverted basins, and the low snow-built passage forming the entrance looked like the handle of each. The entrance passage can be easily moved, and in severe weather is always turned away from the direction of the prevailing wind. The passage, always long, and generally crooked, led to the principal apartment, which was a circular dome, ten feet in diameter when intended to accommodate only one family, but larger when it contained two families. A third of the area of the interior was occupied by a bench of hard snow, two and a half feet high. This bench formed the sleeping-place for the whole family, and when so used, was covered with skins. The houses were lighted by a large piece of clear ice, fixed half-way up on the eastern side of the roof. The oil lamp, with its wick of moss, kept the whole hut warm, and supplied sufficient light during the dark weather.

The friendly intercourse thus commenced between the explorers and the Eskimos of the east coast of Boothia Felix continued uninterrupted for many a day. One of Ross's principal objects in securing the goodwill of the natives was to obtain from them all the geographical information of which they were possessed. Accordingly, he frequently had parties of the best informed of the Eskimos to dinner in his cabin, when, after regaling them with soup and salmon—they declined to touch salt meat, and would on no account look at pudding, rice, or cheese—pencils, paper, and the charts of the land round Regent's Inlet, so far as known, were placed before them, and they were invited to continue the land lines, and to insert the lakes, rivers, etc., with which they were familiar. But as no noteworthy result accrued from these geographical *séances*, we must not linger over their details. One of the best native geographers was Tulluahui, the man who had lost his leg in the encounter with the bear. This hunter's contributions to the geography of the neighbouring coasts were magnificently rewarded. To his great astonishment he was one day handed over to the surgeon of the "Victory," who examined his leg, found the stump good, and, calling the carpenter, directed him to take the necessary measurements, and make a wooden one. The commission was most successfully executed, and Tulluahui, with a broad foot-piece fitted to his wooden leg, to enable him to walk on difficult ice with



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ease, was once more able to join his neighbours, and take his turn of duty at the seal-fishing. The skill of the ship's carpenter in thus providing a substitute for the natural limb, gave the greatest satisfaction and delight to the whole tribe. One man, who had a slight sore on his leg, came to Ross and begged to be furnished, like Tulluahui, with a wooden one. "I have no objection," said Ross, "on condition that you first have your own leg cut off." The Eskimo never repeated his request.

During the spring of 1830 Commander Ross, Captain Ross's nephew and first officer, made a number of journeys from Felix Harbour—the name given to the inlet in which the "Victory" was frozen up—for the purpose of exploring the surrounding country. The third of these expeditions was undertaken for the purpose of visiting a place considerably to the north of Felix Harbour, at which point, according to the Eskimos, the land trended away to the north-west. This, it was reported, was the route to the western Arctic Ocean, to reach which was one of the chief aims of the explorers. On the 27th April Commander Ross, accompanied by the surgeon, and by Abernethy, the mate, set out with their dog-sledge to reach the Eskimo village, where, it had been arranged, they were to procure a guide. Their arrival at the huts was not hailed with the cheerful shouts with which they had been greeted on all former occasions; and they were surprised to find that all the women and children had been sent out of the way. Soon the men swarmed out from the huts; and young Ross was astonished to observe that all the men were armed with their knives. "It was the noise of our dogs," says Ross, "that gave them notice of our arrival; and as soon as this was heard, one of them rushed out of a hut, brandishing the large knife used in attacking bears, while the tears were streaming down his aged and furrowed face, which was turning wildly round in search of the objects of his animosity. In an instant he lifted his arm to throw his weapon at myself and the surgeon, who were then within a few yards of him. But the sun dazzling him, caused him to suspend his arm for an instant, when one of his sons laid hold of his uplifted hand, and gave us a moment's time for reflection." Ross retired to the sledge, where he had left his gun. The old Eskimo, Pow-weet-yah, struggled to free himself; and a number of the natives made a detour so as to surround the Englishmen. Gradually they closed in, brandishing their weapons, and had arrived close upon the sledge, when Ross raised his gun to his shoulder, upon which the Eskimos beat an instantaneous and rapid retreat. The Englishmen could not even guess at the reason for this hostile reception, until one of the women, calling on the explorers not to fire, advanced towards them, and explained the meaning of the warlike demonstration. She stated that one of Pow-weet-yah's adopted sons, a fine boy of seven or eight years of age, had been killed on the preceding night by the falling of a stone on his head. This fatal accident the

Eskimos attributed to the agency of the white strangers, to whom they ascribed the possession of all manner of supernatural powers. An explanation immediately followed, and friendly relations with the natives were soon re-established.

This journey, resultless in its objects, and dull enough in its details, was enlivened by an exciting musk-ox hunt. Ross's guide, Poo-yet-tah, having discovered recent tracts of this animal, let slip the dogs. These immediately started off upon the track at full speed, and were soon out of sight. Ross and the guide followed, and after a rapid march of two hours, on turning the shoulder of a hill, had the intense satisfaction of beholding a fine ox at bay before the three dogs. The guide, who now rushed on in advance, attempted two or three times to bring down the huge animal with his arrows, which, however, proved ineffectual and harmless against the great creature's ribs and hide. Ross advanced to within fifteen yards, and fired. The ox dropped, but rising again, charged Ross, who eluded the attack by dodging behind a large stone, which was luckily in the near neighbourhood, and upon which the animal, "rushing with all its force, struck its head so violently that it fell to the ground with such a crash that the hard ground around us fairly echoed to the sound." Again the creature recovered, and charged as before. Ross was now in the open, but having had time to reload, he awaited the onset, fired, and brought down the ox at a distance of five yards. "The sight of his fallen enemy," says Ross, "made my companion scream and dance with joy. . . . He was lost in astonishment at the effect of the firearms; first carefully examining the holes which the balls had made, and pointing out to me that some of them had passed quite through the animal. But it was the state of the broken shoulder which most surprised him; nor would it be easy to forget his look of horror or amazement when he looked up in my face and exclaimed, '*Now-ek-poke*'—'It is broken!'"

Captain Ross's narrative of the first year's sojourn of the "Victory" among the ice is weary, stale, flat, and unprofitable to a degree beyond what the heart of readers of the present day can conceive. Besides the present writer, there is probably no human being alive at this moment who could, would, or should read it in its entirety. It is suffused with a faint colouring of interest only in one portion—that in which the expedition of Commander Ross across the isthmus of Boothia is described; but even this journey, performed in the face of continual perils, was in itself practically resultless. It is with a sense of relief, therefore, and with no feeling of regret, that we pass over the dull and monotonous details of Ross's journal until we arrive at the entry for the 17th September. In the morning of that day the ice had drifted off the land, and at two o'clock, all necessary preparations having been made, Ross found himself once more afloat, and in clear water. He advanced three miles, when he was again stopped by ice — the detention

lasting for more than a week. It soon became evident that the "Victory" was not to be released this season; and on the 30th September the explorers found themselves frozen in for another year in a harbour only a few miles distant from that in which they had spent the winter of 1829-30.

The principal enterprise undertaken by the explorers during the year 1831 was the journey undertaken under the command of the younger Ross, to ascertain the position of the North Magnetic Pole. This question had deeply engaged the attention of Parry and Franklin; and one of the objects they had in view in making daily records of the variation of the compass, and the dip of the magnetic needle, was to arrive at some satisfactory solution of it. From the mass of their observations, these navigators had calculated the position of this important spot to be in 70° of north latitude, and in 98° 30′ of west longitude. "Thus," says Commander Ross, "it appeared that in the course of my land journey to the westward in the preceding year (1830) I had been within ten miles of this assigned place, when near Cape Felix, but as I was not then provided with the necessary instruments, I could do nothing towards verifying the fact." Now, however, when the "Victory" had been again imprisoned in the ice, and when there was little to employ her officers and men, Commander Ross resolved to make an attempt to set this question at rest. Accordingly, setting out on the 27th with his party, Ross travelled westward all night across Boothia Isthmus until eight on the following morning, when he made his encampment in lat. 69° 34′ 45″, long. 94° 54′ 23″ W. At this point he found that the dip of the magnetic needle had increased to 89° 41′ N., and that the north end of the horizontal needle pointed to north 57° W. "By means of these observations," writes the explorer, "I was enabled to determine both the direction in which we must proceed, and the distance that lay between us and the great object in view." On the evening of the 28th the march was resumed, and, as usual, continued during the night, to lessen as far as possible the danger from snow-blindness. On encamping on the morning of the 30th May, the latitude was found to be 69° 46′ 25″, the long. 95° 49′ 11″ W. Ross was now coasting a wide inlet running westward from Boothia Isthmus into one of the arms of the Arctic Ocean. On the morning of the 31st the party had reached to within fourteen miles of the position of the Magnetic Pole, as calculated by Ross. Leaving all unnecessary baggage and provisions behind, the young explorer set out on a rapid march, and reached the spot which, according to his calculations, marked the position of the Magnetic Pole, at eight in the morning of the 1st June. "I believe I must leave it to others," he writes, "to imagine the elation of mind with which we found ourselves now at length arrived at this great object of our ambition. It almost seemed as if we had accomplished everything that we had come so far to see and to do; as if our voyage and all its labours were at an end,

and that nothing now remained for us but to return home and be happy for the rest of our days."

There was nothing in the appearance of this famous spot to indicate that this was the centre, or the position on the earth's surface of the centre, of one of the greatest and most mysterious of earth's influences—terrestrial magnetism. The land was low near the coast, and rose in ridges of fifty or sixty feet high about a mile inland. No striking feature in the landscape arrested the eye; and "Nature had here no monument to denote the spot which she had chosen as the centre of one of her great and dark powers." Ross had therefore to content himself with noting by mathematical numbers and signs what it was difficult to distinguish in any other manner. An encampment was speedily formed, and the necessary observations were commenced. "The amount of dip," says Ross, "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. These were suspended in the most delicate manner possible, but there was not one which showed the slightest effort to move from the position in which it was placed, a fact which even the most moderately informed of readers must now know to be one which proves that the centre of attraction lies at a very small horizontal distance, if any."

Having thus ascertained that he had reached the position of the Magnetic Pole on the earth's surface—that, in fact, he was actually standing upon that hitherto unknown spot—Ross communicated to his companions the result of their joint labours, after which, amid mutual congratulations, he, with their co-operation, planted the British flag upon the spot, and "took possession of the North Magnetic Pole and its adjoining territory in the name of Great Britain and William IV." A lofty cairn, under which was buried a canister containing a record of the discovery, was raised, and the latitude was determined to be 70° 5′ 17″ N., long. 96° 46′ 45″ W. The return journey was commenced on the 2d, and successfully finished on the 13th June.

This famous and important discovery was the one great scientific achievement of the expedition, and from this point onwards there is little to note, further than the various and disheartening attempts made by the explorers to escape from the ice, until we come to record more in detail the heroic efforts by which, abandoning their vessel, they at last reached the open sea in their boats.

The summer of 1831 was chilly, and brought with it no promise of relief to the ice-bound explorers. On the night of the 3d July water, previously open, froze to the thickness of an inch and a half. During this month an immense number of fish were caught, and pickled in hot vinegar, dried, or

salted. The natives assisted at the fishery, and thus became acquainted for the first time with the use of nets, of the value of which they showed full appreciation. Ross, perceiving that the natives were fully aware of the value of the fishing-net, ordered his men to instruct them in the method of manufacturing it, and thus made them a present of a contrivance which would be of the highest importance to them. Indeed, throughout all the intercourse between the Englishmen and the Eskimos, the latter were always treated with the greatest humanity and considerate kindness. Reflecting on the character of this intercourse, Ross states, with a justifiable pride: "We had sold them no rum, we had introduced no diseases among them, nor had we in anything done aught to corrupt their morals or injure their healths—to render them less virtuous or less happy than we had found them. Nor had they learned anything from us to make them discontented with their present and almost inevitable condition. On the contrary, while we soon hoped to leave them as happy as we had found them, we had reason to believe that they would hereafter so far profit by our example, and by the displays of knowledge and ingenuity which they had seen with us, as well as by the various useful things we had distributed among them, as to augment their own ingenuity and resources, and thus improve their condition of life as far as that was capable of improvement."

During the summer months every necessary preparation had been made to fit the "Victory" for the open sea. The gunpowder was taken on board on August 5th, and the vessel was hove some little distance out of its icy bed on the 11th; but there was heavy snow on the 16th, followed by fog and rain, and though the ice had now begun to shift about the ship, an adverse wind drove it all back and packed the bay as before on the 21st August. On the 27th the ice began to drift out of the bay to the eastward, and on the evening of that day the passage out of the bay was deemed practicable. The "Victory" was accordingly warped a quarter of a mile to the south-west into a convenient place for taking advantage of the first opening. "As soon as this was done," writes the captain, "we got under sail, but unfortunately carrying away the mizzen-boom, could not weather a piece of ice. She was then brought about by it, and equally failed in weathering a large iceberg on the other tack, which was grounded, by which means she took the ground herself. We soon, however, hove her off by hawsers to the shore; and though her bottom did not prove to be damaged, the lower rudder iron was broken, *so that there was an end to our progress for the day.*" In other and in simpler words, Ross had again missed his opportunity, and there was now every likelihood that the "Victory" should be imprisoned in the ice on this most inhospitable of all known coasts for yet another year. On the following morning a western wind, the very wind that Ross had been praying for, sprang up, and hope once more fluttered the pennon of the

"Victory." The vessel was again moving in free water, and at four in the morning Ross cast off, and with reefed topsail stood to the north-east along the shore on his return voyage up Regent's Inlet towards the home he pined for. "Unluckily," continues Ross—— but we need not quote further. It was the old, old, detestably old, story of adverse winds driving the vessel on a rocky, ice-fringed shore. After running four miles, the "Victory" entered a little bay, "which," says Ross, with a *naïveté* one would hardly give him credit for, "we found to be secure from all points of the compass, *except four*." One might almost as reasonably talk of the shelter afforded by a coverless umbrella. The bay in which the "Victory" was moored was found to be in lat. 70° 18′. On the 31st a survey of the situation was made, and Ross found "everything blocked up with ice." Two hares were shot, and it was with a mournful foreboding that the sportsmen noticed that the fur of the animals was white—in other words, that winter had already commenced its reign in these happy regions of Boothia Felix.

The "sweet little cherub that sits up aloft," and is supposed to look after the interests of "Poor Jack," does not appear to have been a passenger in the "Victory." In all the annals of Arctic Exploration it would be difficult to name any vessel that was so long and so continuously unlucky. There was assumption, if not presumption, in naming her the "Victory," for even her advances were only a succession of defeats; and now, after three years of fruitless, or nearly fruitless, exploration within the Arctic circle, she was frozen up for the third winter in what is perhaps the worst harbour in the Arctic regions. "It was out of the track of animals," says Ross, "there were no rivers, and we did not know of any fish in the small lakes near us. If we could not, therefore, look for any supplies from these sources, neither could we from the natives, as the interval between them and us was filled with unpassable ice. If our aspect was a southern one, yet there were high hills to the southward which much shortened the already too short visits of the sun." Yet to this inlet of starvation the gay commander was inconsiderate enough to give the name of Victoria Harbour! The only victory likely to manifest itself in this quarter was the victory of the grave.

Arid, dull, and dreary as his winter home is Ross's record of his sojourn in Victoria Harbour. Toward the close of the year scurvy began to affect the crew. On the 10th January 1832, James Dixon, one of the seamen, died; and Buck, another seaman, who had been for some time subject to epilepsy, soon after became blind. "Our medical report," writes Ross on the 31st, "begins now to be very different from what it had hitherto been. All were much enfeebled, and there was a good deal of ailment without any marked diseases. An old wound in my own side had broken out with bleeding, and I knew too well that this was one of the indications of scurvy." Altogether, the spirit of the Arctic realm seemed resolved to assert

his sovereignty in Victoria Harbour, and to make an example of the white intruders who had invaded his domains. One thing was now evident, that if the "Victory" could not be got out of the ice *the men must*—or one common doom would speedily overwhelm officer and man, and the whole victorious expedition would come to the somewhat unvictorious termination of the stronger members of the crew digging the graves of their comrades, without any reasonable hope that anybody would be left to perform the same service for themselves. The prospect was not cheering, and the only alternative, that of abandoning the ship and travelling north along the coast to some spot where open water was accessible in summer, was not an exhilarating one. But scurvy was hovering over the seemingly doomed vessel like a vulture, and if the men were to be saved from the threatening danger they must be kept occupied, however hopeless and cheerless the occupation. Accordingly, early in the spring of 1832 preparations were actively commenced for abandoning the "Victory." The boats had to be repaired, and sledges made for transporting them, together with the stores and other baggage. Sleeping bags of skins had also to be made, clothes repaired, etc.; and, busily engaged in these employments, the men had little time for that despondent habit of mind which so predisposes men to attacks of scurvy.

In the spring of the year the weather was intensely severe. On the 7th April the thermometer rose on a sudden to 7°, but it had not risen above zero for 136 days. "I do not believe," says Ross, "there is another record of such a continuous low temperature; and it was a state of things most certainly to confirm us in our resolution of leaving the ship to her helpless fate, and attempting to save ourselves in the best manner that we could." In April the work, laborious almost beyond conception, of carrying forward the boats, sledges, etc., was begun. On April 23d, a party of fourteen set out at nine, marched four miles to where one boat had been deposited and dragged her on two miles farther to where a second boat, with a store of provisions, had already been placed. From this point the northward journey was continued over the rough ice with great difficulty—the men, divided into two parties, each dragging a sledge laden with a boat and a quantity of provisions. But the work was altogether beyond the men's powers, and a different arrangement was decided upon. The whole party were to drag on one sledge, then return and bring up the other. The nature of the work may be conceived from the fact that, after five hours' labour, an advance of only five miles had been made. "It then began to blow so hard, with drifting snow," says Ross, "that we were obliged to halt and build snow huts. These we covered with canvas, and by means of the deerskin beds, and our cooking apparatus, the whole party of fourteen was well accommodated, though the temperature of our house at night was but minus 15°, while it was as low as 30° (below zero) outside."

The same process of dragging the sledges alternately was resumed on the following day, and it is astonishing how such labour was continued day after day by men whose food was at once insufficient and comfortless. Their meat was frozen so hard that they were obliged to cut it with a saw; and their only way of thawing it was putting it into their warm cocoa. Fuel could not be spared for the purpose of thawing the meat exclusively. On the 26th, the party were imprisoned all day in their tent by a storm, and on the following day so difficult was the road that the travellers did not advance "more than three hundred yards in two hours." Stopped by a gale on the 28th, they resolved to secure the boats and return to the ship, where they arrived on the 30th. "The total result of this journey," says Ross, "was, that we had walked a hundred and ten miles, and had advanced in real distance but eighteen; while it would be necessary to go over this space three times more, before everything could be even thus far advanced in a journey which was destined ultimately to be three hundred miles, though the direct one was only a hundred and eighty."

Arrived at the ship, Ross and his men immediately busied themselves in preparing provisions for the advance. On the 3d May, two sledges were taken to the first stage, four miles from the ship. The men who had dragged them returned to the ship in the evening. On the 4th, Captain Ross with ten men—the whole of the effective crew—set out with one heavy sledge. Day after day was spent in dragging on the sledges alternately, until on the 16th the travellers crossed over Eclipse Harbour. Ross and his party returned to the ship on the 21st, and commenced preparations to carry on the sick men and the remainder of the provisions. In a week all preliminaries were arranged. The chronometers and astronomical instruments which could not be taken on, were buried, together with the gunpowder, in a specially-prepared *cache;* the masts, sails, and rigging of the ill-fated "Victory" were placed in the Krusenstern barge, which was drawn up on the shore. "And now," says Ross, in a passage at once striking and pathetic, "we had secured everything on shore which could be of use to us in case of our return, or which, if we did not, would prove of use to the natives. The colours were therefore hoisted and nailed to the mast. We drank a parting glass to our poor ship, and, having seen every man out in the evening, I took my own adieu of the 'Victory,' which had deserved a better fate. It was the first vessel that I had ever been obliged to abandon, after having served in thirty-six, during a period of forty-two years. It was like the last parting with an old friend; and I did not pass the point where she ceased to be visible without stopping to take a sketch of this melancholy desert, rendered more melancholy by the solitary, abandoned, helpless home of our past years, fixed in immovable ice, till Time should perform on her his usual work."

And now on the 29th May 1832, the men of the "Victory" commenced one of the most laborious marches on record. The object of the march was to reach Fury Beach from Victoria Harbour by travelling north along the east coast of Boothia Felix and North Somerset Land, known, since the discovery of Bellot Strait in 1852, as North Somerset Island. In other words, the journey was to be along the greater part of the then known western coast of Regent's Inlet. The plan of the journey was to carry both the boats on to Elizabeth Harbour, with provisions for six weeks at full allowance, there to deposit the boats and half the provisions, and to proceed with the sledges and the other half of the provisions until the lat. 71° was reached, from which a "light" or unburdened party of five should be sent on to ascertain the state of affairs at Fury Beach.

On the 31st May the travellers had reached to within sixteen miles of Elizabeth Harbour. On the morning of the 3d June, after three days' most fatiguing labour, the mate Blanky approached Captain Ross and stated that he was deputed by the men to state that they wished to be permitted to abandon the boats and spare provisions there and then, and proceed direct for Fury Point. "This," says Ross, "was the first symptom approaching to mutiny which had yet occurred." But the gallant captain perceived the whole situation in an instant, and was prepared to deal with it. He had already suspected the existence of a spirit of insubordination among his men, and was prepared to extinguish it at once. "I not only expressed my refusal," writes the captain, "but ordered the party to proceed in a manner not easily misunderstood, *and by an argument too peremptory to be disputed,* after reprimanding the ambassador for the extreme impropriety of his conduct." Ross knew that the last hope of escape from the ice depended on his carrying the boats and provisions with him, and when he picked up his gun and ordered his men to advance, he did what was best for them as well as for himself.

On the 9th June everything had been got forward to Elizabeth Harbour. Here Ross resolved to leave the boats in the meantime, and to proceed northward for twenty or thirty miles with the men and with three weeks' provisions. After advancing a few miles farther north, on the 12th June, the advance party, consisting of Commander Ross, Abernethy, and Park, set out for Fury Point, carrying with them a light sledge, fifteen days' provisions, and a tent. They were directed to leave a note under a cairn at every place where they slept. Their destination was still one hundred and fifty miles distant, and by the time they had reached it Ross expected to have advanced half the distance, or seventy miles, with the loads. This arrangement was observed by both parties. On June 27th Ross had reached Cape Garry, and on July 2d arrived at Fury Beach. "We were once more at home," he writes—"such a home as it was. There was the feeling of

home at least, and that was something; it had been once the home of all of us. . . . The first measure which I adopted was to send them all to rest for the night, . . . and after this we proceeded to take a survey of the stores. Being scattered in every direction, it was, however, difficult to prevent the half-starved men from getting access to them;" and the consequence was, that a number of them devoured whatever they found so voraciously that they were seriously ill for several days afterwards.

After the men had had a rest, they were told off into parties and set to their several tasks. The first thing to be done was to construct a house. It was planned at thirty-one by sixteen feet and seven feet in height, and by evening the frame of it was already *in situ;* and in celebration of this event the explorers concluded the day with a luxurious supper from the still abundant stores of the Fury. The house, which was divided into two rooms —one for the men and another containing four small cabins for the officers— was named Somerset House. We have already seen what a genius Ross had for conferring appropriate names. The next matter that engaged Ross's attention was the repair of the "Fury's" boats; those of the "Victory" left behind at Elizabeth Harbour had not been brought up to Fury Beach. On the 31st July the boats were ready, and every preparation for launching upon the open water, as soon as open water should present itself, was complete.

CHAPTER IV.

INEFFECTIVE ATTEMPT TO ESCAPE—FOURTH WINTER IN THE ICE—AFLOAT IN THE BOATS—RESCUE AT LAST.

It appeared at last that the sorely-tried crew of the "Victory" were to have the "chance," which is said to be afforded to every man at least once in his life, for no sooner were the boats ready for the water than the ice broke up, and the sailors had the happiness of seeing clear navigable water once more. No time was lost. The boats were stored with provisions for two months, with bedding and other necessaries, and launched on the afternoon of the 1st August. Sailing with the northward flowing tide, the boats advanced eight miles along the coast. With the turn of the tide it was known that the ice-stream would return to the south, and, to avoid it, Ross caused the boats to be unloaded and hauled up on the beach. "It was not a minute too soon," writes the captain, "for the ice immediately came down, and two floes near us were broken to pieces with a violent crash so as to form a ridge of hummocks close to the shore. . . . It was a singular coincidence that we experienced this narrow escape not only where the 'Fury' was wrecked, but on the same day that she was lost eight years before." For four weeks the shore remained packed with ice. On the 28th August the boats were a second time launched. Ross steered a northward course, and on the 29th he stood for the edge of the packed ice, in the direction of Cape York. On this and on the following day the pack was diligently searched all along the entrance to Regent's Inlet, but no opening could be found. Landing near Cape Seppings, and ascending a mountain on September 2d, Ross obtained a view of Barrow Strait, and saw, to his dismay, that the whole of that inlet was one unbroken field of ice, and the dismal prospect of having to return to Fury Beach for another winter was the only one which the scene suggested. Another and yet another attempt was made to pierce the pack, but every attempt was vain; and on the 30th September the wretched explorers were forced to haul up the boats on the north cape of Batty Bay, land the stores, and prepare for a journey southward to their old "home" on Fury Beach. This plan—the only one prac-

ticable—having been resolved upon, the carpenter proceeded to make sledges out of the empty bread-casks, and the return march to Fury Beach was commenced on October 4th. Meantime, Taylor, one of the mates, who had been some time previously hurt by accident, was now so lame and ill that he could neither walk on his crutches nor ride on the sledges, which were continually overturning on the rough ice. *How* the party reached Somerset House on the 7th October, Ross himself seems unable to tell; and it is perhaps enough to know that they did reach home without fatal casualty. An early and miserable winter now set in, and as the house had not been prepared for severe weather, the men suffered much from cold. Gradually, however, these castaways began to fortify their habitation against the winter. Stores that had been left behind were brought in, a snow wall four feet thick was built around the house, its roof was strengthened and covered with snow, and an additional stove was set up inside. With these contrivances they found that they could raise the heat of the interior to 51°. At the close of October, Mr Thom, the purser, inspected and took an account of the remaining provisions, and found that there were flour, sugar, soups, peas, vegetables, pickles, and lemon-juice in abundance, while of preserved meats there was a considerable quantity. On the 6th November the men were busily employed throwing water on the snow walls of the house and pointing them with wet snow, which, immediately freezing, formed a coating of ice around the house which completely excluded the cold winds.

The cold of November and December was extreme; and the only amusement of the men was in trapping foxes, which they stewed or roasted, and devoured with the greatest relish. A dish of "fox" was the only variety of fresh meat obtainable. From November 1st, the whole party were put upon half rations. On the 16th February C. Thomas, the carpenter, who had been ill for some time, died. He was buried with the usual solemnities of the Church, though, with the thermometer at 45° below zero, "it was not easy to read the service out of doors." No other incident marked the slowly creeping months. Everything was frost-bound, still, immovable. Even the intellects of Ross and his companions seem to have suffered from a frost. The gallant old captain has nothing to relate, and he bemoans and apologises for the uninteresting character of his journal. "But," he pleads, "let him who reads to condemn what is meagre, have some compassion on the writer, who had nothing better than this meagreness, this repetition, this reiteration of the ever-resembling everyday dulness to record, and, what was infinitely worse, to endure. I might have seen more, it has been said: it may be; but I saw only ice and snow, cloud and drift and storm. Still I might have seen what I did not; seen as a painter, and felt like a poet; and then, like painter and poet, have written. That

also may be, but let painter and poet come hither and try; try how far cold and hunger, misery and depression, aid those faculties which seem always best developed under the comforts of life, and under that tranquillity at least of mind, if not much more, which the poet and the writer require to bring their faculties into action. Our '*fœcundi calices*' were cold snow-water; and though, according to Persius, it is hunger which makes poets write as it makes parrots speak, I suspect that neither poet nor parrot would have gained much in eloquence under a 'fox' diet, and that an insufficient one, in the blessed regions of Boothia Felix."

But stirring times were at hand, and, from this point onwards, there can be no reason to complain of the want of incident in the fortunes of the unfortunate explorers. The bright days of early summer were soon to shine, and one last desperate effort must be made to break through the icy barrier that had hitherto forbidden their return to civilisation. Ross had now determined to carry forward sufficient provisions to last for three months, to the spot near the north cape of Batty Bay, where the boats were lying, to march the whole party up to the depôt, and to be in readiness, early in July, to launch the boats from that point, as soon as the ice should break up. Carrying out this programme, he had succeeded, before the 30th April, in getting all his provisions advanced eight miles—a quarter of the distance to the depôt—and he considered that the labour of transporting them the whole distance would be work enough for the next month, as the sledge-parties would be under the necessity of travelling over the ground eight times, thus making the entire distance 256 miles. On the 8th May, at eleven at night, the first journey northwards was commenced, and at three in the morning, the first stage—at a distance of eight miles from Somerset House—was reached. Three sick men had been left at the house to be brought forward at a later period. On the evening of the 9th the advance party again started, and after travelling a distance of ten miles to Two River Bay, with six casks of bread, and depositing the provision there and resting, retraversed the ten miles to the first stage, to bring up another load. There were four loads in all, and to transport each of these from stage to stage, between each of the four halting-places between Somerset House and Batty Bay, a separate journey had to be made. The sufferings of the men—ill-fed, weak, stricken with snow-blindness, and in some cases lame—were such as it rarely falls to the lot of men to endure. By the end of May, however, all these arduous preliminary labours were successfully ended. On the 1st June Ross writes: "Having thus carried forward to the boats all that could be spared from our actual wants, that everything might be in readiness for moving, whenever the ice should open, we had now to occupy ourselves as we best could at our 'Somerset House,' and to make ourselves as content as might be, till it was time to move

again." That time was not far distant, and on the 25th of the month the removal of the remaining stores, and of the invalids, was begun. The system of successive journeys was again necessarily adopted, and during the first week of July the stores were got well forward. On Sunday, 7th July, the last divine service the hapless explorers hoped ever to attend at Somerset House was performed. "It was the commencement," says Ross, "of a farewell which all hoped would be eternal. . . . On Monday everything was ready, and we too were as prepared as we were anxious to quit this dreary place, as we hoped, for ever. Yet, with these hopes, there were mingled many fears; enough to render it still but too doubtful, in all our minds, whether we might not yet be compelled to return—to return once more to despair, and perhaps, but to die. To have been able confidently to say, Adieu, for ever! would have been indeed to render this a delightful parting."

After infinite exertion and suffering, the starved and emaciated men reached the boats at Batty Bay on the 12th, having brought their remaining stores and sick comrades with them. And now there was nothing to do but to pray for the speedy breaking up of the ice.

Weary and heart-sickening was the waiting for the expected change of weather during the long days of July, and the longer days of the first two weeks of August. On the 14th of that month a lane of water was, for the first time, seen leading to the northward, and the heart-sickness of hope deferred was superseded by feverish anxiety. Few of the wretched men slept that night, and at four in the morning all were up and busy with their hatchets cutting away at the ice that obstructed the shore. Soon after four the tide rose, and a fine westerly breeze springing up, the men launched their boats, embarked the stores, and by eight o'clock were fairly under way, free from the detested ice at last, and rocked once more by the swell of the sea-water.

No time now to think of past failures. "In the reproof of chance lies the true proof of man." They must succeed! If ever men made the conditions of nature bend to their will, these winter-worn seamen must do it now.

The boats soon rounded the north cape of Batty Bay, and striking a continuation of the lane of water, crossed Elwin's Bay at midnight. As they proceeded the open water increased in breadth, and at eight on the evening of the 16th, they reached the north-eastern cape of North Somerset Island, at the entrance to Regent's Inlet. Here they landed, pitched their tents, and rested for the night. At three in the morning they again embarked. The weather was calm; but the men took to the oars and rowed in an eastward direction across the mouth of the inlet. At noon they reached the edge of the packed ice through streams of floating pieces. A southerly breeze then sprang up, enabled them to round the pack, and

brought them into open water, and near the eastern shores of the inlet at three in the afternoon. "Thus," says Ross, "in a few hours we had at length effected that for which we had formerly waited in vain so many days, and which it is likely could not have been effected in any of the years that we had been imprisoned in this country."

How must this sudden change from their icy exile to open water, from a living death to active life, and to the near prospects of restoration to home and friends, have reawakened a whole world of thoughts, interests, affections, in the breasts of these men, who for over four years had been lost to name and fame! Ross partly reveals to us his own feelings, and in giving expression to them he no doubt represents the feelings of his companions. "Accustomed as we were to the ice," he says—"to its caprices, and to its sudden and unexpected alterations, it was a change like that of magic to find that solid mass of ocean which was but too fresh in our memories, which we had looked at for as many years as if it was fixed for ever in a repose which nothing could hereafter disturb, suddenly converted into water; navigable, and navigable *to us,* who had almost forgotten what it was to float at freedom on the seas. It was at times scarcely to be believed: and he who dosed to wake again, had for a moment to renew the conviction that he was at length a seaman on his own element; that his boat once more rose on the waves beneath him, and that when the winds blew it obeyed his will and his hand!"

On the 17th the boats ran merrily before the rising breeze along the eastern shores of the mouth of the inlet, and were obliged, as the wind rose into a gale, to take shelter on a beach near Cape York, after having made seventy-two miles. On the 18th the explorers, having been deserted by the wind, recommenced rowing, and made their way laboriously to the eastward, past Admiralty Inlet. On the 19th, after having rowed for twenty hours, the men were utterly exhausted, and Ross thought it best to land, and pitch the tents for a night's rest. In this neighbourhood they were detained by stormy weather until the 25th, when, again launching the boats, the men rowed to the eastward, across Navy Board Inlet, when, the men being exhausted with twelve hours' labour, it was found again necessary to land and pitch the tents. "At four in the morning" (of the 26th), writes Ross, "when all were asleep, the look-out man, David Wood, thought he discovered a sail in the offing, and immediately informed Commander Ross, who by means of his glass soon saw that it was in reality a ship. All hands were immediately out of their tents and on the beach, discussing her rig, quality, and course; though there were still some despairers who maintained that it was only an iceberg. No time, however, was lost; the boats were launched, and signals made by burning wet powder; when, completing our embarkation, we left our little harbour at six o'clock. Our progress was tedious,

owing to alternate calms, and light airs blowing in every direction; yet we made way towards the vessel, and, had it remained calm where she was, should soon have been alongside. Unluckily, a breeze just then sprang up, and she made all sail to the south-eastward." On the point of being saved, and yet to be deserted after all! But there is no time or place now for despair. There are whalers in the sound, and if the exhausted explorers will but persevere, they may still fall in with one of them. A few hours afterwards, another sail was seen to the northward, lying to, apparently for her boats. Shall this vessel vanish also like a phantom, and make the half crazed castaways believe that all this open water and these ships are but a delusion—the delirium of swift-coming death—and that they are not sailing over free water, but still starving at Batty Bay, and awaiting the only release that is given to the utterly forsaken? It would seem so, for the vessel now bears up under all sail, and it is evident that she is fast sailing away. Is all this a horrible vision—an unreal mockery, then; and this width of water, these friendly sails, are they only of the stuff that dreams are made? But now the wind lulls, and the illusory vessel hangs idle in the calm. "Give way, men!" is Ross's order, and the men of the "Victory" bend to their oars with a will, and row for their lives. They rapidly gain on the vessel, and after rowing for nearly an hour, they have the supreme happiness of seeing her heave to, with all her sails aback, and lower down a boat to meet them. The boat of the vessel soon came alongside, and the mate inquired whether the explorers had met with some misfortune and lost their ship. "This being answered in the affirmative," says Ross, "I requested to know the name of his vessel, and expressed our wish to be taken on board. I was answered that it was *the 'Isabella' of Hull, once commanded by Captain Ross;* on which I stated that I was the identical man in question, and my people the crew of the 'Victory.' That the mate who commanded this boat was as much astonished at this information as he appeared to be, I do not doubt; while, with the usual blunder-headedness of men on such occasions, he assured me that I had been dead two years. I easily convinced him, however, that what ought to have been true, according to his estimate, was a somewhat premature conclusion, as the bear-like form of the whole set of us must have shown him, had he taken time to consider, that we were certainly not whaling gentlemen, and that we carried tolerable evidence of our being 'true men, and no imposters' on our backs, and in our starved and unshaven countenances. A hearty congratulation followed, of course, in the true seaman style; and, after a few natural inquiries, he added that the 'Isabella' was commanded by Captain Humphreys, when he immediately went off in his boat to communicate his information on board, repeating that we had long been given up as lost, not by them alone, but by all England."

The mate, followed slowly by Ross's boats, reached the ship, and jumped up the side. His wondrous message must have been speedily told, for in a minute the rigging of the vessel was manned, and three ringing cheers saluted Ross and his companions as they rowed slowly forward to within a cable's length. "We were not long in getting on board my old vessel," says Ross, "when we were all received by Captain Humphreys with a hearty seaman's welcome."

As they stood on the trim deck of the "Isabella," the appearance of the explorers was pitiable in the extreme. "Unshaven since I know not when; dirty, dressed in the rags of wild beasts instead of the tatters of civilisation, and starved to the very bones," writes Ross; "our gaunt and grim looks, when contrasted with those of the well-dressed and well-fed men around us, made us all feel, I believe, for the first time, what we really were, as well as what we seemed to others. . . . But the ludicrous soon took the place of all other feelings. In such a crowd and such a 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 English semblance. All—everything—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 these were interminable questions to be asked and answered on all 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 all of us that care and kindness could perform. Night at length brought quiet and serious thoughts; and I trust there was not one 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 not distant grave, to life and friends and civilisation. Long accustomed, however, to a cold bed on the hard snow or the bare rock, few could sleep amid the comforts of our new accommodation. 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."

On the 30th September the "Isabella," with the captain and crew of the "Victory" on board, sailed out of Davis Strait, and on the 12th October she reached Stromness. On the 19th Ross arrived in London, and having reported himself to the Secretary of the Admiralty, he set out at once for

Windsor, to place before the king an account of his voyage, and to lay at his feet the British flag that had been hoisted on the Magnetic Pole. "I had the honour," writes Ross, "of being most graciously received by his Majesty, who had always taken a deep interest in my enterprise, and who immediately granted me permission to inscribe his illustrious name and that of her Majesty the Queen, on my chart of the Magnetic Pole; and commanded me to place around it the names of the Royal Family and the reigning crowned heads of Europe." More valuable testimony, however, to the results of the voyage was supplied by the report of the Parliamentary Committee appointed to inquire into the merits and extent of Ross's discoveries. In this report the committee state that "they see no reason to doubt that Captain Ross nearly approached, and that Commander Ross actually reached, the Magnetic Pole;" and that "they can have no hesitation in reporting that a great public service has been performed." Besides proving that there was no sea-way leading west from the extreme south of Regent Inlet, and thus narrowing the field for future explorers, Ross discovered from six to seven hundred miles of coast-line, and performed important services in the advancement of magnetic science and meteorology.

Although the voyage of the "Victory" was the enterprise of one or more private individuals, the Lords of the Admiralty generously placed in Captain Ross's hands the sum of £4580 to pay to his junior officers and men the long arrears which, during this five years' voyage, were due to them. Neither Ross himself nor his nephew received, nor indeed could they expect, reward for their voluntary services. In 1834, however, Commander Ross was promoted to the rank of post-captain, and the honour of knighthood was conferred on Captain Ross. And thus ends the brief narrative of one of the longest, if not one of the most important, of Arctic voyages.

CHAPTER V.

OBJECTS OF THE EXPEDITION—AN INDIAN ENCAMPMENT—DISCOVERY OF GREAT FISH RIVER—OLD FRIENDS—A PECULIAR LANDSCAPE—THE PLAGUE OF SAND-FLIES—FORT RELIANCE ESTABLISHED—"RAISING THE DEVIL"—EXTREME SUFFERING OF INDIANS.

It is now well known that the casualties which take place on vessels engaged in Arctic exploration are not greater in number—due precautions being observed—than those which occur in other departments of the naval service. But this fact had not been demonstrated forty years ago, and the prolonged absence of Captain Ross from 1829 to 1833 gave rise to the greatest uneasiness throughout the country. At that time it was believed that no Englishman could possibly survive the rigours of four successive Arctic winters. Indeed, the general opinion in England with respect to the adventurers in the "Victory" was that they must have perished during the winter of 1831. In 1832, the probability, or rather the certainty, of their dreadful fate was the subject of general and anxious conversation not only in England, but throughout the Continent. England has always regarded the career of her great seamen with the utmost solicitude, and if in this instance the country had been mournfully forced to the conclusion that the explorers of the "Victory" had perished, we may form some idea of the anxiety that must have been felt by the friends and relatives of the missing men. Of these relatives, Mr George Ross, brother of the captain of the "Victory," and father of Commander Ross, the first officer, had a twofold interest in ascertaining the fate of the explorers.

Among naval men, and especially among those who had some experience of Arctic navigation, the feeling of anxiety for Ross and his companions, and the desire to rescue them, or at least ascertain the conditions under which they were compelled to succumb, were universal. Dr Richardson, the loyal friend and comrade of Franklin, made an application to Government, offering his services as leader of a search expedition. His offer, however, was declined. Captain George Back, whose fortunes we have already followed as mate in the "Trent," under Franklin, and as the companion of that great explorer in his first and second land expeditions, heard, while in Italy in the spring of 1832, a report to the effect that Ross and his com-

panions had perished; but fully aware that in the event of the "Victory" having reached Fury Beach, there were stores enough there to provision the people of the ship for two or three years, in which case they might still survive, he hurried to England, prepared and resolved to offer to Government his services as leader of an expedition in search of them. Arriving in England in June 1832, he was informed that Mr George Ross, the nearest relative of the two chief officers of the "Victory," was anxious to meet with an officer properly qualified to lead a search party through America to the shores of the Polar Sea, and, if possible, along the western shores of Regent Inlet as far north as Fury Beach, where it was believed the survivors of Captain Ross's expedition would be found, or at least authentic tidings of the missing men be obtained. Mr George Ross was as glad to obtain the services of Captain Back as that famous traveller and navigator was to obtain the appointment, and a petition was forthwith laid before the king, asking his Majesty's sanction to the despatch of the projected expedition. A favourable answer was received from Lord Goderich, then Colonial Secretary, in which Mr George Ross was informed that the proposed expedition to ascertain the fate of the son and brother, had the approval of Government, and that the Lords Commissioners of the Treasury were prepared to grant the sum of £2000 in aid of the expenses of the expedition, provided that gentleman and his friends subscribed the remainder of the expense, which was estimated to amount to £3000. Subscription lists were immediately opened in London, Devonport, Dumfries, Edinburgh, Cheltenham, Exeter, Hull, Glasgow, Greenock, Liverpool, Newbury, Portsmouth, Plymouth, and Stranraer; "and," writes Back, "it was gratifying to observe, in the rapid accumulation of our funds, the liveliness of the public sympathy in this disinterested project." Meantime, the governor and directors of the Hudson's Bay Company had become deeply interested in the enterprise, and had despatched directions to their agents in America informing them that such an expedition might be expected in the following spring, and directing the necessary preparations to be made for it. These gentlemen also placed 120 bags of pemmican, two boats, and two canoes at Captain Back's disposal; and they formally took the expedition under their especial protection by issuing a commission under their seal to Captain Back, as its commander, thus furnishing that officer with credentials which empowered him to levy contributions of provisions and stores, etc., at any or all the stations of the Hudson's Bay Company.

The expedition was to consist of two officers—the commander and a medical officer, who should also take up the duties of naturalist—and eighteen men, two of whom should be boat carpenters. This force, it was proposed, should sail to Canada, and, starting from Montreal, should proceed northward, following the ordinary route of the fur traders of the Hudson's Bay

Company, by the Ottawa River, French River, the Great Lakes, Lake Winnipeg, etc., to Great Slave Lake, whence Indians should be employed as guides and hunters to accompany the party to the banks of the Thlew-ee-choh-desseth (fear not, reader; this dreadful name shall never again appear in this history, but the stream, of which this is the Indian name, shall hereafter be invariably spoken of as the Great Fish River, the translation in English of the name in use among the Indian tribes). Of the course of this river nothing was with certainty known to Back, further than that it rose to the east of Great Slave Lake. The theory respecting the stream, however, was that it flowed northward or north-eastward, and might thus bear onward the canoes of the explorers towards the southern reaches of Regent Inlet. A winter residence was to be built on the eastern extremity of Great Slave Lake, where, after having made a preliminary excursion to, and survey of, the Great Fish River, Back and his party should reside during the winter of 1833-34, and where, during the spring, he should set his carpenters to work upon such boats as he should find suitable for the navigation of the rapids and cascades, by which, as in the case of Coppermine River, the course of the stream might be interrupted. "Having passed the first winter," writes Captain Back, "it was proposed that we should start for the sea the moment the ice broke up; and if an opinion should prove correct, which I had been led to entertain from an inspection of the maps traced by the Indians, that the mouth of the river lay between the 68th and 69th parallels of latitude, and the 90th and 100th meridians of longitude, we should then be less than 300 miles from the wreck of the 'Fury' in Regent Inlet." Back was, of course, aware that it was Ross's intention to visit the wreck of the "Fury" that he might supply himself with stores and coals, and to return and winter beside it. Regent Inlet, therefore, and especially Fury Beach and its vicinity, was the locality in which the search for the lost explorers should naturally commence. If this search should prove unavailing, Back proposed to reascend Great Fish River, pass the winter at the fort by the shores of the lake, and revisit the Polar shores in the following spring, with the two-fold object of continuing the search for Ross, and completing the as yet undiscovered coast-line westward from the mouth of Great Fish River to the Point Turnagain of Franklin.

For these purposes, as well as for the purpose of making magnetic and other observations, Back was provided with the best astronomical and other instruments. Guns, etc., were provided by the committee organising the expedition, and, finally, the entire enterprise was formally taken under the protection of Government, and constituted a national undertaking. Mr Richard King, a competent medical man, having been engaged to attend to the health of the party, and to make collections in natural history, the preparations for the outset of the expedition were regarded as completed.

On the 17th February 1833, Captain Back, accompanied by Mr King and three men, two of whom had gained experience of Arctic exploration under Sir John Franklin, sailed from Liverpool for New York. On the 9th April the party reached Montreal, where they were joined by four volunteers from the 6th battalion of Royal Artillery, and by a *corps* of Canadian "*voyageurs.*" The route followed was the usual one by Lakes Huron, Superior, and Winnipeg. At Fort Alexander, on Lake Winnipeg, Captain Back met Governor Simpson, of the Hudson's Bay Company, from whom he learned that every aid was to be afforded to the exploring party, stores were to be thrown open for their use at all the forts, and the services of experienced guides, hunters, and interpreters were placed at their disposal. Having been joined *en route* by Mr A. R. M'Leod, with his wife and family, Back arrived with his party at Fort Resolution, on Great Slave Lake—which was to be the basis of his operations—on the 8th August.

Starting on the 11th August in a small canoe, accompanied by his servant, William Malley, one of the volunteer artillerymen, and by one Canadian *voyageur*, two half-breeds, and two Indians, Back paddled away from Fort Resolution across the waters of Slave Lake, in search of the source of Great Fish River—the stream that was to bear him in the following summer to the shores of the Polar Sea, and to the unknown area in which his search for the Rosses and the crew of the "Victory" was to be prosecuted. He had not proceeded far, when, landing to commence the survey of the east shore of the lake, he came upon an Indian encampment, which presented a picture of luxurious ease and gay contentment rarely seen in this remote region in the far north of British America. The occupants of the camp were busily and noisily employed in drying the meat of three recently killed moose-deer. "The successful hunters, apparently not a little vain of their prowess, were either lying at full length on the grass, whiffing the cherished pipe, or lounging on their elbows, to watch the frizzling of a rich marrow-bone, the customary perquisite of their labours. Women were lighting or tending the fires, over which were suspended rows of thinly-sliced meat—some screaming to thievish dogs making free with the 'hunt,' and others with still louder screams endeavouring to drown the shrill cries of their children, who, swaddled, and unable to stir, were half suffocated with the smoke; while to complete the scene, eight or ten boys at play were twining their copper-coloured bodies over and under some white bark canoes, like so many dolphins. Poor creatures, their happiness was at its full: at that moment they were without care, enjoying themselves according to their nature and capacity." How different this summer picture of plenty from the dreadful scenes of misery, starvation, and death which the explorer was fated to witness in the same region during the two following winters.

Continuing his voyage north-east, Captain Back discovered and named

the Simpson group of islands on the 14th August. The shores of these islands presented the most striking natural features this traveller, who was familiar with the most famous mountain ranges of Europe, had ever seen. On the left were round-backed hills, from which, at various points, rose columns of smoke from the fires of straggling hunters; "but the scenery to the right increased in grandeur and boldness; and never, either in Alp or Apennine, had I seen a picture of such rugged wildness. Rising to a perpendicular height of upwards of twelve hundred feet, the rocks were rent, as if by some violent convulsion, into deep chasms and rugged fissures, inaccessible to the nimblest animal. A few withered pines, grey with age, jutted their shrivelled arms from the extreme ridge of the abyss; and on one of these a majestic fishing eagle was seated, and there, unscared by our cries, reigned in solitary state, the monarch of the rocky wilderness. Salvator alone could have done justice to the scene." Continuing to coast the north shore of the lake, Back arrived, on August 18th, at the mouth of Hoarfrost River, a mountain stream broken by frequent and dangerous rapids, and flowing in a south-west direction into the eastern arm of Great Slave Lake. The ascent of this river, by numerous and difficult portages, in which repeated journeys required to be made for the transport of the canoe and provisions, was a work of most arduous labour, occupying four days. The route then led eastward among detached lakes, and on August 24th Back found himself again in continuous water, leading north and west by Clinton-Colden Lake and Lake Aylmer, which were discovered and named on the 26th. The high land on the north shore of Lake Aylmer is the watershed between Great Slave Lake on the south, and some river system, as yet unknown to Back, on the north-east. This river system the explorer fervently hoped might prove to be that of the unexplored and dreaded river of which he was in search—the Great Fish River. With the view of ascertaining this, Back sent away his three men, together with Maufelly, his Indian guide, on the 27th, to discover in which direction the drainage of the country ran, and to find out the lake in which the mysterious stream was supposed to have its source. The men had not returned on the 29th, and Back, taking his gun, and marching in a north-north-west direction over the Sand Hills, which formed the watershed already mentioned, went out to look for them. He had not proceeded far, when, ascending a hill, he beheld a rapid flowing with a northward course. "Crossing two rivulets," writes Back, "whose lively ripples ran due north into the rapid, the thought occurred to me that these feeders might be tributaries to the Great Fish River; and, yielding to that pleasant emotion, which discoverers, in the first bound of their transport, may be pardoned for indulging, I threw myself down on the bank, and drank a hearty draught of the limpid water. From a height a mile forward, the line of stream could be distinctly traced

into an open space, which, as it contracted, inclined to the north." His hopes were now realised. He had struck the head-waters of the river system of which he was in search; and now before him extended the waters of the great stream, that had never before been seen by civilised man, and which offered to him a water-way to the Polar shores, and possibly to Regent's Inlet and to Fury Beach.

Starting on the morning of August 30th, Back resolved to explore the course of the newly-discovered river for a few miles, that he might be able to learn, from the character of its channel, what build of boat would be best adapted for its navigation. The portage from Lake Aylmer to the sheet of water which forms the source of the river, and which the discoverer named Lake Sussex, was less than a mile, and the height of the dividing land or watershed was no more than two feet. The country became more rocky as he proceeded, and irregular hills lined the banks of the stream. Passing Icy River, an affluent from the westward, a "narrow" brought Back into Musk-Ox Lake, an expansion of the stream. "And now," writes the traveller, "having arrived at the commencement of a series of rapids, which the canoe was too weak to run, and too rickety to be carried over, I had no choice but to stop, and rest satisfied with what had been achieved; which, if not equal to my hopes, was still sufficient to cheer my companions, and lure them on to the relief, as we then supposed, of our long-suffering countrymen." The return journey was at once commenced, and on the 4th September the ascent of the river and of Lake Aylmer was completed, and the narrows of Clinton-Colden Lake reached.

Akaitcho, the chief of the Coppermine Indians, of whom mention has already been frequently made, as having on several occasions proved of signal service to Franklin, Back, and Richardson, in the two land expeditions conducted by the first of these famous dicoverers, was still alive at the time when Back revisited, in 1833, the scenes of his early adventures in 1819-22. The old chief was hunting in the Slave Lake district when Back was conducting his search for the source of Great Fish River, and on the evening of the 4th September, two of his Indians, attracted by the smoke of the Englishman's fire, came into camp. Both were gaunt, emaciated, squalid—having evidently suffered much from destitution. "I knew them both," says Back; "one, indeed, had been with me to the Coppermine River, on Sir J. Franklin's first expedition. With the usual apathy of their nature, they evinced no marks of satisfaction or surprise at seeing me; but received their tobacco, and smoked it as coolly as if it had been given by some gentleman of the country, in the regular routine of a trading expedition. Their silence and seriousness soon, however, underwent an extraordinary change, when they heard some half-dozen expressions which I had been accustomed to use on the former occasion. They laughed immoder-

ately; kept repeating the words; talked quickly among themselves, and seemed greatly delighted. They were supplied with presents for my old friends Akaitcho and his brother Humpy," and the same evening they set out for the headquarters of their chief. On the shores of Artillery Lake, an expansion of the shallow water-course that connects Clinton-Colden Lake and Slave Lake proper, a number of dwarf pines were observed; and rejoicing in the prospect of a comfortable camp-fire—a rare luxury in these high latitudes—the voyagers landed and set up their encampment on the night of the 5th. The night was calm, and the sky was illumined by the coloured streamers of a bright aurora; but amid the stillness and the beauty of the night there were not wanting premonitions of swift-coming winter. From an immense height, out of the darkness overhead, came the cries of flocks of geese flying southward. Back now knew that the season was closing, and that the long Arctic night was gathering, and it was not without sincere gratitude that he thought of the home—now near at hand—which he knew was being erected for him, under Mr M'Leod's superintendence, at the eastern extremity of Slave Lake.

The river by which Artillery Lake discharges its waters into Great Slave Lake, is interrupted by numerous and dangerous rapids. Three of these were safely run, but in running a fourth the bark canoe was fixed against a sharp rock, and seriously cut. Fortunately it twirled round, wore off the rock, and floated till it was paddled to the shore. The Indians now declared it impossible to proceed down the foaming stream, and Back ordering them to place the canoe *en cache,* divided the baggage among the men, and set out to finish the remainder of the journey on foot. The path was difficult and perilous, and, on the evening of the 6th, when the party halted to encamp at sunset, the country around presented the most singular and striking aspect. "It was a sight," says Back, "altogether novel to me; I had seen nothing in the Old World at all resembling it. There was not the stern beauty of Alpine scenery, and still less the fair variety of hill and dale, forest and glade, which makes the charm of an English landscape. There was nothing to catch or detain the lingering eye, which wandered on without a check, over endless lines of round-backed rocks, whose sides were rent into indescribably eccentric forms! It was like a stormy ocean suddenly petrified. Except a few tawny and pale-green lichens, there was nothing to relieve the horror of the scene, for the fire had scathed it, and the grey and black stems of the mountain pine, which lay prostrate in mournful confusion, seemed like the blackened corpses of departed vegetation. It was a picture of 'hideous ruin and combustion!'"

Early on the morning of the 7th the encampment was broken up, and the party proceeded, walking in Indian file and without the exchange of a syllable. Every man was too busily and anxiously engaged picking his way on

the pathless, stormy hill-side, to care to speak. An incident soon occurred, however, which broke the spell of silence. The moving antlers of a fine buck were seen behind a point at the distance of thirty yards. It was soon brought down, and the haunch, which was covered with a rich layer of fat two inches thick—the luxury of luxuries in this climate—afforded a magnificent breakfast. But the march so prosperously begun, had its drawbacks. We are accustomed to regard the plague of mosquitoes as an infliction experienced in tropical climates only. But during the brief but bright summer of Polar countries myriads of these are called into being, to the all but intolerable torment of travellers. And quite as bad as the mosquito is the smaller but still more vicious sand-fly. Swarms of these creatures attacked Back and his party on their march to Slave Lake, and stung them almost into madness. "As we dived into the confined and suffocating chasms," writes Back, "or waded through the close swamps, they rose in clouds, actually darkening the air: to see or to speak were 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. Whenever we halted, which the nature of the country compelled us to do often, the men, even the Indians, threw themselves on their faces and moaned with pain and agony. My arms being less encumbered, I defended myself in some degree by waving a branch in each hand; but even with this, and the aid of a veil and stout leather gloves, I did not escape without severe punishment. For the time I thought the tiny plagues worse even than mosquitoes."

On the evening of the 7th Back had reached the eastern extremity of Great Slave Lake, at the spot where he had requested Mr M'Leod to build a winter residence; and it was with much gratification that, as he marched along, he heard the sound of the woodman's axe. Guided by the branchless trunks which lay along the earth, he came to a bay "where, in agreeable relief against the dark green foliage, stood the framework of a house." The explorers approached in single file to where Mr M'Leod was seen walking under the shade of the trees, "and," says Back, "with our swollen faces, dressed and laden as we were—some carrying guns, others tent-poles, etc.—we must have presented a strangely wild appearance, not unlike a group of robbers on the stage." Mr M'Leod had arrived on this spot on the 22d August with four men, and had immediately commenced to erect the log-house. He had set his nets in the lake, and the quantity of fish he had taken seemed to prove that in selecting this spot for winter quarters, in the hope of establishing a productive fishery here, they were not likely to be disappointed. He had also bought a quantity of dried meat from the Indians. Of all these measures Back cordially approved.

"The following day being Sunday, divine service was read," writes the leader of the expedition, who also acted as chaplain, "and our imperfect thanks were humbly offered to Almighty God, for the mercies which had been already vouchsafed to us; and though, in this imperious climate, with everything to do, time was certainly precious, yet feeling that the first opening of the sacred volume in this distant wilderness ought not to be profaned by any mixture of common labour, I made it a day of real quiet and repose."

On the 16th September Mr King arrived at the winter quarters with two boats laden with a heavy cargo of stores for the coming season, and bringing with him the remainder of the men engaged for the expedition. Back now divided his men into parties, and appointed them to regular tasks—felling trees, squaring them for beams and rafters, sawing them into slabs and planks, dressing blocks of granite for building purposes, and collecting mud and grass to be used as plaster, were separate occupations carried on by groups of men told off for the purpose. "It was an animated scene," says Back; "and set off, as it was, by the white tents and smoky leather lodges of the Indians, contrasting with the mountains and green woods, it was picturesque as well as interesting." The building of the winter establishment, observatory, etc., proceeded apace, and the name given to this temporary house in the bleak desert, was Fort Reliance, "in token," says Back, "of our trust in that merciful Providence, whose protection we humbly hoped would be extended to us in the many difficulties and dangers to which these services are exposed." But the destitute Indians of the district had found out the house long before it was finished. The sick and miserable soon began to flock in from all quarters, in the hope of obtaining from the white man what the white man could only purchase from the Indian hunters. It might be supposed that these hunters should have supported their own sick and infirm kinsfolk; but in the Indian, "the savage virtues of our race" are not strong. So long as he is healthy and vigorous himself, he moves about from place to place with almost as much speed as the deer and oxen he pursues, trusting to the humanity of the white man to succour the diseased or starving members of his family. Back was resolved that no party coming to Fort Reliance should leave any of its members behind; but in spite of all his efforts he soon found himself hampered with many helpless dependants. This was all the more distressing as the fishery on the lake proved a failure, and little or no meat could be purchased from the Indians.

In the course of October the observatory, a building twelve feet square, in the construction of which no iron, not even a nail, had been used, was completed; and here Captain Back, assisted by Mr King, took regular observations for the magnetic force and dip. The season was unusually mild,

and owing to this circumstance the deer, which in ordinary seasons, migrated southward from their feeding grounds in the north, still remained in their distant districts, and disappointed the Indians who were lying in wait for them on the southward route. The sufferings of the natives from want of food at this season were consequently very great; and as they could not understand the object of the observatory, or the use of the instruments, they began to associate these with their misfortunes, and eventually to speak of them as the causes of the scarcity of the deer. Nor were they singular in this opinion, for on one occasion, when taking the dip, Back and King were cautiously watched by two of the *voyageurs*, who, hearing only a mysterious word at intervals, as "Now! Stop!" etc., followed by perfect silence, looked at each other, shrugged their shoulders, and, turning hastily from the railing which surrounded the observatory, joined their companions, and informed them that they had seen the white chief "raising the devil."

On the 5th November the dwelling-house at Fort Reliance was finished. It was fifty feet long and thirty broad, was divided into four square rooms, with a hall in the centre for the reception and accommodation of the Indians. Towards the end of the month there was little food at the fort, with the exception of the stores for the expedition of the coming summer, which Back could not afford to use. The distress at this time, especially among the Indian refugees, was very great. Fortunately, Akaitcho arrived with a supply of meat, and the sufferings of the people were for a time allayed. Thus with alternating seasons of extreme want and temporary plenty, the weeks and months wore on. But during that winter of 1833-34 the sufferings of the wretched Indians were indescribable, and instances of cannibalism occurred. "Our hall," writes Back, "was in a manner filled with invalids, and other stupidly dejected beings, who, seated round the fire, occupied 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 the freezing point*," or 70° below zero."

The degree of cold experienced at Fort Reliance during January and February 1834 is perhaps the lowest ever recorded in these regions. On the morning of January 17th the mean temperature was 70° degrees below zero. A surface of four inches of mercury, exposed in a common saucer, became solid in two hours with a temperature of *minus* 57°. On the 4th February the registered temperature was - 60°, and, as a fresh breeze was blowing, the cold was nearly insupportable. Ink and paint froze, and the sextant cases and boxes of seasoned wood split. "On one occasion," writes Back, "after washing my face within three feet of the fire, my hair was actually clotted with ice before I had time to dry it." During this terrible weather many of the Indians died from want and exposure.

CHAPTER VI.

INTELLIGENCE OF THE RETURN OF CAPTAIN ROSS AND HIS CREW—EXPLORATION OF GREAT FISH RIVER—RUNNING THE RAPIDS—"IS THIS A TIME FOR PRAYING?"—THE POLAR SEA REACHED—CONCLUSION OF VOYAGE.

On the 26th March a messenger from York Factory arrived at Fort Reliance with a packet of letters which Back had been expecting daily for six weeks. Delivering his packet, the bearer stated that he believed he had only brought half of the letters, and that the other half had been sent forward from Fort Resolution a month previously under the charge of a Canadian and an Iroquois, accompanied by Augustus, the faithful Eskimo interpreter who had so loyally served Franklin and Back in their former journeys. Little Augustus had heard that Back was in the country, had resolved to join him, and had walked all the way from Hudson's Bay to Fort Resolution with that intention. Setting out with the Canadian and Iroquois (the letter-carriers), Augustus commenced the journey to Fort Reliance. The three, however, lost their way; two of them returned to Fort Resolution, but Augustus, anxious to meet his old friend, went forward alone. Nothing had since been heard of him, and, as he carried only a few pounds of provisions with him, it was feared that he had perished. Back's anxiety for the fate of the affectionate interpreter was intense, but it was soon to be allayed. On the 25th April, when the inmates of Fort Reliance were sitting together, talking about absent friends, a loud rapping was heard at the door. "The permission to come in," says Back, "was unnecessary, for the person followed the announcement before the words could be uttered, and with the same despatch, thrust into my hands a packet which a glance sufficed to tell me was from England. 'He is returned, sir!' he exclaimed, as we looked at him with surprise. 'What! Augustus! Thank God!' I replied quickly. 'No! Captain Ross, sir! Captain Ross has returned!' 'Eh? are you quite sure? Is there no error? Where is the account from?' The man paused, looked at me, and pointing with his finger, said, 'You have it in your hand, sir.' It was so; the packet had been forgotten in the excitement and hurry of my feelings. Two open extracts from the *Times* and *Morning Herald* confirmed the tidings. . . . To me the intelligence was peculiarly gratifying, not only as verifying my previously expressed opinions, but as demon-

strating the wisdom as well as the humanity of the course pursued by the promoters of our expedition, who had thereby rescued the British nation from an imputation of indifference which it was far indeed from meriting. In the fulness of our hearts, we assembled together and humbly offered up our thanks to that merciful Providence which, 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 but 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."

The fact that Captain Ross and the crew of the "Victory" had been rescued in Barrow Strait had necessarily some effect upon Captain Back's plans for the future. The principal object of the expedition under his command had been unexpectedly accomplished; but the secondary objects, which were of great importance from a geographical and scientific point of view, were still to be achieved. Already something had been done. Back had discovered and surveyed the source and head-waters of a great river previously unknown to civilised men, and known to the Indians of Slave Lake only by repute as an unnavigable stream, broken by impracticable rapids and by fearful cascades, and the mysterious lower course of which was regarded with dread, from the circumstance that it lay somewhere in the lands of the hostile and treacherous Eskimos. To open up the course of this river, to discover its mouth in the Polar Sea, and thence to track the sea-coast westward to the Point Turnagain of Franklin, and thus materially aid in completing the North-West Passage—these were the main objects which Back's expedition was organised to accomplish, and for the accomplishment of which he now commenced active preparations.

In the meantime, however, one word about the fate of Augustus. Months after the poor Eskimo had set out from Fort Resolution to join his friend Mr Back, his remains were found at no great distance from the fort. "It appeared," says Back, "that the gallant little fellow was retracing his steps to the establishment, when, either exhausted by suffering or privation, or caught in the midst of an open traverse in one of those terrible snowstorms which may be almost said to blow through the frame, he had sunk to rise no more. Such was the miserable end of poor Augustus!—a faithful, disinterested, kind-hearted creature, who had won the regard, not of myself only, but of Sir John 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."

Absolved by the timely return of the explorers of the "Victory" from taking with him a strong rescue party and a heavy load of provisions, Back abandoned the idea of fitting out two boats for his summer voyage, and determined to explore the newly-discovered river, and attempt the coast-voyage of the Polar Sea in one boat, with a crew of ten picked men. The limited number would be more than compensated by the quality of the men who were to compose it. Every man would be a host in himself—the *voyageurs* in the boat should be men of great experience, strength, and skill; and the hunters, who should precede the boat, under Mr M'Leod—himself an excellent shot—should be trustworthy and industrious. The voyage was to last three months; and in the meantime the pemmican and baggage had been transferred to a point on the west shore of Artillery Lake, where the boat was being constructed, and from which the voyage was to start; and a number of Indians had been engaged to carry the stores, instruments, etc., across the dividing land or watershed to the upper waters of Great Fish River, a distance in direct line of 115 miles. On the 5th June, Mr M'Leod, accompanied by his staff of hunters, set out in advance from Fort Reliance, and all that was now left to be done was to secure the house against weather and intruders. With this view, a platform was erected in the hall, on which the remainder of the stores were deposited, and carefully secured against wet and marauding wolvereens. Other articles were lowered into a cellar, which was closed and nailed down. The boxes were got together and covered with a tarpaulin, and a small quantity of brandy was securely and effectually hidden away, to be used in case of emergency on the return of the party. Finally, the windows and doors were blocked up, and then Captain Back, Mr King, and four attendants with dogs, turned their backs upon the fort on the 7th June, and commenced the march eastward to Artillery Lake.

On the evening of the second day, Back reached the bay on Artillery Lake, where his carpenters had been at work on the boats. The one selected for the voyage was 30 feet over all, and 24 feet keel. It was placed on runners, plated with iron; and on the morning of the 10th June the expedition started, a party dragging the boat over the ice which still covered the lake, and the others dragging each a burden of about 100 lbs. on a small sledge. The journey to the source of Great Fish River was accomplished on the 27th June. At one P.M. on the following day the boat was launched on the stream, and the difficult navigation of the shallow and impetuous torrent was commenced. At the beginning progress was exceedingly slow and laborious, rapid succeeding rapid every few miles. The adventure of the 9th July may be taken as representative of the class of incidents which were of daily occurrence during the voyage. On that day, as the boat slowly advanced, an island was seen near the centre of the river, from the sides of which

suspicious-looking columns of mist were seen to rise. There was evidently a fall ahead, and it was necessary to land and inspect it. The baggage was carried down below the fall, and afterwards the boat, managed with splendid dexterity and nerve by Sinclair, the bowman, a half-breed, and M'Kay, the steersman, a Highlander, was carried through the rush of the fall, and made to sweep into the eddy "with the ease and buoyancy of a water-fowl." At this spot the stream was a quarter of a mile broad; but it soon narrowed to two hundred yards, and, running with a winding course, formed a series of no less than five rapids, to the turbulence of which, two tributaries that joined the main stream here contributed not a little. A still sheet of water now brought the boat to a long and appalling rapid, full of rocks and huge boulders; the sides hemmed in by a wall of ice, and the current flying with the velocity and force of a torrent. "The boat," says Back, "was lightened of her cargo, and I stood on a high rock, with an anxious heart, to see her run the rapid. I had every hope which confidence in the judgment and dexterity of my 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 my view. I heard what sounded in my ear like a wild shriek, and I saw Mr King, who was a hundred yards before me, make a sign with his gun and run forward. I followed with an agitation which may be conceived, and, to my inexpressible joy, found that the shriek was the triumphant whoop of the crew, who had landed safely in a small bay below. I could not but reward them with a glass of grog apiece, and they immediately applied themselves to the fatiguing work of the portage, with as much unconcern as if they had only crossed a mill-pond." The rapid thus successfully run, named Malley's Rapid, by Back, is in longitude about 107° 20′ W.

On July 13th, the sun shone out for the first time for nine days, which enabled Back to take observations, and afforded his men an opportunity, while he was thus engaged, to go after the deer that were feeding in the neighbourhood in considerable numbers. In less than an hour the men returned with four fine bucks. The change from pemmican to fresh food was agreeable enough; but as Back was provided with abundance of provision for his small party, and as the boat was already too heavily laden, he forbade all such hunting excursions in the meantime.

On the 17th July, the mouth of Jervois River, a large affluent from the right, was passed, and observations were taken in 65° 9′ N., and 103° 33′ W. At this point the threatening appearance of the curling waves, and the roar and gloom of a defile, along which the course now lay, suggested the necessity of reconnoitring a little in advance, and finding out what dangers might await the voyagers among the frowning rocks which, overlapping as they receded in the distance, seemed either to engulf the stream or to forbid

a passage. After a halt, the navigation of the rapids was recommenced, and the boat was soon whirling about in the circling pools; and but for the amazing strength of the Highlander M'Kay, who steered, it "must inevitably have been crushed against the faces of the protruding rocks." "As we entered the defile," continues Back, "the rocks on the right presented a high and perpendicular front, so slaty and regular that it needed no force of the imagination to suppose them severed at one great blow from the opposite range, which, craggy, broken, and overhanging, towered in stratified and many-coloured masses far above the chafing torrent. There was a deep and settled gloom in the abyss—the effect of which was heightened by the hollow roar of the rapid, still in deep shade, and by the screaming of three large hawks, which, frightened from their eyrie, were hovering high above the middle of the pass, and gazing fixedly upon the first intruders on their solitude; so that I felt relieved, as it were, from a load, when we once more burst forth into the bright sunshine of day. The boat was then allowed to drive with the current, the velocity of which was not less than six miles an hour, among whirlpools and eddies, which strongly buffeted her about. The men, glad to rest from their oars, were either carelessly looking at the objects which they passed, or whiffing the ever-welcome pipe, when something was seen swimming a little ahead. As we nearly touched it in passing, the bowman, almost without looking, stretched out his hand to grasp it, but drew it in again as quick as lightning, and, springing up for the boat-hook, called out, 'D——n it, it has bit me! it's a fox!' The fox immediately reached the bank in safety, where he began skipping about with much gaiety, as if enjoying the trick he had played off on the unsuspecting boatman."

Proceeding onward down the river, which now broadened and deepened until it assumed nearly the dimensions of the Mackenzie, Captain Back discovered two important affluents from the right, which he named respectively M'Kinley and Buchanan Rivers. Below these streams the river varied in breadth from a quarter of a mile to a mile and a half; and, after having flowed in a generally eastward direction, it now, to Back's great delight, made a bend to the north, the region of his hopes. On the 18th July, the captain ascended a hill some distance from the river, and was puzzled to discern several extensive sheets of water in almost opposite bearings, one of them being due south. Owing to the intervening rocks and uneven ground, it was impossible to decide whether these were lakes, or different reaches of one continuous water. The difficulty was only to be solved by letting the boat run with the current of the stream; and issuing orders to this effect, Back was soon carried into a wide lake, with a clear and uninterrupted horizon, but glimmering with firm ice. This expansion of the stream the discoverer named Lake Pelly. Crossing the lake, the explorers were carried into another similar expansion, in which the unwelcome glare of ice was

again too clearly visible. Towards evening all hope of immediate progress was precluded by extensive and unbroken fields of ice stretching to the extreme point of vision. It being impossible to get through the ice, there was only one alternative for the indomitable explorers—they must go over it. And over it they did go, unloading and dragging the boat until they again reached open water, and were again able to launch her. On the evening of the 19th, they had reached lat. 65° 48′ N., long. 99° 40′ W. On the following day, Lakes Garry and Macdougal were discovered and named. Emerging from the latter lake, the river curved to the north, and the whole force of the water glided smoothly but irresistibly toward two stupendous rocks of gneiss, from five to eight hundred feet high. The hollow roar sounding from the distance warned the voyagers that there was danger ahead; and having secured the boat in a small curve, near which the river disappeared in its descent, sending up clouds of spray, an examination of this threatening part of the course was made. It was found that at this spot the river made a succession of falls and cascades. The stream was here four hundred yards broad, and its navigation was rendered extremely perilous by the islands and rocks of its channel, around which the waters surged and foamed "with a roar that was heard far and wide. The space occupying the centre, from the first descent to the largest island, was full of sunken rocks of unequal height, over which the rapid foamed, and boiled, and rushed with impetuous and deadly fury. At that part it was raised into an arch; while the sides were yawning and cavernous, swallowing huge masses of ice, and then again tossing the splintered fragments high into the air. A more terrific sight could not well be conceived, and the impression which it produced was apparent on the countenances of the men." It was impossible to carry down the boat on shore; for even when unloaded, she was too heavy for the men to lift. There was, therefore, no alternative but to try the falls, and steadily and silently the resolute men went about making the preparations for the fearful attempt. Double lines of rope from the bow and stern were held on shore by the most careful of the men, and M'Kay and Sinclair took their accustomed places at the stern and bow, each with a pole in his hands, to keep the boat from dashing against the rock. The perilous descent began, and often was the frail boat dashed headlong toward the rocks, as often, however, to swerve and pass them in obedience to the guidance of the intrepid and skilful men who navigated her. "Still," says Back, "amongst the many descents, she did not escape without some very severe shocks, in one of which the remaining keel-plate was entirely stripped away; but cool, collected, prompt to understand and obey the mutual signs which each made to the other with the hand—for their voices were inaudible—the gallant fellows finally succeeded in guiding her down in safety to the last fall."

But the narrowest escape of the whole journey was experienced on July

25th. The boat had then reached about 96° 40′ W., and a mile of heavy and dangerous rapids was before her. Again she was lightened, and every precaution was taken as before; but so overwhelming was the rush and whirl of the water, that she and those in her were twice in the most imminent danger of being engulfed in the hollows of the rapid. "It was in one of those singular and dangerous spots, which partook of the triple character of a fall, rapid, and eddy, in the short space of a few yards, that the crew owed their safety solely to an unintentional disobedience of the steersman's directions. The power of the water so far exceeded whatever had been witnessed in any of the other rivers of the country, that the precautions successfully used elsewhere were weak and unavailing here. The steersman was endeavouring to clear a fall and some sunken rocks on the left, but the man to whom he spoke misunderstood him, and acted contrary to the instructions given. And now seeing the danger, the steersman swept round the boat's stern: instantly it was caught in an eddy to the right, which, snapping an oar, twirled the boat irresistibly broadside on; so that for a moment it seemed uncertain whether the boat and all in her were to be hurled into the hollow of the fall, or dashed stern foremost on the sunken rocks. Something, perhaps wiser than chance, ordained it otherwise; for how it happened no account can be given, but so it was that her head swung inshore towards the beach, and thereby gave Sinclair and others an opportunity of springing into the water, and thus, by their united strength, rescuing her from her perilous situation. Now, had the man to whom the first order was given understood and acted upon it, no human power could have saved the crew from being buried in the frightful abyss. Nor yet could any blame be justly attached to the steersman: he had never been so situated before, and even in this imminent peril his coolness never forsook him. At the awful moment of suspense, when one of the crew, with less nerve than his companions, began to cry aloud for aid, M'Kay, in a still louder voice, exclaimed, 'Is this a time for praying? *Pull your starboard oar!*' 'Heaven helps them who help themselves,' seems to have been the creed of this stout-hearted Highlander."

An observation taken at noon on the 26th, gave latitude 66° 6′, "nearly abreast of a picturesque and commanding mountain, with steep, sloping sides to the south-west, where musk-oxen were feeding, but to the northward broken into fearful precipices and overhanging cliffs, inaccessible to the foot of man. It was by far the most conspicuous eminence we had seen; and from some fancied likeness, the people said, 'Here's Hoy's Head. Give way, boys, we are not far from the sea!' The remark took me in imagination to Auld Reekie; and I called the hill Mount Meadowbank, in honour of the learned lord of that name."

For some time Back had been aware, from remains of Eskimo encamp-

ments seen on the shore, that he had now arrived in that people's country; and on July 28th he had an interview with a number of them, who had come down to the shore, evidently with hostile intentions, but were speedily pacified with a few simple presents. On July 29th the explorers were again afloat, and at noon of that day they had reached lat. 67° 7′, long. 94° 39′. A majestic headland in the extreme distance north was named Victoria Headland; and on coming abreast of this promontory, Captain Back knew that he had reached the mouth of Great Fish River, and that before him extended the waters of the Polar Sea. The exploration of the great river was accomplished after running for five hundred and thirty geographical miles through an iron-ribbed country, without a single tree on its banks, and interrupted by no less than eighty-three falls, rapids, and cascades. The latitude of the mouth of the river was ascertained to be 67° 11′; its longitude 94° 30′ W. The rush of the river meeting a fresh breeze from the ocean raised such a commotion that Back was glad to take refuge in an inlet to the south of Victoria Headland, which he named Cockburn Bay. A number of days were spent on the coasts at the mouth of the river to little purpose. It was Back's earnest hope that he might be able to sail westward along the shore to Point Turnagain; but the ice-hampered shore to the west of the mouth of the river rendered the attempt altogether vain. Imprisoned here by ice, suffering from continuous wet weather, and from the depression arising from inaction and from a hopeless prospect, the crew began to show signs of declining health, and Back began to perceive that he had arrived at the limit of his explorations.

After discovering, naming, and visiting all the more striking natural features at, around, and opposite the mouth of Great Fish River—hereafter to be known as Back's River, from the name of its discoverer and explorer—and after many unavailing attempts to penetrate to the westward, the captain was convinced that to delay his return would only be unnecessarily to expose his men, and to overstep the limit of time set down in his official instructions as the date at which he should commence to retrace his steps. This conviction was pressed upon him by the peculiarly dismal and hopeless character of his situation and surroundings. The morning of the 14th August was ushered in by a wet fog, in which no object was distinctly visible at the distance of eighty or ninety paces. At the same time, a breeze sprang up and packed the seaward body of ice. For some time he had thought of dividing the party, leaving four to protect the boat and property, and going on with the others along the shore towards Point Turnagain. "But this scheme," he writes, "was completely frustrated by the impracticability of carrying any weight on a soil in which at every step we sunk half-leg deep; destitute of shrubs or moss for fuel, and almost without water; over which we must have travelled for days to have made even a few miles

of longitude, and when, finally, if sickness had overtaken any one, his fate would have been inevitable. Thus circumstanced, therefore, and reflecting on the long and dangerous stream (combining all the bad features of the worst rivers in the country) that we had to retrace, . . . I felt that I had no choice, and assembling the men, I informed them that the period fixed by his Majesty's Government for my return had arrived; and that it now only remained to unfurl the British flag, and salute it with three cheers in honour of his most gracious Majesty, whilst his royal name should be given to this portion of America, by the appellation of William IV.'s Land." It was with satisfaction, not to say delight, that this intimation was received. 'King William's Land, opposite the mouth of Great Fish River—not one of the least of Back's discoveries—was duly named, and a dram concluded the ceremony.

The return voyage up the river was commenced on the 21st August, and prosecuted without interruption to its close. On the 17th September, having on that day arrived at the source of the river, and commenced the portage across the watershed to Lake Aylmer, Back had the great pleasure of again meeting Mr M'Leod, accompanied by six men. Delayed for two days by unfavourable weather, Captain Back set out again on the 20th September, crossed Lakes Aylmer and Clinton-Colden, and encamped on the shore of Artillery Lake. On the 27th the whole party arrived at Fort Reliance, "after an absence of four months; tired indeed, but well in health, and truly grateful for the manifold mercies we had experienced in the course of our long and perilous journey." The house was found still standing, but dreadfully out of repair, and after a rest of a few hours, Back and his companions were obliged to commence the labour of restoring it, and rendering it habitable.

The winter months of 1834-35 passed over uneventfully, and on 21st March, bidding farewell to his friend M'Leod, and to the region of his discoveries, Captain Back set out for, and shortly reached, Fort Resolution, on his return to England. From this point his progress was unmarked by any unusual or noteworthy incident. On the 17th August, he took ship from New York for England, where he arrived on the 8th September. Mr King, with eight of the men, reached England in October.

CHAPTER VII.

BACK'S VOYAGE IN THE "TERROR," 1836-37—BESET FOR A YEAR—SAILING IN ICE—BEATEN BY ICE-WAVES—A SCENE OF RUIN—CANNONADING THE ICE—RELEASE AND RETURN.

ATTEMPTS to complete the coast-line of North America from Regent Inlet to Point Turnagain had been made successively by Parry, Ross, Franklin, and Back, and though Commander Ross in crossing Boothia Isthmus and exploring parts of the coast of King William Sea, and Captain Back in discovering the *embouchure* of the Great Fish River and King William's Land and all but connecting his discoveries with those of Commander Ross, had done much towards simplifying that problem, they had not yet arrived at its solution. The completion of the coast-line between the points named was one of the cherished objects of the Government of the time; for in its achievement men seemed to see the North-West Passage an accomplished fact. Accordingly, when the Geographical Society urged upon Government the expediency of fitting out another expedition with this object, the project was favourably received, and Captain Back was appointed to carry it out.

For the purpose of the new expedition, H.M.S. "Terror" was put in commission, and Captain Back appointed to the command on May 13, 1836. The vessel had a short time previously been doubled and strengthened with massive iron and copper fastenings. Three whale boats, at once large and light, were built, and attached to the "Terror," and three sledges, so contrived as to be equally well adapted for iron runners or for wheels, were specially constructed for the transport of stores over land. Clothing, provisions, and general stores were provided on a more complete scale than had ever been before attempted, and an elaborate warming apparatus, consisting of an iron pipe extending nearly all round the ship, and intended to be charged with hot brine, was fitted to the interior of the vessel. The *personnel* of the expedition consisted of sixty officers and men, and among the former, it is interesting to note that Robert M'Clure, who, some years afterwards, was the first officer who actually accomplished the North-West Passage, and Graham Gore, afterwards first lieutenant in the "Erebus" in Franklin's last

and fatal expedition, served as mates. Captain Back's instructions were to proceed to Hudson Strait, thence to make the best of his way to the shores of the American continent, either by the north shore of Southampton Island, and through Frozen Strait, or by rounding the southern shores of the same island, and proceeding up Rowe's Welcome to Wager River or Repulse Bay. Having arrived at Repulse Bay or its vicinity, Back was instructed first to place the "Terror" in secure quarters for the winter, and then, as soon as the season should permit, to strike across the isthmus (afterwards known as Rae Isthmus) connecting Melville Peninsula with the mainland. It was believed that three days' journey might enable him to cross the isthmus, and this being accomplished, he would find himself on the extreme south shore of Regent Inlet, whence he should work his way in the whale boats and sledges along the coast westward to Point Turnagain.

On the morning of the 14th June 1836, the "Terror" was towed down the Thames. American waters were reached towards the close of July, and Davis Strait was crossed under a steady breeze from the south-west on the 28th of that month. On the 29th "the day was beautifully fine, and to those who were novices in this sort of navigation, nothing could exceed the interest of the scene — the tall ship with all her sails set threading her graceful way through the masses of ice, upon a sea as smooth as an inland lake." But this halcyon weather was not of long continuance. On the 1st August the "Terror" opened up Hudson Strait; but detained by fog and hampered with ice, she arrived at the western extremity of the strait only on the 14th. Pushing on north-west, on the morning of the 23d Back was heading for Frozen Strait, and heard with gratification the announcement of Baffin Island on the N.N.W. with Southampton Island on the west. Already, however, he had suffered much from the ice, and now the frozen barrier seemed to forbid any farther advance. "Had there only been a channel even as wide as a brook," writes Back, "we should soon have got to the strait; but the scene around us now presented an apparently solid sea of ice, thrown up in many parts to the height of eighteen feet, and so rugged, peaked, and uneven, as to bid defiance to any attempt even to walk over it. . . . Cheerless indeed was the prospect, for, excepting within a few feet of the ship, where the black streaks of water looked like inky lines on a fair sheet of paper, far as the eye could reach all was ice." On the 25th the ice seemed somewhat less compact, and after warping to the edge of the floe where the ice was less pressed together, Back made sail and bored through towards the south-west, in the hope of getting nearer to Southampton Island. The light air of wind now fell off, and the "Terror" hung motionless among the ice. Many an anxious glance was now cast upward at the vane on the masthead, and whistling for a wind was almost the only employment of the crew. At this time the weather was lovely, 44°

being registered in the sun, and about 36° in the shade. In this weather excellent work might have been done in the boats along the coast, could the "Terror" only have been got inshore. This annoying condition of affairs continued till noon of the 29th, when a general movement of the ice from the westward began. "It is needless to say," writes Back, "with how much pleasure so joyful a sight was hailed, and how sincerely we prayed that both the cause and the effect might continue until a passage should be cleared to the Frozen Strait." By noon on the 4th September the ship had been worked to a position five miles west of Fife Rock, twenty-four miles from Southampton Island, and four hundred and thirty-six miles from Repulse Bay. On the following day lanes of water were seen leading shoreward; but though every sail was set, and the strongest hawsers were fastened in the ice ahead, and then hove round by the capstan, it was found impossible to move the vessel, so firmly was the "sludge" frozen around her. There was still, however, another resource. Lieutenant Smyth, Captain Back's first officer, was despatched with the whole of the officers and men to the only open water at all near, and the entire force setting to work with axes, ice chisels, handspikes, and long poles, began cutting away the sludge that bound the pieces together and removing the latter into the clear space. "In this service they were frequently obliged to fasten lines to the heavier masses and haul them out; and though slipping and tumbling about, yet the light-hearted fellows pulled in unison to a cheerful song, and laughed and joked with the unreflecting merriment of schoolboys. Every now and then some luckless wight broke through the thin ice and plunged up to his neck; another endeavouring to remove a piece of ice by pushing against a larger mass would set himself adrift with it, and every such adventure was followed by shouts of laughter and vociferous mirth." This resource proved not unfruitful. The breeze gradually increased, the sails were hoisted, and the "Terror" began to gather way and went slowly towards the land. The expanse of ice around seemed indeed to be infinite; but every dark spot of water afforded some ground for the hope that, should the wind veer and come off shore, Back would find himself in a navigable channel. As the great masses separated from time to time, the hawsers were put in requisition, and the ship hove in between. This arduous labour was continued incessantly until at ten P.M. the "Terror" was worked into a clear space which, however, was only four miles long. On the evening of the 6th, the ship being then distant ten or twelve miles from the shore of Southampton Island, the vessel was again stopped by ice. Earnest, indeed, and frequent, were the prayers for a south or a west wind, but no such favourable breeze arose, and the enforced idleness of the officers and men was felt as most irksome. On September 11th the officers collected in groups and "basked in the sunshine of an Arctic summer day, with the thermometer at 35°." To relieve

in some manner the monotony of the situation, Back had permitted the seamen to go on the floe alongside and amuse themselves with various amusements, chief of which was the appropriate though rather rough game of baiting the bear. On the 11th the game was played in earnest. George Green, the ice mate, called down from the crow's-nest the electrifying words, "A bear in sight!" "The alarm being immediately given, the men ran helter-skelter to the ship, headed by a bull-dog belonging to the sergeant of marines, which was first on board. Every one below hearing the rush flew on deck, and learning the cause, seized the first gun at hand to prepare for the attack. Meantime the noble animal—a fine Polar bear—nothing startled by the hubbub which might well have frightened a legion of his kindred away, approached with deliberate steps nearer and nearer. His gait was loose and rolling, as if weak from hunger, for he rather drew than lifted his huge limbs over the rugged surface; and still as he advanced, he now raised his black nose and sniffed, and now paused, as appetite or fear prevailed. At length he took courage and followed up the scent; till at the distance of about fifty paces from the ship, he stood like a target to receive the balls which were soon showered upon him. He fell, but recovering his legs, limped with what strength was left a few paces off. Then all hurried to pursue. One grasped a handspike, another poised a lance, a third, more heedless, rushed on with a mere stick to give the *coup de grâce.* The more prudent, however, retained their guns, and a few more shots terminated the sufferings of poor Bruin." The animal was found to be seven feet long from the snout to the tail, and five feet in girth round the middle.

On the 16th September a breeze sprang up from south by west. The sails were set, and the ship began to forge ahead slowly through the ice. "It was indeed singular," says Back, "to behold the vast ship gliding along without any perceptible water." Considerable progress was made toward the land in the neighbourhood of Cape Comfort; but the wind changing to the east, the compacted ice around the ship and the ship itself, were carried along toward the west. On the morning of the 18th, Back found that he had been driven three or four miles past Cape Comfort, and at the same time had been set considerably nearer the coast, which had a most forbidding appearance. To the north it presented a towering and perpendicular front, rent into fissures, or jagged with splintery ridges, all deeply black, whilst toward the south it receded in round backed hills entirely covered with snow, except where sharp-angled rocks cropped out. Toward the west the land gradually declined with long slopes and wide valleys to Cape Bylot. At midnight the ice began again to drift slowly westward, and on the morning of the 19th sail was set to make the most of the wind which now blew from the south. If it would only veer round four points to the westward! Next morning, instead of changing to the desired quarter, the wind drew to

the north, and blowing fresh, jammed up the seaward ice upon the land with more force than had ever yet been displayed. Shortly after nine A.M. a floe piece split in two, and the tremendous violence of the pressure from the north curled and crushed up the windward ice, and piled it eighteen feet high against the beam of the "Terror." "The ship creaked as if she were in agony," says Back, "and, strong as she was, must have been stove and crushed, had not some of the smaller masses been forced under her bottom, and so diminished the strain by lifting her bow nearly two feet out of the water." There was some reason to believe that the ice, besides being sunk under the vessel, was also finding its way under the rampart of ice now threatening the beam of the "Terror;" "for," says Back, "the uplifted ruins (of this ice rampart), within fifty paces of the weather beam, were advancing slowly towards us like an immense wave fraught with destruction. Resistance would not, could not, have been effectual beyond a few seconds; for what, of human construction, could withstand the impact of an icy continent, driven onward by a furious storm? In the meantime, symptoms too unequivocal to be misunderstood, demonstrated the intensity of the pressure. The butt-ends began to start, and the copper, in which the galley apparatus was fixed, became crushed; sliding doors refused to shut, and leaks found access through the bulk-heads and bulls-eyes." The crisis appeared to be impending, and in order to meet it in the only way possible, Back ordered the preserved meats and provisions to be put up from below and stowed on the deck ready for immediate transference to the ice, when the final crush should come. On the 21st a motion was felt in the surrounding ice; a number of astounding thumps were heard against the bottom of the vessel under water, and then the ship, which had been heaved high above her line of flotation and thrown over to port, came swinging round and righted. Back, on beholding the walls of ice on either side between which the "Terror" had been nipped, was astonished at the tremendous force which she must have sustained. "Her mould," he says, "was stamped as perfectly as in a die" in the ice. The old Greenland seamen aboard said that no ship they had ever sailed in before, or ever seen, could have withstood such a pressure.

The winter had now commenced in this region, and Back was fully aware that if his enterprise was to be saved from failure, and his ship and men saved from destruction, he must find some sufficient shelter for the "Terror" during the winter months. Accordingly he despatched an exploring party under Lieutenant Smyth to examine the rocks and headlands of the neighbouring coast in search of some available harbour. But the search for the desired harbour was fruitless, and, from the circumstances in which Back now found himself, it was impossible at any subsequent period to resume it.

During the night of the 24th September the condition of affairs was entirely changed. Chaotic commotion arose around the explorers, and the whole body of ice in which the "Terror" was imbedded separated into single pieces, and, finally, on the morning of the 26th, commenced to rush violently westward towards Frozen Strait, tossing into amorphous heaps or grinding into sludge and brash ice whatever floes opposed its advance. In this commotion the "Terror" was helpless, and for the first time the appalling conviction took possession of the mind of the commander that there was now nothing to do but drift with the ice at the risk of wreck on the rocks, or of being crushed under ice-mountains, until Nature in her own good time should release him.

And now commenced one of the most singular and surprising experiences on record of an Arctic winter among the ice. Each succeeding day brought successive perils and vicissitudes, and from this point onward, for twelve months Back and his companions continued to live in the immediate and constant presence of death, and under its very shadow. The very continuity and perpetual recurrence of horrors renders the story of the fortunes of the "Terror" monotonous. Under the influence of wind and tide, and of the irresistible pressure of the ice-fields sweeping down Fox Channel from Fury and Hecla Strait upon the north shore of Southampton Island, the ice in the neighbourhood of the vessel was almost daily curled up into moving ramparts and swept onward, crushing everything before it, with as free a motion as if it had been an ocean billow instead of a wave of solid ice. Over and over again the "Terror" must have been engulfed under these waves of ice had its strength not been much greater than that of ordinary whalers, or than the vessels of the Hudson's Bay Company. As it was, the "Terror" rose to the advancing ice-rampart as it would have done to an ordinary wave in free water, though of course the rising motion was in this case more limited in its sweep. During the whole winter the good ship was liable daily to be dashed to pieces by those ice-waves, and in every encounter with the billows of adamant she was more or less severely "nipped," until eventually her timbers crashed, her bolts started, and her hull had literally to be held together by chains carried round the keel and hove tight over the deck with the capstan. During the first weeks of the winter the vessel was drifted backwards and forward, carried helplessly hither and thither by wind and tide along the coast of Southampton Island, off Cape Comfort. As the season advanced, however, she gradually drifted with the pack south-eastward towards Hudson Strait.

On the night of the 21st December the barometer began to fall quickly, and the minds of all were oppressed with the expectation of some uncommonly perilous occurrence. On the following morning the wind blew hard from S.S.E. The sky was overcast, and a snowy haze prevented the explorers

from seeing an object at a greater distance than a few yards. Soon a rustling noise like the rushing of water was heard, and presently the storm was upon the vessel, raging with such fury that not a man could face it. Several of those who tried to go out from under the housing were instantly frost-bitten, and the officer of the watch, in merely going from the housing to the taffrail to register the thermometer, "had the whole of his face frozen." The storm raged like a hurricane and covered the ship with snowdrift. The top-masts shook like wands, and the lee rigging was bent outward "like a bow." The tempest was not exhausted till the 24th, and then the sky was again serene, and Back found that he had driven with the ice twelve or fourteen miles eastward of Cape Comfort. Toward the end of December the crew began to be affected with scurvy, and on the 13th January a sailor named Graham Walker died of it. On the 14th the officers and crew performed the last mournful duties toward their shipmate. "The body was conveyed on a sledge to the extremity of the floe, where a grave had been dug through the ice; and the solemn and affecting service for the dead having been read, the remains were committed to the deep." Another victim was shortly afterwards to be claimed by the fell disease. January had closed with intense cold, the thermometer registering 54° below zero on the 31st, on which day the sailors amused themselves by firing a pistol-ball of frozen mercury into a frozen piece of timber. Donaldson, the gunner, a valuable man, had for some time been down with scurvy; and on the 3d February, after remaining for days in a drowsy lethargy, refusing with a wave of his hand the nourishment that was offered to him from time to time, he gradually sank, and at last "slumbered to death."

Early on the morning of the 20th February, the ice separated along the starboard side and under the bow of the "Terror;" but a few hours later it returned upon the ship with accumulated force, making her crack fore and aft, with a hideous sound of ruin and disruption, that made every man hold his breath. Doors were dislocated and split with the prsseure. The people crowded on the deck in alarm, and even the poor scurvy-stricken invalids came tottering aft in an agony of terror. "Providentially the ship lifted herself up fully eight inches, under the prsseure of a force that would have crushed a less strengthened vessel to atoms—and thus the opposing ice either passed in part under the bottom, or was wedged against the large masses at either extremity." At eight A.M., Captain Back called the crew together, and reminded them that as Christians and British seamen they were called upon to conduct themselves with coolness and fortitude; and that, independently of the obligations imposed by the Articles of War, every one ought to be influenced by the still higher motive of a conscious desire to perform his duty. "I gave them to understand," continues Back, "that I expected from one and all, in the event of any disaster, an implicit obedi-

ence to, and an energetic execution of, every order they might receive from the officers, as well as kind and compassionate help to the sick. On their observance of these injunctions, I warned them, our ultimate safety might depend. Some fresh articles of warm clothing were then dealt out to them; and as the moment of destruction was uncertain, I desired that the small bags in which those things were contained should be placed on deck with the provisions (already collected there in anticipation of the break-up of the ship), so as to be ready at any instant. Meanwhile the ice moved but little. . . . Though I had seen vast bodies of ice from Spitzbergen to 150° W. longitude, under various aspects, some beautiful, and all more or less awe-inspiring, I had never witnessed, nor even imagined, anything so fearfully magnificent, as the moving towers and ramparts that now frowned on every side." At six o'clock in the evening the ice again attacked the ship. The ominous cracking of the timbers again assailed the men's ears, and again the vessel was lifted up eighteen inches; similar "nips" with similar effects took place on the following morning. At ten o'clock the ice-field became fixed in utter silence. Back went out to examine the floe, and his wonder was anew excited by the gigantic piles and ramparts of ice frowning along the sides of the vessel. "Of the awful grandeur of these," he writes, "no language could give an adequate description, and even the more effective pencil would be able only to catch our momentary aspect of the scene, the terrible solemnity of which lay chiefly in the rolling onward of these mighty engines of destruction. . . . While engaged with the first lieutenant in contemplating these effects, within ten paces of the vessel, the sound of rushing water beneath warned us to expect some change. All at once, however, it ceased. Another rush was heard, which stopped as suddenly; but a third, advancing with a louder roar, threw the whole body of ice into motion, and bringing the ponderous acres with all their loads against the ship, threw her up, and considerably over to starboard, with great violence, though, strange to say, with little apparent injury. It was then we saw her rise to the pressure, and endeavour to thrust the ice beneath her bends, a result much to be desired, as it would form a sort of bolster to support her." At 3.30 P.M., the ice suddenly pressed up against the ship, and at six it came with such force that the timbers creaked fearfully, and then, as usual, after some resistance, the ship rose and heeled over to starboard. On the morning of the 22d, the pressure came again suddenly on the ship, and strained so much as to start a number of the iron fastenings in the store-rooms. On the starboard, where the pressure was terrific, a huge mass of ice had been thrown up nineteen feet above the level. The whole scene was one of ruin, confusion, and devastation. "Broken points at every angle, from the perpendicular to the nearly horizontal, hummocks, mounds, jagged and warted masses, splinters, walls and ramparts, with here and there the

remains of some floe not yet entirely broken up—such was the picture which saluted us on every side."

From day to day throughout the whole of the spring and summer—the ship remaining beset in the floe all that time—a monotonous but terrific succession of crushes from the tide-heaved and wind-driven ice continued to afflict the "Terror." On the evening of the 7th March, the usual premonitory rushing sounds were heard far off on the north-east and north-west. These were caused by the approaching tide-flood which advanced either under the compact ice-field, or along the cracks and openings. As it passed through the latter, the flood, narrowed and hampered within the confined channels, attained a furious velocity. It happened that on the day named there were a number of these cracks at no great distance from the ship, and when these opened on the "Terror" like so many conduits rushing to a common centre, "the concussion," says Back, "was absolutely appalling—rending the lining and bulkheads in every part, loosening some shores or stanchions, so that the slightest effort would have thrown them down, and compressing others with such force as to make the turpentine ooze out of their extremities. One fir plank placed horizontally between the beams and the shores actually glittered with globules. At the same time the pressure was going on from the larboard side, where the three heaviest parts of the ruin of the floe remained, cracked here and there, but yet adhering in firm and solid bodies. These of course were irresistible, and after much groaning, splitting, and cracking, accompanied by sounds like the explosion of cannon, the ship rose fore and aft, and heeled over about 10° to starboard." On the 14th March the wind freshened into a gale, and in the evening the advancing ice began to press hard upon and underneath the stern and quarter, causing the timbers to crack fore and aft. The commotion continued till noon of the next day, when suddenly a loud crack was heard below the mainmast, as if the keel were broken or carried away. Meantime the boats and stores were lowered and placed on the floe, in expectation of the ship itself being buried under the ice. A continually increasing rush was heard at night, and it soon came on with a heavy roar towards the larboard quarter, "upturning in its progress, and rolling onward with it an immense wall of ice. This advanced so fast," continues Back, "that though all hands were immediately called, they had barely time, with the greatest exertion, to extricate three of the boats, one of them in fact being hoisted up when only a few feet from the crest of the solid wave, which held a steady course directly for the quarter, almost overtopping it, and continuing to elevate itself until about twenty-five feet high. A piece had just reached the rudder, and at the moment when to all appearance both that and a portion at least of the framework were expected to be staved in and buried beneath the ruins, the motion ceased, and at the same time the crest of the nearest part of the

wave topped over, leaving a deep wall extending from thence beyond the quarter."

Continuing to drift along the shore toward the south-east, the "Terror," still imbedded in the floe, was carried, by the 7th April, to Sir James Gordon's Bay, near Seahorse Point, the most easterly headland of Southampton Island. But though the season was now well advanced, and the sun shone with daily increasing power, the ship remained in constant peril from the tumultuous ice with which she was still surrounded. On the 26th April, Alexander Young, a marine, died of scurvy. By the 5th May, the "Terror" had drifted to near Nottingham Island, at the western mouth of Hudson Strait. The crew were now much employed in refitting the vessel, which was still moored to her broad raft of ice. But the floe to which the vessel was attached was now gradually diminishing in dimensions; and on the 1st June Back observed a considerable number of pieces detach themselves from the main body, and drift away. On the 6th a western wind blew with considerable violence, and began at length to have some effect on the immense surface of ice surrounding the vessel. On June 8th a lane of water opened out astern to the distance of three or four hundred yards; and on the following day the ice forming the pack on which the vessel was carried was observed to have slightly diminished in thickness; and from the effects of the sun, and of the heat radiated from the sides of the ship, the ice around her had sunk two feet, thus partly exposing the keel under the fore-part of the vessel, while a deep trench extended quite round her, surmounted by the ruins of the ponderous ice-waves, in the hard gripe of which the whole of the after-part lay immovably wedged. The crew were now set to work with picks, spades, and axes, to reduce the size of these ramparts of ice, and to mark out the most feasible line of escape when the disruption of the pack should commence. On the 15th Back gave orders to commence undermining the ice below the bow of the vessel. In this most laborious process, saws were altogether useless, on account of the thickness of the floe, which was found to be between forty and fifty feet. The thaw continuing, however, the cracks around the ship became more numerous; and on the 23d June an immense mass of the pack near the ship broke off. Upon this mass, at the moment it broke off, a number of the crew were working. These were for the moment placed in the most perilous position from the rocking of the piece after being detached. A small boat was at once sent to them, and all of them were got safely on board, though their pick-axes, shovels, handspikes, etc., were all lost. On June 29th a sudden disruption took place a hundred and fifty yards ahead of the ship, and split the floe right across. On the following day the experiment of cannonading the ice was made, but without the expected results, for instead of splintering and throwing down the mounds, the six-pounder shot used

merely cracked it, and sank deep into the ice, without causing any disruption. One of the shot was next day recovered. It had been discharged at the distance of twenty-one yards, with a charge of sixteen ounces of powder, and had penetrated a yard and a half, splitting the mass in various directions. Early in July the ice-saws were got out, and considerable progress was made in cutting across the masses of over twenty feet in thickness. On the 11th, while the crew were engaged sawing the ice, so as to free the stern-post, a succession of unusual cracking noises from below seemed to warn them that something was about to happen. The captain was called, and after inspecting the works and giving directions, he returned again on board the ship. But scarcely had he regained his cabin, when a loud rumbling notified that the ship had broken her icy bonds, and was sliding gently down into her own element. "I ran instantly on deck," writes Back, "and joined in the cheers of the officers and men, who, dispersed on different pieces of ice, took this significant method of expressing their feelings. It was a sight not to be forgotten. Standing on the taffrail, I saw the dark bubbling water below, and enormous masses of ice gently vibrating and springing to the surface. The first lieutenant was just climbing over the stern, while other groups were standing apart, separated by this new gulf; and the spars, together with working implements, were resting half in the water, half on the ice, whilst the saw, the instrument whereby this effect was produced, was bent double, and in that position forcibly detained by the body it had severed." Fortunately, all the men on the detached pieces were got off the floating masses without accident.

The ice *around* the vessel was now seen in fragments floating away and mixing with other loose pieces. But Back had still to get rid of the ice *under* the vessel, and recourse was had to every known expedient to get free of this huge encumbrance. The ice-saw was repaired, and though this remaining mass was found to be twenty-four feet thick, the crew, among whom the officers laboured like ordinary shipmates, commenced the arduous work with the greatest spirit on the 13th, and worked incessantly during that day and the following night. At two o'clock on the morning of the 14th, while the exhausted crew were still languidly at work, the grating sound of breaking ice was suddenly heard, and before a word could be spoken, the liberated ship righted, and floated in free water, while broken spars, the bent saw, and the massive berg were all in confusion together. "Quick as they could spring, the crew jumped on deck; and I know not," says Back, "how many cheers commemorated the joyful occasion."

Sail was now set, but in the teeth of an adverse easterly wind progress was slow. It was not till the 5th August that the battered, strained, and leaky ship reached Button Isles, at the entrance to Hudson Strait. On the following day Back entered Davis Strait. But now the shattered condition

of the after-part of the vessel, the rickety state of the stern-post, and other parts, demanded immediate attention; chain cables were passed under the bottom of the ship to strengthen the loosened outer timbers or "doubling," hove tight by the capstan, and fastened to ring-bolts on the quarter-deck. Thus patched up, the "Terror," practically a wreck, was carried across the Atlantic. On the 3d September, after one of the most extraordinary voyages of modern times, she reached British waters, and was safely anchored in Lough Swilly. Thus, after a year of constant danger and hardship, Back's expedition of 1836-37 came to a close. The gallant commander was not even permitted to reach the spot in which the original exploration was to begin, and he returned without having had it in his power to add anything to the geography or the scientific knowledge of his time.

After the date 1837, Back no longer appears as an Arctic explorer; but from that date to the present time he has continued to take the keenest interest in all voyages of discovery in Polar regions, in the organisation of which Government have never failed to avail themselves of his judgment and experience. For forty years he has continued to enjoy and to merit the respect of the service and of the country. He was knighted in 1839, and was promoted to the rank of Admiral in 1867. To his qualifications as an explorer and a man of science he adds the gifts of a man of artistic culture. His sketches are vivid reproductions of Arctic scenery and the incidents of exploration; and in taking leave of him here, it is with sincere gratitude that the present writer pays a just tribute to his literary style. The study of his works has been a pleasure, and their condensation an interesting task. The narratives of many explorers are dull, heavy, clogged with iteration, deluged with aimless and flavourless detail; but those of Admiral Sir George Back are full of the picturesqueness and the humour which characterise his pencil sketches of Arctic life and adventure.

CHAPTER VIII.

SIMPSON'S EXPLORATIONS, 1836-39 — OFFICIAL INSTRUCTIONS — ARRIVAL AT RETURN REEF—THE UNKNOWN TRACT TRAVERSED—RETURN TO WINTER QUARTERS.

WHILE Captain Back, in the "Terror," was drifting helplessly in the ice-pack between Frozen and Hudson Straits, an expedition destined to be as successful as the gallant captain's was fruitless, was being organised by the Hudson's Bay Company. By the efforts of Franklin, Beechey, and Back, immense tracts of the northern shores of America had been visited and surveyed. Beginning from the west, Beechey's expedition, passing north through Behring Strait, and eastward past Icy Cape, advanced the British flag as far eastward along the American shore as Point Barrow, in long. 156° 21′ W. From Point Barrow, eastward to Return Reef, a distance of about 150 miles, the tract of coast was as yet entirely unknown. From Return Reef eastward along the coast, past the mouths of the Mackenzie and Coppermine Rivers to Point Turnagain, on the eastern shore of Kent Peninsula (Dease Strait), Franklin and Richardson surveyed the shore. From Point Turnagain eastward again, the shores of the Polar Sea were entirely unknown as far as the coasts of the mouth of Back or Great Fish River, the discovery of which, as we have seen, is due to the energy and enterprise of Captain Back. The portions of the northern coast of America that remained still unexplored, then, were the tracts between Point Barrow and Return Reef in the far north-west, and between Point Turnagain and the Great Fish River, forming the most easterly reach of the coast-line. What lay to the east of the mouth of Great Fish River was wholly unknown in 1836. Many persons interested in Arctic discovery, however, believed that water communication existed between the mouth of this great river and Regent Inlet. To ascertain whether this really was the case, and also to survey the as yet undiscovered tracts of the North American coast-line, were the principal considerations in determining the Hudson's Bay Company to organise the expedition with which the name of Simpson is identified in the annals of Arctic exploration. The directors of the Company resolved to give the command of the enterprise to two of their own officers, and the gentlemen

selected for the distinction were Mr Peter Warren Dease and Mr Thomas Simpson—the former a chief factor and the latter a junior officer in the service of the Company. Mr Dease, who, it will be remembered, rendered signal service to Franklin during the winter of 1825-26 (see page 247), was a gentleman of considerable experience in dealing with Indian hunters, guides, etc., and on account of his seniority, the chief command of the expedition was entrusted to him. Practically, however, the actual conduct of affairs came gradually into the hands of Simpson, who was young, ardent, ambitious, and to whom, personally, all the discoveries of the expedition are to be credited.

The purpose of the expedition, as explained in the letter of instructions sent by the Governor of the Company to the joint commanders, and dated 13th July 1836, was "to endeavour to complete the discovery and survey of the northern shores of the American continent." The expedition was to consist of twelve men, to be placed under the command of Dease and Simpson. These were to be conducted without delay to the Athabasca country, and to pass the winter of 1836-37 either at Fort Chipewyan (Lake Athabasca) or Fort Resolution (Great Slave Lake). In June 1837 the officers, leaving four men behind on Great Bear Lake to erect buildings there and collect stores, etc., were to proceed down Mackenzie River and trace the unknown coast-line between Return Reef—Franklin's farthest in the westward direction—and Point Barrow, the farthest point eastward from the Pacific, discovered by Beechey's first officer in 1826. Returning along the coast, and by the Mackenzie River, the leaders should pass the following winter at their establishment on Great Bear Lake, whence, in the summer of 1838, they were to proceed down the Coppermine, and coasting along the north shores of the continent, should explore the unknown coast-line from Franklin's Point Turnagain east to the mouth of Back or Great Fish River. In compliance with these instructions, Mr Dease set out on the 31st July 1836 from Norway House to Athabasca Lake, while Mr Simpson, whose services were not immediately required, went south to Red River Settlement, "chiefly," he says, "with a view to refresh and extend my astronomical practice, which had for some years been interrupted by avocations of a very different nature." Simpson subsequently states that he found less difficulty in refreshing his knowledge of mathematics and astronomy, with the view of taking the necessary observations of the expedition, than he had expected. Certainly the routine work of a clerk in the employment of the Hudson's Bay Company of the date referred to was not of a kind requiring the exercise of high-class scholastic attainments, but it must be remembered that Simpson, who was now only twenty-eight years of age, had seven years previously graduated M.A. at King's College, Aberdeen, of which, also, he was the successful candidate for the "Hut-

tonian Prize," the highest reward of literary merit then given in that university. And the determination, which had enabled him to carry off the highest honour of his university in the year in which he attained his majority, had evidently not yet deserted him; for, having read mathematics with care and profit for a few months, he started on the 1st December to walk from Red River Settlement to Athabasca Lake, a distance of 1277 miles, which he accomplished in sixty-two days. Twenty miles a day for two months must be regarded as remarkable walking, when it is remembered that the route lay over a rugged and trackless waste, that the journey was performed in the depth of winter, that the party nightly bivouacked on the snow, and that Simpson himself invariably "*raised the road*"—*i.e.*, led on in advance to mark the track, a duty so fatiguing that it is usually taken for only an hour at a time by the different members of a travelling party alternately. Of the nature of this astonishing march, some idea may be formed from the following record, in Simpson's narrative, of one day's journey: "We were now (23d December) at the commencement of a plain twenty miles in breadth, which my guide required daylight to cross; we therefore breakfasted and started at seven o'clock. The wind blew strongly from the westward, and to face it, where there was not even a shrub or blade of grass to break its force, with a temperature of at least -40°, was a serious undertaking. Muffling up our faces with shawls, pieces of blanket, and leather, in such a manner as to leave only the eyes exposed, we braved the blast. Each eyelash was speedily bedizened with a heavy crop of icicles, and we were obliged every now and then to turn our backs to the wind and thaw off these obstructions with our half-frozen fingers. Early in the afternoon we reached what are called the Cross Woods, where we were glad to make the best lodging we could for the night, there being another wide prairie on the opposite side. Notwithstanding every precaution, two of the men were injured by the cold—one, a half-breed from Fort Pelly, who afterwards, at Carlton, lamented his inability to dance in consequence of his frozen heels. Neither bird nor beast was seen during the day, the intense cold having driven all living things but ourselves to the shelter of the woods."

On the 1st February, Simpson arrived at Fort Chipewyan on Athabasca Lake. The construction of two boats for the voyage down to the Polar Sea was at once proceeded with. By the close of May, the boats—light clinker-built craft of twenty-four feet keel, and six feet beam, and each carrying two lug sails—were finished, and were named "Castor" and "Pollux." In these the expedition started from Fort Chipewyan on the 1st June, on its descent to the sea, and arrived on the 10th at Fort Resolution on Great Slave Lake. Fort Simpson was reached on the 28th, and Fort Norman on the 1st July. Here, according to his instructions, Simpson sent away a party of four of his men to ascend Bear Lake River to Great Bear Lake, and to erect winter

quarters there, establish a fishery, and collect dried meat for the coming winter. From this point began the voyage proper down the Mackenzie to the Polar Sea. The crews of the "Castor" and "Pollux" consisted of six men each, and included the famous steersmen, M'Kay and Sinclair, who had sailed with Back down Great Fish River, as well as François Felix, a Canadian bowman, who had been with Franklin in 1826. Near the junction of Bear Lake River with the Mackenzie, the natural fires of wood-coal along the bank were observed to be still burning, just as when they were seen and described by Richardson. On the 7th, after having passed Point Separation, at the head of the delta of the Mackenzie, the explorers had the satisfaction, new to a number of them, of beholding the sun at midnight, elevated more than one diameter above the horizon. "At four P.M." (on the 9th), writes Simpson, "the Arctic Ocean burst into view. We saluted it with joyous cheers, and, immediately landing, found ourselves at the bottom of Shoalwater Bay." After waiting here for an hour, the westward voyage along the coast was commenced, and the discoveries of Franklin were successively verified without the occurrence of many incidents of a kind with which his voyage has not made us familiar. The navigation was difficult, the storms frequent, and the shore-channel hampered with ice, as Franklin had found them, and the different tribes of Eskimos met with at the various landing-places, displayed the same characteristics of simplicity, cupidity, and occasionally of a disposition to high-handed robbery, which the first civilised navigator of these shores so minutely observed and described. There is, therefore, little to record in the voyage of the "Castor" and "Pollux" until when, on the 23d July, the boats arrived off Return Reef, the farthest point reached by Franklin, and consequently the point at which the discoveries and original researches of Dease and Simpson were to begin. "At ten o'clock on the morning of the 23d," writes Simpson, "we once more set sail for Point Anxiety. The ice again prevented our approaching it, and let us far to seaward, till, in passing Yarborough Inlet, the low coast was only visible from the mast-head, distant about six miles. The ice, to our great joy, then turned abruptly in towards Return Reef, which we reached at nine in the evening. I may here mention that our early arrival at the point where our discoveries were to commence is, under Providence, mainly attributable to our perseverance in *doubling* these great ice-packs, any of which might have confined us a fortnight to the beach, had we chosen to wait for its dispersion, or even till its extent could have been ascertained. Our humble thanks were offered to the Omnipotent Being whose arm had guarded us thus far, and we fervently implored a continuance of His gracious protection. . . . After supper we resumed our route, and the regular survey began."

The route along the shore from Return Reef to Point Barrow was

followed out with the greatest determination and courage, and without an hour's unnecessary delay. Simpson and Dease, starting "after supper" on the night of the 23d July, sailed all night—if night it could be called, when the sun never dipped below the horizon—and early on the morning they passed two points; about twelve miles beyond Return Reef they discovered two headlands, to which they gave the names Point Back and Point Beechey. A long day of hard work followed. At nine A.M. the water shoaled to from one to two feet; and after seeking in vain for a deeper channel, the explorers were obliged to stand out to sea. Colville River was discovered and named. The low beach near the mouth of this stream is formed of mud and gravel, and the volume of the river itself was so considerable, that the water, even at the distance of three leagues to seaward, was perfectly fresh. After running out from shore fourteen miles, the explorers tacked, and steering south-west, ran a distance of sixteen miles. Again they ran out seaward for seventeen miles, when they found themselves in salt water a fathom and a half deep. The wind now sprang up from the north, and drove in the ice on the boats. The adventurers, who had not seen land since morning, and were quite uncertain what direction to take, now steered westward at a venture, and after sailing five miles, had the good luck to make the shore at midnight. "It was with difficulty," writes Simpson, "that we found a landing-place on a large fragment of ice, upon which the boats were hauled up. Having fasted for twenty-five hours, and being, moreover, benumbed with cold, it will readily be believed that we eagerly set about collecting wood, and making a fire to cook our supper, to which, of course, we did ample justice. In gratitude for these seasonable enjoyments, this spot was denominated Point Comfort. Most of the party had caught severe colds from the constant exposure and unhealthy fogs; and all would have been incapacitated for wading through the ice-cold water, had it not been for the sealskin boots which we had procured from the Eskimos—an invaluable acquisition on such service."

Detained by adverse winds on the 25th—during which, however, Simpson was able to take observations, and found himself in lat. 70° 43′ N., long. 152° 14 W.—the boats were launched on the morning of the 26th. "On the 27th," writes Simpson, "it blew a cutting blast from the north-east, and the spray froze upon the oars and rigging." On the same day, Cape George Simpson, in lat. 70° 59′ N., long. 154° 21′ W., was discovered and named. For the next four days, however, the progress made was only one mile *per diem;* such were the obstructions from ice and fog. Simpson now began to fear that the expedition would be detained on its present service until it would be too late in the season to effect a return to the winter quarters at Bear Lake, and he therefore resolved to explore the remainder of the coast to Point Barrow on foot. Selecting five men to accompany him, he

started from the encampment, at which the boats were to be left in charge of Mr Dease, and which was named Boat Extreme, on the 1st August. The provisions of the travelling party consisted of a supply of pemmican and flour; besides which each man carried his blanket, spare shoes, gun and ammunition. The remaining stores consisted of a single kettle, a couple of axes, a few trinkets, a sextant and artificial horizon, and a canvas canoe, stretched on its wooden frame. "The day," writes Simpson, "was dark and dismal in the extreme, a cutting north wind bearing on its wings a fog that hid every object at the distance of a hundred yards. We were therefore under the necessity of closely following the coast line, which much increased the distance and fatigue. The land is very low, and intersected by innumerable salt creeks. In fording these, we were constantly wet to the waist, and the water was dreadfully cold. . . . Having accomplished twenty miles at seven P.M., we found a grassy plot, with a few pieces of (drift) wood. Little or none of that essential article had been seen during the day, this part of the coast being shut out from the action of the sea by a chain of reefs. Here, then, we encamped, half congealed by the cold wet fog and wind, which encrusted our clothes with hoar-frost and ice, as in the severity of winter. Unfortunately the spot where we halted was wet beneath the deceitful surface; and being quite exposed to the weather, we passed a miserable night." The following day was one of similarly trying labour. After discovering and naming Point Tangent (long. 154° 52′ W.), the party had advanced ten miles, wading through many a salt creek, the waters of which were at the freezing temperature, when, to their "inexpressible joy," they descried an Eskimo encampment. As soon as friendly relations with the natives had been established, Simpson proposed to borrow one of their oomiacks, or large family canoes, to take his party on to Point Barrow and back. The Eskimos at once acceded to the request. The best of the oomiacks, with its oars and paddles, was selected; and after a general distribution of tobacco and trinkets—the former received with intense delight by men, women, and children—Simpson shoved off, and steering westward, soon discovered and named Dease Inlet and Point Christie. On the evening of the 3d August, progress was barred by a compact body of ice. It was easy, however, to carry the light oomiack across this barrier, and resume the voyage. "It was now calm," writes Simpson; "the ducks flew westward in immensely long files, and *young ice* had formed on every open space—a timely warning to travellers who adventure far into these regions of frost. But we were fast approaching the goal that was to crown our enterprise, and disregarded all impediments. Seven miles beyond Cape Scott, we crossed the mouth of a fine, deep river, a quarter of a mile wide, which I called the Bellevue. Landing beyond it, I saw, with indescribable emotions, *Point Barrow*, stretching out to the northward, and enclosing Elson Bay, near the bottom

of which we now were. The sun was just reappearing, a little before one in the morning of the 4th, when this joyful sight met my eyes. His early rays decked the clouds in splendour as I poured forth my grateful orisons to the Father of Light, who had guided our steps securely through every difficulty and danger. We had now only to pass Elson Bay, which is for the most part shallow. It was covered with a tough coat of young ice, through which we broke a passage; and then forced our way amid a heavy pack, nearly half a mile broad, that rested on the shore. On reaching it, and seeing the ocean spreading far and wide to the south-west, we unfurled our flag, and with three enthusiastic cheers, took possession of our discoveries in his Majesty's name." Thus did this most intrepid explorer successfully accomplish the first task which the Hudson's Bay Company had set before him. He had advanced from the point at which Franklin had been compelled to retire, and had connected the brilliant discoveries of that great navigator with those of Beechey's expedition from the Pacific.

Point Barrow, which had been the end and aim of Simpson's efforts for months, is a long, low spit of land, consisting of gravel and coarse sand, which the pressure of the ice of numberless winters has forced up into numerous mounds. Bare and bleak in itself, the most lively feature it presented was an immense Eskimo cemetery, where the remains of numbers of that people were seen lying on the ground, still invested with the sealskin dresses which they had worn in life. Near the spot where the explorers had landed, at a very early hour, on this barren headland, there were two Eskimo encampments, the inhabitants of which, roused from their slumbers by the unwonted and ominous sound of three British cheers, appear to have been at first struck with terror, and lay still within their huts. Afterwards, however, they ventured out, and confidence was established between them and their visitors in the usual way, and with the usual results. On the 4th, Simpson launched the oomiack, and commenced the return voyage; and on the following day reached and rewarded the Eskimos from whom he had borrowed the canoe. He stipulated, however, that he should retain the use of the oomiack for a few days more, and promised to leave it for the owners at Boat Extreme, where he had left Mr Dease and the remainder of the party in charge of their own boats. On the 6th he reached Boat Extreme, and, having laid up the canoe securely on the beach, he, together with Mr Dease and the whole party, put to sea in the "Castor" and "Pollux," and continued sailing all night eastward along the shore toward the mouth of the Mackenzie River, where he arrived in safety on the 17th. "Our ascent of the Mackenzie," writes Simpson, who was certainly the swiftest of all Arctic explorers down to his own day, "was performed almost exclusively by towing—at the rate of from thirty to forty miles a day. The crews were divided into two parties, who relieved each other every hour, and were thus

spared all unnecessary fatigue." Continuing the voyage in this vigorous fashion, the boats arrived at the confluence of Bear Lake River with the Mackenzie on the 3d September. Here the leaders deposited the cargoes of the "Castor" and "Pollux," and prepared to ascend the Mackenzie a few miles farther to Fort Norman, where it was expected they should find their outfit for the coming year, with despatches, etc. "On the 4th," says Simpson, "we took an early breakfast at the burning banks, and lighted our fire with coals of nature's kindling. In the woods that crown this vast hot-bed we found a great profusion of very fine raspberries and gooseberries, which afforded us a rich treat. . . . At six P.M. we reached Fort Norman, to the utter amazement of the person in charge, who imagined us still at the coast." Two days after, the goods and provisions for the next, year's voyage down the Coppermine, and east to the Great Fish River, arrived; and taking these in charge, Dease and Simpson set out on the 10th for their winter quarters at Great Bear Lake. The little tabernacle in the snowy waste—for winter had already set in with its accustomed severity—was situated at the north-east extremity of the lake, near the mouth of Dease River. "We reached it," says Simpson, "at four P.M. on the 25th September, and had the satisfaction of finding our comrades safe and well. Our greetings were cordial indeed; and with feelings of sincere gratitude to an Almighty Protector, we bestowed upon our infant establishment the name of Fort Confidence.

CHAPTER IX.

WINTER AT FORT CONFIDENCE—EXTRAORDINARY APPETITES—SAILING OVER THE ICE—NEW LAND SURVEYED—THE IMPOSSIBLE ACHIEVED.

THE building party had not arrived at the spot selected for the winter quarters before the 27th August, and at the date of the arrival of Dease and Simpson (25th September), only a small store and the framework of a dwelling-house had been erected. The site of the new establishment was a wooded point on the northern side of a deep and narrow strait, on the opposite or southern side of which was a large island. A fishery had been at once established on the strait, and though the number of fish taken diminished rapidly as the cold increased, yet this source of food-supply proved of the utmost importance, as otherwise the joint commanders would have experienced the greatest difficulty in feeding the numerous Dog-rib and Hare Indians who crowded, with their families, to the fort as soon as the settlement was made. "To commence a winter within the Arctic circle," remarks Simpson, "with a considerable party destitute of provisions, and the Indians upon whom we mainly depended for subsistence requiring *our* aid and support, was an alarming condition, which demanded the utmost exertion of our personal resources." More nets were accordingly set in the strait, and several fishing stations established at some distance. These, however, ceased to be productive early in November, after which period the settlers were obliged to place their chief reliance on the uncertain movements of the reindeer. During October and November, Simpson occupied himself chiefly in hunting with the Indians. At this season the deer began to draw in from the north-east to the country between Great Bear Lake and the Coppermine, and whenever the hunters were lucky enough to strike down a number of deer, they despatched the greater part of the meat to Fort Confidence. These hunting excursions were not only necessary and profitable, but also delightful. "I highly relished the animation of the chase," writes Simpson, "and the absolute independence of an Indian life. Our tents were usually pitched in the last of the stunted straggling woods, whence we issued out at daybreak among the bare snowy hills of the 'barren lands,'

where the deer could be distinguished a great way off by the contrast of their dim colour with the pure white of the boundless waste. The hunters then dispersed and advanced in such a manner as to intercept the deer in their confused retreat to windward, the direction they almost invariably followed. On one occasion I witnessed an extraordinary instance of affection in these timid creatures. Having brought down a fine doe at some distance, I was running forward to despatch her with my knife when a handsome young buck bounded up and raised his fallen favourite with his antlers. She went a few paces and fell; again he raised her, and continued whirling around her, till a second ball—for hunger is ruthless—laid him dead at her side." Precarious indeed was the subsistence of the party and their Indian allies until the month of December, when the excessive cold drove the deer to the shelter of the woods, where they were more accessible to the hunters.

The buildings of Fort Confidence consisted of a log-house forty feet long and sixteen broad, with a chamber at one end for the leaders, a hall sixteen feet square used as eating-room—the explorers never *dined*—kitchen, and Indian workshop; and a house for the men, thirty feet long and eighteen broad. The whole, together with the store, forming three sides of a quadrangle fronting the south, was habitable before the close of October; but owing to the smallness of the timber of which the structures were built, and the difficulty of procuring enough of the frozen earth to cover the light roofs, there were chinks and crannies through which both snow and wind were freely admitted, and the cold was consequently severe throughout the entire winter. Near the close of December, when the thermometer stood at –49°, Simpson cast a pistol-bullet of quicksilver, which, fired at a distance of ten paces, passed through an inch plank, and flattened and broke against the wall a few paces beyond. But if the explorers sometimes suffered severely from cold, they were at least guaranteed against the greater calamity of want. By the end of the year the hunters had accumulated two or three weeks' provisions in advance, and no scarcity was experienced during the remainder of the season. This is not a little surprising, considering the immense quantities of food consumed at the fort daily by each individual. "The *daily ration* served out to each man," writes Simpson, "was increased from eight to ten, and, to some individuals, to twelve pounds of venison; or, when they could be got, four or five white fish weighing from fifteen to twenty pounds. This quantity of solid food, immoderate as it may appear, does not exceed the average standard of the country, and ought certainly to appease even the moderate appetite of a French Canadian." Yet there was one of these who complained of short commons, and did not scruple to help himself to an additional supply when the opportunity offered. "It would have taken twenty pounds of animal food daily to satisfy him." In these

regions the heat of the body is only to be maintained by a liberal supply of food, and during the winter of 1837-38, at Fort Confidence, the season was exceptionally severe. On the 11th February, at five A.M., the greatest cold registered during the winter was experienced. A spirit thermometer by Dollond stood at 60° below zero, while an older instrument stood at -66°. "This intense cold," writes Simpson, "was accompanied by a fresh westerly breeze, which several of our people had to face that morning, returning with meat from M'Tavish Bay. Spite of their deer-skin robes and capotes, their faces bore palpable marks of the weather; and when they reached the house, not a man was able to unlash his sledge till he had first thoroughly warmed his shivering frame."

During the spring of 1838, Simpson made an excursion north-east from Fort Confidence by Dease River and the Dismal Lakes to the vicinity of the Coppermine, travelling, in all, over a thousand miles. His object was to ascertain the character of the intervening country, in preparation for the great voyage which he was now about to undertake to the Polar Sea, and eastward along its shores to Great Fish River. This little reconnoitring trip of a thousand miles taxed the energies and endurance even of Simpson, who must be regarded as, among all Arctic explorers, the swiftest and most indefatigable *pedestrian.* "I had formerly walked," he says, "in the depth of winter, from York Factory, on Hudson's Bay, to Red River, and again from Red River to Athabasca—a distance little short of two thousand miles—wearing only an ordinary cloth capote, and have accomplished fifty miles in a day. Here, however, myself and my companions soon found that the wanderer within the unsheltered precincts of the Polar circle must be far otherwise provided. Accordingly, on our distant excursions, we usually assumed capotes of dressed moose-skin, impervious to the wind, or of reindeer hide, with the hairy side outwards; and were provided with robes of the latter light and warm material for a covering at night, when, to increase the supply of *animal* heat, our dogs couched close around us. Yet, in a stormy, barren, mountainous country, where, in many parts, a whole day's journey intervenes between one miserable clump of pines and the next, we were often exposed to great suffering, and even danger, from the cold; and several of our dogs were at various times frozen to death."

The time had now come when it was necessary to hurry on the preparations for the great voyage. Summer was now at hand. On the 15th May a solitary goose flew over the house away to the northward, and was followed two days after by swans and ducks of different species. About the same period the rapids, in the lower part of Dease River (near its mouth in Great Bear Lake), broke up, and the sea-boats, which had been thoroughly repaired and strengthened, were dragged over the ice to its mouth, to be in readiness for the moment that the ascent of the stream should become prac-

ticable. The voyage was commenced on the 7th June, when Dease and Simpson, with four men to each of their two boats, commenced the ascent of the Dease River. On the 9th, after passing the south branch of the river which falls in from the mountains in lat. 67° 1′ N., long. 118° 12′ W., the party pushed on over fifteen small rapids, and passed over several sheets of still water. On the 12th they had advanced seventy miles up the Dease River, and had arrived at the commencement of the portage forming the height of land between that river and the Dismal Lakes. On the 17th these lakes were reached, and were found to be still covered with thick ice, while the hills around glistened with snow. "At four o'clock next morning," says Simpson, "having fixed the boats firmly upon stout iron-shod sledges, brought with us for the purpose, and placed in them the oars and luggage, we hoisted the sails to a fair wind, and, placing the crews at the drag-ropes, set out at the rate of two knots an hour over the ice, colours flying. This extraordinary spectacle will long be a subject of tradition among the natives. The snow still adhering to the surface of the lake much impeded our progress, but could not damp the ardour which our strange and successful march excited. With the aid of the breeze we advanced fifteen miles, nearly half the length of this chain of lakes, and encamped in a little bay sheltered by an inland, where we collected willows enough to cook our supper." On the following morning, at three A.M., the intrepid explorers were again on the ice, crossing the deep and partially thawed snow-banks that lined the shores on snow-shoes. On this day the last of the Dismal Lakes was traversed, and on the 20th, having reached the open water of Kendal River, the boats were trimmed, the provisions embarked, and the descent of this stream—an affluent of the Coppermine—commenced. The descent was completed the same day, and the Coppermine, which, however, was found to be still covered with ice, was reached. A lead, or open passage in the icy surface of the great river, was discovered on the 22d, and the boats being pushed into it, were hurried down the stream. On the banks of the river herds of deer, unapprehensive of danger, were peacefully feeding, and the explorers, firing from the boats, brought down a number of them. "It was princely sport," exclaims Simpson, "and a supply of venison for several days rewarded our exertions." This favourable progress was interrupted, however, by quantities of ice, which came driving down the river from the north, and stopped the advance of the boats till the 24th. The sun was now in the heavens during the whole twenty-four hours; but the cold was still severe, and a chilling fog came up the valley of the river from the sea every night.

Tired of delay, and resolved to advance at all hazards, Dease and Simpson pushed out at eight on the morning of the 25th. The swollen and tumultuous stream was still strewed with loose ice, while the inaccessible

banks were piled up with ponderous fragments. "But," writes Simpson, "the day was bright and lovely as we shot down rapid after rapid, in many of which 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 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 a hundred 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 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. The waves there were still higher, and for a while we lost sight of our friends. When they emerged, the first object visible was the bowman disgorging part of an intrusive wave which he had swallowed, and looking half-drowned. Mr Dease afterwards told me that the spray, which completely enveloped them, formed a gorgeous rainbow around the boat."

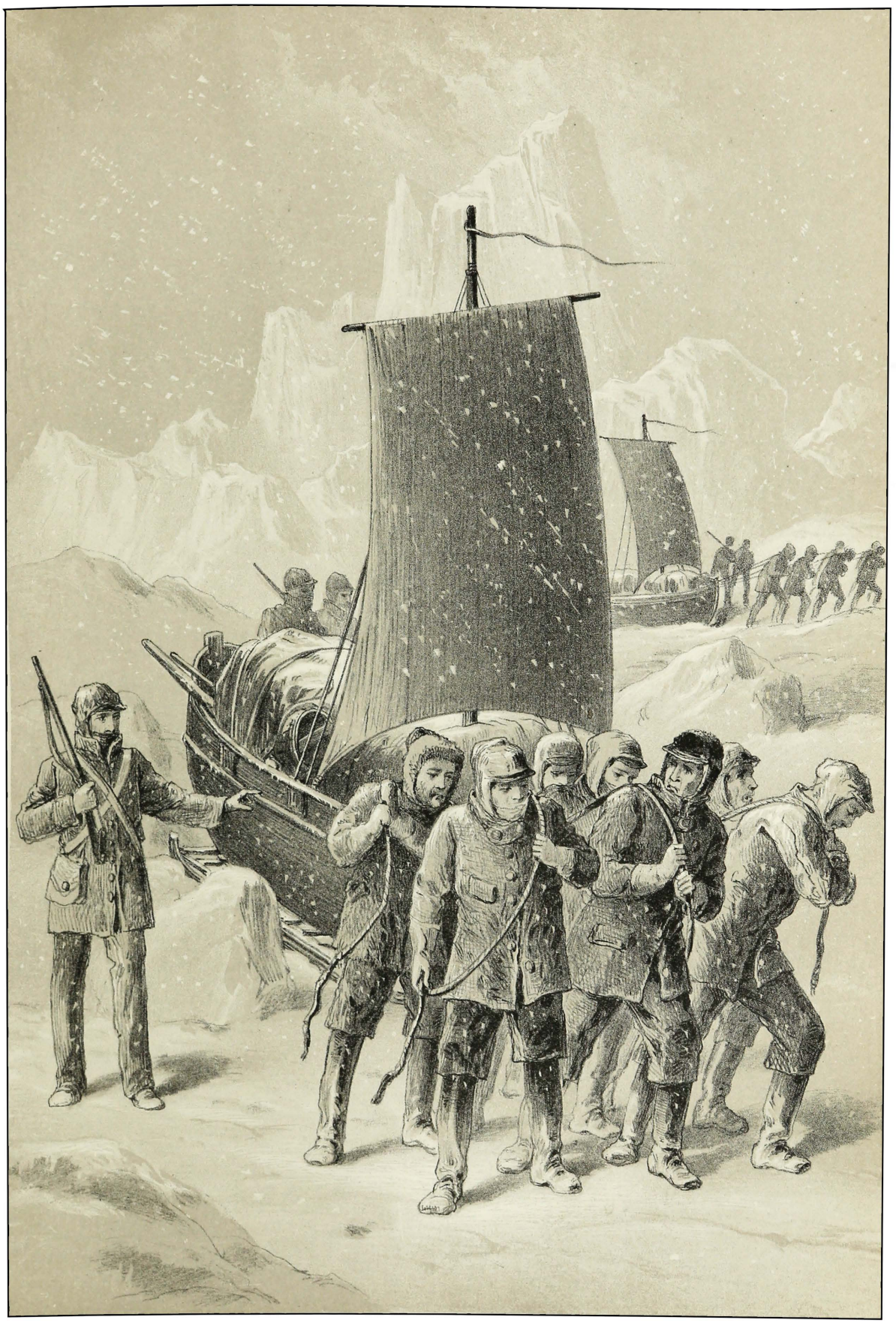
After an enforced halt of five days on account of the ice, which still hampered the lower reaches of the river, the explorers recommenced the voyage on the 1st July, and descending Bloody Fall, reached the shores of the Polar Sea. The sea-ice, however, was found still firmly adhering to the beach, and showing no signs of decay. After a provoking delay of a week, Sinclair was sent along the coast on the 7th to examine the condition of the ice. He found it everywhere *lying solid and unbroken upon the sand!* On the evening of the 16th an opening in the ice, running east, was discovered, and on the following day the explorers, pushing into it, commenced their second voyage along the shores of the Arctic Ocean. Advancing day by day, with great labour, along the ice-hampered shore, the expedition followed the track of Franklin from point to point. On the 29th they doubled Cape Barrow, and finding the ice in Coronation Gulf still perfectly solid, they were obliged to coast along southward in search of a passage across Bathurst Inlet. While detained among Barry Islands, Simpson had the good fortune to discover several pieces of pure copper ore, in which these shores are known to be rich. Crossing the entrance to Melville Sound on the 5th, Simpson was deeply disappointed to find the interior of that inlet still com-

pletely covered with ice. The navigation of the shores of Kent Peninsula, round to the vicinity of Point Turnagain, where Franklin was stopped in 1821, was exceedingly slow, laborious, and unpromising. From the 9th to the 19th August the explorers were arrested in the vicinity of Cape Flinders, the western extremity of Kent Peninsula. While thus situated, the sea-ice, which extended before them, remained solid, its frozen rim resting on the sands of the beach. The short summer was now at an end, and the men had resumed their winter clothing. It was evident that little more could be achieved this season. "The period appointed for the return of former expeditions," writes Simpson, "was now arrived. Franklin's farthest encampment (Point Turnagain) in 1821, was about three miles to the northward of us; but on the 16th of August in that year he found here a perfectly open sea." How different was it now only three days later in the season! Instead of free water a frozen ocean extended around. Simpson, of course, knew that the exceedingly unfavourable character of the present season was due chiefly to the extreme length and severity of the preceding winter.

The extreme point reached by the boats was the encampment named Boathaven, in lat. 68° 16′ 25″ N., long. 109° 20′ 45″ W.; but in order that this voyage might not prove wholly fruitless, and that Simpson might be able at least to say that he had planted his foot on ground never yet visited by European, that officer proposed to conduct a party of seven men on foot, for ten days, along the coast to the eastward. This was the only means by which he could achieve at least a portion of the discoveries which he had hoped to complete this year, but the completion of which was only to be accomplished the following season. No sooner was his proposal to conduct a short land journey made to the men, than all of them volunteered to accompany him. He selected those of them who had not been with him on the journey from Boat Extreme to Point Barrow, and the necessary arrangements having been made, he set out with them on the morning of the 20th August. Each man's load, at starting, weighed about half-a-hundredweight—the stores including a tent, canvas canoe, astronomical instruments, copper kettle, two axes, guns, ammunition, and provisions for ten days. He describes his plan of march as follows: "We set out at seven or eight A.M., after breakfasting (which lessened the loads) and obtaining observations for longitude, and travelled for *ten hours*, exclusive of a halt of half-an-hour at noon to procure the latitude and variation." Their daily advance was twenty-three English miles, and about half way on his first day's journey he passed the extreme point to which Sir John Franklin and his officers walked in 1821. After this point every step was on virgin soil. The coast-line, as he advanced on the 20th, continued low, and the land trended north-north-east to the spot which he selected as his first encampment, and which he named Cape Franklin (long. 108° 58′ W.). On the 21st he dis-

covered and named Hargrave River, and on the 22d he passed a conspicuous hill which he named Mount George, and a headland which he named Point Ballenden. On the 23d (the men already suffering much from swelling and inflammation in the legs) the travelling was exceedingly painful—the beach and slopes being formed of loose stones, and traversed by numerous brooks and streams. The party, however, continued to push on with great spirit and pluck, full of eager expectation respecting the coast they were traversing and the line of high land, away across the ice, which they had first seen a few days previously, and which ran parallel to the coast they were traversing at a distance of about twenty miles north. "Along the distant shore of this strange land," writes Simpson, "the beams of the declining sun were reflected from a broad channel of open water; while on the coast we were tracing, the ice still lay immovable, and extended many miles to seaward. As we drew near, in the evening, an elevated cape, land appeared all round, and our worst fears (that the coast-line of the Polar Sea was not continuous eastward) seemed confirmed. With bitter disappointment I ascended the height, 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 northern visible extremity I called Cape Pelly, in compliment to the Governor of the Hudson's Bay Company; and the promontory where we encamped Cape Alexander, after an only brother." Cape Alexander, a rounded, rocky ridge, two or three hundred feet high, is in lat. 68° 56′ N., long. 106° 40′ W.

The route of the party was now south-south-east round the eastern shore of Kent Peninsula, and at six P.M. on the 24th they discovered a large bay running far away to the south and south-east, and studded with islands. The five days allotted for *outgoing* were now expired, and the leader therefore prepared for the return journey. Two miles south of his encampment (lat. 68° 43′ N., long. 106° 3′ W.) he discovered and named Beaufort River. There had been no occasion to use the portable canoe they had brought with them; they therefore buried it in the sand at the foot of a noticeable rock on the beach, that they might know where to find it the following year, and thus lightened they commenced retracing their steps to Boathaven, where Mr Dease had been left in charge of the boats and the remainder of the party. As they marched along in the piercing wind, they noticed a number of sandpipers and other birds lying dead in several places



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on the beach, having apparently perished through the intensity of the cold. Herds of deer also were seen migrating southward, and "one magnificent buck," says Simpson, "marched before us, like a doomed victim, for two days, and was shot near our last encampment." On the 29th Simpson and his party arrived at Boathaven, and the return voyage of the whole party up the Coppermine to the winter quarters on Great Bear Lake was forthwith commenced. Hearne, Franklin, and Richardson had each pronounced the ascent of the Coppermine impossible by boats. Simpson, however, had come to another conclusion on the point, and was resolved, at least, to try whether he could not so ascend it.

Sailing westward along the Arctic shore with all despatch, Dease and Simpson arrived in the mouth of the Coppermine on the 3d of September. Next day the boats were towed up to the Bloody Fall. Here ten bags of pemmican were secured for the voyage of the following year in a deep cleft of the rocks, and the masts, yards, rudders, and spare oars, were also placed *en cache.* On the morning of the 5th the boats were passed up the fall, the crews of both hauling on ropes formed of the rigging spliced together for the purpose, and the boats being under the skilful guidance of the famous steersmen M'Kay and Sinclair. In the same manner, but with infinite labour and continuous peril, the boats were carried safely up all the rapids, and, on the 9th September, a well-wooded spot on the banks of the Coppermine, about five miles below the junction of Kendal River, was safely reached. As this was the nearest point of the Coppermine to Fort Confidence, and as it was at the same time a convenient place for repairing the boats in the ensuing spring, it was resolved to deposit these here. They were accordingly hauled up into the wood on the bank, beyond the reach of the spring inundation. A store of pemmican and flour, together with a number of miscellaneous articles, were also concealed here, and the party then set out across the thin, dead woods, towards Fort Confidence, where they arrived safe and well on the 14th September. Thus was the broken and savage channel of the Coppermine safely ascended in boats *for the first time,* and the impossible rendered possible for all subsequent travellers.

CHAPTER X.

IN WINTER QUARTERS, 1838-39—DOES THE AURORA EMIT SOUND?—RETURN TO THE POLAR SEA—FRESH DISCOVERIES—EXPEDITION SUCCESSFULLY CONCLUDED—TRAGICAL DEATH OF SIMPSON—MURDER OR SUICIDE?

ON his arrival at Fort Confidence, Simpson had the satisfaction of finding everything in great order. Ritch, the officer who had been left in charge, had been working upon the buildings during the summer, and had succeeded in making them comparatively weather-proof. He had also purchased a considerable quantity of dried venison from the Indians, and had cured several thousand trout and white fish caught at the different stations near the fort. Thus provided, in a measure, against want, the explorers passed the dark days comfortably, nor were the general transactions at the fort, during the winter of 1838-39, varied by extraordinary adventure or incident.

On the question whether, under any circumstances, the aurora emits *sound*, a good deal has been written by different explorers. On this subject Simpson adduces a curious point of evidence, to the effect that the aurora does emit sound, and this evidence is corroborated by the testimony on personal observation given years later by Admiral Pullen. During the winter of 1838-39, which was much less severe than its predecessor, the aurora was visible every clear night, and was brightest and most active in the mornings before daylight. At about four A.M. a most brilliant exhibition of this singular phenomenon was witnessed by Mr Ritch. "It formed a quadrant," writes Simpson, "issuing from west-north-west, and extending to the zenith. There it doubled on itself, and terminated in a semi-elliptical figure, apparently very near the earth, in rapid motion, and tinged with red, purple, and green. The half ellipse seemed to descend and ascend, accompanied by *an audible sound, resembling the rustling of silk.* This lasted for about ten minutes, when the whole phenomenon suddenly rose upwards, and its splendour was gone. Ritch," continues Simpson, "is an intelligent and credible person; and, on questioning him closely, he assured me that he had perfectly distinguished the sound of the aurora from that produced by the congelation of his breath, for the temperature at the time was 44° below zero. I can therefore no longer entertain any doubt of a fact, uniformly asserted by

the natives, and insisted on by Hearne, by my friend Mr Dease, and by many of the oldest residents in the fur countries, though I have not had the good fortune to hear it myself."

The long months of the winter and spring gradually passed, the dulness of Arctic life in winter being unrelieved by any noteworthy incident. Simpson, however, was delighted that the weather was much milder than in the preceding year, and from this circumstance he augured favourably for the result of his next voyage to the Polar Sea. Winter lingered long and stubbornly around Fort Confidence, and even when the Mackenzie River had broken, and vegetation had made considerable progress at Fort Norman, there was no crack in the ice around the solitary fort at the mouth of Dease River. "At length," exclaims Simpson, with a burst of enthusiasm, "June came with a change, sudden, delightful, and complete. The frost almost entirely ceased; the temperature at mid-day attained from 40° to 70° in the shade; the snow disappeared as though by magic from the surface of the ice and of the ground, forming many brooks and rills of water; willows timidly put forth their buds, and the woods grew vocal with the voice of song. . . . With renovated hopes and thankful hearts, we prepared to try our fortune a third time on the Polar Sea."

On the 15th June, Dease and Simpson, with their exploring party, set out from Fort Confidence for the Coppermine River. The journey was conducted with wonderful intrepidity and spirit, and the labours of the portages, the dangers of the rapids, etc., only seemed to give zest to an enterprise, which Simpson at least enjoyed as much as if it had been a sporting excursion. This officer accepted the discomforts of the journey in the gayest humour. "The journey was pleasant enough," he says, "for, except a little snow one day, and plenty of rain the next, we enjoyed fine weather, besides a picnic party regularly every morning and evening. We crossed mountains, swamps, streams, and frozen lakes; shot two or three deer, and ate them; and finding the rapid Kendal River flooded, passed over on a raft, and on the 19th had the happiness to find the three men left in charge of our boats and baggage safe and well. . . . On the 22d we ran down to the Bloody Fall without stopping to make a single portage, making, in fact, light of the rapids, which the falling of the river rendered much less formidable than on the same day of the previous year, though some of them did not fail to initiate our new hands, by pouring a few harmless waves into the boats. The descent occupied nearly eleven hours, the windings of the river greatly increasing the actual distance. Our deposit of provisions in the cleft of the rock was untouched by man or beast, but slightly affected by damp; . . . the rudders, masts, etc., were found safe on the islet below."

After a few days spent in exploring Richardson River, the explorers emerged from the mouth of Coppermine River on the 3d July, and com-

menced the eastward voyage to the unknown coasts beyond the limits of the last year's voyage. Only five miles were made on the first day, only twenty in the first week, and it was the 18th before the party reached Point Barrow. Ascending the rugged heights of this headland, and gazing eastward, Simpson saw with astonishment and delight that the broad expanse of Coronation Gulf was open and navigable. At the same date of the previous year it had been covered with firm ice, and might have been crossed on foot by the whole party. The wonderful difference in the state of the ice was accounted for by the circumstances that, not only had the past winter been considerably less severe than the preceding one, but that the present summer was much warmer than that of 1838. Favoured by strong winds, and protected from the prevailing streams of ice by the bulwark formed by the Wilmot Islands, the broad inlet of Coronation Gulf was safely and rapidly traversed, and on the 20th the party supped at Boathaven, where on the previous voyage they had so long been detained by ice and hard weather. At Boathaven the wind was blowing strong off land, and the "Castor" and "Pollux" ran rapidly up along the west coast of Kent Peninsula to Cape Franklin, where they were anchored soon after midnight of the same day—exactly one month earlier than the date of Simpson's arrival with his pedestrian party at the same spot in 1838. All the conditions of the present voyage seemed to be different from those of the previous year; for now, instead of finding the grand strait between the northern shore of the American continent and Victoria Land covered, as it was in the summer of 1838, with an unbroken sheet of ice, an open channel was discovered, two miles wide, along the shore. "The slopes and plains, too," says Simpson, "wore a greener and more cheerful aspect, and the ground was comparatively dry. Besides mosses and dwarf carices were to be seen flowers of various hues, wild sorrel, and an abundance of the Labrador tea-plant (*Ledum palustre*), of very diminutive growth, but at this time covered with fragrant white blossoms."

On the 26th the explorers had reached Cape Alexander, and on the following day rounding Trap Cape, they entered a lane of water leading along the shore to the extreme point of their advance the previous year. The top of the cairn which they had there erected had fallen; but they did not wait to rebuild it, and only stopped to dig out the portable canoe they had left buried in the sand; "which done," exclaims Simpson, "we once more entered upon ground never trodden by civilised man." Pushing on in a south and south-east direction along the coast, Dease and Simpson discovered and named Melbourne Island and Roxborough Cape. South of the latter extended Labyrinth Bay, a perfect maze of islands, beyond which a range of picturesque, rocky heights, to which the name of Gloucester Hills was given, extended away southward till they were lost in distance. Ellice River, a stream much larger than the Coppermine, and which enters the

Polar Sea in lat. 68° 2′ N., and long. 104° 15′ W., was discovered and named on the 31st July. Green flats marked by small lakes and rocky knolls extended along its banks. Detained for four days by a heavy crush of ice that encumbered a headland in long. 103° 36′ W., the explorers resumed their voyage on the 5th August, after which date the weather continued remarkably fine for several days. The coast, broken by a succession of bays, and studded by numberless islands, edged away south-eastward as far as Ogden Bay, in long. 101° 15′. From this point it was found to curve round to the north-east, and M'Loughlin Bay, in long. 99° 15′ W., was reached on the 8th. On the 10th the party pushed on north-eastward among islands, and on the evening entered a strait running to the southward of east. Here the rapid rush of the tide from the east assured the leaders that they were now entering an open sea leading to Back's Great Fish River, and on the 11th they entered upon the wide expanse of water, the existence of which they had inferred from the swell of the tide. "On the 13th," writes Simpson, "we ran rapidly south-east and east, and, at the end of fifteen or twenty miles, got clear of the countless islands that had all along, from my last year's pedestrian limit, embarrassed us beyond measure, and hailed with real transport the open sea. . . . On doubling a very sharp point, that offered a lee spot for the boats, I landed, and saw before me a sandy desert. *It was Back's 'Ogle Point' that we had at length reached.*" Dease and Simpson had now reached the estuary of Great Fish River, and thus accomplished the main objects of their three years' expedition. They had at last, in this latest discovery, presented the freedom of the Polar shores to the navigators of all succeeding time.

On the 16th the discoverers steered with flags flying to Montreal Island, and landed in a small bay, on which Captain Back had encamped on his return from Point Ogle to the Great Fish River. Directed by M'Kay, who, it will be remembered, was one of Back's party, Simpson's men soon found a *cache* among the rocks, comprising "two bags of pemmican, several pounds of chocolate, two canisters of gunpowder, a box of percussion caps, and an old japanned tin vasculum, including three large fish-hooks." The pemmican and chocolate were both rotten. The minor articles Messrs Dease and Simpson took possession of, "as memorials," says Simpson, "of our having breakfasted on the identical spot where the tent of our gallant though less successful precursor had stood that very day five years before."

What now remained to be done? "All the objects," writes the author and the hero of this story of discovery, "for which the expedition was so generously instituted, were now accomplished; but Mr Dease and myself were not quite satisfied. We had determined the northern limits of America to the *westward* of Great Fish River; it still remained a question whether Boothia Felix might not be united to the continent on the *other* side of the

estuary!" We now know, through the brilliant discoveries of Dr John Rae, that the great peninsula of Boothia is united to the continent; but in 1839 it was thought by many that this peninsula was cut off from the mainland by a strait running from Boothia Gulf eastward into the Arctic Sea. This supposed strait was the one missing link wanted to complete the North-West Passage, by connecting Regent Inlet with the now completely explored shore of the Polar Sea. With the view of ascertaining whether such a strait existed, Simpson resolved to continue his explorations farther east, and calling the men together, he explained his intention. Three of the party volunteered to accompany him. Nothing is more characteristic of Simpson than his rapidity and directness, and on this occasion he displayed his wonted promptitude. Having selected his volunteers, he ordered supper; and this being despatched, he at once set out, at nine P.M., on the 16th September, for the farthest visible land on the north-east. After rowing for six hours, the party neared the high land to which their course had been directed, and at sunrise on the 17th Simpson climbed the cape, and saw that the coast turned sharply and decidedly eastward. Thence, round to the north-west, stretched a sea free of ice and land. Naming the headland from which he had obtained this cheering prospect, Cape Britannia (lat. 68° 3′ N., long. 95° 41′ W.), the leaders again ordered an advance. On the 19th they sailed along in a north-east direction for thirty miles to Cape Selkirk, a headland of lime and sandstone, through which huge granite boulders of every grain and hue protruded. At night several flocks of Canada geese flew over the tents to the southward, a sure sign that winter was rapidly approaching. On the next day, the 20th, the wind was adverse, and after struggling on against the wind among shoals and breakers for three miles, the boats were steered into a small river for shelter. "It was now quite evident to us, even in our most sanguine mood," says Simpson, "that the time was come for commencing our return to the distant Coppermine River, and that any further foolhardy perseverance could only lead to the loss of the whole party, and also of the great objects which we had so successfully achieved. The men were therefore directed to construct another monument in commemoration of our visit; while Mr Dease and I walked to an eminence three miles off, to see the further trending of the coast." They could see along the shore of the continent to the distance of five miles, at which point the coast appeared to bend eastward. Far out in the offing they beheld a number of large islands, and more distant still, in the north-east, appeared a lofty ridge of blue land, which they named Cape Sir John Ross.

The small stream in which the boats had taken refuge was named after them the River Castor and Pollux. Its mouth is in lat. 68° 28′ N., long. 94° 14′ W. From this point the explorers now prepared immediately to return. The strong wind that had forbidden their advance filled their sails,

and carried them rapidly on their return voyage, and on the night of the 20th they were again at Cape Britannia. From this point progress was rapid. At sunset on the 6th September, Dease and Simpson stood out for the nearest point of the as yet unvisited Victoria Land, which they named Cape Colborne. On the 7th and 8th they sailed across two magnificent bays, which they named respectively Cambridge and Wellington Bays. On the 9th the party were nearly opposite, and at a distance of twenty miles from, Cape Franklin. They had now explored the southern shore of Victoria Land to the distance of 156 geographical miles. On the 10th, standing out from this coast, the explorers sailed for Cape Barrow. They reached the mouth of the Wentzel River at ten P.M., and encamped. "Our poor fellows," writes Simpson, "absolutely capered and whooped for joy on finding the beach strewed with driftwood, and enjoyed once more the luxury of a rousing fire, to which we had been strangers since crossing Bathurst Inlet in July." Night and day the explorers pressed on, and at length, "on the 16th," says the leader, "in a bitter frost, the surrounding country covered with snow, we made our entrance into the Coppermine, after by far the longest voyage ever performed in boats on the Polar Sea, the distance we had gone not being less than 1408 geographical, or 1631 statute miles."

The ascent of the Coppermine had been deemed impracticable till Simpson achieved it in the autumn of 1838. Having accomplished this feat successfully once, it was without any apprehension that he prepared to attempt it a second time. On the evening of the 16th September, the expedition had ascended as far as Bloody Fall. Here they left one of their two boats, together with sails, masts, iron fittings, some dressed leather, skins, old nets, oil-cloths, and a quantity of somewhat weather-worn pemmican, as a prize for the first Eskimos that might pass that way. The united efforts of the entire party were then employed in working the other boat as expeditiously as possible up the stream. Escape Rapid, perhaps the most dangerous of all, was safely ascended on the 17th, but not without great labour; for winter had now fairly set in, and the tracking-ground over the ice-sheeted rocks offered very precarious footing indeed. On the evening of the 20th, the party reached the commencement of the portage to Great Bear Lake. Here the remaining boat, the tents, powder, ice-trenches—everything except the books, instruments, and absolute necessaries, were made over in equal shares to the two Indian attendants. From this point the march across the barren grounds was commenced on the 21st, and successfully finished on the evening of the 25th. The two succeeding days were spent by the explorers in settling with the natives at the fort, and in packing up their own goods in preparation for departure. On the 26th, Dease and Simpson with their party took a last leave of Fort Confidence, and set out across Great Bear Lake. "In crossing the wide traverses of the lake," says Simpson, "we took in much water, which, freezing as it

fell, converted the sails, oars, cordage, the boats themselves and everything in them, into shapeless masses of ice. . . . In the body of the lake, betwixt Cape M'Donnell and the Scented Grass Mountain, white partridges lay dead upon the waves, having been drowned in attempting to cross over in the stormy weather." Fort Norman, on Mackenzie River, was reached on the 7th October, and Fort Simpson on the 14th. From that date till the beginning of December, Simpson remained at the fort named, busily engaged writing up and completing the narrative of his expedition, and drawing the charts of his eastern discoveries. On the 2d December he set out from Fort Simpson for his own station, Red River Settlement. The distance is about 1900 statute miles, and the indefatigable traveller performed it in sixty-one days, at the rate of over thirty miles a day, all stoppages included. "Even this excessive toil," writes Simpson's brother and biographer, "was insufficient to exhaust the energies of such tried travellers as were himself and M'Kay and Sinclair, the picked men of the party, who followed him with unshrinking confidence through all dangers and privations. After a day's march of seventy miles, they revelled on the morrow in the delights of *a ball and tea supper*." On the 2d February, Simpson arrived at Red River Colony, after an absence of three years and two months.

At this point ends the history of Simpson's brilliant achievements as an Arctic explorer; but the circumstances of his premature, tragic, and violent death, which occurred a few months after his return from the far north, must detain us yet a little while, especially as it has been suspected by some that the spirit in which his services were regarded by his relative, Sir George Simpson, then Governor of the Hudson's Bay Company, may have been indirectly the cause of the melancholy event which it is now our duty to chronicle. It is only necessary to premise that though Sir George Simpson was a *relative*, he was not regarded as a stanch well-wisher or zealous *friend* by the young explorer.

The season of 1837, in which Thomas Simpson discovered and surveyed the coast-line of North America, from Return Reef to Point Barrow, was one of uncommon severity, and Governor Simpson, writing in that year to the leaders of the expedition, gave them authority to devote *two summers* if necessary, to the exploration of this tract of coast; and afterwards to devote a *third* summer to the coast-line to the east of Point Turnagain. This letter, however, did not reach the explorers till after they had completed the exploration of the western tract of the coast; but the additional authority was eagerly assumed by Simpson for the completion of the exploration of the eastern tract. Writing to Sir George Simpson, the young explorer says: "Fully aware of the imprudence of making statements in public documents which unforeseen circumstances may overthrow, I have not in our reply to their honours' despatch, proposed any specific plan for com-

pleting the surveys which our ensuing voyage may leave unfinished. Indeed, it is impossible at present to say what those unfinished parts may be, or how much ; for though in our letter we state that we only anticipate reaching the Great Fish River—our original limit—yet if we can by any means penetrate farther, you may rely upon it that we will do so. I rejoice that you have resolved at all events upon pushing these discoveries to Hudson's Bay ; and I gladly devote life and limb to their completion. I should greatly prefer finishing the whole before going home to publish any part of our travels. *The present expedition (*that of the summer of 1839) *must undoubtedly terminate with next voyage ; for our men, boats, goods, provisions —all are worn out and exhausted.* . . . Should another expedition then be necessary, *I would readily undertake to conduct it* into the north next year." Simpson then goes on to propose a plan for a final expedition to be undertaken in the summer of 1840, for the purpose of completing the survey of Boothia Felix, passing through Fury and Hecla Strait, and returning south to Hudson's Bay by the east coast of North America. The successful manner in which he conducted the expedition of 1839 led him naturally to expect that Governor Simpson would have favourably considered his proposed plan for a final expedition in 1840. We may readily imagine then what must have been the effect, upon a man of his sensitive, not to say excitable temperament, of the following reply to his proposals, which he received when returning flushed with success from having not only reached the mouth of Great Fish River, but discovered a considerable tract of coast-line farther to the east : " We observe that, whether successful or otherwise in accomplishing the survey to Great Fish River, *you are not prepared to continue the operations of the expedition next year,* which is to be regretted, as we were in hopes that, after that section of the coast had been surveyed, you would have been in a condition to push your discoveries to the Straits of the Fury and Hecla. That, however, we find cannot be done under any circumstances ; you may therefore repair to the depot, and take a winter's leave of absence, if agreeable to you, by way of recruiting after your severe and hazardous labours, during which I have no doubt plans will be matured for completing this very difficult and interesting service, which cannot be allowed to fall to the ground while a shadow of hope remains that there is a possibility of accomplishing it."

Thus was Simpson's eager offer to conduct another expedition to the north not only ignored, but a most galling intimation made that the work of completing the service which he had so brilliantly conducted so far should be deputed to another ! The effect of this missive from the governor seems to have driven Simpson to the brink of madness. He at once replied, dating from Fort Simpson, October 25th, 1839, and stating that so far from wishing to avail himself of the proffered leave of absence, it gave him the

greatest pain to think that a whole year must intervene "before the final expedition can be set on foot that is destined to accomplish this *North-East*, as my excursion to Point Barrow in 1837 achieved the *North-West* Passage. . . . As for what remains to be done," continues Simpson, writing evidently under the influence of intense mental excitement, "I am so far from seeking to convert it to my future advantage, that, with my life, I hereby place at your disposal, towards meeting the expenses of the new expedition, the sum of five hundred pounds, being every shilling I am worth at this moment, besides all the future proceeds of my double commission, till the whole charge of the said expedition shall be redeemed. Fame I will have, but it must be *alone*. My worthy colleague on the late expedition frankly acknowledges his having been a perfect supernumerary. . . . The coast, from the Straits of the Fury and Hecla to York Factory (Hudson's Bay) is still more dangerous for boats than that which we have tried so well this season; but my whole soul is set upon it, and I feel an irresistible presentiment that I am destined to bear the honourable Company's flag fairly through and out of the Polar Sea."

A week before writing the above, Simpson had written to the directors of the Hudson's Bay Company in London, proposing to lead an expedition for the exploration of "the Gulf of Boothia, the only section of the Arctic coast of America now unknown." This proposal was favourably received by the directors, who, writing from London in June 1840, formally accepted Simpson's offer, and appointed him sole commander of an exploring party to continue the survey of the coast from the mouth of Great Fish River to the Strait of Fury and Hecla. That letter, however, which would have filled Simpson's cup of happiness to overflowing, the explorer was destined never to see; for in the meantime the Governor of the Company, ignorant apparently of the resolution to which the directors had come, had ordered the explorer to repair immediately to England. On the 6th June 1840, Simpson started from Red River, with two companions well mounted and armed, to travel through the United States, and take ship for the "old country."

At this point all clear authentic record of Simpson ends. Six weeks afterwards all America was ringing with a terrible narrative of "Murder and Suicide," of which crimes the traveller was stated to have been the perpetrator. The details of the tragedy, around which the deepest mystery still hangs, were derived from the deposition of one of Simpson's companions, whose statement may or may not be trustworthy, and of two persons, who visited the scene of violence, to witness only its closing act.

James Bruce, of the Red River Colony, appends "his mark" to a sworn statement made before Henry H. Sibley, Justice of the Peace, Clayton County, Iowa, on the 13th July 1840, to the following effect: Bruce left Red River to travel eastward early in June, with a party consisting of a

considerable number of individuals, and after travelling nine days, he, together with Simpson, Antoine Legros, senior, his son Antoine Legros, junior, and John Bird, left the main camp with the view of travelling more rapidly than the remainder of the party towards St Peters. A few days after leaving the main body, Simpson, according to the deponent, complained of being unwell, and wished to return. On the morning of the 14th June, he again insisted upon returning to Red River Colony, and offered a considerable sum of money to each of the others composing the party if they would return with him. Simpson, it seems, appeared very restless and uneasy, and is said to have expressed a conviction that he would never recover from his illness. He complained of no special ailment, and when told that he would have the opportunity of consulting a physician at "Lac qui Parle," he is said to have stated that a physician "would do him no good." On the 14th June, he did turn back with his four companions, and, after travelling till an hour and a half after sundown, and arriving at within a mile of Turtle River, he was asked whether he wished to have the tent pitched. He replied that it was "just as the others pleased." Bruce, John Bird, and the elder Legros, then proceeded to raise the tent. While thus engaged, and standing with his back to the leader, Bruce heard the report of a gun, and on turning round saw that Simpson had shot Bird, who groaned and fell dead. Bruce then saw Simpson turn and shoot the elder Legros, who staggered against the camp cart, and in about two minutes fell. Immediately after the report of the second gun, Bruce and the younger Legros started off and ran a short distance from the cart. Simpson now called out to Bruce, asking him if he (Bruce) was aware of any intention to kill him (Simpson). Bruce answered that he had never heard of any such intention on the part of any one. The explorer then told Bruce that he had shot Bird and Legros because they had intended to murder him that night *for his papers*, and that the laws of England would justify him for so doing. The elder Legros, who was still alive, then asked Simpson to allow his son to go away unharmed, to which the leader consented. Simpson then offered Bruce five hundred pounds to go back with him to Red River Colony and "keep the affair secret." He afterwards asked Bruce if he knew the road back to Red River, and on being answered "yes," he gave orders to harness the horses. The elder Legros now called to his son, bidding him kiss him for the last time. Simpson then asked Legros if it was true that he and Bird meant to kill him, to which the dying man answered, "No." All this time the explorer was standing with his gun in his hand. Bruce and young Legros now went to where the horses were placed, and mounting one each they rode away in the direction of the main camp, which they had so recently left. Immediately after arriving at the main camp, the two fugitives gave the alarm, and having been joined by five men, the whole

party returned to the scene of the murders. On approaching they called out to Simpson, but received no answer. Bruce, however, could see him lying in bed on the further side of the cart. "The report of a gun was forthwith heard, and the whistling of a ball in the air. A remark was made by one of deponent's (Bruce's) party, that said Simpson must have shot himself. This deponent, with his party, then made a circle around the cart aforesaid, to ascertain whether Simpson could be seen to move. Nothing was seen, however, but a dog lying beneath the cart. Said deponent, with his party aforesaid, continued to call upon Simpson by name; and receiving no reply, *they fired at the said dog, and drove him away.* Deponent, with his party, *then discharged their guns at the top of the cart,* with the intention of alarming Simpson, if still alive." After some time Bruce, approaching nearer with one companion, went up to the cart and found that Simpson had shot himself through the head. Simpson was quite dead, as also were Bird and the elder Legros. The bodies of the three were interred in the same grave. A trunk, carpet bag, and double-barrelled gun belonging to Simpson, were brought on to "Lac qui Parle," and there left in charge of Dr Williamson of that place. Bruce concludes his statement by testifying that at no time had Simpson manifested symptoms of insanity, and that "he acted through the whole affair like a man in the possession of his senses."

Of the supposed murders of Bird and Legros there were only two eye-witnesses—Bruce, whose narrative is given above, and the younger Legros, who was never examined. Two other depositions, made respectively by Robert Logan at Red River, 14th October 1840, and James Flett, on the 11th October 1840, refer only to what these deponents are supposed to have witnessed—the circumstances of the finding of the body—and are corroborative so far of Bruce's statement. No papers were found among Simpson's property referring to any circumstances that could have led to this murderous episode of prairie life. The remains of the traveller were removed to the churchyard of Red River Colony, and in his grave the secret of his death lies also buried. But there seem to be only two theories respecting this most pitiful catastrophe. The first is that Simpson died defending his life and the records of his discoveries; and the second, and by far the more likely one, is that his mind, a prey to anxiety, ambition, and to despondency superinduced by neglect real or imagined, had at last become unhinged; that he became the victim of hallucination and suspicion, and that, having in an access of insanity killed Legros and Bird, he either died by his own hand on the arrival of Bruce and his party, as already described, or was shot down by them as a madman and a public enemy.

PART VII:

FRANKLIN'S LAST AND FATAL EXPEDITION—1845.
DR JOHN RAE'S FIRST EXPEDITION—1846-47.

CHAPTER I.

PURPOSE OF THE EXPEDITION—EQUIPMENT OF THE SHIPS—COMMANDER FITZJAMES'S JOURNAL — SURGEON GOODSIR — WISE FORBEARANCE — DISCO REACHED—LAST GLIMPSE OF THE SHIPS.

THE fatal expedition of Sir John Franklin, with one hundred and thirty-seven officers and men in the discovery ships "Erebus" and "Terror," is the unique Arctic enterprise, the scanty records of which excite at once the profoundest interest in a great national loss, yet fail to gratify that interest with any but the meagrest details. Within the last thirty years more than forty expeditions have been fitted out from England and America with the view of rescuing the lost, should any such survive, or of bringing home relics or records that might cast some light on their last days. Of these search expeditions, the last was that of Captain Allen Young in the "Pandora" in 1875. From year to year details, few indeed in number, but priceless as illustrating the voyage of the "Erebus" and "Terror," have been gathered by various explorers; and the history of the fate of Franklin and his companions (though it may possibly for ever remain an incomplete record) must be regarded, in the light of the most recent discoveries, as, to this day, unwritten. But Franklin's last expedition, besides being so profoundly interesting, and yet—perhaps necessarily—so imperfectly commemorated in the works of any single writer hitherto, is remarkable for other reasons. It distinctly marks an epoch in scientific naval enterprise in England. It was the last of the great voyages of discovery in the first half of the present century. It closes the great discoveries of the English navigators of that era with the crowning achievement of demonstrating the existence of a North-West Passage. It was the first expedition in which steam was practically employed—for though the "Victory," which Ross

abandoned on the shores of Boothia was a paddle-steamer, the steam-machinery was defective from the beginning, and proved wholly useless among the ice. Finally, this most unfortunate enterprise called forth numerous search expeditions, which, going north on the track of Franklin, formed the school in which the explorers of the last and of the present generation were trained—in which Captain Nares, who now leads the latest and the greatest of all British expeditions along the shores of Smith's Sound toward the North Pole, obtained that experience of Arctic navigation which so well qualifies him for his present undertaking.

After the return of Captain Back from his unavailing and disastrous attempt to reach Repulse Bay in the "Terror" (1836-37), the Admiralty seem to have been discouraged in their desire to prosecute discovery in the Polar seas, and to have regarded the Antarctic regions as a more promising field for exploration. The "Terror" was accordingly repaired, strengthened with a doublet of exterior planking, and, together with the "Erebus," a bomb-vessel of 370 tons measurement, placed under the command of Sir James C. Ross, and commissioned in 1839 for a voyage of discovery toward the South Pole. This voyage was successfully completed in 1843, and again the two good vessels were riding at anchor in the Thames off Woolwich. Meantime considerable impetus had been given to Arctic enterprise by the signal success of Dease and Simpson, who, acting under the commission of the Hudson's Bay Company, had succeeded in discovering and surveying the previously unknown tracts of the shores of the Polar Sea from Behring Strait eastward to the mouth of Back's Great Fish River, and still farther north-eastward to Cape Britannia, opposite the south-east promontory of King William Land. More than this, the Company had projected another expedition, to be undertaken in 1840 by Simpson, for the purpose of tracing the shores of North America eastward (by the supposed strait which was then believed by many to insulate Boothia) round the shores of Boothia Gulf to Fury and Hecla Strait—thus completing the passage between the Pacific and Atlantic. The untimely and melancholy fate of Simpson prevented the Company from carrying out this project. But the idea they had suggested was not lost sight of; and when in 1843 the "Erebus" and "Terror" returned safe and sound after a cruise in South Polar seas, in which many surprising discoveries had been made, the public mind, stimulated by the late successes, and again reverting, as it always had done for centuries, to the unknown North, appears to have soon decided that these well-tried ships would be best employed on another voyage to discover the North-West Passage. This object, however visionary it may have been regarded in earlier times, seemed now to be within the easy compass of naval enterprise. "Ships are but wood, sailors but men," the sceptics might have argued; but the ships could now be fitted with efficient steam

machinery, and thus to some extent armed for the contest with the ice, and the sailors, better trained now than ever, by tradition, by personal experience, and by geographical science, had an important advantage over earlier navigators in the circumstance that they were about to enter on no aimless task, but had a definite, and, in part, a well-known route laid down for them on the chart of the Polar regions. That chart, almost a blank prior to 1819, when Parry, the "first that ever burst into that silent sea," broke the charm of silence and mystery under which these Polar regions had lain so long, by entering Lancaster Sound and sailing westward half-way to Behring Strait, was now marked by the tracks of successive explorers. In the north of the region, ships had sailed from Baffin Bay west to about long. 113°, while in the south different explorers—Cook, Beechey, Simpson, Franklin, Richardson, and Back—had explored the whole North American coast eastward from the Pacific at Behring Strait to the 95th meridian west. The Polar discoveries of the century, it will thus be seen, overlapped each other, in an east and west direction, to the extent of no less than eighteen degrees of longitude. The geographical problem, therefore, of the promoters of renewed Arctic enterprise in 1843 was one simple enough, at least in scope, namely, to demonstrate by discovery the existence of a sea-way connecting the open water between longitude 95° and 113° in the latitude of Barrow Strait and Melville Island on the north, with the open water between the same meridians in the latitude of the shores of the Polar Sea in the south. In other words, the one object of the period was to accomplish the discovery of a complete north-west passage by connecting the discoveries of Parry on the north with those of the overland explorers on the shores of the Polar Sea. "How simple a matter it appeared," exclaims a recent writer, "to connect the water in which Parry sailed to Melville Island in 1819 with Dease and Simpson's easternmost position off the coast of America in 1838." [Dease and Simpson, however, did not reach their "easternmost position" till 1839.] The most eminent scientific men of the day, Sir John Barrow, secretary of the Admiralty, Sir Francis Beaufort, and among explorers, Parry, Sabine, Ross, and Franklin, were eager that Government should fit out an expedition for the accomplishment of this object; and whatever may have been said respecting the hopelessness of the undertaking at that time and subsequently, this at least must be stated as evidence of the sound judgment of the authorities named, that the expedition organised at their suggestion actually and completely achieved the intended purpose—the discovery of a North-West Passage.

Sir John Franklin had been appointed Governor of Tasmania in 1838, and for six years he discharged the duties of his post in such a manner as to win the grateful esteem of the colonists. But Franklin was a born seaman, and his six years of civil employment had only the effect of intensify-

ing his love for the profession in which he had earned his fame. He accordingly returned to England in 1844, in time to find the service full of enthusiasm about the new Polar expedition. No enterprise is so popular in the English naval service as that of exploration amid the icy wastes of the north; and on this, as on former occasions, so general was the eager desire to be in the north-going ships that the "Erebus" and "Terror" might have been wholly manned by lieutenants. A number of the ablest officers in the service had secured appointments,—among them Crozier, Graham Gore, Fairholme, Hodgson, and Des Vœux. Commander James Fitzjames, who had seen two years' service in the China war, and had earned a reputation for distinct naval genius, for indomitable energy and scientific acquirement, was said at one time to have been selected by Government to command the expedition. Arrangements, however, were subject to modification; and when Franklin, on his arrival in England, was heard to say that, as senior Arctic explorer, he considered the command of the expedition a post to which he had the first natural claim, the Admiralty, delighted to obtain the services of an explorer of his experience, were at once prepared to accept him. Lord Haddington, then First Lord of the Admiralty, in the most kindly spirit, suggested that Franklin, who, he believed, was now sixty years of age, might with perfect honour content himself with the fame he had already earned, and spend the remainder of his life at home. "I might find a good excuse for not letting you go, Sir John, in the rumour that tells me you are sixty years of age," said Lord Haddington. "No, no, my lord," exclaimed Franklin; "*I am only fifty-nine!*" In this reply there was the true, living spirit of the fearless navigator; and its enthusiasm swept away the last shred of objection to Franklin's appointment.

On the 5th May the veteran explorer received his official instructions from the Admiralty. He was directed to proceed with all despatch to Lancaster Sound, and, passing through it, to push on to the westward, in the latitude of 74° 30′, without losing any time in *examining any openings to the northward*, as the object of the expedition was to find a sea-way southward to the shores of America. When he should reach the longitude of Cape Walker—about 98° W.—he was to use every effort to penetrate to the southward and eastward of that point, and to pursue as direct a course for Behring Strait as circumstances might permit. He was cautioned not to attempt to pass by the western extremity of Melville Island (where Parry's progress was stopped by a tremendous, and apparently an everlasting, ice-pack), unless his progress southward was closed by a permanent barrier of ice; but in the event of being unable to penetrate either to the southward or westward on account of ice, he was to go *northward* up Wellington Channel in the second summer.

H.M.S. "Erebus" (370 tons), and H.M.S. "Terror" (340 tons), were

OPENING THE CAIRN CONTAINING THE RELICS OF FRANKLIN.

thoroughly examined, repaired, and refitted. A warming and ventilating apparatus of the most improved construction was fitted up in each ship; and for the first time in the annals of Arctic exploration, both were fitted with an auxiliary screw and engine of 20 horse-power. A plentiful supply of fuel was taken on board for the purposes of heating the vessels and working the engines. The vessels were also abundantly supplied with every requisite for Arctic navigation—warm bedding, clothing, medicines, and an ample store of provisions, including pemmican and preserved meats. These last were enclosed in tin cases labelled "Goldner's Patent." "The miscreant Goldner" already lives in history. It is known that a vast quantity of preserved meat supplied by Goldner to the Royal Navy was found putrid, and was condemned by survey at Portsmouth, and thrown into the sea. There is every reason to believe that the "Patent" preserved meats of the same notorious tradesman supplied to the "Erebus" and "Terror" turned out to be of precisely the same quality; and that, trusting to them as a last resource, the explorers had found in their bitter struggle with starvation that the tinned stores they had relied upon were filled only with corruption. But we dare not anticipate.

On the 19th of May 1845 the "Erebus" and "Terror," each with sixty nine officers and men on board, set sail from the Thames. Of the officers of both vessels there shall be much to say in the following pages; and partly for this reason, partly for the higher reason that each of them was a hero, and deserves to live in the affectionate remembrance of his countrymen, the following list of the gentlemen of the vessels is here given:

"EREBUS."

Captain—Sir John Franklin, Kt., K.C.B.
Commander—James Fitzjames.
Lieutenant—Graham Gore.
Lieutenant—H. P. D. Le Vesconte.
Lieutenant—W. Fairholme.
Ice-Master—James Reid.
Surgeon—Stephen S. Stanley.
Paymaster—C. H. Osmer.
Assist. Surgeon—H. D. S. Goodsir.
Sec. Master—Henry F. Collins.

"TERROR."

Captain—Francis R. M. Crozier.
Lieutenant—Edward Little.
Lieutenant—George H. Hodgson.
Lieutenant—John Irving.
Ice-Master—Thomas Blankey.
Surgeon—John S. Peddie.
Assist. Surgeon—A. M'Donald.
Sec. Master—Gillies A. M'Lean.
Clerk in Charge—E. J. H. Helpman.

Numerous were the festivities held in honour of the officers and crew of the discovery ships during the early days of May. "Success to the expedition," greeted with the cheers of men and the tears of women, was drunk at many a splendid board, and responded to by brave men, who vowed in response that if the passage was to be won, they would win it. The whole country thrilled, responsive to the hopes and the noble ambition of the

explorers; and when on the 19th they weighed anchor and passed slowly down the Thames, they carried with them the nation's fervent hopes of a speedy, safe, and successful return. Little did the well-wishers suspect, as they watched the sails grow dim over the flat reaches of the Thames, that the adventurers had gone for ever; that already the dark curtain of fate was lowering above them; that not one man among the gallant company still faintly cheering in the distance—captain, officer, or seaman—would ever return to England again. They had gone in the pride of their youth and strength and hope to die of disease and want for the honour of their officers and of their country; and their fate of itself was such as to plunge the nation in grief. But we are too proud of them to mourn for them. No company of more truly noble hearts ever left the shores of England. Officers and men, comrades from the first in the unity of their hopes and aims, had become brothers before the dread end of all in the kinship of common suffering—in the fellowship of those who together wait for death, yet cheer each other gallantly till the shadow shall come over the snow. No murmur was heard; no mutinous outbreak disturbed the grandeur of the closing scenes. Like the heroes of the "Birkenhead," they went down *on duty*. No greater instance of British discipline illumines the annals of the country. The last officer that fell still bore the insignia of his rank; and it was only to drop on the snow and swoon away into fatal sleep that the last man paused in his duty.

It would have been hard indeed to have parted for ever with Franklin and his heroes on our own shores, but fortunately we are able, by means of the journal of Commander Fitzjames, and the letters of Franklin and Fairholme, to be with them—in spirit, at least—as they cross the Atlantic, to receive their last messages at Disco, and even to descry their last waved farewells, as, a week later, they are preparing to enter the "middle ice," and cross over to Lancaster Sound.

Commander Fitzjames's "Journal," consisting only of a few pages, printed for private circulation, and now very rare, is of inestimable value for its racy descriptions of the officers of the "Erebus," and of the excellent feeling which pervaded all ranks of the expedition. It was written on board ship mainly for the amusement of a lady, Mrs Coningham, wife of Mr Coningham, sometime M.P. for Brighton, and one of the writer's earliest and dearest friends. But it was a too valuable memorial of an excellent officer and true man—a too valuable record of an enterprise in which the whole nation had an absorbing interest, to be retained for the gratification of a single family. Mr Coningham accordingly edited a privately printed edition of it for distribution among the relatives of the writer and the other officers of the expedition. The editor also presented a copy of the "Journal" to Charles Dickens, with permission to make what use of it he pleased. No

man was likely to make a better use of it than the great novelist, who has written so much and so well in the cause of the suffering and the forsaken. Of the "Journal" itself Dickens writes: "Every page of it assures us that Captain Fitzjames added to his high professional qualifications the two rare gifts of a quick and true observation of character and a happy facility in conveying the results of that observation plainly, unaffectedly, and graphically to others. Narrow as its limits are, this interesting journal effects its avowed object of placing us on board ship by the writer's side, of showing us his floating home in its most familiar and most domestic aspect, and of introducing us, in a delightfully considerate and kindly spirit, to the more prominent characters among the officers and men."

The steamships "Rattler" and "Blazer" accompanied the "Erebus" and "Terror" as far as the Island of Rona, about eighty miles beyond Stromness; and in bidding these English ships farewell, the explorers felt as if the last frail link that still bound them to their country was severed. What the more reflective men of the expedition felt in saying this last "good-bye" may be conjectured from the following entry in Fitzjames's journal:

"Their captains" (those of the steamers named) "came on board and took our letters; one from me will have told you of our doings up to that time. There was a heavy swell and wind from north-west, but it began veering to west and south-west, which is fair. The steamers then ranged alongside of us, one on each side, as close as possible without touching, and, with the whole force of lungs of officers and men, gave us, not three, but a prolongation of cheers, to which, of course, we responded. Having done the same to the 'Terror,' away they went, and in an hour or two were out of sight, leaving us with an old gull or two and the rocky Rona to look at; and then was the time to see if any one flinched from the undertaking. Every one's cry was, 'Now we are off at last!' No lingering look was cast behind. We drank Lady Franklin's health at the old gentleman's table; and it being his daughter's birthday, hers too. But the wind, which had become fair as the steamers left (as if to give the latest, best news of us), in the evening became foul from the north-west, and we were going northward instead of westward. The sky was clear, the air bracing and exhilarating. I had a slight attack of aguish headache the evening before, but am now clear-headed; and I went to bed thinking of you and dear William, whose portrait is now looking at me." Thus with exultation at being "off at last," tempered by the affectionate remembrance of friends into high resolve to acquit themselves well, the explorers set their faces towards the merciless north.

Admirable is Fitzjames's picture of his comrades in the officers' mess: "In our mess we have the following, whom I shall probably from time to time give you descriptions of: First lieutenant, Gore; second, Le Vesconte;

third, Fairholme; purser, Osmer; surgeon, Stanley; assistant surgeon, Goodsir; ice-master (so-called), Reid; mates, Sargent, Des Vœux, Crouch; second master, Collins; commander—you know better than he does himself. . . . The most original character of all—rough, intelligent, unpolished, with a broad north-country accent, but not vulgar, good-humoured and honest-hearted—is Reid, a Greenland whaler, native of Aberdeen, who has commanded whaling vessels, and amuses us with his quaint remarks and descriptions of the ice, catching whales, etc. For instance, he just said to me, on my saying we should soon be off Cape Farewell at this rate, and asking if one might not generally expect a gale off it (Cape Farewell being the south point of Greenland), 'Ah! now, Mister Jems, we'll be having the weather fine, sir, fine. No ice at arl about it, sir, *unless it be the bergs;* arl the ice 'll be gone, sir; only the bergs, which I like to see. Let it come on to blow, look out for a big 'un. Get under his lee, and hold on to him fast, sir, fast. If he drifts near the land, why, he grounds before you do.' The idea of all the ice being gone, except the bergs, is racy beyond description. . . . I have just had a game of chess with the purser, Osmer, who is delightful. . . . I was at first inclined to think he was a stupid old man, because he had a chin and took snuff; but he is as merry-hearted as any young man, full of quaint, dry sayings, always good-humoured, always laughing, never a bore, takes his pinch after dinner, plays a rubber, and beats me at chess—and, he is a gentleman."

To the noble character of Sir John Franklin we have already had the generous testimony of Dr Richardson and Captain Back. In the following extracts the fine old seaman is sketched with much discernment by Commander Fitzjames, his first officer: "*6th June.*—To-day Sir John Franklin showed me such part of his instructions as related to the main purpose of our voyage, and the necessity of observing everything, from a flea to a whale, in the unknown regions we are about to visit. He also told me I was especially charged with the magnetic observations. He then told all the officers that he was desired to claim all their remarks, journals, sketches, etc., on our return to England, and read us some part of his instructions to the officers of the 'Trent,' the first vessel he commanded in 1818, with Captain Buchan, on an attempt to reach the North Pole, pointing out how desirable it is to note everything, and give one's individual opinion upon it. He spoke delightfully of the zealous co-operation he expected from all, and his desire to do full justice to the exertions of each. . . . At dinner to-day, Sir John gave us a pleasant account of his expectations of being able to get through the ice on the coast of America, and his disbelief in the idea that there is open sea to the northward. He also said he believed it to be possible to reach the Pole over the ice by wintering at Spitzbergen, and going in the spring, before the ice broke up and drifted to the south, as it

did with Parry on it. . . . 8*th.*—I like a man who is in earnest. Sir John Franklin read the church service to-day, and a sermon, so very beautifully, that I defy any man not to feel the force of what he would convey. The first Sunday he read was a day or two before he sailed, when Lady Franklin, his daughter, and niece, attended. Every one was struck with his extreme earnestness of manner, evidently proceeding from real conviction. . . . We are very fond of Sir John Franklin, who improves very much as we come to know more of him. He is anything but nervous or fidgety; in fact, I should say remarkable for energetic decision in sudden emergencies, but I should think he might be easily persuaded where he has not already formed a strong opinion."

There is a capital sketch of Harry Goodsir, brother of the famous Professor Goodsir of Edinburgh University. Young Goodsir, now assistant surgeon of the "Erebus," had been previously curator of the Edinburgh Museum, was an eminent naturalist, and was joint author, with his brother, of "Anatomical and Pathological Observations," and other papers. Here we have him in his habit as he lived: "I can't make out why Scotchmen just caught always speak in a low, hesitating, monotonous tone of voice, which is not at all times to be understood; this is, I believe, called 'cannyness.' Mr Goodsir is 'canny.' He is long and straight, and walks upright on his toes, with his hands tucked up in each jacket pocket. He is perfectly good-humoured, very well informed on general points, in natural history learned, was curator of the Edinburgh Museum, appears to be about twenty-eight years of age, laughs delightfully, cannot be in a passion, is enthusiastic about all 'ologies, draws the insides of microscopic animals with an imaginary pointed pencil, catches phenomena in a bucket, looks at the thermometer, and every other meter, is a pleasant companion, and an acquisition to the mess. . . . 10*th.*—A fine clear sunset at a quarter to ten, and Goodsir examining 'mollusca' in a microscope. He is in ecstasies about a bag full of blubber-like stuff, which he has just hauled up in a net, and which turns out to be whales' food, and other animals."

And so with a light and pleasant, but skilful touch, Fitzjames fills in the portraits of the men who were to be his companions during a long and arduous, but hopeful struggle for all of them in what is perhaps the gloomiest and most tragic consummation in our history. Crouch, the mate, "is a little black-haired, smooth-faced fellow, good-humoured in his own way; writes, reads, works, draws, all quietly; is never in the way of anybody, and always ready when wanted; but I can find no remarkable point in his character, except, perhaps, that he is, I should think, obstinate. Stanley, the surgeon, I knew in China. He was in the 'Cornwallis' a short time, where he worked very hard in his vocation. Is rather inclined to be good-looking, but fat, with jet-black hair, very white hands, which are always abominably

clean, and the shirt sleeves tucked up, giving one unpleasant ideas that he would not mind cutting one's leg off immediately—'if not sooner.' He is thoroughly good-natured and obliging, and very attentive to our mess. Le Vesconte, you know. He improves, if possible, on closer acquaintance. Fairholme, you know, or have seen; is a smart, agreeable companion, and a well-informed man. Sargent, a nice, pleasant-looking lad, very good natured. Des Vœux I knew in the 'Cornwallis.' He went out in her to join the 'Endymion,' and was then a mere boy. He is now a most unexceptionable, clever, agreeable, light-hearted, obliging young fellow, and a great favourite of Hodgson's, which is much in his favour besides. Graham Gore, the first lieutenant, a man of great stability of character, a very good officer, and the sweetest of tempers, is not so much a man of the world as Fairholme or Des Vœux, is more of Le Vesconte's style, without his shyness. He plays the flute dreadfully well, draws sometimes very well, sometimes very badly, but is altogether a capital fellow. Here ends my catalogue. I don't know whether I have managed to convey an impression of our mess, and you know me sufficiently to be sure that I mention their little faults, failings, and peculiarities in all charity. I wish I could, however, convey to you a just idea of the immense stock of good feeling, good humour, and real kindliness of heart in our small mess. We are very happy."

These delightful chatty sketches, written to amuse a lady in England, who had specially requested Fitzjames to inform her whether his comrades were "good-natured," furnish us with material for forming probable conjectures with respect to the usual employments of the mess of the "Erebus," and to guess at the manner in which these fine fellows would comport themselves when the days of darkness and disease came upon them. But we will not anticipate disaster just yet, and will make room here for the picture which the above extract suggested to the fine imagination of Dickens: "They were very happy!" exclaims the creator of Captain Cuttle. "What a pathos in those four simple words, read by the light of our after-experience. They are very happy. How delightfully the little strokes of character in the 'Journal' open the view to us of the cheerful, simple-hearted social intercourse of the sailor-brotherhood! How vividly between tears and smiles we see the honest faces round the mess table, as day by day draws the good ship nearer and nearer to the cruel north. Purser Osmer, taking his after-dinner pinch, and playing his rubber; long, straight, pleasantly-laughing Goodsir, matching his learning and his science against ice-master Reid and his natural north-country sharpness; plump, white-handed surgeon Stanley, with an attentive eye to the appointments of the mess table; little, quiet, steady, black-haired Crouch, listening to the conversation, while sweet-tempered Des Vœux keeps it going pleasantly, and Graham Gore sits near at hand, ready to while away the time, when the talk flags, with a tune on

his flute. One by one these members of the doomed ship's company appear before us again: fold by fold the snowy veil wreathed over them is melted from view, and the dead and gone come back to us for a little while from the icy keeping of Death."

The greater part of Fitzjames's "Journal" concerns itself naturally with the writer's brother officers; but he was a man of sympathy too wide and genuine not to interest himself in the men as well. "Our men," he writes, "are all fine hearty fellows, mostly north countrymen, with a few men-of-war's men;" and with this last touch we have a complete view of the *personnel* of the ship. From this point onward the entries in the "Journal" refer to matters in general—the progress of the ships, notes on the weather, and the little incidents and anecdotes that served to enliven life on shipboard. A pleasing instance of the considerate, yet firm, discipline which Fitzjames maintained on board the "Erebus" is of interest as supplying some reason for believing that when the days of trial came the proper and natural relations between the officers and men were maintained throughout. It was feared that on reaching Stromness some of the men might wish to draw back from their engagement, and it is not customary for north-going ships to allow any of the men to land there. "But two men," writes Fitzjames, "wanted to see, one his wife, whom he had not seen for four years, and the other his mother, whom he had not seen for seventeen; so I let them go to Kirkwall, fourteen miles off. I also allowed a man of each mess to go on shore for provisions. They all came on board to their leave, but finding we were not going to sea till the following morning, four men (who probably had taken a *leetle* too much whisky)—among them was the little old man who had not seen his wife for four years—took a small boat that lay alongside, and went on shore without leave. Their absence was soon discovered, and Fairholme, assisted by Baillie and somebody or other, brought all on board by three o'clock in the morning. I firmly believe each intended coming on board (if he had been sober enough), especially the poor man with the wife; but, according to the rules of the service, these men should have been severely punished, one method being to stop their pay, and give it to the constables or others who apprehended them. It struck me, however, that the punishment is intended to prevent misconduct in others, and not to revenge *their* individual misconduct. Men know very well when they are in the wrong; and there is clearly no chance of any repetition of the offence until we get to Valparaiso or the Sandwich Islands; so I got up at four o'clock, had everybody on deck, sent Gore and the sergeant of marines below, and searched the whole deck for spirits, which were thrown overboard. This took two good hours; soon after which we up anchor, and made sail out. I said nothing to any of them. They evidently expected a rowing, and the old man with the wife looked very

sheepish, and would not look me in the face; but nothing more was said, and the men have behaved not a bit the worse ever since."

Fair progress is made during the early days of July. On the 11th and 12th the wind is high, the colour of the sea, which advances upon them in a never-ending succession of long and lofty rollers, is a "beautiful, delicate, cold-looking green." Amid pouring rain and thick mantling fogs, on the 14th the "Erebus" and "Terror," together with the store ship, which is to accompany them to Disco, sail on slowly, and in close company. It is a dull day, and the officers while away the time getting out and arranging their books, and find to their satisfaction that among them they can set up quite a considerable library. Every one is helpful and kindly to his neighbour. The cook, who appears to have acquired his skill on land, is at a loss how to make the salt fish a little less salt; and in his bewilderment he slings the fish overboard and tows it through the brine. This peculiar method of putting out the fire by adding fuel to it provokes the ridicule of the "old salt," ice-master Reid. "What are you making faces at there?" shouts the practical Aberdonian. "That's not the way to get the *sarlt oot.* Boil the fish first, then keep it near the fire a while, just below the boil." The recipe, we may be sure, was not forgotten. Later in the evening, Reid and merry purser Osmer have a little quiet symposium, the ice-master recounting his adventures when he was captain of a whaler, and Osmer telling humorous stories of his experiences in the "Blossom" with Beechey in 1825-28, and of wild life on the Canadian lakes, where he afterwards served. The two old salts drink together the never-failing sea toast, "Sweethearts and wives," and ask Fitzjames to join them. "Hav'nt got a sweetheart, and don't want a wife," responds Fitzjames, who concludes the entry in his "Journal" for that evening with an affectionate good-night to the Coninghams in England.

Not yet, for a little while, shall these halcyon days come to an end.

The sea is calm on the 16th, and Fitzjames and a few more take a boat and look in on the fellows in the "Terror" to have a few minutes' talk. The 17th is cloudy, and at night a bright light is seen flickering on the verge of the horizon on the north-east. "It may be the aurora," suggests Gore. "What would you say to the ice-blink?" asks the weather-wise ice-master. Fitzjames thinks it is the reflection of sunset, and says that it has all the effect of a large town, twenty miles off, on fire. The 18th June is "Waterloo Day," and old Sir John after dinner asks his officers to join him in drinking the health of "the Duke." On the same day the "crow's-nest" is rigged. "It is usually," says Fitzjames, "a cask, lined with canvas, at the fore-topmast head, for a man to stand in to look out for channels in the ice;" but on board the "Erebus," it is a more elaborate and scientific structure, which somebody names a "hooped cylinder." Ice-

master Reid, who will spend in it many a cold, weary, and anxious watch, looks aloft at his perch critically, and like a thrifty Scotchman as he is, pronounces it "a very expensive one." On this same day, Fitzjames anticipated promotion in his absence (that event having been talked of in England as likely to take place on the brevet of the 18th June), and at night he indulged in a modest glass of brandy and water in honour of the occasion, and then sat down to his journal to have a chat with the distant Coninghams about the pleasing event. As he writes, Reid comes into the cabin, and looks much perplexed at seeing the commander writing so constantly. "Why, Mister Jems," he says, "you never seem to me to sleep at arl, you're arlways writin'."

The 21st brings the "Erebus," the "Terror," and the accompanying store ship into Davis Strait, and the wonders of the Arctic seas begin to rise around. Bottle-nosed whales plunge and frolic near the vessels, and great tree-trunks—the bark of them rubbed off by the ice—go floating by. A storm springs up on the following day (Sunday), and as the ships are rolling tremendously, it is necessary to assemble the men on the lower deck for the reading of the church service. Sir John was to have given a dinner-party on the Monday; but the ships continue to pitch so freely, that the idea has to be abandoned. On the 24th, warm clothing is given out, for the Arctic cold now pinches keenly, and on the 25th, Greenland, "rugged, and sparkling with snow," heaves in sight far away on the right. All is calm now: the sea shows a delicate blue in the shadows, and is so still, that the mast-heads of the "Terror," which is half a mile off, are reflected alongside the "Erebus." On the 29th, they pass some lofty icebergs, which look like huge masses of pure snow, furrowed into caverns and dark ravines. "The Whalefish Islands are neared on the 1st July. There are no fewer than sixty-five icebergs in sight, and the vessels sail in among a shoal of some hundred walruses, tumbling over one another, diving and splashing with their fins and tails, and looking at the ships with their grim, solemn-looking countenances and small heads, bewhiskered and betusked." The well-known Danish settlement of Disco is reached on the 2d. Here the scenery strikes the strangers as grand but desolate beyond expression. It does not depress merry Osmer the purser, however, for Fitzjames comes upon that cheerful officer at midnight doing a little dance to himself on deck. "What a happy fellow you are, always in good humour," says Fitzjames. "Well, sir," returns the purser, "if I am not happy here, I don't know where else I could be." On the 4th, they drop anchor at Disco, and every man is ashore "running about for a sort of a holiday, getting eider-ducks' eggs, curious mosses, and plants, and shells." It is reported at Disco that the season is milder and earlier than ever was known before, and the officers are all certain they shall get through the Passage this season, and in their last letters home they ask

their friends to write to them at Petropaulovski, a seaport away beyond the rocky gate of Behring Strait, on the coast of Asiatic Russia. Fitzjames's belief is that there is "a good chance of getting through this year, if it is to be done at all;" and in a little access of professional conceit, which we can so well forgive him now, he rather hopes that they may be detained a little in the ice, that he may "have a winter for magnetic observations."

At Disco the last letters are written, and the long farewell to life in England is taken. A letter from Lieutenant Fairholme well describes the occupations of the explorers during the few days they remain at Disco: "We have anchored in a narrow channel between two of the islands, protected on all sides by land, and in as convenient a place for our purpose as could possibly be found. Here we are with the transport lashed alongside, transferring most actively all her stores to the two ships. I hope that this operation will be completed by to-morrow night, in which case Wednesday will be devoted to swinging the ships for local attraction, and I suppose Thursday will see us under way with our heads to the northward. We have had the observatory up here, on a small rock on which Parry formerly observed. . . . Of our prospects we know little more than when we left England, but look forward with anxiety to our reaching 72°. . . . 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* 10*th*.—The transport is just reported clear, so I hope 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 crowded with casks, etc. 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." On the 12th Sir John Franklin writes his last official letter to the Admiralty, reporting progress down to that date, stating that "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;" and concluding handsomely with the words—"It is unnecessary to assure their lordships of the energy and zeal of Captain Crozier, Commander Fitzjames, and the officers and men with whom I have the happiness of being employed on this service."

And now all is ready for the departure, and Commander Fitzjames snatches a moment to finish his journal with a few hurried words to Mrs Coningham. "Your journal is at an end," he writes, "at least for the present. I do hope it has amused you, but I fear not; for what can there be in an old tub like this, with a parcel of sea-bears, to amuse a 'lady fair!' This, however, is a *façon de parler*, for, I think, in reality, that you will have been amused in some parts, and interested in others; but I shall not read back, for fear of not liking it and tearing it up." On the 11th he writes a letter of final farewell to his friends, in which the closing words are, "God bless you and all belonging to you;" and this benison from the vanishing ship is the last articulate message that reaches us from the "Erebus." On the night of the 12th, the heavily-laden ships sail slowly away north-west through Waigat Strait, between Disco and the mainland, and the store ship returns home. Once again, on the 26th of July, the ships are seen by the "Prince of Wales," whaler, moored to an iceberg, in lat. 74° 48′ N., long. 66° 13′ W. (near the south entrance to Melville Bay), waiting for an opportunity of entering or rounding the "middle ice," and making for Lancaster Sound. A boat with Commander Fitzjames and six more officers leaves the "Erebus" and boards the "Prince of Wales." All are in high hopes and excellent spirits. They invite the whaling master, Captain Dannett, to come and dine with Sir John Franklin on the following day; but the friendly meeting never took place. A favourable breeze sprang up, and Captain Dannett parted company and sailed away southward and homeward. And as he gave orders to bear up for England, he looked at the "Erebus" and "Terror" as they faded in the distance, and saw the last of these good ships, before they disappeared for ever.

CHAPTER II.

DR JOHN RAE'S EXPLORATIONS, 1846-47—ARRIVAL AT REPULSE BAY—NEW GROUND ENTERED UPON—THE ISTHMUS CROSSED—WINTER QUARTERS—SUCCESSFUL TERMINATION OF THE EXPEDITION.

AMONG the last letters written on board the "Erebus" at Disco, was one from Sir John Franklin to his old comrade Lieutenant-Colonel Sabine, stating that the expedition, which was expected to return, at latest, after having been two winters among the ice, might be detained a year beyond that time, and begging that friends in England might be prepared for that contingency. The letter, dated 9th July 1845, informs Sabine that the "Erebus" and "Terror" had provisions, fuel, clothing, and stores on board for three years complete from that date, and concludes: "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 experience when that time arrives, for you know well that without success in our object, even after the *second winter*, we should wish to try some other channel if the state of our provisions and the health of the crews justify it." The completeness of the appointments of the exploring ships, and the well-known determination of their commander, to hold out to the last rather than return without accomplishing his object, for some time held the anxiety of the public, with respect to the fate of the expedition, in check; and it was not till after the explorers had been away three winters that the first of the long list of searching expeditions set out from England. Meantime, however, the work of Arctic exploration was again taken up with vigour, enthusiasm, and brilliant success, by the Hudson's Bay Company.

It will be remembered that the directors of the Company had projected an expedition for the purpose of tracing the north coast of America from the river Castor and Pollux—discovered by Dease and Simpson in 1839—to the strait of Fury and Hecla. The sole command of this enterprise, which was to have been undertaken in 1840, was conferred upon Thomas Simpson by official letter written in London in June 1840; but before that letter

reached America, Simpson had been laid in the same prairie grave with his victims or enemies, Legros and Bird. For some years after the startling and melancholy death of Simpson, the project of completing the survey of the north coast of America was held in abeyance, but in the spring of 1845, when England was fitting out the "Erebus" and "Terror" for another great effort to discover a North-West Passage, the directors of the Hudson's Bay Company determined to resume the survey of the north shores of British America; and Sir George Simpson, Governor-in-Chief of the Company's territories, offered the command of an expedition, to be organised with this object, to Dr John Rae, then one of the traders in the Company's service. Dr Rae gladly accepted the appointment, and the importance of his numerous discoveries, both in this and in a subsequent expedition when he brought home the first authentic intelligence of the fate of Franklin and his companions, is the best evidence of his qualifications for the post.

The new expedition, consisting of thirteen persons, including two Eskimo interpreters, was to set out from Churchill, one of the Company's stations about 200 miles north-north-west of York Factory on Hudson's Bay, and was to proceed north in two boats along the west shore of the great bay, and up Rowe's Welcome to Repulse Bay. Thence they were to cross over the isthmus connecting Melville Peninsula with the mainland (which, according to the Eskimo story told to Parry, was no more than a three days' march), and, meeting the sea at the other side of the isthmus, were to track the coast round to the east until they should connect their discoveries with those of Dease and Simpson or of the Rosses. If Boothia should prove an island, Rae, it was expected, would be able to follow round the coast eastward to Castor and Pollux River of Dease and Simpson; if it should prove a part of the mainland, on the other hand, it was hoped he would be able to track the coast round to some point which had been visited by the Rosses in the "Victory" in 1829-33, and thus complete the survey of the west shores of Prince Regent Inlet.

In October 1845 Rae had reached York Factory from the interior of the Hudson Bay territories. He had experienced some difficulty in getting volunteers, as a belief had got abroad that he and all his party, if they escaped starvation from the scarcity of food in the region to which they were bound, were certain to be frozen to death from scarcity of fuel. This might be considered another instance of the alternative, "out of the frying-pan into the fire," if the ideas of "frying-pans" and "fires" were not so foreign to the subject and the situation. After the commencement of October progress along the coast within the Arctic circle is hardly to be hoped for, "nevertheless the boats that had been built for the expedition were launched and put in order for sea. They were fine-looking, strong, clinker-built craft, 22 feet long by 7 feet 6 inches broad, each capable of

carrying between fifty and sixty *pieces* of goods of 90 lbs. per piece. They were each rigged with two lug-sails, to which a jib was afterwards added, under which, with a strong breeze of wind, they were found to work admirably. They were named the 'North Pole' and the 'Magnet.'" Rae occupied himself during the winter months in taking observations and completing the equipment of his party. He added to his stores a number of articles that had never been used on any former expedition, and as Dr Rae is essentially an explorer of our own day—few improvements in Arctic travelling having been introduced since last he visited the shores of North America—it may be well to quote his short statement of the additions to his equipment, upon which he depended for some degree of comfort during the winter he was to spend at Repulse Bay. "Among other articles which I thought might be useful," he says, "were a small sheet-iron stove for each boat, a set of sheet-iron lamps for burning oil after the Eskimo fashion, some small kettles (commonly called conjurers), having a small basin and perforated tin stand for burning alcohol, a seine net, and four small windows, each of two double panes of glass. An oiled canvas canoe was made, and we also had one of Halkett's air-boats, large enough to carry three persons. This last useful and light little vessel ought to form part of the equipment of every expedition."

On the 13th June 1846, the "North Pole," carrying Dr Rae and five men, and the "Magnet," with five men, set sail from York Factory along the coast northward to Churchill. After a rough day, the explorers cast anchor close to the shore at ten o'clock P.M. The night was beautiful, and as all the men had gone to sleep, there was nothing to interrupt the silence around but the blowing of a white whale, the musical note of the long-tailed duck, or the harsh scream of the great northern diver. Yet though the night was beautiful and still, Dr Rae found it impossible to sleep. On the first night of such an undertaking as that of which he was the leader, the mind is busy at once with the past and with the future, and the mixed emotions, natural under the circumstances, banish sleep. Yet Rae could not attribute his wakefulness to any inferiority of sleeping accommodation. He was lying on a number of bags of flour, small but hard packed, over which he had thrown a blanket. Each of the bags was like a round boulder, and it was only at three or four points that his body was supported by them—at other points it being necessary for him to accommodate himself to the inequalities of the surface in the best way he could. "To a man," writes Rae, "who had slept soundly in all sorts of places—on the top of a round log, in the middle of a swamp, as well as on the wet shingle beach—such a bed was no hardship; but thoughts now pressed upon me which, during the bustle and occupation of preparation, had no time to intrude. I could not conceal from myself that many of my brother officers, men of great experi-

ence in the Indian country, were of opinion that we ran much risk of starving; little was known of the resources of that part of the country to which we were bound; and all agreed that there was little chance of procuring fuel, unless some oil could be obtained from the natives. Yet the novelty of our route, and of our intended mode of operations, had a strong charm for me, and gave me an excitement which I could not otherwise have felt." Next day the boats were stopped at mid-day by ice, and now Rae found the advantage of having nailed sheet copper along the bows of the boats, by which they were protected against the sharp edges of the floating masses. Progress was very slow for many days, but the various kinds of ducks afforded sport and food, and on the 22d a deer was killed. On the 26th, Cape Churchill was doubled. From Nelson River to this cape, the ground is low and flat, with not a single rock *in situ;* but from the cape to Fort Churchill, the land gradually became high and rocky. On the 27th, the boats arrived at the fort, and Rae was most kindly welcomed by Mr Sinclair, the chief trader in charge.

Here Rae remained over the 4th July, on which day he received his letter of instructions from Sir George Simpson; and on the following morning, having taken Ooligbuck and one of his sons on board to act as interpreters, he set sail westward across Button's Bay. Favoured by tolerably fair winds, Rae steered past Chesterfield Inlet on the evening of the 13th July; and on the night of the 14th, he sighted Cape Kendall on Southampton Island. "On the 21st and 22d," says Rae, "we had a continued struggle amongst heavy and close-packed ice, until we reached Wager River estuary, where we were detained all day by the immense quantities driving in with the flood, and out again with the ebb tide, which ran at the rate of seven or eight miles an hour, forcing up the floes into large mounds, and grinding them against the rocks with a noise resembling thunder. . . . To get to a small bay a mile and a half to the west of us, we had more than once to pull for our lives, as the eddy currents already spoken of caused such sudden and uncertain movements among the ice that there was no telling on what side we were to expect it. With much difficulty we entered our harbour, and pulled half a mile up, so as to be safe from the ice, which we had reason to expect would come in with the flood. The latitude of our new anchorage was 65° 16′ 8″ N.," the most northerly point of land on the south side of Wager River. Pulling out of Wager River on the 24th, Rae stood on his course to the north, and favoured by a fine breeze, he rounded Cape Hope at seven in the evening, and ran into Repulse Bay, on the shores of which he was to commence original exploration.

On the following afternoon, the boats were run into Gibson Cove, on the shores of which, to their great joy, the explorers beheld four Eskimos. Rae immediately landed, and taking Ooligbuck's son with him as interpreter, walked up to the natives, calling out, "Teyma" (peace), and shook hands

with them. At first the natives were much afraid, but after a few words with the interpreter, they became quite at ease, and chatted and laughed with great good-nature. Rae obtained from them a few items of valuable information, and one of them drew a chart, from which he learned that the isthmus, from Repulse Bay to the sea on the west side of Melville Peninsula, was not much more than forty miles across, and that water communication by means of a chain of deep lakes existed along thirty-five miles of the route, so that he would only have to haul his boat over about five miles. None of the Eskimos had seen or heard anything of Sir John Franklin.

The party to which these natives belonged consisted of twenty-six individuals, and on the morning of the 26th, Rae was favoured with a visit of a number of the ladies of the tribe—three old, three young, and all married. They appear to have been quite persons of quality, as things go among the Eskimos. "They were all tattooed on the face, the form on each being nearly the same,—viz., a number of curved lines drawn from between the eyebrows up over the forehead, two lines across the cheek from near the nose towards the ear, and a number of diverging curved lines from the lower lip towards the chin and lower jaw. Their hands and arms were much tattooed from the tip of the finger to the shoulder. Their hair was collected in two large bunches, one on each side of the head, and a piece of stick about ten inches long and half an inch thick being placed among it, a strip of different-coloured deer-skin is wound round it in a spiral form, producing far from an unpleasing effect. They all had ivory combs of their own manufacture, and deer-skin clothes with the hair outwards; the only difference between their dresses and those of the men being that the coats of the former had much larger hoods (which are used for carrying children), in having a flap before as well as behind, and also in the greater capacity of their boots, which come high above the knee, and are kept up by being fastened to the girdle." One of these women had been on board the "Fury" and "Hecla," both at Winter Island and Igloolik, twenty-three years previously, and still wore round her wrists some beads which she had obtained from Captain Parry.

Dr Rae had noticed and explored a small stream which fell into Repulse Bay about a hundred yards from where he had landed in Gibson Cove. Pursuing the course of this stream, he found that it had its source in one of the deep lakes which lay on his route from the head of the bay to the sea on the other side of the isthmus. He resolved to have the boat which he meant to take with him dragged up this stream, and on the morning of the 26th, after having been interviewed by the Eskimo ladies, he had all the cargo of the boats placed in a place of security on shore, ordered the "Magnet" to be safely moored in the land-locked harbour of Gibson Cove, and then sent away his men, assisted by four Eskimos, to drag the other boat, the "North Pole,"

up the stream above mentioned. Late at night the men returned after an absence of fourteen hours. With great labour they had succeeded in dragging the boat three miles up the stream through a succession of rapids, in which the channel was so obstructed with boulders that most of the party were almost constantly up to the waist in ice-cold water extricating the boat from among the rocks. The worst part of the stream, however, had now been passed, and the boat had been left at a point only a mile and a half from the lake from which it issued. Early next morning the men were sent away, each carrying a load, to where the boat lay, and the leader himself, having left two men to guard the property on the shore, followed after mid-day.

Rae was now engaged in the exploration of hitherto unknown land. His route was north-north-west, alternately poling or tracking along successive lakes, or carrying the provisions and dragging the boats over intervening portages. On the 29th, he came upon the largest lake he had yet seen, and named it Christie Lake. On the same day he had the equally great gratification of shooting a fine buck with an inch and a half of fat on his haunches; and in the evening, after a fatiguing walk over hill and dale, he obtained the first glimpse of the sea of which he was in search, and which he found covered everywhere with solid ice. The advance during the next two days was slow and laborious; but on the afternoon of the 1st August, after traversing a lake, the shores of which were covered with rich pasturage and a great variety of flowers, the "North Pole" was dragged over many shallows to high-water mark of the unknown Arctic Sea, in lat. 67° 13′ N., long. 87° 30′ W.; and Rae beheld before him a wide expanse of icy ocean that had never before been seen by any civilised man. The native name of this immense bay on the west side of Melville Peninsula is Akkoolee. It is now known as Committee Bay, the southernmost arm of Prince Regent Inlet.

Early next morning as Rae was trying to force a passage along the ice-encumbered shore, he passed a small point on which were two Eskimo tents. He landed with an interpreter, and called once or twice outside the door of one of the tents, when an old woman, apparently just out of bed, made her appearance, drawing on her great boots. She showed no symptoms of alarm though Rae was the first European she had ever seen. Her husband soon appeared, and their report of the state of the ice in Committee Bay was anything but encouraging. "From a chart drawn by the woman, who, as is usual (at least among the Eskimos), was much the more intelligent of the two," writes gallant Dr Rae, "I was led to infer that there was no opening leading into the large bay but through the Strait of the Fury and Hecla, and Prince Regent Inlet."

Rae spent a number of days at the head of Committee Bay, in the vain

hope of having an opportunity of sailing round and surveying its shores. But ice, fog, and storm were arrayed against the explorer, and for the time he was baffled. He succeeded, however, in visiting and naming a few points, inlets, etc., along the southernmost shores of the bay, which may here be enumerated. On the 2d August, having pushed on eight miles along the west shore, he reached and named Point Hargrave, a rugged promontory of granite and gneiss, without a blade of grass or a cushion of moss to relieve its bald and grim appearance. Next morning he was completely stopped by ice, and obliged to put ashore, where he found a large wooden sledge, constructed evidently of the planks of some vessel (probably of the "Fury" or "Victory"), as there were augur holes in it. He cut it up for fuel, and he and his men tasted once more the delights of a hot meal, to which, for some time, they had been strangers. A few miles farther on he reached and named Cape Lady Pelly. In travelling along this coast Rae and his companions were much fatigued, as they often sank knee-deep "in a very adhesive mud." It was evident that no material progress was to be made in this direction, and Rae soon resolved to retrace his steps, cross over to the shores of Melville Peninsula, and try to push on along the east shore of Committee Bay. With great difficulty he reached this shore and discovered a headland to which he gave the name Cape Thomas Simpson, in honour of his predecessor in Arctic travel. On the 7th a heavy gale sprang up and drove the boat among the ice off shore. In this situation the party were exposed to constant danger "from the falling, or breaking off of overhanging masses (some of them 20 feet in height), which were crashing all around us, and under which we had to pass." At night the explorers secured the boat, raised an oil-cloth to keep off the rain that fell in torrents, and having had the usual cheerful supper of pemmican and cold water, lay down to sleep. On the 8th, Rae was reluctantly forced to the conclusion that the whole of the bay was full of ice, and that exploration during the present season was impracticable. If the bay had not been completely packed the gale of the previous day would have cleared it. There was now only one course left—to return to the place from which the party had started. "It was with a sad heart," writes Rae, "that I turned the head of the boat towards our starting-point, where I purposed to await some favourable change in the state of the ice, and at the same time learn how the people left at Repulse Bay were getting on with preparations for wintering." The starting-point was reached on the same day, and on the 9th, Rae, with three of his men, set out to walk back across the isthmus to Repulse Bay, where they arrived hungry, weary, and foot-sore—for their shoes and socks were entirely worn out long before they reached their destination—on the after noon of the 10th August.

At Repulse Bay, Rae found the men he had left in charge of the

remaining boat and the stores, in good health. A feast of venison and fish was soon prepared for the weary and hungry travellers, and as the venison was cooked first, the men began their meal with steaks and finished it with salmon as second course. Rae then sat down to "think out" his course for the future. "This was to me," he writes, "the most anxious period during the expedition; nor will this appear strange when I mention that it was necessary to decide, and that promptly, on one of two modes of proceeding, namely, whether to leave the whole survey to be completed during the following spring and summer, or to endeavour to follow it up this autumn. After mature consideration, I determined on adopting the first of these measures and giving up all hopes of prosecuting the survey at present." This determination was arrived at in full knowledge of the fact, that if he remained at Repulse Bay, he and his men ran the risk of starving, as they could obtain no promise of supplies from the natives, and all the provisions they had brought with them would not go far towards supporting them during the winter.

Having resolved upon his course, Rae proceeded at once to action. Two things were to be done immediately—a site to be selected for building a house for the winter, and a plan to be matured for obtaining a supply of food. A narrow valley on the north shore of Gibson's Cove was promptly selected as the site for the winter quarters, and preparations for building were at once commenced. This done, Rae, with his rifle on his shoulder, set out every day, ranging over the neighbourhood in search of suitable fishing stations on the inlets of the bay, and keeping an exceedingly wide-awake look-out for game. Brought up among the wild highlands of Scotland, the Doctor was a sportsman by instinct; and it is well that he thoroughly enjoyed the deer-stalking and duck-shooting excursions upon which his party were to be mainly dependent for food during the long Arctic night, when neither fish, fowl, nor four-footed animals are to be got. On the evening of the 12th August, the highest festival in the sportsman's calendar, Rae, when on his way to set a net in a lake near the shore, fell in with a covey of ptarmigan, and in an hour or two bagged eighteen brace of birds. "Knocking down these birds on *this day*," he says, "made me half fancy myself among the grouse in my own barren, native hills." On the 14th and 15th ninety salmon were obtained at the fishing stations.

On the 16th the men who had been sent back to the shores of Committee Bay to bring across the boat, and who had dragged it over nearly the whole way to Repulse Bay, and had then secured it till it should be wanted in the coming spring, returned into camp, and after a rest were set to work in preparation for the winter—building the house, setting nets, hunting deer, and gathering fuel. "On the 2d September," writes Rae, "our house was finished. Its internal dimensions were 20 feet long by 14 feet broad, height in front

7½ feet, sloping to 5½ at the back. We formed a very good roof by using the oars and masts of our boats as rafters, and covering them with oil-cloth and moose skin, the latter being fixed to the lower or inside of the rafters, whilst the former was placed on the outside to run off the rain. The door was made of parchment deer-skins stretched over a frame of wood. The walls were fully two feet thick, with three small openings, in which a like number of windows, each having two panes of glass, were placed. Our establishment was dignified with the name Fort Hope, and was situated in lat. 66° 32′ 16″ N., long. 86° 55′ 51″ W. . . . A sort of room was formed at one end by putting up a partition of oil-cloth. In this, besides its serving as my quarters, all our pemmican and some of the other stores were stowed away."

After the middle of September Dr Rae and his party began to settle down into regular habits for the winter. The routine of work varied little from day to day. The men got up in the morning before daylight, rolled up their bedding, made breakfast, and, having got their orders for the day, promptly set about their various employments, which were generally carried on out of doors. The breakfast meal usually consisted of boiled venison, and the water in which the meat had been boiled, with the addition of some deer's blood and a handful or two of flour, made a very excellent soup. The only other meal of the day—dinner, tea, and supper in one—consisted of the same fare as breakfast, and was taken at four or five o'clock. In the evening Rae would employ himself writing up his journal or making calculations, while his men practised reading, writing, and arithmetic under his supervision. Divine service was read on Sundays. The weather during September was stormy and unfavourable for observations of all kinds, and Rae was often obliged to exchange the sextant for the rifle, "a not unwelcome exchange to one addicted to field sports 'from his youth upwards.'" Deer were numerous at this season on the uplands around Fort Hope, and the Doctor's skill as a sportsman had its reward. The sporting-book for the month showed that 63 deer, 5 hares, 1 seal, 172 partridges, and 116 salmon and trout had been brought in for present necessities and as part provision for the winter.

On the 16th October the mercury in the thermometers sank for the first time to zero. But the increase of cold was not without its advantages. Hitherto the wet clay used in the building of the house had produced a most unpleasant feeling of dampness, and had injured many of the stores. Now, however, the clay was hard frozen, and the interior was consequently dry and comfortable. But such articles as had been damp previously now froze solid. Rae was surprised, on attempting to open some books that had been lying on a shelf, to find the leaves a solid mass. On the 23d, a party of natives arrived at Fort Hope, bringing with them five dozen reindeer tongues, a seal-skin full of oil, and some dogs, all of which Dr Rae gladly

purchased. In the earlier part of October numbers of deer frequented the neighbourhood, but at its close they had migrated southward, or gone away to wooded districts for shelter. The sporting-book showed that sixty-nine deer had been taken during the month, but only eighteen salmon and four trout.

During November few incidents of greater interest than the following hunting adventure took place: "On the 4th November," writes Dr Rae, "when out looking for deer, a little before daylight in the morning, I observed a band of animals coming over a rising ground at a quick pace, directly towards me. I at first supposed them to be deer, but on a nearer approach they proved to be wolves, seventeen in number. They continued to advance at full speed until within forty yards, when they formed a sort of half circle to leeward. Hoping to send a ball through one of them, I knelt down and took what I thought a sure aim at a large fellow that was nearest; unfortunately it was not yet broad daylight, and the rascals all kept end on to me, so that the ball merely cut off a line of hair and a piece of skin from his side. They apparently did not expect to meet with such a reception, for after looking at me a second or two they trotted off, no doubt as much disappointed at not making a breakfast of me as I was at missing my aim. Had they come to close quarters (which they sometimes do when hard pressed for food), I had a large and strong knife which would have proved a very efficient weapon."

Severe cold was felt during this month, and Dr Rae, finding that his stock of fuel was now very low, gave orders that fires were only to be lit for cooking purposes; but never for the purpose of drying clothes. The plan he adopted for drying his own wet and freezing garments was to take them under the blankets with him at night, and dry them by the heat of his body. The evaporation rising from the wet clothes froze on the blankets, which he always found sparkling with hoar-frost when he went to bed at night. But the rigorous climate of Repulse Bay exposed the expedition to frequent peril, as well as to constant inconvenience and hardship. On the morning of the 9th November a party of four men had been sent to North Pole Lake, eight miles from Fort Hope, to examine and re-set the fishing-nets. A blinding snow-storm came on in the afternoon, and the greatest anxiety was felt for the absent men. Guns were fired frequently to attract their attention, and at last, at eight P.M., the bewildered absentees came in staggering with fatigue, and looking like so many "walking pillars of snow." They had taken eight hours to accomplish the homeward journey of eight miles.

During the month of December there was no game to be seen, and Rae exercised his men chiefly in building snow-houses after the Eskimo fashion, and found that one or two of them soon became very good snow-masons.

The skill thus acquired proved of the greatest value a few months afterwards, when the party were out exploring the shores of Boothia and Melville Peninsula. As the month wore on, out-door amusements were all but abandoned owing to the severity of the weather; and wrestling and occasional games at football were the only means of obtaining exercise, keeping up the animal heat, and thus preventing the approach of the dreaded enemy, scurvy. "Christmas Day was passed very agreeably, but the weather was so stormy and cold that only a very short game at football could be played. Short as it was, however, it was sufficiently amusing, for our faces were every moment getting frost-bitten either in one place or another, so as to require the continual application of the hand; and the rubbing, running about, and kicking the ball all at the same time, produced a very ludicrous effect." The Christmas dinner of the explorers consisted of venison and a plum pudding, with a modest bumper of brandy-punch wherewith to drink a health to absent friends. This was tolerable fare for Repulse Bay; and the rigour of the weather at this season seems only to have enhanced the comforts of the feast. So intense was the cold in December that any water getting among the hair while the face was being washed instantly froze, making the locks rigid as the quills of the porcupine. North Pole River froze to the bottom on the 28th, after which water was only to be obtained with much inconvenience from a lake at the distance of half-a-mile. On New Year's Day, 1847, the temperature varied from 55° to 59° below the freezing point. Dr Rae, being a Scotsman, observed this day with the due and customary solemnities. The whole party had an excellent breakfast of fat venison steaks, after which they amused themselves for some hours playing football, "at which there was much fun, the snow being so hard and slippery that several pairs of heels might be seen in the air at the same time." Hare, venison, and reindeer tongue, with currant pudding, made a good dinner for the first day of the year; a small supply of brandy was served out, "and," says Rae, "on the whole, I do not believe that a more happy company could have been found in America, large as it is. 'Tis true that an agreeable companion to join me in a glass of punch, to drink a health to absent friends, to speak of bygone times and speculate on the future, might have made the evening pass more pleasantly; yet I was far from unhappy. To hear the merry joke, the hearty laugh, and lively song, among my men, was of itself a source of much pleasure."

The season of extreme cold was now at hand. On the 7th January the temperature registered was 79° below the freezing point. On the 9th there was a storm with thick snow-drift—the temperature 72° below freezing point—and, owing to the wind, bitterly cold. A house had been made for the dogs only a few days previously, else the animals must have been frozen to death. The force of the gale completely demolished Rae's two observa

tories. Indoors the thermometer ranged from 29° to 40° below the freezing point, "which," says Rae, "would not have been unpleasant where there was a fire to warm the hands and feet, or even room to move about; but where there was neither the one nor the other, some few degrees more heat would have been preferable. As we could not go for water we were forced to thaw snow, and take only one meal each day. My waistcoat, after a week's wearing, became so stiff from the condensation and freezing of my breath upon it, that I had much trouble to get it buttoned." Stormy and intensely cold weather prevailed throughout the month. Ouligbuck, the Eskimo interpreter, went out to hunt on the 18th, and for a week nothing was seen of him. He had been caught in a snow-storm on the day he set out, and was unable to proceed. In this predicament he was obliged to build a snow hut, in which, with the storm howling around and over him, he passed the night comfortably. Next day he went on to the Eskimos at Christie Lake, abused them for not bringing a large quantity of oil, according to promise, to Fort Hope, and having stayed with them for a week, and energetically exhorted them to redeem their promises for the future, he returned on the 25th to Repulse Bay, much to the astonishment of Dr Rae, who had given him up for lost.

The Eskimos of Repulse Bay are a people of extraordinary endurance. Even in such wintry weather as has just been described, it is the custom of these Eskimos to strip off all their clothes before going to bed. It is necessary to explain, however, that the ever-burning lamp by which they cook their food, and which serves the double purpose of diffusing light and heat, preserves the temperature of their houses at a comparatively high register. Rae visited a family on the 1st February, and found their "comfortable house" so warm, that his waistcoat, which had been frozen quite stiff for some time previously, "actually thawed." Two days afterwards the Doctor came upon one of these Eskimos repairing the runners of his sledge. "The substance used was a mixture of moss chopped up fine, and snow soaked in water, lumps of which are firmly pressed on the sledge with the bare hand, and smoothed over so as to have an even surface. The process occupied the man nearly an hour, during the whole of which time he did not put his hands in his mits, nor did he appear to feel the cold much, although the temperature was 30° below zero." The ingenuity also of the Eskimos, as displayed especially in trapping wild animals, is remarkable. One method of destroying the wolf deserves notice. The usual method is to secure a loaded gun by means of sticks, so that its muzzle shall point straight at a bait which is laid down at the distance of fifteen or twenty yards. A line connected with the trigger of the gun is tied to the bait. When the wolf seizes the bait, the line is agitated, the gun is fired, and the wolf is usually so severely wounded as to be easily tracked and killed. Ouligbuck, Rae's Eskimo interpreter,

improved upon this plan. Early in February a wolf had been observed prowling about Fort Hope, and the interpreter resolved to get rid of him. He made use of the usual contrivance of the bait, line, and fixed gun. But instead of having a distance of fifteen yards between the bait and the gun, he placed the former at the distance of no more than a foot from the muzzle of the gun, which was carefully concealed from view by means of a small snow house which he raised above it, and which was pierced with a port-hole in a line with the muzzle and the bait, so that the shot could scarcely miss the head of the animal. When Ouligbuck went to his gun next morning, he saw the track of the wolf and followed him to the dog-kennel, in which he had comfortably taken up his quarters. He immediately took the brute by the tail, dragged him out much against his will, and despatched him with an ice chisel. The animal measured 5 feet 9 inches from the nose to the tip of the tail (the tail being 19 inches long), and his height to the shoulder was 2 feet 8 inches.

Dr Rae was much interested in the Eskimos who visited Fort Hope during February. One of the women wore a brass wheel fastened to her dress by way of ornament, which had evidently formed part of some instrument left in the neighbouring region by a former explorer. Akkeeoulik, the man who had promised to bring the oil for sale to Dr Rae, but who had failed to keep his promise, appeared one day with a heavy iron hoop which he "had taken off a large stick," evidently a mast-head or bowsprit end of the abandoned "Fury" or "Victory." Several of these visitors had seen Ooblooria, Ikmallik, and other Eskimos mentioned by Sir John Ross; and they were able to tell Dr Rae that Tulluahua, whom Ross had furnished with a wooden leg, was dead. This free and intelligent intercourse with the natives doubtless suggested to Dr Rae the method by which, on a subsequent expedition, he ascertained the fate of Franklin and the crews of the "Erebus" and "Terror." His experience at Repulse Bay proved to him that the Eskimos could remember and describe events after the lapse of years, and that they illustrated their narratives of past occurrences by exhibiting well-preserved relics, which threw light on these occurrences—as the beads that had been given by Parry twenty-three years previously, and the brass wheel and iron hoop which had undoubtedly been the property of some predecessor in Arctic exploration. It was by the practical application of the experience gained on this expedition—by collecting the authenticated evidence of the natives, and by purchasing from them many articles known to have belonged to Franklin and his officers, that Rae was able to bring home the earliest intimation respecting the result of the great expedition of 1845.

As early as the middle of February there were tokens of reawakening life and of the return of spring in the vicinity of Repulse Bay. Unwilling to lose a day of the coming season, Rae gave his carpenter orders to com-

mence making two sledges for the spring journeys. The only wood available for this purpose was the timber lining of the boats; for nothing more important grew on the desert slopes around Repulse Bay than a low and scanty kind of heather, and here and there some moss. Five deer were seen going north on the 21st February; but they were still very wary and kept well out of gun-shot. Before the close of the month a brace of ptarmigan were shot, and several wolves had been destroyed at Ouligbuck's set gun. Two were wounded on the night of the 27th, one of which was caught before breakfast on the following day. "I went with Ouligbuck after the other," says Rae, "in the forenoon, and got sight of him about three miles from the house. Although his shoulder was fractured, he gave us a long race before we ran him down, but at last we saw that he had begun to eat snow, a sure sign that he was getting fagged. When I came up with him, so tired was he that I was obliged to drive him on with the butt of my gun in order to get him nearer home before knocking him on the head. At last we were unable to make him move on by any means we could employ. Ferocity and cowardice, often if not always, go together. How different was the behaviour of this savage brute from that of the usually timid deer under similar circumstances. The wolf crouched down and would not even look at us, pull him about and use him as we might; whereas I never saw a deer that did not attempt to defend itself when brought to bay, however severely wounded it might be."

The first deer was shot on the 11th March, and the latter part of this month was spent in making preparations for the journey over the ice and snow to the shores of Akkoolee or Committee Bay. On the 3d April the thermometer rose above zero for the first time since the 12th December. After the beginning of April, the aurora, which had been frequently visible during the winter, was seldom seen. With respect to this singular phenomenon, Dr Rae states that though both Eskimos and Indians, as well as the Orkneymen and others employed in the service of the Hudson's Bay Company, assert that it produces an audible rustling noise, he himself had never heard any such sound.

On the 5th April Dr Rae, together with four of his men and an Eskimo ally named Ivitchuk, whom he had enlisted as guide, started on his second journey across Rae Isthmus. The luggage and provisions—consisting mainly of pemmican, reindeer tongues, and flour—were stowed on two sledges, each drawn by four dogs. The travellers set out at dawn, and were welcomed upon the frozen desert with a gale of snow-laden wind. At eight A.M., however, the sky cleared, the day became fine, and the sun "shone forth with great brightness, surrounded by a halo of the most brilliant colours, with four parhelia that rivalled the sun himself." At the close of a long day's work they stopped at Christie Lake, built their snow house, and got into their blankets

at eleven P.M. After a comfortable night, the party were again on the march at six A.M. On the morning of the 7th they reached the sea, and striking across the land towards Point Hargrave, found themselves in lat. 67° 16′, long. 74° 30′. The work of exploring and surveying the west shore of Committee Bay with the view of ascertaining whether any sea-way led westward to the Arctic Sea, had now begun in earnest. Cape Lady Pelly was passed on the 8th, and after advancing seven miles farther, a halt was made, a snow house built on the ice, and a comfortable night passed, although owing to scarcity of provisions the supper was somewhat scanty. Setting out on the morning of the 9th, Rae led the march in a north-west by west direction, passed a low promontory formed of shingle and mud, which he named Point Swanston, and after a journey of fourteen miles (geographical) erected the usual snow tabernacle and slept. At this camping-place half a bag of pemmican, some flour, shoes, etc., were placed "*en cache*" for the return journey. Still pushing along the west shore of Committee Bay, Rae reached Colville Bay on the 10th, after a journey of sixteen miles, and then gave orders to erect the usual snug quarters for the night. "Our usual mode of preparing lodgings for the night," says Rae, "was as follows: As soon as we had selected a spot for our snow house, our Eskimos, assisted by one or more of the men, commenced cutting out blocks of snow. When a sufficient number of these had been raised, the builder commenced his work, his assistants supplying him with the material. A good roomy dwelling was thus raised in an hour, if the snow was in a good state for building. Whilst our principal mason was thus occupied, another of the party was busy erecting a kitchen, which, although our cooking was none of the most delicate or extensive, was still a necessary addition to our establishment, had it been only to thaw snow. As soon as the snow hut was completed, our sledges were unloaded, and everything eatable (including parchment, skin, and moose-skin shoes, which had now become favourite articles with the dogs) taken inside. Our bed was next made by smoothing a snow-bench, and laying upon it one or two reindeer mats, and by the time the snow was thawed or the water boiled, as the case might be, we were all ready for supper. When we used alcohol for fuel (as we usually did in stormy weather) no kitchen was required." When fuel was scarce, the usual supper consisted of an ounce or two of pemmican and a drink of snow-water.

The long headland on the north side of Colville Bay, covered with granite blocks and the *débris* of limestone, was named Point Beaufort. Five miles farther north Point Sieveright was discovered and named, and from this point the line of the day's march was northward past Cape Barclay and into Keith Bay.

Fuel was now scarce, and of the two meals a-day, only one (breakfast) was taken hot. In order to save fuel to the utmost, Rae and his companions "filled two small kettles and a bladder with snow, and took them to bed

with us, for the purpose of procuring water to drink," a plan which was frequently adopted afterwards. At the encampment on Keith Bay, Rae's Eskimo, Ivitchuk, informed him that by crossing overland in a north-west direction he would reach the sea much sooner than by following round the coast, which here runs out north in a bold peninsula into Committee Bay. Acting on this information, Rae led the party inland on the morning of the 13th, struck across the country, which was miserably barren in every respect, in a north-north-west direction, and discovered and named Lake Ballenden. On the 14th the weather was stormy, dark, and intensely cold. The wilderness of snow presented no landmarks, and the guide was often puzzled to decide upon the true track. The temperature fell to -12° in the afternoon, and as a strong wind was blowing in the faces of the travellers, they suffered much from cold. "We trudged on manfully," writes Rae, "until five P.M. . . . At half-past five we commenced building our snow house. This was far from pleasant work, as the wind was piercingly cold, and the fine particles of snow-drift penetrated our clothes everywhere; we, however, enjoyed ourselves the more when we got under shelter and took our supper of the staple commodities, pemmican and water. . . . It blew a complete storm all night, but we were as snug and comfortable in our snow hive as if we had been lodged in the best house in England. At 5.30 the wind moderated to a gale, but the drift was still so thick that it was impossible to see any distance before us, particularly when looking to windward, and that, unfortunately, was the direction in which we had to go. The temperature was 21° below zero—a temperature which, as all Arctic travellers know, feels much colder when there is a breeze of wind, than one of -60° or -70° when the weather is calm. But there was the prospect of both food and fuel before us, for seals were said to abound in the bay and heather on the islands of Akkoolee-guwiak (afterwards named Pelly Bay). Such temptations were not to be resisted; so we muffled ourselves well up, and set out. It was one of the worst days I ever travelled in, and I could not take the bearings of our route more than once or twice." At length, after a march of twelve miles, Rae reached the frozen shores, and after a further walk of six miles across sea-ice, encamped on the sheltered side of the nearest of a group of islands. "All the party, even the Eskimos, had got severely frost-bitten in the face, but as it was not much more than skin deep, this gave us little concern. When our house was nearly built, a search was commenced among the snow for heather, and we were so fortunate as to procure enough in an hour and a half to cook us some pemmican and flour, in the form of a kind of soup or pottage. We were all very glad to get into our blankets as soon as possible. . . . Notwithstanding that I carried my watch next my skin, the cold stopped it."

After one day's rest, Rae set out with two of his party for the purpose

of reaching the most southerly of Sir John Ross's discoveries, and thus ascertaining whether the land was continuous all along the west shore of the Gulf of Boothia. He took with him only two of his party, and he instructed the others, who were left behind, to kill seals, buy provisions from any Eskimos that might visit them, and, above all, to be careful in using the remaining stock of provisions. With his two companions Rae started on the morning of the 17th April, his course being along the shore in a north-west direction. After walking seventeen miles, he reached and named Cape Berens (lat. 69° 4′, long. 90° 35′) at noon, and at three P.M. he reached the camping-ground for the night, between two small points, which he named the Twins (lat. 69° 13′, long. 90° 55′). Starting again at three A.M. on the 18th, the same course was followed along the shore, and Halkett Inlet was discovered and explored.

Rae was now certain that, if his observations and calculations for latitude and longitude were correct, he must be near Lord Mayor's Bay, the most southerly of Ross's discoveries, and that the main object of the expedition—so far as regarded this line of coast—was now about to be realised. He therefore decided on striking across the land in a north direction, in preference to following round the coast, as by so doing he would reach Lord Mayor's Bay more quickly. He and his men, having rested a little, accordingly commenced a toilsome march overland, in the course of which an excellent meridian observation was taken and the latitude ascertained to be 69° 26′. In a spot three miles north of this point, Rae ordered his men to prepare the snow-house for the night, while he himself went forward alone in the hope of reaching the coast. "A walk of twenty minutes," he writes, "brought me to an inlet not more than a quarter of a mile wide. This I traced to the westward for upwards of a league, when my course was again obstructed by land. There were some high rocks near at hand which I ascended, and from the summit I thought I could distinguish rough ice in the desired direction. With renewed hopes I slid down a declivity, plunging among snow, scrambling over rocks, and through rough ice, until I gained more level ground. I then directed my steps to some rising ground which I found to be close to the sea-shore. From the spot on which I now stood, as far as the eye could reach to the north-westward, lay a large extent of ice-covered sea, studded with innumerable islands. Lord Mayor's Bay was before me, and the islands were those named by Sir John Ross the 'Sons of the Clergy of the Church of Scotland.'" One interesting and important point in the geography of the Polar regions was thus settled. The joint discoveries of Sir John Ross and of Dr Rae had proved that there was no water-way leading west from Boothia Gulf to the open water of the Arctic Sea. Had Simpson, therefore, endeavoured to follow round the north shores of America, eastward from the Castor and Pollux River, with

the view of entering Boothia Gulf, and sailing out into the Atlantic by Fury and Hecla Strait, his purpose would have been frustrated by the discovery that Boothia Felix, instead of being an island separated by a navigable strait from the mainland of America, was really a part of that mainland—a great peninsula connected with the continent by an isthmus, just as Melville Peninsula is joined to the mainland by Rae Isthmus. Dr Rae reached his farthest point in this northward direction when he scrambled down to the south shore of Ross's Lord Mayor's Bay, and, from this point, "after offering, with a humble and grateful heart, thanks to Him who had thus brought our journey so far to a successful termination, I began," writes the discoverer, "to retrace my steps towards my companions." At a late hour, and after having traversed in all forty miles, over a rough road, Rae arrived at the commodious snow hut which his comrades had prepared. Next morning (19th April), having taken possession of his discoveries with the usual formalities, he set out upon his return journey to Fort Hope, on Repulse Bay. From Ross's Isthmus, at the south-east angle of Lord Mayor's Bay, the explorers travelled eastward, along Franklin Inlet, then turning south walked seven miles in that direction and encamped. Crossing Halkett Inlet on the morning of the 20th, they reached their former encampment between the "Twins," and slept in the snow house they had previously erected. At two A.M. they started again to reach the island on which they had left the remainder of the party, where they arrived on the evening of the 21st, and found all well. Here they were visited next morning by a number of Eskimos, who brought a quantity of seals' flesh, blood, and blubber. These Rae purchased, giving in exchange knives, files, beads, and needles. The island on which the party were staying, and which was found to rise 730 feet above sea-level, was named Helen's Island, the group to which it belonged was named Harrison Islands, and the inlet of Boothia Gulf, in which the islands are situated, was called Pelly Bay.

On his outward journey, Rae had been advised by Ivitchuk, his Eskimo guide, to strike inland across the country from Keith Bay to Pelly Bay, and thus save the time and labour which travelling round the coast would have rendered necessary. Now, however, that the explorer had accomplished the great purpose of his journey, he resolved to devote a day or two to the exploration and survey of the tract of coast-line which had been left unvisited. Accordingly, on the 24th, the whole party set out from Helen's Island in a north-east direction along the shores of what proved to be a bold peninsula stretching northward into the south part of Boothia Gulf. The sun was now warm during the day, and the travellers, exposed to the mid-day glare, began to suffer much from snow-blindness. To avoid this evil, Dr Rae stopped early, built his snow house on the coast, which was low and flat with limestone and granite boulders here and there, and resumed his march

again at midnight. Following the line of coast, he discovered and named Cape Chapman on the 26th; and on the 29th, after making the circuit of the peninsula, he discovered and named the Clouston Points. Point Anderson and Cape Barclay were passed on the 30th, and on the morning of the 1st May the party encamped opposite Cape Beaufort. "The whole of the coast which we had traced during the last seven days, as far as Cape Barclay," writes Rae, "was low and flat, with neither rock nor hill to interrupt the sameness of the landscape. It—the promontory round which the party had been travelling—was named Simpson's Peninsula, after Sir George Simpson," who had projected and planned the expedition.

On the 1st May, Rae arrived at the spot where, on the 9th April, he had buried a quantity of provisions. Having dug up this hidden store, he was glad to have a change from seals' flesh and blood, on which the whole party had lived for eight days, to pemmican and flour. "It is true," writes Rae, "that during these eight days we had supped on a few dried salmon, which were so old and mouldy that the water in which they were boiled became quite green. Such, however, is the advantage of hard work and short commons, that we enjoyed that change of food as much as if it had been one of the greatest delicacies. Both the salmon and the water in which they were cooked were used to the last morsel and drop, although I firmly believe that a moderately well-fed dog would not have tasted either."

Arrived at the extreme south shores of Committee Bay, the explorers lost no time in crossing Rae Isthmus and making their way to Fort Hope on Repulse Bay, where they arrived on the 5th May. After all their perils and hardships, the travellers were able to report themselves "all well, but so black and scarred on the face from the combined effects of oil, smoke, and frost-bites," that their friends would not believe but that they had suffered from some explosion of gunpowder. "Thus successfully terminated a journey little short of 600 English miles, the longest, I believe," writes Rae, "ever made on foot along the Arctic coast."

But the purpose of the expedition was now no more than half accomplished. Rae had discovered, and had several times traversed, the isthmus that bears his name; had reached the southern shores, previously unknown, of Boothia Gulf; and had connected his survey of the west coasts of that gulf with those of Sir John Ross; and had demonstrated that no navigable passage led westward from the gulf to the Arctic Sea south of lat. 69° 30′ N., and that consequently no "North-West Passage" was to be looked for south of that parallel. The west shores of Boothia Gulf were thus brought within the sphere of geographical knowledge, but the east shores, south of Fury and Hecla Strait, had never yet been visited by civilised man. The survey of this east shore fell within the scope of Rae's instructions, and after a rest of only a few days at Fort Hope, this indefatigable explorer

organised another expedition with this object in view. He took with him four men and a supply of pemmican, tongues, flour, tea, sugar, and chocolate, with some alcohol and oil for fuel; and on the morning of the 13th May, he started to cross Rae Isthmus, and to reach the south shores of Committee Bay once more.

On the 16th the party reached the shore of Akkoolee, or Committee Bay, and Rae discovered and named Dease Peninsula and Cape Simpson, in honour of his immediate predecessors in Arctic travel. Around Cape Simpson the shores were barren—no vegetation was visible except patches of moss in the crevices of the rocks. But the region was not altogether inhospitable; for Corrigal, Rae's snow-house builder, shot two hares, and a sufficient quantity of moss or heather was gathered to boil the kettle. In this spot (lat. 67° 22′, long. 87° 3′) a quantity of pemmican, flour, etc., was buried for use on the return journey. After rounding Cape Simpson, Rae found the route very trying. The coast, which trended eastward, was broken up into deep inlets packed full of rough ice. In crossing, the travellers would sink at one moment waist-deep in snow, and at the next, knee-deep in salt water, and soon after would come upon blocks of ice, on which they were continually falling. "Sometimes we had to crawl out of a hole on all fours like some strange-looking quadrupeds, at other times falling backwards, we were so hampered by the weight of our loads that it was impossible to rise without throwing them off or being assisted by one of our companions. We therefore found it better to follow the shores of the inlets than to cross them, although by doing so we had double the distance to go over." On the 17th the travellers marched across Lefroy Bay, which was covered with rough ice, to Cape M'Tavish, three miles beyond which, in lat. 67° 42′, long. 86° 30′, the snow hut for the night—or, rather, for the day, for Rae and his companions were again travelling by night to avoid snow-blindness—was built. Opposite this cape, Rae discovered the large and flat island which he honoured with the name of Prince of Wales Island. Setting out at 8.30 P.M. on the 19th, the travellers were soon enveloped in a thick snow-drift whirled along by a gale which blew with great fury from the south-south-east. The gale was on the travellers' backs, which was so far fortunate; but the snow-laden wind had so darkened the air that it was impossible to see twenty paces in advance, or to deviate a single step from the ever-winding track of the coast-line. But though these five travellers were thus being drifted along an unknown shore they knew not whither, carrying with them no more food than would suffice for a few days, unable to see farther than a few yards ahead, there was no fainting or failing, and each man tramped on doggedly to accomplish, at all hazards, the object of the expedition. After travelling all night, during which they advanced only twelve miles, they halted and built their snow hut. No fuel could be procured here, and the snow-storm still continuing to rage, they

were obliged to remain under shelter till eight P.M. on the 21st. "During our detention," says Rae, "finding that our provisions would run short if the walking continued as difficult as it had been, we took only one not over-abundant meal during the twenty-four hours." Selkirk and Smith Bays were discovered and named on the morning of the 22d, and as no fuel could be found at the camping-ground, the travellers could only procure drinking water by taking a kettle or two of snow to bed with them. Starting again at eleven at night on the 22d, after a scanty and comfortless meal, Rae again led out his men. He had not advanced many miles beyond the headland, to which he gave the name of Point Corcoran, when he descried a number of deer feeding on the banks of a stream at no great distance. A vision of venison stews at once presented itself to his mind, and he sent forward Corrigal, who was a fair shot, in pursuit of the game. Corrigal had the luck to hit a fine buck, but though severely wounded, the animal was still able to run too fast to be overtaken; and the sportsman had already given up the chase, when Rae himself came up, and the two men recommenced the pursuit. "The deer having got a considerable way in advance, had lain down," writes Rae, "but rose up before we could get within good shooting distance, and was trotting off at a great pace when, by way of giving him a parting salute, I fired, and very luckily sent a ball through his head, which dropped him. . . . I immediately returned to the men, who had been busily employed collecting fuel, of which great quantities grew along the borders of the creek, and sent two of them to assist in skinning and cutting up the deer, whilst I and the other men continued to gather heather, as we now anticipated great doings in the kitchen! We placed the greater part of the venison *en cache*, but kept the head, blood, leg-bones, etc., for present use; and being determined to lose nothing, the stomach was partially cleaned by rubbing it with snow, and then cut up and boiled, which thus made a very pleasant soup, there being enough of the vegetable contents of the paunch to give it a fine green colour, although I must confess that, to my taste, this did not add much to the flavour. Having discussed this mess, a second kettle-full was prepared, composed of the blood, brains, and some scraps of meat, which completed our supper."

On the 24th, Rae and his party had advanced northward along the east shore of Boothia Gulf, as far as Cape M'Loughlin, lat. about 68° 47′. Bands of deer and flocks of partridges were seen at this halting-place, and here Rae resolved to leave two of his men to hunt and fish while he and the other two went on toward Fury and Hecla Strait. At ten P.M. on the 25th, the leader again started with Corrigal and Matheson, and still following up the coast-line, successively discovered and named Finlayson Bay, Point Richardson, and Garry Bay. All the way along this coast from Lefroy Bay to Garry Bay, and at a distance of about five miles from the shore, extends a

range of hills of from 500 to 800 feet high, which Rae named the Prince Albert Hills. The party encamped at seven A.M. on the 27th, in lat. 69° 19′ 39″, long. about 85° 4′.

The provisions which the three men had brought with them were now nearly at an end, and Rae saw that he could advance only half a night's journey farther to the northward, and return the following morning to his present quarters. Accordingly, leaving one of the men behind, the leader set out with the other at nine P.M. on the 27th. Snow fell heavily, and progress was slow. Baker Bay was discovered and named, and the march was continued for several hours afterwards. At four A.M. the sky cleared, and Rae now found that he had reached the south shore of a considerable bay. He also obtained a distinct view of the coast-line to the distance of twelve miles beyond the bay. Of this farthest limit of his explorations Rae writes: "To the most distant visible point (lat. 69° 42′ N., long. 85° 8′ W.) I gave the name of Cape Ellice. . . . The bay to the northward and the headland on which we stood were respectively named after the distinguished navigators, Sir Edward Parry and Captain Crozier. Finding it hopeless to attempt reaching the strait of the Fury and Hecla, from which Cape Ellice could not be more than ten miles distant, we took possession of our discoveries with the usual formalities, and retraced our steps, arriving at our encampment of the previous day at half-past eight A.M."

On the night of the 28th the march homeward was commenced. On the morning of the 30th the three men had joined the other two who had been left behind to hunt and fish, but who had been equally unsuccessful in both pursuits. Rae had expected a good meal on his arrival, but found that the men he had left to provide a store of food were themselves so ill-supplied that they were on the point of boiling a piece of parchment-skin for supper. Under certain circumstances scarcity of food may be borne for a time with equanimity; but a man's lot is somewhat hard when he has fatiguing work to do, and at the same time nothing to eat. "I have had considerable practice in walking," writes Rae, "and have often accomplished between forty and fifty, and, on one occasion, sixty-five miles in a day on snow shoes, with a day's provisions, blanket, axe, etc., on my back; but our journey hitherto had been the most fatiguing I had ever experienced. The severe exercise, with a limited allowance of food, had much reduced the party, yet we were all in excellent health; and although we lost flesh, we kept up our spirits, and marched merrily on, tightening our belts—mine came in six inches—and feasting our imaginations on full allowance when we should arrive at Fort Hope."

It is needless to state that under such conditions the journey homeward was a rapid one. The travellers were lucky enough to find that the small stores of provisions which they had concealed at different stages of their outward journey were inviolate on their return, and as a few ptarmigan fell to

Rae's rifle, there was generally something good in the kettle when the day's journey was over. On the 6th June the party arrived at Cape Simpson, and were delighted to find the *cache* of provisions which they had made there all safe as it had been left. All hands immediately set to work clearing away the stones beneath which the provisions had been buried, not so much for the purpose of getting at something to eat as to reach a package of tobacco which had been there placed among the other stores. The men were inveterate smokers, but all their pipes had been "out" for want of tobacco for several days. Meantime a fine hare had been shot, and as soon as sufficient fuel had been gathered, a feast was prepared such as the half-famished men had not enjoyed for many days. On this day such was the power of the summer sun that the mercury rose in the thermometer to 82°. At nine P.M. on the 6th, Rae and his men started to recross the isthmus to Repulse Bay, where they arrived at eight on the morning of the 9th all well, and in good spirits, but exceedingly thin.

Thus terminated an important and a completely successful expedition. Dr Rae had been commissioned to explore the unknown shores around the southern arm of Boothia Gulf, as far north on the east and west sides as the most southern points visited by the Rosses, and this he accomplished in the most creditable and satisfactory manner. His discoveries proved that there was no outlet from the south of Boothia Gulf to the Arctic Sea, and he thus so far practically circumscribed the area in which a "North-West Passage" might be sought for with hope of success.

From the 9th June, the date of the return to Fort Hope, to the 12th August, the expedition was detained by ice on the shores of Repulse Bay. On the latter date, however, the ice having broken up, Rae set sail from the bay, after distributing presents of axes, files, knives, etc., among his Eskimo allies, and arrived safely at York Factory on the 6th September.

PART VIII.

THE FRANKLIN SEARCH.

CHAPTER I.

THE SEARCH FOR FRANKLIN RESOLVED UPON—VOYAGES OF THE "HERALD" AND "PLOVER"—AWACHTA BAY—BOAT EXPEDITION FITTED OUT—HERALD ISLAND DISCOVERED—ICE-CLIFFS OF ESCHSCHOLTZ BAY.

A YEAR and a half had elapsed since the departure of Franklin in the "Erebus" and "Terror" (May 1845), when a feeling of uneasiness as to the fate of the expedition began to manifest itself throughout the country. Sir John Ross was the first to give expression to this feeling in a number of letters written to the Admiralty and to the Royal and Geographical Societies, in which he stated that the discovery ships were most probably frozen up off the western shores of Melville Island, and their return rendered impossible by an ever-thickening rampart of ice on the east. The publication of these letters gave rise to a discussion which thoroughly aroused the interest of the public and stimulated the Government to immediate action. Sir John Franklin, the most illustrious explorer of his day, together with one hundred and thirty-seven of the most promising officers and best men of the navy, had now been detained among the ice for two winters in the prosecution of a great national aim; and it was now considered high time that the nation should take some measures for the purpose of ascertaining what fortune, good or bad, had befallen the adventurers. The Lords of the Admiralty pointed to the voyages of Parry and Ross, both of whom had been ice-bound in the Polar Seas for several successive winters, and to Franklin's letter to themselves, in which the gallant old seaman, writing from Disco, says, "The ships are now complete with supplies *for three years;*" and they stated that the second winter of Sir John's absence "was too early a period to give rise to well-founded apprehensions for his safety." Nevertheless, a certain degree of anxiety seems to have been felt in official quarters, and, besides, some concession was due to the temper of the country. Accordingly, Government

invited all officers who had sailed in Arctic seas to send in written statements of opinion respecting the probable situation of the absent expedition, and the best means of sending assistance. From the reports returned to Government, the general impression of the officers consulted appeared to be, that they "did not apprehend that the expedition had foundered in Baffin's Bay, as some naval men of high rank, but not of Arctic experience, had suggested; that it had not as yet passed Behring Strait; and that until two winters without tidings had elapsed, serious fears for its safety need not be felt; but that immediate preparations for its relief ought to be made, to be carried out in the event of the summer closing without intelligence arriving." Should no intelligence arrive during the summer of 1847, it was the opinion of practical navigators that the directions in which search expeditions should be sent out should be determined by the "instructions" which Franklin had received from the Admiralty. These instructions were to the effect, that Franklin was to proceed to about lat. 74° 15′ N., long. 98° W., in the vicinity of Cape Walker, and that thence he was to push southward and westward in a course as direct to Behring Strait as the position of the ice and the existence of previously unknown land would permit. Going on the supposition that the leader of the "missing expedition" had endeavoured, and was even now endeavouring, faithfully to carry out these instructions, the Admiralty naturally determined to send out three search expeditions—one to sail to Behring Strait to *meet* the "Erebus" and "Terror;" a second, to Lancaster Sound to *follow* them on their supposed track, and a third to proceed overland to the shores of the Polar Sea to succour them in the event of their having been compelled to abandon their ships and make for the north coast of the continent.

Of the three projected relief expeditions, the first to enter upon the actual work of searching for the missing vessels was that sent to Behring Strait. It consisted of the "Herald" (Captain Kellett), a surveying ship of 500 tons, and carrying 110 officers and men; and the "Plover" (Commander Moore), a store ship of 213 tons, and carrying 41 men. The "Herald" had been commissioned in 1845 to survey the coasts of Central America, the Gulf of California, and Vancouver's Island; and its captain and officers were not a little surprised when, in April 1848, having reached Panama after surveying the coasts of Peru, they learned that they were to enter upon a new career, and change the pleasant waters of the Pacific for the Polar seas. Captain Kellett's instructions were to proceed north through Behring Strait and to "co-operate with H.M. brig 'Plover' in searching the north-western extremity of America and the Arctic Sea for traces of the missing voyagers." Officers and men, though debilitated by a three years' cruise in an unhealthy climate, and now ordered to pass suddenly from enervating heat to the rigours of the remote north, received with enthusiasm the intelligence that

their services were now to be required in the sacred cause of conveying the means of succour to the region in which the "Erebus" and "Terror," with their colony of explorers, had been for three years lost.

The "Herald" weighed anchor in the Bay of Panama, on the 9th May 1848, and was towed by a steamer westward, a distance of 660 miles, in order to fall in with the trade-wind, and thus avoid the variables and calms. On the 11th July she sighted the Hawaiian group of islands, and on the 7th August anchored in the harbour of Petropaulovski, Kamtchatka. After a long cruise along tropical shores, covered with abundant and glowing vegetation, the men of the "Herald" expected that Kamtchatka would show them nothing but nakedness and sterility, and were surprised at the luxuriance of its herbage and the brilliant green of its snow-capped volcanoes. Setting sail again on the 14th August, Captain Kellett steered for Norton Sound, North-West America, and reached the Russian trading-port of Michaelovski, where an Eskimo interpreter (whom the sailors of the "Herald" afterwards nick-named *Bosky*) was taken on board. On the 14th September Captain Kellett dropped anchor off Chamisso Island in Kotzebue Sound, where, according to arrangement, he should have joined the "Plover." Here the "Herald" lay inactive for fifteen days waiting the arrival of the brig. There was nothing to do, and as time hung heavy on the officers' hands, theatricals were resorted to, and the ingenious J. G. Whiffin, clerk in the "Herald," and the manager of the *extempore* theatre, brought out "The Mock Doctor; or the Dumb Lady Cured—a comedy freely translated from the French of Molière by Fielding," in which the part of *Sir Jasper* was filled by Mr Bedford Pim, now (1876) M.P. for Gravesend, and proprietor of the *Navy*, a valuable service paper, while the part of *Dr Hellibore*, the mock doctor, was appropriately assigned to the "Herald's" assistant-surgeon, Mr W. J. Billings. Meantime the open season was rapidly drawing to a close, and as the "Plover" had not yet arrived at the place of rendezvous, Kellett, on the 29th September, sailed out of the sound to resume his survey of the Mexican coast, Panama, and the Sandwich Islands.

On the 19th May 1849, having previously made preparations for a second cruise in Arctic waters, Captain Kellett set sail from Honolulu. He sighted Kamtchatka on the 22d June, and on the following day anchored again off Petropaulovski in Awachta Bay. "Nothing more picturesque," writes Berthold Seemann, the naturalist attached to the "Herald," "can be imagined than the scenery of Awachta Bay when lit up by the full moon. The cliffs standing out in bold relief, the conical volcanoes towering to the skies, and throwing long shadows into the valleys, the large expanse of water, almost resembling an inland lake, all combined to impress the mind with lofty feelings: still this sight, however imposing, dwindled into insignificance before that which displayed itself when the sun rose behind the snow-capped moun-

tains; the whole elevated land seemed to be a mass of fire, and the spectator remained as it were spell-bound, until the full appearance of daylight dispersed the illusion, and once more restored him to the sober thoughts of life."

Nothing had been heard or seen of the "Plover" at Petropaulovski; but Captain Kellett was not a little surprised to see a Royal Thames Yacht Club schooner, named the "Nancy Dawson," riding at anchor in this out of the way harbour. The "Nancy Dawson" was owned and commanded by Mr Robert Sheddon, formerly a mate in the navy, who had sailed into the seas of the far north for the purpose of joining the Behring Strait expedition, as a volunteer in the Franklin search. Sheddon's yacht was well stocked with provisions and instruments; but her crew, consisting chiefly of Americans picked up at Hong-Kong, from which the vessel had last sailed, were a disorganised and altogether unsatisfactory set.

On the 27th June Kellett sailed out of Awachta Bay accompanied by the "Nancy Dawson," and steering through Behring Strait, entered Kotzebue Sound on the 15th July, and had the satisfaction of seeing the "Plover" lying at anchor off Chamisso Island. In this vessel Commander Moore had sailed from the Thames, on the 1st January 1848, to join the "Herald." The brig proved, however, a very slow sailer, and Moore was unable to reach the Sandwich Islands before the close of August. It was now too late in the season to make for Behring Strait; accordingly he sailed for the harbour of Anadyr, on the east coast of Eastern Siberia, and wintered there. Leaving his winter station on the 30th June 1849, Moore steered the "Plover" for Behring Strait, entered the Arctic Ocean, and, on the 14th July—the day before the arrival of the "Herald"—anchored off Chamisso Island, in Kotzebue Sound. Moore's instructions were to search the north-west and north coasts of America eastward to the mouth of the Mackenzie River, at which point the examination of the coast eastward was to be taken up by the overland expedition, under Richardson and Rae. Not a moment was lost in carrying these instructions into effect; for, on the 15th July, the day after his arrival in Kotzebue Sound, he had sent away two boats on the voyage round the coast to Mackenzie River. The opportune arrival of the "Herald" on the same day, however, caused Commander Moore to recall his boats. A general consultation was now held. "The new arrival," writes Berthold Seemann, author of the "Narrative of the Voyage of the 'Herald,' 1845-51," "occasioned an entire change in the plan adopted. It was thought more prudent, considering the danger to which boats so heavily laden must be exposed, to despatch them from the highest possible (point) north which the ships, without risking their safety, could attain. We commenced immediately," continues Seemann, "to coal and provision the 'Plover'—removing officers, discharging objectionable men, and filling up their vacancies from

our own complement. While this was going on, Captain Kellett went with Commander Moore, and his acting ice-master, to examine the different bays on the east side of Chloris Peninsula, for a wintering station for the 'Plover.'" In the course of the search the party landed on Chamisso Island, and the boat's crew were set to work digging for a cask of flour that had been buried here by Captain Beechey twenty-three years before. The exact position of the *cache* was indicated by directions cut in the rocks on the shore, and in a short time the cask was found and disinterred. The sand around it was frozen so hard that at every blow of the pick-axe it emitted sparks. "The cask itself," writes Seemann, "was perfectly sound, and the hoops good. Out of the 336 lbs. of flour which it contained, 175 lbs. were as sweet and well tasted as any we had on board; indeed, afterwards Captain Kellet gave a dinner-party, at which all the pies and puddings were made of this flour."

On the 18th July the vessels left their anchorage and stood away to the north-west round the coast, the "Plover" leading under all sail, and the "Herald," accompanied by the "Nancy Dawson," following. On the 20th they passed Cape Lisburne, and on the 25th, they entered off the entrance of Wainwright Inlet, from which Captain Kellett had arranged the boat expedition, for the examination of the Arctic shores eastward to the Mackenzie, should be cast off. All hands were now set to work hoisting out, equipping, and provisioning the boats. By midnight all preparations had been made, and the boats, under the command of Lieutenant (now Rear-Admiral) Pullen, shoved off under three hearty cheers from the ships, to which a cordial response was given. "This little expedition," writes Seemann, "consisted of twenty-five persons and four boats, as follows: Lieutenant Pullen, commanding the 'Herald's' thirty-feet pinnace, fitted on board with the greatest care, thoroughly decked, schooner-rigged, and called the 'Owen,' furnished with pumps, spare rudder, and a strengthening piece of two-inch plank above her water-line; two twenty-seven feet whale-boats, covered in abaft as far as the backboard, but without either boxes or cases, the provisions being stowed, the bread in painted bags, and the preserved meats between tarpaulins—the men's clothes were in haversacks, capable of removal in a moment; the 'Plover's' pinnace, a half-decked boat, with cases for her provisions, etc., so placed as to resist pressure from the ice. There were in the boats seventy days' preserved meats for the whole party, all other articles, except bread, being, like the meat, soldered up in tins. In addition to these, the 'Owen' had on board eight men's allowance of the regular ship's provisions. After she was stowed with this proportion, every corner that would hold a case of preserved meat was filled. Each of the two larger carried five cases of pemmican for the special use of Sir John Franklin's party." The boats went away by the light of the midnight sun on the 25th, and the ships weighed and followed

them for a few hours. Early on the morning of the 26th a dense fog came down upon the sea, and when the weather cleared at noon, the boats and the yacht ("Nancy Dawson") were out of sight. Leaving Lieutenant Pullen to push on along the Arctic coasts, we have now briefly to sketch the operations of the "Herald" and "Plover" until the first Behring Strait expedition was recalled.

At noon on the 26th, these vessels steered due north, and at one P.M. sighted the heavily-packed ice of the Arctic Sea in lat. 71° 5′, and extending from north-west by west round to north-east. On this and the following day the ships continued to steer along the pack, and on the 30th July sailed for, and commenced the survey of, Wainwright Inlet. Early in August the vessels separated. At noon on the 15th the "Herald" was in lat. 71° 12′, long. 170° 10′; and on the morning of the 17th, when making for the north-west extreme of the pack, the exciting cry of "Land ho!" was shouted from the mast-head. A group of islands was reported on the port beam, and beyond this group an extensive and high land was soon afterwards descried by Captain Kellett from the deck. "I had been watching it," says the captain, "for some time, and anxiously awaited a report from some one else. There was a fine clear atmosphere (such a one as can only be seen in this climate), except in the direction of this extended land, where the clouds rolled in numerous immense masses, occasionally leaving the lofty peaks uncapped, where could be distinctly seen columns, pillars, and very broken summits, which are characteristic of the higher headlands in this sea—East Cape and Cape Lisburne, for example. With the exception of the north-east and south-west extremes, none of the lower land could be discerned, unless, indeed, what I took at first for a small group of islands within the pack edge was a point of this Great Land. This island or point was distant twenty-five miles from the ship's track; higher parts of the land seen not less, I consider, than sixty miles. When we hove to off the first land observed, the northern extreme of the Great Land showed out to the eastward for a moment, and so clear as to cause some who had doubts before to cry out, 'There, sir, is the land, quite plain.'"

No sooner was the unknown land discovered than Captain Kellett altered his course and sailed twenty-five miles directly towards it. As he approached he discovered that the pack rested on the shores of the island, and extended away to east-south-east out of sight. Two boats were then lowered for the purpose of visiting and taking possession of the newly-discovered land—Captain Kellett, Mr Goodridge, and Mr Pakenham going in one, and Mr Maguire, Mr Collinson, and Mr Seemann in the other. "We reached the island," says Seemann, "and found running on it a very heavy sea. The first lieutenant (Mr Rochfort Maguire) landed, having backed his boat in until he got foothold—without swimming—and then jumped overboard. The

captain followed his example, hoisted the jack, and took possession of the island with the usual ceremonies, in the name of Her Most Gracious Majesty Queen Victoria. . . . There can be no doubt," continues Seemann, "that we had found an unknown country, and that the high peaks we observed were a continuation of the range of mountains seen by the natives off Cape Jakan, as mentioned by Wrangel in his 'Polar Voyages.' That land, according to a belief current in Siberia, quoted by Cochrane, *is inhabited by a people of whom we are at present entirely ignorant.*"

The island thus taken possession of was named "Herald Island." It is four and a half miles long and two and a half broad, is triangular in shape, and is situated in lat. 71° 17′ 45″ N., long. 175° 24′ W. It may be described as one huge granite cliff, rising to the height of 900 feet, and inaccessible, except at a few spots, from the steep, almost perpendicular frontage of the rocks. It is the haunt of innumerable flocks of black and white divers, but was unmarked by any traces of human inhabitants. The "Great Land" seen beyond this isle was named Plover Island. "Its position," says Mr Augustus Petermann, "very nearly corresponds with that described by Admiral Wrangel off Cape Jakan, and is no doubt connected with it, and probably the same as that said to have been reached by Andreyew in 1762, called Tikigen, and inhabited by a race named Kraïhaï."

On the 2d September the "Herald," "Plover," "Nancy Dawson," and two of the boats that had been despatched to Mackenzie River but had been sent back, were all together at anchor in Kotzebue Sound. Here Commander Moore had resolved to remain for the winter, and a large party, including the carpenters of the "Herald," were told off to erect a winter house for the officers and crew of the "Plover." Meantime it was considered advisable to visit a number of chiefs who were known to live at a considerable village some distance up Buckland River, which enters the sound from the east, and as it was possible that these might make themselves troublesome to the wintering party, Captain Kellett determined to visit them and secure their respect and friendship. "Accordingly, on the 9th September," says Seemann, "we started with the 'Owen'—the 'Plover's' decked boat—the 'Herald's' cutter, and two gigs, their crews and several officers. The first night we bivouacked at Elephant Point, and the whole crew roamed over the ice-cliffs for fossils but could not find many. The second night we stayed at an Eskimo encampment of twenty-two tents and about a hundred and fifty people. We pitched our tents close to those of the natives, had our coppers, pots, kettles, axes, saws, etc., on shore, but although at times we had a third of their numbers about us, not an article was lost; and they were not troublesome when we told them we wished them to go away. They brought us wood and water, gave us fish and venison, and offered us whale blubber and seal flesh. The natives were highly amused, and joined our

crew in the sports of leaping and running. The shooting parties were always accompanied by some of them, and they were greatly surprised to see some of the young officers killing the birds right and left. The moment our boats started, until we got far up the river, we were preceded by their little kayacks, sounding with their paddles, to the channel. We had pilots in each of the large boats, who remained constantly with us, and who showed great concern when they unavoidably got us on shore." Altogether the conduct of the natives was friendly and respectful—very different from their behaviour towards Captain Beechey in his voyage in 1825-28. Their tractable and conciliatory demeanour was probably due to the circumstance that the white men had an interpreter with them who could explain the friendly purposes of the visitors; but it was doubtless also due in part to the increased intercourse between the Eskimos and the Russian settlers and fur traders at Michaelovski, on the south shore of Norton Sound. Many of the natives wore shirts, handkerchiefs of gaudy colours, and cotton cloths, with printed figures of the walrus, reindeer, and other Arctic animals, which they had obtained from the Russians in exchange for peltry. When an Eskimo takes to wearing shirts there is some hope of him. Long before St Paul's shall have crumbled into ruins, there will not be a single New Zealander extant to sketch the interesting relic. But Macaulay may rest in peace—the Eskimos are excellent draughtsmen; and since within the last few years they have advanced so far on the road to civilisation as to tolerate shirts, there is room for the hope that when London shall have become a memory, though no Maori shall be alive to sketch its site, the last respectful duty to the fallen. city may be paid by some R.A. from the Arctic shores.

After the return of Kellett and his party, permission was given to a number of officers to visit the extraordinary ice-cliffs of Eschscholtz Bay. This visit is described with much spirit and humour by Mr Edwin Jago, then clerk of the "Herald," and now (1876), or recently, paymaster of the troopship "Crocodile." The party shoved off early, in two boats, and were carried rapidly by a favourable and strong wind to Eschscholtz Point. As they neared the bold shore "the sun shone out, and the wind gradually dying away, the weather became so beautifully serene that one was filled with amazement when reflecting that the black-looking cliffs were composed of huge and solid masses of ice." Among these ice-cliffs a sufficient number of teeth, fossil bones, etc., were found to fill a large bag. These remains were carefully examined and described by Dr Richardson in his "Zoology of the Voyage of H.M.S. 'Herald.'" After stating that the summer thaw never penetrates the soil deeper than about two feet below the surface in the lands within the Arctic circle, and that animal substance solidly frozen in the earth may be preserved for any conceivable length of time, Dr Richardson, in an admirable sketch of the ice-cliffs of Eschscholtz Bay and the

fossil remains found in them, proceeds to say that "where the permanently frozen subsoil exists it is a perfect ice-cellar, and preserves from destruction the bodies of animals completely enclosed in it. By its intervention entire carcasses of the extinct mammoth and tichorhine rhinoceros have been handed down in Arctic Siberia from the drift period to our times, and, being exposed by landslips, have revealed most interesting glimpses of the fauna of that remote epoch. Conjecture fails in assigning a chronological date to the time when the drift and boulders were spread extensively over the northern hemisphere; . . . and we merely judge from the absence of works of art and of human bones, that the drift era must have been antecedent to the appearance of man upon earth, or at least to his multiplication within the geographical limits of the drift. Whatever may be our speculations concerning the mode in which the carcasses in question were enclosed in frozen gravel or mud, their preservation to present times, in a fresh condition, indicates that the climate was a rigorous one at the epoch of their entombment, and has continued so ever since. . . . The 'St Petersburg Transactions' and other works contain accounts of the circumstances attending the discovery of the entire carcasses of a rhinoceros and of two mammoths in Arctic Siberia, and one cannot avoid regretting that they were beyond the reach of competent naturalists, who might, by examining the contents of the stomach, the feet, external coverings, and other important parts, have revealed to us much of the habits of these ancient animals, and of the nature of the country in which they lived. . . . In Arctic America such remains have been discovered in its north-western corner alone, and as yet, bones, horns, and hair only have been obtained, without any fresh muscular fibre; but all the collectors describe the soil from which they were dug as exhaling a strong and disagreeable odour of decomposing animal matter, resembling that of a well-filled cemetery. In August 1816, Kotzebue, Chamisso, and Eschscholtz discovered, in the bay which now bears the name of the last-mentioned naturalist, some remarkable cliffs, situated a short way southward of the Arctic circle, and abounding in the bones of mammoths, horses, oxen, and deer. The cliffs were described by these discoverers as pure icebergs, one hundred feet high, and covered with soil, on which the ordinary Arctic vegetation flourished. These novel circumstances strongly excited the attention of the scientific world; and when Captain Beechey and his accomplished surgeon, Collie, ten years later, visited the same place, their best efforts were made to ascertain the true nature of the phenomenon. Dr Buckland drew up an account of the fossil remains then procured, with illustrative plates, and Captain Beechey published a plan of the locality." Captain Beechey, however, considers that the ice of these cliffs is merely a facing, and that the cliffs consisted mainly of frozen mud; but "after an interval of twenty-four years," continues Dr Richardson, "the recent voyage

of the 'Herald' to this interesting spot, has given a third opportunity of collecting fossil bones and examining the structure of these famed cliffs. Captain Kellett, Berthold Seemann, Esq., and John Goodridge, Esq., with the works of Kotzebue and Beechey in their hands, and an earnest desire to ascertain which of the conflicting opinions enunciated by these officers was the most consistent with the facts, came to the conclusion, after a rigid investigation of the cliffs, that Kotzebue was correct in considering them to be icebergs. . . . The ice-cliffs of Eschscholtz Bay may have had an origin similar to that of the Greenland icebergs, and have been coated with soil by a single or by successive operations. I find it difficult, however, to account for the introduction of the fossil remains in such quantity, and can offer to the reader no conjecture on that point that is satisfactory to myself. The excellent state of preservation of many of the bones, the recent decay of animal matter, shown by the existing odour, quantities of hair found in contact with a mammoth's skull, the occurrence of the outer sheaths of bison horns, and the finding of vertebræ of bovine animals lying in their proper order of sequence, render it probable that entire carcasses were there deposited, and that congelation followed close upon their entombment. A gradual improvement of climate in modern times would appear to be necessary to account for the decay of the cliffs now in progress, and the exposure of the bones. The shallowness of the water in Eschscholtz Bay, its narrowness and its shelter from seaward pressure by Chloris Peninsula and Chamisso Island, preclude the notion of icebergs, coming with their cargoes from a distance, having been forced up on the beach at that place. Neither is it more likely that the bones and diluvial matters were deposited in the estuary of Buckland's River, and subsequently liberated by one of the earth waves by which geologists solve many of their difficulties, for ice could not subsist long as a flooring to warmer water. In short, further observations are still needed to form the foundations of a plausible theory."

By the 26th of September the "Herald" had supplied all the wants of the "Plover," and on the 29th she sailed out of Kotzebue Sound, having in company the "Nancy Dawson," the owner and commander of which, Mr R. Sheddon, was now in ill health. On the 2d October the "Herald" passed through Behring Strait, and anchored at the port of Mazatlan, in Mexico, on the 14th November, where Mr Sheddon's yacht had arrived on the previous day. Mr Sheddon died three days after his arrival in harbour, and was buried in the Protestant burial-ground at Mazatlan. "The 'Nancy Dawson,'" says Seemann, "will ever be remembered in the history of navigation as the first yacht that performed a voyage round the world, and penetrated to the eastward of Point Barrow; while the generous impulse which induced Mr Sheddon to search for his missing countrymen, will always be appreciated by every feeling heart, and held up as an example to future generations."

CHAPTER II.

THE "PLOVER" IN WINTER QUARTERS, 1849-50.

To Mr Bedford Pim, one of the most versatile gentlemen engaged in the Franklin search—seaman, author, journalist, barrister, and M.P.—we are indebted for a sketch of the wintering of the "Plover." A midshipman in the "Herald," under Kellett, he was transferred to the "Plover," in order to fill up one of the two vacancies caused by two officers having gone away in charge of the boats to Mackenzie River. At first Mr Pim did not fully appreciate the amenities of his new situation; and he remembered with some regret the cheerful days in the old "Herald." "The departure of the 'Herald,'" he writes, in his admirably spirited journal, "the prospect of a long winter, the loneliness and melancholy aspect of the adjacent country, all tended to increase a feeling which the sudden loss of companions and friends is always calculated to produce. The natives also, to whose passion for barter we had been indebted for large quantities of fish, venison, and berries, paid us a final visit in their baidars on the 9th of October; and we seemed now to be entirely excluded from all human intercourse. However, by degrees we became more and more accustomed to our solitude, and tried, by mental and bodily exercise, to make the time pass as agreeably as possible." On the 17th October the temperature of the sea being 28° Fahr., the water thickened, after which it froze so rapidly that a number of the "Plover's" men dragged a heavy boat some distance over its surface. On the 24th, the thermometer fell for the first time to zero, and the reign of winter was completely established in Kotzebue Sound. It was now, of course, necessary to house-in the ship; and Mr Pim tells us how this was done. "A wooden frame, covered with canvas and tilt-cloth, served as a roof; several windows admitted the still remaining portion of daylight; three fire-places and a Sylvester's stove, lit occasionally, diffused an agreeable temperature; in fine, as far as the internal arrangements were concerned, the dockyard authorities had so well provided for every want, that a considerable degree of comfort was experienced. Those who enjoy all the

luxuries of civilised society may perhaps smile at the assertion; yet in a region where even an Eskimo hut has charms, and where nature shows herself only in the most chilly and sombre aspect, the accommodation which the vessel afforded was fully appreciated. It was fortunate that the housing-in was so soon completed, as in October we had a constant succession of bad weather, accompanied by a low temperature. The ice, towards the end of the month, was three feet thick; it had, however, before this time, owing to the meeting of the tides, been thrown up occasionally to a height of twenty feet, forming hummocks, pinnacles, and walls, and presenting a most picturesque spectacle, which forcibly impressed an imaginative mind with the idea of extensive ruins. The *aurora borealis* also, in proportion as the temperature decreased, became more frequent, and displayed a greater degree of brilliancy."

The latitude of the winter station of the "Plover" (about 66° 30′ N.) does not place it within the Arctic circle, and the cold in winter is less intense than in other much-frequented regions of the north. Besides, Kotzebue Sound, protected to some extent from the north and east winds, is open only to the west, and the climate is consequently milder than might be expected. The officers of the "Plover" had made up their minds that when the cold increased all living creatures would vanish from the Sound. This, however, was not the case. Deer appeared in large numbers, and offered so great a temptation for hunting that several parties started for that purpose, but inexperience and haste prevented their killing a single head, and, moreover, so alarmed the herds that they never afterwards approached the immediate neighbourhood. Ptarmigans and hares were abundant, and the sportsmen frequently added these luxuries to the table. Wolves and foxes occasionally enlivened the scene; and the former, probably driven by hunger, sometimes ventured within musket-shot, when they commenced their dismal howlings. Bears appeared more scarce; only one was seen during the whole winter. Although in November the temperature still continued steadily to decrease, yet the weather was so calm that the cold was not much felt, and open-air exercise was freely indulged in by all.

In summer the natives of Polar regions are often in indifferent "feather"—are filthily dirty, ill-clad, lazy, and spiritless; but in the winter the Eskimo is himself again. In the months of ice, he thrives in the severest climate experienced on the surface of the globe, and from frozen fields he gathers abundant food. In the month of November, the natives began to renew the visits to the "Plover" which they had for some time discontinued. "They appeared," says Pim, "almost different beings. Their light and filthy summer dresses had been exchanged for others that fitted more closely and were better made. They were no longer the apparently-overawed people who in their skin baidars paddled near the sides of our large ships, but seemed con-

scious that they were moving in an element for which nature had admirably adapted them. Their step was firm, their movements graceful, their dread of the white man had vanished, and they appeared to communicate with us on the footing of perfect equality. Whenever they arrived, their sledges were well laden with venison, fish, and furs. The latter were brought in in great quantities, for the eagerness with which they were purchased led them probably to suppose that we were traders. Even after they had comprehended the reason of our wintering in Kotzebue Sound, they continued to supply us with sable, ermine, beaver, fox, and other furs of more or less value. The fish were excellent in flavour, and occasionally of considerable size; one mullet, for instance, bought for an ordinary blue bead, was thirty-three inches in length, and weighed twenty-one pounds." It is unfortunate that Mr Pim does not give us the name of the exceedingly 'cute person who "acquired" twenty-one pounds of fish of "excellent flavour" for the value of a fraction of a farthing. The mercantile genius deserves to be immortalised.

In 1848 a report had been brought to Captain Kellett to the effect that a number of white men were travelling in the interior, and again, in November 1849, the natives further reported that two ships had been seen to the eastward of Point Barrow. It was considered that if the story was true, the ships in question could scarcely be other than the "Erebus" and "Terror." But there were reasons for believing that the rumour was false, and that the story was fabricated by the natives with the view of adding to their own importance—a practice not unheard of in regions nearer home than North-West America. For the purpose, however, of ascertaining how much truth there might be in these reports, Mr Pim proposed to travel to Michaelovski, a Russian fort on the south shore of Norton Sound, where constant communication with the tribes of the interior was maintained. For some time Commander Moore refused to sanction this journey; on the 10th March 1850, however, he yielded to Mr Pim's solicitations, and gave that officer instructions to set out on the expedition, and to take "Bosky" the interpreter with him. On the following morning Pim started with a guide and the interpreter, and followed the beaten track to the Spafarief River, taking with him a dog-sledge laden with provisions, arms, ammunition, etc. On the 18th, leaving the beaten track, he pushed on in a south-east direction, but began to discover that his dogs were worthless. "When night was approaching, a halt was called among some pine-trees, where a fire was kindled and some tea and soup prepared. The scene of a winter bivouac is indeed curious. The travellers grouped around the fire are variously employed—one is melting snow, another bringing fuel, while a third unpacks the sledge, spreads the deerskin to sleep upon, or prepares the provisions for cooking. The dogs, secured to

surrounding trees, strain their tethers to reach the scraps thrown to them, and occasionally send forth their long, dismal howl, only to render the scene more dreary."

On the 20th, the dogs fairly gave in, and it became necessary to leave the sledge behind. Pim accordingly placed it *en cache* beneath a covering of branches and snow. He must now trust to his snow-shoes and his physical vigour. All day the party travelled rapidly toward a village well-known to the Eskimo who had been hired as guide, and late at night they reached it—only, however, to find it deserted. There was now only one day's provisions left; and from eighty to ninety miles must yet be traversed before Norton Sound can be reached. Next day a good pace was kept up, and a village was reached at ten o'clock at night. No natives, however, came forth to greet the travellers, "and," says Pim, "we were soon made aware that no living beings were to be found within the huts. A search was instantly commenced, but only a little train oil rewarded the trouble, which, with a few scraps of leather, served as a meal for the dogs; and, scanty as it was, proved their salvation. Our own condition was by no means enviable; for when it is considered that twice the usual amount of food is required in these regions, our slight meal, from the remnants of the provisions, appeared meagre indeed." On the following day, the guide proved to be at fault respecting the route, and the party started away across the sea-ice, "trusting, in a great measure, to chance." The travellers walked all night, and at daylight were so exhausted, that at the risk of being frost-bitten, they were compelled to lie down on the ground. "As the day advanced, the guide declared that he could see a village. With great exertion we crawled to the hut, without, however, seeing any signs of life. Just as despair began to obtain the mastery, and induce an apathy as to our fate, a woman appeared, who inspired us with new life. We were soon ensconced in warm furs, and regaled with fish, train oil, and berries—to hungry men a most acceptable feast. The poor dogs, now in their sixth day of abstinence, were not forgotten; they were allowed an unlimited amount of fish, purchased with a clasp knife, which I happened to carry with me. Bosky at this place informed me that he was unable to walk any farther. The scurvy was breaking out in an alarming manner; his legs were covered with ulcers, having been frost-bitten while he was resting the last time, and now presented a shocking appearance; moreover, he had had a severe fall on starting from the last village. Notwithstanding, he kept up with us during the two-and-twenty hours that we were on the journey, and I cannot sufficiently admire the quiet endurance with which he bore his sufferings. Late in the evening the men returned from a hunting excursion. They had been lucky in the capture of a deer. We were, however, too sleepy to participate in the feast, especially as the fish sauce—*i.e.*, train oil—of the meal partaken did

not agree with our stomachs. We now learned with certainty that two days' journey would bring us to a small Russian outpost, where, Bosky assured me, every comfort would be cheerfully afforded." Starting next morning, Pim and the interpreter, after two days' march, arrived at a solitary hut, where they received food and shelter. Invigorated by a good night's rest, the Englishman and the Eskimo set out early for the Russian post, which was distant twenty-five miles. But the interpreter appeared unequal to this long march. After struggling on, and resting from time to time, they came upon the dead body of a deer that had been driven over the cliffs by the wolves that haunted the neighbourhood. It was arranged that Bosky should remain here while Pim went on to the outpost, from which he was to send back assistance to his exhausted comrade. On then pressed the Englishman —quickening his pace, as at intervals he heard the long-drawn howl of wolves. At length he reached the house, roused up the sleeping inmates, and was laboriously endeavouring to inform them by signs of the hapless condition in which he had left Bosky, when, to his astonishment, that worthy individual appeared in his own proper person at the door. He had become so dreadfully afraid of being attacked by the wolves, that he had resolved to come on at all hazards. Here Pim recruited; and after waiting and resting a number of days, he set out for Michaelovski, where he arrived on the 6th April. At the Russian post he learned that a number of white men were living in the interior, on a river called the Ekko, and were trading with the natives; and from a number of circumstances Pim "concluded that these persons must be a portion of Sir John Franklin's expedition." He now resolved to return to the ship, which he reached on the 29th April. In the meantime, further rumours respecting white men being in the interior had reached the winter quarters of the "Plover," and Mr Pim confidently expected to be sent off at the head of a relief expedition in search of them. To his surprise, however, Commander Moore refused to organise such an expedition, on the ground that he considered the rumours untrustworthy.

Summer now came rapidly on—geese, ducks, the golden plover, and snipe, came in flocks around the ship, and the hum of the mosquito was in the air. On the 14th July the ship was moved from her anchorage off Chamisso Island, and two days after the "Herald" was seen entering Kotzebue Sound. Captain Kellett received from Commander Moore information respecting the successive reports that had been brought to the "Plover" relative to "the encampment of white people in the vicinity of Point Barrow," and resolved to send the relief ship to inquire further into the matter. Accordingly, he furnished the "Plover" with fresh provisions and stores, and sent off her commander on this service. Having despatched the "Plover," Kellett set sail for the north to examine the condition of the ice, and to cruise about and afford assistance to any of the exploring vessels now

in the Arctic Sea. On the 13th August, the "Plover" hove in sight, and joined the "Herald" off Cape Lisburne, the place of rendezvous. Commander Moore had visited Wainwright Inlet and Point Barrow, but could not trace the rumours respecting the white men to any tangible source. It appeared that the Eskimos had invented the stories. "The Eskimos are quick," writes Seemann, "and where it is likely that their natural cupidity would be gratified, ever ready, can they but get a lead, to exercise their ingenuity by inventing a story. It was *after* Commander Moore had made the chief of the Hotham Inlet tribe understand the object of the 'Plover's' wintering in those regions that the majority of the reports were received."

On the 27th, Captain Kellett turned towards the south, passed Behring Strait, and arrived at Michaelovski, on Norton Sound, to investigate the reports respecting white men which Mr Pim had heard there. The chief official and his second, however, had left the fort, taking all papers and letters with them, and no information could be obtained. Again the bow of the "Herald" was turned north; and on the 5th September, having re-entered the strait, she arrived at Port Clarence, where Kellett joined the "Enterprise" and "Plover." The latter had already entered Grantly Harbour, in which Commander Moore had resolved to winter, and on the shores of which he was already erecting a house for the reception of provisions. The house was finished on the 21st September, the provisions landed and stowed, and the ship dismantled. On the 23d, the "Herald" made sail again for the southern seas, and thus concluded its third and last summer cruise up Behring Strait.

CHAPTER III.

NARRATIVE OF A BOAT EXPEDITION ALONG THE ARCTIC COAST FROM WAINWRIGHT ISLAND TO MACKENZIE RIVER,—FROM THE HITHERTO UNPUBLISHED JOURNALS OF REAR-ADMIRAL PULLEN.

WE have now to follow Lieutenant Pullen in his adventurous and important boat expedition of nearly 1500 miles in open boats along the Arctic shore, from Wainwright Inlet to the mouth of the Mackenzie River. Through the kindness of Lieutenant (now Rear-Admiral) Pullen, who has placed his most interesting journal of this undertaking in our hands, the present writer is enabled to give the first detailed account of this expedition that has ever been published.

A preliminary sketch of a search along the coast for suitable winter quarters by Lieutenant Pullen places us at once within the scene of action, and restores to us the trim forms of H.M.S. "Herald," the lively yacht "Nancy Dawson," and the slow and heavy "Plover." "On Friday, the 20th July (1849)," writes Mr Pullen, "it was quite calm, and as I was to go away with two boats, I got all prepared; and taking a week's provision, shoved off at 5.45 P.M., in order to examine the coast between Capes Lisburne and Sabine. I pulled in directly for the cape, and within a mile of it discovered an oomiak or baidar (Eskimo boat of walrus hide stretched over a wooden frame, very buoyant, easily carried, and propelled with paddles) coming up the coast. At 7.30 we reached the cape, and while waiting for the second boat, which was some distance astern, the oomiak approached with friendly salutations, evinced by their holding up their arms and shouting.

"On coming alongside, the man who was working the after paddle seized hold of my head, greatly to my surprise and disgust, and began to rub noses. At first I did not know what he was going to do, and did not submit with a good grace; but recollecting it was their mode of salute and friendly greeting, I quietly resigned myself to my fate, but was very much pleased when released from the embrace; for so fierce was the fellow with the rubbing, that my nose felt it for some time after. There were eight people in

the boat, two of whom were women—the youngest of whom might be pronounced well looking, and, if freed from the dirt and grease on her face, of rather good complexion. They were all clothed alike, in dresses of deer-skin, consisting of frock, trousers, and moccasins; the only distinction between the sexes was, that the frock of the women was rather longer, and was rounded both before and behind, and the men wore those hideous lip-pieces. They were very glad to see us; advanced towards us laughing and talking at a great rate; and thinking, I suppose, we were in want of something to eat, they gave us several of the sea-fowl they had in their boat. We gave them in return beads and a few pieces of tobacco, with which gifts they were delighted. Our second boat now having joined us, we pulled on, the natives following in gradually increasing numbers. We were now passing along a long gravelly beach, on which I landed. The men tracked the boats, in which they were readily assisted by some of the Eskimos, while others walked along with us arm-in-arm as if we were the greatest friends in the world. At last the kindness of the natives became more a hindrance than help; so, to get rid of these demonstrations of affection, we shoved off again, keeping a sufficient distance from the shore to prevent their following us, and at midnight landed on a low shingly beach, close to a native camp, eight or nine miles from Cape Lisburne. At the back of this beach was a very large sheet of water, a mile at least in breadth, and backed up by a range of barren hills, from eight hundred to a thousand feet in height. This was a part of the coast to which I was to direct my attention, but as yet I could see no entrance into this lake from the sea, nor did I think the water of sufficient depth for a vessel of the 'Plover's' draught. The Eskimos at the camp were apparently all asleep when we passed, but directly after we landed they woke up, and darted out among us after they had got rid of their timidity, and had become assured that we were friends. I gave them a little tobacco and a few beads; but they were most desirous of getting the uniform buttons of my coat, and were delighted with the few loose ones I gave them. We again shoved off, and followed the coast along to the eastward, but it was more for the purpose of getting rid of the natives than for any other reason; and at two o'clock on the morning of the 21st we landed again, about two miles to the eastward of our last position, and hauled the boats up to give the men a few hours' rest. The large sheet of water at this spot was only separated from the sea by a narrow gravelly beach, not exceeding two hundred feet in breadth, and we now found the water, on tasting it, to be perfectly fresh, and the surface about four feet in perpendicular height above the level of the sea. We remained until six o'clock, and then launched our boats again, assisted by the Eskimos, who had joined us from the camp shortly before our starting. Keeping the shore close aboard, on getting eastward we observed a strong body of water rush-

ing out from the beach, which I conjectured might be from the lake; but on landing we found it was from a small stream, flowing to the eastward of a large fresh-water lagoon, and separated from it by a narrow belt of marshy land. Where the lagoon terminated, the hills on its southern shores bent round to the south-east, forming the south-west boundary of the flat marshy land, from which the stream issued in a direction north-east by east. Cape Lisburne now bore from us west, fourteen or fifteen miles distant, and the direction of the lagoon was west-half-south, its eastern extreme from two to three hundred feet from the sea. To the eastward of this the coast, as far as Cape Sabine, consisted of high muddy banks, faced occasionally with immense accumulations of snow, quite overhanging a narrow beach, and requiring a much greater duration of powerful sunshine than this part of the world is ever blessed with to clear it away. As Cape Sabine was to be the limit of my examination for the present, we landed a short distance to the westward of it about noon, close to the mouth of a small stream, with not water enough in it to float a jolly boat. Up to this time the weather had been perfectly calm, but now a light breeze sprang up from the westward, which I expected would soon bring up the ships, which were to pick us up off this cape, so we hauled up; but by two o'clock the gradually increasing breeze had raised so much surf on the beach, that we were obliged to launch the boats and anchor at the back of it. When, however, at four o'clock, there was still no appearance of the ships, we weighed and pulled towards Cape Lisburne that we might the sooner meet them.

"At eleven o'clock that night we were only off the eastern end of the lagoon, but as the wind was now decreasing, it was likely we should make better progress henceforward, and accordingly we hauled more off shore, and at midnight anchored some distance from the nearest land, and from where we were could hear what we believed to be a heavy surf continually breaking on the beach. At four o'clock on the morning of Sunday the 22d, we weighed with a light westerly breeze, and shortly after saw a sail in the offing with courses down, standing to the north. We hauled out for her, and soon saw another to the northward of the first. When we had continued to pull for another quarter of an hour, and still saw no sign of a third vessel, I naturally concluded that the two seen were whalers, and resumed my course for Cape Lisburne, expecting to find the ships at the anchorage where I had left them on the preceding Friday evening; but in another quarter of an hour we observed a third sail a long way to the southward, and almost at the same moment we saw the smoke of a gun rolling off in eddies from the side of the mid-ship and first seen vessel, and this was sufficient to satisfy me that she was the 'Herald,' the northerly one the yacht, and the last of all the poor 'Plover,' with every possible stitch of canvas set, making the most vigorous, but unfortunately unavailing, efforts to get on. At seven

o'clock the wind was all gone, and at 9.30 I was received on board the 'Herald,' and made my report of an unsuccessful search to Captain Kellett, and thence proceeded to the 'Plover,' and communicated the same intelligence to Captain Moore."

Mr Pullen's actual work, however, did not commence till the 25th July; when, the boats being fully equipped and provisioned, he received his final orders from Commander Moore, and shoved off a short time before midnight. "We left the vessels under sail," says Mr Pullen, "with a light breeze coming from the land, and we soon saw them get under way and follow us. My small expedition consisted of four boats, viz., the 'Herald's' decked boat, called the 'Owen,' after Captain (now Admiral) William Fitz-William Owen, one of my most valued friends; the 'Plover's' pinnace, and two whale-boats. Three officers, Mr W. Hooper, acting mate, Mr H. Martin, second master, and Mr J. Abernethy, acting second master, etc., and twenty men, one of whom was an interpreter, brought from Petropaulovski by the 'Herald.' The deduction of so many men from the 'Plover's' complement left her but few remaining hands; the 'Herald,' however, supplied her with ten from her number. After taking our whale-boats in tow, arranging signals with Mr Martin, who was in the pinnace, and setting the watch, I retired to such small accommodation as we possessed, with hope and trust that the great God, whom we all serve, would vouchsafe unto us His protection, and grant us success in the service in which we were engaged.

"On the 26th the fog closed round us at 5.30 A.M., with wind moderate from the north-north-east. We were still on the starboard tack, having our consorts about one mile distant on our weather quarter, and the 'Herald' and 'Plover' to leeward. This was the last time we saw either of them. At ten o'clock we observed, through a break in the fog, the yacht passing just to windward of us, and also got sight of the pinnace for a short time. We immediately signalled to her to close, and henceforward kept together as long as the fog lasted, never at any time being separated by more than a distance of one hundred feet. When it cleared at eleven o'clock, we tacked, and stood in for the land, and at noon were in lat. 71° 11′ N., and long. 159° 10′ W. Of our two sailing boats, the 'Owen' was decidedly the fastest; the pinnace was a little more weatherly, but so little that it was barely perceptible; the former was rather leaky from long exposure to warm weather, without having been in the water. The whale-boats were in good condition, but could not proceed as rapidly as the large ones under sail, consequently they were kept in tow, with their sails set, and with crews constantly in them. . . .

"At 11.30 at night the fog cleared away altogether, and disclosed to us the sun slowly circling the western heavens in an orbit of a blood-red colour,

and when on the meridian, about two degrees above the horizon. The weather was now most beautiful. The thermometer stood at 44° in the air, but a heavy dew fell, which made it rather cold; and the frosty look of so much ice about us added, I daresay, somewhat to the feeling. On one or two occasions, I am confident we must have passed over a sleeping walrus, or, at all events, gone very near it, for they rose close under our stern, looked at us with astonishment, and seemed very well disposed to try their strength against us. . . .

"On the morning of the 28th it was almost calm when we landed off a low, shingly beach, in lat. 70° 56′ N., to replenish our water casks. Inside the shore was a large sheet of water, but it had no outlet to the sea fit for boats of any description, and seemed to be entirely formed by streams, which, having their origin in the melting of the snow, flowed into the lake from the several gullies at the head of it. The country round formed an extensive plain, rising a little to the eastward, and covered with dry withered grass, except just about the water. After we had filled our casks, we embarked again, and at nine P.M. weighed, and partly by towing, and partly by taking advantage of the light northerly wind, when it favoured us, reached Refuge Inlet about midnight. I pulled into it with one of the whale-boats, but, owing to the shallowness of the water, could only advance a very short distance. The channel was very narrow and winding—three feet deep at the bar, immediately inside of it only two, and then one, so that I considered it quite unfit for our large boats, particularly as a westerly wind would raise a very heavy surf. A better shelter, should we require it, might be found under the lee of some of the grounded floes, many of which we were likely to meet on our course to the northward.

"On the northern shore of the inlet stood an Eskimo camp, which we visited, and round which we walked, looking into the tents, and examining everything that seemed worth noticing, at which procedure the inhabitants seemed greatly pleased. They brought out their skins for the purpose of barter, and would have favoured us with a dance, but that our time was too precious to wait, and the light wind was favourable. After giving them a few beads and tobacco, we returned on board, and ran to the northward, keeping close along shore in from one and a half to two fathoms water. Previous to our getting up to Refuge Inlet, about ten P.M. we had seen a sail in the offing standing in for the land.

"The wind was now veering to the eastward and the ice becoming much heavier; while the shore was completely covered with snow. Large flocks of ducks and geese were continually passing us, and immense numbers of the diver tribe were generally congregated close up under the ice.

"At 1.15 A.M., Sunday 29th, passed Cape Smyth within a cable's length of the shore, and saw the main pack apparently close in to the land, and

stretching far away to the westward, as if with the intention of checking our further progress to the northward by a solid barrier. At two A.M. we hauled to the westward, as I fancied I saw a passage in that direction, and soon made out the sail we had previously seen to be the 'Nancy Dawson,' standing in for the land, close along the pack edge, with a light westerly air. . . . At six A.M. I boarded the 'Nancy Dawson,' and learned from Mr Sheddon that he had been up to 72° north, and coasted the pack down to this very spot without finding any lead to the northward—nothing but an impenetrable barrier of ice. I now stood in for the shore, with the light north-west breeze which the schooner had brought up with her, to try the channel spoken of by the Eskimos; but our progress was very slow, as we had only just wind enough to stem the current.

"I landed on the southern extreme of the ice, and got a meridian altitude, giving the latitude 71° 16′ north, and distant about five miles from the nearest land. At this point the elevation was about twenty feet above the sea, and all around to the north of west and east-south-east was one vast field of ice, studded with every variety of fantastic shapes, glittering with dazzling splendour in the warm sunshine of a most beautiful day. To the eastward lay the low land, stretching to the north, with snowy patches here and there interspersed, and a narrow belt of open water winding between it and the pack, like a dark thread on a white surface, and which I take to be the channel spoken of by the Eskimos. Their tents were now visible, and their appearance, together with the noisy shouting which the natives make in communicating to each other, offered a scene of busy life in strong contrast with the perfect calm which elsewhere reigned around, and which was broken only by the washing of the water against the ice, or the heavy splash caused by the toppling over of an overbalanced and heavy mass.

"At 3.30 P.M. we got into a deep bight, formed by the pack and shore; and as it was now blowing a fresh breeze from the northward, with a two-knot current from the same quarter, and much ice driving, I came to in four and a half fathoms, half-way between two large and heavy floes, a quarter of a mile from each other, and both aground in the mouth of the bay. Our distance from shore was a long mile, and three-quarters of a mile from the south-east point of the pack, forming the southern extreme of the western side of the bight.

"The channel leading northward appeared to commence in the very bight of this bay close in shore; but as the ice was too thick between us and it to allow of our attempting its passage, we hauled under the western and smallest floe, where we got shelter both from the increasing breeze and the ice, which was now driving to the southward through the bay with great force. At 4.30 the 'Nancy Dawson' anchored to the south-west of us, at about a quarter of a mile.

"In the course of the night the breeze freshened, and it was fortunate for us we were under such good shelter. During the entire 30th, we were confined to our position, not daring to venture with our boats from either end of the floe—so heavy was the drift, tearing and crashing past with fearful violence. The schooner was just in the stream of it, and at times completely surrounded, and heeling over with the weight when taken on the broadside. At length Mr Sheddon, by perseverance and good management, brought her up alongside of us, and shared the snug berth we had secured.

"There was nothing left for us now but to get our small boats ready, and push on with the first opportunity, for I did not expect to get the larger ones farther, so I had the whalers loaded with seventy days' provisions for fourteen men (the number we should muster), besides twenty cases of pemmican, each containing about thirty pounds. This burden sank them very deep; and when the crews got in with their small stock of clothing, I found it was rather more than the boats could bear. A weight of provisions, amounting to ten days' consumption for each man, was then taken out of each; and I determined, besides, if an opportunity should occur, to take the large boats on to Point Barrow, or even beyond it, if I should see sufficient reason to satisfy me that the ice would continue in a sufficiently open state to allow of their return. On overhauling our provision, I found we were short of bread. Mr Sheddon having been informed of our want, immediately supplied us with two bags, as also with a pickaxe and shovel, articles we should most certainly want for the purpose of making deposits; and at the same time offered to supply us with any description of store we might require, as he had an abundance of every sort on board.

"The morning of the 31st set in with a thick and heavy fog, the wind being still from the old quarter, and as much ice as ever driving past our breakwater and pressing heavily on its weather side. At seven A.M. the fog broke away; and at eight A.M., between the heavy pressure of ice and our weight to leeward, our friend the floe parted with a crash, and set us all adrift. We were soon under sail, turning to windward to fetch the large floe which lay on the eastern side of the bay, but were obliged to wind and turn about so much, to avoid contact with the loose ice, that it was past ten o'clock before we could manage it, although the two floes lay only half a mile distant when we parted, and that one to which we were directing our course was less than a quarter of a mile to windward. The schooner being heavier, was not so easily managed among the ice, and it was half-past twelve before she got alongside of us again. Turning to windward, and winding amongst the loose masses in gallant style, Mr Sheddon came up safely, and immediately sent his carpenter to repair some slight damages we had sustained in the crash. Towards evening the wind became moderate, with less drift-ice, and the channel apparently clear; so at 6.30 P.M. we cast

off from the floe, parting from Mr Sheddon with mutual good wishes. He was evidently thinking of taking his vessel on, but I strongly recommended him to attempt no farther advance—unprovided, as he was, for wintering, in the event of being caught by the ice.

"The whale-boats pulled up in-shore, while the larger ones, aided by the smooth water and moderate breeze, nearly worked up as fast, when at nine P.M. the wind had hauled so much to the eastward, that they were enabled to take the whale-boats in tow, and make a good lay along the shore. We were now fairly in the channel (which we found varied from three-quarters to half a mile in width, the water being smooth, and the drift-ice very trifling); all in good spirits, and—as appearances then went—having a fair prospect of reaching Point Barrow by midnight at the furthest. The sky was beautifully clear; but a heavy wetting dew that then fell made the evening cold and chilly—the thermometer stood at 33½°. The shore was crowded with Eskimos—men, women, and children turning out—singing, dancing, and shouting at the top of their voices, and trying every inducement to make us land. They followed us on, their numbers gradually increasing. In a single group I counted forty-six, among whom was one immense fellow, completely topping all the rest, and at the least, I should say, six feet and a half in height. As we were not more than a couple of hundred feet from the shore, we could see plainly, and at times went so close as to be able to make out the differences of sexes, though their dresses are so very similar that it is only by the blue lines on the chin of the women that we could at times distinguish them.

"At eleven P.M. it was quite calm, and close ahead of us was an immense floe stretching directly across the channel, completely barring our farther progress, and upsetting all hopes of reaching Point Barrow this night, while the fog at the same time closed thickly around us; so we hauled in to the shore, securing by, and under, the lee of a projecting piece of ice. We were hardly fast when a number of natives sat down in our vicinity, and began pestering us with their barter; however, they were friendly, and behaved very well, only obliging us to keep a sharp look-out, for the most trifling article seemed so attractive that they would use their best endeavours to become possessed of it.

"On Wednesday morning, the 1st (August), the ice had driven off shore a little, and the fog all disappeared, when, partly under sail and partly by tracking, in which the natives readily assisted, we advanced slowly until eleven o'clock, when the channel was so effectually blocked up by the ice from the shore to the main pack, as far north as the eye could stretch, that I saw no possibility of getting on, and I really thought our farther advance was entirely checked, and we might have to return to the vessel quite unsuccessful. I was greatly disappointed, for I had hoped to reach Point Barrow,

at least, without any difficulty; but as regretting would do nothing for us, I hauled in for the land and secured, determining, if to-morrow I should see no change, to haul the whale-boats across the narrow strip of land into Elson's Bay, and push on in that direction. The wind was now from north-east, but light; an increase might drive the ice to a sufficient distance off the land to enable us to proceed, or a southerly wind might start it altogether, as a great quantity of it was shore-ice and very much decayed. At 11.30 A.M. I landed among a large concourse of natives, who, directly they found we wanted firewood, collected and brought us a large quantity, and were in every way friendly. Such behaviour I could not pass over without notice, so got them all seated in a ring, and, with our small stock of Eskimo, made them a speech, saying how anxious we were to be peaceable with them, and how eagerly we hoped that the good feeling now existing would continue. I then explained the errand on which we had come hither, and expressed my hopes that they would lend us their assistance. By means of the words 'Kabloonan teyma mueet' (white men friendly to the Eskimos) and signs, we managed to make each other understood. Mr Hooper was a famous auxiliary on these occasions, so the interpreter was not much missed. I distributed among them beads, tobacco, and two or three knives, the latter of which I was at a loss how to bestow, wishing to give them to the chiefs; but as I could see no mark of distinction among them, I gave one to a woman who had a swelled face, from a severe blow received in carrying firewood for us, and the others they scrambled for—at which they were as much delighted as at the receipt of other trifles. The latitude at noon was 71° 20′ 30″ N., about three miles south of Point Barrow, which just then I saw no possibility of reaching.

"After dinner we hauled the boats close up to the ice, and endeavoured to force a passage, but it was too firmly set. I then pulled along the edge up to the main pack, and into many indentations; but the whole composed one solid mass, some parts aground in as much as five fathoms water. I then returned to the boats and landed with a party to walk across to Elson's Bay, but before we got thither such a thick and wetting fog had closed around us, that, on reaching its shores, we could not see half-a-dozen yards in advance. On our way we passed through a native village—a great many of the people accompanying us; and as we were returning more had assembled round a turned up oomiak, to leeward of which the old men and some others, who apparently were chiefs, seated themselves, while the younger of both sexes danced for an hour, or at least as long as we remained with them, under the direction of the elders. They did not, as Simpson witnessed, form in a circle, but stood in two lines—two men and three women, the latter in front—all dancing together, and the women being constantly

replaced by others as they tired. The motions of the men were vigorous and energetic, commencing slowly, accompanied by the voice, quickening as they got on, with shouting and jumping, as if imitating the chase and encounters with the monsters of the deep; whereas that of the women was a slow stepping motion, accompanied by movements of head and hand, which, in some of the young damsels, were not ungraceful. The music produced was from an instrument made by stretching the intestines of a seal over a circular frame, so as somewhat to resemble a large battledore. It was beaten with a stick, and when accompanied with the voice in a low monotonous chant, did not sound inharmoniously in the distance. The first time we heard it was on the evening of the 31st, as we were running along the coast, and, at the distance we were from them, the sound was really pleasing.

"On our return we were stopped by a few people, among whom was a man, one of whose hands had been severely wounded while he was engaged in hunting. He was very desirous I should do something for it, and followed us on to the boat, where I gave it a good washing with warm water, and did whatever my small experience to alleviate his sufferings suggested, and finally bound it up; this relieved him at all events, for before he seemed suffering much pain, but when he left us it was with a gratified air.

"The weather was now perfectly calm, with still the same heavy impenetrable fog hanging round us, when, shortly after getting on board, we heard the report of a heavy gun to the southward, which we answered with a light three-pounder which we had mounted in the 'Owen.' I was in hopes it might be either the 'Herald' or 'Plover,' but after pulling about a mile in the direction, saw the schooner 'Nancy Dawson' looming through the fog, having just anchored. I went on board, and Mr Sheddon said it was his determination to follow us on as far as possible, in spite of all difficulty. At eleven P.M. the wind sprang up from south-east, and at midnight the ice was driving northward. At two A.M. a large floe came athwart the schooner's hawse, and drove her close in to the shore, but as it hung by a projecting point south of her, she did not take the ground. I returned to the boats and found our obstructions on the move, breaking up with heavy crashes, and driving to the northward with a current of at least one knot and a half an hour. At 5.30 A.M. it so cleared, and the fog so well dispersed by the increasing breeze, that we cast off and made sail, threading our way through the loose masses, receiving occasional bumps, till at seven A.M. on the morning of the 2d we rounded Point Barrow, and anchored in two fathoms water, one hundred feet off shore, with mingled feelings of delight and gratitude to the merciful Providence which had conducted us thus far in safety;

and with a silent prayer for a continuation of the protection and aid which had hitherto been vouchsafed to us."

At Point Barrow, Mr Pullen was obliged to reconsider the situation in which he found himself placed from all points of view. "Now was the time," he says, "to decide on my future operations—whether to make a bold push for the Mackenzie with the whalers, or attempt a portion only of the distance with all. I learned from the Eskimos that the ice was open for boats the whole way along the coast; with their information, which I have generally found correct, and what I could now see, and have experienced, I was for the former; but the consideration that if we should not be able to return, and should, in consequence, be obliged to seek the Hudson's Bay posts, the provision taken in the whale-boats would never hold out for the winter, formed in my mind an almost insuperable objection to such a course, for I knew not of the possibility of establishing fisheries. However, it was only a momentary apprehension, which was entirely removed by an opportunity, now afforded and eagerly embraced by me, of purchasing a large oomiak from the Eskimos, which would enable us to carry a greatly-increased stock of provisions, and I could not doubt, with the aid of that Providence which had brought us thus far in safety and our own good-will to the work, of being other than successful in reaching the river. At the same time, I determined on taking the large boats on for one day, as I saw nothing as yet to prevent their return."

On the evening of the 2d August, the expedition again started to push on eastward. "As we were on the point of leaving," says Pullen, "Mr Sheddon, with two of his men, appeared, having landed two miles to the southward and walked up the coast. He came on board, and again offered any supplies we might require, but as we had everything necessary, I could only repeat my thanks for his kindness and for the service he had already rendered us. He said he should either remain here for the return of the large boats, or wait off Refuge Inlet, where it was his intention to make a large *cache;* and every day at noon, after the 14th of August, he would fire a gun as long as he remained in sight of the ice. At 11.30 P.M. we parted, with mutual good wishes for each other's success—he for his vessel, then not more than a mile from the point, and we to the eastward, with a light southerly wind and easterly set. It was the last time I saw him alive.

"Our course was rather a devious one, being among the loose ice and quite out of sight of the low land of Elson's Bay. At noon of the 3d we were in lat. 71° 17′ N., long. 155° 08′ W., running with a moderate but increasing breeze, by the aid of which, and of the current, we made rapid progress, and shortly got sight of a low gravelly patch, being the westernmost of a chain of small islets, marked in Simpson's chart as ex-

tending from Point Tangent to Boat Extreme; we coasted them along in a depth of from one to two fathoms, the ice in several places close down and piled up, looking at a distance like high bold cliffs, and betraying its true nature only as we passed close to it. The southerly wind was evidently driving the loose ice off shore, leaving a clear open space; and at 2.30 P.M. we anchored in five feet water, about two hundred feet off the northern shore of one of the islets, in a heavy squall accompanied with rain, and commenced to load our small boats, and make every preparation for proceeding now only with them. . . .

"The morning of the 4th set in with dark heavy weather, with occasional fog and rain and wind flying about from all quarters of the compass, but in the evening it settled at south-west, and as our three boats were ready, I determined on starting. . . . In the meantime, I mustered the men into their respective boats, which I named as follows, viz., first whaler, 'Louisa;' second whaler, 'Logan;' and oomiak, 'Supply;' and found they contained at least ninety-four days' provision for fourteen men, besides twenty cases of pemmican, each case containing about thirty pounds; and that, notwithstanding the large amount we carried along with us, we still left with Mr Martin in the large boats a three weeks' supply. Our little craft certainly swam deep, but we were all determined to put up with every inconvenience and hardship in the hope of succouring our gallant countrymen; and I do not think a man of the party had the remotest idea that we should not get on. Certainly I would not have put such cargoes in such small boats under any other circumstances."

It being now impossible to proceed farther with the two large decked-boats of the expedition, Lieutenant Pullen placed these in charge of Mr Martin, second master, who received full instructions to take them back to the winter quarters of the "Plover." The Mackenzie River expedition then numbered fourteen persons, including officers; and these were distributed—seven in the "Louisa," six in the "Logan," and one to steer in the oomiak "Supply," which was towed. The onward expedition separated from Mr Martin and the return boats on the 4th August, and steered for the eastward. On the 5th, Dease and Simpson's "Boat Extreme" was passed. Here the shore was found to be low and swampy, and the country behind formed a vast treeless plain, covered with short grass and moss. On the morning of the 10th, after having crossed Harrison's Bay, the two whale-boats and the "Supply" oomiak got among quantities of driftwood streaming to the northward with the ice. "Since midnight the wind had been increasing, creating a nasty cross sea, which caused our poor little craft to labour heavily, and ship much water; and as the soundings gradually lessened from three and a half to one fathom, all hands were anxiously looking for the land. At 2.30 A.M. the 'Supply' parted her tow rope, but we secured her again; and

at three A.M. sighted land, lying very low, which, from the shallowness and great discoloration of the water, and the quantities of driftwood which lay around us, I took to be near the mouth of the Colville. At 3.15 A.M. the water had shoaled to two feet, and before we could haul off we grounded; then poled into deep water, and pulled to the northward. Our situation now became rather critical, with such a sea on and the land barely in sight. We accordingly bore away south, to try for a landing at all risks, dead lee-shore as it was. At 3.40 A.M. the 'Supply' pitched under, and from the weight of water on her head sheets, broke off the rail, and tore the skin nearly down to her water-line. As the whalers were not in a much better condition, or able to relieve her of any of her weight, I reluctantly gave the word to lighten the boats, but we threw overboard only the bread, etc., that had been damaged while we were crossing Smith's Bay on the 5th. The boats felt the relief directly, and bounded on to the distant shore with increased speed, reaching it at 6.30 A.M.; and we succeeded in landing on a low, gravelly beach, on the eastern shores of Harrison's Bay, in lat. 70° 28′ N. We hauled up and cleared immediately, and on examining the stores, found that 250 pounds of bread, seven cases of preserved potatoes (about 190 pounds), and a ten-gallon cask, had been thrown overboard.

"This was quite an unavoidable calamity, for even before the things had been consigned to the deep, I had hardly expected to see the 'Supply' keep up much longer, far less to reach the shore; and, could I have foreseen such an occurrence, I never would have attempted to cross the bay in so direct a line. When we left Cape Halkett there was no reason to expect such weather; and by making a straight course, we should avoid the shoals of the Colville, which Simpson had such difficulty in clearing; as it was, we did not escape the outer points of these. We had certainly great reason to be thankful to Him who orders all things for the best; and it now became our duty to determine to be extremely economical in the consumption of that portion of our stores which still remained to us. The worst part of the voyage I considered over, for there were no more of these deep bays to cross; and I hoped to be able to keep the shore close the remainder of the way. At ten A.M. the weather cleared a little, and the sun favoured us with his cheering warmth, raising the thermometer up to 47°, of which favourable event we took advantage by exposing our wet bread, clothes, and bedding. Of the latter articles, indeed, our stock was very limited, for where provision was the main object, and took up so much room, we thought of little else on leaving the vessel, and amongst the fourteen we could not even muster a blanket. I often found it a difficult job to manage a change if any of my things got wet, or to keep myself warm, particularly when I was sitting in the boat.

"After breakfast I sent the men to have a sleep, and at one P.M. got

them all busy again putting things to rights—the carpenter repairing the 'Supply'—till at eight P.M. we were all ready for another move, with both wind and sea considerably abated. While the men were employed, I walked along the beach to the northward, and, on turning a point, saw, about three miles off, a large native village. As I did not wish to have the inhabitants among us while all our things were spread out, I turned back immediately. . . . The Eskimos on the point soon got sight of us, and assembled, making the usual friendly signals.

"This point, from the latitude I got yesterday, I considered as Point Berens, the most eastern horn of Harrison's Bay, where I intended burying pemmican—which would not only be a relief to our boats, but, as the point forms a very conspicuous object, would most likely be visited by any of those we are in search of, if they should get down on the coast. We therefore landed among a noisy group, and were received, as usual, with every demonstration of friendship. A brisk trade in wild geese, moccasins, and fish, was carried on, after which I made them the usual present, by which means they were kept away from the party who were making the *cache*. . . . The mark, of course, we could not hide: it was a pole fifteen feet in length, with a double cross on the top, and a board underneath, with the following notice carved on it: '"Plover's" boats arrived here on the 11th of August 1849; ten feet N.E., search.' At that distance were deposited three cases of pemmican, with the following notice in a preserved-meat tin: 'The "Plover's" boats arrived here on the 11th of August 1849, on their way to the Mackenzie, with relief for, and in search of, Sir J. Franklin and party, with orders to return, after visiting Point Separation, so as to reach the ship by the 15th of September. If not able to do so, will go on to the Hudson's Bay posts on the Peel River, or to Fort Good Hope, thence on to York Factory, and report proceedings as soon as possible to the Admiralty. The boats left the ship on the night of the 25th of July; Point Barrow, night of the 2d of August; and this the same day (11th August). The "Herald" is also in the Arctic seas; brought provision up to the "Plover," and will see her in her winter quarters before she returns south.' On preparing to leave the Eskimos we missed the shovel, and, on looking round, saw one of the natives standing close to the direction post, away from the others, and endeavouring to conceal something. I walked up to the fellow and gently tried to move him, as I was certain the missing article was underneath. The thief resisted, but Mr Hooper passing his hand into the sand, pulled out the shovel, greatly to the Eskimo's mortification. On getting into the boats, the natives seemed very much inclined to make a rush on us, and the same man made another attempt to accomplish his desire, by holding on to the boat with one hand and seizing the shovel with the other. He was at last forcibly shaken off by one of the marines.

"Proceeding eastward for about two miles along a low sandy coast, we endeavoured to land to examine what looked like a signal mark, but owing to the shoal water, could not get within a quarter of a mile. However, as we advanced farther, we saw from another direction that it was not such a signal as should lead us to suppose that white people had been there. Farther on again, a mark more conspicuous than any we had yet seen attracted our attention, and we landed a short distance west of it, but found after all it was just such a one as we had before seen, except that it was a little larger. Here we dined, and were shortly after joined by a party of Eskimos landing from an oomiak, among whom we recognised a woman, and also the man who had attempted to steal the shovel that morning. We did not allow them to infringe upon our boundary line this time, and watched them quite as closely as they did us. We shoved off, leaving our friends behind, and with a light air from north-west, followed the shore as close as shoal water would allow us; and when abreast of the western part of the eastern isle of Jones's group, hauled over towards it. The mirage was now very strong, objects assuming ever-varying and distorted shapes; and when half-way across the channel, between the islands and the main, I was so firmly convinced in my own mind that a large boat was coming in from seaward under sail between the two islands and towards us, that we down sail directly, pulled out for it, and did not discover until having approached it, considerably to our disappointment, that it was a small piece of ice, of which there were great quantities close down on the northern shores of the islands.

"Soon after we saw the oomiak, much farther to the westward, paddling up towards the islands. I supposed the Eskimos were going out after seals. At 8.30 P.M. we landed on the southern shores of the eastern isle about half way along it. It was now quite calm, and as I intended to go on all night, we got supper. While the men were lying round a large fire, getting a little sleep before starting, we were visited by a party of natives, none of whom we had seen before. Among them was a man, apparently a chief, with a musket of English manufacture, having the name 'Barnet' on it. He had also a powder-horn and about a quarter of a pound of powder, but no shot. He was very proud of his treasure (which, however, looked rather the worse for wear), and was very desirous of getting more ammunition. He fired off his musket twice as if to show that he knew how to use it; but it was not done without great preparation, such as planting himself firmly on his legs, tucking up his sleeves, and throwing back the hood of his frock. Indeed, the second time he fired he threw the hood off altogether in order to be quite clear of it. I gave him a charge of powder, and to the rest, as well as himself, a few beads and pieces of tobacco. Great shouting was now heard, and as it soon became evident that there were many more natives approaching, I roused the men up, got into the boats, and at 11.30 P.M. pushed off.

"As we pulled to the eastward we saw four more oomiaks full of people, and two large camps or villages, one on a point abreast of us, the other, and the largest, on the first point westward of Point Beechey. Although the weather was calm, there was every appearance of a change, as we could see heavy clouds banking up to the north-east, and this made me very desirous of getting out of the vicinity of such a number of strapping looking fellows as were now about us. There were five oomiaks; in one I counted twenty-three people, two of whom were women. None of the others contained less than sixteen, and they all seemed very desirous to get alongside of us, shouting and talking as if displeased at our keeping such close order, and such a sharp look-out on their every movement.

"We passed very close to the large camp, and the oomiaks followed us a short distance beyond it, when, finding none of their persuasions would induce us to land, they turned back, and, I hoped, had left us for good. It was now one o'clock on the morning of the 12th, and we had a good breeze from north-east, which by two A.M. had so much increased, and the sea with it, that we were driven to the shore and landed on a very shallow flat beach half-a-mile west of Point Beechey. We had not been long here when the natives came to us in numbers, walking along the shore from the large camp, which was about two miles distant, and from which they must have evidently watched us. I should say there were not less than eighty men and women, among whom was the chief mentioned above, with his musket carried by his wife, as well as the man who tried to steal the shovel at Point Berens. I judged from the pertinacity which this man evinced in following us, that it was his intention to make another attempt to steal something, or perhaps attack us; but although I felt perfectly at ease, seeing no arms among them except their knives, I had everything ready to embark at a moment's notice, and Mr Hooper's double-barrel, as well as my own, was always loaded and at hand.

"A boundary line was drawn, and all were seated quietly on their proper side, preparatory to a distribution of presents, when the chief stepped towards us with his musket, making earnest demands for powder, a request I would not comply with, and accordingly motioned him off. As soon as he found he could not succeed, he gave his gun to his wife, walked a few paces towards a projection in the bank, picked up something there secreted, which we soon discovered to be his bow and arrows, and returned, and at the same time all the men in the company acted in a similar manner. This I considered as almost a declaration of war, and therefore ordered the breakfast (which was preparing) into the boat, and the 'Logan' and 'Supply' to shove off into deep water—Mr Hooper, the two marines, and myself, keeping a sharp look-out with musket in hand, while they were about it. The chief now tried very hard to get on the bank—rather above us—but that we prevented.

As soon as we found a favourable opportunity, the remainder of us moved to the 'Louisa.' The Eskimos immediately made a rush for the bank, hoping to catch us at a disadvantage; but we were too quick for them. We got into the boat, and shoved off, some of us always keeping our fire-arms at the 'present,' and soon joined our consorts. One fellow had the arrow on the string, and his bow at full stretch, directed at me, when fortunately I saw it, and covered him immediately. As soon as the rascal saw this, and perceived besides that my gun had two barrels, he thought better of it, dropped himself and weapons down out of sight in a moment, and did not show again.

"This embarkation was effected with the loss of our cocoa and boats' anchors, which the bow-man in his hurry had forgotten, until it was too late to pull in again; and what was of more importance still, with the additional inconvenience of losing part of the distance we had gained, for the wind was now strong against us, and we were obliged to run back very nearly to where we stopped the night before. Here, to lighten the 'Supply' (nearly full of water), I ordered three cases of pemmican to be taken out of her, and buried on Jones's eastern island, at its south-east part, under the bank, where it falls directly off to the gravelly beach; but before we could either get bearings or erect marks, the Eskimos were following us up, landing about a quarter of a mile to the eastward, fully armed, and bent on mischief.

"I felt very unwilling to come to extremes with these people, because if blood should be once shed, there was no knowing where the matter would end; and as they might take an indiscriminate revenge on any weak party of Europeans who might happen to travel in that direction, I considered it better to get out of their way if possible. They appeared to be a daring set of fellows, but, as far as we were concerned, I did not feel under any apprehension for the result should it come to the worst, although they mustered very much stronger than we did, and appeared to gather much confidence from this circumstance. But we had fully observed their dread of the musket, and, as they had only seen a few, I could not help thinking they imagined we were not all armed. Those who came from Point Berens, I think, were urging them on, for 'Shovel Jack,' the name bestowed by the sailors on the man who attempted to steal the shovel, generally appeared amongst the foremost. Under these considerations we shoved off, and I thought we might attempt to get up to the main pack, distant about two miles, with quantities of drift tossing about with the gale in wild confusion between the main ice and the northern shores of the islands. Thither I did not think they would follow us, and we might get along easily under the lee of the ice. We rounded the eastern point of the island, all stringing on together, and were soon followed by two oomiaks (twenty men in each), which occasionally ranged up abreast, crossing both ahead and astern, but at

a respectful distance. The Eskimos were, of course, watching an opportunity for attack, and I fully believe they would have attempted it, if they had seen us for a moment off our guard.

"The men tugged hard at the oars for an hour without making any very great progress, and as their efforts merely seemed to fatigue them, I gave it up and bore away again, landing this time on the weather shores of the island, on the long gravelly beach extending from its eastern part, about 9.30 on Sunday morning. My reason for thus landing (although it was through a nasty surf) was, that the Eskimos might not have the slightest advantage, in the event of an attack, for their arrows would have had a better flight from a weatherly position—and they themselves before had tried to gain the point. Directly the boats were hauled up, we built a breastwork of drift timber, quantities of which were lying about, and got all ready to resist any attack they might make. The two oomiaks landed nearly about the same time, a quarter of a mile to the eastward of us; but a larger number of men had already done so at a point to the westward, placing our small band completely between two parties, mustering together, I should say, not less than one hundred strong. Two men from the eastern party, and one from the western, were now seen approaching us, making sundry deceitful demonstrations of friendship; but as soon as they saw our formidable preparations, and observed the armed sentinel on the rise, they sat quietly down under the lee of a few logs to watch us, until the patience of all seemed fairly tired out. At two P.M. they left, both bands going off to the main, and we saw them no more that day. . . .

"On the morning of the 13th, the wind had considerably abated, but was still fresh, with a dense fog, of which I took advantage to get away from our troublesome neighbours. At two A.M. we embarked and pulled directly up for the pack, reaching it at four o'clock, and making fast to a large floe close by. Here we had no firewood, spirits of wine were therefore brought into requisition as fuel, and while breakfast was preparing, I lay down in one of the boats to try and get a little sleep, and, in spite of the cold, was just dozing off when I felt myself falling. I at first thought it only a delusion, but, as the sensation continued, I roused up, and found that a large piece of ice had broken off from the main body, and had risen directly under me, and I was just in time to save myself and all that was in the boat from being turned out into the water. This misadventure completely upset my sleep for that time at all events. . . . We got our breakfast shivering with cold, and almost dripping wet with the spray and damp fog. . . .

"We had finished dinner, and were getting the things into the boats again, when we saw two oomiaks paddling up to the reef, and about forty men (fully armed) landing a quarter of a mile to the westward of us. They made towards us, discharging their arrows as they came within distance, but

by that time we were pulling off; nevertheless, some of their arrows dropped very close about us. Mr Hooper and I returned them by firing over their heads. The second time they discharged their arrows we were out of range, for they all dropped astern; and by way of farewell we fired again, our balls falling very short, and made sail, quite satisfied to have escaped all injury ourselves, while we had done nothing more than give our antagonists a good fright. The rascals, on seeing our muskets pointed at them, cut so many capers, that it was impossible for us to take aim, and directly they saw the flash, they dropped on the ground, hoping, by so doing, to avoid injury. Had they come ten minutes sooner I do not think we should have parted so scathless, for on such a small field our fire-arms would have told fearfully against them. . . .

"With a west-north-west wind we went along cheerily; passed Yarborough Inlet; ran between Chandos Point and the small island off it; passed Point Anxiety, near which the wind fell calm; and at midnight landed on a low shingly beach, extending west from the northern part of Foggy Island, tired and weary, but rid at last of our troublesome companions, after two days and a night of constant watching, wet through the greatest part of the time, with the thermometer ranging between 35° and 40°, the latter of which temperatures we considered comfortably warm."

After a day of tracking and pulling, the expedition encamped, on the night of the 15th August, on a low headland immediately east of Point Bullen. Flaxman Island, about midway between Point Barrow and the mouth of the Mackenzie, was reached on the morning of the 16th. The eastern part of Flaxman Island is high and bold, falling off abruptly to the low gravelly beach, on which, from the lofty bank above, Pullen could see his men disposed in groups, some preparing dinner round a large fire, and others tending the boats or enjoying a nap after their morning's work. A dreary expanse of ice extended around, stretching far eastward into Camden Bay. The oppressive silence of the scene was broken only by the occasional disruption and fall of heavy masses of ice, which broke off from the main body with a reverberating sound like distant reports of artillery. On the island were many bleached remains of natives long dead. Pullen selected one perfect skull and placed it in the boat, where the sailors made use of it as a "match-tub." On the 18th the expedition was arrested and detained for a day on a small gravelly spit off Point Martin by a gale accompanied by dense fog. The enforced delay afforded the men an interval of rest, which was much required. Their hard work was now beginning to tell upon them. Their labours usually commenced at six A.M., and continued till nine at night; and during the whole of that time they often worked in clothes that were thoroughly drenched. After such a day, and when the camp fire was lit on the shore and the tent set up, a watch was always set, and those appointed to this duty obtained little or no sleep. "Indeed," writes Pullen, "I very

often saw them sleeping on their thwarts, and seized the opportunity, when passing close to ice, of bringing their oars in contact with it and rousing them by the shock." Few of the party were now free from colds, and one of the men was seriously ill. Meantime all the medicine that had been brought away from the "Plover" had been completely destroyed by wet. After a miserable day of rain and fog, the weather cleared on the 20th, and the boats began to make way satisfactorily. At two P.M. Pullen landed on the western part of Icy Reef, and was visited by a family of natives, the women of which wore their hair in the immense top-knots described by Franklin. These natives had neither seen nor heard anything of the missing expedition.

In the course of his voyage eastward along the Arctic shores, Lieutenant Pullen had many opportunities of noting the thievish propensities of the Eskimos, and the perfect good-humour with which, on detection, they give up the article they have stolen. These traits he thus illustrates: "The morning of the 21st set in with a very thick fog and a light north-west air. After I had examined the thermometer, which stood at 35°, I put it down outside the tent, and turned my back on it for a moment. When I looked towards the place where I had left it, I immediately missed it. Several Eskimos were about at the time—one or two very near me—and, thinking one fellow looked more satisfied than the others, I taxed him with the theft. He very quietly took the instrument from under his arm and handed it to me with a smile, thinking it a matter of course, I suppose, that he should take anything he saw about, if it could be done without detection. This, I believe, is their general idea; and it was not the only time in the course of our voyage that I missed things, and had them returned in the same way by the thief, who invariably assumed a perfect unconsciousness of any wrong. The women are the worst on these occasions; whether they are urged on by the men I cannot say, but I think so; at all events, if the husbands, having got the article away, are suspected, and taxed, their better halves are always sent for it, as in the following instance, which occurred one morning when we landed by Stokes Point. While the men were preparing breakfast, I had a pewter cup and basin filled for the purpose of performing my ablutions, but I changed my mind as to the locality where I should wash myself, in order to have a more refreshing purification at the lagoon, which was near. The kettle was filled from a part not far off, but in consequence of the muddy shores I gave up the attempt to bathe, and returned to my original place, when I missed the cup. A family had joined us on landing, and I charged them forthwith with the theft, appealing to the eldest man for the restitution of the missing article. After a little talk, he spoke to one of the women, who walked to their oomiak, which lay about two hundred yards off, and returned, bringing the missing cup, and laying it

quietly down where it had been taken from, as if nothing extraordinary had happened."

"Blessed is the country whose annals are dull." If it is so also with exploring expeditions, that of Lieutenant Pullen has, in parts at least, special claims to blessedness. After leaving Icy Reef on the 22d August until he reaches the Mackenzie, he has little of interest to relate. Each day seems to have been, to a great extent, a repetition of the preceding one. Successive storms, comfortless encampments, more or less satisfactory interviews with Eskimo families or tribes, form the too familiar matter of this portion of the narrative. The following sketch, however, of the geography, etc., of the coasts eastward from Point Barrow has a scientific importance apart from its value as testimony based upon personal observation: "The coast, from Point Barrow eastward, is low and bare, hardly ever exceeding a rise of fifteen feet, and that only in some places, until you pass Point Kay, when it attains an elevation of from sixty to seventy feet as far as the western entrance of the Mackenzie, the islands about whose mouth are low and covered with dwarf willows. Westward of Harrison's Bay the country appears to be uniformly level, consisting of one immense plain, covered with short grass and moss, and close to the coast, intersected by small lagoons of brackish water. The substratum close along the coast appears to me to be composed of nothing but ice, covered with a dark vegetable soil, from two to three feet in depth. This theory we had frequent opportunities of testing, where large masses were separated by thaw, and once in particular on Flaxman Island. Along the coast, in many places, are long, low, narrow beds of gravel and sand, forced up by the pressure of ice, inside of which we seldom found water for our boats. The Return Reef is the eastern part of a chain of the same description, extending onwards till it comes abreast of Point Beechey. The Escape Reef is coarse sand, with long wiry grass on its western part. The Lion and Reliance Reefs are islands, the northernmost, or outer one of which has at least ten feet of elevation on its sea face; and stretching west from it for about one mile is a low gravelly beach.

"On all these banks, as well as the coast eastward of Harrison's Bay, large quantities of driftwood are to be found. Currents or tides are generally influenced by the wind. About Point Barrow, in calm weather, the flood comes up from the southward, and sweeps round the point to the eastward, and the ebb retires from the eastward. About Herschel Island, and as far east as Escape Reef, there appeared to me to be a set from the northward; and it was here we encountered the heaviest sea, and found the most open water. The bay on the south-west shores of Herschel Island was the only place like a harbour I saw along the coast. The Eskimos appear the same all along the coast; the only difference I noticed was the manner in which

the women arrange their hair. All the tribes west of the Icy Reef wear it short and loose, those to the east of it have it long and tied up on the top of the head in large double bows, which, by Sir J. Franklin, are called top-knots. The greatest number we saw together were congregated near Point Beechey, and this was the party with whom we had the brush."

On August 30th the expedition entered the Mackenzie, but progress, by tracking along the banks, was exceedingly tedious, as the wind was dead against the boats, and a two-knot current offered additional opposition. All hands, however, were in good spirits, and even the sick man brightened and rejoiced at the thought of leaving the dreary and desolate coast. "Our general course," writes Pullen, "was about south-west, till at nine A.M. we got into a broader stream trending east-south-east, and from this point we may fairly consider the ascent of the river to have commenced." Winter had now fairly set in. Snow continued to fall in successive heavy showers, and the wind swept over the river in gusts. The cold was intense, and Pullen and his men, who, while the wind was favourable, sat cramped up in the boats, felt it very severely, and were often compelled to steer for the shore and have a brisk run on land to warm themselves. The higher parts of the country were now covered with snow; "but," says Pullen, with scarcely perfect scientific accuracy, "we had this consolation—we were making a southerly advance, and approaching a somewhat milder climate." On the afternoon of the 3d September, Pullen entered Peel River. On the morning of the 5th he saw on the right bank of the river "something that looked like a congregation of huts; but, on a nearer approach, when we got clear of the influence of mirage, I perceived that it was something more substantial, assuming quite the shape of a strong and permanent building. Shortly after coming round the point of a spit, there appeared a boat, pulled by white people, accompanied by a small fleet of canoes, and as we closed with the former, we were welcomed by a Mr Hardisty, the gentlemen in charge of the Hudson's Bay post, who transferred himself to our boat. At ten A.M. we landed at the fort, with hearts full of gratitude to the God of all mercies for His protection in our long and perilous boat voyage."

But all difficulties had not yet been surmounted, for, on making inquiries, Pullen was informed that it would be impossible for Mr Hardisty to maintain the whole of his party at the fort during the winter. He could provide for five or six of the exploring party, but the others would require to go on to Fort Good Hope, and winter either there, or at Fort Norman, or Fort Simpson. Pullen accordingly left Mr Hooper with five men at the fort, and taking with him the remainder of the men, and twenty days' provisions, he set sail in the "Logan" and "Supply." Their course was down Peel River, a distance of ten miles; they then entered a more easterly branch, and at about seven A.M. on September 7th, they came out upon the broad

bosom of the Mackenzie, six or seven miles to the westward of Point Separation.

"At 12.30," writes Pullen, concluding the narrative of his explorations for 1849, "we landed on Point Separation, and opened Sir John Richardson's *cache*, in which were deposited a large case of pemmican, and a note dated July 31st, 1848; with these I placed three small cases (equal to the large one in weight), and a note of my proceedings—closed all up again, and proceeded, crossing to the right bank, and commenced tracking up the river. Sir John's note gave me to understand that we were to go on to Fort Simpson and winter on the Great Slave Lake, and that Fort Good Hope might be reached by tracking in five days. Until our arrival at the Peel station (Fort M'Pherson), I had been labouring under the idea that it would take us only a day and a half, for this time was specified in my orders. After these proceedings, we stepped out with a good will over a shingly beach; but how long the men would be able to keep up the pace they were now at was a subject of anxious speculation to me. I did not expect a long continuance of it, as the work is of a nature to which they were utterly unaccustomed; and, besides, they were equipped with heavy sea-boots, an article quite unsuitable for walking in during any long period. On the morning of the 11th, I determined on abandoning the 'Supply' (oomiak), as she was impeding our progress very much. Sorry I was to do so, for I had hoped to carry her to England as a specimen of the naval architecture of the western Eskimos, and for the good service she had rendered us. But there was no help for it, and I had yet to learn that we could take none of our boats much farther with us, as they were not adapted for the river work. The 'Supply' was certainly a great drag on the trackers, who were beginning to feel the work terribly, for the beach frequently and for long distances no longer consisted now of light shingle, as we had first found it, but was composed of heavy round stones, which were the source of continued annoyance and of frequent heavy falls to the sailors as they marched on in their cumbrous boots. The skin of the oomiak was stripped off, cut into three pieces, and, together with other stores, stowed in the 'Logan,' making her lie very deep in the water, particularly when nine men got into her, but then she was lighter on the line, and we certainly got on faster; and as a strong breeze now sprang up and continued all day, our distance from our destined goal was considerably shortened by evening, when we stopped to encamp. While the wind continued, we dared not keep any distance from the shore, for fear of serious consequence to our boat in her loaded state, for the strong breeze against the downward current raised a sea quite heavy enough to overwhelm a much larger craft than ours, and not a little alarmed our pilot (an Orkneyman), who styled it 'very wrothy.' This we might have avoided, certainly, if we had left the skin of the 'Supply' behind; but,

considering that it would make good tracking shoes for the men, I did not like sacrificing so useful an article while there was a possibility of taking it on. On the 14th we met the Company's boats on their way to the Peel with winter supplies, and also Mr Peers, who was to supersede Mr Hardisty on his arrival. I informed that gentleman of the number of men I had left at his post, and the quantity of provision with them, hoping they would not cause any distress during the time they might remain. Mr Peers's reply gave me no reason to think it would be necessary to send them to another post. He told me, also, that the river would close up in three weeks; we then parted, and the same evening I arrived at 6.30 at Fort Good Hope. Here we were cordially welcomed by Mr M'Beath, the gentleman in charge; and as all hands turned out to see the strangers, there was quite a formidable show of dusky faces on the bank, the fort being particularly full of Indians at the time, waiting for their winter supply of powder, shot, goods, etc."

CHAPTER IV.

LIEUTENANT PULLEN'S NARRATIVE CONTINUED.

LIEUTENANT PULLEN remained at Fort Good Hope, on the Mackenzie River, until the morning of the 17th September, when, having obtained one of the Company's boats in exchange for the "Logan," which was not well adapted for river navigation, he recommenced the ascent of the great stream of North Western America, toward the more inland posts of the Hudson's Bay Company. On the 22d he reached the point at which the waters of Bear Lake River fall into the Mackenzie. He spent half an hour at the famous "burning banks," where in many places he observed strata of "wood coal in a state of combustion." Above these warm banks were natural raspberry and gooseberry beds bearing abundant fruit, which, to the explorers, nauseated with stale pemmican, were a great treat. Next day Pullen reached Fort Norman, where he replenished his scanty stores with a supply of pemmican, thirty pounds of dried goats' flesh, and a bag of flour. Continuing his ascent of the river, he reached Fort Simpson, where he received a warm welcome from Dr Rae, who was then in charge of the fort. He had now completed his voyage, and though he had not had the good fortune to fall in with the missing voyagers, he had the satisfaction of knowing that he had succeeded in carrying out the instructions of the Admiralty. In thirty-four days he had searched the Arctic shores from Wainwright Inlet to the mouth of the Mackenzie River, a distance of 692 miles, while the ascent from the mouth of the river to Fort Simpson, a distance of 800 miles, had occupied him thirty-six days. In all, since leaving the "Plover," he had traversed 1492 miles in seventy days.

It was found that the whole of the exploring party could not be maintained throughout the winter at Fort Simpson, and Pullen, on the 10th October, sent all of them off, except two, to the Company's fishing station on Great Bear Lake. On the 29th the navigation of the river closed, the whole country around was mantled with snow, fur garments were given out to the inmates of Fort Simpson, and large fires were kept up in every room of that cheerless station. The winter was very cold and very dull, and it

was not until the 28th April (1850) that the first wild goose of the approaching season flew over Fort Simpson from the south, and gladdened its inmates with the intelligence that an early spring was at hand. In the beginning of May, great flocks of geese and ducks passed the station, flying northward. Many were shot, and there were "great doings" in the kitchen once more. The ice of the Mackenzie broke up on the 11th. "All was now bustle and activity," says Pullen. "Boats were being fitted out, furs pressed, and every one was fully employed in preparing for the transport of goods to the Methy Portage, and thence to York Factory, for shipment to England. On the 20th of May, Mr Rae went off with one boat to Forts Norman and Good Hope to bring up the furs that were to go out with the next brigade of boats, and which we were to accompany on our way to England." But the explorer was not destined to see England and home so soon as he expected.

On the 1st June, Lieutenant Hooper, Pullen's first officer, arrived from the fishing station of New Fort Franklin on Great Bear Lake, where he and the greater number of the men of the expedition had spent the winter. This young officer, whose name is invested with a peculiar interest, on account of his services, his fine talents, and his premature and melancholy fate, demands some passing notice here. W. H. Hooper was born in 1826, entered the navy at an early age, and joined the "Plover" as mate under Moore in 1849, and wintered in that vessel in an inlet of the Gulf of Anadyr, near the extreme north-east point (East Cape) of the Asiatic continent. His experiences among the Tchutski tribes who inhabit this region, are ably recorded in his most readable work, "Ten Months among the Tents of the Tuski." The special interest of this singularly fresh and vigorously-written volume is due to the circumstance that it describes the appearance, manners, customs, etc., of "a people of whom less is known than any on the face of the habitable globe, if we except, perhaps, some of the tribes in the interior of Africa." While sojourning among the Tuski or Tchutski, the principal object of the expedition on which the "Plover" was engaged—the search for Sir John Franklin—was never for a moment forgotten by the officers of that vessel; but, imprisoned as they were in Emma Harbour, south-west of Cape Tchutskoi (lat. about 64° 30′), and still many miles from Behring Strait, they had no opportunity of prosecuting the search. We dare not, therefore, linger with Hooper among the curious tents of the Tuski. In the summer of 1849 the young officer was appointed to the command of the "Plover's" cutter, in the boat expedition under Lieutenant Pullen from Icy Cape to the Mackenzie River. He afterwards passed two successive winters at the stations of the Hudson's Bay Company, and in these bleak forts he contracted an illness, of which he died in 1853, at the early age of twenty-seven.

Lieutenant Hooper spent the winter of 1849-50 at the fishing station of New Fort Franklin, a wretched log hut near the Fort Franklin on Bear Lake, where Sir John wintered in 1826-27. At this miserable station Hooper spent much of his time in observing the almost nightly displays of the aurora. This singular and beautiful appearance, "the most gorgeous as well as most wonderful of northern, and perhaps of any other, phenomena," seems to have engaged the constant attention and the most earnest speculation of the young officer. Probably no predecessor in Arctic exploration studied the subject with greater zeal than Hooper; certainly no other officer ever succeeded in representing the aurora by an equal number of curious and suggestive drawings. For these reasons, therefore, Lieutenant Hooper deserves to be heard on this subject, on which, besides, he writes, in his accustomed vigorous and picturesque style: "A beautiful aurora," he writes, in his journal, on the 9th December 1849, "appeared in arch from north-north-east to north-north-west, and gradually assumed an appearance similar to that produced by the aurora of the 7th, in broken vertical rays, coruscating towards the zenith. The stars were visible in myriads and very bright. At eleven P.M. I returned from viewing, and listening too, to the aurora, which then presented a gorgeous spectacle. It had shifted from its position, and at that hour covered one-half of the heavens, from east through south to west—its beauty was of so exquisite a nature as to be indescribable, but I will attempt to give some idea of its position and main features. Orion then bore south-south-west, and, on each side of that constellation, to about four points, rays were converging very nearly to the zenith, at perfectly regular distances, and in form reminding one of the lines of longi tude on a globe, and like these they were divided just below the zenith. Around and about them were wreaths and rolls, straight lines and curves, dense columns and scattered outposts of the luminous fluid, never still for a moment, but waving and rolling, advancing and retiring, folding and unfolding, rapid as thought and changeful as a dream. In its eternal change it was like the fickle kaleidoscope, ever presenting some new appearance, never returning to its former shape, and yet always as wondrous in beauty, or, if possible, more so, than before it altered its appearance. Some of the flying lines were drawn up or let down like the curtain in a theatre, and they expanded and contracted incessantly. Others again looked like heavy breakers, curling and turning under and about. There was one large mass, a perfect blaze of light, which seemed not to be more than twenty feet above me; others with less body appeared to be far away. This night I was also able, by personal observation, to settle a point long doubted by me. I have *heard* the aurora, *not once,* but *many times;* not faintly and indistinctly, but loudly and unmistakably—now from this quarter, now from that, now from a point on high, at another time from a point low down. At first it seemed

to me to resemble the sound of a field of ice cracking, then it was like the distant stroke of an axe, then like the sound of pile-driving, and at last like the whirring of a cannon-shot, when heard from a short distance. At one time three sounds of this kind followed in rapid succession, and I thought I could see the mass whence the noise proceeded, trembling and vibrating far above me. The night was intensely cold; the sky perfectly clear; the stars shining as brilliantly through the masses of luminous fluid, as in that part of the heavens which was unoccupied by the aurora—the wind was from north-north-west. I have read in other northern voyages that the sound produced by the aurora resembles the cracking of a whip, but I heard nothing like this to-night. In a few minutes the character of the phenomenon changed; the tremors and rays all disappeared, and nothing was presented to the view but a long arch from east-south-east to south-west, banking in a rising mass of clouds; but I still heard occasionally the sounds as before, much subdued indeed, and less frequent now."

Thus the question of whether auroral displays are accompanied by sound seems settled, and Wordsworth is justified—

> "In sleep I heard the northern gleams;
> The stars were mingled with my dreams:
> In sleep did I behold the skies,
> I saw the crackling flashes drive
> And yet they are upon my eyes."

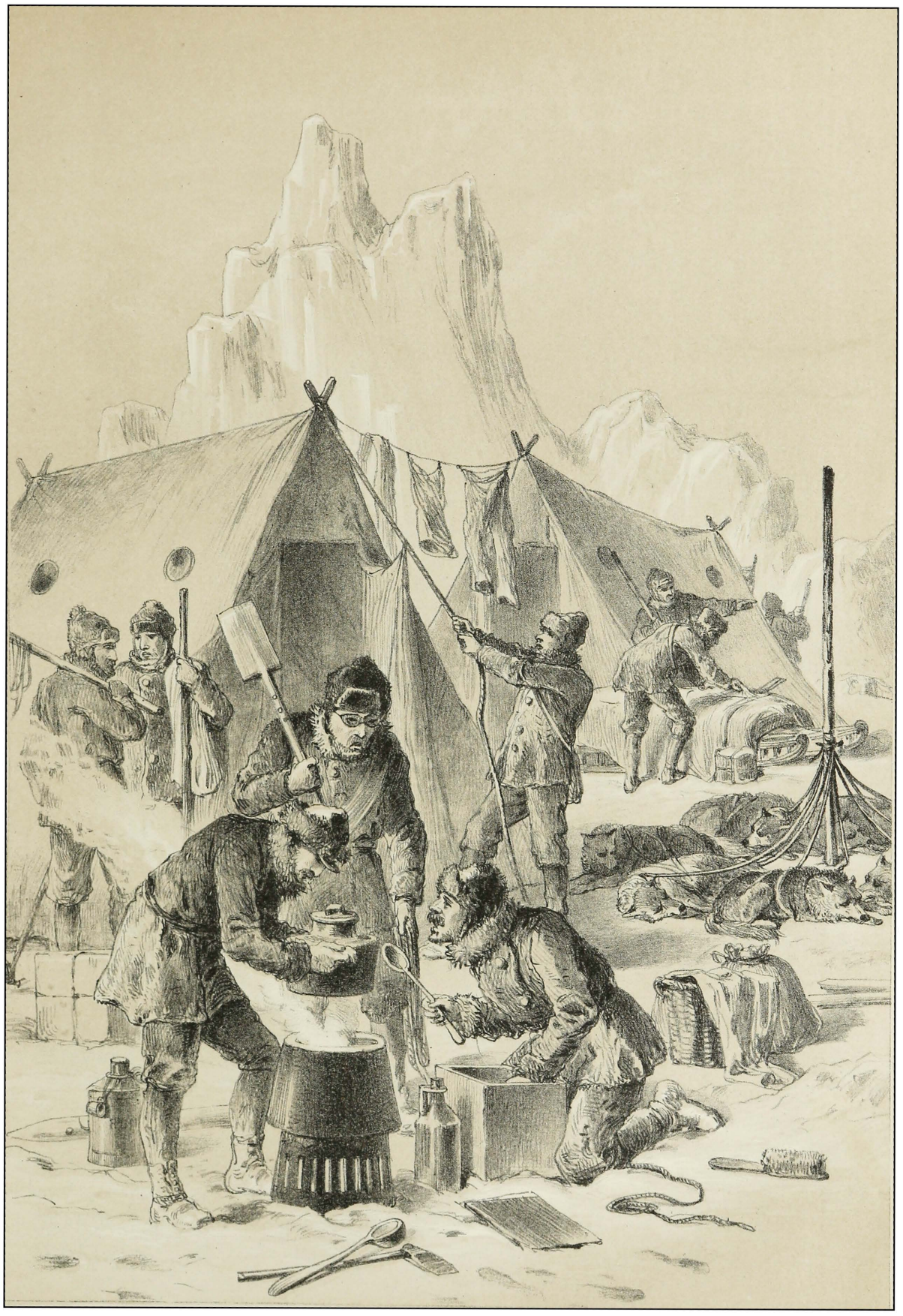
But it must be remembered that the description of the aurora given above, from Hooper's *manuscript* journal, was written early in the winter season, and before he was sufficiently familiar with the sounds of the Arctic winter to be able to attribute all of them to their true causes. In his unpublished journal the following passage occurs, under the heading 12th December, or three days after the great auroral display above described: "The wind was from north-west. The aurora at night was very brilliant. I again heard the cracking sounds proceeding from it; *and though our fisherman insisted it was the cracking of the ice on Bear Lake, I retired to rest, perfectly convinced I was in the right.* [13th December] I found this day that the fisherman was quite right, for I heard in broad daylight the sounds which I had imagined to proceed from the aurora. I now am quite convinced that they were caused by the ice cracking." Again, in the published narrative of his sojourn at the Hudson's Bay Company's forts, which appears as a pendant to the writer's "Ten Months among the Tents of the Tuski," the following passage, written after more extended experience and mature reflection, occurs, in reference to the display of the 9th December: "On this occasion I fancied that I *heard* the aurora, and so much was judgment misled by imagination, that I thought I saw the masses vibrating after con-

tact, when, in fact, the noise I heard was indubitably produced by the cracking of the ice on the lake, as I afterwards became assured of. . . . On some occasions all the colours of the rainbow were displayed by turns, each visible but for an instant, then succeeded by another hue. Vast, irregular, ever-changing fringe-like lines—at one moment of an exquisite violet, the next of a grass-green tint—engaged and delighted the eye. Those above named were the predominating colours, but all others, in every variety of shade and brilliancy, were evolved. A scene of sublime and awful magnificence!"

It has been already stated that Lieutenant Hooper joined Lieutenant Pullen at Fort Simpson on the 1st June. Here the expedition remained till the 20th of the same month, on which the "Mackenzie River Brigade" of boats, from Fort Good Hope and the posts situated lower down the river, and carrying the annual cargo of furs, left Fort Simpson to proceed up the Mackenzie to Methy Portage, and thence to York Factory, for England. The "Plover's" boat expedition set out to accompany this brigade in its ascent of the Mackenzie, and officers and men expected to have a speedy journey to England by way of Hudson's Bay. But a surprise was in store for them. "On the 25th of June," writes Hooper, "when near Great Slave Lake, we were met by two Indians in a canoe, who proved to be bearers of an 'extraordinary express' from England, which contained Mr Pullen's commission as commander, and the sanction of the Admiralty to renewed prosecution of the search for Sir John Franklin's party, if Captain Pullen should consider it practicable. Very little consideration was necessary on the subject, and after consultation with Dr Rae, the decision was speedily arrived at to return to the sea-coast. "We reached the fishing station called Big Island, at the entrance of Great Slave Lake, where some of our party had wintered, next day, and attempted to reach Fort Resolution to obtain a supply of pemmican, but the ice in the lake checked our progress, and Captain Pullen decided on returning at once to Fort Simpson to prepare for the second trip. On the 29th, accordingly, we bade farewell to Dr Rae and his brigade, and retraced our way to Fort Simpson, which was reached on the 3d of July." Of the boats of Pullen's expedition, only one, the "Logan," was now available; but a new craft, forty feet long and nine feet broad, and which was named the "Try Again," was furnished by the Company. On the 11th July, the explorers set out from Fort Simpson, and pushed on down the Mackenzie in the "Logan" and "Try Again." Fort Good Hope was reached on the 16th, the Arctic circle was crossed on the night of the 17th, and on the 18th the expedition reached Point Separation, near the mouth of the river, and landed to take up a store of pemmican that had been left there by Sir John Richardson in 1848. Garry Island, in the Arctic Sea, was reached at mid-day on the 20th, "and," writes Captain Pullen, "while

dinner was preparing, I walked to the highest point of the island, the soil of which was pretty profusely strewed with flowers, and got a good view round." The prospect, however, was not encouraging. It was Pullen's aim to sail along the Arctic shores in a westward direction to about the mouth of the Coppermine, and from this quarter to explore the shores of Banks Land and Wollaston Land, on which, he surmised, Franklin and his party might probably be found. But the route westward, he now perceived, was closed by an unbroken barrier of ice, and progress was, in the meantime, impossible. Hitherto the weather had been exceedingly hot, and the mosquitoes and gad-flies correspondingly tormenting. On the 20th, the temperature was 84° *in the shade,* and the insects, clouds of which darkened the air, were insatiable. "Apart from the great annoyance of the mosquitoes," writes Hooper, on this day of tropical warmth, "it was curious to notice one of these little torments settle upon one's skin, and how its shrunk carcase distended to quadruple its original size as it gorged itself with blood, the crimson fluid showing plainly beneath, until at last it became almost incapable of flight. Each one of these tiny creatures will extract a large drop of blood, so that, where they are numerous, one may suffer considerably by their homœopathic phlebotomy as well as by the distressing irritation they produce."

Pelly Island was reached on the evening of the 22d. On Kendall Island, on which the party encamped on the night of the 23d, the Indian hunters who had been hired to accompany the expedition and keep it provided with game, brought down a deer, which, when dressed, afforded 160 pounds of good meat. Another deer was knocked over on Richard Island on the 24th, and for a brief interval, at least, the explorers were gratified by having venison steaks in place of the usual comfortless pemmican and cold water. After three days' detention on the marshy beach of Hutchinson's Bay, the party got away on the 29th; but the day was spent in a vain endeavour to reach the open sea over fields of ice, which lay in flat pieces several acres in extent and seven or eight feet thick, or rose in masses twenty or thirty feet high, like the ruins of a town of ice. In crossing these icy fields, the party suffered much from cold. "It is difficult," exclaims Hooper, "for inexperience to conceive how greatly chilled the wind becomes in its passage over ice! Here, in the month of July, a south breeze, which should have been the softest and warmest exhalation of Æolus, stagnated the blood by its frost-becharged breath. . . . It was hoped," continues the same writer, "that, the season being favourable, the expedition descending the Mackenzie would reach the sea about the 23d of July, and gain Cape Bathurst in a few days. Thence it was intended to strike right across for Banks Land, a distance of rather more than 300 miles. This accomplished, future operations would have to depend upon the contingencies then arising. It was not our good fortune to achieve this grand undertaking. The season was, as regarded ourselves,



SLEDGE PARTY ENCAMPING FOR THE NIGHT

most unfortunate. A succession of northerly winds drove the ice down upon the shores, along which we had to pass, and our days were frittered away in vexatious detentions or useless toil amongst rugged ice masses or shallow waters."

In the neighbourhood of Cape Dalhousie ice was seen on the 3d August, piled up in hummocks from fifty to sixty feet high. On the evening of the 6th the party had reached Maitland Island. On the 8th the voyagers crossed Harrowby Bay, and in the afternoon, when approaching Cape Bathurst, they came within sight of an Eskimo village of a dozen tents. Immediately a score of kayaks and a number of oomiaks pushed off from shore—the women in the latter shouting and vociferating in the merriest and most friendly manner. "We were quite overwhelmed," writes Hooper, "by their amicable demonstrations. The single boats hung upon the gunwales of our craft, the oomiaks got athwart our bows, and the crews of both threw in meat, fish, skins, dresses, or whatever else they possessed, pell-mell. These were, however, all rejected," and nothing received except in barter for knives, needles, and other British goods. Landing here, the explorers enjoyed a plenteous and a peaceable dinner, which was heartily enjoyed by all, and by no one more than Captain Pullen. "I have now seen more than twenty-three years of a sailor's life," writes the gallant captain, "and can safely say, I never was engaged in such laborious and disheartening work as we went through" during the few days prior to reaching the vicinity of Cape Bathurst. On the evening of the 8th August the party encamped upon the larger of the Baillie Islands. Here they found the shores hampered with heavy ice, which they learned from the Eskimos would completely close up the passage to the eastward. On the 9th they pushed along the shore for some distance, until progress was finally checked by rugged, massive, and compact ice. The captain was therefore obliged to give orders to land and encamp anew. In the afternoon a woman, running into camp, brought news of a huge bear which she had seen on the higher ground above the beach. Of course the voyagers, as well as the Eskimos who had followed them to their encampment, immediately sprang up to go in chase. As this hunt after Bruin illustrates the ingenuity and bravery of the Eskimos, it is considered proper to quote the description of it given by Lieutenant Hooper, who himself assisted at the capture: "The brute was discovered on a huge mass of ice, which, with others, had grounded at some distance from the beach; one party started in the 'Logan' to cut off his retreat by sea; another, which I joined, made for the summit of the bank, which we hoped he would endeavour to ascend. First blood was drawn by our party; a ball from my fowling-piece struck him in the shoulder, and he fell for an instant on the ice and began to suck his paw, which made us think it was there he had been wounded. Speedily rising, he ran on along the hummock, taking to the water, and climbing the sides of the masses of

ice with the utmost indifference and ease. Our hunters—Indians are always excellent marksmen—now paid him some attention; they hit him several times, but did not succeed in turning him. He attempted at last to swim to seaward, and would doubtless have succeeded but for a new opponent. One of the Eskimos, launching his kayak, followed the bear, and at close proximity discharged arrow after arrow into his body. This was the most exciting part of the hunt. Each time that an arrow pierced his body, the poor animal seized the missile, if within reach, in his teeth, and strove to wrench it from the wound, generally, however, breaking it short. Then would it turn fiercely on its persecutor, who, skilfully manœuvring his light boat, hung at two or three yards distance only on his rear; so close were they indeed, that the man deliberately splashed water with his double-bladed paddle into poor Bruin's face, just backing gently to be clear of his paws, a single stroke from which would quite have reversed the fortune of the combat. When, after a hunt which lasted about four hours, the animal received its final death-stroke by a ball through the brain from the 'Logan,' he was stuck all over with arrows, and looked like a barbecued pig. By the laws of savage venery, first blood always decides the captor, and the Eskimo readily recognised the rule in the present instance, indicating that the prize belonged to the Kabloonan. Of course the carcass was divided, but I stipulated for and obtained the skin, which I still possess as a trophy. An hour afterwards I ate a bear steak. The Eskimo who had so importantly contributed to the capture, was rewarded with a large broad dagger and some other trifling presents, and was delighted with his good fortune." It is not at all uncommon for an Eskimo, single-handed and unarmed, except with the large knife which is his favourite weapon for encounters at close quarters, to attack the bear on his own ground. In such a terrific battle, man is almost invariably victorious over brute, though he seldom escapes without receiving fearful wounds.

Pushing off from the largest of the Baillie Islands on the 10th, Captain Pullen endeavoured to beat up for Cape Bathurst. With great difficulty, the boats were worked through narrow passages, between vast masses of ice, to the cape. Here all farther progress was seen to be impossible.

> "The ice was here, the ice was there,
> The ice was all around."

It extended all round Cape Bathurst, and far to seaward, "in masses heaped tumultuously, sparkling and shimmering in the sunshine, each crystallised point evolving hues of the prism. Not a lane, not a breach appeared—a barrier of stone lay between us and our desired route." Here Pullen remained several days, but no change taking place in the condition of the vast icy barrier that intervened between him and the seas he had

hoped to reach to the eastward, he at last, with the greatest regret and reluctance, gave orders to put about and return.

While the expedition waited at Cape Bathurst, two of the Indian hunters were sent away on the 12th to look for a deer. They failed to come into camp at night, and it was feared they had been attacked and killed by their traditional enemies, the Eskimos. Search parties were sent out on their track, but nothing was seen of them till late on the afternoon of the 14th. They staggered into the camp, shoeless, footsore, faint, and famishing. They had broken the leg of a deer, and in the heat of the pursuit of the wounded game had lost their way. They were told that their white allies were on the point of setting out on the return journey without them, and they were asked what they should have done in such a case. "We should have dug a hole," said they, "and lain down in it and died."

With the details of the return journey of this unsuccessful expedition which, sent out to seek for Sir John Franklin, failed to reach even the borders of the region in which he was supposed to have been beset, it would be uninteresting and profitless to concern ourselves. Like the outward trip, the return journey was one of continuous discomfort and hard labour. "Gales, rain, snow, shallow water, heavy ice, a freezing temperature, and wretched food—these," says Hooper, "tell our tale comprehensively." On the 23d August the voyagers passed three islands, which they had discovered in the easternmost channel of the Mackenzie on the outward voyage, and named them respectively Beaufort, Hooper, and Pullen Islands. On the 31st, they fairly entered the Mackenzie, reached Fort M'Pherson on the 7th September, Fort Good Hope on the 17th, and on the 5th October, Fort Simpson, where Captain Pullen, Lieutenant Hooper, and two marines remained during the winter, while the remainder of the party went on inland to the fishing station on Great Slave Lake.

After passing a dull and uneventful winter at Fort Simpson, Pullen and Hooper set out from that post on the 5th June 1851, and ascended the Mackenzie by easy stages. On the 20th June, they reached Fort Resolution, the neatest and cleanest establishment they had yet seen, and on the 28th August reached York Factory, whence they sailed for England (9th September) in one of the Hudson's Bay Company's ships. They arrived in England just in time to see the last of the Great Exhibition, where they themselves took no mean rank among the numberless objects of interest.

CHAPTER V.

RICHARDSON'S BOAT-VOYAGE THROUGH RUPERT'S LAND AND THE ARCTIC SEA.

THE second search expedition sent out by the British Government, with the object of rescuing Sir John Franklin and his party, was that commanded by Sir John Richardson, the faithful companion of Franklin in his earlier expeditions. Dr Rae, a narrative of whose brilliantly successful exploration of the previously unknown shores of Boothia Gulf has already appeared in these pages, was selected to accompany Richardson, and to sail under his orders. Suitable stores, including pemmican, flour, sugar, tea, bacon, etc., were prepared for the expedition early in 1847; four boats were specially built for it at Portsmouth and Gosport, and five seamen and fifteen sappers and miners—joiners and blacksmiths for the most part—were selected from a number of volunteers to man the boats. Stores, boats, and men sailed from the Thames in two of the Hudson's Bay Company's ships on the 15th June 1847. As it was just possible that news of the missing expedition might arrive in England before the close of that year, Richardson and Rae were ordered not to leave England till the spring of 1848, when, travelling rapidly, it was expected they would overtake the men and stores at some of the Company's forts in Rupert's Land, as the territory belonging to the famous corporation of fur traders was named.

The two officers of the expedition left England, on the 25th March 1848, by the mail packet "Hibernia," and arrived in New York on the 10th April. Travelling with all possible expedition, they reached Saut Sainte Marie, at the outlet of Lake Superior, on the 29th April, and Cumberland House, on the Saskatchevan River, a distance from New York of 2880 miles, on the 13th June. On the following day the travellers set out from Cumberland House, and on the 28th they reached Methy Portage, where they overtook Mr Bell, one of the Company's officers, who had been appointed to conduct the men, stores, and boats of the expedition as far in advance as possible. The descent of the Clear Water River was commenced on the 5th July by Dr Richardson in his own boats, and accompanied by his own men. Athabasca Lake was entered on July 11th, and in the evening the expedition

reached Fort Chepewyan. From this post the boats proceeded north by Slave River, and the explorers entered Great Slave Lake on the morning of the 17th, and arrived at Fort Resolution before mid-day. The expedition reached Fort Simpson, on the Mackenzie River, on the 22d July, and Fort Norman on the 26th. On the 31st, the expedition stopped at Point Separation, where Richardson made a *cache* of a case of pemmican, to be used in case of necessity by the boat expedition of the "Plover," under Pullen. "We dug the pit," says Richardson, "at the distance of ten feet from the best grown tree on the point, and placed in it, along with the pemmican, a bottle containing a memorandum of the objects of the expedition, and such information respecting the Company's post as I judged would be useful to the boat party of the 'Plover,' should they reach this river. The lower branches of the tree were lopped off, a part of its trunk denuded of bark, and a broad arrow painted thereon with red paint." As we have seen in the preceding chapter, the *cache* was discovered, and the pemmican obtained by those for whom it was intended.

The actual work of Richardson's expedition only commenced after his boats had reached the mouth of the Mackenzie, and having arrived at the estuary of that great river, he endeavoured to stimulate his crews "to an active look-out, by promising ten pounds to the first man who should announce the discovery ships." The actual searching voyage eastward along the Arctic coasts was commenced early on the morning of the 3d August. On that day a large number of Eskimos came off from shore in their kayaks and oomiaks. They were predatory and mischievous as usual, and would have been dangerous had they not been overawed by the levelled muskets of the Europeans. On being examined respecting the discovery ships, they one and all denied having ever seen any white people, or heard of any vessels having been on their coasts. Richardson's description of the Eskimos is graphic, brief, and well-informed. Its insertion here may save recapitulation at another time: "The Eskimos are essentially a littoral people, and inhabit nearly five thousand miles of sea-board, from the Straits of Belleisle to the Peninsula of Alaska, not taking into the measurement the various indentations of the coast line, nor including West and East Greenland, in which latter locality they make their nearest approach to the western coasts of the old world. Throughout the linear range here indicated, there is no material change in their language, nor any variation beyond what would be esteemed in England a mere provincialism. Albert (Richardson's interpreter), who was born on the East Main, or western shore of James's Bay, had no great difficulty in understanding and making himself understood by the Eskimos of the estuary of the Mackenzie, though by the nearest coast line the distance between the two localities is at least two thousand five hundred miles. Traces of their encampments have been discovered as far north in the New

World as Europeans have hitherto penetrated, and their capability of inhabiting these hyperborean regions is essentially owing to their consuming blubber for food and fuel, and their invention of the use of ice and snow as building materials. Though they employ drift timber when it is available, they can do without it, and can supply its place in the formation of their weapons, sledges, and boat-frames, wholly by the teeth and bones of whales, morses, and other sea animals. The habit of associating in numbers for the chase of the whale has sown among them the elements of civilisation; and such of them as have been taken into the Company's service at the fur posts fall readily into the ways of their white associates, and are more industrious, handy, and intelligent, than the Indians. The few interpreters of the nation that I have been acquainted with (four in all) were strictly honest and adhered rigidly to the truth; and I have every reason to believe that within their own community the rights of property are held in great respect, even the hunting-grounds of families being kept sacred. Yet their covetousness of the property of strangers, and their dexterity in thieving, are remarkable, and they seem to have most of the vices as well as the virtues of the Norwegian vikings. Their personal bravery is conspicuous, and they are the only native nation on the North American continent who oppose their enemies face to face in open fight. Instead of flying, like the northern Indians, on the sight of a stranger, they did not scruple, in parties of two or three, to come off to our boats and enter into barter, and never on any occasion showed the least disposition to yield anything belonging to them through fear."

By the 8th of August the expedition had crept laboriously along the Arctic shores eastward to Cape Brown, in longitude about 130° W. Landing near the cape to prepare breakfast, the voyagers encountered four Eskimos, of whom the usual inquiries were made, with the usual result. "These people," says Richardson, "like the other parties we had previously communicated with, declared that no large ships nor boats had been seen on their coasts, and that we were the first white men they had ever beheld. I could not discover that any remembrance of my visit to their shores twenty-three years previously existed among any of the parties I saw on the present voyage, though I never failed to question them closely on the subject." Pushing on on the following day, Richardson crossed Liverpool Bay and encamped under the frozen cliffs of Cape Maitland on the night of the 9th August. On the 10th the explorers held on their course between Baillie Islands and the mainland, and at night, finding no suitable landing-place either on the islands or the main, they slept in their boats, which were anchored about a mile from the beach. Early on the morning of the 11th, the voyage was resumed under the guidance of a considerable company of the Eskimos of Cape Bathurst, and Richardson, after crossing a bar on which

there were from four to five fathoms water, passed suddenly from muddy water "into a green sea, in which," says the commander, "we had no bottom with the land line." Proceeding south-east from Cape Bathurst, Richardson observed that the crest of the high bank rose to the height of about two hundred and fifty feet. These high banks are continued along the shore from Cape Bathurst to the bottom of Franklin Bay, where they recede from the coast to form the base of an even-backed line of hills of from four to five hundred feet high, called the Melville Range. Cape Parry was reached on the 13th, and on Cocked-hat Point a case of pemmican, with a letter of instructions for the use and information of the missing expedition, were deposited on the 14th. Dr Rae, that "mighty hunter," killed a roe reindeer in excellent condition on the morning of the 17th, and rejoiced the hearts of his comrades with fresh steaks for breakfast. Again on the 19th Rae brought in two fine reindeer. Several seals were also killed; but as none of the men would touch the dark flesh of the seals so long as venison could be had, Richardson gave instructions that no more seals should be shot. On the 20th Rae killed and brought in a fine buck reindeer, and the frequency with which these splendid animals were knocked over constrains Richardson to exclaim, that "in this quarter a skilful hunter like Mr Rae could supply the whole party with venison without any loss of time." On the 21st, the expedition having then passed to the eastward of Hoppner River, the explorers obtained their first view of the cheerless shores of Wollaston Land, the summits as well as the ravines of which were covered with snow. Could the explorers only reach these white shores gleaming away on the north, something might yet be done, even in this rapidly-waning summer season, to throw light upon the fate of the lost ships! But the channel between the main and Wollaston Land was filled with ice, and this land of promise was unapproachable.

On the 23d the weather darkened threateningly, a haze closed over the boats, heavy showers fell, and a water-spout, herald of a coming storm, was seen on shore. At five P.M. the storm came on, "and," says Richardson, "we were compelled to reduce our canvas to the goose-wing of the mainsail, under which we scudded for an hour, until, entering among large masses of ice, about two miles from Point Cockburn, we found shelter under some pieces that had grounded. The shore was too flat to admit of our bringing the boats near enough to encamp; the ice-cold sea-water chilled the men as they waded to and fro; there was no drift timber on the beach; and we passed a cold and cheerless night in the boats, the wind being too strong to admit of our raising any kind of shelter. I afterwards learned," continues Richardson, "that this storm began at Fort Simpson at six A.M. on the 23d, or, making allowance for the difference of longitude, about thirteen hours and a half later. It commenced on the Mackenzie by the wind

changing from north-east to north-west, and the sky did not clear up till nine in the morning of the 24th. At the same date an earthquake occurred in the West India islands, which did much damage." The description of this storm in Richardson's journal is noteworthy, as proving that this explorer, who was also an accomplished scholar and a man of great scientific acquirement, was the first traveller who prosecuted the study of meteorology in the Arctic regions, upon the broader modern basis of comparing the meteorological conditions of different localities, at a certain given time —and thus tracing the courses of storms—which enables us in our own day to foretell the approach of the tempest and to secure ourselves against its ravages.

Continuing to force his way along the main shore in the Dolphin and Union Strait, which he himself had discovered in 1825-27, Richardson saw with regret, on the morning of the 26th, that a frosty night had covered the sea and ponds with young ice, and had cemented all the floes into one solid field. During this day, spent in cutting through tongues of ice, dragging the boats over floes, etc., only five miles were made. On the following the distance gained was only three and a half miles. It was now determined to lighten the men's labours, by depositing one of the boats with her cargo on the shore. Accordingly, a deposit of several cases of pemmican, an arm-chest, and several other things that encumbered the boats, was made on the 27th, on a flat shelf of rock distant about twelve miles from Cape Krusenstern. From this date progress by water was almost impracticable. On the 29th Cape Krusenstern was reached, and the 30th was spent in the encampment on its shore, watching for a change of weather, which fortunately took place at four P.M., when a channel opened in the ice, through which the boats made way round the cape. Cape Hearne was reached on the 31st, and the party encamped that night about eight miles north-east of Cape Kendall. Richardson's boats were now much shattered by the rough work among the floes, and a survey from the high ground above his encampment proved that all the lanes were frozen up. He therefore determined to leave his boats here, and at once commence the homeward march by the Coppermine River to Fort Confidence—his winter quarters. The explorer's reflections on the necessity for terminating his boat-voyage here, were not of the pleasantest description. "The unavoidable conclusion of our sea voyage," he writes, "while still at some distance from the Coppermine River, was contemplated by me, and I believe by every individual of the party, with great regret. I had hoped that, by conveying the boats and stores up the Coppermine River beyond the range of the Eskimos, we could deposit them in a place of safety, to be available for a voyage to Wollaston Land next summer. But abandoned as they must now be on the coast, we could not expect that they would escape the searches of the hunting parties,

who would follow up our footmarks, and who were certain to break up the boats to obtain their copper fastenings. The unusual tardiness of the spring, and our unexpected delay at Methy Portage for want of horses, caused our arrival on the Arctic coast to be considerably later than I had in secret anticipated, though it differed little from the date I had thought it prudent to mention, when asked to fix a probable time. Even a few days, so unimportant in a year's voyage elsewhere, are of vital consequence in a boat navigation to the eastward of Cape Parry, where six weeks of summer is all that can be reckoned upon. Short, however, as the summer proved to be, neither that nor our tardy commencement of the sea-voyage would have prevented me from coasting the south shore of Wollaston Land, and examining it carefully, could I have reached it; for the distance to be performed would have been but little increased by doing so. The sole hindrance to my crossing Dolphin and Union Strait was the impracticable condition of the close-packed drift-ice."

Meantime preparations were hurried on for the return march to winter quarters. All necessary stores were divided into packages weighing from sixty to seventy pounds, and distributed among the men. Six "pieces" of pemmican were buried under a limestone cliff, and the position marked. The boats were abandoned, the tents were left standing, and a number of cooking utensils, hatchets, etc., were left for the first Eskimos who should visit the spot, as tokens of goodwill from the white man; and on the morning of Sunday, 3d September—prayers having been first read—the party, led by Richardson and Rae, set out on the march to the Coppermine. Passing Cape Kendall, the party were ferried across Rae River by Eskimos—this being, probably, the first occasion on which the natives performed the part of paid ferrymen to Europeans. The valley of the Coppermine was reached on the 5th, and found filled with snow. The banks of the river, three or four miles above Bloody Fall, were arrived at on the same evening; and a camp having been formed, a good fire was made, and a famous supper of snow geese, about a dozen of which had fallen to Rae's unerring rifle, was prepared and enjoyed. On the evening of the 7th, Rae has his first encounter with a musk-ox—certainly the most formidable creature of the Arctic wilds. The meeting was not fatal; and to this day it remains uncertain whether Dr Rae or the ox are the more grateful for that circumstance. On the 9th, the party passed the boat which had been left by Dease and Simpson at the commencement of the portage to Great Bear Lake in 1839. Starting early on the 10th, Richardson struck the Kendall a short distance above its junction with the Coppermine, and crossed it on a raft constructed of dry timber found on the spot. The explorers now shaped their course across country towards Dease's River. "We steered by the compass," writes Richardson, "Mr Rae leading, and the rest following in Indian file. . . . On the hills the snow covered

the ground thickly; and it is impossible to imagine anything having a more dreary aspect than the lakes which frequently barred our way. We did not see them till we came suddenly to the brink of the rocks which bounded them; and the contrast of the dark surface of the waters with the unbroken snow of their borders, combined with the loss of all definite outline in the fog, caused them to resemble hideous pits, sinking to an unknown depth. . . . After walking till half-past five, without perceiving a single tree, or the slightest shelter, we came to a convex rock, from which the snow had been swept by the wind. On this we resolved to spread our blankets, as it was just big enough to accommodate the party. There being no fuel of any kind on the spot, we went supperless to bed. Some of the party had no rest, and we heard them groaning bitterly; but others, among whom were Mr Rae and I, slept well." When we remember that Sir John, or, as he is better known in these pages, Dr Richardson, was born at Dumfries in 1787, and that consequently, when he accomplished this journey, sleeping every night in the open air in a climate severe enough to turn the russet coat of the hare white, he was sixty-one years of age, we may arrive at some approximate estimate of the old gentleman's pluck and vigour. After sleeping like coneys in the hollow of a rock, the travellers were up and on the march at half-past four on the 12th; and at eight o'clock, and before having had breakfast, forded a branch of the Kendall, the ice-cold water of which came up to their waists. As they travelled along in single file on the 13th, they were seen by a party of Indians, who immediately "made a smoke" as a signal. This intimation of the goodwill of the Indians and of their position, which was on a hill-side distant six miles from Richardson and his party, was answered by the travellers as soon as they could gather a few handfuls of moss, and strike a light. The white men then marched straight toward the Indian camp, where they received a hearty welcome, a supply of reindeer meat, and the services of a native guide to Fort Confidence, where the whole party arrived in safety at four P.M. on the 15th September. Richardson found that the houses erected by Dease and Simpson had been burned down; but that Mr Bell, of the Company's service, who had been deputed to prepare winter quarters for the party at Fort Confidence, was already well forward with his work. The day after arriving at the fort was spent in rest and in writing; and the following day, the 17th, being Sunday, Richardson assembled his people in the hall, read Divine service, and returned thanks to the Almighty for the protection and the safe return that had been vouchsafed to all.

CHAPTER VI.

RICHARDSON IN WINTER QUARTERS.

THE site selected for the winter quarters of the Richardson and Rae expedition was Fort Confidence, on Dease River, and about three miles above the point at which the river enters Great Bear Lake. Fort Confidence, it may be remembered, was built for, and named by, Dease and Simpson in 1836. Of the buildings which formed the fort in 1836-39, only a part of the men's house was now standing, and Richardson's "fort" was an entirely new erection. The new building was a log house, built of trunks of trees laid over one another, and morticed into the upright posts of the corners, doorways, and windows. Loam or clay was beat into the spaces between the round logs of the walls and roof, both on the outside and inside, and several coatings of a mixture of clay and water rendered the walls weather-proof. "The building," says Richardson, "was forty feet long by fourteen wide, having a dining-hall in the centre, measuring sixteen by fourteen, and the remaining space divided into a store-room and three sleeping apartments. A kitchen was added to the back of the house, and a small porch to the front." The officers' rooms were furnished with glazed windows; in the other rooms deerskin parchment was used instead of glass. On the east of this central building were two houses for the men, and on the west side were store-houses; so that the whole formed three sides of a quadrangle, facing the south. Two of the men, who were carpenters by trade, were set to make tables and chairs; and Bruce, the half-breed guide, acquitted himself ably and industriously as a joiner. The men were divided into gangs, and employed respectively in cutting and bringing in fuel, in fishing, hunting, etc., and a number of Indians were engaged as hunters to keep the fort well stocked with fresh reindeer meat. At no period during the winter was any inconvenience experienced from scarcity of wholesome food. "Our men," says Richardson, "had each *a daily ration of eight pounds of venison* on five days of the week, and on the other two days from ten pounds to fifteen pounds of fish." Not many of the Europeans, we are informed, consumed the whole of their rations, which

included barley, potatoes, and flour, in addition to venison and fish; but the Indians, a large number of whom with their wives and children were maintained at the fort during the winter, were generally in attendance at meals to receive the unconsumed victuals.

In the accounts of residence in quarters during the Arctic winter, little variety is to be expected; and as, in earlier chapters, the winter experiences of all the important Arctic explorers have been recorded more or less fully, the same ever-repeated incidents need not engage our attention in noticing the residence of Richardson at Fort Confidence. In fairness to this eminent explorer and naturalist, however, it is necessary to state that, while weather-bound in his log-house on Dease River, in the winter of 1848-49, he carried on a series of observations and investigations in natural history, the effects of temperature, etc., which, for completeness, width of range, and practical results, throw all the inquiries and observations of previous explorers into the shade. For this reason, therefore, although perfectly well aware that the all-important topic in hand at present is the search for Franklin, we will hazard a minute's delay over Richardson's winter occupations.

Much ammunition, and not a little vigorous rhetoric, were expended upon the Indian hunters, who, when they had killed deer on the Barren Grounds, were too careless to bury the meat securely, until it could be sent for from the fort. The consequence was that the Indian *caches* were in almost every instance broken in upon and robbed by wild animals—generally by wolverines. "The wolverine," says Richardson, "is extremely wary, and shows extraordinary sagacity and perseverance in accomplishing its ends. The Indians believe that it is inspired with a spirit of mischief, and endowed with supernatural powers. Though more destructive to their hoards of provision than the wolf, or even the bear, and able to penetrate fences that resist their powerful efforts, the wolverine is only about thirty inches long, and a foot high at the shoulder." One of these animals was surprised in a *cache* and killed. Richardson, who gives its exact dimensions, describes its legs as being remarkably muscular—the fore ones, when skinned, have a "strong resemblance to a finely-proportioned, muscular human arm, rather than to the limb of a quadruped." This animal breaks its way into a *cache* by gnawing asunder one of the logs that form its roof; and in doing so it works so hard that "it causes its mouth to bleed, as the ends of the logs and the snow often testify. Once admitted into the hoard, it has to gnaw the pieces of meat asunder, as they are generally frozen together, and then it proceeds to drag them out one by one, and to bury them in the snow, each in a separate place. As it travels backwards and forwards over the meat, it smears it with a peculiarly fetid, glandular secretion, after which no other animal will touch it. In this way one of these beasts will spoil a large *cache* in an hour or two, and wholly empty it in

a few nights." The Indian hunters at Fort Confidence either could not or would not construct *caches* sufficiently strong to resist the wolverine. Dr Rae, however, brought more skill, or more industry, to the task. After a successful excursion he constructed a safe meat-cellar, by cutting a hole in the ice, covering it thickly with snow, and then pouring water over all, until the frost had rendered the whole a solid mass.

The Dog-rib Indians who inhabit the country around Fort Confidence are merry and good-natured, but indolent, improvident, and dreadfully mendacious. As liars, they are probably unsurpassed by the most accomplished practitioners in China or Hindustan. Here also, as in other countries, "woman, lovely woman," commands considerable respect for her charms, and for the use she makes of them. In the spring of 1849, a number of the Martin Lake Indians brought supplies of fresh meat to Richardson's camp, at which a number of Indian women of the Dog-rib tribe were then residing. The strangers carried the venison intended for the white men neatly packed on sledges; but, besides, each man carried a knapsack on his back, filled with a number of the choicest pieces of the meat, to be consumed on the return journey to Martin Lake. "The first act of the new-comers was to run the loaded sledges at once into the store-house, which was open to receive them, but as they arrived in succession, the (Dog-rib) women from the camp generally pressed in, and throwing their arms around a young hunter, with much kindness of manner, would say to him, 'It is long since we have seen you, my relation; how have you fared since we have met? You are a generous man!' and so on. While his attention was thus engaged, and before he could free himself from the unwashed sirens, whose unwonted softness of speech never led him to suspect either ridicule or plunder, one of the females, having cut the strings of his knapsack, would carry it off, amidst the laughter of the crowd. The young fellow thus despoiled of his provisions, however much he might be vexed in secret, was obliged to join openly in the mirth; and the expression of face of some of the youths thus preyed upon, as they endeavoured to force a smile in their distress, was irresistibly comic." Among these tribes, the women, who are regarded as the natural property of the strong, are often moved from one tent to another, without apparently regarding compulsory transference to the home and the affections of a *new* husband—who has been lucky enough to thrash their *old* one—as a hardship.

> "All kinds and creatures stand and fall
> By strength of prowess, or of wit."

And so the good old rule, the simple plan, sufficeth still the Indians of British North America.

And yet it has never been proved beyond question by any Arctic explorer that these Indian tribes of the remote north of America are bound by any

natural law to decay and vanish from the earth in presence of the white man. Perhaps too much has already been written on the necessarily ephemeral character of the ancient races of America. It is when the vices of the civilised are engrafted upon the uncivilised man that the latter dies out in a very few generations. How would it be if only the virtues of the white man were added to the "savage virtues" of the coloured races? Richardson, a keen observer and just thinker, states that, with proper management, the natural resources of the country around Great Bear Lake "would support a population ten times as great. But as long as all the drones of the community claim a right to appropriate to their own wants the produce of the exertions of an industrious hunter and fisherman, no certain provision for the future will be made. The first step in advance," continues Richardson, "will be the formation of fishing villages, and the culture of barley and potatoes; and, under the guidance of intelligent missionaries, this might be effected without much difficulty; while, at the same time, the truths of Christianity might be brought to bear on the heathenism and moral defects of the 'Tinnè (or Chepewyan) nation."

The structure and formation of ice is a subject which, prior to the date of the Richardson and Rae expedition, had not, to any serious extent, engaged the attention of travellers within the Arctic circle. This subject, however, formed a branch of scientific inquiry which offered many attractions to Richardson; and the prolonged residence of that naturalist in the fur countries of America afforded abundant facilities for pursuing it. The first step in the freezing of rivers in the Polar regions, and after the water has been cooled down by continued cold weather to the freezing point, or to about 32°, is the formation upon its surface of circular plates of ice of from six to eight inches diameter. "These drift for a time with the current, until they have become numerous enough to cover the surface of the water, when they are arrested in a narrow part of the river, or by any slight obstacle, and speedily adhere to each other, after which the interstices between the circles fill rapidly with crystals that bind all firmly together. The sheet of ice thus produced is at first nearly opaque; but, when, in the course of a day or two, it has acquired the thickness of a few inches, it becomes transparent, and remains so until a fall of snow has obscured the surface. In unsheltered lakes, the wind drifts the snow to the beach, and would, perhaps, keep the ice clear for a great part of the winter were it not that in certain hygrometric conditions of the atmosphere small starry tufts of most beautiful crystals are deposited at short intervals on the ice, and freeze firmly to it. In a dry atmosphere, these crystals evaporate again, but should a fall take place of the fine, dust-like snow, which is the most common kind in the high latitudes, they serve to detain it until it consolidates, so as to resist the wind. It is rare, however, for the snow to lie more than a foot deep on

any of the large lakes, unless where it has drifted under the lee of piled-up slabs of ice, or of rocks, islands, or other shelter. During winter, the ice receives an increase of thickness from beneath, and at the same time evaporates above; the latter process going on with a rapidity that would scarcely be credible to one ignorant of the extreme dryness of the air in an Arctic winter. The ice acquires a thickness of from four to eight feet, according to the severity of the season, the depth of the lake, and other modifying circumstances; and I desire here to advert especially to the fact, that although it is constructed of successive *horizontal* additions beneath, when it decays in spring, it consists of *vertical prisms*, penetrating its whole thickness, and standing side by side like the columns of a basaltic cliff. . . . In this condition the ice may be strong enough to support a considerable weight; and I have travelled over it with a large party on several occasions, when the prisms on which the foot rested were depressed at every step, and a pointed stick could be driven through the whole thickness into the water beneath with as much ease as into a bank of snow. The ice then, in fact, presents the physical characters of a semi-fluid mass, as pointed out by Professor Forbes, its parts being movable on each other, not only vertically, but, as in the case of travelling glaciers, capable of gliding past one another horizontally."

The extreme dryness of the air in an Arctic winter is attested by the rapid evaporation of both snow and ice, long before these are thawed into a liquid form by any action of the sun. Of this fact Richardson gives a familiar but striking illustration. "When a shirt, after being washed, is exposed in the open air to a temperature of 40° or 50° below zero—say 70° or 80° below the freezing point—it is instantly rigidly frozen, and may be broken if violently bent. If agitated when in this condition by a strong wind, it makes a rustling noise like theatrical thunder. In an hour or two, however, or nearly as quickly as it would do if exposed to the sun in the moist climate of England, it dries and becomes limber"—or flexible. . . . "In consequence of the extreme dryness of the atmosphere in winter, most articles of English manufacture made of wood, horn, or ivory, brought to Rupert's Land, are shrivelled, bent, and broken. The handles of razors and knives, combs, ivory scales, and various other things, kept in the warm rooms, are damaged in this way. The human body also becomes visibly electric from the dryness of the skin. One cold night I rose from my bed, and, having lighted a lantern, was going out to observe the thermometer, with no other clothing than my flannel night-dress, when, on approaching my hand to the iron latch of the door, *a distinct spark was elicitated!* Friction of the skin, at almost all times in winter, produced the electric odour." The lowest temperature registered during the winter was that of the 17th December, when the minimum was −65°, or *ninety-seven degrees below the freezing point.*

CHAPTER VII.

RAE'S EXPEDITION IN 1849—SIR JAMES ROSS'S EXPEDITION, 1848-50—AUXILIARY VOYAGE OF THE "NORTH STAR."

It will be remembered that Richardson, on his return from the Arctic shores in the autumn of 1848, was obliged to leave his boats within Eskimo territory, at the mouth of the Coppermine. Had he been able to drag his boats up the river, to a spot in which he might have securely hidden them, he would have resumed the search for Franklin in the following year, with the whole strength of his party. As it was, only one boat was now available for service, and it was therefore the duty of the leader of the expedition, to decide whether he or Rae should take charge of that boat, and of the few men she could accommodate, on a second expedition to the Arctic shores. Sir John Richardson decided upon giving the charge to Dr Rae. The elder explorer accordingly instructed the latter to descend the Coppermine, as soon as the sea should open in July, to explore Dolphin and Union Strait, and the shores of Wollaston and Victoria Lands, in search of Sir John Franklin and his party.

The outline of this supplementary expedition, of which Dr Rae himself gives a detailed account, in his despatch to the Secretary of the Admiralty, dated from Fort Confidence, September 1st, 1849, must not detain us long. Starting from Fort Confidence on the 9th June, with a crew of six men, Rae ascended Dease River; but from the quantity of ice with which the river courses were hampered, his progress was very slow. On the 21st he arrived at the station on the banks of the Kendall River, to which he had caused provisions for the sea-voyage to be conveyed in the spring of the year. Next day he reached the Coppermine, but, finding it covered with ice, he was obliged to remain on its bank five days, which were employed in shooting deer to save the pemmican, in repairing the boat, etc. He did not reach the sea till the 14th July. Camping on the north shore of Richardson Bay (lat. 67° 51′), he was visited by seven Eskimos, among whom he recognised the man who, last season, had ferried Richardson's party across the river, at the head of Back's Inlet. These visitors stated that they had communicated during the winter with the natives of Wollaston Land, and

that the latter had never seen white men, nor their boats or ships. They had not, therefore, seen any party belonging to the missing expedition. On the 16th, the coast being still impracticable from ice, Rae ran into Back's Inlet and explored Rae River, discovered and named in the previous season by Richardson. At thirty miles from its mouth, this stream was eighty to two hundred yards wide, running with a strong current, but exceedingly shallow. On the 24th, the party arrived at the spot where the boat had been left the previous year. The Eskimos had broken up the boats to obtain the iron-work, but had left tents, oil-cloths, pemmican, and ammunition, uninjured. On the 30th, Rae arrived at Cape Krusenstern. "We were now," he writes, "at the most convenient, though not the nearest point for making the traverse to Wollaston Land, and there was no necessity for our proceeding farther along the shore, even had we been able to do so, which at present was impossible, the high rocks presenting an unsurmountable barrier on the one hand, and the ice, by its roughness, equally impassable on the other. . . . Our situation was most tantalising to all the party; occasionally, at turn of tide, a pool of water a mile or more in extent would appear near us, and everything would be prepared for embarkation at a minute's notice in expectation of the opening increasing and permitting us to cross to Douglas Island, but our hopes were always disappointed."

This tiresome state of affairs lasted till the 19th August, when a rather wider extent of open water was seen in the offing. After waiting for hours for a good opportunity of forcing his way through a close-packed stream of ice that was grinding along the rocks as it drove onward, Rae pushed off, and after a few narrow escapes, reached comparatively open water where oars could be used. The party had pulled seven miles out from shore, and were within three miles of Douglas Island, when they encountered an ice-stream so closely packed and so rough that they "could neither pass over nor through it." A retreat to the main shore was the unavoidable result of this defeat. On the 22d, Rae ascended a hill near his encampment, from which a fine view was obtained, and swept the shores of Wollaston Land with his telescope. "As far as I could see," he writes, "nothing but white ice forced up into heaps was visible." The fine weather had now broken up, and Rae, chagrined and disappointed, gave orders to return to the Coppermine. On the 24th, he entered the river, and next day, in attempting to tow the boat up Bloody Fall, he lost one of his crew, Albert, the interpreter, who was drowned in the rapid.

Without further accident, Rae arrived at Fort Confidence on the 1st September. All the stores having been previously packed, he set out next day, reached Fort Simpson on the 26th, and proceeding by the usual route, arrived at the headquarters of the Hudson's Bay Company. Meantime Sir

John Richardson had left Fort Confidence on the 7th May, proceeded south-eastward through Canada by the lake route, entered the States, and, taking ship at Boston, arrived in England, 6th November 1849.

Expedition to Barrow Strait under Sir J. C. Ross—1848-49.—It has already been stated that during the third year of Franklin's absence the British Government resolved upon sending out three search expeditions. Two of these, the Behring Strait expedition, embracing the voyages of Kellett and Moore in the "Herald" and "Plover," including Pullen's boat expedition, and the river and coast journeys of Richardson and Rae, have already been treated. We now come to add a short account of the expedition of Sir James Clark Ross as a pendant to the expedition of Richardson and Rae. For thus treating Ross's voyage to Barrow Strait, there seems to be two sufficient reasons. First, the two searching parties were expected to act in concert, and each was instructed to connect their work with that of the other; and, second, the actual results of Sir J. C. Ross's labours were unfortunately so inconsiderable that it seems scarcely expedient to treat them in a separate chapter.

The first Barrow Strait searching expedition, organised to discover and follow up the track of Franklin in the "Erebus" and "Terror," consisted of the "Enterprise," a vessel of 530 tons, and carrying sixty-three officers and men; and the "Investigator," of 538 tons, and carrying sixty officers and men. Sir James Clark Ross, who sailed in the "Enterprise," commanded the expedition, and was supported by Captain Edward Bird in the "Investigator." The expedition did not leave England till the 12th June (1848), and, as might be expected after such a late departure—late, at least, for sailing vessels—they had not their sorrows to seek. Ross experienced many difficulties in Baffin's Bay, and was unable to cross the "Middle Ice" before the 20th August, on which day he reached open water in lat. 75½° N., long. 68° W. On the 26th he reached Possession Bay (near the south side of the entrance to Lancaster Sound) and was lucky enough to find there a memorandum left by Parry in 1819, though he saw nothing to prove whether Franklin had visited the bay. Entering Lancaster Sound, and pushing west, he reached Cape York on the 1st September, and caused a prominent landmark to be there erected. He then crossed over to the north coast of Barrow Strait, and examined Maxwell Bay and other indentations. Still holding on a westward course, he was stopped by a formidable barrier of ice, which extended from the mouth of Wellington Channel to Leopold Island, at the west side of the entrance into Regent Inlet. On the 11th September the ships were taken into Port Leopold, in which they were effectually sealed up for the winter on the following day by the main pack closing in upon the land. Ross had carried out a steam launch with him, in which he ex-

pected to be able to navigate the narrow channels, and perhaps push as far westward as Melville Island, on which, in the opinion of many, the lost navigators might be frozen up. The closing in of the ice effectually prevented Ross from making use of his launch. An ingenious but not very certain means of conveying to Franklin's party intelligence of the measures which were being taken for their rescue occurred to some of the officers of the searching ships. During the winter a number of white foxes were taken in traps. Around the necks of these, copper collars, on which intimations of the position of the searching vessels, and of the sites of the different depots of provisions that had been made for the benefit of the missing expedition, were engraved. The foxes were then set free to spread the intelligence far and wide.

In the spring, sledge expeditions, conducted by the officers, were sent out in various directions. Lieutenant Robinson searched the west shores of Regent Inlet as far south as Fury Beach; Lieutenant Barnard crossed Barrow Strait to Cape Hurd, but was prevented by the hummocky condition of the ice from reaching Cape Riley or Beechey Island, where he would have found traces of Franklin; while Lieutenant Brown crossed Regent Inlet to Port Bowen. "By these excursions," writes Sir John Richardson, "taken in conjunction with Mr Rae's expedition in the spring of 1847, the whole of Prince Regent Inlet and the Gulf of Boothia was examined, with the exception of 160 miles between Fury Beech and Lord Mayor's Bay; and as there were no indications of the ships having touched on any part of the coast so narrowly traced, it is certain that they had not attempted to find a passage in that direction." Of these search excursions the most important was that of Sir James Ross, who, accompanied by Lieutenant M'Clintock—a name destined to become one of the most famous in the annals of Arctic discovery—thoroughly explored the west coast of North Somerset, down to lat. 72° 38′ N., long. 95¾ W. After having thus surveyed nearly the whole of the west coast of North Somerset, a line of coast previously quite unknown, he returned to the ships on the 23d June, much exhausted by fatigue. At Port Leopold, Sir James erected a store-house, in which he left a large store of provisions and fuel, together with the "Investigator's" launch and steam-engine. He then proceeded to cut his way out of the ice-encumbered harbour—a work which was not successfully accomplished until the 28th August, when the season was again on the turn, and enclosure among new ice no unlikely contingency. Having struggled out of the bay in which he had been for a year imprisoned, Ross crossed over in a north-west direction toward Wellington Channel, at the entrance of which he found the land-ice still fast, and preventing his approach. While contending with the loose packs, and struggling to advance to the westward, a strong gale of wind on the 1st September suddenly closed the ice around

the ships, which remained firmly beset in the drifting pack until the 25th of the month. Ross had by this time drifted out of Lancaster Sound, and was now off Pond's Bay. The navigation of the great northern strait had closed for the year; and as further search was therefore at an end, the commander brought the expedition to a close by giving the order to "bear up" for England. This expedition, in which no trace of Franklin was found, is only memorable for Sir James Ross's sledge travelling round the north and west shores of North Somerset, in which he was absent from his ship forty days, and in which the distance traversed was 500 miles.

Auxiliary Voyage of the "North Star."—On the 26th May 1849, the store-ship "North Star," under the command of Mr Saunders, sailed from the Thames with provisions and supplies, both for Franklin's expedition and for that of Sir James Ross. Mr Saunders worked his vessel up the east side of Baffin's Bay amid constant and imminent danger from the ice, which was unusually heavy in the bay in the summer of 1849. Saunders's orders were to proceed to Lancaster Sound with despatches and supplies for Ross, and afterwards to examine the great sounds at the head of Baffin's Bay. His progress was very slow, and it was the 29th July before he reached Melville Bay. In endeavouring to cross over from this bay to Lancaster Sound, Saunders was caught in the ice, and the "North Star" was drifted hopelessly about in the pack for sixty-two days. At length on the 29th September she was providentially driven into Wolstenholme Sound, where she wintered in lat. 76° 33′ N., long. 68° 56¼′ W., "being," says Richardson, "the most northerly position in which any vessel has been known to have been laid up." In this high latitude, the greatest cold was felt in February, during which, on one occasion, the thermometer showed 64½° Fahr. below zero.

The story of the wintering of this unfortunate vessel in Wolstenholme Sound has never been written. We know, however, that four of the crew died of scurvy, and that the whole suffered more or less from the same cause. The detention of Mr Saunders in this remote sound, however, enabled him to contradict a mischievous Eskimo report as to the fate of Franklin's ship, which, had it been accepted as true, would have brought the searching operations at once to a close. It appears that Sir John Ross had, during his cruise in the "Felix," picked up an Eskimo at Holsteinborg, named Adam Beck—a clever, ingenious, lying wretch, who gave currency to a report that "two ships had been destroyed by fire in Wolstenholme Sound, and their crews massacred by the natives." This report happened to explode like a bomb-shell during the second week in August, when almost all the searching ships had accidentally come together in the neighbourhood of the scene in which the tragedy was said to have occurred. Many of the officers of the different expeditions were inclined to

believe the report. No casualty had happened to any of the whalers, and the two ships that were thus savagely destroyed could only, of course, have been the "Erebus" and "Terror." If so, the search was at an end, and everybody had better go back to England. The officers of the different ships constituted themselves temporarily into a board of inquiry to investigate the subject. A number of the Eskimos of Cape York, who must have known of the tragedy had it taken place, were examined individually and together in the ship and on shore, and, to be brief, the result was, that Adam Beck was branded by his countrymen as a liar *par excellence*—being far in advance of his tribe in that respect. Cape York was visited, and the bloodthirsty race who had burnt the "Erebus" and "Terror," and massacred the crews, was found to consist of five miserable half-naked and sufficiently inoffensive wretches of the lowest Eskimo type. Beck's story, evidently false from the beginning, was now of course disproved. A week afterwards, the "North Star," having got freed from the ice of Wolstenholme Sound, fell in with Penny's "Lady Franklin" and "Sophia" in Barrow Strait; "and," writes Dr Sutherland of the latter ship, "the report of the Eskimos at Cape York (who had disproved Beck's story) was fully verified by the information which Mr Saunders gave us."

After a winter of much discomfort and suffering, the "North Star" was hauled out of her winter retreat on the 1st August 1850. Her commander then took her across towards Lancaster Sound, where he saw and spoke several of the vessels then engaged in the Franklin search. He touched successively at Possession Bay, Whaler Point, Port Bowen, Jackson's Inlet, and Port Neil; and, according to Berthold Seemann, he deposited his cargo of provisions in Navy Board Inlet, without acquainting any of the searching vessels with that circumstance. On the 9th September Saunders steered for home, where he arrived on the 28th of the same month.

With the unfortunate voyage of the "North Star," the first series of expeditions sent out to seek for Franklin comes to an end. Neither of these expeditions can be said to have been in any distinctive degree successful. Indeed, these earlier expeditions were the only really unsuccessful and barren enterprises organised either by our own Government or by America for the purpose of prosecuting the Franklin search. For from 1849 onward to the present day, the tale of Arctic exploration is enlivened and enriched with the important successes of each succeeding expedition, from those of Austin and Penny, who first struck upon Franklin's track, and of M'Clintock, who first told us the whole sad story of his fate, to those of our own day, in which we are discovering new lands beyond Nova Zembla, and new seas beyond Smith's Sound.

PART IX.

ON FRANKLIN'S TRACK.

CHAPTER I.

CAPTAIN PENNY, WHALING MASTER AND EXPLORER—GOODSIR'S "VOYAGE IN THE 'ADVICE' (WHALER), IN SEARCH OF FRIENDS WITH SIR JOHN FRANKLIN."

CAPTAIN PENNY, the discoverer of the first winter quarters (1845-46) of Sir John Franklin's squadron, and, in virtue of this discovery, the first navigator who had the good fortune to strike the track of the lost expedition, seems to have been born to, as he has certainly lived upon, the sea. He was born in 1809. At what period of infancy he took to a seafaring life is not to the present writer known; but it is certain that, at the—for him—comparatively mature age of twelve, he was already an Arctic navigator, and since that period he has spent his professional life exclusively in Arctic seas, fluid and frozen. Prior to the year in which he was selected by the Lords Commissioners of the Admiralty to command an expedition in search of Sir John Franklin, he had been in command of a whaling ship for sixteen years. At the period, therefore, when he was invited to sail under the red pendant, he, of all British seamen living, had the most thorough knowledge and the amplest practical experience of what is loosely termed "ice-navigation;" and it was in deference to these qualifications, as well as to the well-known resolute character of the man, his fertility of resource, and his zeal in the humane and patriotic cause which he was asked to aid, that he was appointed to the command of H.M. rescue ships, "Lady Franklin" and "Sophia," in the early spring of 1850.

But, in order to attain to something like an adequate notion of the character and capabilities of this famous navigator and discoverer, it seems almost necessary to accompany him on one of his whaling voyages. Of these voyages, probably none was more stirring or more successful than that

of 1849—the last he undertook previously to his appointment to the command of the search expedition already mentioned. Fortunately for us, to give an outline of this cruise is at once *desirable* for the purpose of suitably introducing Captain Penny to the reader, and *necessary* in order to faithfully carry out the purpose and the plan of the present work. The cruise referred to, made in the whaler "Advice" of Dundee, is memorable and noteworthy for more than one reason. It was not exclusively a whaling cruise. It was practically also a Franklin search expedition, and for this reason, if for no other, it falls in to be noticed here in the chronological order which has been observed throughout these pages. In what sense the cruise of the "Advice" in 1849 was a search expedition as well as a commercial venture, may in a few words be explained.

In a previous chapter, in which the departure of Franklin on his last expedition in the "Erebus" and "Terror" is recounted, we were fortunate enough to be able to reproduce from Commander Fitzjames's "Journal," portrait-sketches of all the officers of the former vessel. Of these sketches, perhaps none is so vivid, so instinct with character, as that of "Surgeon Goodsir." He is "long and straight, and walks upright on his toes, with his hands tucked up in each jacket pocket. He is perfectly good-humoured, . . . laughs delightfully, cannot be in a passion, is enthusiastic about all 'ologies, . . . catches phenomena in a bucket, . . . is a pleasant companion, and an acquisition to the mess." Is this sound-hearted man and "pleasant companion" who so soon won the friendship of all on board, likely to have left no friends at home? That he counted them in troops we may be sure; for, besides his fine social qualities, he possessed a liberal share of that intellectual superiority which won for one member of his family, at least, a European reputation. He himself, though only twenty-eight when he joined the "Erebus," had been for some time previously Curator of the Edinburgh Museum. His elder brother, John Goodsir, Professor of Anatomy in Edinburgh University, has left a name which is known and revered in every medical school throughout the world. Another brother, Robert Anstruther Goodsir, late President of the Royal Medical Society of Edinburgh, was also a man of fine intellectual gift, and of sympathy warm and wide. With this last gentleman it is now our privilege to commence a pleasant acquaintance in these pages.

Years having passed after the departure of the "Erebus" and "Terror" without one re-assuring message being brought home from the blank Polar wastes, R. A. Goodsir—like a thousand other kinsfolk of the absent men—began to feel much anxiety for the fate of his brother "Harry," as in his letters he familiarly calls the assistant-surgeon of the "Erebus," and eventually he resolved to go out to the north and search for him and for the missing expedition. In 1849 he incidentally heard of Captain Penny (then master

of the "Advice"), and of the enterprising character and energetic disposition of that gentleman. He had, like his brothers, received a medical training, and he now resolved to make that training his passport to the north. He proceeded to Dundee, had an interview with Penny and with the managing owner of the "Advice," offered his services as surgeon for the summer cruise, was engaged, sailed on the 17th March 1849, returned in the autumn of the same year, and wrote and published "An Arctic Voyage to Baffin's Bay and Lancaster Sound in Search of Friends with Sir John Franklin."

The book named is exceedingly valuable, not on account of the results of the "search," but as giving an excellent account of whaling operations with modern appliances, making us familiar with the character and the high professional skill of Captain Penny, and placing before us impressions of life in the far north of Baffin's Bay, which are simply delightful from the facts that they were made upon a mind perfectly fresh and unhackneyed, yet gifted at once with great powers of observation and of expression. A gale that sprang up on the 27th March would certainly have cut short the career of the young adventurer, but for the mere accident that at a given moment he happened to leave the deck and go below. In this storm, the first serious incident of the voyage, two of the crew were washed overboard. Goodsir's description of the storm will commend itself to every one who has been at sea in hard weather as being at once perfectly fresh and perfectly true: "On the 28th it began to moderate somewhat, but a tremendous sea was running. About eleven o'clock I ventured on deck, and, for the first time in my life, saw what the ocean *looks like* in a storm. I could see nothing all around but heaving mountains of water; each succeeding wave seemed as if it would swallow up the labouring vessel, but it always appeared to melt away gently under us, except when one more rapid, or 'cross,' would send water and spray washing over her decks and high up into the rigging. The motion of the ship was not uncomfortable, being very different from the short cross pitching we had experienced in the North Sea. I remained on deck about a quarter of an hour, gazing about me in silent wonder and admiration, little thinking that the hitherto harmless waves were upon the very eve of proving their might over man's puny bolts and beams. Feeling it chilly, I went below. I had just entered the cabin and taken my seat, when the ship became motionless, as it were, and seemed to tremble in every beam. A report like thunder, mingled with the rending and crashing of timber; sudden and complete darkness, with a rush of water through the skylight, and the ship thrown on her beam ends, showed me what one has to expect occasionally at sea. I scrambled on deck after the captain, as I best could, scarcely knowing what had happened. Here nothing was to be seen but wreck and destruction. The quarter-deck was literally swept of everything, rails and bulwarks, almost all the stanchions, the binnacle, com-

passes, dog's couch, and nothing could be seen of the wheel but the nave. But the worst was still to come, two poor fellows were missing. One had perished unnoticed; he must have been killed amongst the wreck, washed overboard, and sunk like a stone. The other had been seen by the mate, for an instant only, floating on the binnacle, and just sinking. No human assistance could have been rendered to them with such a sea running. Two other poor fellows were rather seriously injured, and took up my attention for some time. The captain, cool and collected, soon restored confidence to his men, and in a short time had the wreck cleared away, a long tiller shipped, and the vessel again hove to. Spare spars were lashed to the stanchions that remained, so that we had again something like bulwarks, but for many a day afterwards the ship had a sadly damaged and *wrecky* appearance. I have much reason to be thankful to Providence for my escape, for had I remained but ten seconds longer on deck, I should either have been crushed under the wreck or washed overboard. Many of the men, I daresay, were grateful enough, but, sailor-like, in a few days all was forgotten, and 'sweethearts and wives' drunk as heartily on the Saturday nights as ever. At any rate, we soon heard their clarionet and songs sounding from the half-deck as cheerily as before."

The progress of the "Advice" toward the usual fishing-grounds was satisfactory. It can only be glanced at here. On the 14th April the whalers saw the first iceberg, and in a few days afterwards they rounded the Cape. They passed through the first ice-streams on the 20th, and on this day each of the seven harpooners of the "Advice," having had his boat adjudged to him by lot, with his boat's crew, set to work to splice his lines together and to coil them away in the after-part of the boat. These preliminary operations were all performed with the most anxious care; for seeing that the value of a whale may be from £500 to £800, it is of the greatest importance that the lines and all the other appliances should be in perfect condition. On the 22d they were really among the ice for the first time; and, says our landsman, "a very bitter day it was. . . . The frost was intense; the ship was almost incased in ice, the bows one mass of it, and every rope *electrotyped*, as it were, with a silvery covering. I never, during the rest of the voyage, felt the cold so intense as on this day." With the close of April, however, came bright sunny weather, with cloudless skies. As the "Advice" sailed along the coast to the north of Queen Anne's Cape, Goodsir was charmed with the coast scenery, at once *new*, and in the highest degree imposing; and he reproduces its chief features in two sentences—which are absolutely photographic in their truth, and which we take the liberty to quote, though we have already had so much to say on the subject of Arctic scenery, simply because they evince extraordinary vividness of impression on a fresh mind, and great powers of reproduction in verbal description. "The whole length

of the coast we sailed along was a succession of towering mountain-ranges, covered with snow, bordered by the black and precipitous shores, along which were seen the entrances to the numerous fiords, deeply indenting this coast, but which, at the distance we were at, appeared to be merely valley. The different effects of light and shade were exceedingly beautiful, more particularly in the evenings, when the summits of the more distant inland ranges shone in the sunlight like masses of gold, and the icebergs in the foreground were tinged with the most beautiful and dazzling colours. . . . One berg which I saw here was perforated by an arch of the most perfect outline. The berg itself was of immense size, and I am not exaggerating when I say that a pretty large vessel could pass through it with all sails set. But it is impossible to describe the beauties of these ice-islands. Many of them have caverns worn in them, within which the ice appears of the most brilliant blue and green, whilst without all is of stainless white, the entrances curtained, as it were, with glittering icicles."

On the 8th June, the "Advice" had advanced to about lat. 74°, and was standing off the "Devil's Thumb," an immense column of rock rising from among the mountains not far from shore; and on the 1st July, Captain Penny was in sight of Cape York, which abuts on the northern entrance to Melville Bay. On the 3d he passed the famous "Crimson Cliffs" of Sir John Ross, and found them not at all crimson, but rather dirty brown in colour. On the 4th the whalers were fairly in the north-west, whence, sailing westward, they passed Carey Islands, and sighted the "west land" of Baffin's Bay on the 8th. The land seen was part of the coast of North Devon, from which, steering south, Penny passed the mouth of Lancaster Sound. "We were too distant at this time," writes Goodsir, "to make out whether the sound was frozen across, but it may be believed it was not; with no uninterested eyes I looked in that direction, which, four years before, had been taken by those of whose welfare so many were now looking eagerly for tidings. I would fain have struck at once for the westward; however, there was nothing for it but to wait patiently. So I made up my mind to pass the next month in Pond's Bay, as I best could—the hope never leaving me that I might yet succeed, one way or another, in getting up Lancaster Sound." On the evening of the 9th, the "Advice" was off Cape Graham Moore, the northern point of Pond's Bay—then the most productive fishing-ground of the whalers. Here for a time Goodsir must be content to remain, leaving aside the main object he had in view in coming to Lancaster Sound. He must accept the inevitable. It was Captain Penny's first duty, to himself, his owners, and his crew, to secure "a full ship," after which, whatever could be done to forward the "doctor's" wishes, he would doubtless try to do; for his heart was in the sacred cause, as well as Goodsir's. Meantime the nightless day—for the sun had ceased to decline below

the horizon since the 10th May—would not weary him, for he was to see what Purchase calls "an hunting spectacle, of the greatest chase which nature yieldeth, I mean the killing of the whale."

Captain Penny had a strong conviction of the value and importance of sailing early for, and arriving early at, the whaling grounds. He considered that if he could get to Pond's Bay in or about the first week in July, he should fall in with a run of "fish;" and here he was, hanging in the breathless air at the entrance of the bay on the 9th. Already he was eager to be at work, and he talked of sending the boats into the bay to try and capture one or two of the leviathans of these waters. His usual luck seems to have attended him, for on the day of his arrival in the bay he caught "two fish at a fall." On sailing slowly into the bay, Penny saw that he had not been first in the race to the fishing ground, and that he had been preceded by a vessel which turned out to be the "St Andrew" of Aberdeen. The "St Andrew" had got through the barrier of ice at the north end of Disco, *inside,* or to the eastward of Hare Island, at the mouth of Waigat Strait, and proceeding northward, had *found open water* almost the whole way through Melville Bay in the beginning of June. She was only once obliged to cut a dock as a protection against moving ice, and she arrived in Pond's Bay on the 10th June, a month before the "Advice." She had not however killed, or even seen, any whales. "I was annoyed at this," writes Goodsir, "or rather at my own bad fortune in our ship not having got through at the same time, merely in consequence of our not succeeding in getting through the barrier of ice at Hare Island when we first attempted it. It was thick weather at the time, and the 'St Andrew' took the inside of the island, whilst we tried the outside. She succeeded, but we had to put back. The result is seen; she was at the west side of Baffin's Bay a full month before any of the other ships, and had little or no difficulty in effecting it. This proves that Mr Penny is right in the opinion he has so often expressed to me, that the earlier in June the passage through Melville Bay is attempted, the easier will it be effected. He has pointed out to me that the prevailing winds during the month of May and the beginning of June, are from the north or north-east, and that the effects of these are to drive the ice to the southward, consequently slackening it in Melville Bay and the northern part of the 'middle ice,' and thus rendering the passage through it easier during the earlier part of the month of June than it is about the end of it: and that it is still more difficult during July, from the prevailing winds then being from the south and south-west, their effect being to pack the ice into Melville Bay. Going over every year from 1820, he has shown to me *that the earlier the passage has been attempted, the easier it has been;* and that if the whale ships have been delayed to the southwards, from any of the many causes which are apt to impede them, they have always had proportionate

difficulty in effecting their passage, according to the period in the month of July in which it was attempted. For instance, Sir John Franklin's ships, in 1845, were only crossing the Arctic circle at the time we were this year (1849) in the 'north water.' And in 1845 Sir John Franklin's ships were met in Melville Bay beset, and still forty miles from the 'north water,' when the whalers were returning full from Pond's Bay.

"I was the more annoyed at our bad luck, seeing that if we had got through at the same time as the 'St Andrew,' some advantage might have been taken of the additional time thus gained, to search for some information of the expeditions. I am certain, at least, we should not have been lying idle. Mr Penny had proposed a most feasible plan to me, and which I should have been delighted to have had it in my power to execute. He knew there was an Esquimaux at Pond's Bay of the name of Toonick, with whom he was well acquainted, an intelligent fellow, and who could speak English well. Our plan was, that I should make a bargain with this man to accompany me as a guide from Pond's Bay to Navy Board Inlet. With a couple of sledges, the necessary number of dogs, and Esquimaux attendants, we thought this could have been easily done, and I yet regret that I had it not in my power to try it. Although we visited Navy Board Inlet a month afterwards, and found no trace of the expedition there, yet my time would have been as well employed as on board ship; and, if I had done nothing else, I could have ascertained whether or not there is a sea communication between the two inlets, which seems exceedingly probable. However, we found, upon inquiry, from the first natives who came off to us, that Toonick, and almost all the rest of the Esquimaux, had proceeded up the country salmon-fishing. Those who were left were all old men, many of them afflicted with snow-blindness; and the only stout young fellow we saw appeared to be idiotical. We could make nothing whatever out of him. Our scheme was thus knocked on the head, much to my disappointment, as I had looked forward to it with great hopes." How many voyages of discovery in the high latitudes have failed from omitting the precaution to be at the edge of the ice early in the season!

Whaling now went merrily on for the next two weeks, Captain Penny enjoying more than the average share of good luck. During this time, Goodsir's habits were sadly upset. It almost invariably happened that when the electrifying cry of "A fall!" was heard, it was at midnight, or shortly after it; "and then," says Goodsir, ruefully, "adieu to sleep for the next eight hours at least." For the first ten days the "doctor" seems to have suffered a little from despondency, bred of his enforced confinement on a whaling station when his heart and soul were away among the ice-rimmed coasts, the channels, and inlets of Barrow Strait, among which it might still be possible to find his brother, or at least to rescue some of Franklin's party.

Gradually, however, his healthy nature seems to have asserted itself. The instincts of the true sportsman were within him. Always interested in the fortunes of his ship and of Captain Penny, for whom he had the highest esteem, he soon began to participate in the excitement that thrilled through the ship when "A fall!" was shouted from aloft, and the men tumbled headlong into the boats, and rowed madly away to be in at the death. It was when in his despondent mood that he wrote: "For my part, every successive capture we made was a sort of disappointment to me, for the more we got, the less chance was there of our getting up Lancaster Sound—my only aim and object." Alas! poor Yorick! A few days later, however, we find that he has, temporarily at least, aims and objects of a very different character. The spirit of the hunter is soon awakened within him, and rages in his bosom as in that of another Nimrod. Let us see the doctor *en chasse:* "It was late in the evening of a brilliantly clear and warm day—one of those days which but too seldom enliven this land of eternal ice and snow, and which, when they do happen, contrast so delightfully with the many days of dreary mist which the visitor of Arctic countries has to endure. Two or three of the hands were lounging listlessly about the decks, all the watch being 'on the bran' (watch) in the boats, stationed along the ice, to which the ship was made fast, and the rest of the crew sound asleep in their berths. The master had just gone up to the crow's-nest to take a look around him before turning in. He had not been there many minutes before his quick and well-trained eye saw whales blowing beyond a point of ice some ten miles distant. The welcome news soon spread that the long-looked-for 'run' was at length in sight, and ere long every soul was astir and ready for the sport. The boats were immediately lowered, those in the 'bran' were called alongside, and their kegs filled with bread, beef, and water, and a small supply of grog given to each. The master was anxiously reiterating his orders to each of the harpooners; whilst some of the keenest of them were running up to the crow's-nest, and as they came down again were asserting that they saw the whales spouting like 'steam-coaches, only far thicker.' Most of the boats were now sent off to meet the 'run;' but in a short time, the whales showing no inclination to come further into the bay, the rest were despatched also, with orders to pull right out to them. I had no idea of remaining by the now almost deserted ship at a distance from the scene, so I proposed to go in the last boat, and, as we were short enough of hands, I had no difficulty in getting my offer accepted. We had a long pull before us, but the anticipation of the sport, the delightful calm of the evening, and the beauty of the scene around us, shortened the distance wonderfully. . . . We passed a Kirkcaldy vessel, the crew of which were busily engaged, and pulling onwards. We shortly came up to one of our own boats, which we found had succeeded in killing a large fish of ten or eleven

feet bone: the fish was floating at the edge of the floe, and the boat's crew would fain have had ours to join them in the laborious and irksome task of hauling in their lines. But we had no idea of this when there was sport to participate in a little farther on: so, after a few minutes spent in asking questions—how many lines she had taken out, etc., all of which seem so interesting to the true whaler, we had regained breath, and pulled onwards. About three miles farther on we found a second boat with her 'jack' flying, denoting that she was fast. Passing close to this boat, we found that the fish was taking out line with great force and rapidity, and that the harpooner was rather doubtful as to his being 'well fast' or not; that is to say, he was uncertain whether his harpoon was securely inserted into the whale. He had fired at a long range just as the fish was going down. We pulled in the direction in which she was 'heading,' where the rest of the boats already were. Before we got up to them, she had made her appearance at the surface. A second boat had got fast to her, and just in time, as she was seen to be 'loose' from the first. She did not take out much line from this boat, but remained away a considerably longer time than usual, greatly to our astonishment, until we found that she was 'blowing' in some holes in the floe, a good distance from the edge of it. One of the harpooners immediately proceeded over the ice with a hand-harpoon, trailing the end of the line with him, assisted by part of his crew, and from the edge of the hole drove his weapon into the body of the poor whale; whilst some of the others following plied the bleeding wretch with their long lances, so that she was soon obliged to betake herself again to the open water outside the floe. Here more of her enemies were waiting, for our boat was immediately upon her, and a gun-harpoon was at once driven almost out of sight into her huge side, which was already bristling with weapons. Our boat was on her very back as she dived, with an unwieldy roll, which sent it surging gunwale under, taking the line whistling out for a score fathoms, until the harpooner, knowing she was pretty well exhausted, stopped her way, by taking three or four turns round the 'bollard.' But every few seconds she would make a start, drawing the boat almost head under, until the line was permitted to run out again, which, as it did so, made a grinding, burring noise, eating deep into the hard lignum vitæ of the bollard, enveloping the harpooner in smoke, and causing the most distinct smell of burning, which was only prevented from actually taking place by the line-manager throwing water constantly on it.

"Again she appeared at the surface, but far exhausted, still she made a strong fight for it, lashing about with her tail and fins in fury whenever she seemed to have regained breath. It was no very pleasant sight to see her tail quivering high up in the air within but a short distance of us, and coming down on the water with a loud sharp crack like the report of a dozen rifles,

and which, had it alighted on any of our boats, had power sufficient to have converted their timbers into something very like lucifer matches. A few more lances soon settled her, and ere long she was rolling on her back. The usual cheers of triumph were given, and we had time to breathe and shake ourselves, for it may be believed we had not escaped the showers of spray which the defunct had sent about so liberally. The water far around us was dyed with blood and covered with a thick pellicle of oil, upon which the 'Mollys' (mollemokes) were as busy as they could be, whilst the edges of the ice, as far as we could see, were deeply crimsoned; and a hummock on the edge of the floe, beside which the final struggle had taken place, was from the summit downwards streaked with the black blood which the last few blasts of the dying monster had sent over it. Much to our satisfaction, we had little line to pull in, so that we were soon ready for another victim. It must not be thought, however, that I have been all this time an idle spectator. If one wishes to partake in this sport, he must also partake in the labour. The whale-boats are necessarily so constructed that they can only contain their proper crew. But as I was able to handle an oar, from former practice, I had no difficulty in finding a place in them and so gaining a closer view of the scene. The labour was severe, as we had already pulled upwards of fifteen miles, and that at full stretch, as hard as we could lay to our oars; but this was scarcely thought of at the time. It was only now, when the excitement was over, that I thought of fatigue or felt it. I had luckily pitched my pea-jacket into the boat when we left the ship, as I had a sort of idea we might be some time away; so I now rolled it up, placed it on the gunwale of the boat, and stretching myself out on the 'thwart,' slept as soundly as ever I did in my life. My slumbers, however, did not last long, for it was scarcely according to rule that any one should sleep in the boats on fishing-ground. But I woke thoroughly refreshed, and we were again in full chase after the 'fish.'

"We had two or three unsuccessful bursts after them, but failed in getting within striking distance. We saw one of the boats, however, a short way from us, fire at a large fish, which, on receiving the harpoon, leapt almost clean out of the water, head first, displaying the greater part of its huge bulk against the sky, until we thought it was going to jump right on to the floe. Suddenly reversing itself, its tail was seen high over the boat, and so near, that for an instant or two we breathlessly expected to hear the cry of agony from the poor fellows as they were crushed beneath it. But she dived sheer downwards, quite clear of the boat, towards which we now pulled quickly to render assistance, more excited, perhaps, by the narrow escape we had just witnessed than they were themselves. Distant as we were from the ship, and notwithstanding the hair-breadth escape they had just made, the joyous shout of 'A fall!' was now raised, and the jack dis-

played. Just, however, as we reached it, the line which had for the few seconds since the fish had dived been running out with lightning speed, slackened, and the strain stopped. The harpooner looked blue, and began slowly hauling in, his crew assisting, with long faces; for, be it remarked, each man in a 'fast boat' gets half-a-crown and the harpooner half-a-guinea. We sat gravely by, condoling with them on having lost their fish. In a few minutes the harpoon appeared on the surface, and was hauled on board, with sundry maledictions from the *heathens* of the unlucky boat. The whale had wrenched herself loose by her sudden and active leap, for the massive iron shaft of the harpoon was bent and twisted upon itself as one would twist a piece of soft copper wire with a pair of pliers. We pulled back again towards our former station. By this time we scarcely knew whether it was night or day. We had a sort of an idea that we had been a night and a day away from the ship, but of that we were not certain. We had made repeated attacks upon the biscuits and canisters of preserved meats, but although the appetites of steady-living people at home are pretty fair time-keepers, we found ours of little use in that way here.

"I suspected it was again night, but I could scarcely think it possible, the time seemed to have passed so rapidly. But there was a *stillness* about the air that must have struck every one as peculiar to the dead hour of the night; and although I have noticed it in far different situations, it never struck me so forcibly as it did here. The light passing breezes and cats' paws which had dimpled the water for some hours back had died away. It was now so calm that a feather dropped from the hand fell plumb into the sea. But it was the dead stillness of the air which was so peculiar. No hum of insect, none of the other pleasant sounds which betoken it is day, and that nature is awake, can be expected here even at mid-day in the height of summer, twenty miles from land, and that land far within the Arctic circle, where, if one may say so, a third of the year is one long continuous day. Yet there is a most perceptible difference—there is a stir in the air around—a sort of *silent music* heard during day which is dumb during night. Is it not strange that the deep stillness of the dead hour of night should be as peculiar to the solitude of the icy seas as to the centre of the vast city? For many hours we lay quietly still, no fish coming near enough for us to attempt getting fast. But during the whole of this time they were pouring round the point of ice, and apparently running in towards the bay, almost in hundreds, the deep boom of their blowings resounding through the still air like the distant bellowing of a herd of bulls. My ear should have been pretty well accustomed now to the blast of the whales, but it was not until this time that I ever had noticed the peculiar hollow *boom* of their voice, if voice it may be called.

"We thought at the time that the fish were running right into the bay,

and imagined we could hear the distant sound of the guns and the shouting of 'falls' about the ships, which could just be seen. We were in no very good humour at the idea of not being in the thick of it, but we had no reason to complain as it turned out, for we learned, on our return, that the fish had never gone into the bay, and that scarcely any one had seen them on this occasion but ourselves. But we now had a good chance. A fish was seen beside the ice at no great distance from us, but beyond a 'fair start.' I have noticed a peculiarity about the whale, that if there is a piece of ice within sight it will run towards it, and come to the surface beside it. And when beside a floe, it always rises beside its edge, and never appears at any distance from it. And, moreover, if there should be a crack or bight in the floe, it is ten chances to one it will rise to blow in it, in preference to the outer edge of the floe. This is well known to the whalers. Such a crack being now opposite to us, and at such a distance from where the whale was last seen, it was likely she would rise there next, and we pulled towards it. Here we lay for some minutes in breathless expectation, our oars out of the water, and the harpooner silently motioning with his hand to the boat-steerer which way to 'scull.' Up in the very head of the crack the water was now seen to be circling and gurgling up, '*There's her eddy,*' quietly whispers our harpooner: '*A couple of strokes now, boys—gently—that'll do.*' Looking over my shoulder, I could see first the crown, then the great black back of the unsuspecting whale, slowly emerge from the water, contrasting strangely with the bright white and blue of the ice on each side—then followed the indescribable, hurstling roar of her blast. But short breathing time had she—for, with sure aim and single tug of his trigger-string, the keen iron was sent deep in behind her fin. '*Harden up, boys!*' he cries, and the boat is pulled right on to the whale, when he plunges the hand-harpoon deep into her back, with two hearty *digs*. The poor brute quivered throughout, and for a second or two lay almost motionless; then diving, and that with such rapidly increasing speed that the line was whirled out of the boat like lightning. The usual signals were now made to the other boats that we were 'fast.'

"For the first few minutes the lines were allowed to run out without interruption, then one, two, three turns were successively thrown round the 'bollard.' This had the effect of stopping her speed somewhat, but the line still ran out with a great strain. The boat's bow was forcibly pressed against the ice, and crushed through the underwashed ledge to the solid floe beyond; the harpooner sitting upon his 'thwart,' allowing the lines to run through his hands, which were defended by thick mits: stopping the progress of the fish as much as he could, as the rest of the boats were still some distance from us. Every few minutes the fish seeming to start off as with renewed strength, the boat's bow would be pulled downwards, threatening

to pull us bodily under the floe. But then allowing the line to run out, the strain was partly removed, and the boat's head again rose, but only to be again dragged downwards. Upwards of twenty minutes had elapsed since we had 'got fast,' and the strain now began to slacken, but it was full time—we were drawing nigh the 'bitter end.' The welcome sound of a gun was heard, and in a few seconds, looking down the edge of the floe we could see one of our boats with the well-known blue 'jack' flying. A few fathoms more of line were rapidly drawn out, and then the strain as suddenly ceased. We commenced hauling them in, and whilst doing so, could see a third boat 'get fast.' The rest of the boats were now at hand, and as she appeared at the surface, closely surrounded her, and busily plied her with their lances. It was in about an hour and a half from the time we first struck her that we heard the distant cheers announcing her death. From the time the second boat had got fast we had been busily engaged hauling in our lines, and thus slowly approaching the cluster of boats round the dying whale. But long ere we had finished this they had succeeded in killing her, and she was lying safe and sound, made fast to the edge of the floe. The boats now collected and prepared to tow the dead fish to the ship. This was even more tedious than hauling in the lines, but as I had volunteered to take my place in a boat, I said not a word, but tugged away at my oar in silence. Luckily, however, one or two fish were seen near us, in pursuit of which our boat and another cast off from those which were towing. The moment we were again in chase, fatigue and languor vanished, and we stretched to our oars as heartily as we had done when we first left the ship.

"We had a long, but a fruitless pull, and in the meantime a light breeze had sprung up, and we could see that the ship had 'cast off' from the land ice in the bay, and was working down towards the boats and dead fish. We pulled towards her at once, and I was not a little glad to be able to stretch myself on deck again, after nearly forty-eight hours' confinement to the thwart of a boat. A hearty welcome from the captain, who was not a little astonished to find me so fresh after my labours, and the tempting sight of smoking beef-steaks and *early potatoes* on the cabin table soon made me all right, nor did I feel half so fatigued as I might have expected, and was later than even my usual time of retiring to my narrow berth in the little closet off the cabin, which was by courtesy termed the *doctor's state-room.*

"Two or three days after this, I had another opportunity of closely witnessing the death of a whale. She had been struck in a crack but a short distance from the ship. All the crew, except the 'watch,' who were on the 'bran,' were sound asleep in their berths below, fatigued after some days' hard labour. It is a most laughable scene to see a 'fall' called under such circumstances. The one or two hands who were walking quietly and gently on deck a second before, in order not to disturb the fatigued men below, are

now seen dancing and jumping like madmen on the half-deck hatch, screaming 'a fall!' as if for their lives. The more active men of the crew are on deck in an instant, with ready bundle of clothes in hands, and shoes or boots slipped loosely on their feet. But it is generally a race who will be first into their boats, clothed or unclothed, and nothing is more common than to see half-a-dozen fellows rushing to the boats with nothing on but their woollen underclothing, the rest in a bundle under their arm, trusting to the first stoppage to complete their toilette, such as it is. Rather a sudden change this from their close and crowded 'bunks' (as they call them) in the half-deck to an atmosphere often far below zero. But neither the old whaling sailor, nor the green Orkney boy, ever seemed to feel it.

"The stern-boat was the only one now left on board. The master ordering it to be lowered, and getting into it himself, I jumped in with him. We pulled up to the 'fast boat,' to see how things were getting on, and found they were only fast with the gun-harpoon, and not very well with that. Whilst talking to the harpooner of this boat, we heard a commotion amongst the others, and almost before we had time to turn, bang! went one of their guns, and the fish was made almost secure. She seemed to dive under the floe, and reappeared almost at the same place, for she next came up within a very short distance of where she was first struck, when a third boat got fast to her, and before she dived again she was mortally lanced. When she next appeared at the surface, it was close to our boat; we were at her in a minute, when the ready lance of the master was twice buried deep behind her fin. She made a rush forwards, which pulled the lance out of his hand, but he soon had a second—we 'hardened up' to the fish, when he plunged it into her side. She had been quiet enough hitherto, but it was now full time for him to cry, 'Back, men, for your lives!' I heard a sudden whizzing, whistling sound in the air—I thought a black cloud had passed between us and the sun—a drenching shower of spray passed over us, and there was a loud *thud* upon the water on the other side of the boat, as her huge tail descended into the sea, which it continued to lash into seething foam for more than five minutes. It may be believed that whilst this was going on we all kept at a safe distance. It was, however, only the last struggle—'the dying flurry,' and the huge mass was soon lying powerless and motionless before us. This was a female whale, and one of the largest we had yet seen." Its length was sixty-five feet, and its breadth behind the gills thirty feet.

Such was Captain Penny's good fortune, that in three weeks he had taken almost as many fish as he wanted, and had nearly "a full ship." He was now free to bear up from the fishing-ground of Pond's Bay, and steer for Lancaster Sound. Goodsir was devoutly glad to find himself "running smartly" towards the sound on the 1st August. On Friday the 3d, Captain

Penny, who for the time had ceased to be a whaler and had become an explorer, was borne on his way with a favourable breeze. A sudden shift of wind, however, blowing off Navy Board Inlet, forced him to stand to the northward, and he sailed in this direction until he could make out the headlands of the northern shore. On the morning of the 4th the air thickened with fog, and there was a heavy sea and a rising gale. At six A.M. the ship had to be hove to, under close-reefed main-topsail. At ten A.M. heavy "washing ice," or pieces over which the waves washed and broke, was met with, and the remainder of the day was spent in manœuvring against ice and wind. On the 5th, the "Advice" got so far to windward that Captain Penny, after passing Cape York, sighted Leopold Island from the mast-head. At this point progress was arrested. "All hope of proceeding farther," writes Goodsir, "had now to be given up, and we at once commenced to ply our way out of the sound, deeply chagrined at having to renounce our search. For my own part, I was miserably distressed: I had failed in achieving the only object of my voyage. But Mr Penny has scarcely another course open to him: he was not authorised to prosecute the search, or to go out of his way in obtaining information regarding the expeditions. . . . The next three days were melancholy enough; we were now retracing our steps; there was no hope of future success to sustain us now."

In the voyage up Barrow Strait, as well as on the return voyage, Captain Penny deposited casks containing letters, newspapers, etc., and surmounted by long poles, with red vanes as signals, on several of the prominent headlands. For this, and for his endeavours to carry succour to Sir James Ross's expedition, he received, in due time, the substantial acknowledgment of Government.

Repassing Pond's Bay, and stretching away on a south-east course, the "Advice" reached Home Bay. Thence, after capturing a white whale, Penny slowly worked his way south. After a run of a few days in this direction, the captain, who was not yet quite "full," was delighted to see the horizon chequered by the spouting jets of numerous whales. "All sail was crowded on at once, though there was a strong breeze blowing; but there being three or four other vessels in company, it was of course necessary," writes Goodsir, "to be ahead of them. This we accomplished in gallant style; the good old 'Advice,' when well handled, clumsy as she looked, could still sail well, and, indeed, throughout the whole voyage, when we were in company with the others, I think we showed as good a pair of heels as any of them. Well, we got into the midst of the black floundering masses; one, two, three boats were in an instant lowered, and in five minutes one of the largest of the oily giants was writhing and struggling under the tortures of a deeply-planted harpoon. 'She' made rather a long and hard fight, but was ultimately subdued." The "fish" was soon got

alongside, "flensed," or stripped of its blubber, which, as soon as the men could be spared, was "made off" into oil, and stored in the hold.

Meanwhile a rare and humorous incident occurred, which showed that Penny, in keeping his weather eye open, occasionally saw something to his advantage. He was up in the crow's-nest, and, sweeping the horizon with his telescope, he saw a huge black mass lying on the surface of the sea, about five miles ahead of the "Advice." It was a dead fish worth £500 at least. Now, as there were two ships between the "Advice" and this mountain of blubber, it was necessary to act warily, in order to pass these ships and reach the treasure, which of course would be the prize of the first comer. Trusting to no man on board, Penny himself started off with a well-manned boat. He went cautiously and slowly at first, careful lest he should rouse the attention of the other masters, who would be sure to wonder what game he was after. As soon as he had passed the boats of the other ships, however, he gave orders to go on at full speed. Goodsir mounted to the "crow's-nest," to watch the event of Penny's stratagem. "Luckily," says he, "during this time, the masters of the other ships had not been in their 'crow's-nests'—being busily engaged with their captured fish, so that they did not notice our cautious manœuvring. But now, one of them ascending, noticed (as he afterwards informed us) my long form standing erect on the seat of the 'nest,' with telescope fixed to my eye, and seemingly greatly interested in what was going on ahead of his own boats. They are quick-witted as well as quick-sighted, most of these same whaling-masters; so, seeing at once that something was in the wind, his own glass was immediately applied in the same direction, when he at once saw one of our pretty white boats pulling rapidly towards an object that he almost at the same time discerned—an object, too, worth some little trouble to attain possession of. But he at once saw it was too late. . . . Our good outlook gained us possession of the valuable prize; for now I could see those in the boat waving the blue 'jack' aloft in triumph. I shouted out 'a fall!' to those on deck, which was loudly and gladly responded to, and the ship's jack was again hoisted to the mizzen-top, not a little to the astonishment, and, I daresay, causing not a little envy, amongst those of the other ships, who had not noticed what was going on in the 'Advice.'" The immense carcass of the whale, swelled to an enormous size by the generation of gases, was soon towed to the ship's side, "flensed," and "made off" in the usual way.

The voyage was now to all intents and purposes at an end. It was Penny's first duty to sail at once for home with his valuable cargo. That duty he successfully accomplished in the early autumn. He and Goodsir then parted, to meet again on the trim deck of the "Lady Franklin," for another and a more effective "search" for the missing mariners.

CHAPTER II.

CAPTAIN PENNY'S SEARCH IN THE "LADY FRANKLIN" AND "SOPHIA."

THE ships of the two Barrow Strait expeditions—the "Enterprise" and "Investigator," under Sir James Clark Ross, and the "North Star," under Commander Saunders—had been caught in the drifting pack in 1849-50, and had, owing to that circumstance, been disabled for further efforts in the interests of the missing expedition. No such misfortune, however, had befallen any of the whalers during the same year. To the relatives and friends of Sir John Franklin this seemed a surprising and suggestive fact. Could it be that the freedom and security with which the whalers sailed the Polar seas was due to the thorough knowledge of ice navigation acquired by many years' experience of the winds, currents, and general hydrographical conditions which usually prevail within the Arctic circle? This indeed seemed to be the case, and the Admiralty, having resolved to send out another expedition in the spring of 1850, for the purpose mainly of searching the shores of Wellington Channel, decided to give the command of it to a whaling captain of ability and ample experience. Captain William Penny, of the "Advice" of Dundee, was the navigator appointed as being best qualified to take the command of the new expedition.

Acting on the instructions of the Admiralty, Penny purchased two new clipper-built vessels; one of 200 tons, built at Aberdeen, and which he named the "Lady Franklin," the other, of 100 tons, built at Dundee, and named the "Sophia," after Miss Sophia Cracroft, niece of Sir John Franklin. Mr R. A. Goodsir sailed as surgeon in the "Lady Franklin," and Mr P. C. Sutherland in the same capacity in the "Sophia," which was under the command of Mr J. Stewart. The two ships were towed out from Aberdeen harbour, where both had been equipped, on the 13th of April 1850. The voyage across the Atlantic was rapid and favourable, and on the night of May 2d, Leively, the Danish settlement on the south shore of the island of Disco, was reached. On June 3d, after prolonged detention among the land-ice of the Greenland coast, the ships had advanced northward to within a few miles of Sanderson's Hope. Here an Eskimo came alongside in his

kayack, and informed the explorers that no ships had been seen on the coast since the whalers and the Danish vessels had left it last year. On arriving at Uppernavik on June 5th, Captain Penny went on shore and succeeded in engaging Mr Petersen, who was acting in the capacity of assistant governor of the settlement, to accompany the expedition as interpreter. During the month of June, the progress of the vessels northward along the west coast of Greenland toward Melville Bay was provokingly slow and unenlivened by adventure or noteworthy incident. On July 2d, the "Lady Franklin" and "Sophia" passed the Arctic searching expedition, under the command of Captain Austin, in the neighbourhood of Cape Shakleton. It was not till August 14th that Captain Penny passed Melville Bay, and had steered his vessels close in with the land between Cape York and Cape Dudley Digges. On the 18th, the fog that had prevailed for many days cleared away, the sky brightened, and an east-south-east wind, favourable for crossing over to Lancaster Sound, sprang up. "Our studding-sails were set," writes Surgeon Sutherland, "and as our neat little ships scudded before the increasing breeze, there was nothing to cast the slightest gloom upon our bright prospects of being soon in the spot where our services would be called into requisition." Soon the dark coast from Cape York northwards began to fade in the distance astern, while the Carey Islands rose up from the sea in the distance ahead. "At four o'clock in the evening," continues Sutherland, "as the Carey Islands were sinking rapidly in the eastern horizon, the west side of Baffin Bay, on the north side of Jones Sound, was seen, and for this part our course was shaped with the view of exploring it and of passing through it into the Wellington Channel." At nine o'clock the vessels were within about sixteen miles of the land opposite the entrance into Jones Sound. The inlet, however, was found to be full of heavy ice, which, so far as could seen from the crow's-nest, presented no opening leading westward into the sound. The close state of the ice in the inlet, taken in connection with the advanced period of the season, was regarded by Captain Penny as a sufficient reason for altering his plan and steering straight for Lancaster Sound. On the morning of the 19th, two small ships were sighted bearing the American flag. These proved to be the schooners "Advance" and "Rescue" (Commander De Haven), which had been sent out by sympathisers in America to search for Sir John Franklin. On the morning of the 20th, while the vessels, sailing southward along the coast of North Devon, were nearing the entrance to Lancaster Sound, the wind blew from the east with terrific violence. In the afternoon, Captain Penny was obliged to heave to off Admiralty Inlet, a short distance within the entrance and on the south side of the sound. On the following day he sailed northward toward the North Devon shore, and had the fortune to fall in with the "North Star" (Commander Saunders). Mr Saunders was beset among the

ice on the 30th July 1849 in Melville Bay, and had drifted about in every direction, until, on the 30th September, he got into winter quarters in Wolstenholme Sound (lat. 76° 33′ N., long. 68° 56′ W.). Here he remained until the 3d August 1850 (eighteen days before his meeting with Penny), when, struggling out of Wolstenholme Sound, he sailed westward with the object of carrying out his instructions to search for Franklin's and Sir James Clark Ross's expeditions. Saunders examined Possession Bay, and thence proceeded up Lancaster Sound to Whaler Point. He examined Point Leopold and found that the stores which had been left there by Sir James Ross were safe. The crew of the "North Star" had suffered much during their long detention in Wolstenholme Sound—one of the most northerly localities in which any vessel ever wintered. "Some of them appeared to be emaciated," writes Dr Sutherland. "The Arctic winter had taken effect upon them, and had told its tale upon their constitutions. They were one hundred and sixteen days without the sun. The minimum temperature was $-63\frac{1}{2}°$ (or $95\frac{1}{2}°$ below freezing point) on the 24th February—one of the lowest degrees of natural cold ever observed. They seemed to have no objections to their orders to return to England."

On the 22d August, Captain Penny, sailing westward along the north shore of Barrow Strait, took observations in lat. 74° 27′, long. 86° 27′. On the 23d, after standing off for some hours to the south-west to examine the state of the ice in the vicinity of Leopold Island, and having reached to within fifteen miles of the island, Penny encountered a stream of ice, and was obliged to alter his course—not, however, until he had obtained a clear view of Cornwallis Island and Cape Hotham. On the 24th, he plied westward along the north shore of Barrow Strait, passing Cape Hurd, Radstock Bay, and coming within sight of Cape Ricketts, Caswall's Tower, and Gascoyne Inlet on the south-west shores of North Devon. Three ships were observed off Cape Hurd. On the 25th, Cape Riley and Beechey Island were reached. "The Wellington Channel," says Dr Sutherland, "was opening out to our view, and we could see the three ships already alluded to endeavouring to get to the westward. . . . The small ship we had seen on the morning of the 19th belonged to the American expedition. She had parted company with her consort during the gale of the 20th. . . . The 'Lady Franklin' was visited by a boat from her, to make inquiry whether we had seen her consort coming up the sound, *and to report that traces of the missing ships had been found at Cape Riley* by the 'Assistance' and the 'Intrepid;' but they were of a very doubtful nature, and it was impossible to arrive at any conclusion with regard to them, except that they proved that the ships of the missing expedition, or parties from them, had been at Cape Riley, and also at Beechey Island. . . . At two o'clock Mr Penny went on board H.M.S. 'Assistance,' which by that time was closely beset. On his return to the

'Lady Franklin,' we all learned that the 'Assistance' had found traces of the missing ships at Cape Riley and Beechey Island, *but of such a nature as not to leave the slightest impression on the mind at what time or under what circumstances the expedition had been there.*" In the evening Captain Penny cast loose, and steered toward the eastern side of Wellington Channel, along the edge of the fixed ice, which was hummocky from recent pressure. At one o'clock A.M., on the 26th, the ships were made fast to the floe. Afterwards, Mr Penny and Mr Stewart, who commanded the "Sophia," accompanied by Mr Goodsir and Mr Petersen the interpreter, went ashore to explore the coast northward from Cape Spencer, on the east side of the entrance to Wellington Channel. At six in the evening the party returned, bringing with them indubitable traces of large parties belonging to the missing expedition. The site of an encampment was discovered at the distance of about six miles north of Cape Spencer. Here there was a hut built of, and neatly paved with, stones. It was four feet high, and twelve feet in diameter. On one side of it was a recess which had evidently been used as a fireplace, from the ashes and the *débris* of ancient feasts it contained. "A great many articles," says Sutherland, "were brought off by the party. These included soup canisters, some of which had been used as cooking utensils, while others had the labels entire. 'Goldner's Patent'—a variety of preserved meat which had been furnished in large quantity to Franklin's expedition—was a very common form of label; and there was one bearing the name 'Mr M'Donald,' written in a business style. Some of them—the canisters—were a good deal corroded, especially where the paint had been removed in the opening, which in most cases appeared to have been very roughly performed. . . . There were pieces of oak, such as staves of small casks; the end portions of a small cask, with the words 'mixed pickles' scratched on them; also larger pieces of oak, such as might have been procured by splitting up the knees or the doubling of a ship, and they were charred at the ends as if they had been in the fire; the bones of birds also a little burned; but there were no beef bones; part of the leaves of a book (MS.), with some markings on them, and a part of a newspaper bearing date September 1844; portions of rope, very much chafed, but easily distinguished as belonging to the Royal Navy by the *middle yarn;* also torn mittens, cotton rags, and blank paper, all of which the wind had driven beneath the stones. The wall of the tent or hut had been rendered impervious to the wind, by the interstices being packed up with moss and bits of paper. Mr Petersen said it was about four years since the hut had been built, from the appearance which everything connected with it had assumed by the action of the weather. In this respect Mr Petersen's opinion would be of great value, as it could be relied upon, from his extensive experience within the Arctic circle. There were a few handfuls of coals in the fireplace, together

with birds' wings, tails, heads, feathers, and bones, some of which appeared evidently to have been in the fire. The track of a sledge was discovered, and the marks of the runners, which were very distinct, were found to be two feet apart."

The large body of relics thus discovered by Captain Penny were held to be incontestible proofs of two facts: that parties belonging to the "Erebus" and "Terror" had lived here for a considerable time, and that the period at which they did sojourn here was about 1846, or four years before the discovery of the encampment. These facts having been so far established, many inferences were deduced from, and many opinions based upon them. With these we have now nothing to do. It is sufficient here to chronicle the fact that what the officers of the "Assistance" failed to establish from the inspection of traces of Franklin at Cape Riley and Beechey Island, Penny clearly enough established from inspection of the deserted encampment six miles north of Cape Spencer. The former arrived at no conclusion as to "what time, or under what circumstances, the expedition had been" at the localities examined by them; the latter had already discovered that the expedition had been there in 1846, and he was now on the eve of discovering under what circumstances the sojourn was made. Having resolved to thoroughly examine the coast to the north and south of Cape Spencer, he gave orders not to make sail from the neighbourhood during the night. Sailing southward next morning, Penny reached a floe fixed in a bay between Cape Spencer and Beechey Island, to which he secured his ships. Here the "Felix," under the veteran Sir John Ross, who had come out to join in the search, and the two vessels of the American expedition, had already been moored. To the commanders of these ships Penny at once communicated the results of his gratifying discovery; and immediately afterwards he sent away a party to Beechey Island, under command of Mr Stewart of the "Sophia," in search of further traces. The search was highly successful. Mute relics were found in abundance; but no written document, no record to tell the searchers when their missing countrymen were there, or whither they went when they left the island. Sutherland tells us that among the articles found were tin canisters in hundreds; pieces of cloth and rope; wood, in large fragments and in chips; pieces of iron around the spot where the anvil had stood, together with the block that supported the latter; paper, it seems, both "written" and "printed," but affording no intelligence. Along the northern shore of Beechey Island the embankment of a house, a carpenter's and an armourer's "shop," and—saddest memorial of all—the graves of three men belonging to the ships, who had died here early in 1846, and above whose last resting-places oaken headboards with inscriptions had been raised by their comrades. The inscriptions on the headboards are as follow: "Sacred to the memory of John Torrington, who departed this life

January 1st, A.D. 1846, on board H.M. Ship 'Terror,' aged 20 years;" "Sacred to the memory of John Hartnell, A.B., of H.M.S. 'Erebus,' died January 4th, 1846, aged 25 years. Haggai, c. i., v. 7, 'Thus saith the Lord of Hosts, Consider your ways;'" "Sacred to the memory of Wm. Braine, R.M., of H.M.S. 'Erebus,' died April 3d, 1846, aged 32 years. 'Choose ye this day whom ye will serve,' Joshua, c. xxiv., part of 15 v." Death claims his own in every quarter of the world:

> "And here and there a churchyard grave is found,
> In the cold North's unhallowed ground."

Of these graves, pathetic in their simplicity, the late Sherard Osborn, who had himself carefully examined them in 1850, thus writes: "The graves next attracted our attention; they, like all that English seamen construct, were scrupulously neat. Go where you will over the globe's surface—afar in the east, or afar in the west, down amongst the coral-girded isles of the South Sea, or here where the grim north frowns on the sailor's grave—you will always find it alike; it is the monument raised by rough hands but affectionate hearts over the last home of their messmate; it breathes of the quiet churchyard in some of England's many nooks, where each had formed his idea of what was due to departed worth; and the ornaments that nature decks herself with, even in the desolation of the frozen zone, were carefully culled to mark the seaman's last home." From the dates on these head-boards it is abundantly evident that the "Erebus" and "Terror" had wintered off the north shore of Beechey Island. Captain Penny, therefore, to quote again the words of Sherard Osborn, "ascertained the first winter quarters of Sir John Franklin's squadron."

Besides the site of a large store-house and workshop found along the north shore of the island, smaller sites, supposed to have been those of observatories and other temporary erections, were also noted. Coal-bags containing small quantities of patent fuel were found scattered about. "The meat tins," says Sutherland, "were piled in heaps in the same regular manner in which shot is piled up. Each had been packed with loose shingle, and when the tiers of a single layer were completed, the interstices were filled up with shingle. In this way several mounds were raised to a height of nearly two feet, and they varied in breadth from three to four yards." The number of tins in the mounds was computed at six or seven hundred, but many more were dug up and emptied while the search was being prosecuted. Amid all the searchings, however, no documents were found, and the fate of Franklin seemed mysterious as ever. But though it appeared astonishing to Penny and his brother officers that Franklin should have left his first winter quarters without leaving papers stating by what

route the ships had arrived there, and by what other route they should proceed on leaving the island, there were those who held the missing navigators as in some sort excused for neglecting this ordinary precaution, on the ground that the three graves were sufficient evidence of their having wintered at Beechey Island; while as to the route they were about to pursue, as they could not tell in what direction they should be driven by drift-ice, tide, and wind, they were unable to say anything definite on the subject.

In the evening Penny sent away a boat party under the command of Mr Stewart to examine Gascoyne Inlet and the shores of Cape Ricketts. The boat party landed at Cape Riley, where traces were found, but no documents. Another party was sent on the 30th to examine a cairn that had been seen on the south-west bluff of Beechey Island. The soil was dug up with pick and shovel, but nothing found. About this time it was suggested to open the three graves, and to search these; "but," says Sutherland, "as there was a feeling against this very proper and important step, the suggestion was not reiterated." From this point onward to the spring of 1851, nothing practical was achieved, either in geographical discovery, or in the search for Sir John Franklin. The "Lady Franklin" and the "Sophia" on the 16th September reached their winter quarters in Assistance Harbour, at the southern extremity of Cornwallis Land, from which they were destined not to be freed for nearly a year.

CHAPTER III.

PENNY'S SEARCH AND DISCOVERIES IN WELLINGTON CHANNEL.

THE main object of Penny's expedition was to prosecute the search for Franklin in Wellington Channel, and it was with the view of carrying out his instructions to that effect, that he organised a number of sledge expeditions to examine the shores of the great channel in the early summer of 1851. During the first week of May, six sledges, manned by over forty officers and men, and including the captain, were actively engaged in this search. Leaving Assistance Harbour, the winter quarters of the "Lady Franklin" and "Sophia," the different sledge parties proceeded north in company to latitude about 75°, where it was arranged two sledges should cross over to and examine the east shores of Wellington Channel, two more should continue the search northward along its western shores, while the third sledge party under Penny himself should strike off across the frozen inlet in a north-west and north direction. Of the journeys of Penny's officers, important as they were as resulting in accurate surveys of the islands and inlets of this channel, and thus mapping out the ground for the whaling and sealing vessels, which have never yet failed to follow and to reap splendid harvests in the wake of Arctic discovery ships, it is needless here to make more than passing mention. Chief of these sledge excursions was that commanded by Penny himself—an excursion in the course of which the old captain was fortunate enough to achieve a number of surprising and valuable discoveries.

On the 5th of May the sledges and men had gone on in advance, to travel northward along the east coast of Cornwallis Island, to be afterwards joined by Penny at the advance depôt situated about forty-five miles north from the ships' quarters in Assistance Harbour. On the 9th May, Captain Penny, accompanied by Mr Petersen, the interpreter, and two seamen, left the ship at four A.M. with two dog-sledges, and after travelling eight hours, arrived at the advance depôt. No time was lost. The sledges were filled up out of the depôt—to which stores had been conveyed during the previous month—and at eight P.M. the whole force started northward. Penny accompanied them along the land, and parted with the three sledges that were to

cross the channel to the east side. At eleven P.M. Penny started again, and having advanced six miles farther—in all fifty-one miles from the ships—he encamped on a low flat point, which he named Point Petersen, and took his first night's rest. "At half-past six P.M. (on the 10th)," writes Penny, who had been detained all day, through having met Surgeon Goodsir who had finished a most laborious journey—"we started from Point Petersen, and had a splendid drive, passing a deep bay, which I named after Dr Kane, *a highly intelligent medical officer in the American expedition.*" [In paying this deserved compliment, Penny little imagined that after a year or two Dr Kane would be the conductor of one of the most remarkably exciting, as well as scientifically important, Polar expeditions that ever set sail from any shore.] On the 10th the distance travelled by Penny was about thirty miles. On the route the captain and Petersen suffered much from pain in the eyes, and a bay which they passed toward the close of the day's journey they named Snowblind Bay. The encampment was made on the north-east point of Cornwallis Island. The point "forms the northern boundary of Wellington Channel on this (the western) side." Penny named it Cape de Haven, "out of compliment to the commander of the American expedition (the 'Advance' and 'Rescue'), that so nobly came out in search of our lost countrymen." From this cape the land trends away to the westward and northward for ten miles, when there is another point. On the 11th Penny and Petersen were snowblind and unable to proceed, and on the 12th the sunshine was so bright, and the glare of the snow so powerful, that the travellers could not start till after seven in the evening. Passing round Cape de Haven, Penny pushed on to the point ten miles north-west of it. "At this point," writes Penny, "I ascended a hill about four hundred feet high, from which I could see land stretching from the opposite side of the Wellington Channel northward to a point bearing about north-east, and appearing to be continued north-westward, as if it should join the land on which I stood, which stretched away about north-west. There was, however, a space to the eastward in which the land was lost sight of. Here, as well as between the points north-east and north-west, there might be openings out of this newly-discovered sea. I came to the resolution of proceeding (over the frozen channel) northward, leaving instructions for Messrs Marshall and Goodsir to continue along the line of coast leading to the north-westward." The point from which Penny had this splendid view of a sea that had hitherto had no name among civilised men, he named Point Decision, from the circumstance that it was here he had decided upon his subsequent route. Fired by his important discovery, Penny gave orders to proceed, though the time was now about midnight, and a howling, blood-curdling blast laden with snow blew from the north-west right in the teeth of the advancing sledges. Petersen had warned Penny that the dogs could not

face the bitter tempest; but, says the captain, "nothing would satisfy me but to start, and after proceeding about two miles we were obliged to return and encamp." Detained for a time by bad weather, Penny again started at five P.M. on the 14th, and, after travelling from twenty-five to thirty miles, "running after the sledges a great part of the way," encamped. A large island, bearing north-west from the encampment, the discoverer named Hamilton Island. Starting at one P.M. on the 15th, the travellers drove twenty miles in a straight line, and reached Hamilton Island. "The moment we landed," says Penny, "I set out to a bold headland, or I should say rather, the south-east point of the island; but I found no traces of the missing ships. From this my inference was, that Sir John Franklin had kept along the *north land* which I saw from Point Decision." He named the south-east point of the island Cape Washington, and the channel between it and Cornwallis Island, South Channel.

The discoverer was now in the midst of a region unknown in the geography of his time. It was, therefore, with the closest attention and the keenest curiosity that he noted each striking or peculiar feature. He observed that the ice in South Channel, between Hamilton Island and Cornwallis Island, was much decayed, that it was traversed by large lanes of water, and, under condition of temperature two or three degrees more favourable, would actually be a navigable passage. Away twenty miles to the westward he descried two islands, the nearest of which he named Stewart Island. He observed also that here the compass had become exceedingly sluggish, and he was therefore obliged to depend wholly on the sun in laying down his courses and bearings. He made the circuit of Hamilton Island, carefully looking for the landmarks, cairns, flagstaffs, etc., which every explorer is instructed by the Admiralty to erect along every newly-discovered route; but he saw none. At midnight, Penny and Petersen, having passed and named Cape Scoresby and Haddo Bay, pushed on for a headland several miles north-westward, "making sure," writes the captain, "that we should find traces of the missing ships in the shape of a cairn. The point is a very low one, and there was immensely pressed-up ice upon it. But lo, and behold! to our surprise a strait, and nothing but *clear water*, opened out before us. The tide seemed to be going at a rapid rate—I should say not less than four knots. The channel or strait is about eight miles in breadth, and ten miles in length from east to west." Away thirty miles to the westward was an island which he named Baring Island, and to the north and north-east land could be seen at a distance of about twenty miles. This coast he named Prince Albert Land. No cairn was found on the headland from which the open sea and the strange coasts were seen, and standing upon it, "the expression that escaped me," says Penny, "was—'No one will ever reach Sir J. Franklin; here we are, and no traces are to be found.'" The

expression was perhaps a little hasty. Penny had discovered open water where no open water was formerly believed to exist. He had also on the same day seen flocks of birds in a latitude which he had formerly believed to be destitute of animal life. There might yet be other surprises in store for him. After the excitements of the day, the discoverer pushed himself into his sleeping-bag, and had eight hours' comfortable repose. The encampment was in latitude about 76°.

How the discovery of open water far to the north of the barrier of ice that closed up the southern reaches of Wellington Inlet affected Captain Penny's plans, may be learned from the following extract from his journal: "Sir James C. Ross said he would give one thousand pounds for ten days' provisions; I certainly should have given five thousand pounds for a boat to follow up the search for Sir J. Franklin. How pleasant to the eye it is to see the blue open water! Mr Petersen and I set out again for Point Surprise, and while I was laying down the points and islands by the compass card and the sun, I sent him back to let Thomson, our only attendant, see the expanse of water from this point, whence only the strait could be opened out. As we were thus employed going back and fore, and making a tracing of the coasts, two walruses sailed passed upon a piece of ice, at the rate of at least three knots. Two eider ducks and some burgomasters flew past at the same time. Here we had creatures that we could only have expected ten degrees farther south, at such an early date! *I shall never plume myself upon experience again.* Light ice and twenty-five miles (all the way to Baring Island) of open water, and from the appearance of the sky at least twenty-five miles more beyond the north point of the strait. To have proceeded *northward* (*i.e.*, by land), could only be accomplished by making a very large circuit, and for this we had but barely two days' provisions for the dogs. Our own provisions might last for twelve days; but should we be under the necessity of serving it out to eighteen or twenty ravenous dogs, it would certainly not last three days. We might shoot seals, and walruses, and birds in the water; but when was the boat to pick them up in such rapid tides! No alternative remained but to return to the ships, and see if, by any means, a boat could be got into the open water, which was so unexpectedly discovered. At 9.30 P.M. (17th May) we started for the ships."

The return to the ships was a race rather than a deliberate journey. The season was wearing on, and besides, hunger was following in the wake of the party. The pace was so hard that on the first day one of the dogs gave in, and was shot by Penny, who was actuated by the double motive of ending the animal's sufferings and using its carcass as food for the rest of the starving team. But hungry as the dogs were, they would not touch the flesh of their late companion. In this pell-mell retreat, bipeds suffered as well as quadrupeds. Both Penny and Petersen were much exhausted on the even-

ing of the 18th, "but," says the gallant captain, "had we been advancing instead of retreating, I do not believe we should have felt the fatigue nearly to the same extent." But they were hurrying on to winter quarters, where food and rest awaited them. "The very dogs," writes Penny, "knew they were going home. Poor brutes! they had nothing to eat for the last twenty-four hours. Had any member of the Royal Humane Society seen us, I fear very much our conduct would not have met with his approbation, for it did not meet with our own; but necessity has no laws, and no human foresight could have informed us that we should not have got a bear where so many were seen. In a hunt which I had after one, in which I was assisted by the dogs, I ran until sheer exhaustion brought me to the ground. I was never so disappointed with the loss of a whale worth a thousand pounds as with the loss of that bear!" On the 19th Mr Petersen's sealskin dress was divided among the voracious dogs, and eagerly devoured. On the evening of the 19th—Penny was travelling by night, to avoid the snow glare—the sledges were started, though everything was enveloped in a whirling snow-drift; "nevertheless, on we went," says the captain, "although the dogs had eaten nothing for two days, with the exception of Mr Petersen's dress." The ships were reached at eight P.M. of the 20th, and soon afterwards the ship's carpenter was busy constructing a sledge, on which the largest six-oared whale-boat of the "Lady Franklin" was to be dragged along the shore of Wellington Channel to the open water; while the sailmaker of the "Sophia" was employed in getting ready a housing-cloth for the boat, for Penny was determined that his crew should have no other shelter. The sledges and boat were ready on the 4th June, and on the evening of that day they were sent forward. At midnight on the 10th, Penny started to follow, and in three hours came up with his sledge-party. Working their way laboriously along the land-ice of the east coast of Cornwallis Land, they were surprised to hear voices inshore. Crossing from the ice to the land, Penny discovered that the hail he had heard came from Mr Goodsir and his party, who had travelled along the south shore of Queen's Channel to about 97° west. They had found no traces of the missing ships. Each of them got a glass of spirits from the captain, and then, after a pause of not more than ten minutes, each party went its way with a cheer. On the 16th, a herd of deer was seen; and Penny, halting his party, and ordering them to encamp, went away after the game. "After three hours' travelling and running after deer," he writes, "I ascended a high headland, and, behold! the water was within twenty miles of the boat—clear open water!" The wind for the last twenty-four hours had been blowing *down channel,* or from the north-north-west; and the ice had consequently been driven southward, leaving open water away to the far north. Penny returned to the encampment, and put himself into his sleeping-bag without saying a word about what he

had seen. Next morning the encampment was roused by a frantic shout of "The water! the water!" raised by the first man that had turned out. At this shout every man sprang up. The sea was now seen at the distance of less than ten miles, bearing west-north-west from the encampment. The explorers reached it, and the boat, loaded with forty days' provisions, was launched at five P.M. The fatigue party that had helped to bring on the boat and sledges was sent back with the dogs to the ships; and Penny, again upon his element, and exulting in the chance that at last had been given him, close-reefed his sail, and began to beat up against the adverse wind that blew strong from the west-south-west. Late at night, a gale sprang up from the west, and Penny was obliged to bear up for a bay on the south shore of South Channel. On the 18th, it blew a perfect gale, and the people were kept under cover of the housing-cloth. The wind drove the ice into South Channel, and packed it to the distance of twenty miles west. For several days the party were confined by gales to the bay in which they had taken refuge; but on the 24th they succeeded in crossing over to Hamilton Island, the whole of which they carefully surveyed on the following day, but without finding any traces of Franklin's ships. Again there came a succession of storms from the west, preventing Penny from proceeding a mile in the one direction in which he was most anxious to proceed. Daily disappointment was now varied only by the thrilling excitement of awful dangers. On the 30th June, Penny had hauled up his boat at an unpromising spot about four miles from Cape Fitzjames, on the coast of Hamilton Island. On one side of the landing-place was a perpendicular, snowy cliff, on the other was the shore ice, pressing up and squeezing in two fathoms water with a loud grinding noise, and tumbling over in huge blocks at no great distance from the spot on to which the boat had been hauled. On July 2d, Penny writes: "The first few hours of morning we had a partial breeze from the eastward, which brought the ice out of the channel. It came tearing along the land at a fearful rate, turning up immense hummocks in its progress. I felt very restless, and could not sleep. The boat began to move a little. I took it into my head that there was a bear outside. My hand was upon my pistol, and all ready for action; I put out my head beneath the lower edge of the covering of the boat, and it was well I did so at the time, for immense hummocks were tumbling over and over with the pressure within a few yards of us. No one waited to put on his clothes, for each flew to the provisions, and conveyed them up to the face of the precipice, and then to the boat, to attend to its safety. The ice on which it rested was broken into several pieces, and thrown very much from its level by the pressure among the hummocks around it. In the middle of the channel it was truly fearful, and could be compared to nothing but an earthquake. Some pieces were rising to a height of twenty feet, and tumbling down with tremendous crash

ing and rending. We again turned in beneath our covering, but little sleep was obtained, for *every one was peeping beneath the housing-cloth.*"

What need further to chronicle a search that was fruitless—a cruise that consisted only of successive attempts to penetrate westward, rendered abortive by head-winds and drifting ice? Captain Penny had, in the autumn of 1850, discovered what were indubitably the first winter quarters of the "Erebus" and "Terror;" and in his boat expedition up Wellington Channel, he had examined and surveyed the upper reaches of that passage, had discovered and named Hamilton and Baring Islands and Queen Victoria Channel, extending away westward from Wellington Channel, and having Albert Land on its north-east, and Queen's Land on its south-west sides. But here the success of the boat expedition ended. Every coast visited was carefully examined and surveyed with approximate accuracy; but no cairn or other trace of the missing expedition was seen. Every day Penny and his men heroically struggled on in the "imminent deadly breach" between battling floes, or between the churning drift-ice and the cliffs of the shores; but to no avail. It was now the 20th July, and the party had only a week's provisions left. Would it be prudent to continue the voyage—to proceed further, and exhaust the supplies that already were too scanty to keep his men up to working power on the return journey to the ships? There could only be one answer; so, on the morning of the 20th, after worship, the party set out on their return to winter quarters. On the 22d, the boat, which was felt to be a terrible encumbrance, was abandoned, and the men started to travel along the coast of Cornwallis Island to Assistance Harbour—a distance of upwards of 100 miles. With infinite labour and suffering this journey was accomplished by midnight of the 25th July.

On the 11th August, Captain Penny and Captain Austin held a consultation as to what ought now to be done. Penny believed that the "Erebus" and "Terror" had taken the route up Wellington Channel, and he declared himself ready to propose a "continuance of the search by means of one of Captain Austin's steamers and the 'Sophia' through Wellington Channel, as soon as the ice in that channel should open." On the other hand, Captain Austin stated that had he done exactly what Captain Penny's expedition had done, and were he placed in Captain Penny's position, he should not hesitate to conclude at once that the search for the missing ships need not be prosecuted to the north-west of their winter quarters at Beechey Island—a direction which he believed they had never taken. The result of the consultation is recorded in Sutherland's journal as follows: "After the heads of the expeditions had considered matters fully, we were given to understand that little remained to be done but to proceed to England. Captain Austin was satisfied that the missing expedition need not be searched for to the due west or north-west; and Mr Penny, uncertain whether they had proceeded

up the channel, could hold out no hopes of our being able to accomplish anything to compensate the almost inevitable risks of a second winter."

It has often been stated that the refusal of Captain Austin to place one of his steamers at the disposal of Captain Penny, was the occasion of a more or less serious altercation between these officers. There is little ground for this opinion. Penny's instructions to return home in 1852 were peremptory, and therefore to stay out another winter, with the view of sailing northward through Wellington Channel, into the supposed Polar Sea beyond, in one of Austin's steamers, was what he was not at liberty to do, even had Austin agreed to the proposal. That officer, however, did not, and could not favour any such proposal, as he was convinced that Franklin had not taken the route up Wellington Channel. But without Austin's co-operation, Penny, whose own resources were dried up, could effect nothing by remaining out another year. It is not surprising, therefore, that Captain Penny, in reply to frequent solicitations from Captain Austin, with respect to the further prosecution of the voyage, wrote a note stating that he had accomplished all that could be necessary within the limits of Wellington Channel, and adding a question—"What more could be done?" Yet he had every reason to be satisfied with the results of his voyage, which, whether considered with reference to discoveries in connection with the missing expedition, or to geographical discoveries, must be regarded as the most successful of the search expeditions hitherto undertaken.

On the 12th August, the "Lady Franklin" and "Sophia" moved slowly out of Assistance Harbour on the homeward voyage, and at three P.M. on the 21st September they dropped anchor off Gravesend. The world had reclaimed them. "We knew," says Sutherland, in conclusion, "that on the following day we should reach our destination, and be paid off then, or as soon as possible thereafter. In the meantime, however, the rows of lamps, the rolling sounds of carriage wheels, and the well-known sound of the chain upon the windlass as the anchor went down, all spoke loudly in our ears that our voyage in search of the 'Erebus' and 'Terror' and their gallant crews was at an end."

CHAPTER IV.

SEARCH EXPEDITION UNDER CAPTAINS AUSTIN AND OMMANNEY IN THE "RESOLUTE" AND "ASSISTANCE."

THOUGH the Government in 1850 wisely resolved to enlist the knowledge and experience of the chief of the whaling captains of the period in the search for Franklin, Penny's expedition in the "Lady Franklin" and "Sophia" was regarded as merely supplementary to the great naval expedition sent out under Captains Austin and Ommanney in the same season. Horatio Thomas Austin entered the navy in 1813, served in the American war under Hardy, and gained fruitful experience of Arctic navigation when serving as first lieutenant in the "Fury" (Commander Hoppner) in Parry's third Arctic voyage in 1824-25. Recommended for Arctic service by his old captain, Sir Edward Parry, Austin was appointed to the command of the great expedition of 1850, consisting of four vessels—the "Resolute" and "Assistance," with their tenders, the "Pioneer" and "Intrepid," both screw steamers. The "Resolute" and "Assistance" were sailing ships rigged as barques, the former 410 tons and the latter 430 tons burthen, and each carrying sixty officers and men. The steamers "Pioneer" and "Intrepid" were sister vessels of 400 tons, with screw propellers of 60 horse-power, and rigged as three-masted schooners. Captain Austin, the commander of the expedition, hoisted his flag in the "Resolute," and was supported by Captain Erasmus Ommanney in the "Assistance;" the "Pioneer" was commanded by Lieutenant Sherard Osborn, and the "Intrepid" by Lieutenant J. B. Cator. This expedition, the most complete and effective that had ever left the British shores for the Arctic seas, was fully provisioned for three years. The ships sailed from England on the 3d May 1850, passed Cape Wrath on the 15th, and after a prosperous voyage across the Atlantic, reached the Whalefish Islands, to the south of Disco, on the 16th June. Resuming the voyage on the 25th, the ships proceeded northward past Disco and Uppernavik. Writing on the following day, the 26th, Sherard Osborn, commander of the "Pioneer," thus reports progress: "In the first watch, the 'Lady Franklin' and 'Sophia' were seen by us fast between loose flat pieces,

to seaward of which we continued to flirt. The 'Intrepid' and 'Pioneer' were now to be seen trying their bows upon every bit of ice we could get near without getting into a scrape with our commodore, and from the ease with which they cut through the rotten stuff around our position, I already foresaw a fresh era in Arctic voyaging, and that the *fine* bows would soon beat the *bluffs* out of the field."

On the 1st July, Captain Austin signalled the screw steamers to "take ships in tow." There was a lane of open water leading northward, "and," says Osborn, "with a leaping heart we entered the lead, having the 'Resolute' fast by the nose with a six-inch hawser. What looked impassable at ten miles distance," continues the commander of the steamer, "was an open lead when close to. Difficulties vanish when they are faced, and the very calm which rendered the whalers unable to take advantage of a loose pack was just the thing for steamers. Away we went past berg, past floe, winding in and out quietly yet steadily, and the whalers were soon astern. Penny, the indefatigable, was seen struggling along the shore with his boats ahead, towing, and every stitch of sail set to catch the slightest cat's-paw; we soon passed him too. The water ahead increased as we advanced, and we found, as is well known to be the case, that the *pack-edge* is always the tightest part of it." The neighbourhood of Devil's Thumb was reached on the 4th July, and on Sunday the 7th, Lieutenant Osborn entertained Captain Stewart of the whaler "Joseph Green," to dinner in the "Pioneer." Captain Stewart, father of the commander of the "Sophia" in Penny's expedition, was a most interesting personage in the eyes of the officers of the "Pioneer." His racy sketches of life on board a whaler were in no small degree fascinating to his naval hearers, and it was not without a certain degree of awe that they gazed upon a man who assured them that "he had not seen corn grow, nor eaten fresh gooseberries, for thirty years! although he had been at home every winter." He was now advanced in years, yet he spoke with the enthusiasm of youth about the excitement and the perils of his calling. "We are the only people," he said, "who follow the whale and kill him in spite of the ice and cold." Osborn was proud to recognise a brother seaman in such a hardy and gallant old sportsman of the deep. "This worthy old Scottish fisherman," Osborn informs us, "perished next year off Spitzbergen. His ship was caught between two fields of ice, and as she was sinking, he rushed down to save a sick sailor, and sank with the ship that had so long been his home."

The power and value of steam in ice-navigation was clearly demonstrated for the first time in the expedition under consideration. When the *whalers* found it impossible to advance, Osborn and Cator, in the "Pioneer" and "Intrepid," were always able to make some progress. They charged floes six inches thick, and pushed, without apprehension, into old and decayed ice of

much greater thickness. After charging an ice-barrier ineffectually, they reversed the engines, drew back a short distance, and then, putting on full steam, rushed forward again to deliver a second blow—often with the desired effect. The whalers were all delighted with the performance of the steam vessels in the ice; and it was acknowledged that the employment of the screw propeller marked the commencement of a new era in Arctic navigation. Captain Penny candidly confessed that he never thought the screw steamers would have answered so well, and regretted that he had not had a steam vessel. "Our seamen," says Osborn, on the 11th July, "fully appreciated the good service the screw had done them; they had now been eleven days in the ice, during every day of which period they had witnessed it working effectually under every circumstance. They had seen the crews of the whalers labouring at the track-line, at the oar, and in making and shortening sail, both by day and by night, whilst our crews had nothing to do beyond taking the ships in tow and casting them off again." But the ships referred to, the "Resolute" and "Assistance," were wretched sailers. They had been filled up with dead wood—by way of strengthening them against the ice—until they lay like logs on the water, and, even under fairly favourable conditions, could not be dragged by the steamers at a rate much quicker than three knots an hour. Being thus heavily handicapped, Osborn and Cator found that they worked under great disadvantages, and that the whalers, which were handled with the utmost skill and daring by Penny and his fellow captains, made as rapid progress as the captains of the naval squadron. But for being hampered with the "Resolute" and "Assistance," the steam vessels might have made a comparatively early passage northward, between the sea and land ice of Melville Bay. As it was, they were continually delayed and exposed to the danger of being nipped in the enclosing ice. Between the 20th and 31st July, only seven miles had been made in the right direction. Little or no progress was made during the first week in August. At length, on the 9th, Penny's squadron having gone on in advance, in a lake of water toward Cape York, the wedge-bow of the "Pioneer," with full steam on, was brought to bear upon the ice. "In one hour," writes Osborn, "we were past a barrier which had checked our advance for three long weary days. All was joy and excitement; the steamers themselves seemed to feel and know their work, and exceeded even our sanguine expectations; and to every one's delight, we were this evening allowed to carry on a system of ice-breaking, which will doubtless, in future Arctic voyages, be carried out with great success. For instance, a piece of a floe, two or three hundred yards broad, and three feet thick, prevented our progress; the weakest and narrowest part of it being ascertained, the (sailing) ships were secured as close as possible, without obstructing the steam vessels, the major part of the crews being despatched to the line

where the cut was to be made, with tools and gunpowder for blasting, and plenty of short hand-lines and claws. The 'Pioneer' and 'Intrepid' then in turn rushed at the floe, breaking their way through it, until the impetus gained in the open water was lost by the resistance of the ice. The word 'Stop her! Back turn, easy!' was then given, and the screw went astern, carrying with her tons of ice, which the blue-jackets, who attended on the forecastle and others on broken pieces of the floe, held on by. As the one vessel went astern the other flew ahead to her work. The operation was, moreover, aided by the explosions of powder; and altogether the scene was a highly interesting and instructive one. It was a fresh laurel in the screw's wreath. The gallant 'Intrepid' gave a *coup-de-grâce* to the mass, which sent it 'coach-wheeling' round, as it is termed; . . . and we were next morning in the true lead, and our troubles in Melville Bay were at an end."

It was on the 10th August that Captain Austin's ships succeeded in shaking themselves clear of the ice of Melville Bay. The air was now calm, the water smooth, and the "Intrepid" and "Pioneer" steamed away northward, with the "Resolute" and "Assistance" in tow. Soon the screws overhauled the "Felix," in which Sir John Ross had come out to assist in the search for Franklin, and the "Prince Albert" schooner, which had been sent out for the same purpose, under the command of Captain Forsyth. The steamers took the schooners also in tow, and the whole squadron proceeded northward for some time together. On the 13th Cape York was in sight. In this neighbourhood two precious days were lost in investigating the report of the miscreant Adam Beck, who had completely imposed upon Sir John Ross, with the fantastical story of the burning of two English ships, supposed to be the "Erebus" and "Terror," and the massacre of their crews. As already mentioned, the mischievous story proved, on examination, to be wholly unfounded. On the 15th the "Pioneer," with the "Resolute" and "Prince Albert" in tow, steered away westward, reached the west water, a wide reach of sea unencumbered with ice, and then made for the mouth of Lancaster Sound. Here the "Prince Albert" was cast off to proceed on its way to Regent Inlet, while the "Resolute" and its tender proceeded to Pond's and Possession Bays, the shores of which they searched unavailingly for cairns or other relics that might have been left by the missing expedition. On the 22d the vessels entered Lancaster Sound. The great inlet was regarded with intense interest by the young officers of both vessels. Steering for the north shore, the ships reached Croker Bay, between Cape Warrender and Cape Home, on the 25th; thence they steered for Leopold Island. Driven north by a furious gale, they were sailing westward off Cape Hurd on the 27th, and on the evening of the 28th they had pushed into a passage between Cape Ricketts and Beechey Island, when a boat in sight was reported from the mast-head. The boat carried Captain Stewart

and Dr Sutherland of the "Sophia," and these gentlemen were the first to communicate to Captain Austin and Lieutenant Osborn the stirring intelligence of the traces found on Cape Riley and Beechey Island.

We have been hitherto following the fortunes of the commodore's ship and tender. It is now necessary to revert for a moment to the "Assistance" and "Intrepid." These vessels, after having visited Wolstenholme Sound, entered Lancaster Sound on the 18th August, and passing Cape Warrender, landed at, and named, Dundas Harbour. On the 23d, the "Assistance" and "Intrepid" reached Cape Riley. A boat's crew was sent on shore to erect a cairn on the cape, "and," writes Clements R. Markham, midshipman under Ommanney in the "Assistance," "at this point the first traces of Sir John Franklin were found. Pieces of rope, preserved meat tins, and other remains were strewn upon the beach, while higher up the cliff was a cairn of stones and a few charges of shot strewn about. All this created the greatest excitement, and conjecture was rife as to whence these remains had come; but at length the discovery of the name 'Goldner' marked upon the meat tins—the contractor who had supplied Sir John Franklin with provisions—proved to a certainty that a party from the 'Erebus' and 'Terror' had been at Cape Riley." A cairn was afterwards seen on Beechey Island, and a boat from the "Intrepid" was sent away to examine it. It was soon torn down, every stone of it turned over, and the ground in the neighbourhood dug up, but without result. No record or document of any kind was found. A lead of water now opening up in the direction of Wellington Channel, Captain Ommanney resolved to take advantage of it and proceed westward. His discoveries on Cape Riley were barren as far as he or his officers were concerned. He regarded them as merely the traces of a shipwrecked or retreating party from the "Erebus" and "Terror." Meantime, the clue thus lightly picked up and as lightly let go again was eagerly seized by Captain Penny, who exclaimed that he "would take up the search from Cape Riley like a bloodhound." With what success he prosecuted this search has already been stated in our narrative of the gallant captain's voyage in the "Lady Franklin" and "Sophia." He was, however, materially assisted in his investigations by the officers of Captain Austin's expedition, with the achievements of which we are at present chiefly concerned.

After receiving from Captain Stewart the news of the discoveries on Beechey Island, Lieutenant Osborn steered for Union Bay, where the "Resolute" and "Pioneer" arrived on the 28th August. On the following day Osborn, with a searching party, went ashore to examine Franklin's first winter quarters. He discovered the remains of a garden, oval in shape, and with a border carefully formed of moss, lichen, poppies, and anemones, and afterwards came on the foundation of a storehouse. Still later, he noted an old water-course, now frozen up, and knew from the tubs by its banks that this

was the washing-place of Franklin's men. He picked up a pair of cashmere gloves lying on a patch of level ground, with a small stone upon the palm of each to prevent its being blown away. They had been put out to dry, and had remained as they had been placed for four years. He afterwards inspected the three graves already mentioned, and, walking to the east extremity of the island, he came to where "a very neatly-paved piece of ground denoted a tent place." In a gully near it "a shooting-gallery had been established, the ranges marked off by stones placed at proper distances, and a large tin marked 'Soup and Bouilli,' perforated with balls, had served for a target." He walked out with Captain Penny to examine some sledge marks that had been reported, and found that some ran towards Cape Riley, others swept northward through a ravine towards the interior, "whilst the remainder pointed to Caswell's Tower, a remarkable mass of limestone, which, isolated at the bottom of Radstock Bay, forms a conspicuous object to a vessel approaching this neighbourhood from the eastward or westward." The vicinity of this rocky monument was subsequently examined; but though several cairns had been erected here, no document was discovered. It was agreed that this spot had been one of the stations for shooting wild-fowl and hares. After mentioning these reliquary localities, Osborn says: "I have now enumerated all the important traces left by Sir John Franklin's squadron in its first wintering place. To them at all hours of the day and night parties from the eight vessels in our company were constantly wending their way. Every one felt that there was something so inexplicable in the non-discovery of any record, some written evidence of the intentions of Franklin and Crozier on leaving this spot, that each of us kept on returning to again search over the ground, in the hope that it had been merely overlooked in the feverish haste of the first discovery of the cairns by Captain Ommanney and Captain Penny. One great good, however, resulted from the discovery of these traces—the safe passage of Franklin across the dangers of Baffin Bay was no longer a question. This was a certainty, and it only remained for us to ascertain which route he had taken, and then to follow him."

At this stage of the search, many of the officers of the different expeditions regarded Wellington Channel as being the passage into which Sir John carried his ships after leaving Erebus and Terror Bay, between Beechey Island and the mainland, in which they had undoubtedly been moored during the winter of 1845-46. We have seen that Captain Ommanney had already steered for this channel in the "Assistance" and "Intrepid," and had left the search at Beechey Island to be prosecuted by Penny and Austin. It was in the beginning of September that Ommanney left Cape Riley, and commenced to push westward for the mouth of the channel, at the middle of which he soon arrived, only, however, to be hemmed in by ice. There was every likelihood of the "Assistance" being here crushed to pieces.

Midshipman Markham tells us that every one on board was told off to one or other of the ship's boats, that the provisions were had up on deck, and every preparation made for getting on the ice and deserting the "Assistance" when the last crash should take place. The amenities of the situation were not improved by the presence of a number of bears that now came prowling about the ship on the look-out for seals. Of the sagacity and courage of these animals, Mr Markham was not too much overwhelmed by the peril of his situation to note instances. "On one occasion," he says, "I saw a bear swimming across a lane of water, and pushing a large piece of ice before him. Landing on the floe, he advanced stealthily toward a couple of seals, which were basking in the sun at some little distance, still holding the ice in front to hide his black muzzle; but this most sagacious of bears was for once outwitted, for the seals dived into a pool of water before he could get within reach. On another occasion a female Bruin having been shot from the deck of the 'Intrepid,' her affectionate cub (an animal about the size of a large Newfoundland dog) remained resolutely by the side of its mother, and on the approach of the commander of the 'Intrepid' with part of his crew, a sort of tournament ensued, in which the youthful bear, although belaboured most savagely, showed a gallant resistance, and at length rushing between the legs of the corporal of marines, laid him prostrate on the ice, floored another man who had seized hold of his tail, and effected his escape."

After several days of great peril and anxiety the wind changed, the ice slacked off, and the "Assistance" advanced along the southern shore of Wellington Channel. "The land we now entered upon," says Markham, "was entirely new. Parry indeed had sighted it; but no human being was ever before known to have landed on any part of the coast between Cape Riley and Byam Martin Island. There was therefore all the novelty of a new discovery, as we coasted along the southern shores of Cornwallis Island, and came upon a fine bay which was named Assistance Harbour. "Proceeding to the westward, our progress was stopped by a solid barrier of ice, reaching from Griffith Island to Cape Walker; and here we were joined by the 'Resolute,' 'Pioneer,' the American expedition, and Mr Penny's brigs. The season for work, however, was nearly at an end; the cold was becoming intense, and it was soon found necessary to seek for safe winter quarters. Mr Penny succeeded in reaching Assistance Harbour, where he wintered with Sir John Ross; and our squadron was secured to a field of ice between Cornwallis and Griffith Islands. Thus concluded the working season of 1850. We were now destined to pass the winter further west than any vessel since 1819, and there to prepare for those great efforts for the discovery of Sir John Franklin which were developed during the following spring."

CHAPTER V.

SLEDGE JOURNEYS OF CAPTAIN AUSTIN'S OFFICERS.

In one respect Captain Austin's expedition was peculiar—it was the first *Government* expedition in which exploring operations were carried on during the autumn, after the vessels had been regularly settled in winter quarters. To work while it is day is absolutely necessary in the most literal sense in these regions, and Government expeditions hitherto accepted without question the previously received belief that no explorer could work after the long Arctic night had set in. Certainly the Hudson's Bay Company's explorers, and conspicuously Dr Rae, continued to labour with about equal success in day and in dusk, and were not quite idle even in dark; but it was left for Captain Austin's officers to demonstrate that the manifold resources and the elaborate equipment of a Government expedition could be turned to profitable account during some of the months in which their predecessors had been content to consider it an impossibility, or at the least an unheard-of innovation, to carry on the work of sledge travelling.

No sooner had the ships become fixed in the ice off Griffith Island, than preparations for sending out sledge parties were commenced. The management of these preparations was entrusted to Lieutenant M'Clintock of the "Assistance," an officer who, by scientifically elaborating the system of sledge-travelling, by due attention to the structure and weight of the sledge, the housing and victualling of the men, etc., has brought this method of exploration to great perfection. Early in the season M'Clintock had urged the necessity of sending travelling parties to forward depôts of provisions upon the routes to be followed by the sledges at a later date, and on the 2d October he started from the winter quarters and established a depôt of provisions at the distance of thirty-five miles westward from the ships, and on the route toward Melville Island. This journey, which lasted seven days, was the first experiment ever made in Arctic travelling during autumn. The mean temperature was 3° below zero, "and," says Markham, "no Arctic voyager had hitherto ventured to dare the rigours of this season." Other parties had been sent out at about the same time. Lieutenant Aldrich went westward to

Somerville Island, and there landed a store of provisions; while Lieutenant Mecham, who had been commissioned to examine the south coast of Cornwallis Island for traces of Franklin, had the good fortune to discover Assistance Harbour, where were Captain Penny's two brigs and Sir John Ross's "Felix" snugly laid up for the winter. The three lieutenants, on their return in the second week of October, found the ships of the squadron covered with "housings," like tents, and all the usual preparations for wintering in the ice well forward.

On the 4th November the sun appeared for the last time for ninety-five days. During the previous month, however, the splendours of the successive sunsets had been such as to rouse the enthusiasm of the prosiest observer. "During the latter part of autumn," says Mr Markham, then midshipman in Austin's ship, "the tints in the sky are so magnificent that it would be difficult to draw any comparison with those which we are accustomed to see in other parts of the world. It seems as if the sun displays his most glorious brilliancy in these regions, where his rays brighten the gloomy prospect only for a time, compensating by the increased grandeur of his presence for the long night which is to follow. On one side brilliant shades of violet, green, and purple shone forth; while on the other, lake, crimson, orange, and yellow gave a character of more gorgeous splendour to the eastern sky." This glowing description was written in September, and is no doubt truthful and sober. The following, written by Sherard Osborn—a fellow officer—a few days, or at most, two or three weeks later, is no doubt equally truthful: "No pen can tell of the unredeemed loneliness of an October evening in this part of the Polar world: the monotonous rounded outline of the adjacent hills, as well as the flat unmeaning valleys, were of one uniform colour, either deadly white with snow, or striped with brown where too steep for the winter mantle as yet to find a holding-ground. You felt pity for the shivering blade of grass, which, at your feet, was already drooping under the cold and icy hand that would press it down to mother earth for nine long months. Talk of 'antres vast and deserts idle;' talk of the sadness awakened in the wanderer's bosom by lonely scenes, whether by the cursed waters of Judea or the afflicted lands of Assyria—give me, I say, death in any one of them, with the good sun and a bright heaven to whisper hope, rather than the solitary horrors of such scenes as these."

Active work commenced early in April 1851. On the 4th Mr M'Dougall of the "Resolute" was despatched to inspect and report upon the depôts formed in the autumn of the previous year. This service was undertaken a month earlier in the season than any similar excursion in any former expedition. On arriving at the depôt that had been formed on Somerville Island, M'Dougall found that the tin cases in which the provisions had been packed were torn to ribands and their contents devoured by bears. Even

the tin packets of frozen pemmican had been crushed by them. The depôt having been replenished and secured as completely as possible, M'Dougall returned to the ships and reported. Meanwhile the two great sledge-parties, that were to prosecute the search for Franklin far to the south and west, under the commands of Captain Ommanney and Lieutenant M'Clintock respectively, were mustered on the 15th April, and after having been briefly addressed by Captain Austin, the divisions separated at once with mutual cheering, the one party setting out south-westward toward Cape Walker, the other proceeding west in the direction of Melville Island.

Captain Ommanney's division consisted of two "long-party sledges," or sledges for distant travelling—the "Reliance" (Captain Ommanney and six men), and the "True Blue" (Lieutenant Osborn and seven men). To accompany these part of the way there were five "supporting sledges," the "Succour," "Enterprise," "Adventure," "Inflexible," and "Success," the chief purposes of which were to keep up the resources of the long-party sledges, and to form provision depôts for the return march. Lieutenant Osborn explains the manner in which it had been arranged to take full advantage of the supporting sledges. "The junior supporting sledge, 'Success,'" he writes, "was capable of feeding all the division for five days (by which time we hoped to be at Cape Walker), and then have sufficient food to return back to the squadron, where it would again replenish, and, returning to the same point at which we had separated from it, form such a depôt that each of the sledges in return would find five days' provisions to carry them home. By this means six out of the seven sledges in the southern search will be seen to reach a point fifty miles from their original starting-point in perfect condition, so far as their provisions are concerned. We will, for the sake of clearness, cause these six sledges to form into three divisions, of two each, viz., a 'long-party' sledge and a support. In each case the support can feed the long-party for another ten days, and then a depôt of provision equal to ten days more, yet have sufficient left itself to reach back to Cape Walker, and thence home. The 'long-party' would thus be still complete, after receiving two supports, equal to fifteen days or 150 miles, and two depôts stand in their rear, the one for ten days, the other for five days. The 'long-party' now starts, consuming its own provision (forming its own depôts for the returning march), advances for twenty days, and accomplishes 200 miles; which, with that done whilst supported, makes in all a journey outward of thirty-five days, or 350 miles from the ships. Of course with an increased number of supports, this distance and time may be carried on as long as the strength of the men will endure, or the travelling season admit of."

Starting on the afternoon of the 15th April, Captain Ommanney's sledges were soon enveloped in darkness, for the grey twilight of the night was so darkened by a snow-storm from the south-west that the men, dragging at

the ropes, were obliged almost to grope their way through the broken ice off Griffith Island. At two o'clock in the morning a vast quantity of piled-up ice was reached, and progress having become all but impossible, the word was given to halt and pitch tents. The seven sledges of the division were soon secured on the smoothest spots, and the tents arose on the ice, fluttering in the breeze. Tea was cooked, pipes were lit, and then each man getting into his blanket-bag, went to sleep wishing for fine weather. But "next day," says Osborn, "the weather was still as thick as pea-soup, with a double-reef topsail breeze blowing in our teeth; but detention was impossible, so we again packed-up, after a meal of chocolate and biscuit, and facing towards Cape Walker, we carried the hummocks by storm. Ignorance was bliss. Straight ahead, over and through everything was the only way; and, fresh, hearty, and strong, we surmounted tier after tier, which more light and a clearer view might only have frightened us from attempting. Here a loud cheer told where a sledge had scaled the pile in its path, or shot in safety down the slope of some huge hummock. There the cry, one! two! three! haul! of a jammed sledge, and quizzical jokes upon name, flag, or motto, betokened that 'Success' or 'True Blue' had floundered into a snow-wreath, above which the top of the sledge-load was only to be seen, whilst seven red-faced mortals, grinning, and up to their waists in snow, were perseveringly endeavouring to extricate it; officers encouraging and showing the way; the men labouring and laughing." On the 17th smoother ice was reached sweeping away to the base of Cape Walker. But the vapour-loaded south-west wind was still blowing, the outlook was one greyish haze with fast falling snow, and sky and ice-floe were indistinguishable from being of uniform colour, and both were covered by a thick veil of mist. From the monotonous, featureless character of the scene it was impossible to take bearings and so preserve a straight course, and it was equally impossible to keep a compass constantly in hand. The order of march was therefore very anxiously considered, and after having been decided upon, was carefully observed. The officers, forming in a line ahead, "raised the road," or made the track to be followed by the sledges, "the crews of which soon learned that the easiest mode of travelling, and most equal division of labour, consisted in marching directly after one another; but as the leading sledge had the extra work of breaking the road through the snow, and straining the men's eyes in keeping sight of the officers, the sledges were changed every half-hour or hour, according to circumstances."

The party travelled by night to avoid the glare of the sun and the snow-blindness, of which it was the cause. But, in avoiding one evil, another was incurred, for in travelling at night the men were subjected to the severest weather—the greatest degree of cold—of the twenty-four hours. On Easter

Sunday the wind veered to the north, and the travellers set sails on the sledges, and sent up enormous kites, with which each was provided by some somewhat fanciful philanthropist in England. The little expedition now advanced rapidly, the pace—thanks to the help afforded by the sails rigged on the sledges—being such as to throw the seamen into a profuse perspiration, and make them look like men "toiling under a tropical sun rather than in an Arctic night with the temperature below freezing point." On Easter Monday the cold increased with a cutting gale from the north-west, and as the night closed round the travellers, the temperature sank with alarming rapidity. With this change of temperature occurred one of those magnificent displays of halos and parhelia common to those regions. The whole heavens were lighted with the spectral gleam of mock suns, the centres of vast mystic circles; and the seamen, as they tugged hard at the dragging-ropes to get across the floe,

> "Where oft the stormy winter gale
> Cuts like a scythe."

thrilled throughout every fibre of their superstitious nature as they gazed at the unearthly spectacle. But they did not gaze long. The savagely biting blast recalled them from the spiritual, remote, "uncanny" pictures on the curtain of the night sky. "The brilliant warm colouring and startling number of false suns seemed as if to be mocking the sufferings of our gallant fellows, who, with faces averted and bended bodies, strained every nerve to reach the land, in hopes of obtaining more shelter than the naked floe afforded from the nipping effects of the cutting gale." On the night of the 21st the edge of the floe at the base of Cape Walker was reached, and though the sea-ice was here piled up in a rugged rampart, to the height of fifty feet, Captain Ommanney's party, with one last gallant effort, carried the sledges over the ice barrier, reached the land once more, and encamped.

Next day exploring parties went off to discover the trend of the land, and seek for cairns or other possible traces of the lost expedition. The cape itself is an immense cliff of sandstone and conglomerate, rising to the height of 1000 feet. No traces were found on it or near it. But a broad channel ran southward from it toward the coast of the American continent; and as this channel was likely to have tempted Franklin to seek a passage to Behring Strait, Captain Ommanney decided to send Lieutenant Browne to explore it from the cape toward the south. The "Success" sledge was then despatched with the invalids—for two or three of the men had been severely frost-bitten—to the winter quarters at Griffith Island, while the remainder of the party, after forming a depôt, started away from the spot in five sledges to the westward. It may here be stated that Lieutenant Browne, in following out the channel leading southward from Cape Walker, discovered a con-

siderable tract of coast previously unknown—the east coast of Prince of Wales Land—and after having been absent on the ice for forty-five days, succeeded in returning in safety to the ships, though he was unsuccessful in discovering anything to indicate that he had been upon the track of Franklin. Meanwhile the larger party of the southern division, under Ommanney and Osborn, pushed on on a south-west course along the north shore of Russell Island, of which Cape Walker is the north-east point, until, on the 30th April, they reached a deep inlet, which Mecham discovered was a strait separating Russell Island from Prince of Wales Land. Ommanney then travelled over the western outlet of this strait, and pursued his way over the ice of the west coast of Prince of Wales Land. "Every mile that we advanced," says Osborn, "showed us that the coast was one that could only be approachable by ships at extraordinary seasons. The ice appeared the accumulation of many years, and bore, for some forty miles, a quiet, undisturbed look. Then we passed into a region with still more aged features. There the inequalities on the surface, occasioned by the repeated snows of winters and thaws of summers, gave it the appearance of hill and dale. . . . To avoid this description of ice, amongst which a lengthened journey became perfectly hopeless, we struck in for the land, preferring the heavy snow which then encumbered the beach to such a heart-breaking struggle as that on the floe. Irreparable injury had however been done to our crews during our last day's labour amongst the hummocks. A fine clear evening had given us the full effects of a powerful sunlight upon the pure virgin snow. . . . All was white, brilliant, and dazzling; the eye in vain turned from earth to heaven for rest or shade — there was none. An unclouded sunlight poured through the calm and frosty air with merciless power, and the sun being exactly in our faces, increased the intensity of its effects." The natural and inevitable result accrued. Out of the whole party of thirty, sixteen men and one officer were, on the 1st May—two days after they had reached the shore — struck with snow-blindness, and rendered all but helpless. This disease has its origin in the continued irritation of the eye, caused by the glare of the sun, and the reflection of that glare—blazing as from a mirror—from the surface of the snow. It commences with a dull aching sensation in the eyeball, as if from the effect of overstraining. On the second day blindness rapidly sets in. "From experience," says Osborn, "I can speak of the mental anxiety which must have supervened at the thought of one's entire helplessness, and the encumberance one had become to others, who, God knows, had troubles and labour enough of their own." Gradually the film spreads, objects become dimmer and dimmer, until at last all is darkness, with an intense horror of the slightest ray of sunlight. The effects, however, of this species of ophthalmia, are not lasting, and with rest, seclusion from light, and the

application of a simple remedy, the symptoms vanish almost as rapidly as they arise.

Onward went Ommanney and Osborn, with their crews sorely tried, but always cheerful and ready for any hard work, along the west coast of Prince of Wales Land, until they had reached a point distant about three hundred miles from their ships. Nothing whatever had been discovered to prove that any European had ever set eyes on these solitary and savage shores. Indeed, Markham informs us that "from the shoalness of the water at considerable distances from the shore, and the great thickness and apparent age of the ice, it is probable that these seas are seldom, if ever, navigable for ships." This was to a certain extent *primâ facie* evidence against Franklin's having landed here, and although since the time that Markham wrote, opinion respecting the *permanence* of ice in any tract of the Arctic Sea has been much changed, still it was unlikely that the missing ships could have visited these shores, however favourable the season, since no traces of encampments or cairns were discoverable. But Ommanney was chiefly disappointed that no signs of Franklin were to be met with at Cape Walker, a spot so distinctly named in his official instructions,—a spot which he could hardly have avoided visiting if he attempted the passage by a southward route at all. But now, neither at Cape Walker, nor along the east and west shores of Prince of Wales Land, southward from the cape, was any trace of the missing expedition seen; all that rewarded the hardy explorers was the view of a barren coast, covered with snow and bounded by the frozen sea—monotonous, dreary, and inhospitable.

Captain Ommanney commenced the return journey to the ships on the 6th June. Of most return journeys there is little of interest to be told, but on the 12th, the day before he reached the ships, the gallant captain met with "an adventure." The party had encamped, and the men had just got into their blanket-bags, when, we are informed, "a peculiar noise as if of something rubbing up the snow outside was heard." In these regions of continuous oppressive silence, all *sounds* are interesting from their rare occurrence, if not alarming. But whatever the danger, it was the part of a British seaman and the captain of a discovery ship to be ready to meet it. Ommanney therefore seized his gun, loaded it, cocked it, and then ordered the tent door to be opened. Astonishment, not unmixed with consternation, was depicted on several of the faces that peered out from the blanket-bags, when the opened door disclosed a huge bear at the tent entrance. The captain fired, but owing perhaps to the fact that his limbs were benumbed with cold, or that the light of the Arctic night was ghostly and glimmering, or to the excitement naturally caused by the unusual, not to say tremendous, circumstances of the case, he missed. But his intention was obvious, and the bear, enraged at the uncivil salute, entered the canvas house, knocked over

the tent-poles, and brought down the whole erection on the heads of the inmates, whose terror at thus finding themselves playing at blind man's buff with a hungry and an angry bear, seems for a moment to have completely paralysed them. At last, one man scrambling out of his sleeping-bag, escaped from under the overthrown tent, rushed to the sledge, and returned with another gun. Meantime the bear, observing the man escaping from his blanket-case, and thinking perhaps that there might be more where this one came from, seized the sleeping-bag with his teeth and shook and tore it violently. The owner of the bag, however, now approached, and with a well-aimed shot, killed the monster, after which, amid much laughter, the tent was pitched anew, and the light-hearted tars were soon asleep.

Captain Ommanney had been absent from the ship sixty days, a fact which of itself proves that vast improvements had been made in sledge-travelling. The results of his journey are well stated in the concluding paragraph of his report: "It is a consolation to know that we have thoroughly examined all the coast within our reach, and personally explored two hundred geographical miles of newly-discovered land. Although unsuccessful in meeting with traces, my mind is firmly convinced of the impracticability of any ships navigating along this coast, for these reasons—shoals extend along the greater part of it, and I could see no indication of currents or tide-marks; and, from the nature of the ice, it is impossible to say what time the oldest of it may have taken to accumulate, probably for many seasons; consequently, I entertain no hopes of ships ever reaching the continent of America south-west of Cape Walker."

But the most remarkable of the sledge journeys of Austin's expedition was that performed by Lieutenant M'Clintock. Starting from the ships on April 15th, he proceeded rapidly to the westward, examining the shores of Cornwallis and Bathurst Islands as he advanced. At the outset, his party suffered intensely from cold. Several of the men, who were frost-bitten, were sent back by the support sledges to the ships; and in one case, mortification set in so rapidly that the man died twenty-four hours after he had been taken on board. M'Clintock reached Byam Martin Island, off Melville Island, on the 1st May. Here he parted with his companion officer, Surgeon Bradford, who went off northward to prosecute the search along the shores of Byam and Austin Channels. Bradford searched the east coast of Melville Island as far north as 76° 15′ N., and returned to the ships after eighty days' absence. The lieutenant pushed direct west, and on the 10th May, landed on the south-east point of Melville Island. He was the first European that had visited that remote land since Parry left it in 1820. "He was now, with his six men," says Markham, "thrown entirely on his own resources, exposed to all the vicissitudes of a rigorous climate, and dependent on his own efforts and the accidental condition of the ice for

advance or retreat." But he was equal to every required exertion. Rigging a sail upon his sledge, he skirted along the coasts of the island, examining every indentation, and ever on the watch for a landmark; but though from day to day incidents and discoveries kept him ever cheerful and hopeful, he saw no evidence on these desolate shores to show that Franklin had penetrated thus far west. On the 16th, the party passed through a gigantic range of hummocks, twenty feet in height, and resembling a ruined wall. The pressure required to pile up the level floe to this height must have been enormous. Arrived near Cape Bounty on the 19th, they got sight of a herd of musk-oxen, and killed two of them, but obtained only 8 lbs. of fat and 150 lbs. of beef from the two carcasses. From Cape Bounty he advanced past the Winter Harbour of Parry, and traversed the land on both sides of Cape Providence, which was found to consist of ranges of hills with a narrow belt of low land, containing many well-sheltered and comparatively productive spots. West of Cape Providence, the perpendicular cliffs rose sheer from the sea to the height of 450 feet. Rounding Cape Dundas, M'Clintock reached Cape James Ross (lat. 74° 41′ N., 114° 26′ W.), the most westerly point on this coast that had been visited down to the year 1851. In this neighbourhood he ascended a cliff 700 feet high, from which he saw away to the south-west the mysterious Banks Land, with its lofty and steep hills and large ravines. From this point a tract of the coast-line of the island stretched away westward, and between it and Banks Land the distance over the frozen sea was sixty-six miles. "The party," writes Markham, "had now arrived at a distance of three hundred miles from the ships in a direct line, when it became necessary to commence the return home; and accordingly they proceeded up Liddon's Gulf, and on the 1st of June reached Bushnan Cove. Here it was that Sir John Franklin, or some of his crew, if they had wintered anywhere on the north of Melville Island, would have left some traces in an attempt to reach the continent of America; but not a vestige was to be found. In this picturesque spot Parry had left his travelling cart on the 11th of June 1820, and Lieutenant M'Clintock found the wheels, which he used for fuel,—several tin water-bottles, and even the bones of the ptarmigan Parry had dined off. Thus, after an interval of thirty years, did these explorers revisit the place where the first Arctic travellers had encamped. Crossing the land from the head of Liddon's Gulf, the party arrived at Winter Harbour on the 5th, and encamped near the mass of sandstone at its entrance, on which the names of the 'Hecla' and 'Griper' were carved. The foundations of Parry's observatory were found, with pieces of wood, broken glass, nails, and a domino—rare things in these desolate regions! Here also they found a hare, which dwelt within twenty yards of their tent, and remained on the most friendly terms with them during the whole of their stay, regarding them with the utmost

confidence, and even allowing the men to touch her. There can scarcely be a more convincing proof than this, that our missing countrymen had not been there. On the 8th of June the weather had become so warm that drink was enjoyed off Cape Bounty without the aid of fire; and from that time the snow began to melt, which occasioned additional discomforts; for the tent and baggage on the sledge frequently got wet, and the men had to wade incessantly through water up to their knees, so that the extreme cold and frost-bites of spring were replaced by the wet and misery of an Arctic summer. After a long and weary walk of 250 miles, Lieutenant M'Clintock arrived on board on the 4th July, and thus terminated the most extraordinary journey in the annals of Arctic history. His party had been absent eighty-one days, during which time they had travelled over 770 miles of ground, averaging a distance of ten miles daily.

"Another party from Captain Austin's ship discovered the deep bay dividing Cornwallis and Bathurst Lands, and which is terminated on the west by Markham Point, and on the east by a narrow inlet; while Mr Allen, master of the 'Resolute,' examined the shores of Lowther and Garrett Islands. Such were the exertions made during the spring of 1851, to discover and relieve our long-lost countrymen. Five parties of Captain Austin's expedition were away from the ships much longer than any that had preceded them, and braving the hardships of a month, the mean temperature of which was -7°, and the maximum 39°; they have, although unsuccessful in the main object, at least done their utmost, and well merited the praise which has been bestowed upon their gallant and untiring efforts."

On the 8th August, the discovery squadron was floated out of its winter quarters, southward towards Barrow Strait. On arriving off Cape Warrender, Captain Austin took command of the two steamers, and proceeded to search Jones's Sound, while the "Resolute" and "Assistance" were ordered to rendezvous off Wolstenholme Sound. On the night of the 15th, the steamers entered Jones's Sound, which was found to increase in width above the entrance. Its scenery was declared to be magnificent, especially that of the south shore, "where," says Osborn, "some ten miles in the interior a huge dome of pure white snow envelopes land some 3000 or 4000 feet high." On the 17th, however, farther progress up the sound was stopped by floes extending from the north to the south shore. Beating out of the sound, the "Intrepid" and "Pioneer" made for the rendezvous, in the neighbourhood of which they joined the "Resolute" and "Assistance" early in September. Captain Austin was now forced to decide whether to remain out another year, or at once to return to England; and in view of the difficulty of reaching a secure harbour, and the probability, in the event of not finding such a harbour, of being drifted away into the Atlantic early in the spring, the captain resolved to bear up for home. He accordingly made sail southward

through Baffin Bay for England, where he arrived at the close of September.

Thus the completest and most splendidly-equipped expedition that had ever left the British shores returned after an absence of seventeen months. Its officers had searched the whole coast of the Parry Islands, from Beechey Island, where Penny discovered Franklin's first winter quarters, to the extreme western point of Melville Island—a distance of 350 miles; and besides this, great tracts of land, of more than 500 miles in extent, had been thoroughly examined by Surgeon Bradford and Lieutenant Aldrich. Again, 400 miles of coast-line to the south of Cape Walker had been discovered and roughly surveyed. Finally, both sides of Wellington Channel had been examined by Penny, and Jones's Sound, as far as the barrier of ice, by Captain Austin; yet, though the search was so thorough and of such wide extent, nothing was discovered that threw light on the fate of the "Erebus" and "Terror." Nothing, yet, for a little while.

CHAPTER VI.

VOLUNTEER EXPEDITIONS IN 1850-51—LIEUTENANT DE HAVEN'S AMERICAN EXPEDITION—CAPTAIN FORSYTH'S VOYAGE IN THE "PRINCE ALBERT"—SIR JOHN ROSS IN THE "FELIX."

BESIDES the Government expeditions sent out in 1850, under Penny and Austin, to search for Franklin in Barrow Strait, and in the inlets running north and south from that great channel, three private or volunteer expeditions were fitted out to aid in the search, under the commands respectively of Lieutenant de Haven of the American Navy, and of Captain Forsyth and Sir John Ross. In the voyages under these commanders, however, no trace of the missing ships was discovered. It is therefore only necessary here to notice briefly the origin of these expeditions and the main incidents of each voyage.

The American Expedition.—Sympathy for the relatives of the men who had set sail so hopefully in the "Erebus" and "Terror" in 1845, was almost as keenly felt in America as in England; and when, in 1849, Lady Franklin appealed to the great American nation to aid England in her humane endeavours to rescue the lost navigators, our kinsmen across the Atlantic returned a ready and generous response, and the national feeling was expressed by Mr Henry Grinnell, a merchant of New York, who, at his own expense, bought, provisioned, and equipped two vessels to be despatched to the Arctic seas. The two vessels—the "Advance," schooner, 140 tons, and the "Rescue," schooner, 90 tons—were wisely placed at the disposal of the American Government, in order that they might be commanded by naval officers, and be subject to the discipline of the regular service. The command of the expedition was given to Lieutenant De Haven, who hoisted his pendant in the "Advance," and Mr Griffin was appointed to the "Rescue," as second in command. De Haven, with instructions to prosecute the search in Wellington Channel and in the region around Cape Walker, set sail from New York on the 23d May 1850. He did not reach the pack of Melville Bay till the 7th July, and it was late in August before he had

reached the entrance to Regent Inlet. Leaving the neighbourhood of Leopold Island, De Haven stood over for the north shore, and on the 25th he was off Cape Riley, on which he visited the encampment which had originally been discovered by Captain Ommanney. On the 26th he passed Beechey Island, and pushed north into Wellington Channel. Here, he says, he found the ice "fixed and unbroken from shore to shore," and looking like as if it "had remained so for at least three years." Progress in a northward direction was consequently out of the question; he therefore turned back, took shelter under the lee of Point Innes, and waited for a change. "On Point Innes," writes De Haven, "distinct traces of an encampment were found, together with many relics similar to those found at Cape Riley. Captain Penny (whose squadron we met here) picked up a piece of paper containing the name of one of the officers of Franklin's expedition, written in pencil, thus proving beyond a doubt that some of his party had encamped here; but when, or under what circumstances, it was impossible to say. The preserved meat cans, moreover, bore the name of the person who had supplied his ships with that article." From Point Innes, De Haven returned to Beechey Island, and joined Penny and Ross in searching the newly discovered winter quarters of Franklin for documents. He visited the graves, the observatory, armourer's shop, etc.; but, as has already been stated, without any satisfactory result.

Returning to Wellington Channel, De Haven continued to beat about its entrance without being able to make way to the north, for ten days. On the 9th September, he entered a lead extending along the south side of Cornwallis Island, and reached Griffith Island, where the lead closed. Here the ice was so unfavourable, that after consultation with Mr Griffin, De Haven resolved to return to the United States. He was detained, however, for days at the mouth of Wellington Channel, and a south wind springing up and drifting him northward, he found himself on the 18th off Cape Bowden, the most northern point seen on the east shore by Parry. He continued to drift to the north-north-west until the 22d, and now, "between Cornwallis Island and some distant high land visible in the north, appeared a wide channel leading to the westward. A dark misty-looking cloud which hung over it (technically termed frost-smoke) was indicative of much open water in that direction. . . . Nor," continues De Haven, "was the open water the only indication that presented itself in confirmation of this theoretical conjecture as to a milder climate in that direction. As we entered Wellington Channel, the signs of animal life became more abundant; and Captain Penny, who afterwards penetrated on sledges towards the region of the 'frost-smoke' much farther than it was possible for us to do in our vessels, reported that he actually arrived on the borders of this open sea." For the remainder of September, and until the 4th of October, the vessels drifted but little; but all

through October and November they were driven to and fro by the changing wind, though they never passed out of the channel. The perils and labour endured during these months were such as few men are ever called to experience. Sometimes the hummocks, consisting of massive granite-like blocks, would be thrown up above the ship's side to the height of twenty or thirty feet, and "this action in the ice," says De Haven, "was accompanied with a variety of sounds impossible to be described, but which, when heard, never failed to carry a feeling of awe into the stoutest hearts."

De Haven had failed after repeated and anxious endeavours to reach a harbour, and he was doomed to spend the winter at the mercy of the drifting ice. "In one respect," writes Seemann, "this is the most extraordinary of all searching expeditions, namely, in its being exposed to drifting ice from the middle of September 1850 to the middle of June 1851, an occurrence altogether unprecedented." Seemann appears to have forgotten the disastrous voyage of Sir George Back in the "Terror" in 1836-37. But we must follow De Haven's narrative. Toward the close of November, the "Advance" was drifted south-east to a point about five miles south-west of Beechey Island; and on the last day of the month a strong wind from the west sprang up and carried the vessel clear of Wellington Channel and into Lancaster Sound. During the remainder of December, the drift of the "Advance" (still imprisoned in the pack) to the eastward, averaged nearly six miles per day, so that on the last of the month De Haven found himself at the entrance of Lancaster Sound. By the 14th January he was fairly launched into Baffin Bay, and his line of drift began to be more southerly, assuming a direction nearly parallel with the western shore of the bay, at a distance of some forty to seventy miles from it. On the 29th the sun rose his whole diameter above the horizon, and remained visible for an hour; but with the lengthening daylight the cold became only the more intense, and in February, and again in March, mercury froze, though it had remained fluid during the dark days of winter. But curiously enough, a very low temperature was invariably accompanied with clear and calm weather, so that in the "Advance" the coldest days were perhaps the most pleasant.

The ice, in the midst of which the "Advance" and her consort, the "Rescue," were drifting, had frequently been subject to temporary disruption; but in February it became cemented again, and no other rupture took place until the final one which permitted the vessels to escape. "Still," says De Haven, "we kept driving to the southward, along with the whole mass. Open lanes of water were at all times seen from aloft; sometimes they would be found within a mile or two of us. Narwhales, seals, and dovekies were seen in them. . . . Bears would frequently be seen prowling about; only two were killed during the winter, others were wounded, but made their escape. A few of us thought their flesh very palatable and

wholesome, but the majority utterly rejected it. The flesh of the seal, when it could be obtained, was received with more favour. As the season advanced, the cases of scurvy became more numerous, yet they were all kept under by the unwearied attention and skilful treatment of the medical officers. My thanks are due to them, especially to passed Assistant-Surgeon Kane, the senior medical officer of the expedition." As the spring advanced, the floe which encased the ships began slowly to decay. In April the "Rescue" was cut free from the surrounding ice, and the officers and crews removed into her; but the ice continued so thick around the stern of the "Advance" that the thirteen-feet saws were too short to pass through it. It was not till June 8th that the "Advance" was set free, in latitude about 65° N.

De Haven now made sail for Lievely on Disco Island, for the purpose of verifying chronometers and recruiting his crew. On the 22d, having replenished his stores and recruited his men, the gallant lieutenant again turned his prow northward, "with the intention of prosecuting the object of the expedition for one season more at least." He pushed north past Proven and Uppernavik; but on the 27th June the "Advance" was again closely beset in the ice, and remained so till the 4th August. De Haven now began to dread being frozen in for another winter, in a similar if not worse situation than before. He therefore took advantage of an opportunity afforded him, late in August, of retracing his steps, in accordance with his instructions not to spend more than one winter in the Arctic regions. His progress homeward, after one of the most remarkable cruises in the annals of Arctic exploration, was favourable. On the 6th September, he left Holsteinberg for New York, where he arrived on the 30th of the same month, the "Rescue" coming in safely a week later.

Captain Forsyth's Voyage in the "Prince Albert."—The thorough examination of Barrow Strait, Wellington Channel, Melville Island, and the regions to the south and south-west of Cape Walker having been provided for by the Government expeditions under Penny and Austin, Lady Franklin thought it advisable to send out an auxiliary searching vessel, to the only quarter the examination of which seemed unprovided for in the Government scheme—that of Prince Regent Inlet and the east coasts of North Somerset and Boothia. With this view the "Prince Albert," schooner, eighty-nine tons, was purchased and equipped at the cost of about £4000, of which more than one-half was contributed by Lady Franklin from her own resources, while about £1500 was raised by subscription. Captain Charles Codrington Forsyth was appointed to the command, and Mr W. Parker Snow was engaged to take charge of what he calls "the civil department of the vessel; the superintending and issuing of stores, etc.; the care

of all the scientific instruments and medicine chest." The same versatile gentleman acted as "doctor" to the expedition, the medical man who had been engaged for the service having at the last moment "declined the honour." All preparations having been completed, the "Prince Albert" put to sea from Aberdeen on the 5th June 1850.

In less than four months—on the night of the 1st October—the vessel was again in Aberdeen harbour, and Mr Parker Snow had now the congenial task before him of writing the story of the adventures and achievements of "the expedition." This he has done in a volume entitled the "Voyage of the 'Prince Albert' in search of Sir John Franklin." The cruize lasted four months, during which time no discovery was made; the volume runs to four hundred pages, in which no fact of importance is recorded. It is enough to state that the "Prince Albert" reached Lancaster Sound, sailed for some time in company with the other discovery ships, then entering Regent Inlet, proceeded as far south as Fury Beach, where she was stopped by ice. From this point the homeward voyage began. Mr Snow tells once more the story of the discovery of Franklin's first winter quarters, an episode in Arctic exploration which has already been sufficiently dwelt upon. This writer speaks of the craft in which he sailed as the "*bonnie wee pet,*" and emphasises the expression by putting it in italics. No more! No more!

Sir John Ross in the "Felix."—While Government were fitting out the expeditions under Penny and Austin, Sir John Ross, who had then reached the great age of seventy-three, volunteered his services to proceed again to the north and search for his old comrade, Franklin. Government declined the offer, but the veteran navigator, persisting in his endeavours, obtained the countenance of the Hudson's Bay Company, from which and from the public, he obtained by subscription sufficient funds to purchase and equip the small schooner "Felix," in which he set sail from the west of Scotland on the 23d May 1850. On the 27th August he arrived at Beechey Island, where he inspected the traces of Franklin's winter quarters. He added nothing, however, to the discovery of Penny, with whom he spent the winter in Assistance Harbour. During the winter, his first officer, Commander Philips, made a futile and fruitless effort to cross Cornwallis Island. On the 12th August 1851, the "Felix" with the other vessels was released from the ice, and Ross commenced his homeward voyage, and arrived off the west coast of Scotland, 25th September 1851. "This expedition," says Seemann, "was attended with no results, either as to the missing vessels or to geographical discovery."

PART X.

DISCOVERY OF A NORTH-WEST PASSAGE.

CHAPTER I.

SEARCH BY BEHRING STRAIT RESUMED—EXPEDITION UNDER CAPTAINS COLLINSON AND M'CLURE—VOYAGE OF THE "INVESTIGATOR."

On the return of the unsuccessful expedition, consisting of the "Enterprise" and "Investigator," under the command of Sir James C. Ross, in 1849, Government, having already provided for the prosecution of the Franklin search in Lancaster Sound, Wellington Channel, etc., by fitting out the squadrons to be conducted to these waters by Penny and Austin, resolved to re-equip the newly-returned vessels and despatch them to continue the search *by Behring Strait.* The "Enterprise" and "Investigator" were accordingly re-docked, thoroughly repaired, and provisioned for the long voyage round Cape Horn, across the Pacific, and into the Polar Sea by its western entrance. The command of the "Enterprise"—and of the expedition—was entrusted to Captain Richard Collinson, C.B., while Commander Robert J. Le Mesurier M'Clure was appointed to the "Investigator." Collinson entered the navy in 1823, and had served with distinction on the West Coast of Africa and during the first China War; while M'Clure, who sailed as mate in the "Terror" with Sir George Back in 1836-37, had just returned with Sir J. C. Ross, under whom, in the "Enterprise," he had held the rank of first lieutenant. Of the officers, the latter, Commander M'Clure, was destined, in the expedition now under consideration, to achieve the object for which British navigators had been striving ever since the close of the fifteenth century—the discovery of a North-West Passage; and it will therefore be necessary, in our narrative of the incidents and results of this expedition, to follow closely the fortunes of his vessel, the "Investigator."

The vessels sailed from the Thames on the 10th January 1850; but did not finally leave the British shores till the 20th. On the 20th February the

"Investigator" first felt the influence of the north-east trade-wind of the Atlantic, and on the 28th March she passed out of the southern tropic in the South Atlantic Ocean. On the 14th April M'Clure reached to within ninety-one miles of the Strait of Magellan, in long. 67° 57′. At this point the officers and crew became entitled to "*double pay,*" writes Surgeon Armstrong—who sailed with M'Clure, and who writes a "Personal Narrative of the Discovery of the North-West Passage,"—"in accordance with the orders of the Admiralty that it (the increased rate of payment) should commence on attaining the meridian of Cape Horn, which we had then reached." On the 17th the "Investigator" joined the "Enterprise" in Fortescue Bay in Magellan Strait, and it was found that, though the vessels had parted company early in February, and from that period had never sighted each other, they both had crossed the line on the same day. On the 19th the discovery vessels set sail in company, but in the evening a fresh gale springing up from the north-west, the vessels parted company, *never more to rejoin.* For ten days the "Investigator" was driven about in the gale, and it was only on the 30th April that M'Clure was able to resume his course for the next rendezvous—Honolulu, in the Sandwich Islands.

Honolulu was reached on the 1st, and left on the 4th July. On the 28th Behring Strait was passed, Arctic circle was crossed, and the Admiralty clothing for the use of the seamen in the far north was issued to the crew. "Arctic sights," writes Sherard Osborn, "now rapidly accumulated to interest the many novices in the 'Investigator,' and to awaken in the mind of their commander recollections of his former trying and unsuccessful voyage on the opposite side of America into that same frozen sea." This first issue of warm clothing, we are informed by Armstrong, consisted of "one complete suit of blue double-milled box-cloth, boots, stockings, boot-hose, comforters, mits, and caps; all of excellent quality, and well adapted for Polar service." At eight P.M. on the 28th, M'Clure observed a sail bearing down upon him, and was delighted to find that the stranger was the Arctic store-ship "Plover" (Captain Moore), which had passed the winter of 1849-50 in Kotzebue Sound. From Captain Moore the "Investigators" learned that the "Enterprise" had not yet been met with in the Polar Sea, and that the ice beyond Kotzebue Sound was so heavy as to be impenetrable. Bidding adieu to the "Plover," M'Clure pushed on northward for Cape Lisburne.

The "Investigators," however, did not miss the opportunity of sending their last words to friends in England by the "Plover," and among other letters, M'Clure sent home to the Admiralty one of the most vigorous despatches it has ever been our fortune to read. In it are discernible all the courage, the ambition, and the inflexible resolution which were afterwards displayed in accomplishing the North-West Passage. Captain

M'Clure states that he had received clear instructions from Captain Collinson to proceed to Cape Lisburne to meet the latter at that rendezvous; but he fears that before he shall have been able to reach the cape, Collinson will have rounded it and gone on. In that case he would consider the "Investigator" a detached and independent part of the expedition, and would act accordingly. "After passing Cape Lisburne," he writes, "it is my intention to keep in the open water, which, from the different reports that I have read, appears, about this season of the year, to make between the American coast and the main pack as far to the eastward as the 130th meridian, unless a favourable opening should earlier appear in the ice, which would lead me to infer that I might push more directly *for Banks Land, which I think it is of the utmost importance to thoroughly examine.* In the event of thus far succeeding, and the season continuing favourable for further operations, it would be my anxious desire to get to the northward of Melville Island, and resume our search along its shores and the islands adjacent, as long as the navigation can be carried on, and then secure for the winter in the most eligible position which offers. . . . In the event of this being our last communication, I would request you to assure their Lordships that no apprehension whatever need be entertained of our safety *until the autumn of* 1854, as we have on board three years of all species of provisions, commencing from the 1st September proximo, which, without much deprivation, may be made to extend to a period of four years." Having committed this bold missive into the hands of the captain of the "Plover," M'Clure felt himself free to act only on his own independent judgment, and signalling farewell to Captain Moore, he shaped his course for Cape Lisburne and the icy seas.

On the 31st July, when at a distance of about twenty miles from the cape, the "Investigators" observed a sail standing down towards them from the north-west. Could it be Captain Collinson in the "Enterprise?" The question was soon decided, as the stranger unfurled the gay ensign of St George, and at the same time ran up a number to the masthead declaring her to be the "Herald," Captain Kellett. The vessels soon closed, and as the "Herald" courteously rounded behind the discovery ship, she manned her rigging and welcomed the "Investigators" to the Polar Sea with three hearty cheers, and one cheer more. The vessels then proceeded in company toward Cape Lisburne. "We now learned with regret," writes Armstrong, "that nothing had been seen of our consort (the 'Enterprise'), and we having now arrived at the rendezvous, there could exist no doubt that she was still far behind us. . . . We received no orders from our senior officer (Captain Collinson) as to our course of action in the event of reaching the rendezvous before him; the possibility of such a contingency occurring had evidently never been entertained for one moment. We were conse-

quently obliged to adopt a course of action for ourselves. One of two courses was left for us to pursue—either to remain at the rendezvous until the arrival of the 'Enterprise,' with the uncertainty of then meeting her owing to the foggy state of the weather, in which case we should lose the first season—or at once to proceed to the northward and enter the ice single-handed. We resolved on the latter, and cheerfully prepared to encounter all obstacles and dangers, with a firm reliance on a merciful Providence, and full confidence in our resources." In adopting this course M'Clure ran directly counter to the letter of the official instructions received from the Admiralty; but he was not a man to yield a slavish obedience to the home authorities when he felt himself in command of a good ship stored for three years, and with an undiscovered ocean ahead of him. The wonder is, that Captain Kellett, who was the senior officer, did not interfere with M'Clure's freedom of action. He does indeed appear to have mildly remonstrated, but in the feeblest and most ineffectual manner.

When the "Investigator" stood in to pay a formal visit to Cape Lisburne, the "Herald"—although farewells and complimentary messages had been signalled between the ships—still continued to follow astern; and when, having touched at the cape, M'Clure stood away boldly for the ice toward the north-west, the "Herald" still followed, as if filled with apprehension for the discovery ship. "This did not add to our comfort," writes Armstrong; "for it may now be confessed, we still feared that Captain Kellett would detain us, and that, on reflection, he might see the necessity of keeping us at least some days to await the chances of our senior officer's arrival; but," continues Armstrong, "*if the truth must be told,* an *opposite* state of the case was urged upon him. Captain M'Clure maintained (what nobody believed) that the 'Enterprise' was ahead of us, in support of which view he retained the private letters he had for Captain Collinson, *for early delivery.*" But the "Enterprise" had never been seen or heard of in the Polar Sea during the whole season, and in point of fact, when the date of her departure from the last port in the Pacific was taken into view, together with the circuitous route she had taken, and her poor qualities as a sailer, it was clear as day to every one that she could not yet have passed Behring Strait. But Captain M'Clure continued to assure Captain Kellett that the "Enterprise" must have gone ahead, and that therefore the "Investigator" ought to follow immediately. As the one gallant captain gave this assurance to the other gallant captain, one can fancy that both of them winked rather hard. Kellett's position was difficult and delicate. He wished and thought it was right to detain the "Investigator;" yet to stop a discovery ship while the brief summer of the Arctic seas was waning, was to incur a grave responsibility. At last, however, the captain of the "Herald" seemed to have made up his mind, and on the evening of the 31st, he bore straight

down with all sails set, upon the "Investigator," and summoned M'Clure to bring his ship to anchor, and wait for forty-eight hours for the "Enterprise." M'Clure's signal in return, as his ship bore away into the deepening twilight, was, "*Important duty. Cannot, on my own responsibility.*" It was the old story of Nelson over again. He raised a telescope to his blind eye to look at the admiral's signal to retire from action, but, not being able to see it, fought on—and won.

On the morning of the 2d August, the "Investigators" sighted the first ice extending across ahead, in lat. 72° N., and as they advanced towards it, the sea, with its fantastically shaped ice-islands floating on towards them, presented a novel and a fascinating appearance to many of them. "Large pieces," says Armstrong, "coming in our course, were cleft by the ship, producing a slight shock, a grating noise, and an equally strange sensation amongst us, as the fragments, having been partially submerged, were dashed on either side, while the breeze bore us steadily along. The main pack soon became visible; and chilling as was its aspect," continues the enthusiastic doctor, "I am not sure that we did not hail it with a cheer." The main pack was reached at noon on the 2d., in lat. 72° 1′ N., long. 166° 11′ W. Lofty in itself, its height seemed magnified by the refracting power of the atmosphere, and it formed an impenetrable barrier, extending across the ship's path from north-west to south-east.

For the next few days M'Clure sailed eastward along the edge of the pack, in the hope of being able to turn its southern extreme, and then make his way to the northward. On the 5th August he was off Wainright Inlet, and thence he made rapid progress along the well-known coast toward Point Barrow. During the night of the 5th he kept away to the north-north-east, well off the land, sailing among loose ice, and helped on his course by a northward flowing current. By meridian observation, on the following day, he found himself in lat. 71° 35′ N., long. 155° 12′ W. "We were thus," says Armstrong, "farther to the northward of Point Barrow than we intended to go, and, to our great joy, had successfully rounded this hitherto much dreaded point of coast, the alleged unpracticability of which (for ships) we had then fully refuted. The 'Investigator' then floated in strange waters, where no ship had ever preceded her, and commenced the navigation of a hitherto unknown and unexplored sea." Having thus reached a sea hitherto untraversed by any ship, and having practically turned their bow eastward, towards *home*, it was intensely annoying to find that at mid-day on the 6th, the wind entirely deserted them, and they lay becalmed in the middle of loose ice, with every probability of being beset, unless a breeze should spring up. When we think of M'Clure thus powerless, and chafing under his enforced idleness, one cannot help thinking how much he might have accomplished had his vessel been a screw steamer. As it was, the "Investigator"

lay helpless upon a sheet of water two or three miles in diameter, and apparently ice-locked—"idle as a painted ship upon a painted ocean." What matter that the sun shone brilliantly, gilding the icy landscape, when the sails were hanging sluggishly from the masts? M'Clure seemed to have reached an Arctic "Doldrums;" but a surprise was in store for him. A light air sprang up in the afternoon, and soon a moderate gale was blowing from the south-east. The captain took advantage of the wind to follow up an east-north-east course; but the navigation was of the most dangerous description. "It was quite appalling," writes Armstrong, "to observe immense floes coming on towards us as we sped our way through the narrow channels of water that separated them from each other, and some of which were almost magically closed as we approached them, by the junction of these ponderous masses, propelled onward, as they were, by the united power of wind and currents. . . . Some fragments it was impossible to avoid, and, as the ship struck them from time to time, the shock was tremendous, and vibrated through every timber of its solid framework—even endangering the safety of the masts; and it was only by an effort that any one could maintain his equilibrium on board. . . . The gale imparted an appearance of grandeur and wildness to the scene difficult to conceive; but so perfectly ice-locked were we, and so circumscribed was the area, that it could not exercise its power."

Next day, the wind having fallen, all the boats were called away to tow, and at about eight P.M. Point Drew was reached. On the following morning, when close to Point Pitt, Mr Court, the ice-master, was sent ashore to erect a cairn, with a notice to the effect that the "Investigator" had passed that point. On landing, Mr Court's party were met by three Eskimos, who at first showed extreme timidity, but after being addressed in their own language and allowed to rub noses with the strangers, became, as usual, friendly and communicative. The most valuable information obtained from them, however, at this and subsequent interviews, was that open water, from three to five miles wide, extended to the east along the mainland, and that no other big oomiak like the "Investigator" had visited their coasts—from which M'Clure learned, first, that the lost expedition must still be detained in the central polar sea, and second, that, to a certainty, the "Enterprise" had not preceded him, and must yet be far behind. On the 11th, the ship was visited by two baidars containing twenty-four natives, of whom the chief, who carried an old musket marked "Barnet, London, 1840," was probably the same troublesome individual who headed the attack on Mr Pullen in 1849. All communications with the natives were carried on intelligently and satisfactorily by the "Investigator's" interpreter, Mr Mierching, a Moravian missionary, who, though he had learned all he knew of the Eskimo language and character at the settlements on the coast of Labrador,

was able to converse with the western Eskimos dwelling at a distance of nearly 4000 miles—a circumstance which seems clearly to prove the unity and distinctiveness of the Eskimo race.

On the 14th August, M'Clure had penetrated eastward beyond Return Reef to long. 148° 17′ W., and was now sailing in waters hitherto deemed completely impracticable for ships. But the navigation was exceedingly difficult owing to numerous shoals, many of which were hidden by floes. "These shoals," says Osborn, "are composed purely of driftwood and the alluvial deposits of neighbouring rivers. A mass of the former takes the ground, or becomes fixed by some accident, in three or four fathoms water; the current soon feels the impediment, and begins to deposit in and around the nucleus matter that forms a shoal; the shoal grows rapidly; more driftwood grounds, more sediment is deposited, and even within the lifetime of a man, as one Eskimo assured Mr Mierching, an island rises from the bottom of the sea." Amid shoals of this description the "Investigator" was beset on the 14th, and in trying to work her way out she took the ground. The moment was one of extreme danger, as the ship was for the time at the mercy of the moving floes. To provide against casualty the deck-load of provisions was removed into the boats, and in the midst of the operations for getting the ship into deep water, one of these boats, laden with eleven casks of salt meat, capsized. The meat was, of course, lost.

After three days' detention M'Clure forced his way on the 18th into open water, and passed Flaxman Island, in longitude about 146° W. On the 19th, with the water deepening around him, he steered north-east for Banks Land. He soon discovered, however, that he was working into a blind lead in the pack, and was glad to struggle out toward the south, and resume his course eastward along the mainland. Crossing the mouth of the Mackenzie River on the 21st, M'Clure reached Cape Dalhousie on the 27th. The season was now drawing to a close, and instead of continual daylight there were already three hours of darkness at night, during which, at intervals, guns and rockets were fired, as signals to any parties from the Franklin expedition that might be in the neighbourhood. Cape Bathurst was reached on the 31st.

A few days previously, on the 24th, when the "Investigator" was stationed off Cape Warren, on the eastern shore of the mouth of the Mackenzie, Captain M'Clure, with his interpreter, Mr Mierching, went ashore to communicate with the natives of the district. In the course of his intercourse with them, the captain asked why they did not trade with the white men up the big river—meaning the Hudson's Bay Company's traders on the forts up the Mackenzie. The natives replied that the white men "had given the Indians a water which had killed a great many of them, and made others foolish, and they did not want to have any of it!" This dread of rum and

its consequences was not confined to the natives of Cape Warren. The numerous natives at and around Cape Bathurst, expressed the same sentiment respecting the effects of "fire-water." This tribe, numbering about a hundred and fifty persons, leaves Cape Bathurst as soon as the young ice covers the sea, and proceeds westward to meet a tribe from the Mackenzie, with whom they trade, and who, in turn, trade with the Indians who are in direct communication with the Hudson's Bay Company's agent. These natives, like those of Cape Warren, "repeated," says Dr Armstrong, "the accusation of the fire-water having been given in barter, and its fatal results." It is just, however, to state that the practice of giving rum to the Indians in exchange for furs, has for many years been abandoned by the Company.

M'Clure closely questioned the Eskimos of Cape Bathurst, with regard to the existence of land to the northward. They only pointed to it with an expression of anxiety, and exclaimed, "That is the Land of the Great White Bear!" "While at Cape Bathurst," writes Sherard Osborn, "a constant exchange of garments went on between the seamen and officers on the one side, and the natives on the other; but one Eskimo, more knowing than the rest, hit upon an ingenious plan to obtain clothing without giving a *quid pro quo.* He went to several of the individuals of the 'Investigator's' company, commencing with the commander, and pretended to be suffering from excessive cold. His teeth chattered, and his whole frame shook so, that compassion was immediately aroused, and a Guernsey frock given him. Then he felt better; but watching an opportunity, the rogue would slip it off, stow it away in his kayack, and then return to obtain a fresh one. At last, however, an old quartermaster, who had been watching him with some degree of amusement, flew into a passion at the fellow trying the same trick on with him, called him '*a Jew,*' and threatened to knock his head off, accompanying his threat with a demonstration from a large horny fist, which the Eskimo understood better than the profuse volley of adjectives, that rolled out at the same time over the quartermaster's quid."

Having obtained a promise from these natives to be kind to any "white men" who might come amongst them, Captain M'Clure resumed his voyage, and on the morning of the 6th September, had reached Cape Parry, in longitude about 124° W., and immediately south of Banks Land. A strong south-easterly wind, which set the ice off the coast, was blowing, and as the sea was clear to the north, M'Clure pursued his course in that direction—in sleepless anxiety for what secret this unknown sea had to give up to him. He had not long to wait. "At 11.30 A.M. (on the 6th)," writes Dr Armstrong, "the joyful report of 'land on the port bow,' was proclaimed from the masthead, and as noon dispelled the haze which hung around its lofty outline, and revealed it to our delighted eyes, it bore from N.E. to E.N.E., distant about thirty miles. I need not attempt," continues the Doctor, "to describe

the feeling of joy which this pleasing intelligence diffused amongst us; of the hopes indulged in, or the variety of opinions entertained and freely expressed. All eyes were directed towards it for the remainder of the day, anxiously looking forward to our soon reaching this newly-discovered territory. Some thought it would prove to be a continuation of Wollaston Land, others that of Banks Land, as we had then nearly reached its meridian; but whichever it might prove to be, the interest was absorbed by the feeling of confidence universally entertained that the land before us would prove a certain guide to lead us to the northward—perhaps to Melville Island. . . . As if to add to the cheerful feeling we experienced, the sunset was peculiarly beautiful, tinting the western horizon with colours no effort of art could portray—the most brilliant scarlet and crimson, stratified on a rich neutral ground, formed by a harmonious blending of all the elementary colours of the rainbow—a picture of pure Arctic scenery, stillness, and beauty, which cast an auspicious halo around this new land." On the following morning, the "Investigator" having reached to within two miles of the southern point of the land—a lofty cape, 1000 feet high, afterwards named Nelson Head—Captain M'Clure and Dr Armstrong left the ship in one of the whale-boats, followed by Lieutenant Cresswell with a party of officers in the first cutter, for the purpose of landing upon, and taking possession of, their discovery, which, with the usual formalities, was named "Baring Island." It was afterwards discovered, however, that the island was no other than Banks Land, the northern shores of which were discovered from the coast of Melville Island by Sir Edward Parry, as early as 1819-20. Parry named the land he discovered Banks Land, and this name it has properly retained.

M'Clure and his companions proceeded to examine the shores, and found that vegetation was general, that the Arctic flora occurred in perfection, and that there were recent traces of reindeer and hares. Better than all, however, a perfectly open sea extended away toward the north-east—the route to Barrow Strait and to England. In this direction the vessel was now worked against a moderate east wind. The south-eastern coast of Banks Land revealed itself point after point, and was found to consist mainly of limestone, covered with soil and verdure, and sloping to the sea. Pushing on for two days, on the 9th M'Clure discovered new land to the eastward, or "on the starboard bow," and the "Investigators" began seriously to fear, as the trend of the shores both on the right and left was toward the north-east, that they were running into some deep fiord or land-locked inlet. Still there was the chance that this inlet, which was about thirty miles in width, might prove an open passage leading into Barrow Strait, and in that hope M'Clure pressed on toward the north-east. "Early on the morning of the 10th," writes Dr Armstrong, "the joyful intelligence of land on either quarter was reported as day advanced; and as the fog cleared away, it could be seen running in

a parallel direction on either side as far as the eye could reach; and the hope so ardently entertained, that this fine sheet of water might prove a strait, was likely to be realised, as we uninterruptedly pursued our way to the northward. Still the same anxious feelings pervaded our minds; and one almost felt afraid to give expression to one's hopes, lest the reports from the mast-head, frequently as they came, might destroy them." On the same day the vessel had reached two islands, afterwards named Princess Royal Islands; and at noon the observations taken demonstrated that the explorers had now reached a point only sixty miles distant from the known northern limit of Banks Land, or, in other words, from Barrow Strait and the achievement of the North-West Passage. At this period Captain M'Clure suffered intense anxiety and ceaseless excitement. "I cannot describe my anxious feelings," he writes, in his private journal. "Can it be possible that this water communicates with Barrow Strait, and shall prove to be the long-sought North-West Passage? Can it be that so humble a creature as I am will be permitted to perform what has baffled the talented and wise for hundreds of years?" On the afternoon of the 10th, however, the wind veered round to the north-north-east, and brought down with it, right against the "Investigator," large quantities of ice not previously in sight. The gale drove the ship on the eastern or lee shore of Prince of Wales Strait, as this new channel had been named, and pressed her, together with the ice that surrounded her, down upon the coast of Prince Albert Land, the name given to the land on the east side of the strait. For three days the ship remained beset in the ice, and in constant danger of being overrun by the moving floes. On the 15th the wind changed to the southward, and gradually drifted both the ship and the floes with which she was surrounded, toward the north. "Drifting along in a churning sea of ice," writes Osborn, "amid darkness and snowstorm, the 'Investigator' held her way, her gallant company contented to run all risks, so long as her course was onward, and towards the north-east."

On the 17th September M'Clure reached his most advanced position in Prince of Wales Strait—lat. 73° 10′ N., long. 117° 10′ W.—a point only *thirty miles distant from the waters of Barrow Strait.* North of this point the ice, jammed together by the heavy pack of Melville Sound, which lay across its northern extremity, could find no outlet toward the north. After being drifted up and down the strait by shifting winds, liable to sudden destruction at any moment from the moving and irresistible ice, M'Clure found himself, on the 30th September, finally beset in the pack, in lat. 72° 50′ N., long. 117° 55′ W. On this day the temperature fell below zero for the first time; and as the ship was now stationary, preparations were immediately commenced, by dismantling the ship and erecting the woollen housing, for spending the winter in the pack.

CHAPTER II.

FIRST WINTER IN THE ICE.

In the early October days of the first winter among the ice, nothing important occurred. The excellent spirits of officers and men were dashed, but only for a moment, by the discovery that 500 lbs. of preserved meat were putrid, and had to be thrown overboard. Taken in connection with the loss of the boatful of salt meat already mentioned, this was a serious loss to a crew now firmly enclosed amid the ice of an unknown sea. But despair is death in the Arctic regions, and Captain M'Clure was ever anxious to keep the attention of his men fully engaged, so that there should be no time allowed for grumbling or despondency. One of the means toward this end, was to send out parties of officers and men to explore the lands they had discovered on either side of Prince of Wales Strait. On one of these excursions an incident occured, which might have resulted in the sudden and tragical termination of the expedition.

On the 10th October, with a temperature of 40° below freezing point, Captain M'Clure, Lieutenant Cresswell, Dr Armstrong, and Mr Mierching the interpreter, with four seamen, started from the ship to visit the land on the eastern side of the strait, and take possession of it. The route was first over broken and rugged pack, afterwards over a belt of smooth ice, extending to near the shore, and finally across a barrier of broken floe, formed by the violent contact of the sea-ice with the grounded hummocks on the shore. "The tide happened to have brought the two edges together with much violence," writes Osborn, "and the lighter ice (some feet in thickness, however) was turning up and rolling over, layer upon layer. 'Follow my leader' was the idea of all the party; and away they rushed over the pile formed by the battling floes, cheering as they reached the land, and regardless of the fact that at turn of tide those very floes might part and cut off their retreat." The party having arrived on shore, the seamen were ordered to construct a cairn on this new land, which had been named after Prince

Albert; while the officers, marching on for two hours, were rewarded with a view of "a headland, which appeared like the termination of Banks or Baring Land, with a blank space between it and the coast side of the strait, which confirmed Captain M'Clure in his belief in a channel through, and made his companions exclaim that they saw into Barrow Strait." In this excursion no living creature was seen, though traces of bears, deer, and foxes, were observed. The scant vegetation consisted merely of small patches of dwarf willow and moss. On the whole, Prince Albert Land was unpromising as a hunting-ground.

"We had returned to the shore," writes Captain M'Clure, "and were following our track back to the ship, anticipating the pleasure of a good dinner, after a twenty miles' walk, when, on coming to where the junction of the land-ice and the sea-floes took place, we beheld a separation of fifty yards of clear black water! Our feelings are easier to be imagined than described: nearly five miles from the vessel, a Polar night closing in, and the only provision amongst the whole party a solitary tin of preserved meat, which had been issued to the men for their dinner, but had now become so solidly frozen as to defy both their knives and teeth!" The situation was threatening. The starving seamen ranged along the edge of the land-ice in the hope of finding a floating piece on which, as on a raft, they might cross over the open water that gloomed black between them and safety. No such ice-raft, however, was to be found, and, as the men wandered along the floe-edge, they fell heavily into icy clefts, or bruised their limbs on the iron hummocks, and were fain to sit down and fall off into the sleep of fatigue, which, in these regions, knows no waking. The officers prevented this by keeping every man on his feet and in motion, until at last, in answer to the resounding muskets of the despairing men, rockets and guns were fired from the ship, and the wanderers knew that a rescue party would soon be with them. This party soon arrived within hail on the opposite side of the open water. "Have you a boat with you?" cried M'Clure. "No," was the answer, "we did not know you wanted one." The captain ordered them to return immediately, and bring one. In the meantime, however, another relieving corps had been sent from the "Investigator" with a boat, by means of which M'Clure and his companions were rescued. By four in the morning the travellers had partaken of a substantial meal, and retired to their beds, almost exhausted, after eighteen hours' exertion, but grateful for the fortunate termination of their adventure. "The distance we had travelled," writes Dr Armstrong, "exceeded thirty miles, which, in consideration of the nature of the ground, was more trying than double the distance over level country; and what with the intense cold of the night, no tents, inadequate clothing, and entire want of food, had we not been happily rescued, there was but too much reason to fear that morning would have furnished a serious list of casualties."

Between the 12th and 18th of October, 424 lbs. of preserved meat were thrown overboard, as unfit for human food, and this loss, taken in connection with those that had preceded it, was somewhat ominous. Still the spirits of the men were excellent, and M'Clure endeavoured to preserve cheerfulness by keeping them constantly employed. On the 21st October 1850, the captain, at the head of a party, including Dr Armstrong, set out on a sledge excursion for Barrow Strait. The "Investigator," however, was but scantily furnished with the necessary apparatus for efficient sledge-travelling, nor does the deficiency in this respect appear to have been compensated for by the training or the ingenuity of her officers. For example, M'Clure did not know how to construct and load his sledges, so as to include a sufficiency of necessary provisions; and we find that, at the close of the first day's journey toward Barrow Strait, the only supper for officers and men was "a pint of tepid water apiece, into which a little oatmeal was thrown." A sledge expedition conducted on this scale could only achieve success at the expense of infinite labour and the most poignant suffering. After three days, however, the party had so far ascended Prince of Wales Strait, as to obtain a clear view into Barrow Strait, or, in other words, to behold before them the completed North-West Passage. The following is M'Clure's report of what led to the incident: "October 24th was not so cutting a day, the thermometer having risen to 5° Fah., I walked ahead whilst the sledge was packing, ascended a point of land a hundred feet above the level of the sea, and observed distinctly that the eastern shore of Prince of Wales Strait trended far away to the eastward, whilst that of the western coast (which we were upon) preserved its northerly direction. The point whereon I stood appeared to be the most contiguous to the opposite shore, and the breadth across about fifteen miles; beyond me the shores of the strait evidently began to separate. This encouraged me in the hope that we were on the point of reaching Barrow Strait; and seeing a hill at what appeared a distance of twelve miles due north of my position, I returned to the sledge, and pointed it out to the crew as a cape whence we should see that long-wished-for sea." On the morning of the 26th the cape referred to was reached, and ascending a hill 600 feet high before sunrise, the captain and his party waited till daylight should reveal the North-West Passage from the Atlantic to the Pacific Ocean. As the sun rose, the wondrous prospect was unveiled. Prince Albert Land trended away to the eastward, and Banks Land, near the north-east angle of which the party stood, was seen to terminate in a low point about twelve miles ahead. Northward across the northern entrance to Prince of Wales Strait extended the frozen waters of Barrow Strait, or rather of that western reach of it now known as Melville Sound. "A North-West Passage was discovered," exclaims Osborn. "All doubt as to the existence

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SPORT WITH SEA BIRDS AMONG THE ICE CLIFFS.

of a water communication between the two great oceans was removed, and it now only remained for Captain M'Clure and his men to perfect the work, by traversing the few thousand miles of water between them and their homes."

The cape from which the discovery was made, afterwards named Mount Observation, is in lat. 73° 30′ 39″ N.; long. 114° 39′ W.; and from this point the explorers pushed on to Point Russel, the extremity of Banks Land, on the veritable shores of Melville Sound. The return journey was now commenced, and after great suffering from extreme cold, etc., the party safely reached the "Investigator" on the 31st October.

On the 11th November the sun was seen by the "Investigators" for the last time during the winter of 1850-51, and the dreary eventless season of darkness set in. Christmas was celebrated in the usual time-honoured fashion; and, writing on the 31st December, M'Clure states that "nothing could be more satisfactory than the state of the vessel, her crew, and her resources on this day."

After a long and monotonous winter of eighty-four days of twilight and darkness, the sun reappeared to the "Investigators" on the 3d February. The returning spring was hailed, as it always is in these remote regions, with delight, although the Arctic navigator knows that the reappearing sun brings with it, for a time, the intensest cold of the year. The officers and men now extended their walks in the neighbourhood of the ship; hunting parties were formed, out-door sports were commenced, and with the prolonged exercise in the open air the health of the crew vastly improved. "Appetites that had failed now began to return; pale and yellow faces again to recover their ruddy and sunburnt colours; and long discussions already arose as to how Jack would spend his money when he arrived in England—an anxiety which in every clime weighs upon his mind when nothing else will." Preparations were now commenced for the despatch of several sledge parties in spring, to prosecute the search for Franklin along the hitherto unvisited shores of this desolate region. It was arranged that the travelling parties should be three in number; one, under Lieutenant Haswell, to follow the coast of Prince Albert Land, in a south-east direction, towards Wollaston Land; another, under Lieutenant Cresswell, to examine the coast of Banks Land towards the north-west; and the third, under Mr Wynniatt (mate), to travel along the coast of Albert Land, in a north-east direction, round the shores of Melville Sound.

On the 18th April 1851 the sledges left the ship. Each sledge was provisioned for six weeks, weighed eleven hundredweights, and was manned by six hands. Sherard Osborn, who had practical experience of the kind of work these men should have to do, writes, not without kindly eloquence of the trials that lay before them: "If they should feel cold, they must be patient, for until their return to the ship, there will be no fire to warm them.

Should their parched tongues cleave to their mouths, they must swallow snow to allay their thirst, for water there is none. Should their health fail, pity is all that their comrades can give them, for the sledge must move on its daily march. If hungry, they must console themselves by looking forward to being better fed when the travelling is over, for the rations are necessarily, in sledge journeys, weighed off to an ounce. In short, from the time they leave the ship till their return to it, the service is ever one of suffering and privation, which call for the utmost endurance and most zealous energy." On the 20th May, Lieutenant Cresswell's party returned to the ship, after thirty-two days' absence, and after having examined the coast of Banks Land, in a north and north-west direction, for 170 miles. He had experienced north-west gales of intense severity, and his party were frequently frost-bitten. Two of his men were severely bitten, and as mortification threatened to supervene, he was obliged to fall back on the ship to save the men's lives. Of these men, one lost "a portion of his feet." On the 29th May, Lieutenant Haswell returned, after being out forty-seven days, and having explored a great extent of the coast of Albert Land toward the south-east. On his return journey he had fallen in with several Eskimo families near the south-east entrance to Prince of Wales Strait, but was unable to communicate with them. This was remarkable intelligence for Captain M'Clure, who had never dreamed that natives were so near him, though all the land around the winter quarters of the "Investigator" abounded in Eskimo ruins, which, however, were moss-grown and very ancient. Being desirous of seeing the natives, the captain, together with the interpreter, Mr Mierching, set out for their quarters. On reaching the encampment, he found it consisting of five tents, each containing a family—husband, wife, and children. One of these Eskimos he describes, "a fine, active, broad-shouldered savage, with bow and quiver slung at his back, and a large, copper-bladed hunting-knife in his hand." He was well clothed in sealskins, and "his finely-proportioned limbs were neatly encased in beautifully made mocassins and overalls." Mr Mierching and the natives communicated with the most perfect freedom and intelligence, as their dialect was the same as that spoken in Labrador, in which the interpreter had so long resided. This circumstance corroborates the surprising assertion of Dr Rink and others, that the language spoken by this singular and ancient people is homogeneous over the entire area in which they are found—an area 5000 miles in breadth.

On the 7th June the third sledge party, under Wynniatt, the mate, returned. In none of these excursions had any traces of the lost expedition of Franklin been discovered.

During the absence of the sledges a singular incident, exemplifying the constant danger to which Arctic navigators are exposed, occurred near the

ship. A shooting party had been formed on the western shore, to which a young man named Whitefield was attached. All the sportsmen were out on one occasion, and were delighted, and at the same time chagrined, to behold a large flock of hares come trooping along a ravine, for just at the time a blinding snowstorm came on. All the men at once retreated for safety into their tent except Whitefield, who was tempted to go on after the hares. He was soon missed, and the sportsmen, alarmed for his safety, went out in parties of two at a time to seek for and rescue him, each relieving party running much risk of being lost and smothered in the drift. "Failing in all their efforts," says the narrator, "and fairly at their wit's end, the party, which was in charge of a petty officer, retreated to their tent again, and began to fear the worst, when one of them suddenly exclaimed that he 'heard the footsteps of a bear!' All heard the sound for a minute, and then it ceased. The drift was so dense they could see nothing, and to their shouts of 'Whitefield!' no answer came. Shortly afterwards, during a lull in the gale, some one happened to look out of the tent, and there, not a yard from the tent, knelt poor Whitefield, stiff and rigid as a corpse, his head thrown back, his eyes fixed, his mouth open and full of snow, and his body being fast buried in a snow-wreath. They pulled him into the tent, restored animation, and then sent for aid to the ship. When the man eventually recovered sufficiently to tell his tale, it was strange indeed. He said that whilst struggling with the snowstorm, and endeavouring to find his way home, he felt a chill, and then a fit came on, which appeared to have deprived him of his senses to some extent, for he had seen his companions looking for him—some of them had even passed within a hundred yards of him—yet he could neither call them nor discharge his gun as a signal; and, meantime, the snow had covered him. After a while he regained some strength, and fortunately discovered a track leading to the tent. He had actually almost reached it—indeed, those were his footsteps that the people had heard—when again the fit came on, and he sank down a yard from the tent door, in the attitude of supplication in which he was found in the snow. He was fast becoming rigid and freezing, when, by the mercy of Providence, his shipmates saw him." There can hardly be in all Arctic history a more striking example than this of the semi-conscious stupor which affects those who have been long exposed to the bewildering influence of a Polar snowstorm.

CHAPTER III.

RELEASED FROM WINTER QUARTERS—A SECOND WINTER IN THE ICE—SERGEANT WOON'S EXPLOITS—A THIRD WINTER IN THE ICE.

JUNE 1851 came with but half a promise of favour to the "Investigators," shut up in the ice in the middle of Prince of Wales Strait, and with an icy wilderness on either hand. All around the winter quarters changes were taking place, which announced the fact that summer was close at hand. At the close of the month the ice had lost two feet ten inches of its thickness, while the water-pools on its surface were broadening, running into each other, and so acting on the ice beneath as to produce holes in it here and there. Meantime the hummocks, snow-white, like blocks of granite during the winter, were becoming yellow, and evidently hastening to decay, while round the vessel the air was loud with the cries of ducks, geese, and swans. The month of July, the summer of lat. 70° N., was a season of great expectation and anxiety on board the "Investigator." Her sails have been bent, the boats hoisted up, and a constant watch set to observe and report the gradual increase of water which is now detaching the floe from the shore on either side. Meantime, like the Arctic hare, the scenery around has changed the white of winter for the brown of summer, while in the vales and southward sloping banks there is a faint blush of colour from the now blooming flora of these regions—from the yellow anemone and poppy, the purple saxifrage, the modest sprigs of the London pride (blooming so far away from London) and the leaves of the sorrel glowing as if dipped in wine. On the 10th July the floe commenced moving and breaking up, and the "Investigator" was again free from the ice. The western shore of the strait now seeming clear of ice, M'Clure sailed for it on the 17th, but was caught by the ice-pack, and in a thick fog was drifted with the crushing floes so close to Princess Royal Island that he could hear the screams of the sea-fowl on the cliffs, against the iron ribs of which he only escaped destruction by a miracle. On the 24th, remembering the fact that along the eastern side of the strait a north-east current flowed away in

the desired direction towards Melville Sound, the captain steered for that side on the 24th, and arrived near the shore opposite Point Armstrong. Here he found on the beach an immense quantity of driftwood—all American pine—and sent a cutter to obtain a load of it. The wood was so fresh that it could not have been more than two years since it was growing in its native forest, on the banks of the Mackenzie or Coppermine.

After being again beset for some time in the ice, the "Investigator" continued to drift north-eastward with the current referred to, until about the middle of August she was in lat. 73° 43′ 43″ N., long. 115° 32′ 30″ W., in which position she was only *twenty-five miles* from the waters of Melville Sound. Beyond this point it seemed impossible to push the old ship; for there were occasional north-east winds causing southward sets of the ice, while at night the young ice of the approaching winter was already beginning to form on the strait. M'Clure had now the alternative of waiting for an opportunity of pushing north into Barrow Strait, with the prospect of spending the coming winter in the midst of its stupendous pack, or of retreating down the strait, and after sailing round the island (Banks Land), to try for an eastward and a homeward passage by Banks Strait and Melville Sound. He decided upon the latter course, and immediately acted on his decision. The bow of the "Investigator" was turned round toward the south, and soon she was beating fast down Prince of Wales Strait with all sails set, and with a glorious reach of open water extending southward in front of her. After a splendid run of a hundred miles, the "Investigator" passed Nelson Head on the 17th August, and following round the coast for twenty-five miles, found that it was a continuation of lofty cliffs as far as Cape Hamilton. Here a strong breeze and heavy swell were encountered, and the ship, that had so long been immovably fixed among ice, pitched freely, with a true ocean roll, among the heaving waves, to the intense delight of the crew, who were overjoyed to feel the old ship "throw up her heels" once more. Round Banks Land by the south, round Banks Land by the north, and on the 19th M'Clure found himself in lat. 73° 55′ N., higher than he had yet reached on this voyage—and purposing in his secret heart to round Melville Island, and then seek his way through some sound or strait into Baffin's Bay, and home!

But the exultant feeling was soon to be checked. On the same night, M'Clure had no sooner crossed Burnet Bay than the coast suddenly became as abrupt and precipitous as a wall. During the night the space of open water gradually lessened in width, and, besides, was much hampered with loose ice. "In some places," says Osborn, "the channel was so narrow that the quarter-boats had to be 'topped up,' to prevent them touching the cliffs upon the one hand, or the lofty ice upon the other; and so perfectly were they running the gantlet that on many occasions the ship could not 'round to'

for want of space. Their position was full of peril, yet they could only push on; to attempt to retreat was now out of the question. The pack was of the same fearful description as that which they had encountered in the offing of the Mackenzie River during the previous autumn. The surface of the floes resembled rolling hills, some of them 100 feet from base to summit; and the edge of this wonderful oceanic ice rose in places from the water as high as the 'Investigator's' lower yards." On the 20th the ship was beset among the ice off the north-west angle of Banks Land; but on the 29th another extraordinary change occurred. A sudden disruption of the previously fixed ice took place, and a moving floe struck a huge mass to which the ship had been secured; and, to the horror of those on board, this mass slowly reared itself on its edge under the enormous pressure, and towered over the ship's bows until it rose above the fore-yard. Another moment of motion and the "Investigator" must be crushed to atoms, for the ice weighed thousands of tons. For a moment the heaving ice-mountain hung in the air, on the point of toppling over on the vessel. But soon a shout of joy rose along the deck of the ship, for the enormous mass, after oscillating fearfully, broke away, rolled back into its former position, and sank, a harmless heap. For some time longer the explorers remained beset among the ice on the north-west coast of Banks Land; and whilst thus detained in enforced inactivity, the officers employed their time in rambling along the shores, and inland. They saw musk-oxen and deer, and discovered a "most surprising accumulation of fossil trees, as well as fragments not fossilised, lying over the whole extent of the land from the shore to the height of 300 feet above sea level. Of this most singular deposit of timber trees M'Clure writes: "The summits of the hills are about 300 feet high, and nothing can be more wildly picturesque than the gorges which lie between them. From the summit of these singularly-formed hills to their base, abundance of wood is to be found; and in many places layers of trees are visible, some protruding twelve or fourteen feet, and so firm that several people may jump on them without their breaking. The largest trunk yet found measured one foot seven inches in diameter." Under the present climatic conditions of the Polar regions, no higher vegetation than the dwarf willow occurs. How then came these vast deposits of timber on this island, and at the summit of hills 300 feet high? In the same district M'Clure found the north side of a ravine, "for a depth of forty feet from the surface, composed of one mass of wood similar to what I had seen before." Sir Roderick Murchison, in endeavouring to account for this vast quantity of timber trees on Arctic islands, in which, under present conditions, they do not, and cannot, exist, gives it as his opinion that at the period when the distribution of this timber took place, large portions of these Arctic "tracts were beneath the waters, and that the trees and cones were drifted from the nearest lands on which they grew. A subsequent elevation, by

which these islands assumed their present configuration, would really be in perfect harmony with those great changes of relative level which we know to have occurred in the British Isles, Germany, etc. The transportation of immense quantities of timber towards the North Pole, and its deposit on submarine rocks, is by no means so remarkable a phenomenon as the wide distribution of erratic blocks during the glacial epoch over northern Germany," etc. Sir Roderick's theory seems unsatisfactory, as failing to explain the immense quantities of solid wood in layers seen by Captain M'Clure; the similar deposits of trees, the bark of which was in a perfect state, seen by Lieutenant Mecham on Prince Patrick Land; and the fir-tree discovered by Sir Edward Belcher on the east side of Wellington Channel, standing vertically, and with its roots extending into the soil. On this interesting subject Sherard Osborn shrewdly remarks that "a very different climate must *then* have existed in those regions, to allow driftwood (so perfect as to retain its bark) to reach such great distances; and I may, perhaps, be allowed to remark," he adds, "that when the Polar Sea was sufficiently clear of ice to allow such timber to drift unscathed to Prince Patrick Land, might not fir-trees have then *grown* in a soil naturally fertile?" Reviewing all the evidence at his command, Dr Armstrong of the "Investigator," alluding specially to the discovery of numerous trunks of trees imbedded in a white, sandy soil on Prince Patrick Land, affirms that such evidence "establishes a fact no less important than interesting, that throughout the wide extent of the Polar Sea, so far as observation has enabled us to determine, there existed at one period various and luxuriant forms of arborescent growth in regions where there is nothing now to be seen but desolate lands and trackless ice wastes." After which digression, we leave this curious point, in the meantime, for consideration at a future period.

From the 1st to the 10th September the "Investigator" continued to lie beset in her icy cradle, and there was every prospect that the explorers should be compelled to pass the coming winter in a shelterless and dangerous position on the edge of the pack of the inexorable north-west coast of Banks Land. On the 10th the wind veered to the south, and drove the ice, in which the ship was beset, off the coast. The "Investigator" was thus consigned to "the tender mercies of the much-dreaded pack-ice." To free the ship from the pack, and secure her behind some promontory or island that would protect her when the pack should crash in again on the shore, which it must certainly do as soon as the southerly wind should abate, were now the great objects of the navigators. The first of these objects was attained by blasting with immense charges of gunpowder placed among the ice by which the ship was bound. M'Clure now struggled on towards the east for two days and nights, seeking shelter, behind huge masses of grounded ice, from the pack that was now rolling in upon the beach, pulverising shore-masses thirty

or forty feet thick, or piling them on top of one another, and throwing them high up on the beach. No such exhibition of resistless and uncontrollable natural force had these navigators ever seen. "Through the long dark night," says Osborn, "the sullen grinding of the moving pack, and the loud report made by the ice-fields bursting under the pressure, echoed through the solitude; and, as the starlight glimmered over the wild scene to seaward, the men could just detect the pack, rearing and rolling over, by the alternate reflected lights and shadows." On the 19th September the "Investigator" was again creeping along eastward. On the 22d Cape Austin was rounded, and it was some encouragement to the jaded spirits of the explorers to know that they were now actually in the waters of Barrow Strait, or of that part of it known as Melville Sound. On the 23d September water was seen ahead before dawn, sail was set, and M'Clure, now reduced to the necessity of getting his ship into shelter for the winter, however imperfect and unsatisfactory such shelter might be, drove on toward the east, keeping close inshore. The land trended slightly southward, and he followed its trend. It had never been his custom to sail all night in these unknown seas, but on this occasion he departed from his usual rule, for he felt he was following an inland bend into some bay. In the morning the "Investigators" found themselves in a large bay, affording good winter quarters, and out of which, on the north-east side, they found it impossible to emerge. In these circumstances, Captain M'Clure resolved to winter here, and in gratitude for having at last found a haven for the winter, he named the inlet into which he had sailed in the darkness Mercy Bay. And there was no affectation in so naming it, for there was not a soul on board that fated ship but was filled with heartfelt gratitude that at last security was found from the deadly pack and the winter-laden gale; "and many prayed that in after-years, should they be spared to reach their homes, the recollection of the bounty and goodness of Him who had upheld them through such anxieties and dangers" might ever remain fresh in their memories.

On the morning of the 25th the sails were unbent, and the usual preparations made for housing-in the vessel. The arrangements, generally, were the same as those carried out during the previous winter spent by the "Investigators" in Prince of Wales Strait. One very impressive novelty, however, was observed. Captain M'Clure ordered that officers and men should now be put on an allowance of two-thirds of their ordinary rations *per diem.* This painful but necessary measure was adopted to provide against the possible contingency of having to spend yet another year within the ice The hardship, however, was tempered by the discovery of the fact that the country around Mercy Bay abounded in deer and hares, and no sooner were the first preparations for the winter completed, than officers and men were out on the track of these animals. Both Osborn and Dr Armstrong state

that these creatures, together with the ptarmigan, were never absent from the neighbourhood of Mercy Bay, even in the depth of winter, and it was owing only to the cold and darkness that the sportsmen failed to bring them in throughout the whole season. This fact disproves the oft-repeated assertion that in winter reindeer migrate southward from the islands of the Arctic archipelago to other feeding grounds. On this point Dr Armstrong, an accomplished naturalist, is no less explicit. He says: "It has hitherto been the generally received opinion that these animals migrate to the southward on the approach of winter, to lands where the cold is less intense, and the pasturage more abundant—an opinion formed from the writings of the distinguished Polar voyagers who formerly wintered amid the icy solitudes of the north; but the experience of four years enables me to speak from the result of observation in contradiction to this. In the Prince of Wales Strait reindeer were seen in January—our distant position from the shore not enabling us to hunt during the winter—and in the Bay of Mercy for two successive winters they were constant inhabitants of the land, and were killed throughout the winter months of the coldest season in the records of Arctic voyaging. How far the migratory habits of the animal may be established in a more southern latitude, on the coast of America, in their instinctive resort to localities where pasturage may be more abundant, I shall not attempt to decide; but this I will say, that from the more distant lands of the Polar Sea they do not migrate on the approach of winter." Deer-hunting was assiduously pursued as soon as the daylight began to increase. A number were shot before the close of January, and proved a welcome addition to the resources of the ship.

One of the luckiest of the sportsmen was Sergeant Woon, of the marines—a man who had won the esteem of all the "Investigators" for energy, intelligence, and self-sacrifice. Of this gallant marine a story is told both by Sherard Osborn and Dr Armstrong, which well deserves to be remembered. A number of men had been out shooting on the 9th February. Before evening all had returned except two—Sergeant Woon and Charles Anderson, the latter a man of colour and one of the heaviest and most powerful of the crew. Night came, and at eight P.M., neither having yet returned, a mortar was fired and rockets sent up at intervals. At ten P.M. three relieving parties, each consisting of an officer and three men, furnished with rockets, blue lights, and refreshments, were sent out to search in different directions for the missing men. They had not gone far when they met Sergeant Woon hastening toward the ship for assistance. Two of the search parties were still within hail of each other; they united, and, guided by the sergeant, soon reached the unfortunate Anderson. The latter, during the day, had wounded a deer and had followed it for some time, until, a fog coming on, he was unable to find his own track back to the ship. He became bewild-

ered, panic-struck, and commenced wandering wildly about, when, by good chance, he met the sergeant, who had also been out in search of game. Woon found Anderson beside himself with excitement and horror. He had given himself up for lost, and the presence of the sergeant, who promised to conduct him back, failed entirely to soothe or reassure him. So prostrate morally and physically had he become, that he could only with difficulty be roused to make an attempt to walk a little. At last he sank upon the snow, bleeding at the nose and mouth, and writhing in convulsions. The sergeant saw that all hope of the man saving himself was at an end; yet to leave him where he was was to leave him to certain death, and a prey to the wolves then heard howling in the distance. There was no alternative but to drag him to the ship. Carrying was out of the question, as Woon was one of the lightest and Anderson one of the heaviest men in the ship's company. Accordingly, the heroic Woon slung his own and his companion's gun over his shoulder, took the man's arms round his neck, and commenced to drag him over the snow toward the ship. The labour was excessively severe; and the only relief the sergeant had, when he had dragged the half-dead man up one side of a hill or had reached a ravine, was to roll him down the descent—rather severe treatment for Anderson, but under the circumstances beneficial, as it tended to rouse him from his lethargy. Woon had commenced his fearful journey at two o'clock, and at eleven at night he had dragged Anderson to within a mile of the ship. But nine hours of this toil had almost completely exhausted him, and again he tried to rouse his companion to make some effort to advance. "Leave me alone to die!" was the only response. Woon then laid him in a bed of soft snow, and hurried off to the ship for assistance. On the arrival of the sergeant with the relieving party, Anderson was found insensible, with arms extended and rigid, his hands clenched and frozen, his eyes fixed and glassy, his jaws rigid and so firmly clenched, that great force had to be applied to separate them in order to pour restoratives down his throat. He was quickly transported on a sledge to the ship, where Dr Armstrong succeeded in restoring him to hopeful animation. His life was saved, and the courage and devotion of Sergeant Woon were amply recognised by all on board.

Another hunting adventure of a more cheerful description may here be told. Mr Kennedy, the boatswain, when out shooting late one evening, succeeded in breaking two out of the four legs of a fine buck. Knowing that the animal could not go far, he returned to the ship, and next morning started early to secure his game. Arriving at the place, he was disgusted to find five large wolves and several foxes in possession of the deer. "Determined to have his share of the spoil, the boatswain shouted and called them by every strong term he could muster, yet he was afraid to fire his single barrelled gun at the brutes, for fear of their turning upon him, especially as

they seemed inclined to show fight, and made no sign of retreat until he was within four yards of them. Even then only four of them moved away, and sat down a pistol-shot off, howling most dismally. 'Pipes' picked up a leg of the deer which had been dismembered, and then grasped one end of the half-picked carcass, whilst a large female wolf tugged against him at the other end. The position was, to say the least of it, a disagreeable one; and if the music of the four wolves had brought others of their fraternity to the rescue, the consequences of a struggle between hungry wolves and a no less hungry sailor might have been serious." At this critical moment, however, Mr Mierching, attracted by the howling of the wolves, hurried to the scene. The sedate Moravian described the scene as the strangest he had ever seen. So close were Kennedy and the wolf in their struggle, that he fancied the animal had actually attacked the boatswain. The arrival of an important contingent in the shape of the interpreter seemed to the wolves good reason to withdraw from the field. They had, however, devoured 100 lbs. weight of the meat, leaving only 20 lbs. weight for the bold boatswain.

Beyond these and other similar adventures and incidents arising from the pursuits of the men on shore, nothing worthy of record occurred at the winter quarters of Mercy Bay during the spring of 1852. The gloom of winter had passed, however, before the middle of April, and the time for action had arrived. That there was urgent necessity for doing something to ameliorate the condition of the ship's company was evident from the thin and worn appearance of the men, and the gradually increasing numbers on the sick-list. It is not surprising, then, that when the weather moderated and brightened in the beginning of April, Captain M'Clure resolved to set out with a sledge for Melville Island. This step was resolved upon in the hope of finding some of Captain Austin's ships stationed in the Winter Harbour of Parry, or ascertaining whether a depôt of provisions had been placed there by them in the interest of the "Investigators," should these be obliged to abandon their ship, and retreat upon Melville Island. This island, the home of Parry, and the most westerly land hitherto discovered in Polar seas, could be dimly seen in clear weather from the heights above Mercy Bay, from which it was often wistfully surveyed by officers and men. Some of these were now about to visit it.

On the 11th April 1852, Captain M'Clure, accompanied by an officer and six men, and provisioned for twenty-eight days, set out from the ship across the pack to Melville Island. He reached Winter Harbour on the 28th, and was profoundly disappointed to find neither ship nor provisions. All that he did find was the notice which Lieutenant M'Clintock had left of his visit on the 6th June 1851. There was nothing to be done but to face the pack again, and return to the ship. The party reached the "Investigator" on the 7th May. During M'Clure's absence the sportsmen had been extraordinarily

successful, and when he arrived on board, he was no less surprised than pleased to see joints of all descriptions decorating the rigging. Nineteen deer and sixteen hares (yielding over 1000 lbs. of meat) had been shot, and this unexpected addition to the ship's resources justified a slight increase of rations to the poorly-fed men. Each man was now ordered 1½ lbs. of venison six days in every fortnight; which, together with six days of preserved meat, left only two salt-meat days in every two weeks. "One would have supposed," says Osborn, "that on such fare, with a dry and comfortable ship to live in, scurvy would be impossible; but, as the sequel will show, the progress of that dire disease became most marked, and though the care of the captain and the skill of the medical men checked it considerably, still the health of the crew was evidently failing." On the 15th May, a week after the captain's return from the fruitless visit to Winter Harbour, the number on the sick-list had increased to the unprecedented average of thirteen. The moral effect of the failure of the captain to find help, provisions, or at least news, is believed to have been the cause of the increased number of invalids. At sea, depression of spirits, combined with insufficient nutriment, is well known as an infallible predisposer to scurvy.

May and June passed without incident, the men being employed in the laborious but prosaic labour of ballasting and watering the ship, and preparing generally to set sail when the break-up of the ice should take place. In early July the ground became so soft from the melting of the snow that hunting became a most laborious and consequently an almost unproductive employment. All the stock of venison was exhausted by the 7th of the month; and the men were about this time humorously bewailing the want of this agreeable and health-sustaining food, when handy and clever Sergeant Woon came on board to report that he had just shot two musk-oxen. The intelligence was hailed with delight. The men swarmed out immediately, and brought in the carcasses, which were found to yield 647 lbs. of good meat. The sergeant had come upon the two animals at rest—one of them asleep. He approached within 120 yards, fired, and wounded the larger, which at once rose, approached to within forty yards, and then paused, as if about to make a rush. Woon fired again, but the brute remained standing unmoved. The other now approached, and, with the view of securing both, the marine fired at and wounded this one also. He then turned his attention to the larger, and struck and killed him, *but with his last ball.* The other animal, raging furiously, rushed towards the sergeant, and a serious catastrophe was apparently imminent. But Woon was never known to fail in resource. "He quickly re-loaded," says Dr Armstrong, "and fired the screw of his ramrod into the animal, wounding him in the neck, when he fiercely advanced to the distance of only a few feet. Thinking he was about to make a final rush, Woon, who had again loaded, as a last resource fired his

ramrod, which entered at the left fore-shoulder, passed diagonally through his body, and out of his right flank—inflicting a fatal raking wound—and he fell lifeless at his conqueror's feet."

Down to the close of July no actual thaw had taken place. Ice everywhere—no water, and no water sky, the token of open water in the distance. On the 16th August the ice began to loosen from the shore, though it was still blocked by the floes that choked the mouth of the bay. A few days after, these floes at the entrance of the bay opened up, and a broad lane of water was seen extending along the shore to the eastward. The navigators prayed for a south wind to blow the ice out of the harbour, and the ship with it. To take advantage of such a wind, should it spring up, the "Investigator's" sails were bent, and every preparation made for sailing. After the 20th August the temperature fell, chilling the hearts and the hopes of the navigators. The open part of the bay again froze over; and on the 24th the open lane of water to the east *was closed,* and the "Investigators" were able to walk across to shore over the young ice. Rapidly now the scant vegetation withered; not a blade of the medicinal sorrel could be found; the land again resumed its mantle of snow, and the dreaded third winter among the ice gathered gloomily around the fated "Investigator."

CHAPTER IV.

THE THIRD WINTER AMONG THE ICE—CAPTAIN M'CLURE'S PROGRAMME—FIRST DEATH IN MERCY BAY—AN ANGEL-VISIT—THE "INVESTIGATOR" ABANDONED—RESCUE OF THE "INVESTIGATORS"—RETURN OF THE EXPEDITION.

SLOWLY during the first days of September 1852 the unwelcome fear that the wretched ship's company must pass a third winter amid the ice assumed the form of a conviction. The more sanguine of the crew, hoping against hope, trusted that a south wind might spring up, and drive the "Investigator," icy mooring and all, right out of Mercy Bay, and into the open water of Melville Sound. The hope was soon dispelled, for before the first week of September had passed, the vessel was conclusively fixed for the year. "The winter found us," says M'Clure, "ready to combat its rigours as cheerfully as on previous occasions. We were all thinner than we used to be, for we had been twelve months on two-thirds of our allowance; but we were still in good working condition." In considering this declaration of the gallant captain, one is pained to confess to a suspicion that his representation of the robust and cheerful condition of the "Investigators," on the eve of the third winter in the ice, and the second year of short commons, is just a little highly coloured—tinted with just a dash too much of what a distinguished American has described as "yaller varnish." And here let it be noted that from this point onward to the close, Captain M'Clure seems to conduct affairs with rather a high hand. To the last he cannot be brought to own that his crew are unable to accomplish impossibilities. His men are always "healthy," "cheerful," "able for anything," etc., even at the moment when, as we know on incontestible evidence, the men were wasted shadows, victims of scurvy almost to a man. Could it be that blinded by the ambition of carrying his ship triumphantly through the North-West Passage and home to England, he was fain to make himself believe that his men were really as fit and able as we know they were willing to struggle on amid suffering and privations such as it seldom falls to the lot of man to endure?

However this may be, it is certain that at this trying period the captain

of the "Investigator" was oppressed with difficulties of no ordinary nature. It was clear that if all the ship's company remained in the ship till the summer of 1853, and if they should fail to get free *then*, all would starve; for the ship was inadequately provisioned for another year. The difficulty was how to save the men *and the ship*. The "Investigator" was still sound and strong, and the captain's sense of duty, which was great, and his pride, which was as great, constrained him to make every possible exertion to save the ship to his country and his profession. At last, having resolved on the course he should pursue, he summoned the ship's company to the quarter-deck, and informed them that in the spring of the year he should send away one-half of the crew in two divisions. The larger division, consisting of the senior lieutenant, assistant surgeon, two mates, and twenty-two men, would proceed eastward to Cape Spencer, at the east side of the entrance to Wellington Channel—a distance of about 550 miles—with provisions for forty-five days. It was believed that at Cape Spencer a small store of provisions and a boat had been deposited. Having reached the cape, and found or missed the supposed depôt, these twenty-six unfortunates "were to use their best efforts in searching for a whaler, or endeavour to reach some point of succour on the distant shores of Baffin's Bay, whence they might be forwarded to England." The smaller division—six men, led by the second lieutenant and the interpreter—were to proceed eastward along the shore of Banks Land, and south through Prince of Wales Strait, to the Princess Royal Islands, where a boat and depôt of provisions had been left by M'Clure. Here they were to remain until the ice broke up in the summer, on which "they were to make an attempt to reach the coast of America, and proceed to one of the Hudson's Bay Company's posts on the Mackenzie River, whence they were to be forwarded on through North America to England." The gallant but somewhat autocratic captain might just as well have decided on sending away his men on a journey from this world to the next.

In all Arctic expeditions it has been customary for the commander, before detaching any of his company on any service attended with hardship and serious danger, to consult the ship's surgeon respecting the capability of the men, physically, to perform the service. It does not appear, however, that Captain M'Clure took Dr Armstrong into his counsels in the matter above mentioned. The doctor knew well the debilitated condition of the men. "I could arrive at no other conclusion," he says, "than that they were utterly unfit for the performance of the service, and that they would be still more so at the expiration of eight months (the men were to set out in April 1853), after having passed through the trying ordeal of a third Arctic winter. . . . Captain M'Clure had been fully informed by me, on many occasions, of the state of the men; nevertheless I felt called on again to represent their condition, and to express my opinion of their

unfitness for the performance of this service, without entailing great and inevitable loss of life. *It had no result.*"

If Captain M'Clure was to provide for spending a fourth winter in the ice, rather than fail to achieve the glory of sailing his ship through the North-West Passage, it was evident that not only must he curtail the number of his ship's company, and thus place himself in command of an ample store of provisions for those who should remain with him to navigate the ship; but he must also in every practicable way cut down the daily issue of rations to all hands. The former objects he had already attained by anticipation, in deciding to send away thirty-four out of his company of sixty-five officers and men; the second object he set himself to realise on the very day on which he had announced his intentions respecting the future. Accordingly, we learn that on the 8th September 1852 the provisions were still further reduced. After this date the allowance of vegetables was only two ounces daily. "The quantity of meat issued," writes Dr Armstrong, "was eight ounces daily; but making due allowance for bone in the salt, and jelly in the fresh, meat, the average weight did not exceed six ounces, which, with ten ounces of flour, constituted the allowance on which we had lived *for the previous twelve months.* The articles tea, cocoa, and sugar, were issued in fractional parts of an ounce. That this allowance is quite inadequate to maintain health in an Arctic climate our condition fully proved; much less is it able to sustain life for any lengthened period when men are laboriously engaged, and exposed to the rigorous severity of intense cold." At this time, too, the allowance of lime-juice was reduced by one-half—a deplorable necessity, now that scurvy had appeared on board. No extra food was allowed to the sick, the same scale of diet being ordered for all. Previously officers and men had only just felt the want of a sufficiency of food; they now experienced absolute and continuous hunger. The morsel of meat given out daily shrunk so much when boiled, that, in order to make the most of it, both officers and men abjured the pot for good, and ate their salt beef, pork, and half-frozen preserved meat, raw. The officers had long ago exhausted their private stock of viands, and were now on the same miserable allowance as the men; "and like them," says Osborn, "they adopted the system of each being cook or carver for the mess. The carver's share consisted in getting the last portion out of the eight into which the food had to be divided, a method which ensured, we need hardly say, the utmost impartiality on the part of the carver, the other members helping themselves to their shares before him. The rations for the day were given out every morning, and each ate it at his own discretion or inclination, at either breakfast or dinner. They had in fact but one meal *per diem,* for the breakfast, if it deserved the name, consisted of a cup of the weakest cocoa, and a small portion of the small allowance of bread; the rest of the bread, and half-a-pound of salt meat—

containing a good proportion of bone—with just enough preserved vegetable to swear by, constituted the other meal. There was a cup of weak tea in the evening; but few were able to save anything to eat with it." Only from eight to twelve pounds of coals were allowed daily for the whole ship, and the amount of oil was so small that lights could be had only at certain periods of the day, the men having the choice during the unillumined intervals, of walking on the deck, or sitting in the dark. *Everything that had life,* we are informed, was hunted with eagerness, and eaten voraciously—seals, foxes, lemmings, or field-mice. The field-mouse, a tender morsel, of delicate flavour when slightly cooked, and very delicious when eaten raw, is a nice-looking little animal, with a soft and fine fur, white in winter, and of a beautifully mottled-grey colour in summer.

An ugly and ominous incident occurred on the 4th October. The ship's company, who had suffered long from insufficiency of food, and, for the previous four weeks from something approaching starvation, came on the quarter-deck in a body on the date named, and asked the captain for more food. Captain M'Clure refused to grant their request. Meantime disease was spreading in the ship, and the men had become so dispirited and weak, that, with one or two exceptions, they ceased to join the hunting parties which were now made up almost exclusively of officers. When the hunters were successful in striking down a deer, they eagerly drank the fresh and warm blood, as it flowed from the wound, and found the draught nourishing and sustaining. The blood, however, froze on the men's faces as they drank, and when they returned on board, they presented a most surprisingly picturesque and frightful appearance.

By this company of unfortunate men, Christmas Day was celebrated as in former years; but there was an element of pathos in this humble rejoicing which was absent from the Christmas feasts of the two previous winters. Hitherto, though much privation had been endured, the ship's company had remained entire, the "goodly fellowship" had continued unbroken. Now, however, disease was among them, and it was *absolutely certain* that this Christmas dinner was the last they would all enjoy together. Was there any man at that table, who looked round the ring, and speculated who should be the first victim to hunger and Arctic frost? Perhaps not; for our sailors are not given much to speculation. Meantime there is mirth and good humour all round. The poets of the crew sang songs of their own composition, the painters rigged up the most extraordinary representations of Arctic scenery and adventure, the comic actors recited, and upon the faces of the sick a gleam of "watery sunshine" seemed to play. And why should they not be happy? Had not the hungry men feasted on "Banks Land Venison," "ptarmigan pasties," and "Mercy Bay hare soup." "Mercy Bay!" exclaims Dr Armstrong, as he records one of the most curious jokes

ever made; "some amongst us not unappropriately said, it ought to have been so called from the fact that it would have been a *mercy had we never entered it.*"

The New Year brought with it nothing of promise or comfort. It seemed, indeed, as if the "Investigators" were to be sacrificed to a man, for the cold of the in-coming year was intense enough, one might have thought, to have frozen the marrow in the bone. "In the month of January," says the doctor, "the temperature fell lower than has ever been experienced by any former expedition—to 65° below zero, and in the interval of the usual period for taking the observations, it fell to −67°," *or ninety-nine degrees below freezing point.*

Dr Armstrong was not mistaken; for speaking of the severity of the winter of 1852-53, Osborn states that "from 60° to 65° below zero was registered by the 'Investigator,' as well as other ships elsewhere. Yet this extreme cold, so intense that the very ship seemed to suffer from it, and bolts, trenails, and fastenings, were heard to crack under the influence of frost and contraction, forced the deer to approach the ship and the sea-shore so closely, as to afford venison weekly throughout this trying season." Existence under such a temperature promised, indeed, to prove fatal to men under-fed, scorbutic, and with a walk of six hundred miles over the ice, to look forward to.

Among men so situated the most ordinary event created extraordinary excitement. On the 23d March, a party going out to carry in a deer that had been shot on the previous day, found a wolf feeding on the carcass. They fired at the animal and drove it off. Determined, however, to bag the wolf if they should be disappointed in getting the deer, they concealed themselves near the spot. The wolf returned and had resumed operations, when Sergeant Woon sent a bullet through his heart, and he fell dead on the body of the animal he was devouring. He weighed 80 lbs., had a skin of spotless white, was five feet ten inches in length, and three feet four inches in height. "The meat when cooked," says the doctor, "was excellent—much resembling in taste that of fox—and we considered it preferable to bear's flesh." Mr Court, the second master, was among the wolves a few days later, and had a narrow escape. He found himself surrounded by a pack of seven, five of which, however, drew off to a short distance, while the remaining two commenced the attack on Court, with all the science of old campaigners. One of them commenced his advances in front, the other in rear, of the second master, howling a dismal grace before meat, as they neared their intended victim. Court made sundry efforts to frighten them; then, taking aim at the nearest, yet still looking with one eye over his shoulder, he fired, and mortally wounded the beast in the neck. Still, however, the animal crawled on toward the man, and was only despatched by a second shot when within

three yards. The other wolf, profiting by the misfortune of his comrade, made off.

Meantime arrangements for sending away the travelling parties were rapidly progressing. These arrangements had a startling beginning. "On the 2d March," says Dr Armstrong, "the day following the monthly inspection, Captain M'Clure made known to me his intention of despatching *the weaker* half of our crew from the ship, and retaining the most efficient; at the same time, he requested me to make the necessary selection." This is as much as to say, "Select the men that are best fitted to undertake a journey there is little probability they will ever accomplish, and be sure they are the weakest men in the ship's company." On the following day the men were told off. "They consisted," says Osborn, "of thirty of the *most weakly hands*, divided into two parties of fifteen men each." On the same day Dr Armstrong and the assistant-surgeon, Mr Piers, recorded by letter their opinion "of the absolute unfitness of the men for the performance of this journey." However, the inexorable M'Clure had so willed it, and so it must be. Let the battalions fall—*l'idée* must not be abandoned! These thirty "most weakly hands" were now put upon full allowance, and a number of them, at least, visibly improved under the more liberal diet. Their faces were fuller, their expression more animated, and the dull, haggard stare of former days wore away. A sentence in Osborn's work referring to this period is sadly suggestive. "The close of March," he says, "saw all the many preparations for a sledge journey well in hand. The officers, though cognisant of the risk and dangers which beset their lines of retreat, wisely hid them from the knowledge of the men. The healthy amongst the sledge crews were consequently sanguine in their hopes of success; but many a poor fellow, whose black and swollen limbs hardly served to carry him about the ship, knew in his heart that, although the journey he was about to take would be his only chance for life, yet it was but a very slender one."

On the 5th April death visited the "Investigator." John Boyle, a seaman, had been appointed an extra attendant in the sick bay, though he himself was a sufferer from scurvy. He was attacked by illness on the morning of the 5th; but continued talking cheerfully until, on making a slight exertion in his bed, sudden syncope ensued, and he died without a struggle. The effect of Boyle's death upon the men was very depressing, especially among those who were to remain in the ship. But on the following day, an event occurred, which altogether changed the character of their anticipations.

On the grey afternoon of the 6th April, when the twilight was deepening on the horizon, a peculiar, unusual stillness reigned in the Bay of Mercy, and an unaccustomed gloom seemed to have settled over the silent ship in which the dead man lay. Four men were out on the shore laboriously digging a

grave in soil that was frozen hard as granite. Captain M'Clure and Lieutenant Haswell, who had been giving the men the necessary instructions, were slowly returning across the ice to the ship discussing the arrangements for the funeral, which was to take place on the following day. The scene was one of savage gloom, the business upon which the officers had been employed was of the dreariest, saddest description, and their talk was of graves. As they wandered slowly onward, their attention became fixed on a solitary figure approaching from the entrance of the bay. There was something strange in the appearance of this mysterious man coming towards them out of the twilight. "Is he one of our own men?" asked M'Clure. "He seems to be dressed differently from any of the 'Investigators,'" replied Haswell. "Yes, yes," said M'Clure, "it is some lad belonging to one of the travelling parties out trying his new travelling dress for the first time." The two officers strolled forward; but their eyes were fixed on the wild figure stumbling over the ice, as he hurried forward throwing up his arms, and shouting madly. "He must be pursued by a bear!" exclaimed M'Clure. Onward came the strange man out of the twilight, until, having reached within two hundred yards of the two officers, he threw up his arms, and gesticulated excitedly like the Eskimos when agitated by violent emotion. He then shouted an incoherent salutation; for the wind blew his words away, and made only one wild screech of his voice. M'Clure and Haswell stopped —their pulses beating fast, and their brain beginning to heat. Onward came the frantic stranger, and it was with something that was at once surprise, amusement, and horror that the officers perceived that this strange creature's face was as black as ebony. When the sable visitor had arrived within speaking distance, M'Clure called out in English—"In the name of God, who are you?" "I'm Lieutenant Pim of the 'Resolute,' now at Dealy Island," replied the vision, "and I've come to relieve Captain M'Clure and the 'Investigators.'"

Staggered as if by a sudden blow, the officers failed for a moment to understand the meaning of this glorious announcement. Then all the sweetness of the message of relief flowed in upon their minds, and they knew that they were rescued. England and home were restored to them at last. "To rush at the stranger and seize him by the hand," writes M'Clure, "was the first impulse, for the heart was too full for the tongue to speak. The announcement of relief being close at hand, when none was supposed to be even within the Arctic circle, was too sudden, unexpected, and joyous for our minds to comprehend it at once. The news flew with lightning rapidity, the ship was all in commotion; the sick, forgetful of their maladies, leapt from their hammocks; the artificers dropped their tools, and the lower deck was cleared of men; for they all rushed for the hatchway to be assured that a stranger was actually amongst them, and that his tale was true. Despondency fled the ship, and Lieutenant Pim received a welcome—pure,

hearty, and grateful—that he will assuredly remember and cherish to the end of his days."

Lieutenant Pim was the first Englishman the "Investigators" had beheld for three years. Soon after his arrival, his dog-sledge, with the two men who accompanied him, reached the ship; and while the gallant lieutenant was monopolised by the officers in the gun-room, his two men were hurried down to the lower deck, and their story of relief listened to with such feelings as are experienced by dying men recalled to life. The "Resolute," to which Lieutenant Pim was now attached, had arrived at Dealy Island, off the south shore of Melville Island, during the autumn of 1852, and while employed in laying a winter depôt of provisions in Winter Harbour, the officers had discovered the record which Captain M'Clure had left there in April of the same year, intimating the circumstances of his visit to the harbour and the disappointment he experienced in finding neither ships nor provisions, and stating that the "Investigator" was wintering in Mercy Bay, on the north coast of Banks Land. On receiving this record, Captain Kellett of the "Resolute" decided upon sending a sledge-party in search of the frozen-in navigators as early as possible in the spring of 1853. The hazardous service was entrusted to Lieutenant Pim, who had, in the most gallant manner, volunteered for it, and who set out with his dog-sledge and two men from Dealy Island on the 10th March. After a month's journey over the ice, with the thermometer registering 82° below zero, he arrived safely in Mercy Bay on the 6th April.

Profound and genuine was the gratitude which the "Investigators" felt towards their heroic deliverer—a gratitude which his continued kindness and generous sympathy tended only to increase. "When he saw us sitting down," says Armstrong, "with a half-starved aspect, on the morning after his arrival, to what was denominated breakfast (a cup of weak cocoa without sugar, and a moiety of bread), his feelings overcame him, he rushed to his sledge, brought a large piece of bacon, placed it before us, and gave us the only breakfast we had known for many a long day." And the kindliness of the lieutenant was equalled by that of his two men, Bedgood and Hoyle. On their arrival on board, the crew of the "Investigator" were about to draw lots for their evening meal—a pannikin of tea and a little biscuit—a strange and pitiful sight to them who had come from a ship abundantly stored with excellent provisions. When the strangers saw the preparations for the miserable meal, and noted the haggard appearance of the men who were to partake of it, their emotion was uncontrollable until it had found vent in tears.

On the 8th April, Captain M'Clure, with an officer and six men, set out, in company with Lieutenant Pim and his party, to travel over the ice to Dealy Island, where all arrived in safety on the 19th, and where the enfeebled "Investigators" were welcomed with great cordiality on board

the "Resolute" (Captain Kellett), and the "Intrepid" (Commander M'Clintock). In the meanwhile, though Captain M'Clure knew that safety and abundance of provisions were secured to his crew, by the fact that these two rescue ships were stationed off the south coast of Melville Island and within twelve days' march of Mercy Bay, and although the hold of the "Investigator" was still stored with ample supplies, he had not put his men upon an improved scale of diet. This unnecessary rigour on the part of the captain had its natural result in prolonging and increasing the enfeebled condition of the ship's company. Every man on board suffered continuously from hunger. Dr Armstrong had received no authority to give the sick extra rations, and the allowance of lime-juice was so limited in quantity as to be of little use in checking the advances of scurvy. "As these were the remedial agents then most requisite," says the doctor, "our losses by death were entirely owing to the want of them." John Boyle, who had died on the 5th, was buried on the 8th. A second death occurred on the 11th, and a third on the following day.

Before leaving the ship, M'Clure had arranged that the weaker hands, who were to have been sent away from the ship to seek their way to England as best they might, should start from Mercy Bay and join him in the "Resolute" at Dealy Island. Accordingly, on the appointed day, the 15th April, the party, consisting of twenty-seven men, under the command of Lieutenant Cresswell, and dragging three sledges with provisions for twenty-four days, took their way over the ice amid the cheers of their shipmates. "The appearance of the party," writes Armstrong, "as the sledges formed in line, wending their way over the ice, at times enveloped in thick snow-drift that swept around them, was remarkably wild and forlorn, and they thus commenced their journey on a cold and cheerless evening, with the prospect of an icy bed before them." They reached the "Resolute" on the 2d May. The appearance they presented on their arrival at Dealy Island was woeful. "One officer," we learn from the Arctic Blue-Book for 1855, "was subject to periods of mental aberration; one man in a state of *dementia* or imbecility, his condition and appearance rendered still more pitiable from severe frost-bite of the fingers; two men carried on the sledges, the one with scurvy, the other with disease of the legs; the remainder all more or less affected with scorbutic disease, as indicated to the spectator in the tottering gait, attenuated form, and careworn expression of countenance, occasionally lighted up as the truth and recollection of their altered condition flitted across the imagination, a change (as some expressed themselves) difficult to realise." To such a condition of weakness were they reduced that, in order to lighten their sledges, they threw away all their spare clothes and left them on the ice.

On the 19th May Captain M'Clure returned to the "Investigator,"

accompanied by Dr Domville of the "Resolute." Captain Kellett appears to have had some doubt of the accuracy of M'Clure's statement, to the effect that the twenty men still left in the "Investigator" were physically able to extricate the ship from her winter quarters in Mercy Bay, or, in the event of failure, to bear up against a fourth winter among the ice. He accordingly had deputed his surgeon, Dr Domville, to act in concert with Dr Armstrong in making a medical survey of what remained of the crew of the "Investigator." M'Clure was still inflexible in his determination to sail his ship through the North-West Passage into Lancaster Sound at whatever risk; and Kellett, his superior officer, suspecting that such an attempt would result in disaster, had adopted the precaution of having an impartial inspection of the crew held. Should the physical condition of the "Investigators" prove satisfactory, M'Clure was to place before them the alternative of remaining in the ship with him, in the hope of extricating her and bringing her triumphantly home, or of abandoning her and retreating upon Dealy Island. The result of the medical survey, which was held on the 23d, was that *none* of the men were found free from the taint of scurvy, while in many the disease had reached an alarming stage of development. The condition of the crew was made known to M'Clure; but even in the face of the melancholy facts it revealed, the inexorable captain called his men on deck, and asked them if they were willing to volunteer for further service in the ship. Only *four* seamen, together with the five officers on board, stepped forward to stand by the captain. This force was of course quite inadequate to work the vessel, and the only course now left open for M'Clure was to abandon the ship. The men were now injudiciously placed all at once on full allowance of provisions. They had never known what it was to have a good meal for twenty months; and now, when abundance was suddenly placed before them, they devoured their food ravenously—to the very serious, though only temporary derangement of their systems.

Preparations were now hurried on for leaving the vessel. "On the 2d June the sledges were packed," writes Armstrong, "and everything got in readiness to start at an hour's notice. . . . The long-looked-for and anxiously-expected day, the 3d of June, at length came. The weather was cloudy and threatening in the morning, presenting nothing cheering in its aspect. . . . The ship was cleaned throughout from stem to stern, and everything left in perfect order, so as to be immediately available for any party whom adverse fate might compel to seek for succour in the Bay of Mercy. At 5.30 P.M., all being mustered at divisions on deck, Captain M'Clure, the senior lieutenant, and myself, inspected the ship for the last time. A few words—*not complimentary*—were addressed to the men, and all were piped to take their places at their respective places on the ice." The colours were then hoisted to the mast-head—the white ensign of St

George at the peak, and the pendant at the main; and the officers stepping over the side and joining the men on the ice, bade adieu to the "Investigator" for ever.

During the first few marches "tremendous packed ice" was encountered, among which, at times, the rate of advance was no more than a mile in six hours. As the party proceeded, many of the men suffered from snow blindness; but still, dragging blindfolded, they staggered on, constantly falling and slipping among the drag ropes. Suffering intensely from thirst, the men ate quantities of snow, the effect of which, however, was only to increase the evil from excoriation of the mouth. "To obviate this," says Armstrong, "we kept the snow in our hands until it became consolidated into a ball, and then sucked it by degrees. As the thaw advanced, and icicles began to form," continues the doctor, "it was a great relief to us, for we could carry them in our pockets without thawing, and refresh ourselves as we advanced. Although it was then the height of summer, the temperature in the night journeys frequently froze the moccasins or boots to our feet; but during the sleeping hours they were thawed and dried on exposure to the sun, by suspending them outside the tent."

After a fearful march of fourteen days the travellers, on the 17th June, encamped within sight of Dealy Island. The men then rested for four hours, and after washing their faces in a pool, in preparation for meeting strangers, resumed their journey at two P.M. Toiling onwards for several hours, they at last beheld the dark outline of the ships, and knew that once more they had reached the land of the living. At the distance of two miles from the vessels a party of officers belonging to the "Resolute" and "Intrepid" met and warmly welcomed them. They had considerately brought refreshments with them, which the exhausted "Investigators" received with grateful alacrity. "We were joined in a few minutes," writes Armstrong, "by all our old shipmates who were able to come out, and they ran eagerly to meet us. Salutations and greetings, warm and cordial, were exchanged; shipmates and messmates, who had only so very recently parted, again met as if years of absence had intervened; and the hearty greeting, the word of welcome, and the joyous laugh succeeded to each other, as they tackled to our sledges, which they bore rapidly along. . . . Our numbers increased as we advanced, all the officers and men of both ships having come out to meet us. The ships were gaily decorated in honour of our arrival, the remnant of our crews were drawn up on the ice to receive us, with Captain Kellett at their head; and those who had previously joined us fell out of the sledge and received us with three loud and hearty British cheers. A few steps brought us alongside the 'Resolute,' and we at length experienced the pleasant realisation of all our hopes and wishes." The men from Mercy Bay were distributed about equally between the two vessels, in which every-

thing for their comfort had been provided, including a magnificent banquet, of the quality of which the hungry "Investigators" showed a just appreciation.

On arriving at Melville Island Armstrong learned that Lieutenant Cresswell had joined the "North Star" at Beechey Island with a number of volunteers, in the hope of getting a ship for England during the summer of 1853. In this hope the party were not disappointed. They were taken on board H.M.S. "Phœnix," and arrived in England in October with the first intelligence of the discovery of the North-West Passage, and of the rescue of the "Investigator." But the trials of the majority of the crew of that unfortunate vessel were not yet at an end. The "Resolute" and "Intrepid," between which the remainder of the crew was portioned, continued stationed at Dealy Island, awaiting the breaking up of the ice. The thaw progressed satisfactorily during the brief summer, and on the morning of the 18th August, under the influence of a gale from the north-west, the ice drove off shore, and the ships once more rode in free water. Sail was made eastward along the pack edge, but on the 10th September the ships were beset among young ice off Point Griffiths, on the south-east coast of Melville Island, and after drifting for three weeks, became again fixed in the pack about midway between Byam Martin Island and the west shore of Bathurst Land, and the wretched "Investigators" knew that they were to be imprisoned a *fourth winter* among the ice. Bitter indeed was the disappointment of these gallant men, who had so confidently relied on being released during 1853. All of them, however, accepted the inevitable with good humour, or at least with equanimity, except Mr Sainsbury, the second mate, who had long been suffering from pulmonary disease. Had the ships been set free, and their crews safely transported to England, poor Sainsbury might have rallied, but when the announcement was made to him that they were fixed in the pack for another year, his doom was spoken. No more might he indulge in the vision of his home far away in England, and when the vision faded, life faded with it, and the mate, a good officer and brave man, died on the 14th September. The 16th was the day appointed for the funeral. Part of the impressive service for burials at sea was read on board the "Resolute" by Captain Kellett. The uncoffined body was wrapped in canvas and placed on a sledge, covered with the union-jack. The sledge was drawn by six petty officers of the "Investigator," and followed by all the officers and men of both ships, to a smooth sheet of ice about 200 yards distant, in which a square hole had been cut. Here the sledge was drawn up while the remainder of the burial service was read. "We all grouped round," says Armstrong, "gazing in melancholy silence on the touching scene before us, and when the words were pronounced; 'We therefore commit his body to the deep,' it glided slowly from the sledge, and was silently engulfed in the watery

grave beneath the ice on which we stood. The bleak and dreary character of the day was quite in keeping with the occasion; a cold, biting, north-west wind, and a temperature of 57° below freezing point, adding in no small degree to its solemnity and gloom.

On the 1st January 1854 the "Investigators" commenced their fifth year of Arctic service. Little of interest occurred during the spring, and the story of M'Clure's expedition, and the discovery of a North-West Passage, draws rapidly now to an end. In April the "Investigators" were detached from the "Resolute" and "Intrepid" to travel over the ice to the "North Star," stationed at Beechey Island; and between the 10th and the 13th, the men set off in three divisions. The journey, as every journey undertaken in early spring always must be in these regions, was a very trying one. On the morning of the 11th the temperature was 35° below zero. One of the men, whose intellect had long been affected by the hardships he had endured, was reduced by the extreme cold to a state of complete imbecility, and on one occasion was with difficulty saved in his helplessness from the claws and the jaws of a hungry bear. The cold was so intense that the men's stockings and moccasins adhered so firmly together, that it was necessary to cut them off the feet, which were literally encased in ice. "Everything," says Armstrong, "was either half-thawed, frozen, or covered with hoar-frost, not excepting eyelids, beard, and face, with frostbites constantly occurring, from the exposure of the hands in the manipulation necessary for putting on one's garments, or taking them off. We were frequently frostbitten when asleep, or when in the act of despatching our hasty meal, while sitting up in the tent enveloped in our blankets." All hardships however were braved, all difficulties surmounted, and before the close of April the three divisions arrived safely on board the "North Star." Another death, the fifth and last that occurred during the expedition, took place at Beechey Island.

On the 28th May the officers and crews of the "Resolute" and "Intrepid" joined the "Investigators" in the "North Star"—the two vessels at Dealy Island having been abandoned by order of Sir Edward Belcher, the senior officer of the expedition. In the meantime Captain Kellett had, during the spring (of 1854), detached a travelling party from the "Resolute" to visit Mercy Bay, and report upon the condition of the "Investigator," a year after the abandonment of that vessel. This service was conducted under the command of Mr Krabbè, master of the "Intrepid," whose report respecting the condition of the abandoned "Investigator" is the last we shall ever hear of that ill-fated ship. This report, published in the Blue-Book on Polar Expeditions, 1855, contains the following interesting particulars—the last words about the vessel in which M'Clure discovered the North-West Passage. "The tattered remains of the ensign and pendant

were still flying, and there was an accumulation of drift on the northern side of the ship, sufficient to enable me to walk in over her gunwale; there was a good deal on her decks, but not sufficient to prevent our easily getting at the fore-hatchway. The ship's head was N. 30° W., her cable hanging slack under her bow. She was heeled about 10° to starboard, and slightly by the head. There were no signs of pressure about her, although the oakum was hanging very loosely out of most of the seams. She was 1400 yards from the cairn, and 426 from the nearest point of beach, her stern being in eleven fathoms of water. On going below I found all things in good order, and the lower deck pretty free from frost; but overhead on the decks were great accumulations. On examining the holds, I found she had leaked during the preceding summer so much, that she was now full to the orlop beams forward, and within ten inches of them abaft, *with solid ice.* . . . Both on entering and leaving the bay, I paid marked attention to the state of the ice in it, and am confident *that there was no water made* inside a line from Point Providence to Point Back (*i.e.*, a line stretching across *the entrance* to Mercy Bay) during 1853." From the last statement it is evident that had M'Clure's men volunteered to remain with him, they would have failed to extricate the ship even after the fourth winter, and must certainly all have perished.

In the middle of August the "North Star," with its several ships' companies, was freed from the floe-edge off Beechey Island. The homeward voyage was commenced soon after; but was scarcely begun, "when," says Armstrong, "the outline of a ship could be faintly observed through the haze, and we soon hailed with emotion the arrival of H. M. Ships 'Phœnix' and 'Talbot' from England." The "Investigators," however, remained on board the "North Star," which continued on her voyage to England, and the explorers arrived off Ramsgate on the 6th October 1854, after an absence of four years and ten months.

Thus ends the narrative of the eventful voyage of M'Clure and his discovery of a North-West Passage. By Parliamentary grant, the sum of £10,000 was granted to the captain, his officers, and men, in consideration of their having been the first to pass from the Pacific to the Atlantic Ocean by the Arctic Sea. It was not known in 1854, however, that the North-West Passage had been discovered by the Franklin expedition several years previously.

CHAPTER V.

KENNEDY'S SECOND VOYAGE OF THE PRINCE ALBERT—LIEUTENANT BELLOT JOINS IN THE SEARCH FOR FRANKLIN—CUT OFF FROM THE SHIP—RESCUED BY LIEUTENANT BELLOT—AT SEA ON THE ICE—RESULTS OF THE VOYAGE.

ONE of the most spirited, vigorously-conducted search expeditions of this period (1850-54) was the second voyage of the "Prince Albert" schooner, under the command of Mr William Kennedy, who had gained much experience of Eskimo life and habits, of sledge travelling and surveying, during a long residence among the Eskimos of Labrador. Besides its intrinsic importance as a voyage of search and geographical discovery, this expedition is additionally interesting as bringing before the attention of readers the earlier Arctic exploits of the distinguished French naval officer Lieutenant Bellot.

It will be remembered that the "Prince Albert" was purchased and fitted out by Lady Franklin in the summer of 1850, with the view of prosecuting the search for Franklin in Prince Regent Inlet, and along the coasts of North Somerset and Boothia; that she sailed for the north under the command of Captain Forsyth; and that, after a resultless cruise of four months, her commander returned with her to Aberdeen harbour in October 1850. Captain Forsyth, however, was the first to bring to England the exciting intelligence of Captain Penny's discovery of traces of the Franklin expedition at Beechey Island; and the British Government, the relatives of the officers of the missing expedition, and the public generally, were animated by that intelligence with an ardent desire and a noble resolution to continue the search for the lost squadron until its fate should be ascertained. As one of the results of this enthusiastic state of feeling, the "Prince Albert" was re-equipped to renew the search in the regions to which she had been previously sent; the funds necessary for fitting out and provisioning the little schooner being provided for the most part from the slender private means of Lady Franklin, while the remainder was subscribed by private friends, and by a few eminent public men. Mr William Kennedy, who believed that the search for Sir John must ultimately resolve itself into a grand series of boat and land

journeys, and whose travelling experiences in the territories of the Hudson's Bay Company eminently fitted him for conducting such undertakings, wrote to Lady Franklin from Canada, volunteering his services in aid of the humane enterprise which was then engaging the sympathies of the generous of all nations. His offer was frankly accepted. He was invited to England, and appointed to the command of the "Prince Albert."

The vessel, an easily-handled schooner of only 89 tons burden, was ready for sea on the 22d May 1851. The crew, consisting chiefly of Aberdonians and veteran Arctic hands from Orkney and Shetland, included Richard Webb, a "smart, dashing fellow from London," who had accompanied Sir John Richardson on his journey through North America to the Arctic Sea, and the venerable John Hepburn, the faithful attendant of Sir John Franklin throughout all the trials of the wonderful land expedition of 1819-23, and who now came forward volunteering life and limb once more to go northward in search of his old commander. The schooner was fully provisioned for two years, and was well found in all necessaries, and especially in raw material for moccasins, snow-shoes, dog-sledges, etc., in the construction of which Commander Kennedy was an adept. The Admiralty liberally contributed a ton and a half of excellent pemmican to the vessel's stores; and His Royal Highness Prince Albert, who was deeply interested in the projected cruise of the vessel that bore his name, presented its commander with an excellent barrel organ, wherewith to beguile the tedium of life in winter quarters, and to astonish the natives of North Somerset.

Shortly after Kennedy arrived in England from Canada he received a letter from Lieutenant Joseph Rene Bellot, lieutenant in the French navy, and Knight of the Legion of Honour. As the expression of a nature modest, simple, noble, essentially heroic—the imperfect English of it only serving to reveal the fine sincerity and enthusiasm of the writer—this letter is a gem, for the reproduction of which here no apology is necessary. "Sir," writes Bellot, "I am informed that you are about to command the 'Prince Albert.' Since the inquiries about his (Sir John Franklin's) fate were begun I always felt the greatest regret not to be in Europe to partake of the labours undergone by so many brave men that went in quest of the illustrious Lord Franklin. His lordship's glory and success have made him a citizen of the world, and it is but justice that all seamen should take the most lively interest in his fate. I would be particularly proud, sir, to have your consent to serving under your orders in such an honourable expedition. I have been now some years in the French service; and if zeal and devotedness may be relied upon, I can afford them to the greatest satisfaction of my wishes. It would not be for the first time sharing fatigues and hard circumstances with English sailors, as I assisted to an action against the natives of Madagascar in 1848 in company of H.M. frigate 'Conway;' I

was wounded there at the same time as Lieutenant Kennedy, and wish he were a relative of yours. I wrote to our navy secretary for a leave of absence, and to Lady Franklin, but would not do so before warning you of it. I hope, sir, there may be no objection to my being employed under your orders, and beg of you to give communication of my letter to Lady Franklin. Please believe me, sir, your most humble servant, J. BELLOT." Such a letter was irresistible. Bellot's offer, the gallantry of which was duly recognised by the English press, was readily accepted, the volunteer being appointed second in command of the schooner. The vessel's complement of officers and men numbered only eighteen.

The "Prince Albert" set sail for Aberdeen at six P.M. on the 22d May, with the union-jack flying at the peak, and the French flag at the fore, in honour of Bellot. Early on the morning of the 25th, the schooner came safely to anchor off Stromness. Here Lady Franklin and her niece, Miss Sophia Cracroft, took farewell of the officers and men. Some idea of the extraordinary personal influence which Lady Franklin exercised over all the officers and men engaged in the Franklin search with whom she came in contact, may be estimated from the following somewhat impulsive but certainly sincere passage from Commander Kennedy's narrative: "There, in our little cabin, with her estimable niece, sat the truly feminine yet heroic spirit who presided over our gallant little enterprise, one whose name—if her husband's is already associated with the highest honours of geographical discovery—will not be the less so, hereafter in the hearts of Englishmen, with honours of another kind—the most noble, devoted, and unwearied efforts to rescue or solve the fate of our missing countrymen. One by one each of our little party was introduced and cheered by her words of wise and affectionate counsel. If ever three English cheers were given with the heart's best feelings of a British sailor, they were given when, stepping over the vessel's side, our noble patroness waved us her last adieu, and God's blessing on our voyage."

The weather during the voyage out, was all that could be desired. On the 24th June Cape Farewell was sighted, and on the 8th July Kennedy was nearing the Danish colony of Uppernavik. On the 17th August Kennedy entered the "middle ice," in latitude 72° N., and after a perilous passage through 120 miles of the pack, occupying four days, he reached the "west water" on the 21st. On the 26th, when off Pond's Bay, the "Prince Albert" was visited for the first and last time during the voyage by a small party of four Eskimos. On the 4th September the schooner was lying close off Leopold Island. From this locality an unbroken barrier of ice extended as far as the eye could reach down the west side of Regent Inlet. An unavailing attempt was made to run into Leopold Harbour. Kennedy then sailed south to Elwin Bay, which he found sealed up with ice,

then to Batty Bay, which was also closed, and finally to Fury Beach, where finding himself in a narrow lane of water, between the shore on the one hand, and a threatening field of moving ice on the other, he thought it prudent to withdraw. Returning northward he resolved at all hazards to make another attempt to reach and enter Leopold Harbour. Accordingly taking four of the crew with him, in the gutta-percha boat, he left the ship at seven in the evening, and was fortunate or unfortunate enough to strike upon a narrow lane of water, by which he reached the shore. After an hour spent in reconnoitring, he prepared to return to the ship, and rowed out some distance with that intention, when to his great alarm he found that his return was barred by ice, and communication with the schooner thereby rendered impossible. "To add to our perplexity," writes Kennedy, "night had come on. Nothing could be seen or heard around us but huge masses of ice, grinding, tossing, and rearing furiously on every side. To attempt to reach the ship under such circumstances, was to ensure certain destruction to the boat and everybody in it; and nothing was left, therefore, but to return to the shore, which we succeeded in reaching in safety, about two miles to the south of Cape Seppings. Drawing our boat up on the beach, and turning her up, as a shelter from the night air, we prepared to pass the night under her as we best could. The weather was bitterly cold; our clothes were little else than a mass of ice, and knowing, under such circumstances, the danger of allowing the men to fall asleep, I permitted each of them to take an hour's rest in turn, under the boat, but no more, and kept them for the remainder of the night in active exercise. With the dawn of the following morning, we scrambled to the highest cliff of Cape Seppings, stiff, cold, and weary; and the consternation of the poor men may be conceived on discovering, that every vestige of the 'Prince Albert' had disappeared during the night!" But if the men were distressed on their own account, Kennedy was chiefly concerned respecting the fate of the ship. He knew that Sir James Ross had in 1849 deposited provisions at Whaler Point, close to Port Leopold, and a few miles north of Cape Seppings; and as breakfast was now eminently desirable, he immediately set out with his men toward the spot, where alone there was a chance of obtaining it. He was fortunate in finding the depôt almost precisely in the condition in which Ross had left it. The house also, which that navigator had erected, was still standing, although its covering had been sadly damaged by the gales of the last two years. From the circumstances that the depôt was found intact, it was evident to Kennedy that the port had not been visited by any party from the "Erebus" and "Terror."

But what was Kennedy and his four companions now to do? It was now the 10th of September, winter was fast setting in, the "Prince Albert" had vanished, no one knew whither: but wherever she might be, one thing

seemed certain, namely, that her commander and his four companions would be unable to join her that season. Nothing remained therefore but to face the inevitable courageously, and prepare to pass the winter beside the depôt at Whaler Point. Accordingly, with the impulse of a born leader of men, Commander Kennedy—a new Crusoe—began his preparations for the winter at once, discussed his plans for the future with a cheerfulness which was mainly "from the teeth outwards," and inspired his men with a feasible amount of hope and courage by his example. The first thing to do was to rig up some sort of house which should protect them from the dreaded winter weather. Sir James Ross's house, as we have seen, was practically roofless, and otherwise ineligible as a winter residence. But his steam launch? He had brought it out with the view of making it useful in navigating the narrow leads into which his ship could not enter; but he had no opportunity of using it. But if it had never been useful before, Kennedy resolved to turn it to some account now. He removed the mainmast, and rested it on supports about nine feet high, at the bow and stern respectively. Over the mast he spread two of the sails, fixing them down to the deck on both sides. The simple architecture of his winter home was finished in a twinkling. The hull of the launch was his house, and the sloping sails, high pitched over the mainmast, was a tolerable roof. "A stove," writes Kennedy, "was set up in the body of the boat with the pipes running through the roof, and we were soon sitting by a comfortable fire, which, after our long exposure to the wet and cold, we stood very much in need of. There was a plentiful supply of blanket-bags in the depôt, by the aid of which we were soon in possession of as warm and comfortable bedding as we could desire. Out of the same material we were able to supply ourselves with some excellent clothing, using, in the absence of ordinary needles and thread, sail-needles and twine, which answered our purpose equally well. These and other preparations of a similar nature carried us through the first week of our dreary residence with a tolerable approach to comfort and contentment." Deeply and bitterly did Kennedy reflect that the expedition which had cost Lady Franklin so much, had been organised for quite other purposes than affording its commander an opportunity of exhibiting his ingenuity as an amateur Crusoe. But the enforced idleness of this weary time was an accident of a kind to which all Arctic travellers were exposed. He was stopped in the execution of his duty by one of those unaccountable and incalculable movements of the ice which are known to take place with surprising rapidity all over the area of the Polar regions.

On the 21st September, Commander Kennedy records his resolution, as soon as the state of the ice will admit of travelling-parties being sent out, to commence a strict and thorough search for the "Prince Albert" in every direction in which she was likely to have been carried, and in the event of

this search proving unsuccessful, to set out in the spring on a journey to Cape Walker, the north-east point of Russell Island, off the north coast of Prince of Wales Land, with the view of following up the great object of the expedition—the one object which Kennedy never, amid all his adventures, failed to keep prominently in view—the search for Sir John Franklin. Under present circumstances, however, in the dead winter season, and with an equipment in shoes and clothing wholly inadequate, there was nothing to be done but to wait patiently, while the dreary days wore on. But a surprise was imminent. On the 17th October a shot was heard, the report coming apparently from the direction of Cape Seppings. On hurrying out of the launch, Kennedy beheld with delight a party of seven men, under Lieutenant Bellot, approaching, and dragging along with them the jolly-boat of the "Prince Albert." "It was with emotions of inexpressible thankfulness and joy," says Kennedy, "that we received the intelligence that the entire party were well, and that the 'Prince Albert' was safely moored in a good position off Batty Bay." Bellot had previously made two attempts to reach Whaler Point and bring a supply of clothing, but was obliged on both occasions to abandon the attempt. The whole party set out on the 22d to return to the ship, where they arrived in safety before the close of the month.

At Batty Bay preparations were immediately commenced for spending the earlier months of winter, and only the earlier months; for Kennedy was resolved to send out searching parties at the earliest possible moment, and not to postpone operations till the spring had set in, as had hitherto been the usual practice. Accordingly, on the 5th January, Kennedy, Bellot, and three men set out from Batty Bay, with a dog sledge, to visit Fury Beach, and ascertain whether any of Sir John Franklin's party had retreated upon that depôt since it was visited in 1849 by Lieutenant Robinson of the "Enterprise." Travelling along the base of the lofty cliffs, which extend down the west shore of Regent Inlet from Batty Bay to Fury Beach, the sledge party made but slow progress, owing to the extreme roughness of the road, and to the circumstance that this was the darkest season of the year, the sun having set in November, not again to rise till February. Continuing to grope their way through the gloom and over the ever-recurring obstacles of the route, they came on the 7th upon one of the depôts formed along this coast by Sir John Ross during his famous and perilous voyage in the "Victory." The depôt contained three cases of preserved vegetable soup in excellent condition, a small quantity of coal and wood, and some iron hoops. On the 8th Kennedy, Bellot, and John Smith, leaving two men behind with the sledge, started to walk to Fury Beach. Being unencumbered with baggage, they progressed rapidly, and soon arrived within sight of their destination. "It may be imagined," writes Kennedy, "with what feelings, when we really had come upon it, we approached a spot round which so many

hopes and anxieties had so long centred. Every object distinguished by the moonlight in the distance became animated, to our imagination, into the forms of our long-absent countrymen, for had they been imprisoned anywhere in the Arctic seas, within a reasonable distance of Fury Beach, here we felt assured some of them at least would have been now. But alas for these fond hopes! How deeply, though perhaps unconsciously, cherished none of us probably suspected till, standing under the tattered covering of Somerset House, and gazing silently upon the solitude around us, we felt as we turned to look mournfully on each other's faces, that the last ray of hope, as to this cherished imagination, had fled from our hearts. . . . The spot on which we now stood had so long been associated in our minds with some clue to the discovery of the solution of the painful mystery which hung over the fate of Franklin, and had so long unconsciously, perhaps, coloured all our thoughts, that it was not without a pang, and a feeling as if the main purpose of our expedition had been defeated, that we found all our anticipations shattered at a blow by the scene which met our eyes. Thus my friend and I stood paralysed at the death-like solitude around us. No vestige of the visit of a human being was here since Lieutenant Robinson had examined the depôt in 1849. The stores, still in the most perfect preservation, were precisely in the well-arranged condition described in the clear report of that energetic officer." The whole neighbourhood was searched unavail ingly for some record of a visit later than that of Robinson, and then the three men, wearied and disappointed, entered Somerset House. The framework of this mansion of rough timbers, raised by Sir John Ross, was still standing, though one end of it was nearly filled with snow, and the canvas roof had been blown to rags by the gales that howl all the year round over this inhospitable shore. The men soon lighted a fire, however, and after discussing a warm and satisfactory supper, and drowsily nodding for a few hours over the comforting fire, they arose and shook themselves at eleven P.M., and, starting on the return journey, arrived at the encampment of their companions at two o'clock on the following morning. The whole party then re turned to the ship.

On the 13th February Kennedy, Bellot, and two men, started from Batty Bay, taking with them two cases of pemmican and six gallons of spirits of wine, on a dog sledge, with the view of forming an advance depôt on the route to Fury Beach, in preparation for the grand journey to be undertaken somewhat later in the spring. It was their intention to return to the ship the same evening. Shortly after mid-day they were caught in a hurricane—the gale being so thickly charged with snow, in crossing a bay, that the travellers lost sight of the land by which their homeward course should have been guided. After wandering about for some time, scarcely able to distinguish each other at the distance of a few paces, they were obliged to

come to the conclusion that they had lost themselves. Relying on the instinct of their dogs, they unharnessed two of them from the sledge, in the hope that they would act as guides; but the animals remained stationary, as if afraid to leave their companions. At last, however, the whole team of five dogs set off at great speed, taking the sledge with them, and leaving the travellers to their fate. They reached the ship without difficulty, it was afterwards discovered—their arrival with the empty sledge creating the utmost anxiety on board with respect to the fate of the party. Meantime Kennedy and his men continued stumbling about until again they reached land. The question now was how to steer for the vessel. "This was decided on at last," says Kennedy, "by each of the party pointing in turn in the direction in which he thought the vessel lay, and then taking the mean of the bearings. To prevent our separating in the drift (for some of the party had by this time got so benumbed with cold as to be unable to use their hands to clear their eyelids, and had thus become literally blind with the accumulation of snow on their eyes), it was agreed that at intervals we should call and answer to each other's names, and that those whose eyes had suffered least should take the others in tow." In this order the men proceeded, and, guided by a solitary star, were able to keep a true course until, before they were able to see the ship, they heard the wind whistling in her shrouds, and were thus guided to her position by the ear rather than by the eye. All of the men were severely frost-bitten, but by rubbing the affected parts over with cold snow and water, and thus restoring circulation before going below, they escaped with no worse consequences than a number of very ugly-looking scars.

Preparations for the "grand journey," the "leading feature" of the expedition, and indeed the principal object for which it was undertaken, had been carefully made during January and February; and now the day approached on which it was arranged a start should be made. The precise direction to be followed, being a matter dependent upon the discoveries that might be made, and the, as yet, unforeseen circumstances that might arise at the outset, could not as yet be definitively fixed. On one point, however, Kennedy was decided. He was resolved that his route should include Cape Walker, to which (as the point of departure of Sir John Franklin for the west and south) much interest attached.

All preparations being completed—stores arranged and packed on two Indian sledges, and advance depôts formed on the route to Fury Beach—Kennedy, Bellot, and five men started from Batty Bay on the 25th February, and proceeded south along the west shore of Regent Inlet. Fury Beach was reached on the 5th March. On the 7th a fatigue party, bringing additional stores from the ship, joined Kennedy at Somerset House. "We had helped ourselves very liberally from the old stores of the Fury," writes the

commander, "which we found not only in the best preservation, but much superior in quality, after thirty years' exposure to the weather, to some of our own stores, and those supplied to the other Arctic Expeditions. This high state of preservation I cannot help attributing in some measure to the strength and thickness of the tins in which the preserved meats, vegetables, and soups had been placed. The flour had all caked in solid lumps, which had to be re-ground and passed through a sieve before it was fit for the cook's hands. In other respects it was fresh and sweet as ever, and supplied us with a stock of excellent biscuit." On the 29th March the party resumed the journey, and were soon traversing country never before visited by civilised men.

As Kennedy proceeded south-west from Fury Beach towards Brentford Bay, the land gradually fell away into flats, and in some localities it was indicated only by a few black spots appearing through the surface of the snow. On the night of the 29th the party, fourteen in number, encamped after a journey of from sixteen to eighteen geographical miles, and having built two circular snow-houses, had a good night's rest. Next day found them again on foot, toiling on toward Cape Garry. The routine of each day's march is given by Commander Kennedy as follows: "At six o'clock generally (although from various circumstances this hour was not always strictly adhered to), all hands were roused by myself, and the preparations for the march began. Breakfast was the first operation, and then came the bundling up of the bedding, cook ing utensils, etc., the lashing of the sledges, and the harnessing of the dogs, which altogether, on an average, occupied the next two hours. Then came the start, I leading the way, and selecting the best track for the sledges, and Mr Bellot, with the rest of the party, following in regular line with the four sledges. At the end of every hour five minutes were allowed for resting the men and breathing the dogs. The construction of the snow-house, and the preparations for the evening meal, and our repose for the night, concluded the labours of the day, which were seldom over before nine or ten at night." Adhering to this programme from day to day, Kennedy reached Cresswell Bay on the 1st April, and Brentford Bay on the 5th. On the evening of the latter the party encamped on the north side of Brown's Island, on the far side of which a dense column of vapour was seen rising as from a sheet of open water. On the 6th the fatigue party, eight in number, set off to return to the ship, and Kennedy and Bellot, with four men, spent the remainder of the day in the examination of the bay. The officers severally discovered passages leading west from Brentford Bay apparently into some wide sea. The commander ascended a high hill in the neighbourhood, whence he could plainly distinguish a sea stretching westward to an estimated distance of about thirty miles, with the channel through which he had already come so far, leading into it. Starting early on the following morn

ing, and taking the most northerly of the different channels, Kennedy continued tracing it until, after travelling over twenty miles, he reached its western extremity. "From a high hill near to our encampment at this spot," writes the commander, "we observed a broad channel running N.N.E. and S.S.W., which was at first taken for a continuation of Brentford Bay, until its great extent convinced us that we had fallen upon a western sea or channel, and that the passage we had just gone through was in reality a *strait leading out of Prince Regent Island.* It appears on the map of our discoveries as *Bellot Strait,* a just tribute to the important services rendered to our expedition by Lieutenant Bellot. The island which forms its southern shore was named Levesque Island." The western sea, into which the channel opens, is now known as Franklin Sound.

Convinced that he had now reached the west side of North Somerset, and that he had demonstrated that land to be an island, Kennedy, believing that Franklin could not have sailed down the sound that now bears his name, struck due west across it, and reached its west side on the 10th. For a week after this date little progress was made owing to ever recurring and violent snowstorms. On the 19th the journey was resumed; but the mid-day sun was now so powerful, and the sufferings of the whole party from snow-blindness so acute, that Kennedy resolved thenceforth to travel by night instead of by day. Accordingly, towards evening, instead of erecting a snow-house, and encamping for the night, the travellers simply threw up a snow-wall to windward, and sitting down at its base around their spirit-lamp and "conjurer," each man with his pannikin in his hand, a refreshing meal of pemmican and warm tea was discussed. "This over," says Kennedy, "we set out upon our night march, feeling as fresh as we did in the morning. The darkness of midnight we found a shade deeper than the day of mid-winter; but sufficiently light to permit our seeing our way quite clearly." Kennedy continued journeying westward, until on the 21st April he had reached beyond longitude 100° W. He now felt certain that whatever passage Sir John Franklin might have taken in a south-west direction from Cape Walker, that passage must be to the north of his present position. Accordingly, at ten P.M., on the 21st, the party again started, but this time in a direction due north through Prince of Wales Land. On the 24th the party arrived at the head of Ommanney Bay, a deep indentation on the west coast of Prince of Wales Land. "As yet," writes the commander, "we had not come upon the channel laid down upon our map as leading from Cape Walker, which lay at this time considerably to the north and east of our position. Our remaining resources would not admit of any extended explorations further westward, and symptoms of scurvy were appearing among the men. I resolved, therefore, to turn eastward from this point, with the view of striking the channel laid down to the east of Cape Bunny,

and following it up to Cape Walker." Pursuing the eastward course resolved upon, Kennedy recrossed Prince of Wales Land, reached the western shore of Peel Sound, and thence pushed on northward. On the 4th May Cape Walker was reached, and the remainder of that day, and the whole of the next, was spent in a fruitless search for records or traces of the missing expedition.

"Wearied and dispirited beyond description at the fruitless result of our long and anxious labours," says Kennedy, "we returned to our encampment." There was nothing now to be done but to return to the ship at Batty Bay, which was accomplished by crossing the northern entrance of Peel Sound from Cape Walker to Cape Bunny, and rounding the north coast of North Somerset. Whaler Point was reached on the 15th, and here Kennedy remained for twelve days to recruit his men, all of whom had been suffering severely from scurvy. While resting here he made free use of the lime juice, cranberries, vegetables, and other antiscorbutics, which were still to be found in the depôt, and having by this means recruited the strength of his men, he started for Batty Bay, and arrived at the ship without casualty on the 30th May after an absence of ninety-seven days, during which he and his men had accomplished a journey of 1100 miles.

On the 6th August Commander Kennedy was able to extricate his ship from the ice in Batty Bay after a detention of 330 days, and make sail for the north, and on the morning of the 19th he joined the "North Star," Commander Pullen, off Cape Riley. After spending eighteen days in friendly communion with the officers of the "North Star," Kennedy perceived that there was nothing further for him to do in those seas, as the continued search for Franklin had been provided for by the great expedition under Sir Edward Belcher, the ships composing which had already arrived, and had passed away westward. He, therefore, without more delay bore up for England, and arrived safely in Aberdeen Harbour on the 7th October, after an absence from England of sixteen months.

CHAPTER VI.

CAPTAIN INGLEFIELD'S SUMMER SEARCH FOR SIR JOHN FRANKLIN—1852.

In the summer of 1852 Captain E. A. Inglefield, of H. M. Navy, commanded an expedition in search of Sir John Franklin, which was pronounced by Sir Francis Beaufort to be "one of the most extraordinary voyages on record"—a voyage, the results of which, according to Sir Edward Parry, "have placed Commander Inglefield among the most distinguished of our Arctic navigators." The "Isabel," screw schooner, of 149 tons and thirty horse power, had been fitted out by Lady Franklin in the spring of 1852, and provisioned for five years, with the view of prosecuting the search for the lost "Erebus" and "Terror." The command was placed in the hands of Mr Donald Beatson, who, however, was reluctantly compelled, by unavoidable difficulties, to resign the commission. Lady Franklin then offered to present the well-appointed schooner to the Admiralty, on the sole condition that she should be sent on the mission for which she had been specially strengthened and stored.. But the Admiralty having already despatched an efficient expedition to the north to examine Wellington Channel and the regions around Melville Island, thought it prudent to decline the offer. It was then proposed to Commander Inglefield that he should provide a crew and take out the schooner to join the Arctic squadron in Lancaster Sound, and after depositing with them the bulk of his five years' store of provisions, return to England; after which, as compensation for expenses incurred, the vessel and all that remained in her was to become his own property. Inglefield agreed to the proposal on the condition that he should be at liberty to prosecute the search "on any ground he might think fit, and in such a manner as he should deem most suitable to his own views." He accordingly became the sole proprietor of the schooner on the 22d June 1852, and took her down to Woolwich dockyard on the following day. On the 5th July, after having been visited by Lady Franklin and Miss Cracroft, the "Isabel" was towed down the river on her outward voyage to the remote north of Baffin's Bay.

The officers and men numbered eighteen in all, of whom the two ice-masters, Abernethy and Manson, had sailed for years in the Polar seas, either in Government or in whaling expeditions; while the surgeon, Dr Sutherland, will be remembered as one of the medical officers in the expedition of the "Lady Franklin" and the "Sophia," under the command of Captain Penny. Cape Farewell was passed on the 30th July. Running his ship into the little harbour of Fiskernæs on the 7th August, Inglefield was most hospitably entertained by the Danish governor of the locality, and had an opportunity of judging of the beneficial influence which the Lutheran mission-stations that have been planted along the coast by the Danish Government, exercise among the Eskimos. After touching at Lievely (Disco), Inglefield dropped anchor off Uppernavik. Here he procured dogs and other necessaries, and made the acquaintance of Mr Petersen, who had accompanied Penny during the previous year, and whose services as interpreter to successive expeditions have been invaluable to the commanders of both British and foreign expeditions. On the 18th the "Isabel" was abreast of the Devil's Thumb, and on the following day she steamed across Melville Bay. "Having succeeded in passing through the pack, and in reaching the open water," writes Inglefield, "we pushed eagerly on; while the sun bursting forth dispelled the mist, and gladdened our hearts amid the solitude of ice and snow. . . . Forty-one days only have elapsed since we tripped anchor from Peterhead, and here we are in Melville Bay, three days later only (as regards the period of the season) than the Penny expedition of last year, with apparently a far better season, and in a vessel unencumbered with a consort or with any orders." On the 21st Inglefield was well up with the ice of Cape York, into which he at once pushed, although he had to thump his way through it against the heavy pieces that were met with in the water-lanes. Whilst steaming northward amid the ice, Inglefield observed a bear swimming about, and wounded him with a bullet from a Minié rifle. The enraged animal afterwards attacked the small boat in which his enemy promptly pursued him, and might have been the cause of some serious mishap had not the captain pulled a Colt's revolver from his pocket and shot him through the brain. His fine coat became his captor's prize, and his carcass was divided among the famishing Eskimo dogs.

Cape Dudley Digges and the Crimson Cliffs were passed on the 21st, and Conical Island and the Petowak Glacier on the 22d. "The glacier of Petowak," writes Inglefield, "is a wonderful work of nature, extending as it does upwards of a mile into the sea, and four or five miles inland, with a smooth unbroken surface. It carries one's thoughts back to the age when this gigantic ice-formation was in its infancy, and when, during the summer months, it was possibly but a little purling stream, at the head of a deep bay." A number of natives were seen near the base of this glacier, desirous

apparently of having an interview with the white strangers. Inglefield landed and interviewed them. Nothing of European manufacture was found among them, nor did they appear to possess kayacks. They were clad in bear, fox, reindeer, and seal skins, and seemed to be in the most robust health. They appeared to live by hunting, not by fishing, and a number of them who had been engaged in trapping rotges, carried one or two of these small sea-birds in their hands. On the 23d the commander penetrated beyond Cape Atholl. "How I longed to survey this coast!" he exclaims. "The chart was so incorrect that I was compelled to trust to my wits, and every opportunity was embraced for getting observations and angles to fix its outline more exactly." Wolstenholme Sound was carefully examined, and further evidence was obtained, proving the falsehood of the mischievous story concocted by Adam Beck, and already referred to. On the 25th, Inglefield found himself at the distance of about fifteen miles east of Carey Islands. As all the land to the northward of these islands was new, the commander here commenced a careful running survey. At the distance of twenty-one miles along the shore from Cape Parry, huts were observed on the shores of a small bay. The natives afterwards appeared, and Inglefield, landing, went with Dr Sutherland and Mr Abernethy, to communicate with them. They were clad with furs and skins, were as filthy as possible, and their summer tents were miserably dirty and small. No European articles were found among them, and no evidence to lead to the belief that these shores had been visited by any parties from the expedition under Sir John Franklin.

On the following day Inglefield discovered Murchison Strait—"a clear and unencumbered sea, with a distinct and unbroken horizon, which, beautifully defined by the rays of the rising sun, showed no sign of land, save one island." This new strait extending away in a north-east direction from Whale Sound, was very inviting to the discoverers. Inglefield was sorely tempted to enter and follow up his discovery; but the season was now far advanced, "and," writes the commander, "a sense of duty to our lost countrymen (which plainly pointed to the southward and westward), prevailed, and sailing away we manfully turned our backs on a fairer opportunity for research and discovery than often falls to the lot of man." The route to the north was now resumed, and on the 26th the "Isabel" had steamed up to within half-a-mile of Cape Alexander. "We were entering the Polar Sea," says Inglefield, "and wild thoughts of getting to the Pole—of finding our way to Behring Strait—and, most of all, of reaching Franklin and giving him help, rushed rapidly through my brain. A few hours and we should either be secure in our winter quarters, or else flying onward in the unfreezing Polar Basin." The circumstance that the sides of Cape Alexander were covered with bright green mosses and grasses, seemed to encourage the idea that the climate of the sea which was now being navigated for the first time,

was less severe than that of the entrance to Smith Sound. "On rounding Cape Alexander," continues Inglefield, "the full glory of being actually in the Polar Sea burst upon my thoughts, for then I beheld the open sea stretching through seven points of the compass, and apparently unencumbered with ice, though bounded on east and west by two distinct headlands, of which, the one on the western shore was named after His Royal Highness Prince Albert, as, by a happy coincidence, it was at twelve P.M. on his birthday, that the point was first observed." The singularly regular table-topped cliffs to the north of Cape Alexander were named the Crystal Palace Cliffs. To the south of Cape Alexander were snow-capped hills and cliffs; but to the north of it "an agreeable change," says the commander, "seemed to have been worked by some invisible agency—here the rocks appeared of thin natural black or reddish-brown colour, and the snow, which had clad with heavy flakes the more southern shore, had only partially dappled them in this higher latitude." The western shore of Smith's Sound, however, seemed clad with perpetual snows, and was fringed with a belt of ice twelve miles broad.

So long as the weather continued favourable, Inglefield continued to push on northwards. On the 27th, however, the wind drew round towards the north, and beating violently against the schooner, forbade any further advance. The Prince of Wales Mountains, on the western coast, were discovered and named, and the northernmost point of this shore was named Victoria Head. On the eastern shore the most northerly point was called Cape Frederick VII., while the bay immediately to the south of it was named after Lady Franklin. The most northerly position reached was 78° 28′ 21″—a point about 140 miles farther north than had been reached by any earlier navigator of whom there are any records. Inglefield had for some days noticed that a strong northward-flowing current flowed along the east shore of Smith's Sound. The gale, which continued to blow from the north, meeting this current, raised such a heavy sea that the expedition was obliged to return to the mouth of the sound without delay.

Creeping down along the west coast amid ever-recurring perils, Inglefield arrived at Clarence Head on the 30th, and on the following day passed westward through Glacier Strait into Jones Sound. A cape on the north side of Glacier Strait was named Cape Tennyson, in honour of the Poet Laureate.

Continuing on a westward course, and passing Inglis Peak, the explorers discovered, to their surprise, that the north shore of Jones Sound turned away to the northward, while the south shore preserved a direction westerly, until lost in the distance. No land was visible to the west or north-west. In this unknown sea, which was loaded with heavy ice and obscured by fog, whose bold and forbidding coasts afforded neither anchorage, landing

place, nor shelter of any kind, it was now deemed unsafe any longer to delay. "Accordingly," says Inglefield, "having obtained the long. of 84° 10′ W., in the lat. of 76° 11′ N., we bore up, and running over to the south shore before the gale, which had commenced to blow with some violence, we examined, in the intervals of fog, every rock with our glasses, naming certain headlands as we passed. . . . No trace of anything human could we observe; all was a mass of ice." Having reached the offing, Commander Inglefield resolved to run up Lancaster Sound to Beechey Island, and there leave the "Isabel's" surplus stores, provisions, and fuel, for the use of the ships of Sir Edward Belcher's squadron. By so doing, he would also be enabled to communicate his own discoveries to the squadron, and carry home to England the latest intelligence from the ground now being examined by Belcher's officers. Singularly fortunate in wind and weather, the commander of the "Isabel" carried his ship into Erebus and Terror Bay, Beechey Island, on the 7th September, and had the happiness to meet there the "North Star" (Commander Pullen)—the store ship attached to Sir Edward Belcher's expedition.

Commander Inglefield pressed upon Captain Pullen the acceptance of his spare stores and provisions, but the latter, who had been prohibited by his superior officer from in any way interfering with a private vessel, was obliged to decline the offer. On hospitable thoughts intent, Inglefield was thus compelled to accept hospitality instead of conferring it, and he and his officers dined with the captain of the "North Star," enjoying the rare delicacies and luxuries of soft bread, loon pie, beer, etc., and discussing the prospects and programme of the Arctic searching squadron, under the command of Sir Edward Belcher. After an evening pleasantly spent, Inglefield having taken the "North Star's" letter bags on board, the "Isabel" set sail eastward out of Erebus and Terror Bay on the homeward voyage to England, where, after an absence of exactly four months, she duly arrived. The chief result of the voyage was the discovery of about six hundred miles of new coast line, at and within the entrance to Smith's Sound, which, from the date of Inglefield's summer cruise in the "Isabel," has been regarded by all interested in Arctic discovery as affording a highly promising route to the regions still unknown in the extreme North.

PART XI.

EXPEDITION UNDER SIR EDWARD BELCHER.

CHAPTER I.

THE GIFT OF PROPHECY—"A BOOK'S A BOOK," ETC.—VOYAGE OF THE "RESOLUTE"—"INVESTIGATORS" RESCUED.

AFTER the return of Captain Austin's squadron in September 1851 (see p. 534), Her Majesty's Government decided upon re-equipping the Arctic vessels, with the view of further prosecuting the search for the "Erebus" and "Terror" in the regions to the north-west of Beechey Island. Accordingly the "Assistance" and "Resolute," with their respective steam-tenders the "Pioneer" and "Intrepid," were thoroughly repaired and refitted for the new voyage. The "North Star" was added to the Arctic squadron as depôt ship and basis of operations. The command of all the vessels to be engaged in the expedition was vested in Sir Edward Belcher. This distinguished officer was born in 1799, and entered the navy at the age of thirteen. In Captain Beechey's expedition to the Polar Sea in 1825-28 he held the rank of lieutenant, and was entrusted with the duties of assistant-surveyor. During this minor cruise, in which he was occupied almost exclusively in scientific as apart from strictly nautical employments, he appears to have acquired all the knowledge he ever had of Arctic navigation. He was surveyor in the "Etna," on the west coast of Africa, from 1832 to 1834; went round the world in the "Sulphur" in 1836-42; was knighted in 1843; commanded the surveying-ship "Samarang" in the Eastern Archipelago, 1842-47; and in 1852 he was appointed to the command of the "Assistance," and of the most perfectly appointed Arctic expedition that had, down to that date, ever set sail from England. He is the only commander, in the history of Arctic exploration, who abandoned every vessel of his squadron among the ice, and came home, "with the news of his own defeat," in a stranger ship. He is the only Arctic explorer who ever discovered a "bear's nest," but the "mares'

nests" of which he was the discoverer are not to be counted in units. "*It is folly* to talk of the Polar bear hybernating," writes Sherard Osborn (alluding, however, to the male animal only), "whatever bears may do on the American continent. There is only one Arctic navigator who ever saw a bear's nest!" Sir Edward Belcher is the "one Arctic navigator" against whom this shaft of sarcasm is levelled. The manner in which he controlled the operations of his four ships in the expedition of 1852-54 was the chief cause of the abandonment, by the British Government, of all further search for Franklin. "Desisting from the search for Franklin just as success was certain," says Osborn, "arose from official ignorance on the subject, and the alarm created by Sir E. Belcher's strange proceedings during the last expedition to Barrow Strait." To crown his achievements Sir Edward wrote a book, and thereby abundantly gratified the malevolence of his enemies. "*Les marins ecrirent mal,*" quotes Sir John Ross in a preface, which luminously illustrates the truth of the quotation; but no sailor, from Noah downwards, has ever even rivalled the literary style of Sir Edward Belcher. The work, which is entitled "The *Last* of the Arctic Voyages," was published in 1855, since which date to the present, the number of years that have elapsed is not greater than the number of Arctic expeditions that have been undertaken and successfully carried out. "The title of the work may appear open to objection," observes Sir Edward, with condescension and becoming modesty; "but, taking into account the dates of original orders, and those in force in April 1854, it will be apparent that the final command of the British Naval Expedition within the Arctic Seas was vested in me."

A charming modern form of fatalism pervades the work. The author is also constantly finding himself out-doing the cleverest things, and complacently tracing the course of his own ingenious mind through the successive steps by which it arrives at its object. Of his gift of prophecy many examples might be given. On one occasion, when beset, he foresaw and provided for a break-up of the ice when his ice-master saw no reason to expect such an event. "I noticed a suspicious dark streak on the distant floe, apparently, to my comprehension, a lane of water; but the ice-quartermaster, declaring it to be mere fog, I was relieved from anxiety, and as it indicated nothing which demanded further investigation, it passed unnoticed —*but not forgotten!* About ten the breeze freshened considerably, and before going below for the night I jocosely desired the officer of the watch to '*Call me, if the ice parts at the bow,* and take care that the "Pioneer" does not run foul of the ship.' Little did I dream of the immediate prospect of any such danger; but many similar random observations have been treasured up, and if burning for sorcery be still a legal sentence, I may become a victim! Hardly had I reconciled myself to my bed, when the

officer reported, '*the ice has broken off within a few yards of the bow*, and is going off rapidly!'" Another proof of his more than mortal foresight may be given. "'Coming events cast their shadows before,' was never more fully realised," he premises, with more gravity than grammar. "To-day I felt so perfectly satisfied that a sledge was due from Kellett (if he existed), that I fully intended, when the master reported noon, to desire him to send a person to look out on the hill. It escaped me, being then engaged on other matters; but my clerk coming in, reported, 'A dog-sledge nearly alongside, sir!' My reply, instigated by what was then passing in my mind, was very short, and without emotion, 'I know it,' which somewhat astonished him." Happy clerk! to have such a wise commander! Occasionally Sir Edward delivers himself, if not of a bull pure, at least of some monster of allied breed. He speaks of his state of mind in a trying moment, being "unmixed with any doubt—indeed, *quite the reverse*," which means that it was *very materially* mixed with doubt, though this is the opposite of what the gallant author meant to convey. The following is not surpassed by anything in the merriest, maddest page of "Rory O'More" or "Charles O'Malley." "I ascended the hill, where I had ordered a cairn to be built; possibly it was deemed too steep for younger blood; we built three, one" (of the cairns?) "was a house, the two others were constructed by myself—the last being on the *inaccessible* summit of True Star Bluff—and unattended. I must say I would not have *ordered it to be done by any but a volunteer*."

Sir Edward, who must have given his days and nights to "Tristram Shandy," was always very solicitous about his *nose*. Let us hear him play upon this organ. He has been maundering on about the low degree of cold experienced in January 1853, and how it affected himself. Then breaks he off, thus: "We have throughout been thinking, or rather talking of ourselves—we do happen to think more of the crew; but thanks to the unremitting attention of our medical men, and to the general care taken to prevent exposure, I should be disposed to assert, in my proper capacity of the commander, that no official report of frost-bite has yet reached our ears. To descend, perhaps, and allow that once one of my men 'took his captain by the nose,' under pretence that he thought his captain's nose was frost-bitten, and his warm hand could restore it, 'is not quite true.' But I totally and indignantly repel the very low insinuation, and believe that the blood from his heart flowed so rapidly to the end of his arm that it saved my nose by the application of the back of his hand, and I thank him; even if it was a deceit, I forgive him. We command here! no bed of roses, nevertheless—no absolute command is! Ask the fathers of families, and this is not a small one! To continue the matter of low temperatures, they made no impression here; the pains of forehead or lungs some might have experienced, but they were never mentioned in my presence. The only projection

about which I felt interested was *my nose,* and upon this point, not a very prominent feature, I felt a sort of monomania, something like going into action, that I must be wounded in a leg, and nowhere else. I never intended to be killed, *and so I told my surgeon when that idea was realised,* but I am constantly asking people to view my nose. But as I have so far wandered into self, and I know that certain professional men who interest themselves about me will expect to know, I will merely say that I expected certain wounds, cuts, frost-bites of youth, etc., to trouble me. I have suffered intensely, more than can be explained, but nothing to disqualify me, in any manner, for this important command, or the liabilities attached thereto. My feelings are my own. So long as I perform all my duties, who cares for them ?"

Wit and wisdom of this quality, extending in all to six hundred and fifty pages, are overawing to even the most persevering readers. Indeed, it may safely be averred that "The Last of the Arctic Voyages" was never read in its entirety by any one of the author's admiring countrymen. We will not say that the work is frivolous, useless for any practical purpose whatever, ungrammatical, packed full of details meaning nothing and leading nowhere, pervaded by obstinacy, professional jealousy, superstition, intellectual incapacity, and measureless conceit; but we shall be careful not to give the reader much more of the book, lest he may think so. In our very brief chronicle of the Belcher Expedition, we shall refrain from making much use of the Belcher wisdom.

The supreme command of the vessels forming the Arctic expedition of 1852-54 was, as we have said, vested in Sir Edward Belcher. But as no purpose was to be gained by keeping all the four searching vessels in one course, it was arranged that the squadron should be divided into two branches, the first, consisting of the "Assistance" (Sir E. Belcher), and its steam-tender the "Pioneer" (Commander Sherard Osborn), to explore and examine Wellington Channel; and the second, consisting of the "Resolute" (Captain Kellett), and its tender the "Intrepid" (Commander Leopold M'Clintock), to pass west through Barrow Strait, visit Melville Island, and explore the then little known archipelago (Parry Islands), of which that island is the chief. All preparations having been completed, the four ships, together with the depôt ship "North Star" (Commander Pullen), left Greenhithe, and proceeded down the Thames on the 21st April 1854.

No incident of more than passing interest marked the outward voyage, which, like its history, as written by Belcher, was uncommonly dull and tedious. It was not till 1st August that the vessels arrived off Cape York. On the 3d the squadron was off the entrance to Jones Sound, and on the 11th the "Resolute" arrived at the rendezvous in Erebus and Terror Bay, between Beechey Island and the mainland of North Devon. When Captain

Kellett and Commander M'Clintock arrived in their vessels the "Resolute" and "Intrepid," they were surprised to find that the "Assistance" and "Pioneer" had not yet arrived. The depôt ship, the "North Star," however, was moored in the bay, and from this vessel Kellett, to save time, immediately commenced to transfer to his own ship the remainder of the required stores. On the 12th the "Assistance" arrived, and on the 14th the "Pioneer" joined company. As Beechey Island was known to be the point from which the two main branches of the expedition were to diverge, all hands were anxious to ascertain the exact routes to be pursued. These proved to be as follows: (1.) The "Assistance" and "Pioneer" to proceed up Wellington Channel; (2.) The "Resolute" and "Intrepid" to reach Melville Island; (3.) The "North Star" to remain at Beechey Island as a depôt, upon which the crews of any of the searching vessels might retreat in the event of any casualty.

After a complimentary and animated address had been delivered by Sir Edward to the crews assembled on the ice, the officers and men of the different ships bade each other farewell. At ten P.M. on the same day (the 14th August), the "Assistance" and "Pioneer" stood up for Wellington Channel, and disappeared; and on the following day the steamer "Intrepid," taking the "Resolute" in tow, bore away westward. On the 29th Captain Kellett came in sight of the peaks of Bathurst Island, and knew that half the distance to Melville Island was now made. Byam Martin Island was passed on the 31st, and on the afternoon of the 1st September Melville Island was distinctly seen from the crow's-nest. "There were few on board," says George M'Dougall, sailing-master of the "Resolute," "who did not eagerly ascend the rigging to catch a glimpse of the island, whose shores had only once before been approached in a ship." Continuing to push on along the south shore of the island, the vessels passed Point Ross on the 2d. The pack compelled Captain Kellett to sail close to the land in the narrow strip of open water extending between the shore on the north and the pack on the south. A score of telescopes were being constantly directed upon the shore of the famous island which Parry discovered in 1819, and in which he spent his first Arctic winter. This careful examination of the shores was not fruitless, for during the day (the 2d), a number of "dark objects" were seen moving along the beach. This discovery created intense excitement, for an idea had got abroad that these dark objects would yield fresh steaks, and every man on board now pined for a change from salt and preserved meats. Early on the following morning Lieutenant Mecham and Dr Domville, the surgeon of the "Resolute," went ashore with a party, on hospitable thoughts intent, but not quite of a kind to cheer the sable rangers on the beach. "Our delight may be imagined," exclaims M'Dougall, "when, at eight, the glorious news of the

death of a musk-ox was received on board. Never was seen such a commotion as that which ensued; every description of gun manufactured was brought into play; and shot, wads, flasks of powder and of brandy, were hurried into the boat that conveyed to the scene of slaughter. . . . Unfortunately for me," continues M'Dougall, who had inhaled the spirit of the sportsman with the air of his native Highlands, "the sun was shining, and as duty compelled me to obtain observations, I was obliged to forego the pleasure of making one of the party. I do not remember ever seeing the sun shine with less pleasure than on that day." No sooner had the hunting party left the ship than a large herd of musk-oxen were seen on the ridge of one of the nearest hills. No less than twelve of these were shot, and their carcasses brought on board with cheers, and then the "Resolutes" and "Intrepids," having greatly dared, dined.

Continuing the voyage round the south coast, Captain Kellett reached Winter Harbour on the 4th, but found it occupied by "six miles of solid floe." He had resolved to make the harbour his winter quarters, and was consequently disappointed in finding it impracticable. A suitable position for wintering was found in the bay between Dealy Island and the mainland, and here the vessels were securely moored in their ice docks on the 10th September. "All was now hurry and bustle on board, preparing depôts and travelling equipments for two autumn parties, who were to leave the last week in the month, if practicable. . . . As a beginning, the boom boat and deck load of casks were hoisted out, and landed on the beach on the east side of Dealy Island, a few feet above high-water mark; this made a considerable show, and the vessel appeared much larger than before. The topgallant-yards were of course sent down, and the masts housed, the jibs and square sails were well stowed, and secured for the winter; the driver and trysails were unbent, and the trysail-masts unshipped; these, with the studding-sail booms, eventually served for ridge poles for the housing stops. Housing-in was soon completed, and on the 22d travelling parties, led by Lieutenants Mecham, Pim, and Hamilton, and the mates Mr Nares (afterwards commander of the great Polar Expedition of 1875-76), and De Bray (a volunteer from the French navy), and consisting of thirty-six men, with five sledges and a cart, fully equipped and provisioned for twenty-five days, left the ship to lay out depôts for spring travelling. On the 11th October a flagstaff was erected on the highest point of Dealy Island, upon which a flag was to be hoisted, as a signal to the ship, when any party should come in sight after a travelling excursion. This flag was first displayed on the morning of the 14th, and in the afternoon Lieutenant Mecham and his men came into winter quarters after an absence of twenty-two days. He had proceeded round the coast westward as far as Liddon's Gulf, and had formed a depôt of provisions and stores at Cape Hoppner. Travelling homeward by the

coast he visited Winter Harbour, and there found the journal and record of proceedings which M'Clure of the "Investigator" had left there on his fruitless visit to Melville Island in the spring of the same year. These papers detailing the discovery of a North-West Passage, and describing the helpless condition of the "Investigator" in Mercy Bay, created great excitement on board the "Resolute" and "Intrepid." It was proposed at once to send a relief party from the "Resolute" to the Bay of Mercy, in the hope of finding the "Investigators" still there; but this proposal being decided to be impracticable, it was resolved to despatch a sledge as early in the spring as possible.

On the 18th October the first death occurred on board the "Resolute." Thomas Mobley, a marine, had been for some time suffering from latent disease of the heart. "On the 18th," says M'Dougall, "the poor fellow unconsciously went on deck without being properly clad for the change of temperature between the lower deck and that of the atmosphere. A few minutes afterwards he fell down dead. . . . The following day, a spot near the beach, on the eastern shore of Dealy Island, was selected for the burial-place, and parties were sent daily to dig the grave; but the frozen state of the ground rendered this no easy matter, and many days were occupied in getting sufficient depth beneath the surface. Even then we were compelled to rest satisfied with only two feet eight inches; and, to effect this, powder was obliged to be resorted to, in addition to pickaxes, shovels, and the usual implements for digging." The funeral took place on the 26th. On the 12th December, George Drover, captain of the forecastle of the "Intrepid," who had been in ill health since the beginning of October, breathed his last. He was buried on the 19th, his grave being side by side with that of Mobley.

Little occurred to vary the monotony of life on shipboard during midwinter. Early in March 1853 all preparations for sending away Lieutenant Bedford Pim and the relief party to Mercy Bay were completed. Pim and his party started from Dealy Island toward the close of the month. His surprising appearance in Mercy Bay on the 6th April, and the many happy results of his gallant mission of relief, have already been treated. On the 19th his party was seen returning to winter quarters. "About five P.M.," writes M'Dougall, "a party of men were despatched to assist in bringing in the sledges, and most of the officers walked out to meet Domville, who was recognised through a telescope somewhat in advance of the main body. As we grasped his hands (which, as well as his face, were as black as the ace of spades), his words, 'The *Investigator* is found, and M'Clure is close behind,' overpowered us with surprise, and the poor fellow was overwhelmed with a thousand questions ere time was allowed to answer one. Hurrying on with some of my brother officers, I had the pleasure of adding my welcome and congratulations to Captain

M'Clure and Mr Court (second master). The latter had been an old schoolfellow and afterwards a messmate of mine in H.M.S. 'Ranger.' This was our first meeting after a lapse of eleven years. Poor fellow! a few words sufficed to inform us of the miserable state from which we had rescued them, and their hearts overflowed with gratitude towards those who (by the blessing of the Almighty), had been chosen as the instruments of His never-failing mercy. Our feelings on this occasion were those of heartfelt thankfulness that our labour had not been in vain, and each member of our little community must have felt his heart glow with honest pride to reflect that he formed one of the little band whose undertakings in the cause of humanity had been crowned with such signal success. About six P.M. we had the before-mentioned officers and seven men on board. Although eager to learn all the news, close questioning was very properly postponed until their appetites had been quite satisfied." Thus do the incidents of Arctic life—in which man constantly lives face to face with death, and in which there is a constant inter-dependence between fellow navigators for help, comfort, life itself—evolve and nurture the noblest feelings of which human nature is capable.

CHAPTER II.

PRINCE PATRICK ISLAND—ADRIFT IN THE PACK—AN ARCTIC FEAST—AULD LANG SYNE.

In the early summer of 1853 the exploration of all the regions to the north and west of the winter quarters at Dealy Island was vigorously carried out, and the frequent arrival and departure of travelling parties kept the ships in a constant state of commotion, and provided abundant topics for excited discussion among the "Resolutes" and their new allies, the "Investigators." Captain Kellett, who had now many more mouths to feed than he had originally bargained for, resolved to detach a party of fourteen men, and send them to Beechey Island, to the abundantly-provisioned depôt ship, the "North Star." By this party, which set out on the 7th May, under Lieutenants Cresswell and Wynniatt, and Mr Roche, mate, he sent despatches to Sir Edward Belcher with the great news of the rescue of the "Investigators," and the discovery of the North-West Passage. Roche returned to Dealy Island with a dog-sledge within six weeks, the distance he had travelled within that time being not less than 600 miles. On the 18th M. de Bray, who had been commissioned a few days previously to remove a depôt from Point Nias to Point Fisher, returned very unexpectedly with his party. One of his men had suddenly died. "It appears," says M'Dougall, "they were near the termination of their day's work, and were pushing on to encamp on the land distant about three miles, when John Coombes (stoker to the 'Intrepid'), who a minute before had stepped out from the drag ropes, was heard to cry out, in a tone of anguish, 'Help! help!' The whole party ran to his assistance, but on reaching him they found life quite extinct." De Bray and his party had returned to Dealy Island to bury their unfortunate comrade.

During this season Commander M'Clintock ("Intrepid") and Lieutenants Mecham and Hamilton ("Resolute") made extensive and remarkable excursions from winter quarters, and succeeded in thoroughly examining Melville Island and all the land that lay to the north and north-west of it. Mecham started early in the season, with seven men and two summer sledges; went

south to Winter Harbour, and thence crossed over the land to Liddon Gulf, on the shores of which he found coal. Here, on the 16th April, the whole party, with the exception of the officer in advance and other two men, who were appointed to lead the sledges, were struck with snow-blindness. They were accordingly blindfolded, and, in staggering across the floe, under the guidance of the only men still retaining the use of their eyes, they pluckily persevered in dragging their heavy burdens. On their arrival at Cape Smyth (the limit of known land), their journey became one of discovery. At this point, however, the party rested for two days, to recruit the men, "whose legs were swollen to an alarming extent." Lieutenant Mecham employed these two days in scouring the country for game. His description of the musk-oxen of this quarter, and of their tactics under attack, is interesting: "During our stay I proceeded to the northward—overland—towards the land of Hardy Bay (on the south-west coast of the island). The land rises to an elevation of about 800 feet above the sea, and nearly all the hills are of remarkable table shape. Musk-oxen were here in very great numbers. On one plain I observed so many as seventy, grazing within a circuit of two miles. On my approach they divided into herds of about fifteen each, headed by two or three enormous bulls. Their manœuvres were so quick and regular that they were to be compared to squadrons of cavalry more than anything I could think of. One herd advanced several times at a gallop, within rifle shot, and formed in perfect line, with bulls in advance, showing a formidable front of horns. The last time they advanced at a gallop to about sixty yards, and formed in line, the bulls at the same time snorting and tearing up the snow. Immediately I fired they wheeled round, joined the main herd, and made off out of sight, *only waiting occasionally for the wounded one,*" which succeeded in escaping. Before he returned to camp, however, Mecham brought down a deer, which, together with a fine bull shot by the men during his absence, enabled these Arctic pioneers to have "a good time."

The party pushed westward to Cape Russell, the south-west extremity of Melville Island, from which a line of hitherto unknown land extended away to the north-west. Crossing over the frozen sea in the direction of this unknown region, Mecham arrived at a considerable island (Eglinton), west of Melville Island, on the 2d May. Thence pushing still westward, he discovered extensive land, to which he gave the name of Prince Patrick Island, and on the shores of which he arrived on the 6th May. Travelling along the south and west coasts of this island to Cape Manning, the discoverer came upon several pieces of decayed wood, partly buried in the sandy soil, at a point ninety feet above sea-level. From the appearance and position of this wood, Mecham was "induced to believe it had grown in the country." The extreme south-west point of the island (lat. 77° 6′ N., long.

120° 50′ W.), was named Land's End. From this point no land to the westward was observed; and from the nature of the pack which Mecham terms "tremendous," it may be inferred, that if land does exist to the westward, it is at some considerable distance from Prince Patrick Island.

Provisions running short, the gallant lieutenant resolved to retrace his steps, and, to avoid the circuitous coast route, he decided upon striking boldly across the island in a southerly direction. After crossing a dreary plain, the party found themselves in a country broken up by winding ravines. "In one of these," says M'Dougall, "a tree protruding some ten feet from a bank was discovered: it proved to be four feet in circumference. In the neighbourhood, several others were seen, all of them, be it remarked, of the same description as that found on Cape Manning. A second tree measured four feet in the round, and thirty feet in length, and a third two feet ten inches round. Several pieces of these were sawn off as specimens and firewood. In appearance, Mr Dean, our carpenter, declares it resembles larch, but in weight it bore a stronger resemblance to *lignum vitæ*, or iron-wood. . . . The position of this decayed forest was, by supposition, about 400 feet above the level of the sea." Soon afterwards Mecham, to his great disappointment, found cairns containing records left by Commander M'Clintock, who had in the meantime explored most of this district. There was nothing now to do but to march straight for Dealy Island, where the party arrived on the 6th July, after an absence of ninety-four days, during which they had explored 1163 miles; the daily rate of travelling being 12½ miles.

After handsomely acknowledging the able assistance of Mr Nares, and the admirable conduct of the men, Lieutenant Mecham concludes the report of his journey with the following remarks: "I beg to state that, besides the absence of traces (of Franklin's expedition) being a negative proof that the missing crews have not visited any part of the land discovered during this journey, I have further to add, that the character and appearance of the pack driven against the land, and in every direction to seaward, thoroughly convinces me of the impossibility of penetrating with ships to the southward and westward, against such tremendous impediments."

Before the beginning of August (1853), water had been making alongside the "Resolute," and Captain Kellett, having received the results of his sledge parties, and having become convinced that nothing further could be gained by searching in a *north-west* direction, resolved to set sail for Beechey Island as soon as the ice should break up. Early in August the ice outside Bridport Inlet, in which the "Resolute" and "Intrepid" were confined, was in motion; and on the 18th, a gale blowing from the land broke up the ice in all directions, and freed the ships. There was now a prospect of a splendid run eastward, for no ice was seen ahead. On the following day the pack was seen from the crow's-nest extending right across the ship's path. "Within twenty-

four hours," writes Osborn, "the ships were brought up by the pack of Byam Martin Island, and for many a day they lay under the extreme point of Melville Island, watching for an opening to dash across to Bathurst Land, knowing well that once under its lee northerly gales would inevitably make *land water* (an open passage running along the southern shores of the different islands), and enable them to accomplish another run for Beechey Island. Day after day passed; the drifting pack in Byam Martin Channel continued in a most unpromising state, whilst winter was fast advancing, with snow, darkness, and newly-formed ice. Happily this part of Melville Island, like every other part of the southern shores of that favoured land, was found to be abounding in game, especially musk-oxen. Such a godsend, under the circumstances, was eagerly seized by Captain Kellett, who naturally felt most anxious to save and carry the crew of the 'Investigator' in health and strength to England. All available guns and men were sent to secure fresh meat, and such was their success that about 10,000 lbs. weight of game was eventually secured, and, being soon frozen, was easily preserved for the coming winter. At one time the meat was festooned round the rigging of the 'Resolute' and 'Intrepid' until they resembled butchers' stalls far more than British discovery ships. At last, driven to risk anything rather than remain where they were for another winter, the vessels attempted to force a way through the pack, but on the 9th of September both the ships became permanently imbedded in the newly-formed ice, and a north-west gale forcing down the pack upon them, they became fairly beset, and obliged to go whither it and Providence listed. It was another disappointment to the gallant crew of the 'Investigator.' They met it with resignation, and a feeling of thankfulness that they were at any rate some 300 miles nearer home, and that in such well found ships they would assuredly be carried in safety through their fourth winter. Indeed, no pains were spared by the officers and crew of the 'Resolute' and 'Intrepid' to grant every comfort to their passengers, and to distract their thoughts from those corroding anxieties, which, perhaps more than all else, predispose to scurvy. For two months the perils encountered by the drifting ships were very great. Their safety at last appeared to be occasioned by the body of heavy ice formed by constant pressure against the unyielding ships, the strength of which set at defiance the rest of the surrounding pack. At one time, with northerly winds, they feared being set down to the southward; and if there had been a good outlet for the ice between Lieutenant Osborn's and Lieutenant Wynniatt's farthest points in 1851, it was within the bounds of probability that next season (1854) would have found the 'Resolute' and 'Intrepid' in some awkward position between Prince of Wales and Prince Albert Lands. This fear was put an end to when they found that the pack only drifted for a short time to the southward, as if to fill up tightly the

great space called Melville Sound, and then it and the ships drifted steadily away to the eastward, recovering in some measure the southing that had been made, until the pack, doubtless checked by the islands which lay across its path towards Barrow Strait, became stationary; and right glad was Captain Kellett to find that after the 12th of November his good ship was at rest, and had then reached a point about due east of Winter Harbour, in long. 101° W.—an admirable position for an early escape in the ensuing season." On the 20th September the top-gallant sails had been sent down, and the usual preparations for wintering commenced. October set in with strong breezes and a very heavy fall of snow. During this month snow pillars were erected at intervals between the vessels (which were about 400 yards apart), to guide the men passing from ship to ship in foggy weather. This range of pillars, many of which were cleverly sculptured by the sailors into the strangest specimens of grotesque statuary, did not always quite answer as a sufficient guide from ship to ship. On the last night of the year two men from the "Intrepid" came in on board the "Resolute," covered with drift, to inquire whether any one had seen their shipmate Hartnell. No one had seen the missing man, but a line of telegraph having been erected across the ice to the "Intrepid," Lieutenant Hamilton "wired" a message to the tender, inquiring whether Hartnell had come on board. This was the first occasion on which the telegraph was turned to practical use; and great was the satisfaction, in the interests of both science and humanity, when the clear, easily-read answer "Yes" was wired back to the "Resolute." It appears that Hartnell had left the "Intrepid" with the intention of crossing over to the companion ship, but after passing the first guide-post, or pillar rather, he lost sight of his own vessel, became confused, and was brought up "allstanding." He dared not move lest he should wander away in the wrong direction. What was he to do? He hit it at last. He knew he could not be more than fifty yards from the ship, so with great good sense he shouted at the top of his voice, "A man lost! a man lost!" After shouting himself hoarse, he sat down on the lee side of a snow pillar, and philosophically awaited the event. He soon saw blurred lights coming through the fog, and immediately after he was on his way back to his ship, in charge of a number of his messmates. He was called the "lost man" ever after.

At midnight on the 14th "poor Sainsbury," as he is always called by Armstrong, Osborn, and M'Dougall, died. He was buried, as has already been stated, on the 16th. The men were kept amused up to Christmas by theatricals, concerts, lectures, and classes for navigation, etc. Mr (now Captain) Nares read a paper on winds in general, descriptive of the cause and directions of land and sea breezes. "His description of the trade winds," writes M'Dougall, "was lucid and interesting, and must have con-

veyed no little amount of information to those of his hearers who could follow him." On Christmas Day the officers met the men of both ships in cordial companionship; and the last day of the year 1853 was also celebrated with a modest festival. It is appetising to glance at the list of toothsome good things that composed the bill of fare of the "Arctics" on this occasion. Kindly, garrulous M'Dougall supplies us with details of this feast, the fragrance of which, loosened from its imprisonment in the frozen atmosphere by some genial gale, floats down to us now, to stimulate our olfactories after all these years. "We all met at an excellent repast at four P.M.," says the master of the "Resolute." "First came ox-tail and hare soups, then preserved salmon; this was followed by a leg of venison, ditto of musk veal, roast ptarmigan, musk-beef pie, and ham, with vegetables, in the shape of mashed turnips, green peas, parsnips, and preserved potatoes. The second course was composed of a plum-pudding, mince pies (real!), and numerous tarts and tartlets, the whole decorated with miniature flags, made in England for the purpose. Cheese, of course, followed, and an ample dessert of almonds and raisins, of gingerbread nuts, wine biscuits, French olives, and, though last, not least, a noble plum-cake, which would have been excellent had it not been for the numerous geological specimens (!) creating a somewhat unpleasant surprise on coming in contact with the teeth. With the aid of beer, champagne, port, and sherry, to assist the flow of soul, the dinner passed off admirably. The celebrated Arctic band being in attendance, played popular and appropriate airs, after the removal of the cloth, when, with full hearts and glasses, we drank, 'Absent friends! God bless them!'"

Songs, sentiments, recitations, etc., were kept up on the lower deck till midnight, and then, at twelve, the slow, sonorous peal of the "Resolute's" great bell rung the old year out and the new year in. The band now struck up, as a parting strain, "Auld Lang Syne," that favourite all the world over at those sacred times when men recall faces from which the great ocean and the greater has separated them.

CHAPTER III.

MECHAM'S EXTRAORDINARY JOURNEY—INTELLIGENCE OF THE "ENTERPRISE"—SIR EDWARD BELCHER'S MOVEMENTS—ABANDONMENT OF ALL SHIPS ORDERED—THE LAST OF THE ARCTIC SQUADRON—THE COURT-MARTIAL—THE "RESOLUTE" FOUND AND RESTORED.

EARLY in 1854 two men died—Hood, a marine, on the 2d January, and Wilkie, the ice-quartermaster of the "Intrepid," on the 2d of February. Death resulted in both cases from disease of the heart. Both had served within the Arctic seas under Sir James Ross and Captain Austin, so that this was their third Polar expedition, and both were remarkable for their strength and powers of endurance. M'Dougall thinks it probable that the laborious nature of Arctic travelling may have accelerated death in both cases. It is certain, at all events, that heart-disease is the cause of by far the greater numbers of deaths that take place on Arctic ships, although it has been proved that the number of casualties in these regions is not greater —is on an average less—than occurs in H.M. ships stationed in lower latitudes.

On the 1st February Captain Kellett ordered Lieutenant Hamilton to hold himself in readiness to conduct a travelling party to Beechey Island early in March; and on the 4th of that month the party, consisting of Hamilton, Roche, Mr Court, late of the "Investigator" abandoned during the summer of 1853, with nine men, nine dogs, and two runner sledges, set out on their journey. On the 3d April Lieutenant Mecham and Mr Krabbé left the ship, the former to visit the Princess Royal Islands in Prince of Wales Strait, the latter to travel to Mercy Bay and report upon the condition of the "Investigator." Krabbé's report on the abandoned ship has already been given, and it is only necessary now briefly to mention the main incidents and results of Mecham's journey.

This most energetic officer set out with Mr Krabbé on the 3d April, and reached Dealy Island on the 12th, from the depôt of which they provisioned their sledges. They then passed on to Winter Harbour, and thence shaped their course for Cape Russell, the north-east extremity of Banks Land, at the north entrance to Prince of Wales Strait. On the 25th they

encamped off a low point at the entrance to an inlet, which they supposed to be Cape Russell, and on which they deposited eleven days' provisions. Here the two officers parted, Mr Krabbé going off in the direction of Mercy Bay. For three days Mecham continued to explore the inlet; but on the 28th he became convinced it was not the strait he sought. He accordingly ordered half-rations for the party, turned back, took up his depôt, and travelling westward, reached Prince of Wales Strait in two journeys. Proceeding down the strait he arrived at the Princess Royal Islands, and at the cairn erected there he was surprised and delighted to find a document stating that H.M.S. "Enterprise" (Captain Collinson), the companion ship to the "Investigator," had passed up the narrow passage to Point Peel, had returned, and, after coasting along the west shore of the strait, had wintered in 1851-52 in lat. 71° 35′ N., long. 117° 40′ W. The record further stated that further information would be found on an islet about eighty miles farther west. On the 9th Mecham reached the islet referred to, and digging around the cairn which he discovered there, he found the information of which he was in search. The records he dug up stated that parties from the "Enterprise" had visited Point Hearne on Melville Island, and had examined the north and south shores of Prince Albert Land, and that the vessel left the islet on the 27th August 1852 to explore a channel supposed to exist between that land and Wollaston. From this point Mecham resolved to return at once to the "Resolute" with his intelligence. He arrived at the Princess Royal Islands on the 13th May, provisioned his sledge there, and deposited records. Proceeding north he also deposited records at Cape Russell, and thence set out across Melville Sound toward Dealy Island. For ten miles around Cape Russell last year's ice extended *unbroken.* Dealy Island was reached on the 27th, and here Mecham found orders to proceed at once to Beechey Island. On the 12th June he arrived at the "North Star," where he received a kindly welcome from all hands. In concluding his letter of proceedings, Mecham writes: "Allow me to bring before your notice the most excellent behaviour of the men. Circumstances have obliged us frequently to travel upon reduced rations, but throughout I have never heard a murmur; and they have evinced such zeal and spirits in the performance of their work, that in spite of the tedium connected with travelling they have voluntarily performed distances which, under ordinary circumstances, I would not have ordered." On this remarkable journey, over wide reaches of frozen ocean, Lieutenant Mecham was away seventy days, during which he walked 1336 miles, the average rate being the extraordinarily high one of nineteen miles daily for ten weeks.

We unceremoniously left the "Resolute" slowly drifting eastward in the pack, and we now return to her. It will be remembered that Mecham and Krabbé had left the ship on the 3d April. On the 10th of the same month

Lieutenant Haswell, Mr Paine, clerk in charge, Messrs Newton and Ford, and nineteen men, all late of the "Investigator," left the "Resolute" for Beechey Island with two sledges and fifteen days' provisions. On the following morning a second detachment, consisting of Lieutenant Pim, Dr Armstrong, Mr Kennedy, and seventeen men, left the ship for the same destination. Commander Richards, who had arrived on the 6th with a party from the "Assistance" (Sir Edward Belcher), and who had brought letters and papers for the "Resolutes," left with his men on the 13th, and was followed by Commander M'Clintock, who took with him despatches for Sir Edward Belcher. Captain M'Clure, with his assistant-surgeon, Mr Piers; his interpreter, Mr Mierching, and seventeen of the crew of the "Investigator," started for the "North Star" on foot on the 14th April. In due time these different detachments arrived at Beechey Island, and took up their quarters on board the depôt ship.

On the 28th April Commander M'Clintock, having visited the "Assistance," returned on board the "Resolute." It will be remembered that the last we saw of the "Assistance" and its tender, the "Pioneer," was when they bore away westward from Beechey Island toward Wellington Channel. Sir Edward Belcher succeeded in carrying his vessels up Wellington and Queen's Channels to Northumberland Sound (lat. 76° 52′ N.), on the west side of Grinnell Peninsula. He succeeded in penetrating beyond the northern entrance to Queen's Channel, which he proved to open out upon the Polar Sea on the north, and between which and Jones Sound a wide strait (Belcher Channel), studded with islands, communicated. In the summer of 1853, before Captain Kellett had been able to extricate his ships from their winter quarters, Sir Edward left the northern entrance to Queen's Channel, and hurried back towards Beechey Island. In the following passage from his "Discovery of a North-West Passage," Captain Osborn endeavours to account for this precipitate movement. He says: "The return sledge parties of Commanders Richards and Osborn from Melville Island had told Captain Belcher of the position of the 'Investigator' and the accomplishment of a North-West Passage. To intercept the 'Resolute' or 'Intrepid' if they touched at Beechey Island, appeared to be the object of Sir Edward Belcher. No time was therefore to be lost in opening a communication with Beechey Island; and so important was this deemed, that farther search was abandoned, and one sledge party was left to secure a retreat as best it could, after a long and trying journey."

This statement will be best illustrated by glancing for a moment at the operations carried on in the extreme north of Queen's Channel by Belcher in the summer and autumn of 1853. In 1852 the leader of the expedition had succeeded in carrying the "Assistance" and "Pioneer" through Wellington and Queen's Channels, and securing them in winter quarters off the west coast

of Grinnell Land. As soon as sledging operations could be commenced in 1853, he set out to survey the coasts he had discovered, and to prosecute the search for the missing expedition. Passing round by the north coasts of Grinnell Land, he discovered Belcher Channel leading east into Jones Sound. On the night of the 5th June he received a number of "service letters, or official returns," from Commander Pullen, together with a report from Commander Richards, but no intelligence of Captain Kellett or his division. On the 22d Belcher received a number of despatches, which, coming originally from Commander Richards in Barrow Strait, gave full information of the finding of M'Clure's record at Winter Harbour, Melville Island, of the visit to the "Investigator" at Mercy Bay on the 6th April, and of the arrival of M'Clure on board the "Resolute" on the 19th April 1853. On the 12th July Richards arrived on board the "Assistance" (which was still detained in winter quarters off the west coast of Grinnell Land), with letters and despatches from Captain Kellett to Sir Edward Belcher. Toward the close of July, Belcher succeeded in extricating the "Assistance" from the ice. On the 25th, when sailing along the south coast of Grinnell Land, a boat was seen approaching, and soon Commander Pullen was standing on the quarter-deck of the "Assistance." After a busy evening, spent in communicating information and receiving instructions, Pullen started to return on the following morning. "I directed him," writes Belcher, "to be prepared to leave Beechey Island on the 1st September, and proceed to England, taking on board the crew of the 'Investigator,' should they arrive by the 'Intrepid,' and to leave the latter vessel as depôt at Beechey Island." Belcher now attempted to sail down Wellington Channel, but was arrested on its east coast, and about fifty miles from its mouth.

On the 11th September Lieutenant Osborn set out from the "Assistance" with despatches for Beechey Island. He returned on the 22d, announcing three important events—the arrival (at Beechey Island) of H.M. steamer the "Phœnix" (Commander Inglefield); the total loss of the "Breadalbane" transport; and the melancholy death of Lieutenant Bellot, who had perished on duty. The gallant Frenchman had volunteered to join the store ship "Phœnix" (Commander Inglefield), sent out with stores to the "North Star," at Beechey Island. A number of despatches had been brought out from England by Inglefield, and these, together with a number of papers referring to the south-western branch of the expedition, had to be forwarded without delay to Sir Edward Belcher. Bellot undertook to perform the service, and started to travel by boat and sledge along the east coast of Wellington Channel north to Cape Osborn, in the neighbourhood of which the "Assistance" was at that time detained in the ice. The journey appears to have been successfully conducted until having reached the vicinity of Cape Grinnell, about half-way between Beechey Island and Cape Osborn,

Bellot seems to have fallen through some crack in the ice, and to have perished suddenly and silently. A sentence or two from Belcher's somewhat rambling, disconnected account of this melancholy event, is all that we can present to readers on this subject: "The fate of Bellot—admired by all, the untiring supporter of Kennedy, a volunteer again with Commander Inglefield, and the intrepid adventurer in this case to carry our despatches even up to Cape Hogarth—cut off, not by any immediate disaster common to his crew, nor even in their sight, but had slipped down between the hummocks and was no more seen! a most mysterious, incomprehensible death. . . . It appears from the very incoherent statements of the men who accompanied Lieutenant Bellot, that near Cape Grinnell the ice exhibited a heavy crack, opening rapidly, and they were engaged conveying the contents of the sledge to the shore by means of Halkett's boat, when, having secured all but the sledge, the ice drifted off, Lieutenant Bellot desiring them 'to let go the line.' Two men, William Johnson and David Hook, were then with Lieutenant Bellot on the detached piece of ice. Johnson gives a most incoherent tale—loses sight suddenly of Lieutenant Bellot, and supposes him to be drowned between the opening of the floe—sees his stick, and shouts out for him by name. . . . On the other hand, the evidence of the boatswain's mate differs widely: he was on shore, not included in the catastrophe, which might have affected the minds of the two blown off; he was therefore in a better position to see, to judge, and to report truly, and dates and facts confirm his evidence. By his account he watched for them (the two men) six hours; he then travels to Cape Bowden, for which I will allow six hours more, and then suddenly finds them advancing on land and almost within hail! Now it must be remembered that the misfortune occurred on the evening of the 18th August, about eight P.M. by Mons. Bellot's *watch,* and yet on the night of the 19th the party had reassembled, after a pretty fair land travel. . . . But what appears still more incomprehensible to my mind is, two of the most distressed of the party were left behind by their companions to die, starve, or for what purpose is not indicated, and these reach the "North Star" on the 21st, where their statement is taken."

The despatches brought from Beechey Island contained no further intelligence of the operations of the western division of the expedition. On the 13th October, however, Commander Pullen paid a second visit to the "Assistance," and in the course of discussion with this officer, Sir Edward Belcher came to the conclusion that in the spring of 1854 it would be his duty to order the abandonment not only of the "Investigator," but of the "Resolute," the "Intrepid," the "Assistance," and the "Pioneer" as well. Accordingly he wrote to Captain Kellett to that effect on the 1st February. In this somewhat extraordinary despatch, and in a semi-official letter which

accompanied it, the following passages occur: "We are not now left to our own feelings, our zeal, or our judgment, and we know not what may be the orders which will arrive in July or August; but I can *foresee* them, and it becomes my duty to meet them in the same spirit. Taking into consideration, therefore, that similar orders will be given respecting the next steamer, she cannot be retained beyond the 1st September. Whatever powers may be left to me to await your extrication, I must send home every soul who is useless here. . . . Having so far explained myself, I will not hamper you with any further instructions than, *meet me at Beechey Island, with the crews of all vessels, before the 26th of August.*" In the semi-offiicial letter Belcher says: "I foresee their lordships' next instructions, and under this conviction have sent you orders *to abandon.*"

Commander Richards proceeded in the spring from the "Assistance" to the "Resolute," with these orders. Osborn states that Kellett and his officers "were all amazed when, in the following early spring, formal arrangements were made for the abandonment of all of H.M. ships within the Arctic regions in 1854. Totally ignorant of such a proceeding being the intention of the senior officer, the resources of the 'Resolute' and 'Intrepid' had been so carefully and judiciously husbanded, that with a reduced crew in each ship, they were still ready to meet the chance of not escaping in 1854, and this was the more creditable to Captains Kellett and M'Clintock, as they had had to victual the additional men and officers from the 'Investigator,' and had left an ample depôt of provisions and clothing in Melville Island, for the use of Collinson, should fate lead him there. . . . In the meantime Captain Richards, who was despatched in weather so severe as to endanger the lives of all his party, reached Captain Kellett with a 'confidential' letter from Sir Edward Belcher. That 'confidential' letter is of course now a public document, and a very remarkable one too. It contains this paragraph, which is here copied verbatim: 'Should Captain Collinson fortunately reach you, you will pursue the same course, and not under any consideration risk the detention of another season.' . . . Captain Kellett determined not to adopt any such course upon a 'confidential' letter, and immediately he despatched Captain M'Clintock to Sir Edward Belcher, to point out the perfect feasibility of saving his ships—to assure him of the provisions and stores, as well as the health of a sufficient number of officers and men, being such as would enable him to meet the possible contingency of another winter, rather than abandon H.M. ships, when they lay in the very best position for an escape, directly the ice broke up in Barrow Strait; and finally, to point to Sir Edward Belcher, that he was strongly against the desertion of so many fine ships. But the representations of Captain Kellett were unavailing. Captain Belcher sent Captain M'Clintock back with an order for the abandonment of the 'Resolute' and the 'Intrepid;' and the crew of

the 'Investigator,' who had lived through such trials and hardships for four winters, stared to see all hands gradually retreating upon Beechey Island, ready to return to England."

Reverting once more to the quarter-deck of the "Resolute," which we left for a time to follow the fortunes of Sir Edward Belcher in Wellington Channel, we find that it was on the 28th April that Commander M'Clintock returned from his fruitless mission to the "Assistance." "He brought decided orders," writes M'Dougall, "to abandon the ships." Two days after, Captain Kellett informed the assembled officers and men that it was his intention to proceed to Beechey Island with the whole crew, as soon as the various necessary arrangements were completed. These arrangements were proceeded with at once. It was quite possible that after being abandoned, the "Resolute" would require to be re-occupied either by its own or by some other crew, and in view of this contingency, everything was put away and secured; the boats were hoisted in, the booms stowed, cables coiled, the rudder taken on board, and every movable article either packed away below, or securely lashed on deck.

On Friday the 6th May, Messrs Roche, Nares, and Johnson, with seventeen men with two sledges and eight days' provisions, left for Beechey Island. Dr Domville and M. de Bray, with nine men, went away on the 8th. "At length," writes M'Dougall, "the sun rose on the morning of the last day we were to spend on board our old ship, endeared to us all by many bygone associations. Without affecting any absurd sentimentality, it may easily be imagined we all experienced feelings of regret as the time approached when we were to abandon the staunch old craft to her fate and almost certain destruction in the ice. There were a thousand and one things we could have desired to save, such as souvenirs from those we loved and respected, had our weights (the weight of luggage allowed was forty-five pounds for officers) permitted; forty-five is, however, too low a figure to indulge in luxuries. With a sigh, therefore, we were obliged to set aside the ornamental, and choose something more useful, but less romantic, in the shape of shirts, flannels, drawers, etc. All was hurry and bustle in concluding the necessary arrangements. The pilot-jack (letter D) was hoisted at the fore-topmast head, and the red ensign and pendant displayed, that in the event of her being obliged to 'knock under' to her icy antagonist, she might sink beneath the wave as many a gallant predecessor had done, with colours flying. . . . Shortly after the men's dinner, the sledges were packed, averaging 215 lbs. per man. Whilst the carpenters were employed caulking down the gun-room, skylight, and after-companion, the only means of descending to the lower deck was by the main-hatchway, and only half of that was open. The captain dined with us in the darkened gun-room, and after supper at five P.M. the carpenter with his crew prepared to close the main-hatchway. At 6.15 P.M., Captain

Kellett inspected the lower deck, holds, etc., and after drinking a glass of wine to the old 'Resolute' and her crew, the lower deck was cleared for the last time, and the main-hatchway secured. At seven P.M. precisely the four sledges, commanded by Captain Kellett, Commander M'Clintock, Mr Roche (mate), and myself, moved on in the direction of Cape Cockburn—Roche, being the junior officer, leading, whilst the captain brought up the rear as in funeral order. We numbered in all forty-two souls, viz., eleven officers and thirty-one men. . . . After advancing about a quarter of a mile, the crews of the various sledges halted simultaneously, unharnessed, and gave three hearty cheers for the 'Resolute' and 'Intrepid;' but though the ice is a good conductor of sound, we heard no response." On the 28th the western division arrived at the "North Star."

Meantime the crews of the "Assistance" and "Pioneer" were on their way toward the same destination. Captain Belcher defends his action in thus ordering the abandonment of four vessels admirably appointed, amply supplied with stores, and the crews of which were still in fair health (they had only yet spent two winters among the ice), by the following train of reflections: "Our mission was not directed to the discovery of new lands, or of the North-West Passage. It was simply to search for traces of our missing countrymen on reasonable and reliable sources; not to push, for selfish ends, on lines of coast where no reasonable hope could exist or seemed to promise; nor, by a desire of making a show on paper of extended discovery, to undermine the constitutions of my men, who might yet be doomed to endure another winter in this trying desolate region." It has been already stated that in thus abandoning his ships when the search for Franklin (already completed along the shores of the continent of America, along both coasts of Baffin's Bay, along Lancaster Sound, and throughout all the regions to the north and west of Beechey Island) had only now to be prosecuted in the circumscribed region between Boothia Peninsula and King William's Land, was believed by the majority of Belcher's officers to have been a mistake. But the orders had now gone forth, and the result must be left with the Lords of the Admiralty. Early on the 25th August the officers and men of the "Assistance" and "Pioneer" were mustered in travelling order on the ice. "The decks," writes Belcher, "had been cleanly swept, the cabins put in order, and the ship fully inspected. . . . The colours, pendant, and jack, were so secured that they might be deemed 'nailed to the mast,' and the last tapping of the caulker's mallet at my companion-hatch found an echo on many a heart, as if we had encoffined some cherished object. Accompanied by Commander Richards, we silently passed over the side; no cheers, indeed no sounds, escaped; our hearts were too full! Turning our backs upon our ships, we pursued our cheerless route over the floe, leaving behind our home, and seeking, for aught we knew, merely the change to the

depôt at Beechey Island." On the 26th August the crews of the "Assistance," "Resolute," and "Investigator," were embarked together on board the "North Star."

At noon on the 26th "a steamer off the point" was announced, and there was a rush of all hands to see the stranger vessel. Two dark, shapeless masses were seen off Cape Riley, which afterwards turned out to be the transport ships "Phœnix" (Captain Inglefield), and "Talbot" (Captain Jenkins). Arrangements were now entered into for the equal distribution of the various crews between the "North Star," "Phœnix," and "Talbot." At one P.M. on the 27th August 1854, the little squadron slipped from the ice, and, in tow of the "Phœnix," proceeded to the eastward. On the 9th September Lievely was visited, and after passing Cape Farewell a few days later, the "North Star" parted company from her consorts, and did not come up with them again until the arrival of the whole squadron in England in the first week of October.

On the 18th, 19th, and 20th October a court-martial was held on the officers in command of the abandoned ships. The case of the "Investigator" was first proceeded with. Captain M'Clure justified his leaving the ship on the ground that he had the written orders of his superior officer, Captain Kellett, for so doing. These written orders were produced, and the trial, which was merely formal, came to an end by the court declaring that Captain M'Clure and the officers and crew of the "Investigator" deserved the highest commendation for their exertions, and that each and all were fully acquitted. In restoring his sword to Captain M'Clure, Admiral Gordon, president of the court, addressed him in these terms: "The court are of opinion that your conduct throughout your arduous exertions has been most meritorious and praiseworthy."

Captain Henry Kellett was then tried for abandoning H.M.S. "Resolute." In this case the defence was the same as in the preceding. Captain Kellett pleaded the written orders of his superior, Sir E. Belcher, C.B., commanding him to abandon the "Resolute," and her steam tender, the "Intrepid." These orders having been produced, the court acquitted the captain, his officers, and crew; and in restoring Captain Kellett's sword, the president expressed "much satisfaction in returning a sword which the owner had worn with so much credit, satisfaction, and advantage to his country."

When Sir Edward Belcher was asked why he had abandoned the four ships of the Arctic squadron, he read a long defence, with selections from his special instructions from the Admiralty, and his interpretation of these. The reading of this defence being over, the court remained closed for an hour and a half, after which the following verdict was given: "The court is of opinion that, from the great confidence reposed in Captain Sir Edward Belcher by the Lords Commissioners of the Admiralty, and the ample discre-

tionary powers given to him, he was authorised, and did not act beyond his orders in abandoning H.M.S. 'Assistance,' and her tender, 'Pioneer;' or in directing the abandonment of H.M.S. 'Resolute,' and her tender, 'Intrepid,' although, if circumstances had permitted, it would have been advisable that he should have consulted with Captain Kellett previously; and the court doth adjudge the said Captain Sir Edward Belcher to be acquitted, and he is hereby acquitted accordingly." He was exonerated, however, under an implied rebuke, and the president, in returning him his sword, had no word of commendation for the acquitted officer. "The solemn silence," says Sherard Osborn, "with which the venerable president of the court-martial returned him his sword, with a bare acquittal, best conveyed the painful feelings which wrung the hearts of all professional men upon that occasion; and all felt that there was no hope of the mystery of Franklin's fate being cleared up in our time, except by some unexpected miracle."

It now only remains to say a few words respecting the abandoned vessels, and especially the strange fortunes that befell Captain Kellett's "Resolute." Of the "Investigator," we have heard the last in the report of Mr Krabbé, who visited her in Mercy Bay during the summer of 1854. Of the "Assistance" and the two steam vessels, the "Pioneer" and "Intrepid," nothing has been heard, the theory concerning them being that they were crushed in the ice. The "Resolute," however, was destined to revisit British waters.

On the 10th September 1855, a whaling barque, the "George Henry" (Captain James Buddington), was cruising in the pack off Cape Mercy, near the mouth of Cumberland Sound, in the south of Davis Strait, when a stranger ship came in sight on the north-east, and in latitude about 67°. Buddington, ascending the rigging, and examining her with his glass, pronounced her to be an abandoned vessel. She turned out to be H.M.S. "Resolute," that had drifted from the midst of the pack in which she was beset, a distance of eleven hundred miles, through Lancaster Sound, and down Baffin's Bay. Buddington, with eleven men, took possession of the vessel, and sailing southward, steered her into the United States harbour of New London. While detained in harbour, the British consul having informed the Home Government of the finding of the vessel, received instructions from England to the effect that Her Majesty abandoned all right to the vessel in favour of the gallant Captain Buddington, by whose skill and ceaseless exertion she had been brought into port. No sooner was the resolution of the British Government made known, than the Congress of the United States, in the handsomest and most graceful manner, voted the sum of 40,000 dollars for the purchase of the vessel from Buddington. The "Resolute" was then removed into one of the United States Navy yards, and thoroughly repaired and refitted for service. She was placed under the command of Captain Hartstein of the United States Navy, and on the 13th November 1855 she

left New York for England. She reached Spithead on the 12th December. A few days afterwards she was inspected by Her Majesty, Prince Albert, the Prince of Wales, the Princess Royal, and the Princess Alice. The royal party and suite were received at the gangway by Captain Hartstein, his officers, and a number of distinguished visitors. After these had been formally presented, the captain, addressing Her Majesty, said: "Allow me to welcome your Majesty on board the 'Resolute,' and, in obedience to the will of my countrymen and of the President of the United States, to restore her to you, not only as an evidence of a friendly feeling to your sovereignty, but as a token of love, admiration, and respect to your Majesty personally." This gallant address having been graciously received and acknowledged, Her Majesty went over the ship, in which she seemed deeply interested. The "Resolute" was afterwards taken to Portsmouth, and anchored abreast of the King's Stairs, in order to be formally handed over to the representatives of the British Admiralty. On Tuesday, 30th December, Captain George Seymour of the "Victory," accompanied by a party of officers and seamen, went on board the "Resolute," from the peak of which the American and British colours hung side by side. As the dockyard clock struck one, the flag-ship "Victory" hoisted the United States "stars and stripes" at her main, which she saluted with twenty-one guns. Whilst the salute was being fired, Captain Hartstein ordered the American colours to be hauled down on board the "Resolute," at whose peak the British ensign now floated alone, whilst at her main truck an English pendant was displayed. The salute being ended, and the change of colours effected, the American crew manned the rigging, and gave three hearty cheers in acknowledgment of the salute, and thus the old "Resolute" became again one of H.M. ships.

CHAPTER IV.

CAPTAIN COLLINSON'S VOYAGE IN THE "ENTERPRISE."

CAPTAIN COLLINSON, of whose "safety" Lieutenant Mecham, of the "Resolute," brought the welcome intelligence to Beechey Island, as we have seen in the last chapter, will be remembered as the senior officer in command of the Behring Strait Expedition of 1850-54, consisting of the "Enterprise" and "Investigator." The adventures of the "Investigators" we have already traced through all their varying fortunes until their rescue by Lieutenant Pim, their transference successively to the "Resolute" and the "North Star," and their arrival in England at the close of September 1854. But what of Captain Collinson and the "Enterprise?" It is important to know something of this voyage, for its termination marks the close of the "Franklin Search," so far as the British Government were concerned. Collinson, of all English naval officers engaged in the search for Franklin, was the last to abandon that search, and leave the Polar seas clear, if not of British ships, at least of British crews.

As we have already said (p. 540), the "Enterprise" and "Investigator" left the Thames, for Behring Strait, on the 10th January 1850. Early in February, however, the vessels parted company, and they continued sailing apart until they met in Magellan Strait on the 17th April. But these sister ships seem to have been ill-matched, for, after this long separation, they were only two days together when they again parted company, *never again to meet.* What became of the "Investigator," and how her captain discovered, though he was denied the triumph of navigating, a North-West Passage, we have already seen. And now a few sentences only about the voyage of the "Enterprise," by way of conclusion to the "Franklin Search," as conducted by Her Majesty's Government.

After parting company with the "Investigator," the "Enterprise" stretched away north-west across the Pacific, and after a long passage of sixty-six days, reached the Sandwich Islands. Thence, continuing on a

northward course, Collinson passed through Behring Strait, and coasting round the north-west angle of North America, arrived off Point Barrow on the 21st August. Here progress was barred on the east by the pack; but, with the view of reaching the Polar basin, Collinson bore away north, and reached lat. 73° 23′. At this point he was again stopped by ice. It was now the end of August, and without further delay, finding there was no hope of the ice breaking away that season, the captain returned to the south, and eventually reached Hong-Kong, where he wintered. In the spring of the following year he again steered for Behring Strait, passed through in July, and reached Point Tangent on the 31st of that month. Proceeding eastward along the north coast of America, the captain crossed the mouth of the Mackenzie River in midsummer, and reached Cape Bathurst on the 26th August, and Cape Parry the same afternoon. Up to this point Collinson had been following in the track of M'Clure. From Cape Parry land was seen away to the north, the same land that M'Clure had discovered. Collinson made for this land, saw Nelson Head, and soon found himself at the south entrance to a passage, which was no other than Prince of Wales Strait, in which the "Investigator" had passed the previous winter. Pushing into the channel Collinson came upon traces of the "Investigator," learned that M'Clure had wintered here, and that the opening communicated on the north with Melville Sound. He sailed on northward, and beheld the North-West Passage, in the discovery of which, however, M'Clure had anticipated him. From this point Collinson resolved to return down the strait, and sail round the south and west coast of Banks Land, until he should find a suitable harbour for the winter. This, it will be remembered, was precisely the course followed by his predecessor M'Clure. Following out his intention, Collinson sailed along the south coast, and then northward along the west coast of Banks Land. Arrived at Point Kellett, he learned, from records deposited there by M'Clure, that the "Investigator" had only left Prince of Wales Strait thirteen days before the "Enterprise" entered it.

Not finding a sufficiently sheltered bay in which to winter on the west or south coast of Banks Land, Collinson retraced his steps until he arrived at Walker Bay, on the east side of the south entrance to Prince of Wales Strait, and there he spent the winter of 1851-52. During the winter "two of our travelling parties," writes Collinson, "passed through the Prince of Wales Strait. One sledge followed the north coast of Albert Land, which I was desirous to examine, in order to judge whether a route in that direction was practicable for the ship. The other party *crossed over to Melville Island;* but having, from the rough condition of the ice, left the tent and sledge behind, they did not reach so far as Winter Harbour. They landed on Cape Providence twenty days after Captain M'Clure had left it, and saw his sledge tracks. . . . And thus, although we had passed within sixty

miles of the 'Investigator' and had fallen upon the traces of her exploring parties, we again missed the opportunity of communication."

Getting free from his winter quarters in Walker Bay on the 5th August, Collinson entered the deep inlet between what was known as Prince Albert Land on the north and Wollaston Land on the south. He was disappointed in finding this indentation closed all round by land. He then sailed south-east through Dolphin and Union Strait, "and," continues the captain, "after a hazardous navigation among rocks and shoals, embarrassed by the difficulty of not knowing how to steer during the darkness and the fogs, we reached Cambridge Bay on the 26th September, and were frozen in on the 30th." Cambridge Bay is an indentation on the north shore of Dease Strait.

On arriving in Cambridge Bay to spend the second winter in these regions, Collinson at once established friendly intercourse with the natives of the neighbourhood. These Eskimos had never been in communication with white men before, and were at first timid and diffident. As they belonged to a tribe differing in many respects from the natives of the extreme east and west, the following description of them by Captain Collinson will be read with interest: "They belong to the central tribe of Eskimos, wearing the same costume and speaking a similar dialect to the Igloolik and Boothia Isthmus people; and, unlike the Greenland and Behring Strait tribes, who perform almost all their migrations by sea, these people travel over the land and ice with sledges. The journey to Victoria Land is performed previously to the breaking up of the ice in the summer, and having no oomiaks, and but one or two kayacks, their communication with the continent is cut off until the straits are bridged over by the frost; they then assemble between Cape Colborne and the Finlayson Islands, which is the great crossing place for the reindeer, and after they have obtained as many as possible, pick up their *caches* of fish and venison, and return to the continent for the winter. They frequently visited us, bringing children of all ages, even upon the coldest days, but we only could induce them once to remain all night, when they enjoyed the dancing and singing upon the lower deck, and went to rest perfectly satisfied. Unfortunately, the following morning was the usual one for the weekly inspection of the men under arms; and after breakfast, when the ship's company began to take down their muskets and cutlasses, they became alarmed, and crept away before we were aware of it. Otherwise they were upon very good terms, becoming latterly expert in picking up whatever they could lay their hands upon, and occasioning the necessity of a vigilant look-out.

"In addition to their performing their annual migration on land instead of by water, they differ from the other tribes by inhabiting snow houses during the winter, and have therefore no fixed place of abode, all their

necessaries being carried upon sledges. The house is built in the course of two or three hours, and all trace of it disappears in the ensuing summer. Very few iron implements were found among them, the most warlike being a spear-shaped knife made of native copper, while their arrows are tipped with the same, or made of bone and flint. On one occasion they were induced to show their skill by shooting from the forecastle at the mast-head vane, and struck it frequently. They seldom cook their food, the frost apparently acting as a substitute for fire. Biscuit and sugar the children latterly acquired a taste for, but salt appeared always an abomination.

"They do not use driftwood or grass for fuel, but content themselves with the stone lamp, fed by seals' blubber, which enables them to thaw the snow for a drink. Spirits and tobacco they have as yet no notion of; and, unlike their brethren on the east and west, are free from vermin on their persons. A distance of several years was always observed to intervene in the ages of the children of the same family, which must be occasioned, I presume, by the difficulty of supporting them. All the drudgery falls upon the women; even the boys would transfer their loads to their sisters. Bears' claws, deer's teeth, and bills of birds are hung about their coats; the mother frequently pointing with pride to these evidences of success in their children. The limited means of communication which we possessed prevented our ascertaining whether any form of religion existed. One man of the tribe lived by himself in a tent, and appeared to be regarded as the angekok (priest). The dresses, with exception of those of the young girls and children, who use bear-skin, were made almost entirely of reindeer skins, sewed together with sinew by copper needles. Some of the men were tall and well made, the distinguishing features being a broad face, square forehead, and flat nose, hair coarse and black, no whiskers, and but little on the upper lip and chin. The women are generally low of stature, and disfigured on the cheek by tattooing. Among those seen the preceding year were a few with aquiline noses and a Jewish cast of countenance, forming a curious contrast with the remainder of the tribe. The tribes appear to be separated from each other by a neutral ground, across which small parties venture in the summer for barter. The limit of these people westerly appears to be the Dolphin and Union Strait, beyond which the costume alters; the oomiak and the labret appear, showing an immediate connection with the Behring Strait tribe. They do not, however, extend all the way to Point Barrow, but terminate at Herschel Island, whence, in the summer, trading parties resort to Barter Island, where they meet not only the Point Barrow people, but also the Rat Indians, who descend from the Hudson's Bay Company's post, Fort Yucon, and barter muskets, powder, beads, and knives, for furs."

An attempt was made in the spring of 1853 to penetrate northward by

sledges to the farthest point reached by Sir James Ross in 1849. The exploring party were stopped at an islet in lat. 70° 25′ N., from which no land was seen to the northward, and where the ice became impracticable for sledges. Collinson and his crew remained imprisoned till 20th August, when the ice suddenly disappeared, passing away eastward, and leaving Dease Strait free. At this period Collinson would have endeavoured to force his way northward into Barrow Strait by Peel's Sound, "but," he writes, "it was found that, from some error at Woolwich, we were eighteen tons of coal short. I had, therefore, no alternative but to make the best of my way to a coast where driftwood should be found." He accordingly sailed south-west to the mouth of Coppermine River, whence he effected his escape westward through Dolphin and Union Strait. Thence he pushed west along the coast, past Cape Bathurst and Herschel Island, until he reached Camden Bay, in which the "Enterprise" spent the third winter in the ice. The winter passed without noteworthy incident. Toward the close of July the ice broke up, and Collinson was enabled to pursue his way westward. "On the 8th August," writes the captain, "we reached Point Barrow, and made all sail to the southward. On the 11th we fell in with five American whaleships, and re-opened our communication with the civilised world after an interval of 1126 days." The "Enterprise" did not reach England till May 6th, 1855.

The principal results of this voyage were the discovery of Prince Albert Sound, and the demonstrating that the Arctic shores of the North American continent are navigable in ordinary years. The latter fact, first shown to be probable by the successful voyage of Captain Beechey round the north-west coasts of the Arctic Sea, the American whaling fleet have continued from year to year to turn to great advantage.

Thus terminates the last of the Arctic voyages undertaken by the British Government. We have now to narrate the story of the discovery of the fate of Franklin, as given in the successive expeditions of Dr John Rae and James Anderson of the Hudson's Bay Company, and of Captain M'Clintock of Her Majesty's Navy.

PART XII.

THE FATE OF FRANKLIN ASCERTAINED.

CHAPTER I.

DR RAE'S AUTOBIOGRAPHY—A HUNTING ADVENTURE—BOAT-BUILDING UNDER DIFFICULTIES—COAST OF WOLLASTON LAND EXPLORED—COAST OF VICTORIA LAND EXPLORED.

A FEW weeks after the return of Captain Belcher and his disappointed and discomfited officers and crews, all Europe and America were profoundly affected by the intelligence that the fate of Sir John Franklin's party had at last been ascertained. Englishmen had not been satisfied with the achievements of Sir Edward Belcher, who had abandoned the search for the missing expedition immediately after it had been clearly demonstrated that the "Erebus" and "Terror," or at least relics of these good ships, *would be found* within a certain well-defined and strictly circumscribed area to the west of Boothia Peninsula. The whole of the known Polar world between Baffin's Bay and Behring Strait had been searched, *except* this limited area, and it seemed unaccountable that the commander of four distinct crews, all amply provisioned, and each capable of undertaking the thorough examination of thousands of miles of coast line in a single season, should, at the moment when the course of events at last pointed out the one district now left unsearched, have ordered the total and the final abandonment of the enterprise which had employed the best efforts of the Navy for ten years, and which now seemed so near a happy attainment. For the abandonment of the Franklin search was indeed final. The expedition had been lost for nine years, and it was the opinion of many of those best qualified to judge, that no colony of Europeans, dependent on their own exertions exclusively, could support life for so long a time in a region so rigorous in climate and so barren in productions. It was understood, therefore, that the Lords Commissioners of the Admiralty had agreed to consider the further prosecution of the search as hopeless. Probably the outbreak of

the Crimean War in 1854 had something to do with their apparent unanimity on this point. However this may be, it was now evident to the friends and relatives of our missing countrymen, that in any future measures that might be undertaken with the view of clearing up the inscrutable and most painful mystery, the Government were not likely to take part. But just at this time, when many Englishmen were reluctantly making up their minds to rest content in ignorance of the fate of the great Arctic expedition of 1845, the most startling intelligence reached us—intelligence that reopened the wound in the national heart which time was beginning to heal. It suddenly became known, late in autumn 1854, that Dr John Rae, chief factor in the employment of the Hudson's Bay Company, and one of the most intrepid of British explorers, had discovered and brought home information and relics which were conclusive as to the unspeakably mournful fate of at least one-third of Franklin's officers and men.

This bold and successful explorer, certainly the most successful of all Arctic travellers engaged in the Franklin search—with perhaps the exception of M'Clintock, who only followed up the path which Rae pointed out, though he arrived at more important results than the original discoverer—has had a singularly adventurous, useful, and interesting career. With the exception of one modest volume, in which he records the results of his expedition from Repulse Bay across Rae Isthmus, and along the southern shores of Boothia Gulf (see p. 396), Dr Rae may be said to have published nothing. Yet there are few modern travellers whose boat and sledge achievements, apart from his famous expedition of 1853-54, in which he ascertained the fate of Franklin and his companions, and found many important relics of the party, are more worthy of public attention. Fortunately the present writer has been enabled to place before readers the first published narrative of the career and principal exploits of this explorer, from original notes, journals, etc., kindly supplied by Dr Rae himself for the purposes of the present work.

The Orkney Islands, a small group off the northern land's end of Scotland, has sent out a greater number of hardy and capable navigators to the Arctic seas than any other district of equal area in the British dominions. On one of these John Rae was born, at about the time when the great victory of Waterloo brought a long period of confusion and alarm to a close, and enabled men once more to turn their attention in security toward the pursuits of peace. Before the age of boyhood had passed, he was studying medicine at Edinburgh University; but in the meantime he had already received an education of another sort on the coasts and amid the barren moors and hills of the stormy Orkneys. "I there acquired as perfect a knowledge of boating," writes Rae, "as could be obtained by constant practice; because to my brothers and myself our boat was our chief plaything.

In it we used to put to sea in all weathers, the stormier the better, and we stayed out as long as it was possible to remain at sea in any small undecked craft. Our father had given us a beautiful, fast-sailing boat, of about eighteen feet, that could beat anything of her size in that part of the world. We got the boat and also her small tender for fishing, on condition that we kept them in good order; and this we did very effectually, as we took great pride in having every rope and all her four sails in perfect trim. We lived opposite the stormy 'Hoymouth,' and were exposed to constant gales from the west, which brought very heavy waves direct from the Atlantic; so we had abundant opportunities of learning boatmanship under the most trying of situations —fighting against heavy seas and strong currents running at from six to eight miles an hour. I mention this experience only because it stood me in good stead afterwards, in my Arctic work. I also learned to shoot as soon as I was old enough to lift a gun to my shoulder."

Rae passed as surgeon in Edinburgh in 1833, before he was twenty years of age, which seems to show that the splendid physical training of his youth interfered in no way with the due cultivation of his mind. In the same year (1833), he went out as surgeon on board one of the Hudson's Bay Company's ships. "On the way home," he continues, in his *naïve*, unassuming, downright fashion, "we were stopped by an impenetrable barrier of ice in Hudson Strait. At that time the Company presented a *bonus* to every captain who brought his ship home to England, and, stimulated by the expectation of this gratuity, our chief officer exerted every effort to force a passage. All in vain, however. We were obliged to turn back. New ice was now forming all round us, and so much of it clung to the forepart of the vessel (it was about two feet thick on the forecastle), that the extra weight brought her down three feet by the head.

"We went to an island called Charlton, in James Bay—covered with snow when we reached it—and found some old houses, which we repaired for winter quarters. The ship was laid on shore under shelter of a point, and the cargo taken out and placed under a tent extemporised from the sails. We had scarcely any fresh meat with us, and little lime juice or vegetables; so it was not surprising that scurvy attacked the party. Of the seventeen persons attacked, two died before the spring, and some of the others were in a very dangerous condition, when, fortunately the spring sun cleared the snow off the ground, and we found abundance of cranberries (a famous anti-scorbutic). The sick men were taken out during the warm part of the day, and left to eat as many berries as they wished. These, with some soup, made at a later date from the bud of the vetch, restored the health of the invalids without almost any other anti-scorbutic; for the small quantity of fresh meat obtained did not amount to over a few days' rations per man. My first survey work was to examine the whole shore of our island in a bark canoe, as

soon as the ice cleared away a little. This work occupied us—I had two sailors with me—three days.

"Thinking from what I saw that I should like the wild sort of life to be found in the Hudson's Bay Company's service, I accepted the appointment of surgeon at Moose Factory, the former medical man being about to resign his situation. It was at this place, on the south-west shore of James Bay—the southern arm of Hudson's Bay—that I learned all the different modes of hunting, fishing, sledge-hauling, snowshoe-walking, and camping out, both in winter and summer, spring and autumn, that were afterwards so useful to me in my Arctic expeditions.

"Some of my adventures on my hunting excursions were curious enough, and occasionally dangerous. One night I and a young friend were encamped on a low flat island some miles out to sea, at the mouth of the river. What I have dignified by the name of encampment was the small birch-built canoe turned up to windward, a bit of oil-cloth under us to keep us out of the mud, a couple of blankets as bedding, and a fold of the oil-cloth over us to keep off the rain. The night was a pitch-dark one, when a gale of wind came on from seaward, which brought the tide upon us. We quickly righted the canoe, and bundled our things into her. But where to go was the question! To attempt to reach the main shore, if we had even known exactly where it was, would have been futile, as we would have been filled in a moment among the rough waves roaring not far from us. On a neighbouring flat island, separated from that we were on by a very narrow channel not more than one hundred yards wide, there was a small 'clump' of willows six or seven feet high. To reach this clump, about a mile off, was our only chance of safety; and I gradually pushed the canoe as the tide rose higher and higher, across from our island, in the direction, as I thought, of this willow haven. It was so dark that I could not see the bow of our own canoe, but by narrowly watching the effect of the rising water, I kept a fairly good course. After about an hour of this work, all at once I could not touch bottom with my paddle, and felt the canoe was in a current running like a mill stream. This I knew was the channel between the two islands, but was I right for the willows which only occupied some fifty square yards? We paddled vigorously across, and I have had few more pleasurable sensations than when I felt—I could not see them—the bow of the canoe scrape against some branches, and we were safe. The canoe was pushed in some way among the bushes and fastened, stern to windward, under their lee. A snowstorm came on, and continued all night; a roaring sea was raging within fifteen yards of us; and my dear companion—now, alas, dead and gone—not being so habituated as myself to this work, shook so with cold that the tremor was communicated to our canoe, and his teeth chattered so as to be quite audible. The tide rose until only a foot and a half

of our willows remained above water; and by the morning's light a number of inches of snow had fallen. The tide at last fell enough to allow me to walk about, and after making my friend as comfortable as I could, I commenced shooting snow geese which were crowding about the land just left exposed. Having killed a number I went back to the canoe, but could scarcely find my companion, the snow having fallen so thick as to cover him up. Fortunately a piece of wood had got entangled among the willows. This was cut up for a fire, and a cup of tea made us comfortable. All this time I may mention that I was very wet, having no waterproof coat on, but I had no impression of being particularly uncomfortable.

"It came on so bitterly cold, that for fear of injury to my companion I paddled some nine miles against a strong current, my friend being quite helpless, and although my wet clothes and moccasins froze hard, I suffered no bad effects. I could multiply such like events by the half dozen, but I merely mention this one to show one instance of the sort of training, if it may be so called, that I went through to educate me for Arctic service. In winter, snowshoe-walking and sledging were among my chief amusements, so, after a ten years' life at Moose Factory, I had learned a good many useful lessons as to the best manner of taking care of myself in cases of difficulty.

"Sir George Simpson had the kindness to offer me the command of the Arctic expedition of which I took charge in 1846. I had the choice whether to take a fine small schooner or small open boats; I chose the latter, because they could work between the ice and the shore, and in the event of a difficulty could be hauled upon the floe.

"The work to be done, namely, the joining of the surveys of Parry and Ross, had baffled Parry himself, as well as a second Government expedition under Lyon, and a third in the 'Terror,' under Back. I went and accomplished the work at an expense of about £3000, and wintered in a manner never before or since attempted except by myself and my gallant fellows. Hall the American did something of the same kind, but with this difference, that he was landed by a whaling ship close to Repulse Bay, and he had always within reach one or more whalers upon which he could have retreated if necessary. My nearest aid was six hundred or eight hundred miles off."

The expedition which Dr Rae here alludes to has already been described. It need only be added here that the amount of money spent by the British Government in the three expeditions of Parry, Lyon, and Back, all of which failed in carrying out the proposed survey, could not have been less than £100,000.

Having successfully concluded the expedition of 1846-47, and examined and surveyed the southern shores of Boothia Gulf, from Parry's farthest (Fury and Hecla Strait) on the east side, round to Ross's farthest (Victoria Harbour) on the west side, Rae returned to England in the autumn of 1847.

At that time Sir John Richardson was preparing to set out on an expedition along the shores of the Polar Sea, in search of his friend and former comrade, Franklin; "and," says Rae, "he asked me to accompany him. This offer was very complimentary, for Sir John had received hundreds of applications from men in almost all ranks and stations to be allowed to go with him as second. After due consideration, I accepted the offer, and went with the boats from the Mackenzie, along the coast to the Coppermine, near which the ice blocked the way, and we had to abandon the boats before we reached the river (see page 468). Again in 1849 (see page 480) I visited the Arctic Sea *via* the Coppermine, but the ice was so closely packed in the direction I was told to take, that we could make no headway; and on returning to the Coppermine, and attempting to ascend it, our boat, owing to the mismanagement of the steersman, was lost, and our excellent Eskimo interpreter drowned. After this I remained one winter in charge of the Mackenzie River district; and in 1850 was again employed on Arctic service."

In the spring of 1850, whilst Rae was the officer in charge of the large Mackenzie River district for the Hudson's Bay Company, he received a despatch from the Governor of the Company, Sir George Simpson, informing him that Her Majesty's Government had asked for the "loan of his services" to command a boat expedition, to follow up the search for Franklin. The intimation expressed high appreciation of Dr Rae's abilities as an explorer, and left him in every respect untrammelled. He was to select whatever route he thought most promising, and was to conduct the enterprise in every way as he thought best. "I had no other instructions of any kind," says Rae; "but I was placed in a most difficult position, because a boat voyage, under a naval officer (Commander Pullen), had already searched the Arctic shores from Point Barrow to the Mackenzie; and the same officer was this season (1850) to examine the coast eastward from the Mackenzie. The only line of route left, the examination of which was still unprovided for, was that lying eastward from the Coppermine, but we had no small boats such as were absolutely requisite for this route, and to build them at Fort Chipewyan, where Simpson's had been built, or even at Fort Simpson, would have prevented us getting to the coast earlier than 1852. Simpson has said in his very excellent narrative that there was no wood at the north-east end of Bear Lake fit to build boats of. Notwithstanding this, I determined to make the attempt.

"We went in the autumn of 1850, with two large boats, very scantily supplied with provisions, to Fort Confidence, and immediately commenced operations. After a careful search, a clump of moderately good trees was found, which the carpenter thought could be cut into planks suitable for boats. A sufficient number of these were cut down, and boated to the fort

in a wonderfully short space of time, for we had to hurry forward, as the winter might come on any day, and shut up navigation. A difficulty, however, occurred; our carpenter, a very good one, could build the large river boats very well, because he had models to go by, but he had never seen boats such as I required. I therefore had to draft them, so that the width, shape, etc., of every plank could be measured before being put on the frame-work. In this way two very fine little boats of about 22 feet keel and 7 feet beam were constructed under great difficulties; for, as will be evident, the wood had no time to season. But it will be seen by what follows, they did their work admirably. Another difficulty was the making of the sails. These, after I had cut them out, were sewn by some of my people, but roped chiefly by myself in all important parts; the rigging being all fitted and spliced with my own hands.

"We spent a very cold winter, frequently on reduced rations, for the Indians could not bring us as much food as we required, and the quantity we had brought with us was, as I have already said, very small; yet we had enough to keep us in good health, although with no vegetables of any kind, very little flour and tea, and *no rum*, which I have never used on Arctic service, believing its use to be most prejudicial."

Rae's search expedition of 1851 consisted of a rapid but effective sledge journey from Great Bear Lake to Wollaston Land in the spring, and a summer exploring excursion along the south and east coast of Victoria Land in boats. In order to maintain the continuity of our narrative, it will be necessary briefly to summarise the reports of these journeys, and to note their interesting results.

Sledge Expedition, 1851.—Dr Rae left Fort Confidence on the 25th April, arrived at Provision Station on Kendall River on the 27th, and thence made his actual start for the shore on the 30th, with two men and two sledges drawn by dogs. A fatigue party of three men and two dogs accompanied him to within ten miles of the coast, and he was thus enabled to take forward depôts of provisions for the return journey. On the 2d May he reached Richardson Bay, about five miles west of the mouth of the Coppermine. Having resolved to travel by night, to avoid the sun-glare, Rae started with his two companions at ten P.M. on the 2d. Travelling along over the ice in an east-north-east direction, and passing Point Lockyer and Cape Krusenstern, he crossed the frozen Dolphin and Union Strait, and arrived on Douglas Island at three A.M. on the 5th. Starting again the next evening, he walked across the narrow strait between Douglas Island and Wollaston Land. He was now on entirely new ground, and, turning eastward, he marched along, examining the shore, which was found in the main uninteresting, and affording no traces of having ever been visited by Europeans. "We built snow-huts every night when cold enough to require them,"

says Rae, "and all our bedding, for three persons, amounted to about 15 or 16 lbs., consisting of one blanket and a half, and three narrow strips of hairy deerskin to lie upon. The heat of our bodies did not thaw the snow." On the 7th the snow-hut was erected in lat. 68° 31′, long. 111° 30′ W., under a steep bank, surmounted by some whitish limestone and reddish-brown sandstone *in situ.* In all his explorations, Rae has always wonderful luck with the rifle, and at this spot he shot no less than ten hares during the interval between taking the observations for time and latitude. "These fine animals were very large and tame," he writes, "and several more might have been killed, as well as many partridges, had I thought it expedient to follow them."

Pushing on eastward, Rae discovered and named the Richardson Islands and Welbank Bay. As he travelled onward on the night of the 9th, the land continued low, and had an easterly trending. The thermometer showed a temperature of 22° below zero, as some protection against which the shelter of the snow-hut was more than usually acceptable. On this night one of the men was somewhat deeply frost-bitten in the face, and Rae found that taking a set of lunar distances was rather chilly work. "I have generally found, indeed," he remarks, alluding to the degree of cold experienced on the night of the 9th May, "that a temperature which in winter would be pleasant, is in the latter part of spring almost insupportably cold. The latitude of our position was 68° 37′ 48″ by observation; longitude, by account, 110° 2′."

From this spot the farthest point of land bore east-south-east, but Rae did not think it necessary to advance farther eastward along this coast, because his survey and that of Dease and Simpson met at this point; and had he gone on farther east, he would have been going over ground already discovered and roughly surveyed. The object of Rae's search along the south coast of Wollaston Land was to seek for some strait that, leading northward, might afford a passage in the direction of the region in which it was believed by many the "Erebus" and "Terror" were to be found. No such strait was found eastward from the meridian of Douglas Island to long. 110° 2′, beyond which, in an easterly direction, the land had been examined by Dease and Simpson to Cambridge Bay. It would therefore be unavailing to travel on toward the east in search of a northward running strait. Besides, Rae had only a few more days to spare. His two boats were to be ready for him by the middle of June, and it was expected that he should start on his boat expedition not later than the middle of the month. His time was therefore strictly limited. "There were now," he says, "two courses open to me—the one, to strike overland to the north, in search of the sea-coast; the other, to return along the coast and travel westward, in hopes that some of the spaces of Wollaston Land, left blank in the charts, might prove to be the desired strait. I chose the latter of these courses." The journey westward to Douglas Island, where

the party arrived at eight A.M. on the 15th May, was favourable. Thence Rae proceeded west along the shore of Wollaston Land. Simpson's Bay and the Colville Hills were successively discovered and named, and on the morning of the 22d Cape Hamilton, a limestone cliff at least 170 feet high, was reached. "A couple of miles to seaward," says Rae, "there were thirteen Eskimo lodges, and we had an amicable interview with the poor harmless inhabitants, who were rather timid at first, but soon gained confidence. It was difficult to make them understand that no return was expected for some presents I made them. None of the women showed themselves, but all the men were well and cleanly dressed in deerskin. They were all very fat, having evidently abundance of seals' flesh and fat, large quantities of which were carefully deposited in sealskin bags under the snow. We purchased a quantity of this for our dogs, and some boots, shoes, and sealskins for our own use. After a most friendly interchange of signs and words, few of which could be understood on either side, we parted." Pullen Point and Lady Richardson Bay were discovered and named.

On the night of the 22d the coast which had hitherto had a north-west trend bent round toward the north-east. The day's journey ended on the shores of a small bay in lat. 70°, and long. 117° 16′. "The period I had allowed for our outward journey having now arrived," writes Rae, "I left our dogs and one of the men here; whilst with the other man I travelled half a day's journey farther. At 8.30 on the night of the 23d the night was beautiful; and as we started with no other encumbrance than a gun, telescope, and compass, we travelled fast over the hard snow and ice. After walking two miles to the north-west we turned a cape, which received the name of Baring (in honour of the First Lord of the Admiralty), beyond which the coast took a sudden bend to east by north for eight miles, and then became more northerly for six and a half miles, which was the farthest point reached. . . . Near the place from which I turned back the land was fully three hundred feet high, from which objects could be seen at a great distance; and some land fifteen or twenty miles off was observed, the most westerly point bearing N. 25° W. . . . It is difficult," continues Rae, "to determine whether the water dividing these two shores is a bay or a strait, but from the little information I could obtain from the Eskimos I suspect it to be the latter." Captain Collinson, in the "Enterprise," however, explored this "dividing water" in the summer of 1852, and found it a deep inlet surrounded by land. It now appears on the map as Prince Albert Sound.

On the 24th May Rae commenced his homeward journey, checking his bearings, distances, observations for latitude, etc., as he proceeded. He describes all the land from Cape Baring on the south side of the entrance to Prince Albert Sound to Cape Lady Franklin, opposite Douglas Island, as

being extremely barren, and destitute of herbage sufficient to tempt the deer migrating northward from the mainland to pause in their journey into the interior of Wollaston Land. On the 2d June he had reached Cape Hearne; on the 4th he encamped on Richardson Bay; and on the appointed day, the 10th June, he arrived at his starting-point, Provision Station, Kendall River, "having," he says, "been five days coming from the coast, during some of which we were fourteen hours on foot, and continually wading through ice-cold water or wet snow. . . . Our principal food," he continues, "was geese, partridges, and lemmings. The last being very fat and large, were very fine when roasted before the fire or between two stones. These little animals were migrating northward, and were so numerous that our dogs, as they trotted on, killed as many as supported them without any other food."

This sledge journey, extending to eleven hundred miles, including the distance from Fort Confidence to Kendall River, was the fastest on record—averaging twenty-three miles a day—or, not counting three days on which Rae and his men were compelled to keep inside their snow-hut owing to bad weather, twenty-four and a half miles a day.

Boat Expedition, 1851.—Exactly three days after Rae's return from travelling by sledge along the south shores of Wollaston Land, his boats from Fort Confidence, where they were built, were brought to the rendezvous, Provision Station, Kendall River, and everything being in readiness, the explorer and his party started on the boat expedition toward the south and east coasts of Victoria Land two days after, namely, on the 15th June 1851. While descending the Coppermine, which was much swollen, six deer and four musk-oxen were shot on the 23d and 24th, and the greater part of their flesh partially dried over a fire for future use. At the close of the month forty salmon and white fish were taken in a net at Bloody Fall in fifteen minutes, and at the mouth of the river they killed deer, fish, and geese in abundance. Throughout the entire voyage game were abundant, but as the party were plentifully supplied with provisions, Rae did not think it worth while to follow them. Going on the same principle, we shall not think it necessary to return to this subject again in the course of our necessarily brief notice of the boat expedition of 1851 to Victoria Land.

Coasting eastward from the mouth of the Coppermine along the north shore of America, through a narrow channel between the sea-ice and the beach, Rae rounded Cape Barrow on the 16th July, reached Cape Flinders on the 22d, and Cape Alexander on the 24th. The ice in Dease Strait between Victoria Land and the American mainland remained unbroken until the 27th, when Rae pushed his way across among the loose pieces to the Finlayson Islands, and thence to the mainland on the west side of Cambridge Bay. On the 1st August the party reached Cape Colborne,

the most easterly point on this coast examined by Dease and Simpson. All the coast of Victoria Land *east* from this point *was new;* and Rae entered upon the examination and survey of it with his usual zest. At Cape Colborne the shores of Victoria Land are high and steep, but toward the east they are considerably lower. Anderson, Parker, and Stromness Bays, and Macready and Kean Points were successively discovered and named. The coast was found to trend to the north-east. On the 3d August, after making a successful run of one hundred miles without stopping except to cook, the party reached lat. 69° 12′, long. 101° 58′. "On the 4th," says Rae, "the wind again set in from the north, increasing to a perfect gale; and although we could gain ground pretty fast by plying to windward, our slightly-built craft strained so much in the heavy seas that frequently washed over us—in fact, one of the boats had a plank split—that we lowered sails on gaining a partial shelter from the land, and after a tough pull of two miles, during which we were sometimes barely able to hold our ground, we entered a snug cove and secured our boats." Prince Albert Edward Bay was discovered on the 9th, but as there were no evidences that Eskimos had recently visited its shores, and no signs that Europeans had ever been on the coast, Rae pushed on northward without pausing to examine it and reached lat. 69° 42′. At this point north-easterly winds put a stop to all farther progress.

"On the 12th," writes Rae, "finding that there was little or no prospect of change in the wind, preparations were made for a foot journey of a week's duration to the northward. Leaving, therefore, directions that one of the boats should follow us along shore if the ice cleared away, I started a short time before noon, in company with three men; and as we trusted to killing both deer and geese on our way, we carried with us provisions for only four days. Hoping to avoid the sharp and rugged limestone *débris* with which the coast was lined, we at first kept some miles inland, but with trifling advantage, as the country was intersected with lakes, which obliged us to make long detours. Nor was the ground much more favourable for travelling than that nearer the beach, being, in fact, as bad as it could be, in proof of which I may mention that in two hours a pair of new moccasins, with thick, undressed buffalo-skin soles, and stout duffel socks, were completely worn out; and before the day's journey was half done, every step I took was marked with blood. We gained a direct distance of seventeen miles after a walk of twenty-four hours, and bivouacked near the shore. Although we had passed a good many fine pieces of driftwood some time before, here we had some difficulty in collecting enough to boil the kettle. Opposite our resting-place, and not far from shore, was an island some miles in extent, to which I gave the name of Halkett. Next morning, when we had travelled three miles northward, a large piece of wood was found, very opportunely, about breakfast-time. As the travelling continued as bad as ever, and as

the whole party were more or less footsore, I resolved to remain here, to obtain observations, during which time two of my men pushed on ten miles to the north, and the other went to kill deer." The results of the observations here were lat. 70° 2′, long. 101° 24′. In the evening the two men returned after their ten miles' walk northward. From their farthest point they could see to a distance northward of seven miles; and to this farthest land Rae gave the name of Pelly Point.

Here, then, Rae's discoveries in 1851 ended, and from this point the return journey commenced on the following morning, the 13th August. But it must have been with some little degree of complacency that, standing on the dreary, flat, and stony shore, he looked around upon coast and frozen strait that had never before been surveyed by civilised man—unless, perhaps, Franklin's crews, or a party belonging to his expedition, had wandered hither, after breaking out from their winter quarters at Beechey Island in 1845-46. His boat expedition along the American shore and the south and east coasts of Victoria Land, was the longest but one—that of Dease and Simpson—ever made in this region. "I discovered and named Victoria Channel, down which the Franklin ships were driven," writes Rae, "and reached, with my boats, coming from the south, a latitude higher than that in which the 'Erebus' and 'Terror' were abandoned. I knew that Victoria Strait was not a bay, because the flood-tide came from the north." On the 15th he took possession of his discoveries in the name of her Majesty. From this date onward the homeward journey was prosecuted prosperously.

On the 20th a piece of pine wood was found, resembling the butt-end of a small flag-staff. A piece of white rope was fastened to it, in the form of a loop, by two copper tacks. Both the rope and the tacks bore the Government mark, the broad arrow being stamped on the latter, and the former having a red worsted thread running through it. Half-a-mile farther on, a piece of oak, 3 feet 8 inches long, and the one-half of which was squared, was picked up. Rae regarded it as a boat's stanchion. Writing in 1851 respecting these pieces of wood, which, without doubt, had been worked with European tools, Rae says: "As there may be some difference of opinion regarding the direction from which those pieces of wood came, it may not be out of place to express here my own opinion on the subject. From the circumstance of the *flood-tide coming from the northward, along the east shore of Victoria Land,* there can be no doubt that there is a water-channel dividing Victoria Land from North Somerset, and through this channel, I believe, these pieces of wood have been carried, along with the immense quantities of ice that a long continuance of northerly and north-easterly winds, aided by the flood-tide, had driven southward." Subsequent discoveries proved that these fragments came from the lost Franklin ships. On the morning of the 24th the breeze that had been blowing from south

east by east gradually increased to a gale. Reef after reef was taken in, until the two small boats were scudding under the smallest canvas. A very heavy sea was running, which broke over, now and then, from stem to stern, and bent and twisted the slight-built but fine little craft in every direction. "At last," writes Rae, "the weather became so bad that I was reluctantly obliged to look out a harbour. This was dangerous work, as we had to run almost among the breakers before it was possible to see whether the place we made for would afford a shelter. But we were fortunate; and at 9.30 A.M., when eight miles north-east of Cape Peel, we were snugly moored in a small land-locked bay, the entrance into which was not twenty yards wide."

Point Ross was reached on the 28th, and from this there was an uninterrupted run to the mouth of the Coppermine. After five days of arduous labour, the boats were dragged up the swollen river. On the 5th and 6th the party ascended the Kendall, and on the afternoon of the 10th they arrived at Fort Confidence, at the eastern extremity of Great Bear Lake.

The results of the sledge and boat expedition conducted by Rae in 1851 were the discovery and survey of 725 miles of previously unknown coast-line of the shores of Wollaston and Victoria Lands. For his discoveries in this expedition, the Royal Geographical Society awarded their highest honour—the founder's gold medal—to Dr Rae.

After reaching Bear Lake, Rae started with his men to travel to Red River (now Winnipeg) Fort, one of the stations of the Hudson's Bay Company, near the northern frontier of Dakota, U.S. Referring to this feat, Rae says: "On our homeward journey from Bear Lake to Red River we made a forced march on snow-shoes of more than 1300 miles, chiefly to save the expense to Government of five or six months' wages for the men. From Red River I went to Minnesota, a distance of 450 miles, which was accomplished in ten days, at the rate of 50 miles a day—one day being spent under shelter from the weather. In fact, from starting on the 25th April 1851, on our sledge journey to the coast, till the spring of 1852, I and my party were continually on the move either over ice, in boats, or on snow-shoes." The entire distance travelled between the dates named was over 8000 miles.

CHAPTER II.

RAE'S LAST ARCTIC EXPEDITION—EXTRAORDINARY INTELLIGENCE—LIST OF RELICS FOUND BY RAE—WINTER AT REPULSE BAY—CONCLUSION.

IN the summer of 1853 Dr Rae was appointed by the Hudson's Bay Company to the command of an expedition planned and proposed by himself, organised mainly for geographical purposes, and also, no doubt, for the purpose of forwarding the interests of the Company, the two objects being in a sense identical. We have already seen (p. 396) that Dr Rae was employed by the Company on a similar expedition in 1846-47. He was then asked to aid in completing the survey of the Arctic shores of British North America—the special duty marked out for him being to penetrate across the unknown land from Repulse Bay to the southernmost arm of Boothia Gulf; to survey the shores of that gulf northward, so as to connect his discoveries with those of Sir John Ross; and to ascertain, beyond doubt, whether any navigable passage led westward from the gulf into the Arctic Sea on the west of Boothia Peninsula. It may be remembered that he conducted this expedition with great capacity and spirit to a most satisfactory termination, and ascertained that no waterway led west from the gulf into the Arctic Sea to the south of the parallel of about 70° N., down to which point this coast had previously been surveyed by Sir John Ross. He was now called upon to continue the work thus auspiciously begun—his orders in 1853 being to complete the survey of the *west* coast of Boothia, as in 1846 they had been to survey the east coast of that great peninsula.

Dr Rae's genius is eminently practical, and he goes to his point without deviation or delay. His labours were again to commence (as in 1846) at Repulse Bay. He therefore sailed from the north of Hudson's Bay, north through Rowe's Welcome to Repulse Bay, which he reached on the 14th August 1853. The spot at which he landed was about seven miles east of his old winter quarters in 1846-47, but on the following day he sailed down to near the old familiar locality at the mouth of North Pole River. Mooring his boat here, he landed and pitched his tents. The weather was

dark and gloomy, "and," says Rae, "the surrounding country presented a most dreary aspect. Thick masses of ice clung to the shore, whilst immense drifts of snow filled each ravine and lined every steep bank that had southerly exposure. No Eskimos were to be seen, nor any recent traces of them. Appearances could not be less promising for wintering safely, yet I determined to remain until the 1st September, by which date some opinion could be formed as to the practicability of procuring sufficient food and fuel for our support during the winter; all the provisions on board at this time being equal to only three months' consumption. The weather fortunately improved, and not a moment was lost. Nets were set, hunters were sent out to procure venison, and the majority of the party was constantly employed collecting fuel. By the end of August a supply of the latter essential article (*Andromeda tetragona*) for fourteen weeks was laid up; thirteen deer and one musk-bull had been shot, and one hundred and thirty-six salmon caught." This was a fair business-like commencement towards accumulating food and fuel for the winter, and it may be remarked here that it seems to be a maxim with Dr Rae that a country should always feed its explorer. The entire absence of Eskimos from their customary haunts in the neighbourhood caused him considerable anxiety; not that he expected any aid from them, but because he could only interpret their absence as proof that the locality no longer yielded a plentiful supply of venison, owing most probably to the circumstance that the deer had ceased to pass this locality in their migrations to and from the north.

On the 1st September it was necessary to decide whether to stay here or return, and as the Doctor did not wish to conceal from his men the risk of being frozen in on this apparently desolate and barren shore, he called them together, informed them of the slender store of provisions in hand, and remarked on the unflattering prospect of obtaining sufficient supplies during the winter months. But the men knew Dr Rae. All of them volunteered to remain. "Our preparations for a nine months' winter," writes Rae, "were continued with unabated energy. The weather, generally speaking, was favourable, and our exertions were so successful, that by the end of the month we had a quantity of provisions and fuel collected adequate to our wants up to the period of the spring migrations of the deer. One hundred and nine deer, one musk-ox (including those killed in August), fifty-three brace of ptarmigan, and one seal, had been shot, and the nets produced fifty-four salmon. Of larger animals above enumerated, forty-nine deer and the musk-ox were shot by myself, twenty-one deer by Mistegan, the (Indian) deer-hunter, fourteen by another of the men, nine by William Ouligbuck (Eskimo interpreter), and sixteen by the remaining four men." From the above it appears that Rae's party consisted of seven persons besides himself.

ESKIMO SEAL HUNTING.
(MOCK SUNS.)

During September and October the party lived in tents; but at the close of the latter month the cold became very severe, and the snow freezing hard, Rae was able to build snow houses, which afforded palatial accommodation and comfort compared with the tents. Few deer were shot during the winter, and fish were caught in inconsiderable quantities. On two occasions, on the 1st and the 27th February, a singular phenomenon was witnessed. Rae describes it as "that beautiful but rare appearance of the clouds near the sun, with three fringes of pink and green following the outline of the cloud." This splendid phenomenon was often seen during the spring, and was usually followed by a day or two of fine weather.

Having set up a carpenter's workshop built of snow, and constructed a number of sledges to be used in the spring journeys, Rae set out on the 14th March with three men, dragging sledges with provisions to be placed *en cache* in advance. The party pushed on as far as Cape Lady Pelly, on the west shore of the extreme south of Boothia Gulf. Here the provisions were deposited under a heap of huge stones, secure from all marauders except bears and men. From this point Rae returned, and arrived at Repulse Bay on the 24th, having walked altogether 170 miles in ten days. On the 31st March the great spring journey was commenced, Dr Rae taking with him four men, including the interpreter Ouligbuck, and an amount of provisions, which, taken together with the quantity deposited at Lady Pelly Bay, would be sufficient for sixty-five days. The object of the journey was to cross Boothia Peninsula from Pelly Bay to the Castor and Pollux River, discovered by Simpson, and thence to survey the west coast of Boothia northward to Bellot Strait, and thus connect Simpson's discoveries with those of Kennedy and his lieutenant, the gallant Bellot.

On the 6th April the party arrived at their depôt on Cape Lady Pelly, from which they took up their provisions. On the 10th they reached Colville Bay, on the west shore of Committee Bay, and in latitude about 68° N. On the morning of the 17th Rae reached the shore of Pelly Bay, in making a troublesome but unavoidable detour across which three days were spent. Fresh footmarks of an Eskimo and the track of a sledge were observed on the 20th, and Rae sent his interpreter and one companion to look for natives. After an absence of eleven hours the men returned, bringing with them seventeen Eskimos (five of them women). "They would give us," says Rae, "no information on which any reliance could be placed, and none of them would consent to accompany us for a day or two, although I promised to reward them liberally. *Apparently there was a great objection to our travelling across the country in a westerly direction.** Finding it was their object to puzzle the interpreter and mislead us, I declined purchasing more than

* "I found that it was their favourite hunting ground for musk-oxen, deer, etc., and that the natives had *caches* of provisions in that direction."—Dr J. Rae.

a piece of seal from them, and sent them away." On the 21st the party started westward across the peninsula. They had not proceeded far, when they were met by a very intelligent Eskimo driving a dog-sledge laden with musk-ox beef. This man readily consented to accompany Rae two days' journey. He explained that the road by which he had come would be the best for the party. Shortly after this the party was joined by another Eskimo, who had heard of white men being in the neighbourhood, and was curious to see them. Here we must quote somewhat freely from Rae's brief narrative: "This man (the new-comer) was very communicative; and on putting to him the usual questions as to his having seen 'white men' before, or any ships or boats, he replied in the negative, but said that *a party of 'Kabloonans'* (whites) *had died of starvation a long distance to the west of where we then were, and beyond a large river.* He stated that he did not know the exact place, that he never had been there, and that he could not accompany us so far. The substance of the information then and subsequently obtained from various sources," continues Dr Rae, "was to the following effect:

"In the spring four winters past (1850), whilst some Eskimo families were killing seals near the north shore of a large island, named in Arrowsmith's charts, King William Land, forty white men were seen travelling in company southward over the ice, and dragging a boat and sledges with them. They were passing along the shore of the above named island. None of the party could speak the Eskimo language so well as to be understood; but by signs the natives were led to believe *the ship or ships had been crushed by ice,* and that they were then going to where they expected to find deer to shoot. From the appearance of the men (all of whom, with the exception of one officer, were hauling on the drag-ropes of the sledges, and were looking thin), they were then supposed to be getting short of provisions, and they purchased a small seal, or piece of seal, from the natives. The officer was described as being a tall, stout, middle-aged man. When their day's journey terminated, they pitched tents to rest in.

"At a later date the same season, but previous to the disruption of the ice, the corpses of some thirty persons and some graves were discovered *on the continent,* and five dead bodies on an island near it, about a long day's journey to the north-west of the mouth of a large stream, which can be no other than Back's Great Fish River, as its description and that of the low shore in the neighbourhood of Point Ogle and Montreal Island agree exactly with that of Sir George Back. Some of the bodies were in a tent or tents, others were under the boat, which had been turned over to form a shelter, and some lay scattered about in different directions. Of those seen on the island, it was supposed that one was that of an officer (chief), as he had a telescope strapped over his shoulders, and his double-barrelled gun

lay underneath him. *From the mutilated state of many of the bodies,* and *the contents of the kettles,* it is evident that our wretched countrymen had been given to the last dread alternative—cannibalism—as a means of sustaining life. A few of the unfortunate men must have survived until the arrival of the wild-fowl (say until the end of May), as shots were heard, and fresh bones and feathers of geese were noticed near the scene of the sad event.

"There appears to have been an abundant store of ammunition, as the gunpowder was emptied by the natives in a heap on the ground, out of the kegs or cases containing it, and a quantity of shot and ball was found below high-water mark, having probably been left on the ice close to the beach, before the spring thaw commenced. There must have been a number of telescopes, guns (some of them double-barrelled), watches, compasses, etc., all of which seem to have been broken up, as I saw pieces of these different articles with the natives; and I purchased as many as possible, *together with some silver spoons and forks,* an order of merit in the form of a star, and a small plate engraved 'Sir John Franklin, K.C.B.'"

The following is Dr Rae's list of the articles belonging to the officers of the "Erebus" and "Terror," which he purchased from the Eskimos of Boothia, in 1853-54, viz.: One silver fork—crest, an animal's head with wings extended above; three silver forks—crest, a bird with wings extended; one silver table-spoon—crest, with initials, "F. R. M. C." (Captain Crozier, "Terror"); one silver spoon and one fork—crest, bird with laurel branch in mouth, motto, *Spero meliora;* one silver table-spoon, one tea-spoon, and one dessert-fork—crest, a fish's head looking upwards, with laurel branches on each side; one silver table-fork—initials, "H. D. S. G." (Henry D. S. Goodsir, assistant-surgeon, "Erebus"); one silver table-fork—initials, "A. M'D." (Alexander M'Donald, assistant-surgeon, "Terror"); one silver table-fork—initials, "G. A. M." (Gillies A. M'Bean, second master, "Terror"); one silver table-fork—initials, "J. T.;" one silver dessert-spoon—initials, "J. S. P." (John S. Peddie, surgeon, "Erebus"); one round silver plate, engraved "Sir John Franklin, K.C.B;" and a star or order of merit, with motto, "*Nec aspera terrent,* G. R. III., MDCCCXV."

None of the Eskimos with whom Rae came in contact had ever seen the "white men," either before or after death, nor had they ever been at the place where the corpses were found, but had obtained their information from natives who had been there, and who had seen the troop of starving mariners travelling over the ice.

The foregoing narrative of the results of Dr Rae's interviews with the Eskimos of Boothia, is extracted from the published account of his expedition, which the explorer wrote to the Directors of the Hudson's Bay Company. This letter, dated from York Factory, Hudson's Bay, September 1st,

1854, on the day after his arrival from Repulse Bay, was necessarily hurried and imperfect. Further particulars afterwards suggested themselves, but have never yet been published. It is with great pleasure, therefore, that the present writer is enabled to present to the public the following notes, embracing fresh particulars in connection with this most interesting episode in Arctic Exploration. These valuable notes have, in the kindest manner, been supplied by Dr Rae for the present work. We give Dr Rae's communication, so courteously sent, in the form in which it has come to hand:

"When travelling westward on my spring journey, I met an Eskimo, to whom we put the usual question, 'Have you seen white men before?' He said, 'No, but he had heard of a number having died far to the west,' pointing in that direction. Noticing a gold cap-band round his head, I asked him where he obtained it, and he said it had been got where the dead white men were, but that he himself had never been there, that he did not know the place, and could not go so far, giving me the idea that it was a great way off. I bought the cap-band from him, and told him that if he or his companions had any other things, to bring them to our winter quarters at Repulse Bay, where they would receive good prices for them. Some further details were obtained on our way home, and the purchase of one or two additional articles was effected; but it was not until our arrival at Repulse Bay, that I could gain information as to the locality where our countrymen had perished—for I clearly made out that they must have all died some years before, or they must have reached the Hudson's Bay Company's trading posts, from which Indians were sent out with abundance of ammunition, and instructions, should they find any white men, to bring them to their forts. The accounts were that at least forty men (the Eskimos find much difficulty in counting any number above five, and even that puzzles them sometimes) were seen dragging a boat or boats on sledges southward, along the west shore of King William Land, and that they had then turned eastward towards the mouth of a large river, which by description could be no other than Back's Great Fish River.

"Later in the spring, when the natives were going to this river to fish, on the first breaking up of the ice, they found what I have described in my report read before the Geographical Society. The whole of this information was sifted over and over again from a number of Eskimos, through my excellent interpreter, whose correctness I was able to prove, by getting through him information from the natives which I found written in the narratives of Ross and Parry. The articles obtained had among them the crests and initials of fifteen of the officers of both ships. For this we were awarded the £10,000 offered by Government. The correctness of my information was five years afterwards wonderfully borne out by that gained by the "Fox" Expedition in 1859, but this information did not extend

to the knowledge of any of the crews having reached the mainland ('*noo-nah*'), as in my case.

"The finding of the large quantities of clothing on the north of King William Land, and the boat with two skeletons, guns, etc., by the 'Fox' expedition, on or near its west shore, indicates that the Eskimos had not been there, the reason being, no doubt, that the natives seldom or never travel overland, when they can travel on ice."

Dr Rae believed, from information obtained at the time, that the Eskimos did not find any of the Franklin ships. On being asked about ships, the natives always reverted to Ross's steamer, the "Victory," abandoned in Boothia Gulf in 1832, all about which he had heard in the course of his expedition in 1846-47. From this vessel the natives had clearly obtained the wood, of which they had enough for all necessary purposes at that time. "My chief reason," writes Rae, "for believing that none of the ships had been found was the fact that, in 1854, the Eskimos were so destitute of wood, that although they had plenty of sealskins to make their small hunting canoes, they had no wood for frames. Now, as 1846 was fourteen years after Ross's vessel was abandoned, and as 1854 was only four years by Eskimo account—actually six years—after the Franklin ships were abandoned, the probability is that had these ships, or even one of them, been found, the natives would have had at least as much wood in 1854 as they had in 1847. The testimony of the 'Fox' expedition of 1854 tends to support this idea, as no large wooden sledges were found, and no wood of a size larger than might have been got from the keel of a boat was seen. . . . I questioned the Repulse Bay Eskimos over and over again about whether any of the ships of the starved white men had been found, but they could tell me nothing, and always went back to the story of the 'Victory,' stating that it was the only vessel from which wood had been obtained. I still believe that this was the ship to which the Eskimos referred when speaking to M'Clintock in 1859, and that they concealed the locality of the wreck lest he should wish to go there. . . . I may add that the white men, when seen alive by the Eskimos, made the latter understand by signs and a word or two of Eskimo, that they were going to the mainland (*noo-nah*) to shoot deer (*took-took*). All the party except one man, whom the natives took to be a 'chief,' and who had a telescope strapped on his shoulder, were hauling the sledges and boat or boats, and they all looked very thin. The Eskimos also remarked that it was curious that sledges were seen with *the party* when travelling, but none were seen where the dead were, although the boat or boats remained. I pointed out to them that the white men having got close to the mouth of Great Fish River, would require their boat to go up it, but as they did not require the sledges any more, they might have burnt them for fuel. A look of intelligence immediately lit up their

faces, and they said that may have been so, for there had been fires. . . . They said also that feathers of geese had been seen, so they had probably shot some of these birds—an evidence that some of the party must have lived until about the beginning of June, the date at which the geese arrive so far north. I may again say, that the Eskimos gave me clearly to understand that the greater part of the dead men were found on the main shore (*noo-nah*), only four or five being found on an island (*kai-ik-tak*). . . . What struck me at the time, as it does still, was the great mistake made by Franklin's party in attempting to save themselves by retreating to the Hudson's Bay territories. We should have thought that the fearful sufferings undergone by Franklin and his companions, Richardson and Back, on a former short journey through these barren grounds, would have deterred inexperienced men from attempting such a thing, when the well-known route to Fury Beach—certainly much more accessible than any of the Hudson's Bay Company's settlements, and by which the Rosses escaped in 1832-33—was open to them. The distance from their ships to Fury Beach was very little greater than that from where Ross's vessel was abandoned to the same place, and Franklin and his officers must have known that an immense stock of provisions still remained at the place where the 'Fury' was wrecked, and where, even so late as 1859, an immense stock of preserved vegetables, soups, tobacco, sugar, flour, etc., still remained (a much larger supply than could be found at many of the Hudson's Bay trading posts); besides, the people would have been in the direct road of searching parties or whalers. The distance to Fury Beach from where the ships were abandoned, roughly measured, is, as nearly as possible, the same as that between the ships and the true mouth of the Great Fish River, or about 210 geographical miles in a straight line. Had the retreat upon Fury Beach been resolved upon, the necessity for hauling heavy boats would have been avoided, for during the previous season (that of 1847), a small sledge party might have been despatched thither to ascertain whether the provisions and boats at the depôt were safe and available. The successful performance of such a journey should not have been difficult for an expedition consisting of 130 men who, in the record found in 1859 by M'Clintock, were reported all well in the spring of 1847."

We have seen that Dr Rae met his intelligent Eskimo "with the gold cap-band round his head," and learned from him the first trustworthy intelligence respecting the fate of Franklin, on the 21st April 1854, while conducting his party across Boothia to the Castor and Pollux River of Dease and Simpson. The principal object of this journey, it may be necessary to remind our readers, was to complete the discovery and survey of the north coasts of America by exploring the shores between Dease and Simpson's farthest on the south (Castor and Pollux River), with Kennedy's farthest on the north (Bellot Strait). The extraordinary intelligence which Rae had

just received respecting the fate of at least one-third of the officers and crews of the "Erebus" and "Terror" had no influence in making the explorer abandon the object of his journey. He still pushed west across Boothia, and at night built his snow-house in lat. 68° 29′ N., long. 90° 53′ W. The snow-house was built on the frozen bed of a stream which falls into Pelly Bay from the west, in lat. 68° 47′, and which Rae afterwards named Becher River. On the following day (the 22d) the travellers marched west for seven or eight miles to Ellice Mountain, then north-east to the east extremity of Simpson Lake, where the camp was pitched. "Our Eskimo auxiliaries," says Rae, "were now anxious to return, being, or professing to be, in dread that the wolves or wolverines should find their *cache* of meat, and destroy it." The explorer therefore paid them liberally, and bade them a friendly farewell. The natives had advised him to follow the chain of lakes that ran in a north-westerly direction and then turned sharply to the southward, and thereafter to follow the stream that flowed westward from the lakes. He learned, however, that to follow this route would lead him too far south; he therefore struck across the land westward, and found himself among a series of hills and valleys in which traces of deer and musk-oxen were of frequent occurrence. At two A.M. on the 26th, after a most laborious walk of eighteen miles across difficult country, he built his snow-hut in lat. 68° 25′, long. 93° 4′. On the evening of the same day, Rae, leaving two men to follow at their leisure, set out with the remaining two men to reach the sea at the mouth of Castor and Pollux River. At eight on the morning of the 27th Rae reached the *sea-ice,* in lat. 68° 32′ N., long. 93° 44′ 48″ W., being 3′ 38″ N., and about 13′ E. of Simpson's position of the mouth of the Castor and Pollux River. "The weather," continues Rae, "was overcast with snow when we resumed our journey at 8.30 P.M. On the 27th we directed our course directly for the shore, which we reached after a sharp walk of an hour and a half. . . . After passing several heaps of stones, which had evidently formed Eskimo *caches,* I came to a collection larger than any I had yet seen, and clearly not intended for the protection of property of any kind. The stones, generally speaking, were small, and had been built in the form of a pillar, but the top had fallen down, as the Eskimos had previously given me to understand was the case. Calling my men to land, I sent one to trace what looked like the bed of a small river, immediately west of us, whilst I and the other man cleared away the pile of stones, in search of a document. Although the cairn contained no document, there could be no doubt in my own mind, or in that of my companion, that its construction was not that of the natives. My belief that we had arrived at the Castor and Pollux River was confirmed when the person who had been sent to trace the apparent stream-bed returned with the information that it was clearly a river. My latitude of the Castor and Pollux River is 68°

28′ 37″ N., agreeing within a quarter of a mile with that of Simpson,"—which (see p. 347) was 68° 28′.

Having reached Simpson's farthest, and even seen the pillar, or, as that explorer names it, the "monument," constructed "in commemoration" of his discoveries on this coast, Rae now prepared to carry out the main object of his expedition by travelling direct north along the Boothian shores to Bellot Strait, and thus connecting the discoveries of Simpson and Kennedy. After a fatiguing march of fifteen hours, during which a distance of thirty miles was traversed, he arrived at the snow-hut of the men that had been left behind. Thence a fresh start was made. An ample stock of provisions and fuel was placed on the two best sledges, and on a third sledge Rae himself dragged his instruments, books, bedding, etc. Among the chief of the Doctor's discoveries on this coast are Murchison River, Shepherd Bay, Bence Jones' Island, Cape Colville, Stanley Island, and Point de la Guiche. Westward from Stanley Island land was discovered at the distance of seven or eight miles, and was named Matheson Island. A more recent discoverer, however, finding that this bold land was really the eastern extremity of King William Island, changed the name to Matheson Mount.

On the 6th May the snow-hut was pitched on Point de la Guiche, in lat. 68° 57′ 52″, long. 94° 32′ 58″. One of the men, Mistegan, the Indian hunter, was sent forward six miles north along the coast, where, ascending an elevation, he could see five miles still farther. "The land," says Rae, "was still trending northward, whilst to the north-west, at a considerable distance—perhaps twelve or fourteen miles—there was an appearance of land, the channel between which and the point where he stood was full of rough ice. This land, if it was such, is probably part of Matty Island or King William Land, *which latter is also clearly an island.*" At this point Dr Rae, having been detained for a number of days by foggy and snowy weather, found the time at his disposal so limited that he could not complete the whole of the survey to Bellot Strait or Brentford Bay without great risk to his party, one of whom had been for many days badly frost-bitten, and had been left behind with a companion. The explorer therefore resolved to retrace his steps without further delay, and having taken possession of his discoveries in the usual manner, he set out on his return journey on the 6th May. On the 11th he reached the spot at which two of his men had been left, and on the same night started for Repulse Bay. Pelly Bay was reached at one A.M. on the 17th, and a snow-house built near the encampment of the 20th April. Traces of Eskimos were observed here, and after supper two men were sent out to follow them up. After eight hours' absence the men returned with ten or twelve native men, women, and children. "From these people," says Rae, "I bought a silver spoon and fork. The initials 'F. R. M. C.' not engraved, but scratched with a sharp instrument on the spoon, puzzled me

much, as I knew not at the time the Christian names of the officers of Sir John Franklin's expedition." Committee Bay was reached on the 21st, and Repulse Bay on the 26th May 1854. Dr Rae found the three men whom he had left in charge here, living in abundance, and on the most friendly terms with the Eskimos, who had pitched their tents near them. "The natives had behaved in the most exemplary manner," writes Rae, "and many of them who were short of food had been supplied with venison from our stores, in compliance with my orders to that effect. It was from this time until August that I had opportunities of questioning the Eskimos regarding the information which I had already obtained, of the party of whites who had perished of starvation, and of eliciting the particulars connected with that sad event, the substance of which I have already stated."

Dr Rae had still half the original stock of pemmican on hand, together with a sufficiency of ammunition to provide supplies for another winter. The party besides was in excellent health, and he could have procured as many dogs for sledge travelling as would have been required in the event of his deciding to resume the survey of the Boothian coasts in the following year. There was little doubt that a second attempt, therefore, would be successful; "but," says Rae, "I now thought that I had a higher duty to attend to—that duty being to communicate, with as little loss of time as possible, the melancholy tidings which I had heard, and thereby save the risk of more valuable lives being jeopardised in a fruitless search in a direction in which there was not the slightest prospect of obtaining any information." He accordingly embarked with his party on the 4th, and arrived safely at York Factory on the 31st August.

CHAPTER III.

ANDERSON'S EXPEDITION—NO INTERPRETER TO BE HAD—RELICS FOUND ON MONTREAL ISLAND—RETURN OF EXPEDITION.

At the time when the surprising intelligence of Rae's discoveries in Boothia reached us at the close of 1854, England had engaged in a great European conflict. Her troops had been sent to Turkey and the Crimea, and her entire naval force was on active service, either in the Black Sea, the Baltic, or in defence of our own shores and those of our colonies. Yet even at this stormy and eventful period, when the minds of men were thoroughly mastered by the peculiarly distressing details of the Crimean War, the intelligence that the fate of one-third part of the Franklin expedition had been conclusively ascertained, not only won the ear of the entire British people, but created a degree of excitement and painful solicitude which compelled the Government to take some step to follow up the inquiry to which an unmistakable clue had been furnished by Dr Rae. But what was Her Majesty's Government to do? Neither ships, officers, nor men could be spared when the honour and security of England demanded their presence in the north and in the east of Europe. In this difficulty English ministers had recourse again to the Hudson's Bay Company, whom they requested to organise an expedition to examine Back's Great Fish River in 1855, and endeavour to discover whether any of the Franklin party, who were known to be marching for that river with the object of ascending it and reaching some trading station of the Hudson's Bay Company, still survived. A boat expedition for this purpose was accordingly organised by the Company. If Sherard Osborn's statement be strictly correct, the command of this expedition was offered to Dr Rae, the most capable traveller and explorer in the Company's service, but was by that officer declined. It seems indeed a little strange that Rae, who was the first to find the clue to the fate of Franklin, should not have endeavoured to follow up that clue and completely solve the Franklin mystery *in the autumn of* 1854, instead of withdrawing at once from the field and returning to England. In fairness, however, to Dr Rae, it is neces-

sary to explain his declinature of the offered command, and this explanation we are enabled to give, once for all, from original and private documents which the distinguished explorer has kindly placed at our disposal.

"On my return to England in 1854," says Dr Rae, "I was much blamed by people who knew nothing of the matter for not going in the summer or autumn of 1854 to the place indicated by the Eskimos as the locality where many, in all probability, the last, survivors, of the Franklin crews perished.

"This is easily explained. *It was after my return to winter quarters, in* 1854, from our very long sledge journey, that I obtained sufficiently clear information from the natives of the position where the dead white men were found. That they were all dead, and had been so for at least four years, was made evident to me, because I offered immense rewards in guns, kettles, knives, saws, files, etc., and everything that Eskimos most value, if they could tell me of even one man, or the possibility of one man, being alive. But there were actual impossibilities in the way of my getting to the place in the summer or autumn of 1854. In the first place, it is impossible to travel overland when the thawing of the snow is going on. Every stream, however small, is a torrent, and if the banks are at all high, each side has a small precipice or wall of snow that there is no getting over. Apart from this difficulty there was the estuary, many miles wide, of the Great Fish River to cross, which could not have been done without a canoe or a boat, and no such means of conveyance was available. The same difficulty existed as to King William Land (an island). But even had there been a boat or canoe available, the autumn journey could not have been made without exposing my whole party (eight in number) to the almost absolute certainty of starvation. For, as I have already said, we had to depend upon our own guns for our food—shooting deer in their autumn southward migration. But if absent on a journey we could not do this. I the previous season with my own rifle had killed nearly half the game obtained, and as my best men would have had to accompany me on the suggested *autumn expedition,* all the good shots would have been with me, many miles from the passes which the deer frequent at the period of the autumn migration. Then the season was already so far advanced that we would not likely have got back to Repulse Bay until after the formation and setting fast of the sea-ice, so that we could not have pushed southward in our boats. Such were my chief reasons for coming home; but there was another. Four ships of Her Majesty's Navy were in the Arctic Sea searching for the lost expedition in every direction but the right one.

"These ships had orders to remain out for years, a depôt ship being sent out annually to be ready in the event of disasters to give aid. I felt that information of my discoveries should be conveyed to these ships as soon as possible, so that they might be recalled. I found them home before me—

the men at least—not the ships, for *they* were abandoned. They had remained out only two winters instead of three or four as was anticipated."

It is evident, therefore, that Rae, after his return from Repulse Bay in 1854, could not have undertaken any further exploring that season with the slightest hope of success, while his return to England at the close of that year precluded him from accepting charge of a party in the following spring.

The command of the new expedition (1855) was vested in Mr James Anderson, chief factor for the Hudson's Bay Company, and a gentleman of courage and capacity. Mr Anderson arrived at Fort Resolution (Great Bear Lake) on the 20th June 1855, where he found three canoes ready for him. It had been necessary to hurry on the equipment of the expedition with unusual haste, in order to take full advantage of the open season; and in several particulars the preparations made were incomplete. The canoes were constructed of wood, with a covering of birch bark of inferior quality. The great object of the expedition was to explore the estuary of Great Fish River, and to learn everything that the Eskimos had to communicate; but *no Eskimo interpreter had been engaged for the enterprise,* none in fact being available within 2000 miles of Fort Resolution. How to communicate without a communicator was a little difficulty, not more serious, perhaps, than to perform "Hamlet" leaving out the Prince of Denmark; but still a difficulty. To the brave, however, all things are possible, more or less. Accordingly, toward the close of June, Anderson started with fifteen men, an Indian guide, and a contingent of three Yellow-Knife Indians, who were desirous of returning northward to their own lands, and were willing, for a consideration, to lend a helping hand at the portages by the way.

We cannot linger over the descent of the Great Fish River—a work of great difficulty even under the most favourable circumstances. On the 13th July the expedition reached Lake Franklin, near the mouth of Great Fish River, and within the area which Anderson was instructed to thoroughly search. At the outlet of the lake, three Eskimo lodges were discovered. From these an elderly man crossed over; but here on the very threshold of the district in which information of vital importance was expected to be found, Anderson found himself practically helpless. *He had no interpreter,* and could make nothing of the "elderly man." Not to be completely and ignominiously beaten, however, Anderson, taking a number of men with him, went over to the Eskimo lodges. They saw only one man there, and a number of women and children. Large numbers of fresh-water herrings and salmon-trout were hung up to dry, as well as some deer's meat, so that it appeared the land was not altogether naked. "We soon perceived *articles belonging to a boat or vessel,*" writes Anderson in his original journal, "such as tent poles made out of ash oars and poles, copper, sheet-iron, and tin kettles and

boilers, a tin soup tureen, a letter clip with date 1843, and pieces of boards of elm, oak, white pine, and mahogany." There were also a broken hand-saw, chisel, etc. "Some of the boards were painted white," continues Anderson, "but nothing was found by which any person or vessel could be identified. Printed and manuscript books were shown to the Eskimos, and we made them understand by signs and words that we would pay handsomely for even a piece of paper: the women were very intelligent, and, I am certain, understood us perfectly; but they said they had none. They made us understand, by pressing the abdomen inwards, pointing to the mouth, and shaking their heads piteously, that these things *came from a kayack,* the people belonging to which had died of starvation. We could do nothing more, and were compelled to leave. The absence of an interpreter was a sad blow to us."

Proceeding down the falls which form the outlet of Lake Franklin, Anderson perceived a number of kayacks on the shore. He and his party landed on the opposite side, and soon two men crossed over to them. "They immediately began to tell us," says Anderson, "of white men who starved to death, etc." The *et cetera* here cannot stand for much, as what these Eskimos *told,* indeed the whole of the conversation, so to speak, was carried on by what Dr Richardson calls "expressive and unmistakable *pantomime.*" On an island below the falls, the nippers of a pair of smith's tongs were picked up. "About five P.M.," says Anderson, "the rain began to pour down in such torrents, that I gave the word to encamp; but no fit place could be found till 7¼ P.M., when we disembarked, thoroughly soaked, on an island near the mouth of the river. No fires could be made; so that pemmican and cold water was the order of the day. Some spirits should be allowed for emergencies of this description," exclaims the chief factor. "The men really require it; and I myself should have no objection at this moment to a glass of brandy and water;" and surely, under the circumstances, no good Christian could have any objection to his having it.

On the 1st August the party reached Montreal Island, the only island of considerable size in the estuary of Great Fish River, and the spot to which, as it had doubtless been visited by the retreating party from the "Erebus" and "Terror," and probably afforded a grave to some of them, Mr Anderson's attention was specially directed. The examination of the island was commenced on the following day, and Anderson's account—quoted from that gentleman's *private journal,* not from the bare "letter of proceedings" which he forwarded to the Hudson's Bay Company—is as follows: "After an early breakfast, all hands were sent off to explore the island. They were divided into two parties—one going to the right, the other to the left. After making the tour of the island, they were directed to spread themselves out and cross it. Mr Stewart and myself waited some time to hear if the signal (three

shots) of any discovery was made. When we were on the point of departure, we heard a signal, and proceeded rapidly towards the spot. Before we reached it we were met by two of the men (Reid and Bouché), who informed us that they had discovered the place where the boat was cut up, and confirmed it by showing pieces of plank, etc., and a chip covered partially with black paint, with the name 'Erebus' carved on it. We immediately proceeded to the spot. It is a high rocky ridge, on the north-east extremity of the island. On it were several Eskimo *caches*, and among them the spot where it was evident the boat had been cut up. It was strewed with shavings, butts of planks, evidently cut by unskilful hands; small pieces of rope with the Queen's mark; pieces of bunting, etc. Several of the men having come up, the whole of the *caches* were opened; in them, besides seal oil, a variety of blacksmiths' tools, a tomahawk, a chain-hook, a piece of a bar of unwrought iron, etc., were discovered; also a bundle of pieces of wood strung together for some purpose; they were of ash, and evidently portions of snow-shoes. On one of them I discovered the name of Mr Stanley carved, the surgeon of the 'Erebus.' Every mound was examined, to discover if it were a grave, and the search most zealously carried on till dusk. The only additional things found were some pieces of hoops, parts of instruments, a piece of cane, a piece of the leather of a backgammon board, etc., but not a scrap of paper, not a human bone. The other parties had discovered nothing. On their return ten deer were seen, and five of them shot, all five bucks. I had promised a reward of £2 to whoever found the first indisputable traces of the missing party, which will now be divided between Bouché and Reid."

The above account differs but slightly from the description of the day's proceedings given by Mr Anderson in his letter to the Hudson's Bay Company. In the original journal it is stated that on one of the chips of wood, "covered partially with black paint," the name "Erebus" was carved; in the latter, Anderson states that every chip was turned over, and on one of them was found the word "Terror" carved. There is an error here, unimportant in itself, certainly, but significant as indicating an inaccurate, if not a reprehensibly *uninterested* condition of mind.

On the following day all hands were employed in searching for graves. None were found. Two fat bucks were killed. On the 5th the party crossed over from Montreal Island to the western shore (that of Adelaide Peninsula). Here Anderson divided his men into two parties, one of which went south to examine the shore of Elliot Bay, the other going off in a northward direction. Both parties returned without discovering anything. On the 6th it was found impossible to proceed farther with the canoes, which were now "rickety" from the damage they had sustained, and Anderson set out to explore the remainder of Adelaide Peninsula on foot. Not a vestige

of the missing expedition was discovered. The land, however, which had previously been described as "most barren and forbidding," seems to have had what, to hungry men, must have been quite a cheerful aspect, for "about a hundred deer, mostly bucks, were seen in the course of the day;" also Eskimo ducks—whatever these may be—loons, laughing-geese, plover, snow-birds, and a few grouse.

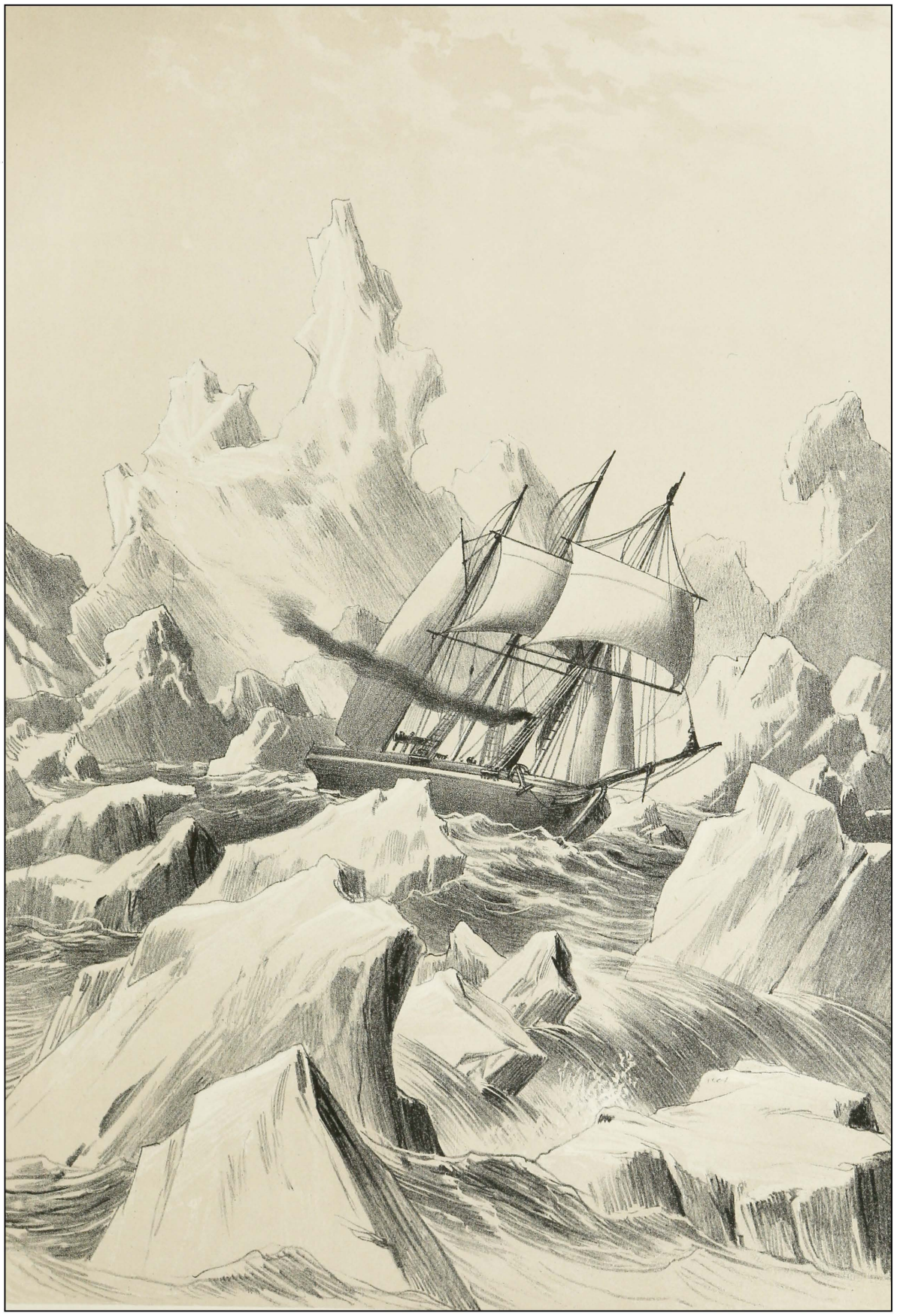
On the 7th the search along the western mainland was resumed, five men being sent along the coast, while the remainder of the party swept the country inland. Nothing was seen except at Point Ogle, where a "small piece of cod-line and a strip of striped cotton were found." Late in the evening the men reassembled and devoured *raw* the greater part of a fat buck that had been killed. Next day Maconochie Island was explored, but not a vestige of anything found. Another fat buck was killed, but what became of it is not stated; for at the encampment that night all were "miserably wet," and had to crawl under their blankets "after a supper of rather ancient pemmican and cold water." It is here and there apparent in Anderson's narratives that he had no great stomach for this fight against discomfort and hardship, and yet the "fat bucks" that decorate his picturesque page are far from inconsiderable in number. But it is evident that at this point the beginning of the end of his discoveries in this quarter is near. On the 8th, after mentioning the "ancient pemmican," Anderson exclaims: "It was now evident that all that could be done with our means had been accomplished; and that, with our frail craft, any delay in returning would compromise the safety of the whole party. It may appear strange to any one unacquainted with this desolate region," he continues, "that not a vestige of the remains of so large a party as are said to have died here should have been discovered. I can safely say that the whole coast between Elliot Bay and Point Ogle, and the country for some distance inland, has been most carefully searched, as well as the whole of Montreal Island, by as keen-eyed and zealous a set of men as exists, still not a human bone has been discovered. My opinion is that a party of men suffering from starvation would have sought out the lowest and most sheltered spots to haul the boat up and encamp. If they died in such a spot, their bodies would have, doubtless, been torn to pieces and scattered about by wild animals, and their bones covered many feet with sand. There are many such spots all along the west coast and on Montreal Island. Any papers would, of course, have been soon destroyed in this climate. Leather-covered books would have been torn to pieces by wolves or foxes. Everything we can do has been done; and it is evident, from the wretched state of the canoes, that any delay in returning up the river will compromise the safety of the party."

The return journey was accordingly commenced forthwith, and on *the*

10*th August*, which is from ten to twenty days earlier than Back, Simpson, Rae, and other explorers, thought it necessary to commence their retreat to the rivers of the mainland, Anderson had already ascended the Great Fish River to Lake Franklin. Here the party renewed their intercourse with the Eskimos. Anderson displayed before these astonished natives the contents of his "trading-cases," and explained, by expressive and unmistakable pantomime, "that he was ready to exchange the entire stock for 'any book or papers' belonging to Europeans." "They understood us perfectly," says Anderson, "said they had no papers, and to satisfy us opened up the whole of their *caches*. . . . They made us comprehend that they had not seen the ships, but had heard from others that they were wrecked, and that the crews were all *dead from starvation*."

There does not appear to have been much chance of Anderson or his men dying of starvation. He states that no privation was experienced by his party from want of provisions. Indeed, he was able to bring home three "pieces"—each 90 lbs. weight—of pemmican untouched. Sir George Back had seen immense numbers of deer and musk-oxen on the lower course of Great Fish River; but Mr Anderson only saw a few scattered deer with their fawns, and a few herds of musk-oxen. "We got as many Canada geese as we wished by running them down," says Mr Anderson. "They were moulting, and were all ganders (!)."

After a journey of great difficulty, Mr Anderson and his party arrived at Fort Reliance, on Great Slave Lake, about the middle of September.



THE "FOX" IN THE ROLLING PACK

CHAPTER IV.

CAPTAIN M'CLINTOCK'S VOYAGE IN THE "FOX"—COST OF THE EXPEDITION—A LONG WINTER-DRIFT—STEMMING THE SWELL—WHAT BELLOT STRAIT IS LIKE—DEATH OF THE ENGINEER.

DURING the year 1856, after the discoveries of Rae and Anderson had become well known, and had been amply discussed, Lady Franklin, the noble-minded wife of the lost navigator, wrote to Lord Palmerston, then the head of the Government, and to the Lords Commissioners of the Admiralty, urging them to send out a final search expedition to that limited area, "in which," as Captain Allen Young has put it, "the lost ships must be, if above water, and through which the crews must have travelled when they left their ships." Lady Franklin's appeals were as eloquent and pathetic as her aim was magnanimous and her requests reasonable. She pleaded that "a careful search be made for any possible survivor; that the bones of the dead be sought for and gathered together; that their buried records be unearthed or recovered from the hands of the Eskimos; and, above all, that their last written words, so precious to their bereaved families and friends, be saved from destruction. A mission so sacred," she urged, "is worthy of a Government which has grudged and spared nothing for its heroic soldiers and sailors in other fields of warfare, and will surely be approved by our gracious Queen, who overlooks none of her loyal subjects suffering and dying for their country's honour. This final and exhaustive search," she states, "is all I seek in behalf of the first and only martyrs to Arctic discovery in modern times, and it is all I ever intend to ask." During the same year Sir Roderick Murchison drew up a memorial for presentation to Lord Palmerston. In this document, which was signed by all the most eminent geographers and Arctic explorers then in London, the veteran *savant* thus indicates the attitude which he and the other memorialists had taken up in reference to this question: "We can scarcely believe that the British Government, which, to its great credit, has made so many efforts in various directions to discover *even the route* pursued by Franklin, should cease to prosecute research, now that the locality has been clearly indicated where the vessels or their remains *must lie*—including, as we hope, records which will throw fresh light on Arctic geography, and dispel the obscurity in which the voyage and fate

of our countrymen are still involved." Even in 1856, eleven years after the expedition had left the British shores, there were many acute and eminent men in England and America, who still believed that a number of the younger men of the "Erebus" and "Terror" might still survive. It was felt that where an Eskimo could live an Englishman would not necessarily die; and it was known that on several occasions English and American officers, as well as men, would gladly have cast in their lot with the Eskimos and pursued the same sort of life, had they not been restrained by superior authority and a sense of duty to their country. A curious evidence of the lingering belief in the popular mind that the expedition had not proved fatal to all engaged in it is afforded by the fact that in 1856 a case brought up in the Scotch Courts, in which considerable property belonging to one of the officers of the expedition was claimed by right of succession, was dismissed on the ground that no proof existed of the decease of the officer in question, who was held to be still existent *in law.*

But notwithstanding Lady Franklin's moving letters—notwithstanding the appeal of Sir Roderick Murchison and his fellow memorialists, and the wide-spread feeling among the people, that, on the question of the lost expedition, the honour of the country had not been redeemed, Lord Palmerston remained obdurate. He had consulted the "highest authorities," and had been informed that further search was hopeless. Osborn states that "all propositions of a rational nature" always meet with opposition "from persons consulted by the Admiralty," and the opinion is borne out by many an instance of "official ignorance and near-sightedness." But hope was not abandoned at the door of the Admiralty. Lady Franklin and her friends were still capable of independent action. The wife of Franklin had already, chiefly at her own expense, fitted out three expeditions, the "Prince Albert" in 1850, and again in 1851; and the "Isabel" in 1852, and her private fortune was now sadly curtailed by the expenditure thus incurred. What available means still remained, this noble and true woman resolved to embark in a final search expedition. It need only be mentioned here that a number of interested friends materially assisted Lady Franklin in her enterprise. The Hon. Mrs Fairholme, the mother, we presume, of the second lieutenant of the "Erebus" (described by his brother officer, Fitzjames, as "a most agreeable and well-informed man"), contributed £150; Captain Allen Young, who appears in the subscription list as simply "a commander in the merchant service," subscribed £500; and Sir T. D. Acland, Bart., W. Coningham, M.P. (Fitzjames's friend), Miss Georgina Hornby (a relative of F. Hornby, mate of the "Terror"), Mr and Mrs Majendie, Sir Roderick Murchison, and W. L. Newall, Esq., each subscribed £100 to the equipment of the new expedition, the total cost of which was £8400.

The "Fox," a screw yacht of 177 tons burthen, the property of Sir Richard Sutton, Bart., who had made but one trip in her to Norway, was considered specially adapted for Arctic service, and was purchased by Lady Franklin for £2000. Captain M'Clintock was appointed to the command, and the terms in which he mentions his acceptance of the appointment clearly indicate the spirit in which the service was undertaken. "On the 18th April 1857," he writes, "Lady Franklin did me the honour to offer me the command of the proposed expedition: it was of course most cheerfully accepted. As a post of honour and of some difficulty, it possessed quite sufficient charms for a naval officer who had already served in three consecutive expeditions from 1848 to 1854. I was thoroughly conversant with all the details of this peculiar service, and I confess, moreover, that my whole heart was in the cause. How could I do otherwise than devote myself to save at least the record of faithful service, even unto death, of my brother officers and seamen? And, being one of those by whose united efforts not only the Franklin search, but the geography of Arctic America, has been brought so nearly to completion, I could not willingly resign to posterity the honour of filling up even the small remaining blank upon our maps. To leave these discoveries incomplete, more especially in a quarter through which the tidal stream actually demonstrates the existence of a channel—the only remaining hope of a practicable North-West Passage—would indeed be leaving strong inducement for future explorers to reap the rich reward of our long-continued exertions. . . . Many worthy old shipmates, my companions in the previous Arctic voyages, most readily volunteered their services, and they were as cheerfully accepted, for it was my anxious wish to gather around me well-tried men, who were aware of the duties expected of them, and accustomed to naval discipline. Hence, out of twenty-five souls composing our small company, seventeen had previously served in the Arctic search." M'Clintock's second in command was Lieutenant W. R. Hobson; and Captain Allen Young, besides subscribing the handsome sum already named, for the purposes of the expedition, gave his services as a volunteer, and accepted the subordinate post of sailing-master, though during the Crimean War he had been commander of the "Adelaide" steam troop-ship, of 3000 tons. Dr Walker was appointed surgeon to the expedition. Carl Petersen, who had sailed with Penny and Dr Kane as interpreter, was telegraphed for to Copenhagen, and joined the "Fox" in the same capacity.

The "Fox" was completely refitted, thoroughly strengthened, and provisioned for twenty-eight months. Of provisions and stores Government contributed 6682 lbs. of pemmican, all the arms, powder, shot, rockets, etc. All necessaries having been taken on board, and every preparation made, the "Fox" set sail from Aberdeen on the 1st July 1857.

After a very favourable run across the Atlantic, Cape Farewell came in

sight on the 12th, Frederickshaab on the 19th, and Fiskernaes on the 23d July. Setting sail early in the morning, M'Clintock reached Godhaab on the 24th. Adjoining this settlement is the Moravian mission station of New Herrnhut, where Hans Egede established himself in 1721 and recommenced the colonisation and evangelisation of Greenland, thus reopening the communication between this great island (?) and Europe, which, established by the early Scandinavian settlers long before the discovery of America by Columbus, had closed when the first colonies decayed and became extinct in the fourteenth century. Godhaven, or Lievely, in Disco, was reached on the 31st. "I do not know," says M'Clintock, "a more enticing spot in Greenland for a week's shooting, fishing, and yachting, than Disco Fiord; hares and ptarmigans may be found along the bases of the hills, ducks are most abundant upon the fiord, and delicious salmon-trout very plentiful in the rivers." Here ten Eskimo dogs were bought, and a young native named Christian, who volunteered his services as dog-driver, was taken on board for the voyage, was washed, cropped, and dressed in sailor's clothes, vastly to his own delight, and to the admiration of his countrymen. The Waigat, with its scenery at once grand and lovely, was entered on the 4th, and on the 7th the "Fox" was hove to off Uppernavik. Here the last letters for home were landed, and fourteen dogs were embarked.

And now commenced the actual difficulties of the navigation of Baffin Bay. "To the uninitiated," explains M'Clintock, "it may be as well to observe, that each winter the sea called Baffin Bay freezes over; in spring, this vast body of ice breaks up, and drifting southward in a mass—called the *main pack* or the *middle-ice*—obstructs the passage across from east to west. The 'North Passage' is made by sailing round the north end of this pack; the 'Middle Passage,' by pushing through it; and the 'Southern Passage,' by passing round its southern extreme; but seasons occur when none of these routes is practicable." On the night of the 7th the edge of the main pack or middle-ice was reached, about seventy miles west of Uppernavik. After running along its edge and carefully examining it, M'Clintock satisfied himself that he could not force a passage through it across Baffin Bay. He therefore steered for the north in the open water along the Greenland coast, and on the 12th August arrived in Melville Bay. To his great vexation he found that Melville Bay was packed with ice driven north by the southerly winds that had prevailed for some time. No movement having taken place for several days, M'Clintock determined to run back to the south-westward on the 16th. On the following day he steamed and sailed on again, threading his way among the floes. The winds had changed to the north-eastward, and the floes began to move off the land. If the "Fox" is to escape from her ice-trap, now is the time. The tide in its affairs seemed now

to have come, and unless it be taken advantage of promptly, there will be no chance of crossing the middle-ice this season, and the explorers will either have to winter in the drifting pack, as Back had done in the "Terror," De Haven and Griffin in the "Rescue" and "Advance," and Kellett in the "Resolute," or else put back to the Greenland coast and winter at Disco. In this critical moment the true spirit of the commander was displayed, and the bolder course was resolved upon. "M'Clintock was not the man," writes Captain Allen Young, "to turn back from his work, but would rather risk everything than leave a chance of our thus passing an inactive winter. The 'Fox' was therefore steered into a promising lead or lane of water, and all sail made to the breeze. We were in high spirits," continues the same writer, "and talked of getting into the west water on the morrow. But at night a dense fog came on, the wind shifted to the southward, and the floes again began to close upon and around us. There was no help for us—we were beset, and it appeared hopelessly so, for the season was fast passing away, and the new ice beginning to form. On the 17th the wind increased, and the weather was dark and dreary. We struggled on for a few ship's lengths by the power of steam and canvas, and at night we unshipped the rudder and lifted the screw, in anticipation of a squeeze. During the three weeks following we lay in this position, endeavouring by every means to move the ship towards any visible pool or lane of water. Once only did our hopes revive. On September 7th the wind had again been from the north-westward, the ice had slackened, and we made a final and desperate attempt to reach some water seen to the northward of us. We were blasting with gunpowder, heaving, and warping through the whole day, but at night the floes again closed. We had not now even a retreat. 'The tinker had come round,' as the seamen say, 'and soldered us in;' and from that time until the 17th of April 1858 we never moved, excepting at the mercy of the ice, and drifted by the winds and currents. We had lost all command over the ship, and were frozen in the moving pack."

The usual preparations for wintering in the pack were now commenced. With the view of providing as completely as possible against a catastrophe, provisions were got up upon deck, sledges and other travelling apparatus prepared, boats' crews told off, etc.; and, after these arrangements were completed, a school for reading, writing, and navigation was opened below, while during the day the sportsmen were busy shooting seals to be used as food for the dogs. The months of mid-winter passed uneventfully. On the 26th February the skylight, which had been covered with snow during the absence of the sun, was opened, and the daylight let in below. On the following day the first seal of the year (1858) was shot, and on the 2d March four more fat seals and a number of dovekies. "Toward the latter end of March," says Captain Allen Young, "the ice was getting very unquiet, and we had fre-

quent disruptions close to the ship. On the night of the 25th of March a wide fissure, which had been opening and closing during the previous fortnight, closed with such force as to pile up tons and tons of ice within forty yards of the ship, and shattered our old floe in a line with our dock. The nipping continued, and on the following night a huge block was hurled within thirty yards of us. Another such a night, and the little 'Fox' would have been knocked into lucifer matches, and we should have been turned out upon the floe."

The "Fox" had been slowly drifting, from about the latitude of Melville Bay, southward through Baffin Bay, during the whole winter, and on the 12th April the vessel was carried southward across the Arctic circle, and consequently out of the Arctic regions altogether. "However," exclaims the gallant captain, "we have not done with it yet. Directly the ice lets us go we will re-enter the frigid zone and 'try again,' with, I trust, better success." And the period when they were to be "let go" was soon to arrive. On the 17th a heavy storm came on, and a general break-up of the ice took place. The "Fox" was released from her winter dock, and blown into apparently open water. Now all was confusion around. The floes were driven crashing against each other, the ice-hampered ocean heaved, it seemed, in universal commotion, and the danger of the moment was intensified by the blinding snow-drift, through which the magnified and distorted forms of the tumbling floes were half revealed. The rudder was shipped, some canvas was shaken out upon the vessel, and the ship was steered on an eastward course. On the 20th the "Fox" was carried rapidly southward, past the position (off Cumberland Sound) in which the "Resolute" had been picked up, and down to lat. 64° N. "On the 25th April," writes Young, "a swell entered into the pack, and gradually increased, until the ice commenced churning up against the vessel, and dashing against her sides. These violent shocks continued throughout the morning, and really seemed as if they would destroy the ship. However, by the power of steam, we got the vessel's head towards the swell, and with a strong fair wind we commenced pushing out. After many narrow escapes from contact with the icebergs, we were by night in comparatively open water. We were free, and steered a course for the settlement of Holsteinborg, in Greenland, to recruit, and to prepare for another attempt. What a change on the following morning! Not a piece of ice could be seen, save a few distant bergs. We once more had our little vessel dancing under us upon the waters, innumerable sea-birds flew around us, and the very sea, in contrast to its late frozen surface, appeared alive with seals and whales. All nature seemed alive, and we felt as if we had risen from the dead. In the evening the snow-covered peaks of Sukkertoppen were seen, and on the 28th April we moored in Holsteinborg harbour. Our anchors had not been down, nor had our feet

touched the land, since the 3d of August. Ice-bound, imprisoned, we had drifted upwards of 1200 (geographical) miles. Need it be added, how thankful we were to that kind Providence who had watched over us, and under Him, to our gallant captain, to whose unremitting attentions to our comforts and safety we owed our health and deliverance. . . . We arrived hungry and unshaven, our faces begrimed with oil-smoke, our clothes in tatters. The good women of Holsteinborg worked and washed for us, repaired our sadly-disreputable wardrobes, danced for us, sang to us, and parted from us with tears and a few little presents by way of *souvenirs*, as if we could ever forget them. We wrote a few hasty letters, hoping that they would reach home in the autumn, and sailed once more upon our voyage."

After visiting Godhaven, and taking another Eskimo lad on board there, M'Clintock set sail through the Waigat, and pushed on toward the north. Uppernavik was reached on the 31st May, and left on the 4th June. On June 6th the "Fox" was in Melville Bay, struggling along toward the north, between the main pack on the west and the ice still attached to the land on the east. Cape York was reached on the 26th June, and, after passing Cape Dudley Digges, the captain set sail westward across Baffin Bay towards Lancaster Sound, but did not arrive off Cape Horsburgh till July 12th. Unable to penetrate Lancaster Sound, which was packed with ice, M'Clintock crossed its entrance, and, with the view of awaiting the turn of events, ran down to Pond's Inlet. Here he had frequent and free communication, by means of his three Eskimos, with two natives, who stated that they had no knowledge whatever of either the missing ships of Franklin's expedition or of the abandoned vessels of Belcher's squadron. On August 6th steam was got up, and the "Fox" stood away to the north for Lancaster Sound once more. Cape Hurd was passed on the 10th, and next day M'Clintock anchored off Cape Riley, close to Beechey Island. "We crossed to the house at Beechey," says Young, "and there landed a handsome tombstone (sent out by Lady Franklin), in memory of Sir John Franklin and his companions. It was placed close to the monument erected by their shipmates to the memory of poor Bellot and those who had died in the previous searching expeditions. On the 16th August M'Clintock set sail westward from Erebus and Terror Bay, and crossed the southern entrance of Wellington Channel. On the evening of the 17th he sailed down Peel Sound without interruption for twenty-five miles, but was then brought up by unbroken ice, extending from shore to shore. There was little hope that this ice would break up during the few days of summer yet to come, "so," says M'Clintock, "I immediately turned about for Bellot Strait, as affording a better prospect of a passage into the western sea." Accordingly, the ship was steered north out of Peel Sound, east along the north coast of North Somerset Island, and then south along the western coast of Regent Inlet toward Bellot Strait.

"We found Regent Inlet clear," writes Young, "excepting a few streams of loose ice, through which we sailed easily. We passed Elwin and Batty Bays, and everything, as an old quartermaster expressed it, looked '*werry prosperious!*' . . . On the 20th we passed close to Fury Beach, where the 'Fury' was lost in 1825; but the pace was too good to stop to visit this most interesting spot. We came on with a fair wind and clear water to the latitude of Bellot Strait. Our excitement now became intense. The existence of the strait had been disputed, and upon it depended all our hopes. Running into Brentford Bay, we thought we saw ice streaming out, as if through some channel from the westward, but as yet we could see no opening; and being unable to get farther that night, we anchored in a little nook discovered on the north side of the bay. A look-out was set upon the highest hill, to watch the movements of the ice; and on the next day we made our first attempt to sail through. We started with a strong western tide, and under both steam and canvas, and after proceeding about three miles, were delighted to find that a passage really existed; but we had not got half-way through when, the tide changing, a furious current came from the westward, bringing down upon us such masses of ice that we were carried helplessly away, and were nearly dashed upon huge pieces of grounded ice and reefs of rocks, over which the floes were running. This current ran at least seven knots an hour, and was more like a bore in the Hoogley than an ordinary tide." The "Fox" had never yet been in such a dangerous drift. Her commander, however, undismayed by the racing floes, the grounded masses, and the wild rocks of the shore, past which he was swept at the rate of six miles an hour, and at a distance of less than 200 yards, succeeded in extricating her from the ice, which, rushing eastward, was hurled about by the whirlpools and eddies of the tide until eventually it was carried out into Brentford Bay. That night the "Fox" was steered into the anchorage she had left in the morning, a little nook on the north side of the eastern entrance of the strait, and which was afterwards named Depôt Bay. Here a large stock of provisions and a record of the proceedings of the expedition were landed, in anticipation of being able to penetrate through the passage into the western sea.

It is interesting to know what Bellot Strait is like. "Its appearance," writes M'Clintock, "is precisely that of a Greenland fiord. It is about twenty miles long, and scarcely a mile wide in the narrowest part; and there, within a quarter of a mile of the north shore, the depth was ascertained to be 400 feet. Its granitic shores are bold and lofty, with a very respectable sprinkling of vegetation for lat. 72°. Some of the hill ranges rise to about 1500 or 1600 feet above the sea. The low land eastward of Depôt Bay is composed of limestone, destitute alike of fossils and vegetation. The granite commences upon the west shore of Depôt Bay, and is at once bold

and rugged. . . . The strait runs very nearly east and west, but its eastern entrance is well marked by Long Island. When half-way through, both seas—Regent Inlet on the east, and Franklin Strait on the west—are visible." After the attempt to push through the strait on the 20th, the passage continued for days choked with ice, which surged backwards and forwards with the tides. On the 25th, however, a change of wind having taken place, M'Clintock prepared to make another dash at the strait. Starting from Depôt Bay, he entered the passage, but soon found he had not his sorrows to seek. At one point where the tide was strongest, and the depth only from six to ten fathoms, the ship "hardly moved over the ground, although going six and a half knots through the water." This delay was a sad interruption, and when the darkness came down, an anchorage was sought at midnight in a small indentation of the north shore, rather more than half-way through. "At early dawn," says the commander, "we again proceeded west, but for three miles only. The pack again stopped us, and we could perceive that the western sea was covered with ice." The eastern sea, however, was free, and while waiting in expectation of the disruption of the ice in the strait, M'Clintock sailed eastward into Regent Inlet, and then southward along the coast of Boothia to a point about forty miles distant. Here he deposited a supply of provisions, to be used in the event of his travelling down this coast to communicate with the natives of Port Elizabeth during the autumn or spring. Depôt Bay was again reached on the evening of the 29th.

Another attempt to push through the strait into the western sea was made on the 6th September. M'Clintock steamed through the clear waters, and made fast to the ice that still stretched across the western outlet. The western ice he found to consist of extensive, "stout" fields, held firmly together by the numerous islets and rocks that rose through them. The captain ascended Cape Bird—on the north side of the west entrance to the strait—and reconnoitred the ice to the westward. Perceiving that he could advance no farther in the "Fox" this season, he determined to return to Depôt Bay on the 11th. Captain Allen Young "was sent to an island eight miles to the south-west to look around; and on ascending the land he was astonished to see water as far as the visible horizon to the southward in Victoria Strait. While sitting down taking some angles with the sextant, he luckily turned round just in time to see a large bear crawling up the rocks to give him a pat on the head. He seized his rifle and shot him through the body, but the beast struggled down and died in the water out of reach, and thus a good depôt of beef was lost." Lieutenant Hobson, M'Clintock's second in command, was also employed on a little commission at this time. He was sent away with seven men and two dog-sledges, to carry provision depôts as far as possible to the southward. On the 12th the "Fox" and all hands, except Lieutenant Hobson, were safe in Depôt Bay—the anchor

being dropped, however, just within the bay instead of at its head. The new anchorage, which was found much more convenient than the old, was named Port Kennedy, in honour of the discoveror of Bellot Strait. Winter now came on apace, and in preparation for it the ship was cleared out, dismasted, and buried in snow, the stores were landed, and magnetic observatories, built of snow and ice, were erected.

Meantime Captain M'Clintock had matured the plan of his spring search excursions. "Of late," he writes, "we have been preparing provisions and equipments for our travelling parties. My scheme of sledge search comprehends three separate routes, and parties of four men (each). To each party a dog-sledge and driver will be attached. Hobson, Young, and I will lead them. My journey will be to the Great Fish River, examining the shores of King William Land in going and returning. Petersen will be with me. Hobson will explore the western coast of Boothia, as far as the Magnetic Pole, this autumn, I hope, and from Gateshead Island westward next spring. Young will trace the shore of Prince of Wales Land from Lieutenant Browne's farthest, if possible, and also examine between Four River Point (on the west coast of North Somerset) and Cape Bird. Our probable absence will be sixty or seventy days, commencing from about the 20th March. In this way I trust we shall complete the Franklin search and the geographical discovery of Arctic America, both left unfinished by the former expeditions; and in so doing we can hardly fail to obtain some trace, some relic, or it may be important records, of those whose mysterious fate it is the great object of our labours to discover." Lieutenant Hobson and Captain Young had conducted several preliminary excursions during the autumn, but the above programme was not to be entered upon seriously until the spring of 1859. Before the close of the year the little company in the "Fox" were mustered for the second time since leaving England to listen to the burial service, and to follow the remains of a comrade to the grave. On the 3d December 1857 Scott, the engine-driver, who had received serious injuries from a fall down the hatchway, died. He was buried on the following day in a square opening cut in the drifting floe of Baffin Bay. The next death was that of Mr Brand, the chief engineer. On the 6th November Mr Brand was in excellent health, and he and Hobson sat together for a while in the evening. "Mr Brand," says M'Clintock, "turned the conversation upon our position and employments last year; he called to remembrance poor Robert Scott, then in sound health, and the fact that, on the preceding day twelvemonth, he had carried our 'Guy Fawkes' round the ship. 'Poor fellow!' he added, mournfully, 'no one knows whose turn it may be to go next.' He finished his evening pipe, and shut his cabin door shortly after nine o'clock. This morning (7th November), at seven o'clock, his servant found him lying upon the deck a corpse,

having been several hours dead. Apoplexy appears to have been the cause." Brand was buried on the 10th November in a grave dug on shore near the ship. There was now neither engineer nor engine-driver on board the "Fox," and only two stokers, who knew nothing whatever about the machinery. The entire strength of the officers and crew, including the interpreter and the two Greenland dog-drivers, was now twenty-four.

On the 14th November the sun disappeared for the winter. Christmas was celebrated in the usual hearty fashion. The captain and officers were invited by the men to walk round the lower deck and inspect the preparations that had been made for the celebration of the occasion. The snow-white deal tables of the men were loaded with all the luxuries of the season—and the locality. Venison, beer, and a fresh supply of clay pipes, were among the most telling features of the festive board. "The variety and abundance of the eatables, tastefully laid out, was such as might well support the delusion which all seemed desirous of imposing upon themselves—that they were in a land of plenty; in fact, *all but* at home." The captain and officers contributed a large cheese and some preserves, and candles were substituted for the ordinary smoky lamps. With so many comforts, and with much good-humour and mirth, the evening was a great success, though at the moment the men were singing, dancing, and reciting on the lower deck, a "fierce north-wester howled loudly through the rigging, the snow-drift rustled swiftly past, no star appeared through the oppressive gloom, and the thermometer varied between 76° and 80° below the freezing-point." The 1st January 1859 was a *Saturday night* as well as a *New Year's Day*, and "sweethearts and wives," the famous toast on the last night of the week, was drunk by the men with more than usual feeling. On January 26th the sun reappeared, and by the middle of February the three travelling parties, under M'Clintock, Hobson, and Young, were ready to set out on their preliminary winter journeys.

CHAPTER V.

PRELIMINARY SPRING JOURNEYS—ROUTINE ON THE MARCH—IMPORTANT DISCOVERIES.

On the 17th February Captain M'Clintock and his small party set out from winter quarters on the preliminary journey southward along the west coast of Boothia to the neighbourhood of the Magnetic Pole. He proceeded overland by the route along Long Lake to the south of Bellot Strait, and, after a march of nineteen or twenty geographical miles, he reached the coast of the "western sea" (Franklin Strait), and there built his snow-hut for the night. Next day the cold was intense, the thermometer indicating 48° below zero. On the third day most of the dogs walked lame, owing to the severity of the cold and the consequent hardness of the snow. The men of course walked, so that the dogs had only the provisions and clothing to drag; but even then it was found necessary to put part of the provisions *en cache,* and to be content with a journey of fifteen to eighteen miles daily. For a number of days the cold continued extremely severe, the mercury of the artificial horizon, the freezing point of which was —39°, remained frozen, and the rum, which was at first thick like treacle, required latterly to be thawed before it could be used. Every day the party pushed on until dusk, then built their snow-hut. The equipment consisted of a very small brown holland tent (generally used to cover the snow-hut by way of roof), a Mackintosh floor-cloth and felt robes; besides this, each man had a bag of double blanketing and a pair of fur boots to sleep in. Of all Arctic explorers, M'Clintock did more than any other to perfect the details of sledge travelling. His daily routine, which was as follows, is therefore specially interesting: "I led the way," he writes; "Petersen (the interpreter) and Thomson followed, conducting their sledges, and in this manner we trudged on for eight or ten hours without halting, except when necessary to disentangle the dog harness. When we halted for the night, Thomson and I usually sawed out the blocks of compact snow, and carried them to Petersen, who acted as the master mason in building the snow-hut. The hour and a half or two hours usually employed in erecting the edifice was the most disagreeable

part of the day's labour, for, in addition to being already well tired and desiring repose, we became thoroughly chilled whilst standing about. When the hut was finished, the dogs were fed, and here the great difficulty was to ensure the weaker ones their full share in the scramble for supper; then commenced the operation of unpacking the sledge and carrying into our hut everything necessary for ourselves, such as provision and sleeping gear, as well as all boots, fur-mittens, and even the sledge dog-harness, to prevent the dogs from eating them during our sleeping hours. The door was now blocked up with snow, the cooking lamp lighted, foot gear changed, diary written up, watches wound, sleeping-bags wriggled into, pipes lighted, and the merits of the various dogs discussed, until supper was ready; the supper swallowed, the upper robe or coverlet was pulled over, and then to sleep. Next morning came breakfast, a struggle to get into frozen moccasins, after which the sledges were packed and another day's march commenced. In these little huts we usually slept warm enough, although latterly, when our blankets and clothes became loaded with ice, we felt the cold severely. When our low doorway was carefully blocked up with snow, and the cooking lamp alight, the temperature quickly rose, so that the walls became glazed, and our bedding thawed; but the cooking over, or the doorway partially opened, it as quickly fell again, so that it was impossible to sleep, or even to hold one's pannikin of tea, without putting our mitts on, so intense was the cold."

On the 22d the party could not march, owing to the violence and severity of the gale that blew from the east; but on that day a bear was shot; the disappointment of the storm-stayed men was tempered by hot, fresh steaks, while the dogs enjoyed an unwonted and ample meal of unfrozen meat. The general geological character of the shores of the west coast of Boothia was found to be granite until midway between Bellot Strait and the Magnetic Pole, when limestone cropped up, forming a low, straight shore, upon which the sledge went more easily than over the deeply-indented and rough coast to the north.

On the 1st of March M'Clintock, having arrived in the neighbourhood of the Magnetic Pole, called a halt. He was beginning to fear his journey was to prove a failure. He had come all the way from Bellot Strait hither for the purpose of communicating with the natives of this district, and gaining information which might enable him conclusively to finish the search in the summer. And now, with provisions much exhausted, and with six out of the fifteen dogs quite knocked up and useless, he could only advance one march farther. It was clear that if natives did not appear on the following day, at furthest, he must commence his return journey. It was therefore with some anxiety that he looked ahead for natives. "But we had done nothing more than look *ahead*," he writes. "When we halted, and turned

round, great indeed was my surprise and joy to see four men walking after us." M'Clintock and the interpreter Petersen now buckled on their revolvers, and advanced to meet the Eskimos. The latter halted, tethered their dogs, laid down their weapons, and calmly received the Englishman and the Dane. Petersen at once addressed them, and they told him they had been out on a seal hunt, and were returning home. "We proposed to join them," says M'Clintock, "and all were soon in motion again; but another hour brought sunset, and we learned that their snow village of eight huts was still a long way off, so we hired them, at the rate of a needle for each Eskimo, to build us a hut, which they completed in an hour. It was 8 feet in diameter and 5½ feet high. In it we all passed the night. Perhaps the records of architecture do not furnish another instance of a dwelling-house so cheaply constructed."

The explorer informed the natives, through his interpreter, that he was anxious to barter with them, and it was only with the greatest caution that he eventually guided the conversation to the subject of supreme interest—the loss, or supposed loss, of the "Erebus" and "Terror." He observed a naval button upon one of their dresses, and asking where it had been obtained, the Eskimos informed him that "it came from some white people who were starved upon an island where there are salmon (that is, an island in a river), and that the iron of which their knives were made came from the same place." None of these men had seen the white men, but one of them said he had been to the island referred to for wood and iron. Another had been to Repulse Bay, and remembered having seen seven of Dr Rae's party. These men had nothing to eat, but accepted a small quantity of bear's blubber and some water from M'Clintock. They were not provided with any clothing besides the double fur dresses they wore. They slept in their clothes, in a sitting posture, and leaning their heads forward on their breasts. Next morning M'Clintock accompanied them ten miles toward their encampment. At this point, however, he stopped, declining to accompany them any farther. A halt was therefore called, and a snow-house built. "This done," says M'Clintock, "we displayed to them our articles for barter—knives, files, needles, scissors, beads, etc.—expressed our desire to trade with them, and promised to purchase everything which belonged to the starved white men, if they would come to us on the morrow. . . . Next morning the entire village population arrived, amounting to forty-five souls, from aged people to infants in arms, and bartering commenced very briskly. First of all we purchased all the relics of the lost expedition, consisting of six silver spoons and forks; a silver medal, the property of Mr A. Macdonald, assistant-surgeon; part of a gold chain; several buttons; and knives made of the iron and wood of the wreck; also bows and arrows constructed of materials obtained from the same source. Having secured these, we pur-

chased a few frozen salmon, some seals' blubber, and venison, but could not prevail upon them to part with more than one of their fine dogs. . . . None of these people had seen the whites. One man said he had seen their bones upon the island where they died, but some were buried. Petersen also understood him to say that the boat was crushed by the ice. Almost all of them had part of the plunder."

Among this tribe of Eskimos all the old people remembered the visit of the "Victory" to the south-west shores of Boothia Gulf, and an old man named Ooblooria, who had been employed by Sir James Ross as guide, inquired respecting the welfare of that explorer, and used his Eskimo name of "Agglugga." M'Clintock inquired after the man who had been supplied with a wooden leg by Sir John Ross's carpenter, and the silence that suddenly fell upon the natives—who do not like to allude in any way to their dead—was sufficient sign that this worthy was no longer in the land of the living.

On the following morning, the 4th March, a number of natives again came to M'Clintock's encampment. The commander bought a spear 6½ feet long from a man who told Petersen distinctly *that a ship having three masts had been crushed by the ice out in the sea to the west of King William Island.* He was not one of those who were witnesses of the catastrophe. The ship sank, *so nothing was obtained by the natives from her;* all that they had got, he said, came from the island in the river. The spear staff seemed to have been part of the gunwale of a light boat. This information, corroborating in such a remarkable manner the account obtained on the same peninsula by Dr Rae, accounted for the disappearance of one of the vessels; but what of the other? As yet no proof that either of the ships had been broken up by the natives had been obtained. M'Clintock says, that among these natives of Boothia "scarcely a scrap of wood was seen *which had not come from the lost expedition.*" But very little wood was seen at all. Indeed, these Eskimos seemed to be singularly destitute of this article. One of their sledges was made of two stout pieces of wood, which might have been a boat's keel; the other sledges, however, "were wretched little affairs, consisting of two frozen rolls of seal-skin coated with ice, and attached to each other by bones, which served as cross-bars." These people, therefore, could not have had access to either of the ships, or they would have been provided with large and strong sledges.

"We now returned to the ship with all the speed we could command," resumes M'Clintock, "but stormy weather occasioned two days' delay, so that we did not arrive on board till the 14th March. Though considerably reduced in flesh, I and my companions were in excellent health, and blessed with insatiable appetites. On washing our faces, which had become perfectly black from the soot of our blubber lamp, sundry scars, relics of

frost-bites, appeared; and the tips of our fingers had become as callous as if seared with hot iron. In this journey of twenty-five days we travelled 360 geographical miles (420 English), and completed the discovery of the coast-line of continental America, thereby adding about 120 miles to our charts." Thus was the entire coast-line of Arctic North America at last discovered, and this triumph, like the discovery of the North-West Passage and of the Magnetic Pole, as well as the nearest approach to the North Pole yet made, is to be scored to the credit of British officers.

As soon as he reached the ship M'Clintock assembled his crew and told them of his success, pointing out that one of the ships of the Franklin expedition was still unaccounted for, and that therefore all the projected search excursions must be carried out as rigorously as had been at first intended.

On the 3d March Captain Young had returned from his journey to Prince of Wales Land, where he had deposited a store of provisions on the shore, at about seventy miles' distance south-west from the ship. On the 18th of the same month the gallant captain was sent away from the ship's quarters in Port Kennedy to Fury Beach, to obtain a supply of sugar from the stores left there by Parry in 1825. In ten days he returned with 1200 lbs. of sugar. His labours had been very severe; one sledge broke down, and all the sugar had to be piled on the other. The consequence was that the load had to be worked back to the ship piecemeal "by a sort of fox and goose chase." There was still (and we must remember this was in the spring of 1859) an immense stock of preserved vegetables and soups still remaining at Fury Beach, and Young brought back with him two specimen tins of "carrots plain" and "carrots and gravy," which were still good, though they had lain on the shore for thirty-four years. All small casks and packages were covered with snow, but of the larger casks, which appeared above the drift, Young counted thirty-four of flour, five of split peas, five of tobacco, and four of sugar. A few tons of coal remained, and there were two boats.

With the beginning of April the time came for the departure of M'Clintock, Hobson, and Young on the extended searching journeys, which were to be the great feature of this expedition, and the splendid success of which have conferred lasting fame on the name of Sir Leopold M'Clintock. "The travelling parties," says Captain Young, "were each to consist of four men drawing one sledge, and six dogs with a second sledge, besides the officer in charge and the dog-driver. By the aid of depôts already carried out, and from the extreme care with which Captain M'Clintock had prepared the travelling equipment, and had reduced every ounce of unnecessary weight, we expected to be able to be absent from the ship, and without any other resource, for from seventy to eighty days, or, if necessary, even longer."

CHAPTER VI.

THE GREAT JOURNEY COMMENCED—MORE RELICS OBTAINED—RELICS AT POINT BOOTH—DOG-SLEDGE DRIVING—SKELETON DISCOVERED—SHIPS' RECORD FOUND—THE MYSTERY SOLVED AT LAST.

CAPTAIN M'CLINTOCK and Lieutenant Hobson set out on their journeys from Port Kennedy at the east entrance to Bellot Strait in search of the relics of the Franklin expedition, supposed to be still lying above ground on the shores of King William Island, or on the neighbouring coasts, on the 2d April 1859. Each of the leaders had a sledge drawn by four men, besides a dog-sledge and dog-driver, and it was arranged that, for a considerable part of the way, the two parties should pursue the same route and travel together. On the first night they encamped on Long Lake; they reached the western sea on the second day, and on the third, hoisting their tents, outspread like sails, on the sledges, and thus making the most of a favourable breeze, they advanced some miles beyond Arcedeckne Island, a few miles south of the western entrance to Bellot Strait. On the 15th April they had got over the rough granite shore, and had entered on the smoother limestone tract, in lat. 71° 7′ N., and which continues in almost a straight line southward for sixty to seventy miles. From this point, depôts of provisions for consumption on the return journey were made at suitable intervals. Down to this date the temperature was excessively severe, sometimes as low as 30° below zero (62° below freezing-point), and often accompanied with cutting north winds. The sun was bright, and the snow-glare strong; and although all wore coloured spectacles, much suffering was felt from inflammation of the eyes. The faces of the whole party were blistered, their lips and hands cracked—never were men more disfigured by the combined effects of bitterly cold winds and bright sun. Frost-bites in the face and hands, however, were too common to be regarded otherwise than as the mere accidents of travel in this region.

No inhabitants were met with until the 20th April, when the parties had travelled down the west coast of Boothia as far as 70° 30′ N.; but on that

date, two families, the same people whom M'Clintock had interviewed at Cape Victoria on his preliminary spring journey, came forward from the ice on which they were engaged hunting seals, to meet the explorers. Their huts, which were built on the ice, were circular, and a single entrance, forked so as to form two "lobbies," afforded access to the two dwellings in which these families, numbering in all twelve individuals, lived. M'Clintock examined the interior of these structures. Light was admitted by a slab of ice let into the roof. "A snow bank or bench, two feet high, and occupying half the area of each hut, was covered with reindeer skins, and formed the family place of repose. An angular snow-bench served as the kitchen table, and immediately beside it sat the lady of the establishment, attending the stone lamp which stood thereon, and the stone cooking vessel suspended over it. The lamp was a shallow open vessel, the fuel seal-oil, and the wick dried moss. Her 'tinder-box' was a little sealskin bag of soft dry moss, and with a lump of iron pyrites and a broken file, she struck fire upon it. I purchased the file," continues M'Clintock, "because it was marked with the Government broad arrow. We saw two large snow shovels made of mahogany board, some long spear handles, a bow of English wood, two preserved meat tins, and a deal case, which might have once contained a large telescope or a barometer. . . . I also purchased a knife, which had some indistinct markings on it, such as ships' cutlasses or swords usually have. The man (from whom the knife was purchased) told us it had been picked up on the shore near where a ship lay stranded, that it was about the length of his arm, but his countryman who picked it up broke it into lengths to make knives. After much anxious inquiry, we learned that *two ships* had been seen by the natives of King William Island; *one of them* was seen to sink in deep water, and nothing was obtained from her—a circumstance at which they expressed much regret—*but the other* was forced on shore by the ice, where they suppose she still remains, but much broken. From this ship they have obtained most of their wood, etc." The body of a man was found on board the stranded ship—"a very large man, who had long teeth." The ships had both been destroyed in the fall of the year—August or September—and all the white people, taking a boat or boats with them, had gone away to the "large river" (Great Fish River), and their bones were found in the island (Montreal Island) in the following winter.

Having purchased two dogs and some seal's blubber from these people, M'Clintock and Hobson continued their journey southward along the coast. On the 28th April they reached Cape Victoria, on the south-west coast of Boothia Felix. Here the two travelling companies parted. The information respecting the *second* ship was of the utmost importance, and Lieutenant Hobson and his party were now detached to go in search of it. Hobson was at this time unwell, complaining of stiffness and pains in the legs, the cause

of which was at the time unknown. This officer was instructed to search the west coast of King William Island for the stranded ship and for records, and to act upon such information as he might obtain. In the event of failure to make any discoveries on the shores of the island, he was directed to cross over Victoria Strait and complete the discovery and examination of Victoria Land northward from Collinson's farthest point, which was only a few miles farther north than the point Rae had reached in 1851. In accordance with this arrangement Hobson parted with M'Clintock, and took his way across the frozen Ross's Strait direct for Cape Felix, the most northern point of King William Island; while the captain, taking a more southerly route, also crossed to King William Island, and after a severe three days' march encamped on it near the entrance of Port Parry, which is directly opposite Cape Victoria, the point of departure. M'Clintock's generosity in thus resigning to Hobson the search of the tract of coast which must of necessity yield relics and records, if such were to be found at all, while he himself elected to examine the unpromising *east* coast of King William Island, *en route* for Great Fish River, deserves to be noted as an act of great kindness on the famous captain's part towards a junior officer.

After a day spent in drying their clothes and sleeping bags, and repairing their travelling gear, M'Clintock and his men started on the 2d May to explore the east coast of King William Island. On the 4th they crossed over to Matty Island, between King William Island and Boothia Peninsula, in the expectation of meeting Eskimos, none having been seen since the departure of Hobson. Off the south-west point of Matty Island M'Clintock came upon a deserted village of nearly twenty snow-huts, in and around all of which he found "shavings or chips of different kinds of woods from the lost expedition." The huts appeared to have been abandoned for only a fortnight or three weeks. How came the shavings and chips of the different woods there? Were the natives skilled in the use of the plane? Another suggestive point is to be noted here. M'Clintock states that "the runners or sides of some old sledges left here were very ingeniously formed out of *pointed rolls* of sealskin about three and a half feet long, and flattened so as to be two or three inches wide and five inches high. The sealskins appeared to have been well soaked and then rolled up, flattened into the required form, and allowed to freeze." In freezing, these rolls of sealskin would no doubt become as hard as board. But why not use the *actual board,* seeing that they had "different kinds of woods from the lost expedition?"

M'Clintock then crossed over to a small islet at the south extremity of Matty Island, where he found more deserted snow-huts and more chips, but no inhabitants. Recrossing from Matty Island to King William Island on the 7th May, the captain marched southward in the evening to avoid the snow-glare, and at midnight arrived at an inhabited snow-village. "Here,"

writes the captain, "we found ten or twelve huts and thirty or forty natives of King William Island; I do not think any of them had ever seen white people alive before, but they evidently knew us to be friends. We halted at a little distance, and pitched our tent, the better to secure small articles from being stolen whilst we bartered with them. I purchased from them six pieces of silver plate, bearing the crests or initials of Franklin, Crozier, Fairholme, and M'Donald; they also sold us bows and arrows of English woods, uniform and other buttons, and offered us a heavy sledge made of two short stout pieces of curved wood, which no mere boat could have furnished them with, but this of course we could not take away; the silver spoons and forks were readily sold for four needles each. They were most obliging and peaceably disposed, but could not resist the temptation to steal, and were importunate to barter everything they possessed; there was not a trace of fear, every countenance was lighted up with joy; even the children were not shy, nor backward either, in crowding about us, and poking in everywhere. One man got hold of our saw, and tried to retain it, holding it behind his back, and presenting his knife in exchange; we might have had some trouble in getting it from him, had not one of my men mistaken his object in presenting the knife towards me, and run out of the tent with a gun in his hand-the saw was instantly returned, and these poor people seemed to think they never could do enough to convince us of their friendliness; they repeatedly tapped me gently on the breast, repeating the words 'Kammik toomee' (We are friends). Having obtained all the relics they possessed, I purchased some seal's flesh, blubber, frozen venison, dried and frozen salmon, and sold some of my puppies. They told us it was five days' journey to the wreck—one day up the inlet still in sight, and four days overland; this would carry them to the western coast of King William Land; they added that but little now remained of the wreck which was accessible, their countrymen having carried almost everything away. In answer to an inquiry, they said she was without masts; the question gave rise to some laughter amongst them, and they spoke to each other about *fire*, from which Petersen thought they had burnt the masts through close to the deck in order to get them down. There had been *many books*, they said, but all have long ago been destroyed by the weather; the ship was forced on shore in the fall of the year by the ice. She had not been visited during this past winter, and an old woman and a boy were shown to us who were the last to visit the wreck; they said they had been at it during the preceding winter (1857-58). Petersen questioned the woman closely, and she seemed anxious to give all the information in her power. She said many of the white men *dropped by the way as they went to the Great River;* that some were buried and some were not; they did not themselves witness this, but discovered their bodies during the winter following. We could not arrive at any approximation to the numbers of the

white men nor of the years elapsed since they were lost." The natives further assured the interpreter that M'Clintock's party would find natives on the south shore of King William Island (three days' journey southward), and also on Montreal Island, in the estuary of Great Fish River.

Having obtained all the information these people had to communicate, and having acquired a number of priceless relics, M'Clintock did not waste another minute at this village; but after a stay of only two hours in all, resumed his march southward along the shore. "It was quite a relief to get away from these good-humoured, noisy thieves; and rather difficult, too, as some of them accompanied us for miles. They had abundance of food, were well clothed, and are a finer race than those who inhabit North Greenland or Pond Inlet. The men had their hair cropped short, with the exception of one long, straggling lock hanging down on each side of the face. Like the Boothians, the women had lines tattooed upon their cheeks and chins." Having got rid of the last of the stragglers, M'Clintock pushed on, discovering and naming Latrobe Bay, and arriving at the extreme east point of King William Island. This point — Mount Matheson, a flat-topped hill — was crossed; and on the 10th May a single snow-hut was reached off Point Booth. Here again M'Clintock made a number of suggestive and interesting, but somewhat puzzling discoveries. "I was quite astonished," he says, "at the number of poles and various articles of wood lying about it, also at the huge pile of walrus' and reindeer's flesh, seal's blubber, and skins of various sorts. We had abundance of leisure to examine these exterior articles before the inmates would venture out; they were evidently much alarmed by our sudden appearance. A remarkably fine old dog was tied at the entrance—the line being made fast within the long passage—and although he wagged his tail, and received us as old acquaintances, we did not like to attempt an entrance. At length an old man and an old woman appeared; they trembled with fear, and could not, or would not, say anything except 'Kammik toomee:' we tried every means of allaying their fears, but their wits seemed paralysed, and we could get no information. We asked where they got the wood? They purchased it from their countrymen. Did they know the Great River? Yes, but it was a long way off. Were there natives there now? Yes. They even denied all knowledge of white people having died upon their shores. A fine young man came out of the hut, but we could learn nothing of him; they said they had nothing to barter, except what we saw, although we tempted them by displaying our store of knives and needles. . . . The principal articles which caught my attention here were eight or ten fir poles, varying in length from five to ten feet, and up to two and a half inches in diameter (these were converted into spear handles and tent poles), a kayack paddle constructed out of the blades of two ash oars, and two large snow shovels, four feet long, made of

thin plank, painted white or pale yellow; these might have been the bottom boards of a boat. There were many smaller articles of wood."

It was evident that nothing was to be made of these timorous and taciturn villagers without stopping a day or two with them, and gaining their confidence by kind and generous treatment. But there was no time to throw away in cultivating the goodwill of people who perhaps had nothing to tell, so, making the old lady happy with the present of a needle, M'Clintock pushed on. Leaving King William Island behind him, he set out due south from Point Booth over the frozen strait, crossed Point Ogle (the extremity of a peninsula of the mainland of America), and encamped the same evening upon the frozen estuary of the Great Fish River. Detained in the tent during the 13th by a furious gale, the captain resumed his march over the ice on the 14th, on the evening of which he pitched his tent "two miles from some small islands that lie off the north end of Montreal Island."

He was now in the centre of the district in which it was expected great discoveries were to be made. The exploration of Montreal Island and the neighbouring islets was proceeded with on the 15th May; but the only traces or relics of Europeans were "a piece of preserved meat tin, two pieces of iron hoop, some scraps of copper, and an iron hook-bolt." These probably were part of the plunder obtained from the boat. The 16th was a day of severe cold and thick snow; but on the 17th the search was resumed by M'Clintock, Petersen, and Thomson, who set off with the dog-sledge round the south shores of Montreal Island. No cairn was seen, and on examining a heap of stones that seemed to have been arranged according to method, nothing was discovered but blubber. It was an Eskimo *cache.* No natives were met with; indeed, none had been seen since the party had left Point Booth. The search was completely unavailing—not even a grave was seen. The examination of the shore of Elliot Bay was equally without any satisfactory result. Barrow Inlet, to the west of Point Ogle Peninsula, was also thoroughly examined, but no relics found. From this barren and unprofitable region M'Clintock was glad to commence his return journey, the first stage of which was from Point Richardson, on the American mainland, and a few miles west from Barrow Inlet, due north to the nearest point of the coast of King William Island. The retreat was commenced on the 19th May. Hampton, one of M'Clintock's party, had for some time been ill, and was unable to drag. The captain therefore made over the dog-sledge to the sick man. M'Clintock's experience in dog-sledge driving is something that he has much reason to be thankful for. The following account of his trials as a "whip" in the icy regions round King William Island is amusing: "I shall not easily forget the trial my patience underwent during the six weeks that I drove that dog-sledge. The leader of my team, named 'Omar Pasha,' was very willing, but very lame; little 'Rose' was coquettish,

and fonder of being caressed than whipped—from some cause or other she ceased growing when only a few months old, she was therefore far too small for heavy work; 'Darky' and 'Missy' were mere pups; and last of all came the two wretched starvelings, reared in the winter, 'Foxey' and 'Dolly.' Each dog had its own harness, formed of strips of canvas, and was attached to the sledge by a single trace twelve feet long. None of them had ever been yoked before, and the amount of cunning and perversity they displayed to avoid both the whip and the work, was quite astonishing. They bit through their traces, and hid away under the sledge, or leaped over one another's backs, so as to get into the middle of the team out of the way of my whip, until the traces became plaited up, and the dogs were almost knotted together; the consequence was I had to halt every few minutes, pull off my mitts, and, at the risk of frozen fingers, disentangle the lines. I persevered, however, and, without breaking any of their bones, succeeded in getting a surprising amount of work out of them. Hobson drove his own dog-sledge likewise, and as long as we were together we helped each other out of difficulties, and they were frequently occurring, for, apart from those I have above mentioned, directly a dog-sledge is stopped by a hummock, or sticks fast in deep snow, the dogs, instead of exerting themselves, lie down, looking perfectly delighted at the circumstance, and the driver has to extricate the sledge with a hearty one-two-three haul! and apply a little gentle persuasion to set his canine team in motion again."

The shore of King William Island was reached at a point a short distance west of the Peffer River on the morning of the 24th, and from this point westward a careful examination of the coast was conducted by M'Clintock. The explorers were now upon the shore along which the retreating party from the sunk or stranded "Erebus" and "Terror" *must have marched.* It was now therefore necessary to proceed with the greatest caution, and examine every object that came into view. M'Clintock's sledges were dragged along the comparatively smooth sea-ice close along the beach, but the captain himself and Petersen walked along the shore, making the very best possible use of their eyes. Nor was their vigilance unrewarded. "Shortly after midnight of the 25th May," writes M'Clintock, "when slowly walking along a gravel ridge near the beach, which the winds kept partially bare of snow, I came upon a human skeleton, partly exposed, with here and there a few fragments of clothing appearing through the snow. The skeleton—now perfectly bleached—was lying upon its face, the limbs and smaller bones either dissevered or gnawed away by small animals."

"A most careful examination of the spot," continues M'Clintock, "was of course made, the snow removed, and every scrap of clothing gathered up. A pocket-book afforded strong grounds for hope that some information might be subsequently obtained respecting the unfortunate owner and the

calamitous march of the lost crews, but at the time it was frozen hard. The substance of that which we gleaned upon the spot may thus be summed up: This victim was a young man, slightly built, and perhaps above the common height; the dress appeared to be that of a steward or officer's servant, the loose bow-knot in which his neck-handkerchief was tied not being used by seamen or officers. In every particular the dress confirmed our conjectures as to his rank or office in the late expedition,—the blue jacket with slashed sleeves and braided edging, and the pilot-cloth great-coat with plain covered buttons. We found also a clothes-brush near, and a horn pocket-comb. This poor man seems to have selected the bare ridge top, as affording the least tiresome walking, and to have fallen upon his face in the position in which we found him. It was a melancholy truth that the old woman spoke when she said, 'They fell down and died as they walked along.' Of this skeleton only a portion of the skull appeared above the snow, and it so strongly resembled a bleached rounded stone that the man I called from the sledge, mistaking it for one, rested his shovel upon it, but started back with horror when the hollow sound revealed to him its true nature. Were it not for their shroud of snow, it is more than probable that our anxious search would have brought to light many another skeleton, and have still further confirmed the old woman's brief story—unsurpassed in graphic simplicity."

Captain M'Clintock did not think the Eskimos had discovered this skeleton, or they would have carried off the brush and comb. Superstition, he states, prevents them from disturbing their own dead, but would not keep them from appropriating the property of the white man if in any way useful to them. To an Eskimo a fork is a wholly superfluous, not to say mysterious, article, yet we have seen that a great number of them had been picked up by the natives, and were carefully preserved by them for eleven years. The fact that the articles were of metal (silver), but not their usefulness, accounts for their having been so long preserved. A piece of flannel, marked "F. D. V., 1845," which had no doubt formed part of the garments of Des Vœux, mate in the "Erebus," was obtained from the Repulse Bay Eskimos by Dr Rae in 1847.

Having completed his examination of the locality in which the skeleton was found without finding other relics besides those already mentioned, M'Clintock moved on a few miles westward, and arrived at Cape Herschel. The summit of the cape is crowned by a cairn erected by Simpson. M'Clintock believes that some record must have been left here by the retreating crews of the "Erebus" and "Terror," as the cairn, a conspicuous object, and made ready to hand, must have struck them as being the most suitable place on this line of coast in which to deposit their papers. If any manuscripts were left here, however, they had evidently been discovered by the natives,

and destroyed, thrown away, or carried off; for, though the somewhat dismantled erection was thoroughly examined, no relic was found. Probably the key to the story of this dumb, half-demolished cairn, may be found in the following suggestive remark by M'Clintock: "Doubtless the natives when they ascertained that famine and fatigue had caused many of the white men 'to fall down and die' upon their fearful march, and heard, as they might have done, of its fatal termination upon the mainland, lost no time in following up their traces, examining every spot where they halted, every mark they put up, or stone displaced."

Leaving Cape Herschel behind him, M'Clintock pressed on westward over this shore, hitherto untrodden by Europeans, except by Franklin's parties, until, having advanced twelve miles, he came to a small cairn that had been erected by Hobson, who, travelling round King William Island by the south-west and south, had passed the spot near which Franklin's ships had been beset, and had discovered the cairn in which the mariners had enclosed the famous record that told of the fate of their ships, and of their gallant commander. For such a record many thousands of miles of bleak coast had been explored during the preceding ten years, many a weary march, many a perilous voyage undertaken. No scrap of paper left by the lost expedition had been found till now; and this, the first record, was also the last. But it was enough. In its few brief sentences was wrapped up the secret of the tragic fate of the Franklin expedition.

Weather-stained, frayed with rust, and ragged from damp and contact with the tin case in which it was enclosed, the very appearance of this paper was eloquent. It is no elaborate document, detailing a mournful history, but only an ordinary ship's paper, with a few remarks in manuscript. It is usual to supply discovery ships with printed forms, in which intimations of discovery, accident, or distress may be entered. Such forms, with their blanks filled up, are enclosed in bottles, and thrown overboard, as messages from the sea, or deposited by travellers in cairns, with the view of affording intelligence not otherwise communicable to the finders, and to the world. British Admiralty papers of this kind contain an intimation, in the languages of the chief commercial nations, to the effect, that "Whoever finds this paper is requested to forward it to the Secretary of the Admiralty, London, with a note of the time and place at which it was found; or, if more convenient, to deliver it for that purpose to the British consul at the nearest port." It is on one of these Government papers, deposited at Victory Point, on the west coast of King William Island, that the officers of the Franklin expedition made their last communication, and which, after an interval of eleven years, was found beside a tumbled cairn by Lieutenant Hobson. Upon this paper the printed intimation was as is given above. The filled-up spaces and manuscript notes are as follow:

"H.M. SHIPS 'EREBUS' AND 'TERROR.'

"28th of May 1847. { Wintered in the ice in lat. 70° 5′ N., long. 98° 23′ W.

"Having wintered in 1846-7 at Beechey Island, in lat. 74° 43′ 28″ N., long. 91° 39′ 15″ W., after having ascended Wellington Channel to lat. 77°, and returned by the west side of Cornwallis Island.

"Sir John Franklin commanding the expedition.

"All well.

"Party, consisting of 2 officers and 6 men, left the ships on Monday, 24th May 1847.

"GM. GORE, Lieut.
"CHAS. F. DES VŒUX, Mate."

Round the margin of the Government form are written the following notes:

"*April 25th*, 1848.—H.M. ships 'Erebus' and 'Terror' were deserted on the 22d April, 5 leagues N.N.W. of this, having been beset since 12th September 1846. The officers and crews, consisting of 105 souls, under the command of F. R. M. Crozier, landed here, in lat. 69° 37′ 42″ N., long. 98° 41′ W. Sir John Franklin died on the 11th June 1847; and the total loss by deaths in the expedition has been, to this date, 9 officers and 15 men.

(Signed)
"F. R. M. CROZIER,
"Captain and Senior Officer.

(Signed)
"JAMES FITZJAMES,
"Captain, H.M.S. 'Erebus.'

"And start on to-morrow, 26th, for
Back's Fish River.

"This paper was found by Lt. Irving under the cairn supposed to have been built by Sir James Ross in 1831, 4 miles to the northward, where it had been desposited by the late Commander Gore in June 1847. Sir James Ross's pillar has not, however, been found; and the paper has been transferred to this position, which is that in which Sir James Ross's pillar was erected."

So then the ten years' mystery is solved at last. Franklin, who was last seen in Baffin Bay on the 26th July 1845, sailed west through Lancaster Sound, Barrow Strait, up Wellington Channel to 77° N., and back again to the mouth of the channel during the few weeks of his first summer, thus making one of the most extraordinarily successful voyages on record. He wintered at Beechey Island in 1845-46 (not in 1846-47 as stated in the record), and then sought a passage southward toward the American coast. Caught in the pack on the 12th September 1846, he passed the winter of 1846-47 in lat. 70° 5′, long. 98° 23′, about fifteen miles north-west of Cape Felix, the northernmost point of King William Island. A party of two officers and six men left the ice-bound ships in the spring (May 24th) of 1847, but in what direction or for what purpose is not known. The officers and crews of the two ships were "all well" on the 28th May 1847; but a fortnight after-

wards, on the 11th June, Sir John was no more. During the winter of 1847-48, the "Erebus" and "Terror," having drifted about thirty miles from the position in which they were beset, still remained imprisoned in the ice. On the 22d April 1848, the vessels were "deserted," and the officers and crews, 105 souls in all, retreated upon Victory Point, on the west coast of King William Island, under the command of Captain Crozier of the "Terror," the senior officer. Nine officers and fifteen men had died before the 25th April 1848, and as no casualty is recorded, it is to be presumed that these men died of scurvy. It should be noted that the deaths among the officers were much more numerous in proportion to their numbers than among the men. On the 26th April the officers and crews started for Great Fish River, and the probability is that all of them perished, either on the way to the river, on its island and the coasts of its estuary, or on its lower course, before the close of the autumn of 1848.

In this record, all of which was written by Captain Fitzjames, except the signature, with the note below it, by Crozier, we shall look in vain for words of weakness or complaint. There is no lamentation, no despair. "So sad a tale," writes M'Clintock, "was never told in fewer words. There is something deeply touching in their extreme simplicity, and they show in the strongest manner that both the leaders of this retreating party were actuated by the loftiest sense of duty, and met with calmness and decision the fearful alternative of a last bold struggle for life, rather than perish without effort on board their ships." "We shall start to-morrow," said they. But whither?

CHAPTER VII.

BOAT WITH SKELETONS FOUND—RELICS IN THE BOAT—THE RETURN JOURNEY.

FROM the point on which Hobson had built his cairn and deposited his record, M'Clintock marched on westward round the south-west angle of King William Island, then north-east along its western shore. The coast is low and uninteresting, even forbidding in appearance—a mere series of limestone ridges, almost destitute both of animal and vegetable life. Nor was the prospect westward over the frozen Victoria Strait more encouraging. The strait presented a "rugged surface of crushed-up pack, including much heavy ice." Having rounded Cape Crozier, the westernmost point of King William Island, M'Clintock came upon a large boat that had belonged to the Franklin expedition, and which contained *two human skeletons.* Hobson had already discovered the boat, and had left a note in it for the captain; but he had not been able to find any record, journal, pocket-book, or memorandum of any description either in or near it. The boat and its contents, however, will be best described by M'Clintock, who carefully examined them. "A vast quantity of tattered clothing was lying in her, and this we first examined. Not a single article bore the name of its former owner. The boat was cleared out and carefully swept that nothing might escape us. The snow was then removed from about her, but nothing whatever was found. She measured 28 feet long, and 7 feet 3 inches wide; she was built with a view to lightness and light draught of water, and evidently equipped with the utmost care for the ascent of the Great Fish River; she had neither oars nor rudder, paddles supplying their place; and as a large remnant of light canvas, commonly known as No. 8, was found, and also a small block for reeving a sheet through, I suppose she had been provided with a sail. A sloping canvas roof or rain-awning had also formed part of her equipment. She was fitted with a weather-cloth nine inches high, battened down all round the gunwale, and supported by twenty-four iron stanchions, so placed as to serve likewise for rowing thowls. There was a deep-sea sounding line, fifty fathoms long, near her, as well as an ice-grapnel; this line must have been intended

for river work as a track-line. She had been originally 'carvel' built; but for the purpose of reducing weight, very thin fir planks had been substituted for her seven upper strakes, and put on 'clincher' fashion. . . . The weight of the boat alone was about 700 or 800 lbs. only, but she was mounted upon a sledge of unusual weight and strength. It was constructed of two oak planks, 23 feet 4 inches in length, 8 inches in width, and with an average thickness of $2\frac{1}{2}$ inches. These planks formed the sides or runners of the sledge; they were connected by five cross-bars of oak, each 4 feet long, and 4 inches by $3\frac{1}{2}$ inches thick, and bolted down to the runners; the underneath parts of the latter were shod with iron. Upon the cross-bars five saddles or supporting chocks for the boat were lashed, and the drag-ropes by which the crew moved this massive sledge and the weights upon it, consisted of $2\frac{3}{4}$-inch whale-line. I have calculated the weight of this sledge to be 650 lbs.; it could not have been less, and may have been considerably more. The total weight of boat and sledge may be taken at 1400 lbs., which amounts to a heavy load for seven strong healthy men. One hundred yards from her, upon the land side, lay the stump of a fir tree, 12 feet long, and 16 inches in diameter at 3 feet above the roots. Although the ice had used it roughly during its drift to this shore, and rubbed off every vestige of bark, yet the wood was perfectly sound. It may have been, and probably has been, lying there for twenty or thirty years, and during such a period would suffer less decay in this region of frost than in one-sixth of the time at home. Within two yards of it I noticed a few scanty tufts of grass.

"But all these were after-observations; there was in the boat that which transfixed us with awe, viz., portions of two human skeletons! One was that of a slight young person; the other of a large, strongly-made, middle-aged man. The former was found in the bow of the boat, but in too much disturbed a state to enable Hobson to judge whether the sufferer had died there; large and powerful animals, probably wolves, had destroyed much of this skeleton, which may have been that of an officer. Near it we found the fragment of a pair of worked slippers, of which I give the pattern, as they may possibly be identified. The lines were white, with a black margin; the spaces white, red, and yellow. They had originally been eleven inches long, lined with calfskin with the hair left on, and the edges bound with red silk ribbon. Besides these slippers there were a pair of small strong shooting half-boots. The other skeleton was in a somewhat more perfect state; it lay across the boat, under the after-thwart, and was enveloped with cloths and furs. This would seem to have been the survivor of the two men whose remains were lying in the boat. Close beside it were found five watches; and there were two double-barrelled guns—one barrel in each loaded and cocked—standing muzzle upwards against the boat's side. It may be imagined with what deep interest these sad relics were scrutinised, and how

anxiously every fragment of clothing was turned over in search of pockets and pocket-books, journals, or even names. Five or six small books were found, all of them scriptural or devotional works, except the 'Vicar of Wakefield.' One little book, 'Christian Melodies,' bore an inscription upon the title-page from the donor to G. G. (Graham Gore?). Another small book, 'A Manual of Private Devotion,' by C. J. Blomfield, D.D., bore on its title-page, 'G. Back, to Graham Gore. May, 1845.' A small Bible contained numerous marginal notes, and whole passages underlined. Besides these books, the covers of a New Testament and Church of England Prayer-book were found.

"Amongst an amazing quantity of clothing there were seven or eight pairs of boots of various kinds—cloth winter boots, sea boots, heavy ankle boots, and strong shoes. I noted that there were silk handkerchiefs—black, white, and figured—towels, soap, sponge, tooth-brush, and hair-combs; Mackintosh gun-cover, marked outside with paint A 12, and lined with black cloth. Besides these articles we found twine, nails, saws, files, bristles, wax-ends, sail-makers' palms, powder, bullets, shot, cartridges, wads, leather cartridge-case, knives—clasp and dinner ones, needle and thread cases, slow-match, several bayonet scabbards, cut down into knife sheaths, two rolls of sheet-lead, and, in short, a quantity of articles of one description and another truly astonishing in variety, and such as, for the most part, modern sledge-travellers in these regions would consider a mere accumulation of dead weight, of little use, and very likely to break down the strength of the sledge crews. The only provisions we could find were tea and chocolate; of the former very little remained, but there were nearly 40 lbs. of the latter. These articles alone could never support life in such a climate, and we found neither biscuit nor meat of any kind. A portion of tobacco, and an empty pemmican tin, capable of containing 22 lbs. weight, were discovered. The tin was marked with an E; it had probably belonged to the 'Erebus.' None of the fuel originally brought from the ships remained in or about the boat, but there was no lack of it, for a drift tree was lying on the beach close at hand, and had the party been in need of fuel, they would have used the paddles and bottom boards of the boat. In the after-part of the boat we found eleven large spoons, eleven forks, and four tea-spoons, all of silver. Of these twenty-six pieces of plate, eight bore Sir John Franklin's crest; the remainder had the crests or initials of nine different officers, with the exception of a single fork, which was not marked; of these nine officers, five belonged to the 'Erebus'—Gore, Le Vesconte, Fairholme, Couch, and Goodsir. Three others belonged to the 'Terror'—Crozier (a teaspoon only), Hornby, and Thomas. I do not know to whom the three articles with an owl engraved on them belonged, nor who was the owner of the unmarked fork, but of the owners of those we can identify, the majority belonged to the 'Erebus.' One

of the watches bore the crest of Mr Couch of the 'Erebus,' and as the pemmican tin also came from that ship, I am inclined to think the boat did also. One of the pocket chronometers found in the boat was marked, 'Parkinson and Frodsham 980,' the other, 'Arnold 2020;' these had been supplied one to each ship. Sir John Franklin's plate perhaps was issued to the men for their use, as the only means of saving it; and it seems probable that the officers generally did the same, as not a single iron spoon, such as sailors always use, has been found. Of the many men, probably twenty or thirty, who were attached to this boat, it seems most strange that the remains of only two individuals were found, nor were there any graves upon the neighbouring flat land; indeed, bearing in mind the season at which these poor fellows left their ships, it should be remembered that the soil was then frozen hard as rock, and the labour of *quarrying* a grave very great indeed."

M'Clintock was surprised to find that the boat-sledge was directed to the north-east, in a line for the next point of land to which he himself was travelling, namely, toward Victory Point. This discovery set the captain upon a suggestive line of reflection. The position of the abandoned boat was 50 miles from Point Victory, 65 miles from the position of the ships, 70 miles from the spot on which the skeleton of the steward was found, and 150 miles from Montreal Island. "A little reflection," writes the captain, "led me to satisfy my own mind, at least, that this boat was *returning to the ships.* In no other way can I account for two men having been left in her than by supposing the party were unable to drag the boat farther, and that these two men, not being able to keep pace with their shipmates, were therefore left by them, supplied with such provisions as could be spared, to last them until the return of the others with a fresh stock. Whether it was the intention of this boat party to await the result of another season in the ships, or to follow the track of the main body to the Great Fish River, is now a matter of conjecture. It seems more than probable that they fully intended to revisit the boat, not only on account of the two men left in charge of it, but also to obtain the chocolate, the five watches, and many other small articles which otherwise would scarcely have been left in her." M'Clintock believes that the same reasons which may account for the return of the boat party from the main body of the men who had started for Great Fish River under Captain Crozier may also explain why they did not come back to the boat; and that in both cases they over-estimated their strength, and under-estimated the distances they had to travel. It will never be ascertained whether any of the men belonging to the return party ever reached the ships; but it is evident they did not return to the boat, or more skeletons would have been found on the spot. From Erebus Bay, on the shore of which the boat was discovered, M'Clintock travelled on northward along the coast-line, carefully

searching for remains of the stranded ship mentioned by the natives, but finding none.

The captain and his party arrived at Point Victory on the 2d June, and found there a note from Hobson, stating that he had found no trace of a wreck anywhere on the coast, that he had seen no natives, but had picked up a duplicate of the record found on Point Victory. In the duplicate, as well as in the original record, the same curious mistake as to the date of the wintering of the expedition at Beechey Island is made. M'Clintock can only account for the error of filling in the year 1846-47 instead of 1845-46, by supposing that little importance was attached to these documents by Fitzjames, who was probably more interested at the time with the grand triumph of the expedition, the discovery of the North-West Passage, than with the details which he was chronicling.

At Point Victory M'Clintock discovered a vast quantity and variety of things strewed about the cairn beside which the record was found. "Amongst these," he writes, "were four heavy sets of boat's cooking stoves, pickaxes, shovels, iron hoops, old canvas, a large single block, about four feet of a copper lightning conductor, long pieces of hollow brass curtain rods, a small case of selected medicines containing about twenty-four phials, the contents in a wonderful state of preservation; a dip circle by Robinson, with two needles, bar magnets, and light horizontal needle, all complete, the whole weighing only 9 lbs.; and even a small sextant engraved with the name of 'Frederick Hornby' lying beside the cairn without its case. The coloured eye-shades of the sextant had been taken out, otherwise it was perfect; the moveable screws and such parts as come in contact with the observer's hand were neatly covered with thin leather to prevent frost-bite in severe weather. The clothing left by the retreating crews of the 'Erebus' and 'Terror' formed a huge heap four feet high; every article was searched, but the pockets were empty, and not one of all these articles was marked—indeed sailors' warm clothing seldom is. Two canteens, the property of marines, were found, one marked '88 C°. Wm. Hedges,' and the other '89 C°. Wm. Heather.' A small pannikin, made out of a 2-lb. preserved meat tin, had scratched on it 'W. Mark.' These abandoned superfluities afford the saddest and most convincing proof that here—on this spot—our doomed and scurvy-stricken countrymen calmly prepared themselves to struggle manfully for life."

The coast-line between Point Victory and Cape Felix had been carefully examined by Hobson. Two cairns and many relics were discovered, and the more interesting among the latter were brought away. M'Clintock did not therefore consider it necessary to re-examine this tract of beach. The survey of this part of the coast, however, convinced him, as it had also convinced Hobson, that "no part of the coast (of King William Land) between Cape Felix and Cape Crozier has been visited by Eskimos since the fatal march of

the lost crews in April 1848; no cairn disturbed; none of the numerous articles strewed about them, nor the scanty driftwood we noticed at long intervals—although invaluable to the natives—had been touched. From this very significant fact it is quite certain that they had not been discovered by the Eskimos, whose knowledge of the white men falling down and dying as they walked along must be limited to the shore-line *southward and eastward of Cape Crozier,* and where of course no traces were permitted to remain for us to find. It is not probable that such fearful mortality could have overtaken them so early in their march as within eighty miles by sledge route from the abandoned ships—such being the distance of the latter from Cape Crozier; nor is it probable that we could have passed the wreck had she existed there." The captain's belief is that the ships drifted south from the position in which they were abandoned, and that they were not wrecked until, carried by the flood-tide from the north, they had been swept southward past Cape Crozier into Simpson Strait, and that thus the vessels actually made the North-West Passage. It was therefore "off the *south-west* coast of King William Island that the abandoned ships were destroyed."

So far as M'Clintock was concerned, the search for traces of the Franklin expedition had now successfully terminated, and it only remained for the commander to make the best of his way back to Bellot Strait, and wait a favourable opportunity of making sail for England. He accordingly proceeded north from Point Victory, crossed overland from Walls Bay to the eastern shore, and traversed the east coast of the island to the south of Cape Sabine. On this side of the island there was a good deal of vegetation, and animals frequented the coast in considerable numbers. The contrast between these habitable shores and those of the west side of the island was very striking. "Nothing can exceed the gloom and desolation of the western coast of King William Island," says M'Clintock. "Hobson and myself had some considerable experience of it; his sojourn there exceeded a month. Its climate seems different from that of the eastern coast; it is more exposed to north-west winds, and the air was almost constantly loaded with chilling fogs," blown over the land no doubt by the prevailing winds from M'Clintock Channel, which seems to be constantly filled with very heavy pack. Early in June Captain M'Clintock again crossed over James Ross Strait, and once more found himself on the straight limestone coast of Boothia Peninsula. As he proceeded northwards he searched carefully for Sir James Ross's cairn at the Magnetic Pole, but could find no trace of it. Like the cairn raised by the same explorer on Point Victory, King William Island, it had been destroyed by the natives. A note left for M'Clintock at one of the depôts informed him that Hobson, who was six days in advance of the captain's party, had become seriously ill, and was unable to walk. His men

had placed him on the sledge, and were hastening "home" to have him put as soon as possible under the doctor's care.

The captain reached the western entrance of Bellot Strait on the 18th June. The summer thaw had now covered the ice with such a depth of water that it was found impossible to proceed. The men therefore hauled the sledges up off the flooded ice, and commenced a march of sixteen or seventeen miles overland for the ship. "The poor dogs," writes M'Clintock, "were so tired and sore-footed, that we could not induce them to follow us—they remained about the sledges. After a fatiguing scramble across the hills, and through the snow valleys," continues the captain, "we were refreshed with a sight of our poor, dear, lonely little 'Fox,' and arrived on board for a late breakfast on the 19th June, after an absence of seventy-eight days."

CAPTAIN F. L. M'CLINTOCK R. N.

RELICS OF THE FRANKLIN EXPEDITION DISCOVERED BY M' CLINTOCK

CHAPTER VIII.

DEATH OF BLACKWELL — CAPTAIN ALLEN YOUNG'S JOURNEY — LIEUTENANT HOBSON'S JOURNEY—RELEASE AND HOMEWARD VOYAGE—LIST OF PRINCIPAL RELICS FOUND.

As soon as Captain M'Clintock arrived at his winter quarters on the morning of the 19th June, he eagerly inquired about Lieutenant Hobson. That intrepid officer had been brought home on the 14th so weak from scurvy, from which he had been suffering at the commencement of his journey, that he could not walk or even stand without assistance, and had at once been put to bed and subjected to rigorous treatment by Dr Walker. M'Clintock found him rapidly mending in health, and in excellent spirits. The record he had found on the beach at Victory Point was to him a living fountain of health. And then everybody was kind to him. The Greenlander, Christian, had shot a number of ducks, and on these succulent water-fowl, backed up with preserved potatoes, milk, strong ale, lime-juice, and whale-fish hide, the gallant lieutenant was in the fair way of soon becoming himself again.

Among the crew, however, one death had taken place during the absence of the captain—that of Thomas Blackwell, ship's steward. Poor Blackwell had the charge of the ship's spirits, and the burden seemed to weigh upon him. He accordingly endeavoured to diminish it as rapidly as possible by consumption. The natural result followed. He became careless in all his habits, cherished a dislike to preserved meats, and never took any, nor any preserved potatoes, unless he was watched and compelled to use them. He would not, except on compulsion, put on clean clothes, and at last he had to be forcibly taken on deck in order to have change of air. All that was manly having apparently died out of him, he appears to have sunk at last, almost in neglect. "He went on deck as usual," says M'Clintock, "and when found there, was quite dead." The event, however, had been expected for some time, and was regarded as merely one of the incidents to be expected under the conditions.

But the prevailing sentiment on board the "Fox" after the return of M'Clintock was that of satisfaction and great content. The feeling of the

officers and men—for in this little yacht all seemed to live on equal terms—is well expressed by Captain Allen Young. "We had been prepared," he writes, "by the report brought from the Eskimos in February to find that all hopes of survivors were at an end, and that the expedition had met with some fatal and overwhelming casualty; but we were scarcely prepared to know, nor could we even have realised the manner in which they spent their last days upon earth, so fearful a sojourn must it have been. Beset and surrounded with wastes of snow and ice, they passed two more terrible winters drifting slowly to the southward at the rate of one mile in the month, hoping each summer that the ice would open, and determined not to abandon their ships until every hope was gone. In nineteen months they had only moved some eighteen miles, their provisions daily lessening, and their strength fast failing. They had at last left their ships for the Fish River at least two months before the river could break up and allow them to proceed, and in the then imperfect knowledge of ice travelling they could not have carried with them more than forty days' provisions. Exhausted with scurvy and starvation, 'they dropped as they walked along,' and those few who reached Montreal Island must all have perished there; and but for their having travelled over the frozen sea we should have found the remains of these gallant men as they fell by the way, and but for the land being covered deeply with snow, more relics of those who had struggled to the beach to die would have been seen. They all perished, and, in dying in the cause of their country, their dearest consolation must have been to feel that Englishmen would not rest until they had followed up their footsteps, and had given to the world what they could not then give—the grand result of their dreadful voyage—*their discovery of the North-West Passage.* They had sailed down Peel and Victoria Straits, now appropriately named Franklin Straits, and the poor human skeletons lying upon the shores of the waters in which Dease and Simpson had sailed from the westward, bore melancholy evidence of their success."

Having witnessed with limitless gratification the satisfaction of his officers and crew with the results of the discoveries made by himself and Hobson—results that had brought the doubts and griefs of more than ten years to an end—M'Clintock now chiefly concerned himself about Captain Allen Young, who for some time had been absent with an exploring party. Young had set out on the 7th April with a sledge party of four men, and a second sledge, drawn by six dogs, under the management of one of the Greenlanders, with the view of exploring and examining Franklin Strait (first named Peel Strait) and Prince of Wales Island. His journey was of the dismallest description. He was afflicted with almost incessant gales, and his progress thereby much retarded. But nothing would stop him; for, finding that a channel existed between Prince of Wales Land and Victoria Land, whereby his field for discovery and search would be lengthened, he sent

back one sledge, the tent, and four men, to the ship, in order that he might thus be able to afford out of his stores as much provision for himself and one companion as might serve them and their dogs for forty days. Young's companion was George Hobday, "a fine young man-of-war's man, and also a man of few words." For many days Young and the silent, loyal Hobday trudged on together, sleeping at night in such snow-lodges as they could build. "They journeyed when the storms abated, pushing on—without regard to day or night on these occasions—as long as their strength permitted. "Once," says M'Clintock, "when quite worn out with fatigue, they slept an unbroken sleep of many hours, their snow-hut so buried in the drift as to be unusually warm and snug, and the storm without, supplying an appropriate lullaby; and so a day slipped by unnoticed. It would have been a marvel had they retained their reckoning during these forty dreary, dismal periods —those days without nights. Young, however, was too good a traveller to be much put out by having lost a day. He tested and corrected his calendar by comparing his observed lunar distance with that given in the 'Nautical Almanac.'" After forty days of constant exposure and fatigue, however, Young, whose health had materially suffered, was compelled to return to the ship for medical aid. He arrived on the 7th June, procured restoratives, and having somewhat recovered, went away again on the 10th to complete his department of the search. His zeal was inexhaustible, and his spirit unbroken by the hardships he endured; and though Dr Walker lodged a protest against his again leaving the ship, on the ground that from illness he was unequal to the task of resuming the search, he re-equipped his two sledge parties, and went away to the westward once more.

His journey, a report of which he submitted to Captain M'Clintock, comprised in all seventy-eight days of sledge travelling under the most trying circumstances. Its incidents and results are thus summarised by M'Clintock: "Leaving the ship on 7th April, he crossed Sir J. Franklin Strait to Prince of Wales Land, and thence traced its shore to the south and west. On reaching its southern termination, Cape Swinburne—so named in honour of Rear-Admiral Swinburne, a much esteemed friend of Sir J. Franklin, and one of the earliest supporters of this final expedition—he describes the land as extremely low, and deeply covered with snow, the heavy grounded hummocks which fringed its monotonous coast alone indicating the line of demarcation betwixt land and sea. To the north-east of this terminal cape the sea was covered with level floe formed in the fall of last year, whilst all to the north-westward of the same cape was pack, consisting of heavy ice-masses, formed perhaps years ago in far distant and wider seas.

"Young attempted to cross the channel (M'Clintock Channel) which he discovered between Prince of Wales Island and Victoria Land, but, from the

rugged nature of the ice, found it quite impracticable with the means and time remaining at his disposal. He expresses his firm conviction that this channel is so constantly choked up with unusually heavy ice as to be quite unnavigable; it is, in fact, a *continuous ice-stream* from the north-west. His opinion coincides with my own, and with those of Captains Ommanney and Osborn, when these officers explored the north-western shores of Prince of Wales Land in 1851; and also with the opinion formed by Captain R. Collinson, C.B., when that officer discovered Gateshead Island, which lies near its southern shore, and at the north-east extreme of Victoria Land. Fearing that his provisions might run short, he sent back one sledge with four men, and continued his march with only one man and the dogs for forty days! They were obliged to build a snow-hut each night to sleep in, as the tent was sent back with the men; but latterly, when the weather became more mild, they preferred sleeping on the sledge, as the construction of a snow-hut usually occupied them for two hours. Young completed the exploration of this coast beyond the point marked upon the charts as Osborn's farthest, up nearly to lat. 73° N., but no cairn was found. He, however, recognised the remarkably shaped conical hills noticed by Osborn when, at his farthest in 1851, he struck off-shore to the westward.

"The coast-line throughout was extremely low; and in the thick, disagreeable weather which he almost constantly experienced, it was often a matter of great difficulty to prevent straying inland from it. He commenced his return on 11th May, and reached the ship on 7th June, in wretched health and depressed in spirits. Directly his health was partially re-established, and in spite of the doctor's remonstrances, he again set out on the 10th with his party of men and the dogs to complete the exploration of both shores of Sir John Franklin Strait, between the position of the 'Fox' and the points reached by Sir James Ross in 1849, and of Lieutenant Browne in 1851. This he accomplished without finding any trace of the lost expedition, and the parties were again on board by 28th June. The ice travelled over in this last journey was almost all formed last autumn."

Of Lieutenant Hobson's journey, the principal results—the discovery of the famous record, and of an immense number of relics on the north-west shores of King William Island—have been already referred to. He was absent from the ship seventy-four days in all, during the greater part of which time he suffered acutely from scurvy. Before he was ten days away from the ship he was suffering severe pains in the limbs, and began to walk lame, and towards the close of the journey he was compelled to allow himself to be dragged on the sledge. When he arrived at the ship he could neither walk nor stand. His illness does not seem to have been caused by insufficient or unwholesome food. He ate the best pemmican—the most nutritious sort of food known—varied at intervals by newly-killed game.

"How strongly this bears upon the last sad march of the lost crews," exclaims M'Clintock. "In spite of this fresh meat, scurvy advanced with rapid strides. And here," continues the commander, "let me observe, that amongst all the relics of the ill-fated expedition, *no preserved meat or vegetable tins were found,* either about the cairns or along the line of retreat. The inference is as plain as it is painful!"

After leaving Captain M'Clintock at Cape Victoria, on the south-west coast of Boothia, Hobson found no difficulty in crossing James Ross Strait. The ice, he says, appeared to be of but one year's growth. As he advanced farther west, however, and came within the region reached or affected by the stupendous pack which slowly but perpetually travels down M'Clintock Channel from the fearful frozen ocean beyond the Parry Islands, the character of the ice underwent a surprising change. Immediately off the beach at Cape Felix the pressure was severe, but the ice itself was not remarkably heavy, as "the shoalness of the coast keeps the line of pressure at a considerable distance from the beach;" but to the northward of King William Island, where Franklin's ships were first beset, the ice was "very rough and crushed up into large masses." In fact this very rough ice to the northward of the island was simply the impracticable pack from M'Clintock Channel, which is originally formed far to the west of Melville and Prince Patrick Islands. It is described by Commander Mecham as consisting of floes, with mounds of blue ice upon it, of from five to twenty feet in height.

Upon the desolate western shores of King William Island Hobson spent thirty-one days. He first came upon traces of the Franklin expedition after having passed westward round Cape Felix. "He found a large cairn, and close beside it three small tents, with blankets, old clothes, and other vestiges of a shooting or magnetic station; but although the cairn was dug under, and a trench dug all round it to a distance of ten feet, no record was discovered. A sheet of white paper, folded up, was found in the cairn, but even under the microscope no trace of writing appears. Two broken bottles (corked) lay amongst the loose stones which had fallen off the cairn, and these may perhaps have contained records. The most interesting of the relics, including a small English ensign, and the iron heads of two boarding-pikes, were brought away. The tents lay prostrate, and without tent-poles; it seems highly probable that the pikes had been used for that purpose, and were subsequently burned for fuel. Two miles farther to the south-west a small cairn was found, but neither record nor relics; and about three miles north of Point Victory a third cairn was examined, but only a broken pickaxe and empty canister found." The finding of the ships' record and the boat has already been described.

On their return to the ship after their respective journeys, both Hobson

and Young were seriously ill. By the skill and resources of Dr Walker, however, they rapidly improved, and soon Captain M'Clintock is able to state that all on board are "indulging in an enormous consumption of eatables, such as only those can do who have been much reduced by long-continued fatigue and exposure to cold." The fare now included "venison, ducks, beer, and lemon-juice, daily; preserved apples and cranberries three times a week; and pickled whale-skin—a famous anti-scorbutic—*ad libitum*, for all who liked it." Meantime the weather, which had been wet, windy, and miserable, now set in fair; the carpenter's hammer resounded all over the little yacht; and as the sailors plied their work, their cheery voices had an unwonted and animating effect. By the 9th July the ship had been cleaned, the provisions taken on board, the tanks filled with fresh water, and all the usual preparations made to take advantage of the first break-up of the ice to escape from Port Kennedy. On the 6th August steam was got up, and Captain M'Clintock himself, assisted by the two stokers, worked the engines. On the 8th the ice was much broken up in Brentford Bay, and a good deal of open water with a water-sky beyond was seen off Cape Garry. On the 9th, under the influence of a south-west wind, the ice cleared off, and M'Clintock steamed out of Port Kennedy, and along the land toward Cape Garry. After a few days' detention in Cresswell Bay, Fury Beach was passed on the 17th; and on the 21st, the "Fox," having passed through Lancaster Sound and entered Baffin Bay, was "out of sight of land." On the 28th August the vessel was safely anchored in Lievely Harbour, and the officers engaged in reading letters from home. Cape Farewell was passed on the 10th September, and on the 20th the "Fox" arrived in the English Channel.

The extent of new coast-line explored by Captain M'Clintock, Captain Allen Young, and Lieutenant Hobson, amounted in all to 800 geographical miles. "In the Franklin search," writes M'Clintock, "more than 40,000 miles have been sledged, including 8000 miles of coast-line minutely examined by parties varying from five to eleven persons, remaining absent from their ships for periods ranging up to one hundred and five days, and dragging along with them provisions for five, six, or seven weeks. Sledge parties travelled in every month, excepting only the dark ones of December and January, in temperatures not unfrequently 40° below zero (of Fahrenheit), and occasionally even 10° or 15° colder still. It was found that men employed on long sledge journeys lost on the average about 12 lbs. weight; and where they would drag a moderately laden sledge thirteen miles a day, an equal number of dogs would drag half the same load for twenty-seven miles. The work of a single expedition of two ships (Kellett's and my own) with ninety officers and men, at a wintering station, amounted to 1282 statute miles sledged in autumn, and 7352 miles in spring, by eleven

parties; in this manner 1800 miles of coast-line were explored. These great results are astonishing; and yet the system of sledge exploration is capable of still further development; already it has brought even the North Pole of the earth within our reach! What laurels, what world-wide renown will be his, who first accomplishes this crowning feat of geographical discovery!"

The following is a list of the principal relics of the Franklin expedition brought to England in the "Fox," and deposited in the Museum of the United Service Institution:

"*Relics brought from the boat found in lat.* 69° 8′ 43″ *N., long.* 99° 24′ 42″ *W., upon the West Coast of King William Island, May* 30, 1859.

"Two double-barrelled guns, one barrel in each is loaded. Found standing up against the sides in the after-part of the boat.

"A small Prayer-book; cover of a small book of 'Family Prayers;' 'Christian Melodies,' an inscription within the cover to 'G. G.' (Graham Gore?); 'Vicar of Wakefield;' a small Bible, interlined in many places, and with numerous references written in the margin; a New Testament in the French language.

"Two table-knives, with white handles, one is marked 'W.R.' (ward-room); a gimlet; an awl; two iron stanchions, 9 inches long, for supporting a weather cloth, which was round the boat.

"26 pieces of silver plate—11 spoons, 11 forks, and 4 teaspoons; 3 pieces of thin elm-board (tingles) for repairing the boat, and measuring 11 inches by 6 inches, and 3-10ths inch thick.

"Piece of canvas: Bristles for shoemaker's use, bullets, short clay pipe, roll of waxed twine, a wooden button, small piece of a port-fire, two charges of shot tied up in the finger of a kid glove, fragment of a seaman's blue serge frock. Covers of a small Testament and Prayer-book, part of a grass cigar-case, fragment of a silk handkerchief, thread-case, piece scented soap, three shot charges in kid glove fingers, a belted bullet, a piece of silk pocket handkerchief. Two pairs of goggles, made of stout leather, and wire gauze instead of glass; a sailmaker's palm, two small brass pocket compasses, a snooding line rolled up on a piece of leather, a needle and thread case, a bayonet scabbard altered into a sheath for a knife, tin water bottle for the pocket, two shot pouches (full of shot).

"Three spring hooks of sword belts, a gold-lace band, a piece of thin gold twist or cord, a pair of leather goggles with crape instead of glass; a small green crape veil.

"Two small packets of blank cartridge in green paper, part of a cherry-stick pipe stem, piece of a port-fire, a few copper nails, a leather boot-lace, a seaman's clasp-knife, two small glass stoppered bottles (full), three glasses of spectacles, part of a broken pair of silver spectacles, German-silver pencil-case, a pair of silver (?) forceps, such as a naturalist might use for holding or seizing small insects, etc.; a small pair of scissors rolled up in blank paper, and to which adheres a printed Government paper, such as an officer's warrant or appointment; a spring hook of a sword belt, a brass charger for holding two charges of shot.

"A small bead purse, piece of red sealing-wax, stopper of a pocket flask, German-silver top and ring, brass matchbox, one of the glasses of a telescope, a small tin cylinder, probably

made to hold lucifer matches; a linen bag of percussion caps of three sizes, a very large and old-fashioned kind, stamped 'Smith's patent;' a cap with a flange similar to the present musket caps used by Government, but smaller; and ordinary sporting caps of the smallest size.

"Five watches.

"A pair of blue glass spectacles or goggles with steel frame, and wire gauze encircling the glasses, in a tin case.

"A pemmican tin, painted lead colour, and marked 'E' (Erebus) in black. From its size it must have contained 20 lbs. or 22 lbs.

"Two yellow glass beads, a glass seal with symbol of Freemasonry.

"A 4-inch block, strapped, with copper hook and thimble, probably for the boat's sheet."

"*Relics found about Ross's Cairn, on Point Victory, May and June* 1859, *brought away.*

"A 6-inch dip circle by Robinson, marked 'I 22.' A case of medicines, consisting of 25 small bottles, canister of pills, ointment, plaster, oiled silk, etc. A 2-foot rule, two joints of the cleaning rod of a gun, and two small copper spindles, probably for dog-vanes of boats. The circular brass plate broken out of a wooden gun-case, and engraved 'C. H. Osmer, R.N.' The field glass and German-silver top of a 2-foot telescope, a coffee canister, a piece of a brass curtain-rod. The record tin, and the record dated 25th of April 1848. A 6-inch double frame sextant, on which the owner's name is engraved, 'Frederick Hornby, R.N.'"

PART XIII.

ARCTIC EXPEDITIONS FROM FOREIGN SHORES.

CHAPTER I.

AMERICAN EXPEDITIONS—KANE'S VOYAGE TO SMITH SOUND, 1853-55—ENTRANCE TO SMITH SOUND—A STORM—ARCTIC FLORA—WINTER QUARTERS REACHED.

THE first exploring expedition sent out into the Arctic seas from the United States was that under Lieutenant de Haven (see p. 535), in the "Advance" and "Rescue," which were bought, equipped, and provisioned by Mr Henry Grinnell, of New York. As we have already seen, this was strictly a Franklin search expedition, and as such it has already been dealt with as one of the volunteer expeditions sent out to seek for the lost squadron in 1850-51. The Smith Sound expedition, commanded by Dr Kane, also in a sense belongs to the series of the Franklin voyages, and might fairly enough have been discussed, like the others of that series, in the section of our work which deals with "The Franklin Search—1850-54." There are reasons, however, for regarding it rather as an important naval enterprise, undertaken with the objects of exploration and discovery generally, than as a voyage to the Arctic seas in search of Sir John Franklin. It was conducted in a region in which there was no hope of finding the lost explorer—it was continued after Dr Rae had ascertained that the fate of Franklin must be revealed on the shores of King William Land and the estuary of the Great Fish River; and the aims and achievements of its commander show that geographical discovery was a principal, if it was not the paramount and inspiring, spring of action animating the entire enterprise. It has therefore been considered convenient to treat the famous voyage of Kane as one of the group of American expeditions undertaken for the general purposes of exploration in the Arctic seas.

Captain Penney in 1851 spoke of Dr Elisha Kent Kane as a "highly intelligent medical officer of the American [De Haven's] expedition." The intelligence of the young doctor had commended itself to many besides the

sagacious whaling captain. On his return with De Haven, Kane was employed, under the orders of the United States Navy Department, to arrange and elaborate the scientific and other results of the voyage; and in the month of December 1852, about fourteen months after his return, he "had the honour of receiving special orders from the Secretary of the Navy to 'conduct an expedition to the Arctic seas in search of Sir John Franklin.'" To the expenses of the undertaking Mr Henry Grinnell, Mr George Peabody, and the chief scientific institutions of America, were the chief contributors.

The "Advance," in which he had formerly sailed in the De Haven expedition, was placed at Dr Kane's disposal for the cruise by Mr Grinnell. His crew consisted of seventeen officers and men, including Messrs Brooks and Morton, who had previously sailed with him, and Isaac J. Hayes, a medical student from Philadelphia; and his equipment consisted of five boats, a quantity of rough boards, to serve for housing over the vessel in winter, some tents of India-rubber and canvas, and a number of sledges. It is important in connection with the fearful sufferings afterwards undergone from scurvy, to note what provisions had been considered suitable for the voyage. "Our store of provisions," writes Dr Kane, "was chosen with little regard to luxury. We took with us some 2000 lbs. of well-made pemmican, a parcel of Borden's meat-biscuit, some packages of an exsiccated (dried) potato, some pickled cabbage, and a liberal quantity of American dried fruits and vegetables. Besides these we had the salt beef and pork of the navy ration, hard biscuit and flour. A very moderate supply of liquors, with the ordinary *et ceteras* of an Arctic cruiser, made up the diet list. I hoped to procure some fresh provisions in addition before reaching the upper coast of Greenland; and I carried some barrels of malt, with a compact apparatus for brewing." Kane may well say his store of provisions "was chosen with little regard to luxury;" he might have added, "or health." The "Advance" left New York on the 30th May 1853, never to return.

St John's, Newfoundland, was reached on the 17th June, and here Dr Kane was able to purchase a fresh stock of beef, "which, after removing the bones and tendons," he explains, "we compressed into rolls, by wrapping it closely with twine, and hung up in the rigging." As he must have used salt or pickle in the process, however, this investment of "fresh beef" was merely adding to his salted store of that article. At Fiskernaes he engaged an Eskimo hunter for the service of the expedition, one Hans Christian, who was "fat, good-natured, and, except under the excitement of the hunt, as stolid and unimpressionable as one of our own Indians."

Dr Kane reached the south entrance to Melville Bay on the 17th July. "I did not deem it advisable," he writes, "to attempt the usual passage

along the fast floes of the land, but stood directly to the northward and westward, until I met the middle pack. Here we headed nearly direct for Cape York, and succeeded in crossing the bay without injury in ten days after first encountering the ice. On the 7th of August we reached the headland of Sir Thomas Smith Sound, and passed the highest point obtained by my predecessor, Captain Inglefield, R.N. . . . Now I felt sure, from the known openness of the season of 1852, and the probable mildness of the following winter, that we could scarcely hope to make use of the land-ice for tracking, or to avail ourselves of leads along its margin by canvas. And this opinion was confirmed by the broken and rotten appearance of the floes during our coastwise drift at the Duck Islands. I therefore deserted the inside track of the whalers, and stood to the westward, until we made the first streams of the middle pack; and then, skirting the pack to the northward, headed in slowly for the middle portion of the bay above Sabine Islands. My object was to double, as it were, the loose and drifting ice that had stood in my way, and, reaching Cape York, as nearly as might be, trust for the remainder of my passage to warping and tracking by the heavy floes. We succeeded, not without some laborious boring and serious risks of entanglement among the broken icefields. But we managed, in every instance, to combat this last form of difficulty by attaching our vessel to large icebergs, which enabled us to hold our own, however swiftly the surface floes were pressing by us to the south. Four days of this scarcely varied yet exciting navigation brought us to the extended fields of the pack, and a fortunate north-wester opened a passage for us through them. We are now in the North Water."

Cape Alexander and Cape Isabella were in sight on the 6th August, and the appearance of the coast was cheerless and oppressive. Dr Kane's description of it from the entrance of Smith Sound is exceedingly graphic. He says: "As we look far off to the west, the snow comes down with heavy uniformity to the water's edge, and the patches of land seem as rare as the summer's snow on the hills about Sukkertoppen and Fiskernaes. On the right we have an array of cliffs, whose frowning grandeur might dignify the entrance to the proudest of southern seas. I should say they would average from four to five hundred yards in height, with some of their precipices eight hundred feet at a single steep. They have been until now the Arctic pillars of Hercules; and they looked down on us as if they challenged our right to pass. Even the sailors are impressed, as we move under their dark shadow. One of the officers said to our look-out, that the gulls and eider that dot the water about us were as enlivening as the white sails of the Mediterranean. 'Yes, sir,' he rejoined, with sincere gravity—'yes, sir, in proportion to their size!'

"*August 7, Sunday.*—We have left Cape Alexander to the south; and

Littleton Island is before us, hiding Cape Hatherton, the latest of Captain Inglefield's positively-determined headlands. We are fairly inside of Smith Sound. On our left is a capacious bay; and deep in its north-eastern recesses we can see a glacier issuing from a fiord.

"We knew this bay familiarly afterward, as the residence of a body of Eskimos with whom we had many associations; but we little dreamt then that it would bear the name of a gallant friend, who found there the first traces of our escape. A small cluster of rocks, hidden at times by the sea, gave evidence of the violent tidal action about them.

"As we neared the west end of Littleton Island, after breakfast this morning, I ascended to the crow's-nest, and saw to my sorrow the ominous blink of ice ahead. The wind has been freshening for a couple of days from the northward, and if it continues it will bring down the floes on us.

"My mind has been made up from the first that we are to force our way to the north as far as the elements will let us; and I feel the importance therefore of securing a place of retreat, that in case of disaster we may not be altogether at large. Besides, we have now reached one of the points, at which, if any one is to follow us, he might look for some trace to guide him."

Upon Littleton Island Dr Kane deposited his metallic lifeboat, and such of his provisions and stores as it was not probable he should be in immediate need of for some time to come. The boat, with her cargo, was buried, and covered with a mixture of sand and water, which immediately froze into a solid mass. "Our stores deposited," says Kane, "it was our next office to erect a beacon, and entrust to it our tidings. We chose for this purpose the western cape of Littleton Island, as more conspicuous than Cape Hatherton—built our cairn, wedged a staff into the crevices of the rocks, and spreading the American flag, hailed its folds with three cheers as they expanded in the cold midnight breeze. These important duties performed —the more lightly, let me say, for this little flicker of enthusiasm—we rejoined the brig early in the morning of the 7th, and forced on again toward the north, beating against wind and tide."

It was Dr Kane's design to carry his ship as far to the north as possible, and afterwards to send out sledge parties along the shores, with the view of discovering new lands, and advancing his country's flag to a point nearer 90° north than had ever yet been reached. He was still, however (on the 7th August), too far to the south to think of going into harbour, and as the ice-blink had been seen from Flagstaff Point on Littleton Island, he made up his mind to push on to the north, and attempt to bore through the ice. He first closed with this dreaded enemy of the Arctic explorer off the west side of Littleton Island on August 8th. In lat. 78° 45′ he found the ice hugging the western shore, and extending completely across the channel in a drifting mass. For a time the contest between man and floating pack was main-

tained with equal honours; but a dense fog coming on, Dr Kane, to avoid being forced on the Greenland coast, was obliged to retreat into a "beautiful land-locked cove," which was afterwards named Refuge Harbour.

For several days the "Advance" was confined in this cove, and for a considerable number of days after, her progress along the east shore of the sound was exceedingly slow. On August 13th Kane was tempted by a change of weather to push out from Refuge Harbour, and try his fortune once more in the ice. The struggle, early begun, lasted all day, and in the evening the "Advance" had only made three-quarters of a mile of northing. On August 15th and 16th the brig remained under the shelter of an island, which protected her from the gale which had sprung up on the 14th, but was now dying out. The gale wore round to the southward on the 17th, but three heavy hawsers having been carried out to the rocks of the sheltering islet, the "Advance" continued to hold on. On the morning of the 20th a perfect hurricane was raging. "We had seen it coming," writes Kane, "and were ready with three good hawsers out ahead, and all things snug on board. Still it came on heavier and heavier, and the ice began to drive more wildly than I thought I had ever seen it. I had just turned in to warm and dry myself during a momentary lull, and was stretching myself out in my bunk, when I heard the sharp twanging snap of a cord. Our six-inch hawser had parted, and we were swinging by the two others; the gale roaring like a lion to the southward. Half a minute more, and 'twang, twang!' came a second report. I knew it was the whale-line by the shrillness of the ring. Our noble ten-inch manilla still held on. I was hurrying my last sock into its sealskin boot, when M'Gary came waddling down the companion-ladders: 'Captain Kane, she won't hold much longer; it's blowing the devil himself, and I am afraid to surge.'

"The manilla cable was proving its excellence when I reached the deck; and the crew, as they gathered round me, were loud in its praises. We could hear its deep Æolian chant, swelling through all the rattle of the running-gear and moaning of the shrouds. It was the death-song! The strands gave way, with the noise of a shotted gun; and, in the smoke that followed their recoil, we were dragged out by the wild ice, at its mercy. We steadied and did some petty warping, and got the brig a good bed in the rushing drift; but it all came to nothing. We then tried to beat back through the narrow ice-clogged water-way that was driving, a quarter of a mile wide, between the shore and the pack. It cost us two hours of hard labour, I thought skilfully bestowed; but at the end of that time we were at least four miles off, opposite the great valley in the centre of Bedevilled Reach. Ahead of us, farther to the north, we could see the strait growing still narrower, and the heavy ice-tables grinding up, and clogging it between the shore-cliffs on one side and the ledge on the other. There was but one thing

left for us—to keep in some sort the command of the helm, by going freely where we must otherwise be driven. We allowed her to scud under a reefed fore-topsail; all hands watching the enemy, as we closed, in silence. At seven in the morning we were close upon the piling masses. We dropped our heaviest anchor with the desperate hope of winding the brig, but there was no withstanding the ice-torrent that followed us. We had only time to fasten a spar as a buoy to the chain, and let her slip. So went our best bower!

"Down we went upon the gale again, helplessly scraping along a lee of ice seldom less than thirty feet thick; one floe, measured by a line as we tried to fasten to it, more than forty. I had seen such ice only once before, and never in such rapid motion. One upturned mass rose above our gunwale, smashing in our bulwarks, and depositing half a ton of ice in a lump upon our decks. Our stanch little brig bore herself through all this wild adventure as if she had a charmed life. But a new enemy came in sight ahead. Directly in our way, just beyond the line of floe-ice against which we were alternately sliding and thumping, was a group of bergs. We had no power to avoid them; and the only question was, whether we were to be dashed in pieces against them, or whether they might not offer us some providential nook of refuge from the storm. But, as we neared them, we perceived that they were at some distance from the floe-edge, and separated from it by an interval of open water. Our hopes rose as the gale drove us toward this passage, and into it; and we were ready to exult, when, from some unexplained cause—probably an eddy of the wind against the lofty ice-walls—we lost our headway. Almost at the same moment we saw that the bergs were not at rest, that with a momentum of their own they were bearing down upon the other ice, and that it must be our fate to be crushed between the two.

"Just then a broad sconce-piece or low water-washed berg came driving up from the southward. The thought flashed upon me of one of our escapes in Melville Bay; and as the sconce moved rapidly close alongside us, M'Gary managed to plant an anchor on its slope, and hold on to it by a whale-line. It was an anxious moment. Our noble tow-horse, whiter than the pale horse that seemed to be pursuing us, hauled us bravely on; the spray dashing over his windward flanks, and his forehead ploughing up the lesser ice, as if in scorn. The bergs encroached upon us as we advanced: our channel narrowed to a width of perhaps forty feet: we braced the yards to clear the impending ice-walls.

". . . We passed clear, but it was a close shave—so close that our port-quarter boat would have been crushed if we had not taken it in from the davits—and found ourselves under the lee of a berg, in a comparatively open lead. Never did heart-tried men acknowledge with more gratitude their merciful deliverance from a wretched death. . . ."

The storm abated on the 22d; and on the following day, sending his men with a tracking-rope on to the ice-belt that seemed soldered down upon the beach, Kane had his brig dragged slowly along in a northerly direction. On the 23d lat. 78° 41′ N. was reached, and Kane exclaims, "We are farther north, therefore, than any of our predecessors, except Parry on his Spitzbergen foot-tramp." It may be recollected that Captain Inglefield penetrated Smith Sound only to about lat. 78° 28′ N.; so that Kane had already pushed his ship farther through Smith Sound, by about thirteen miles, than any previous navigator. Progress at this period was exceedingly tedious, and Dr Kane has leisure to interest himself in the peculiar but scanty flora of the district in which he found himself. "We have collected thus far," he says, "no less than twenty-two species of flowering plants on the shores of this bay. Scanty as this starved flora may seem to the botanists of more favoured zones, it was not without surprise and interest that I recognised among its thoroughly Arctic types many plants which had been considered as indigenous only to more southern latitudes." The botany, however, of the Arctic regions is interesting mainly to those who have made this science a special and enthusiastic study; and in the expedition of 1875-76, so few new species have been discovered that this special department of Arctic investigation will be pursued only by the few.

On the 24th the crew of the "Advance" kept dragging, or rather tracking her onward. For some time the course pursued had been to the east, toward the head of a deep indentation, which promised shelter in the event a further progress northward being impossible. "We are now almost at the bottom of this indentation," writes Kane, on the 24th August. "Opposite us on the shore is a remarkable terrace, which rises in a succession of steps, until it is lost in the low rocks of the back country. The ice around us is broken but heavy, and so compacted that we can barely penetrate it. It has snowed hard since ten P.M. of yesterday, and the sledge fills up the interstices of the floes. Nothing but a strong south wind can give us further progress to the north." On the following day he writes, "I do not like being caught by winter before attaining a higher northern latitude than this, but it appears almost inevitable. . . . We are sufficiently surrounded by ice to make our chances of escape next year uncertain."

About this time one of the most singular incidents that ever took place under similar circumstances occurred to disturb the equanimity of Dr Kane. Of the seventeen men who made up his officers and crew, ten had belonged to the United States Navy, and were attached to Kane's command by order from the Navy Department; the others were shipped for the cruise by Dr Kane himself. "All of them were volunteers" also, it seems; and it is very clear that every one of these free and independent volunteers—who were either drafted to the expedition by Navy Department order, or taken on

by Dr Kane at a salary—thought himself quite as good as his neighbour. It is not surprising, therefore, that toward the close of August, after labouring incessantly among snow and ice, and making so little progress, these gentlemen should freely express their opinions upon the situation generally. "My officers and crew," writes Kane, "are stanch and firm men; but the depressing influences of want of rest, the rapid advance of winter, and, above all, our slow progress, make them sympathise but little with this continued effort to force a way to the north. One of them, an excellent member of the party, volunteered an expression of opinion this morning in favour of returning to the south and giving up the attempt to winter. It is unjust for a commander to measure his subordinates in such exigencies by his own standard. The interest which they feel in an undertaking is of a different nature from his own. With him there are always personal motives, apart from official duty, to stimulate effort. He receives, if successful, too large a share of the credit, and he justly bears all the odium of failure. An apprehension—I hope a charitable one—of this fact leads me to consider the opinions of my officers with much respect. I called them together at once, in a formal council, and listened to their views in full. With but one exception, Mr Henry Brooks, they were convinced that a further progress to the north was impossible, and were in favour of returning southward to winter. Not being able conscientiously to take the same view, I explained to them the importance of securing a position which might expedite our sledge journeys in the future; and, after assuring them that such a position could only be attained by continuing our efforts, announced my intention of warping toward the northern headland of the bay. 'Once there, I shall be able to determine from actual inspection the best point for setting out on the operations of the spring; and at the nearest possible shelter to that point I will put the brig into winter harbour.' My comrades received this decision in a manner that was most gratifying, and entered zealously upon the hard and cheerless duty it involved." Thus the complaints of this little floating democracy were soothed by one well-directed appeal; but it is surely uncommon for a leader to solicit the opinion of his officers on a question of vital importance, so far as the enterprise in hand is concerned, and, having received that opinion, to give his casting vote in favour of a minority of one.

During the next day or two the brig grounded at every ebb-tide. On the night of the 26th "she heeled over so abruptly," says the commander, "that we were all tumbled out of our berths. At the same time the cabin stove, with a full charge of glowing anthracite, was thrown down. The deck blazed smartly for a while; but by sacrificing Mr Sontag's heavy pilot-cloth coat to the public good, I choked it down till water could be sent down to extinguish it. It was fortunate we had water near at hand, for *the powder* was not far off." It soon became evident that the "Advance" was not