

No material alteration took place in the weather on the 12th. The temperature was 45° ; but from the force of the wind, and our confinement in the boats, we felt cold. In the evening two elderly Esquimaux came to us in their kaiyacks, shouting as they approached the boats, and paddling boldly alongside. They told us that they were the same two whom we had seen in the morning of the 10th watching us while at breakfast, though they had first discovered us on the 9th, and had seen Ooligbuck kill the deer, which had alarmed them greatly; they had since been to inquire about us from the party at Point Encounter, and having learnt that we were well-disposed, they had come to open a communication. In allusion, I suppose, to the attempt on the Union, they often said that the Esquimaux at the river's mouth were bad people, but that they themselves were good-hearted men; and they struck their breasts forcibly with their hands, to give energy to their assurances. They told us that a large party of their countrymen, who were at present fishing at the mouth of a river to the eastward, would soon move in this direction to kill white whales. Eetkoo-yak, the principal spokesman, invited us to go to his tents, where, he said, the women would be glad to receive us; and added, that next day he would bring four of his countrymen to visit us. We made them a handsome present of iron-work; and having paid, with beads, for some dried fish which they brought, sent them away highly contented.

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At seven o'clock in the morning of the 13th, nine Esquimaux came to us, amongst whom were our two acquaintances of yesterday. Some of the young men inquired when we were going away, and seemed to be anxious that we should depart; but our friend Eetkoo-yak gave us a pressing invitation to his tents, and wished to embark in the boats to conduct us thither. We declined his proposal, and the wind having moderated, we unmoored the boats, and rowed along the coast. The natives followed us, and

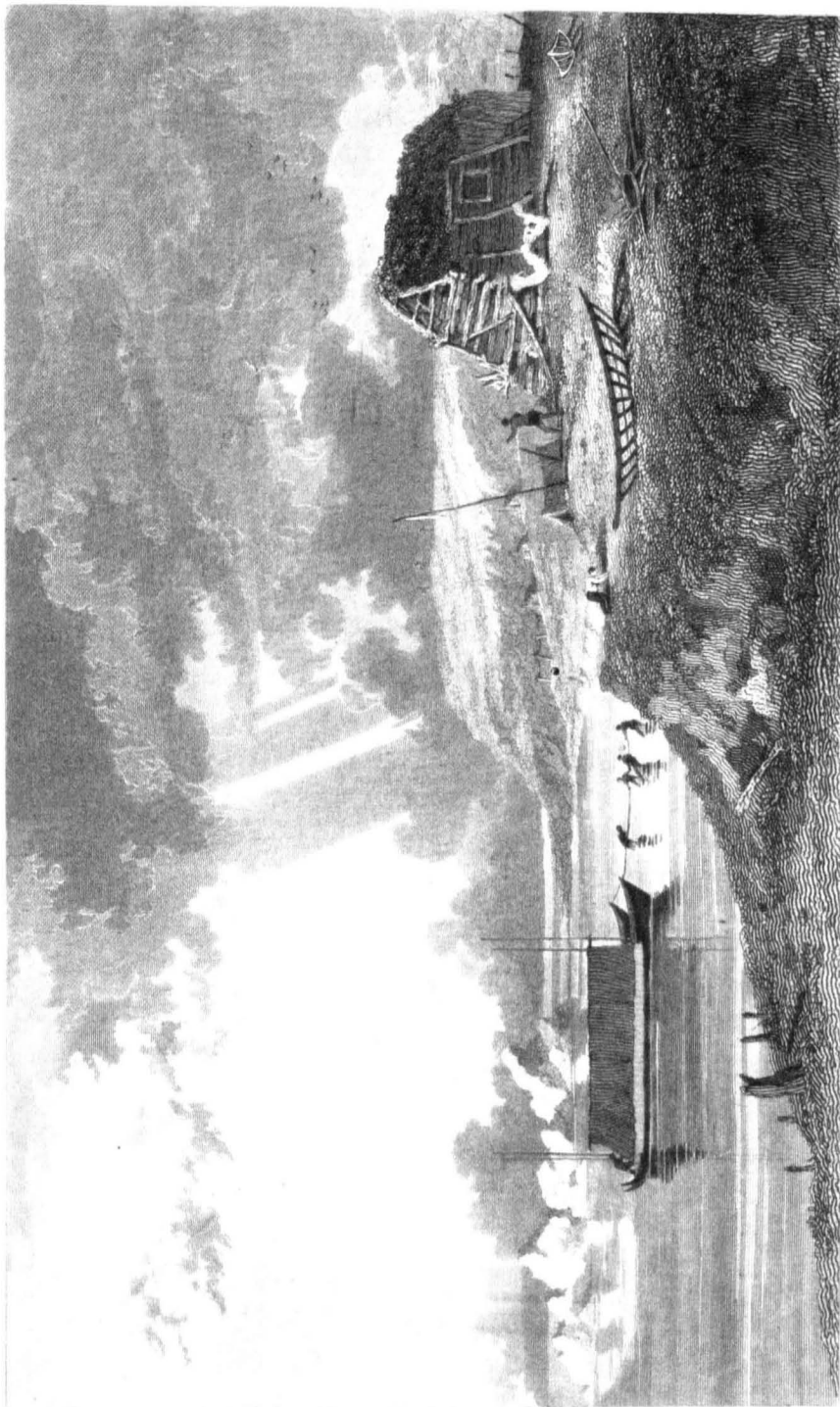
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soon afterwards four women and two boys came off in an oomiak, and exchanged some boots, pieces of leather, deer's meat, and fish, for beads. The point on which their tents were pitched was named Point Warren, after my friend Captain Samuel Warren, of the Royal Navy. As we continued our course the oomiak returned to the shore, and the men also left us soon afterwards, apparently pleased with our departure; for the knowledge of the effect of our muskets seemed to have impressed them with some dread. They were tattooed across the cheeks. The tribes to the westward of the Mackenzie are described by Captain Franklin, (p. 120,) as following a different fashion in the application of this ornament.

We coasted this day a flat shore, with dry sands running off to the distance of two or three miles, and we passed within several shoals, on which some heavy ice had grounded. Only a few small streams of ice were seen, although the ice-blink was visible the whole day. Soon after rounding Point Warren, we crossed the mouth of a large river, the water being muddy and fresh for a breadth of three miles, and the sounding lead was let down to the depth of five fathoms, without striking the bottom. This river is, perhaps, a branch of the Mackenzie, and falls into a bay, on which I have bestowed the name of my esteemed friend Copland Hutchison, Esq., Surgeon Extraordinary to His Royal Highness the Duke of Clarence. On its east side there is an island, which was named after Captain Charles Phillips, of the Royal Navy, to whom the nautical world is indebted for the double-capstan, and many other important inventions.

At five o'clock in the afternoon, rainy weather setting in, we made for a small island, and mooring the boats as near the beach as we could, covered them up, and landed to prepare supper. The length of the day's voyage was twenty-eight miles and a half. Mr. Kendall named the island in honour of Mr. Atkinson, of Berry-House: it is situated in latitude $69^{\circ} 55' N.$,



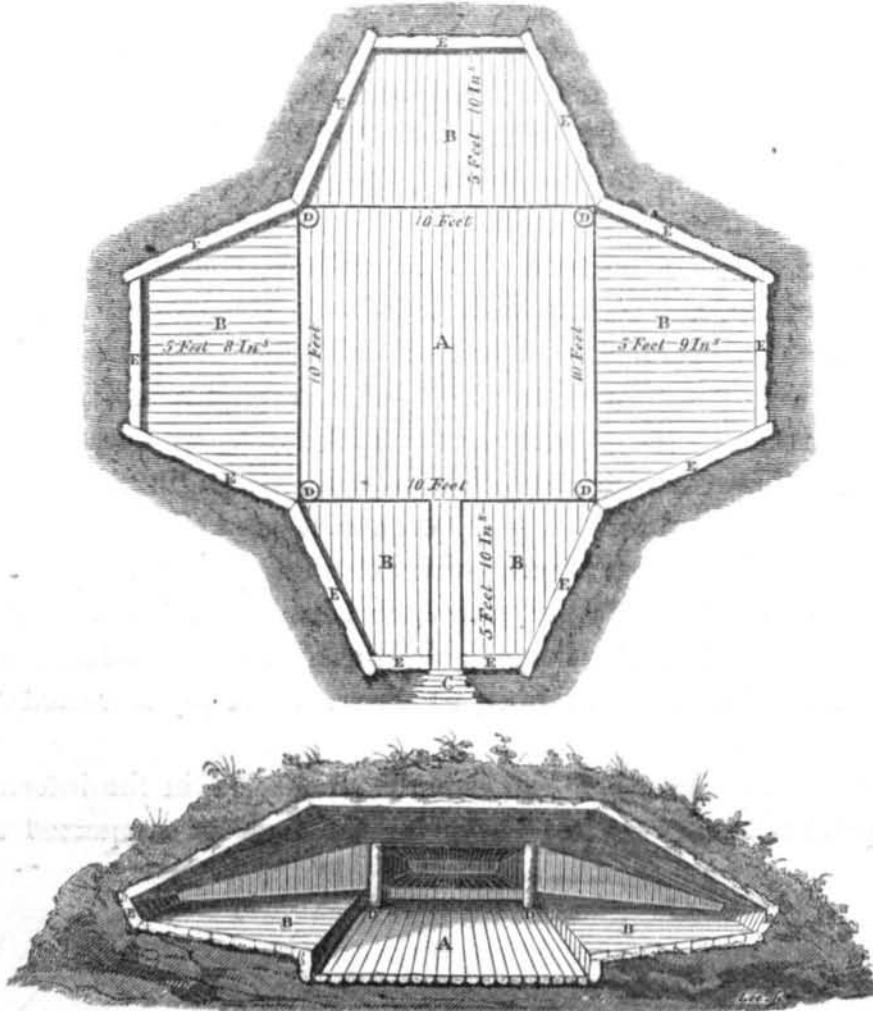
Engraved by J. K. S. 1840

Engraved by J. K. S. 1840

longitude $130^{\circ} 43' W.$, and is separated from a flat, and occasionally inundated shore, by a narrow creek. It is bounded towards the sea by a bulwark of sand-hills, drifted by the wind to the height of thirty feet. Under their shelter seventeen winter-houses have been erected by the natives, besides a large building, which, from its structure, seemed to be intended for a place of assembly for the tribe. Ooligbuck said he thought it was a general eating-room, but he was not certain, as his tribe erect no such buildings.

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I annex a section and ground plan of one of the largest



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of the dwelling-houses. The centre (A) is a square of ten feet, having a level flooring, with a post at each corner (D, D) to support the ridge-poles*, on which the roof rests. The recesses (B) are intended for sleeping-places. Their floors have a gentle inclination inwards, and are raised a foot above the central flooring. Their back walls are a foot high, and incline outwards like the back of a chair. The ridge-poles are six feet above the floor, the roof being flat in the centre, and sloping over the recesses. The inside of the building is lined with split-wood, and the outside is strongly but roughly built of logs, the whole being covered with earth. An inclined platform (C) forms the ascent to the door, which is in the middle of one of the recesses, and is four feet high; and the threshold, being on a level with the central flooring, is raised three feet above the surrounding ground, to guard against inundations. There is a square hole in the roof, near the door, intended for ventilation, or for an occasional entrance. As we observed no fire-places in these dwellings, it is probable that they are heated, and the cookery performed, in the winter, with lamps. Some of the houses were built front to front, with a very narrow passage between them leading to the doors, which were opposite to each other. This passage must form a snug porch in the winter when it is covered with slabs of frozen snow, and one end stopped up. Some of the larger houses which stood single, had log-porches to shelter their doors; and near each house there was a square or oblong pit, four feet beneath the surface of the ground, lined and covered with drift-timber, which was evidently intended for a store-house.

The large building for an assembly-room was, in the interior, a square of twenty-seven feet, having the log-roof supported on

The ridge-poles were omitted in the section by mistake.

two strong ridge poles, two feet apart, and resting on four upright posts. The floor in the centre, formed of split logs, dressed and laid with great care, was surrounded by a raised border about three feet wide, which was, no doubt, meant for seats. The walls, three feet high, were inclined outwards, for the convenience of leaning the back against them, and the ascent to the door, which was on the south side, was formed of logs. The outside, covered with earth, had nearly a hemispherical form, and round its base there were ranged the skulls of twenty-one whales. There was a square hole in the roof, and the central log of the floor had a basin-shaped cavity, one foot in diameter, which was, perhaps, intended for a lamp. The general attention to comfort in the construction of the village, and the erection of a building of such magnitude, requiring an union of purpose in a considerable number of people, are evidences of no small progress towards civilization. Whale skulls were confined to the large building, and to one of the dwelling-houses, which had three or four placed round it. Many wooden trays, and hand-barrows for carrying whale blubber, were lying on the ground, most of them in a state of decay.

Myriads of mosquitoes, which reposed among the grass, rose in clouds when disturbed, and gave us much annoyance. Many snow birds were hatching on the Point, and we saw swans, Canada geese, eider, king, arctic, and surf ducks; several glaucous, silvery, black-headed, and ivory gulls, together with terns and northern divers. Some laughing geese passed to the northward in the evening, which may be considered as a sure indication of land in that direction. The sea-water at Atkinson Island being quite salt, and the ponds on the shore brackish, we had recourse to the ice that lay aground for a supply of fresh water. Strong gales of wind, with heavy rain, continued all night.

The rain ceasing at four o'clock in the morning of the 14th,

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we embarked, and pulled along a sandy bar which projected five or six miles from Atkinson Island, and was covered by masses of ice. We had not left the beach above an hour, when a thick fog hid the land from our view, and a noise of breakers being at the same time heard, we deemed it prudent to moor the boats to a piece of grounded-ice, and wait for clear weather. After a time, the fog dispersing partially, we made sail before a fresh breeze towards the most easterly point of land in sight, but we had not advanced above five or six miles before the looming of the shore on the larboard bow made it necessary to haul to the wind; and the fog becoming as dense as ever, we ran aground on some flats, where the surf nearly filled the boats. On lowering the sails, deeper water was attained, but the wind began to blow hard directly upon the shore, and we could not discover a landing-place, nor did we even know our distance from the beach. In this dilemma we saw a long line of floating sea-weed, and Ooligbuck suggesting that it came from the mouth of a river, we followed its direction, and, with the aid of the sounding-lead, groped our way betwixt two shoals into a well sheltered inlet. Here there was a good landing-place, and we deemed ourselves peculiarly fortunate in reaching so snug a harbour, for the fog continued all day, and in the afternoon the wind increased to a heavy gale. The inlet was named Browell Cove, in honour of the Lieutenant-Governor of the Royal Hospital at Greenwich, and the bay to the westward of it, M·Kinley Bay, out of respect to Captain George M·Kinley, of the Naval Asylum. The latitude of the mouth of Browell Cove is 70° N., and the longitude $130^{\circ} 19'$ W. We did not ascertain its extent, but as its water is brackish, it probably communicates with Esquimaux Lake, which, according to Indian report, lies behind the islands that form this part of the coast. Several large basins of salt water communicate with the cove. Some herds of deer were seen, but too many hunters going

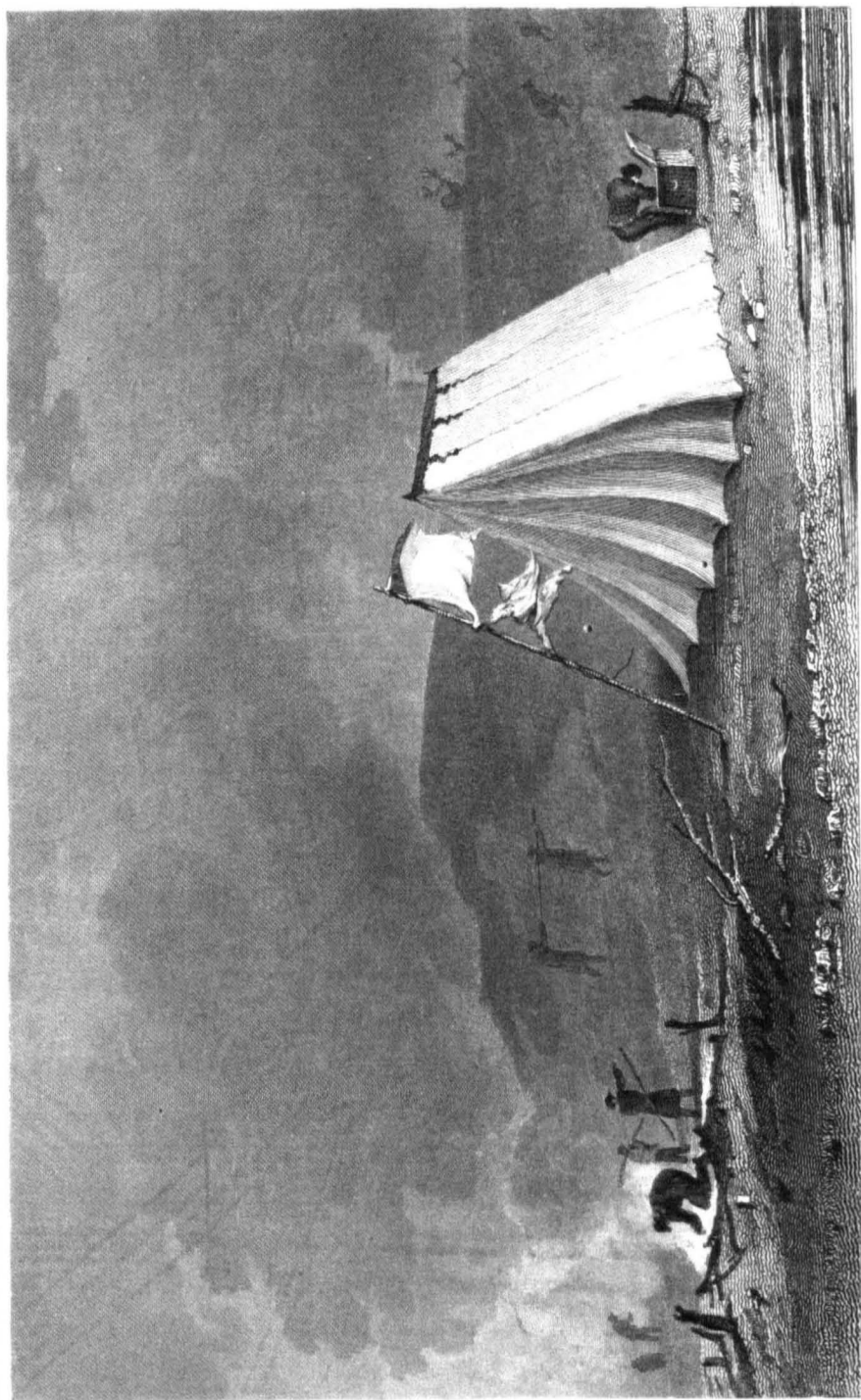


Fig. 18. A. 18. 18.

Drawn by E. N. Bendish, July 12, 1874.

in pursuit of them, they were frightened away. The temperature throughout the day was 42°.

I observed forty species of plants in flower here, of which nearly one-third were grasses and carices. The Thrift common on the sandy parts of the British coast is a frequent ornament of Browell Cove; and seven or eight of the other plants seen there, are natives of the Scottish hills. Two dwarf species of willow were the only shrubs.

The fog clearing away, and the wind moderating, we embarked about three in the morning of the 15th; and steering along the coast, came to a group of low sandy islands, that were separated by wide but very shallow channels, and skirted, to the distance of five or six miles, by sand-banks, which were nearly dry at low water. In rounding these banks our soundings varied from two feet to two fathoms, and we were occasionally led almost out of sight of the land. During the whole day we saw much ice to seaward, and in some places it was so closely packed as to render it doubtful whether a ship would have been able to make way through it. The line of deep water was marked by large masses of ice lying aground, and was about ten miles from the shore. As we could not reach the beach, we disembarked upon a piece of ice at noon, and cutting up a spare seat for fire-wood, proceeded to cook our breakfast, and make observations for latitude and magnetic variation.

After rounding the shoals, we made a traverse of ten miles across an inlet, where the water ran out with a strong current; and, though five fathoms deep, it was nearly fresh. This I supposed to be another communication betwixt Esquimaux Lake and the sea, and named it Russell Inlet, after the distinguished Professor of Clinical Surgery in the University of Edinburgh. The land on its western side was called Cape Brown, out of respect to the eminent botanist, whose scientific researches reflect

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so much credit on British talent; and that to the eastward of the inlet received the name of Dalhousie, in honour of His Excellency the Governor-in-Chief of the Canadas. Cape Dalhousie consists of a number of high, sandy islands, resembling those seen from Sacred Island, in the mouth of the Mackenzie. We entered some deep inlets amongst them, in search of a landing-place, but the beach was every where too flat. At length, after dragging the boats through the mud for a considerable way, and carrying the cargoes for a quarter of a mile over a flat sand, we reached the shore, and pitched the tents. The island on which we encamped was similar to the others, being from one hundred to one hundred and fifty feet high above the water, and bounded on all sides by steep, sandy cliffs, which were skirted by flat sands. From the summit of the island we had the unpleasant view of a sea covered with floating ice, as far as the eye could reach to the eastward. Temperature during the greater part of the day 55° ; at nine P.M. 52° . Wind easterly. The length of this day's voyage was thirty miles and a half; the latitude of the encampment $70^{\circ} 12'$, and longitude $129^{\circ} 21' W$.

Sunday,
16th.

On the 16th the boats were afloat, and loaded by seven in the morning, when we pulled round Cape Dalhousie, and found the land trending as we wished to the south-east. Since reaching the sea, the coast had gradually inclined to the northward, which, with the increased quantity of ice seen on the two or three last days, led us to fear that a cape might exist, extending so far to the northward, as to prevent us from reaching the Coppermine River within the period to which our voyage was limited. It was, therefore, with peculiar satisfaction, that, on putting ashore to cook breakfast, we saw distant land to the S.E., apparently of greater height than that which we had recently coasted; and we now flattered ourselves that we were about to leave behind us the low coasts and shoals, which render the boat navigation across the

mouths of the Mackenzie and Esquimaux Lake so perplexing and hazardous. Many deer were seen at our breakfasting-place, and the mosquitoes annoyed them so much that there would have been no difficulty in approaching them, if we could have spared time to send out the hunters.

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Having obtained an observation for latitude, we directed our course to a projecting point across an inlet, with no land visible towards its bottom. The soundings in the middle of the opening exceeded nine fathoms; the water became less salt as we advanced, and at last could only be termed brackish. The point proved to be an island sixteen miles distant from our breakfasting-place; and as we approached it, we had the mortification to perceive a coast seven or eight miles beyond it, apparently continuous, and trending away to the north-north-west. The island was named Nicholson Island, as a mark of my esteem for William Nicholson, Esq., of Rochester. It is bounded by high cliffs of sand and mud, and rises in the interior to the height of four hundred feet above the sea. The cliffs were thawed to the depth of three feet, but frozen underneath, and the water issuing from the thawing ground caused the mud to boil out and flow down the banks. There were many small lakes on the island, and a tolerably good vegetation. Amongst other plants I gathered here a very beautiful American cowslip, (*dodecatheon*,) which grew in the moist valleys. From the summit of the island a piece of water, resembling a large river, and bearing south, was seen winding through a country pleasantly varied by gently swelling hills and dales, and differing so much in character from the alluvial islands we had just left, that I thought myself justified in considering it to be part of the main land. From S.W. to W.N.W. open water was seen, broken only by a few islands, that were named after Major-General Campbell, of the Royal Marines. This large sheet of water is undoubtedly the

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Esquimaux Lake, which, according to the natives, not only communicates with the eastern branch of the Mackenzie, but receives, besides, two large rivers; and, consequently, the whole of the land which we coasted from Point Encounter, is a collection of islands. The temperature varied this day from 38° to 55° . The length of the day's voyage was thirty-three miles: the latitude of our encampment $69^{\circ} 57'$, and longitude $128^{\circ} 18' W$.

Monday,
17th.

On the 17th a thick fog detained us until nine o'clock in the morning, when it dispersed, and we left our encampment. About two miles from Nicholson's Island the water was nine fathoms deep, and had a brackish taste; but as we continued our course to the northward, it became shoaler and salter. This added to the probability of the winding channel, which bore south, being a large river; and that opinion was further strengthened by our observing, when we landed to breakfast, the shore to be strewed with tide-wrack, resembling that which is generally found on the banks of rivers in this country, such as pieces of willows, fragments of fresh-water plants, and lumps of peat earth. We were delighted to find here a beach of sand and fine gravel, bold enough to admit of our running the boats upon it. The fresh footsteps of a party of Esquimaux were seen on the sand.

After obtaining an observation for latitude, we embarked, and continued our course along the coast until we came to the extremity of a cape, which was formed by an island separated from the main by a shallow channel. The cliffs of this island were about forty feet high, and the snow which had accumulated under them in the winter, was not yet dissolved, but, owing to the infiltration and freezing of water, now formed an inclined bank of ice, nearly two-thirds of the height of the cliff. This bank, or iceberg, being undermined by the action of the waves, maintained its position only by its adhesion to the frozen cliffs behind it. In

some places large masses had broken off and floated away, whilst in others the currents of melting snow flowing from the flat land above, had covered the ice with a thick coating of earth; so that at first sight it appeared as if the bank had broken down; the real structure of the iceberg being perceptible only where rents existed. In a similar manner the frozen banks, or icebergs, covered with earth, mentioned by Lieutenant Kotzebue, in his voyage to Behring Straits, might have been formed. Had the whole mass of frozen snow broken off from this bank, an iceberg would have been produced thirty feet wide at its base, and covered on one side to the depth of a foot, or more, with black earth. The island was composed of sand and slaty clay, into which the thaw had not penetrated above a foot. The ravines were lined with fragments of compact white limestone, and a few dwarf-birches and willows grew on their sides. The sun's rays were very powerful this day, and the heat was oppressive, even while sitting at rest in the boat; the temperature of the air at noon being, in the shade, 62° , and that of the surface water, where the soundings were three fathoms, 55° .

Immediately after rounding the cape, which was named after His Excellency Sir Peregrine Maitland, Lieutenant-Governor of Upper Canada, we entered a channel ten miles wide, running to the eastward, with an open horizon in that direction; and a doubt arose as to whether it was a strait, or merely a bay. Many large masses of ice were floating in it, which proved to us that it had considerable depth; but the water being only brackish, excited a suspicion that there was no passage through it. While we were hesitating whether to hazard a loss of time by exploring the opening, or to cross over at once to the northern land, several deer were seen, and the hope of procuring a supply of fresh meat, induced us to put ashore and encamp for the night, that

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the hunters might go in chase. The beach here was strewed with fragments of dark-red sandstone, white sandstone, white compact limestone, and a few pieces of syenite. There were many large trunks of spruce-firs lying on the sand, completely denuded of their bark and branches; and numerous exuviae of a marine crustaceous animal (*gammarus borealis*) lay at high water mark. Our hunters were successful, Ooligbuck and M^r Leay each killing a deer. Many of these animals had fled to the cool moist sands on the coast, but even there the mosquitoes tormented them so much as to render them regardless of the approach of the hunters. The latitude of our encampment was $70^{\circ} 7'$, longitude $127^{\circ} 45'$; and the length of the day's voyage twenty-three miles. The temperature varied from 52° to 63° . By watching the motion of the tide for the greater part of the night, I fully satisfied myself that the ebb set out of the opening, and that the flood came round the land on the north side; hence I concluded that there could be no passage to the eastward in this direction, and that the opening led into a bay, to which the name of Harrowby was given, in honour of the Right Honourable the Earl of Harrowby.

Tuesday,
18th.

Embarking on the 18th at three in the morning, we set the sails to a favourable though light breeze, and using the oars at the same time, crossed Harrowby Bay, at its mouth. During the traverse, land was seen round the bottom of the bay. On nearing the shore we distinguished twelve Esquimaux tents on an eminence; and a woman who was walking on the beach gave the alarm, but not until we were near enough to speak to her, her surprise having fixed her to the spot for a time. The men then rushed out, brandishing their knives, and, using the most threatening expressions, forbade us to land, and desired us to return by the way we came. Ooligbuck endeavoured to calm their fears,

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by telling them that we were friends, but they replied only by repeating their threats, and by hideous grimaces and gestures, which displayed great agility; frequently standing on one foot and throwing the other nearly as high as the head. At length on my bawling "*noowærlawgo*," (I wish to barter,) they became quiet at once, and one of them running to his kayak, and paddling off to us, was followed by many of the others, even before they could witness the reception we gave him. They came boldly alongside, and exchanged their spears, arrows, bows, and some pieces of well-dressed seal-skin, for bits of old iron-hoop, files, and beads. They were not so well furnished with iron-work as the Esquimaux we had seen farther to the westward, and very eagerly received a supply from us. In our intercourse with them we experienced much advantage from a simple contrivance suggested by Mr. Kendall, and constructed during our halt in Refuge Cove: it was a barricade formed by raising the masts and spare oars eighteen inches above the gunwale on two crutches or davits, which not only prevented our Esquimaux visitors from stealing out of the boats, but, in the event of a quarrel, could have been rendered arrow proof by throwing the blankets or sails over it. On a light breeze springing up we set the sails, and continuing to ply the oars, advanced at the rate of four miles an hour, attended by eleven kayacks. Three oomiaks with the women followed us, and we found that, when rowed by two women, and steered by a third, they surpassed our boats in speed.

The females, unlike those of the Indian tribes, had much handsomer features than the men; and one young woman of the party would have been deemed pretty even in Europe. Our presents seemed to render them perfectly happy, and they danced with such ecstasy in their slender boats as to incur, more than once, great hazard of being upset. A bundle of strings of beads being thrown into an oomiak, it was caught by an old

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woman, who hugged the treasure to her breast with the strongest expression of rapture, while another elderly dame, who had stretched out her arms in vain, became the very picture of despair. On my explaining, however, that the present was for the whole, an amicable division instantly took place; and to show their gratitude, they sang a song to a pleasing air, keeping time with their oars. They gave us many pressing invitations to pass the night at their tents, in which they were joined by the men; and to excite our liberality the mothers drew their children out of their wide boots, where they are accustomed to carry them naked, and holding them up, begged beads for them. Their entreaties were, for a time, successful; but being desirous of getting clear of our visitors before breakfast-time, we at length told them that our stock was exhausted, and they took leave.

These Esquimaux were as inquisitive as the others we had seen respecting our names, and were very desirous of teaching us the true pronunciation of theirs. They informed us that they had seen Indians, and had heard of white people, but had never seen any before. My giving a little deer's meat to one of them in exchange for fish, led to an inquiry as to how we killed the animal. On which Ooligbuck showed them his gun, and obtaining permission, fired it off, after cautioning them not to be alarmed. The report astonished them much, and an echo from some neighbouring pieces of ice made them think that the ball had struck the shore, then upwards of a mile distant. The women had left us previously; several of the men departed the instant they heard the report; and the rest, in a short time, followed their example. They applied to the gun the same name they give to their harpoons for killing whales.

We learned from these people that the shore we were now coasting was part of the main land, and that some land to the northward, which appeared soon after we had passed their tents,

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consisted of two islands; between which and the main shore, there was a passage leading to the open sea. On landing to cook breakfast and obtain a meridian observation for latitude, we observed the interior of the country to be similar to that seen from Nicholson's Island. The soil was in some spots sandy, but, generally, it consisted of a tenacious clay which cracks in the sun. The air was perfumed by numerous tufts of a beautiful phlox, and of a still handsomer and very fragrant cruciform flower, of a genus hitherto undescribed.

On re-embarking we pulled about eight miles farther betwixt the islands and the main, and found a narrow opening to the sea nearly barred up. The bottom was so soft and muddy that the poles sunk deep into it, and we could not carry the cargo ashore to lighten the boats. We succeeded, however, in getting through, after much labour, and the moment we crossed the bar, the water was greenish, and perfectly salt. The cape forming the eastern point of this entrance lies in latitude $70^{\circ} 36' N.$, longitude $127^{\circ} 35' W.$; and proved to be the most northerly part of the main shore which we saw during the voyage. It is a few miles farther north than Return Reef of Captain Franklin, and is most probably, with the exception of the land near Icy Cape, since discovered by Captain Beechey, in the Blossom, the most northern point of the American Continent. It was called Cape Bathurst, in honour of the Right Honourable the Earl of Bathurst, and the islands lying off it were named after George Baillie, Esq., of the Colonial Office. I could not account in any other way for the comparative freshness of the sheet of water we had left, than by supposing that a sand-bank extended from Cape Dalhousie to Baillie's Islands, impeding the communication with the sea, and this notion was supported by a line of heavy ice which was seen both from Cape Bathurst and Cape Dalhousie, in the direction of the supposed bar, and apparently aground.

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Taking for granted that the accounts we received from the natives were (as our own observations led us to believe) correct, Esquimaux Lake is a very extensive and curious piece of water. The Indians say that it reaches to within four days' march of Fort Good Hope; and the Esquimaux informed us that it extends from Point Encounter to Cape Bathurst, thus ascribing to it an extent from north to south of more than one hundred and forty miles, and from east to west of one hundred and fifty. It is reported to be full of islands, to be every where brackish; and, besides its communication with the eastern branch of the Mackenzie, to receive two other large rivers. If a conjecture may be hazarded about the original formation of a lake which we had so few opportunities of examining, it seems probable that the alluvial matters brought down by the Mackenzie, and other rivers, have gradually formed a barrier of islands and shoals, which, by preventing the free access of the tide, enables the fresh water to maintain the predominance behind it. The action of the waves of the sea has a tendency to increase the height of the barrier, while the currents of the rivers and ebb-tide preserve the depth of the lake. A great formation of wood-coal will, I doubt not, be ultimately formed by the immense quantities of drift-timber annually deposited on the borders of Esquimaux Lake.

CONTINUATION OF THE PROCEEDINGS OF THE EASTERN DETACHMENT.

CHAPTER III.

Double Cape Bathurst—Whales—Bituminous-shale Cliffs on Fire—Enter Franklin Bay—Heavy Gale—Peninsula of Cape Parry—Perforated Rock—Detention at Cape Lyon by Wind—Force of an Esquimaux Arrow—Meet with heavy Ice—Pass Union and Dolphin Straits—Double Cape Krusenstern, and enter George the Fourth's Coronation Gulph—Reach the Coppermine River—Remarks—Meteorological Table.

As soon as we entered the clear green water off Cape Bathurst, we perceived a strong flood-tide setting against us, and saw several white whales, and some black ones of a large size, but of a species unknown to Ooligbuck*. The natives term them *aggeewærk*, which is the name given, by the Esquimaux of Hudson's Bay, to the black whales that frequent the Welcome. Many large masses of ice were floating about, but they were no

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* The appearance of whales on the north coast, nearly midway between the nearest passages into Behring's and Barrow's Straits, and upwards of a thousand miles distant from either, affords subject for interesting speculation. It is known that they must come frequently to the surface to breathe, and the following questions naturally arise:—Are there at all seasons large spaces of open water in the Arctic Seas? or do these animals travel from the Atlantic or Pacific Oceans immediately on the breaking up of the ice off Cape Bathurst, and so early in the season as the middle of July; while the sea, to the eastward and westward, is still covered with ice? If the latter is the fact, it is a very curious part of the natural history of these animals. The Esquimaux informed us, that they are rarely seen when the ice lies close, and in accordance with this remark Captain Franklin saw few to the westward, and we also lost them as we approached the Coppermine River, and met with more ice.

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impediment to the boats. The beach, from the time we left Esquimaux Lake, was bold, there being two or three fathoms water close to the shore. We hailed this change of circumstances with pleasure, for the shoals and islands skirting Esquimaux Lake had embarrassed us much, and the brackishness of the water, combined with the trending of the coast to the northward, and even westward, had excited in our minds an apprehension, that we might possibly be obliged to make a great circuit in search of a passage, out of that extraordinary piece of water, and that the opening, when found, might lie so far to the northward as to be obstructed by an icy sea. Fortunately our fears were groundless; and, to increase our joy, the coast-line from Cape Bathurst appeared to run in a straight direction for Coppermine River. There were many winter-houses built by the Esquimaux on Cape Bathurst. The cliffs facing the sea were still frozen, but the water trickling down their sides showed that they were thawing rapidly. We encamped on the beach in latitude $70^{\circ} 32\frac{1}{2}'$ N., longitude $127^{\circ} 21'$ W., having sailed that day thirty-seven miles. A plentiful supply of very fine sorrel (*oxyria reniformis*) being obtained from the banks, proved an agreeable addition to our supper.

Wednesday,
19th.

Embarking at four o'clock in the morning of the 19th, we rowed along the coast close to the beach, in from two to three fathoms water. We landed at noon to observe the latitude; and at four P.M. a thunder-storm coming on, induced us to encamp for the night. The day's voyage was thirty-two miles, and our encampment was situated in latitude $70^{\circ} 11'$ N., longitude $126^{\circ} 15'$ W., on a point which was named after Dr. Fitton, the distinguished President of the Geological Society. No land was visible to seaward, nor were any fields of ice or large floes seen, but we passed many smaller pieces and some masses, that, having

stranded on the beach, were dissolving with great rapidity. A regular tide of six hours affecting the rate of our progress, an allowance was made for it in the reckoning.

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July.
19th.

The coast consists of precipitous banks, similar in structure to the bituminous-shale cliffs at Whitby, in Yorkshire. They gradually increase in altitude from Cape Bathurst, and near our encampment their height exceeded two hundred and fifty feet. The shale was in a state of ignition in many places, and the hot sulphureous airs from the land were strongly contrasted with the cold sea-breezes with which, in the morning, they alternated. The combustion had proceeded to a considerable extent on the point where we landed at noon. Much alum had formed, and the baked clays of yellow, brown, white, and red colours, caused the place to resemble a brick-field or a pottery. This point, which was named after Dr. Traill, of Liverpool, lies in latitude $70^{\circ} 19' N$. The interior of the country, as seen from the top of the cliffs, appeared to be nearly level, and to abound in small lakes. The soil was clayey, and from the recent thaw wet and soft. Tufts of the beautiful phlox, before mentioned, were scattered over these, otherwise unsightly wastes; and, notwithstanding the scanty vegetation, rein-deer were numerous. Some of the young ones, to whom man was doubtless a novel object, came trotting up to gratify their curiosity, and were suffered to depart unmolested. The sea here abounds in molluscæ, and many black whales were seen; also king-ducks, eiders, snow-birds, hawks, and a large moth.

We embarked at half-past two on the morning of the 20th, and ran alongshore for two hours with a strong and favourable breeze, when some shoals lying off the mouth of a pretty large river, led us six or seven miles from the coast. The breeze, which was off the land, freshened considerably, and raised a short break-

Thursday,
20th.

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July.
20th.

ing sea, through which we attempted to pull towards the shore, but the boats shipped much water, and made little head-way. We, therefore, set the sails again, and, fortunately, fetched under a head-land, and effected a landing. The whole of the pemmican in the Union, and some of that in the Dolphin, was wet on this occasion. In the morning we had passed two Esquimaux tents, pitched on the beach, but the inmates seeming to be asleep, we did not disturb them, being unwilling to lose the fair wind by any delay.

Soon after landing the weather became very foggy, and the wind increased to a heavy gale. The cliffs at our encampment consisted of slate-clay, and bituminous alum-slate, and were six hundred feet high. The river, whose mouth we passed, ran close behind them, having a course parallel to the coast for some miles before it makes its way to the sea. It was named Wilmot Horton River, in honour of the Under Secretary of State for the Colonial Department. Its breadth is about three hundred yards, and it seems, from the quantity of drift-timber that was piled on the shoals at its mouth, to flow through a wooded country. The length of this day's voyage was twenty-four miles, and the position of our encampment was in latitude $69^{\circ} 50' N.$, longitude $125^{\circ} 55' W.$ At high-water, which took place at a quarter past four in the afternoon, the small slip of beach on which we had encamped was almost covered, and we had to pile the baggage on the shelving cliff. A very showy species of gromwell grew near our encampment, in company with the common sea-gromwell, (*lithospermum maritimum*.)

Friday,
21st.

On the 21st strong winds and foggy weather, with a considerable surf on the beach, detained us until after eight o'clock in the morning, when many large masses of ice coming in, took the ground near the shore, and smoothed the water sufficiently to enable us



Illustration of the "Frigate"

Engraved by E. N. Ketchikan

to embark. The fog was dense to seaward and over the land, but the height of the cliffs left a space of about a mile from the beach, over which it was carried by the violence of the wind.

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July.
21st.

About two miles from our late encampment, the bituminous shale was again noticed to be on fire, giving out much smoke; and as we advanced, the cliffs became less precipitous, appearing as if they had fallen down from the consumption of the combustible strata. They gradually terminated in a green and sloping bank, whose summit, about two miles from the sea, rose to the height of about six hundred feet. For the information of the general reader, I may mention that the shale takes fire in consequence of its containing a considerable quantity of sulphur in a state of such minute division, that it very readily attracts oxygen from the atmosphere, and inflames. The combustion is rendered more lively by the presence of bitumen; and the sulphuric acid, which is one of its products, unites with the alumina of the shale to form, with the addition of a small quantity of potass, the triple salt, well known by the name of alum. The moistening of the strata by the sea-spray accelerates the process. In some alum-works, where nature has not been so favourable as in the cliffs of Cape Bathurst, a deficiency of the bituminous matter requisite to keep up the proper intensity of combustion, is supplied by brush-wood, which is strewed in alternate layers with shale that has been previously much divided by long exposure to the weather, and the whole is then moistened with salt-water. A further account of these cliffs is given in page xl. of the Appendix.

In the forenoon we passed the mouths of two small rivers, which were designated after Sir Henry Jardine, Bart., King's Remembrancer in the Court of Exchequer for Scotland; and Dr. Burnett, Commissioner of the Victualling Board. A meridian observation was obtained in latitude $69^{\circ} 38' N.$

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July.
21st.

In the afternoon, the wind, blowing more on the shore, caused a tumbling sea. We sailed amongst much stranded ice, and, following the line of coast, were gradually led into a deep bay, whose east side, having a northerly direction, was formed by low land, and so much broken by numerous and extensive inlets, as to look more like a collection of islands than a part of the main land. We were now, reckoning by degrees of longitude, fully half way from Point Separation to the Coppermine River, and the coast from Cape Bathurst had been so exactly in the proper direction, as to excite high hopes of a short and prosperous voyage: it was, therefore, no pleasant sight to us, to behold land running out at right angles to our course, and we were willing to believe that a passage existed betwixt it and the main. This opinion was supported by the direction of the high land, which had hitherto skirted the shore, continuing to be southeasterly, until lost to the sight at the distance of fifteen or twenty miles. We, therefore, endeavoured to find a passage, but the first opening that we came to, led into a circular basin of water, apparently land-locked, and about five miles in diameter. We halted at its entrance to cook our supper, and, during our stay, perceiving that the ebb-tide set out of it, we determined on searching for a passage elsewhere. This inlet is six fathoms deep at its entrance, and would prove an excellent harbour for a ship, only for the sand-banks which skirt this part of the coast, and which render the passage into it too intricate for vessels having a greater draught of water than our boats. It was named Langton Harbour, after the agent for the Hudson's Bay Company at Liverpool.

Leaving this harbour, and steering to the northward, we passed several inlets, into which the flood-tide set with a strong current. We could not see land towards their bottoms, but their mouths were shoal, and we felt convinced that there was no

passage through them, because the flood-tide entered them from the westward. We, therefore, proceeded on our voyage without wasting time in examining them; and at two o'clock, on the morning of the 22d, having come fifty-four miles, we encamped on a beach, composed of small fragments of limestone, and strewn with sea-weed. This beach, which received the name of Point Stivens, separates an extensive sheet of salt-water from the sea, and is similar in character to the Chesil Beach, that connects the Isle of Portland to the shore. It varies in breadth from one hundred yards to a quarter of a mile, is several miles long, has a northern direction, and seems to have been formed by the sweep of the tide round the bay, meeting the ebb from the basins that intersect the peninsular promontory with which it is connected. There are several narrow breaches in it through which the tide flows. Anxious to discover the termination of this promontory which was leading us so much out of the direct course to the Coppermine, I went to the summit of a rising ground, about five miles distant, but the view was closed by some small hills, two or three miles off. The soil was clayey, and vegetation scanty.

In taking wood to make a fire, from a large pile of drift-timber which had been collected by the Esquimaux, the nest of a snow-bird, containing four young, was discovered. The parent bird was at first scared away, but affection for its offspring at length gave it courage to approach them with food; and as it was not molested it soon became quite fearless, and fed them with the larvæ of insects, whilst the party were seated at breakfast close by the nest.

At nine o'clock, A.M., we embarked again, and, running before a favourable breeze, came to a point consisting of cliffs of limestone, twenty feet high, with a small island of the same kind of rock at its extremity. Many large boulders of greenstone were

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21st.

Saturday,
July 22.

1826.
July.
22d.

seen here. After ascertaining the latitude by meridian observation to be $69^{\circ} 42' N.$, we continued our voyage along a bold shore, consisting of precipices of limestone, forty or fifty feet high, with three or four fathoms of water at the base. In the evening, having reached a projection which appeared to be the western pitch of the cape, we encamped in a bay near a remarkable perforated rock, having come twenty-six miles since leaving Point Stevens. In the course of the day's voyage we had to make our way through some pretty extensive streams of ice, composed of pieces which rose eight or ten feet above the water; and we saw a considerable quantity of what is termed sailing ice to seaward, being such as a ship could make her way through. I had now the gratification of naming the extensive bay we had been coasting for three days, after my friend and commanding officer; and to the several inlets on its eastern side I assigned the names of Wright, Cracroft, and Sellwood, in honour of his near relatives. A group of islands to the northward was named Booth Islands on the same account.

In bestowing the name of Franklin on this remarkable bay, 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 an 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. After this feeble but sincere tribute of respect and regard, in which I hope I have not overstepped the proper bounds of a narrative, I hasten to resume the details of the voyage.

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22d.

The country in the neighbourhood of the encampment consisted entirely of limestone, mostly of the variety named dolomite, and, as is usual where that stone prevails, it was extremely barren. The cliffs and points of land present many caverns and perforated rocks, which have very strong resemblances to the windows and crypts of Gothic buildings. Mr. Kendall made an accurate sketch of the perforated rock, from which the accompanying engraving was executed. The common kittiwake breeds in great numbers on the rocky ledges in this quarter, and their young were already fledged. The temperature during the day was nearly stationary at 46°, the wind south. The evening being very fine, the pemmican was taken out of the bags, which were scraped and dried; and our loss of provision, by the wetting it sustained in the gale of the 20th, proved to be less than we had expected.

Embarking at four o'clock, A.M. of the 23d, we sailed with a favourable breeze for nine miles, betwixt Booth Islands and a shore presenting alternately projecting rocky shoals and narrow inlets. We then landed, and ascended a hill, about seven hundred feet high, to ascertain the direction of the coast, and had the satisfaction of finding that we had now reached the northern extremity of this remarkable promontory. It was

Sunday,
23rd.

1826.
July.
23d.

named Cape Parry after the distinguished navigator whose skill and perseverance have created an era in the progress of northern discovery, and a letter addressed to him, containing information of our proceedings and of Captain Franklin's, as far as was known to us, was deposited under a pile of stones which we erected on the summit of the hill. From this elevated situation, land was faintly seen bearing S.E. by S., about forty miles distant; and from thence round to Booth Islands there appeared an open sea, merely studded with a few streams of sailing ice, but no islands were seen in that direction. There are many well sheltered coves in the vicinity of Cape Parry and amongst Booth Islands, but the bottom is rocky, and numerous reefs render the navigation unsafe for a ship. The eastern side of Cape Parry exhibits a succession of limestone cliffs, similar to those which form its western shores; and as we continued our voyage, we passed many excavations ornamented by graceful slender pillars, and exhibiting so perfect a similarity to the pure Gothic arch, that had Nature made many such displays in the Old World, there would be but one opinion as to the origin of that style of architecture. A small island, on which we landed to cook breakfast, was named after the late Daniel Moore, Esq., of Lincoln's Inn. It was composed of a cellular limestone, containing many crystals of quartz. The whole party went in pursuit of a polar hare which was seen here, but, although it had no other shelter than the rocks, it contrived to escape from us all.

In the evening we encamped on an island, which was named by Mr. Kendall after the Reverend Dr. Burrow, of Epping. It is situated in latitude $69^{\circ} 49' N.$, longitude $123^{\circ} 33' W.$ The length of the day's voyage was thirty-one miles. Fine weather, and a temperature of 52° , entailed upon us a visit from the

musquitoes. The sea-water here is of a light blue colour and clear, the bottom being distinctly visible in five fathoms. Pieces of ice still adhered to the cliffs.

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July.

We were detained in the morning of the 24th by a thick fog, which cleared up about eight o'clock; but the moon being then in distance, we remained until noon, that Mr. Kendall might take observations for lunars and latitude. These necessary operations being completed, a short voyage of nine miles brought us to an island on which we encamped, and which obtained from us the name of Clapperton, in honour of the undaunted explorer of central Africa. In our way we passed through several streams of ice, composed of pieces of considerable size, but all evidently in a state of rapid dissolution, under a bright sun; the water flowing from their surfaces in rivulets. Many black whales, and various kinds of seals, were seen this day. We saw no black whales farther to the eastward.

Monday,
24th.

From Clapperton Island we had a view of a ridge of hills, which, from their direction, appeared to be a continuation of those on the west side of Franklin Bay. The island itself, like the neighbouring coast, is composed of limestone, and many detached rocks skirt it, rising from water that is beautifully clear. When we landed there was a strong current setting to the eastward, round the end of the island, but it ceased at four P.M., the time of low water, and was probably produced by the ebb setting out of some of the inlets of Cape Parry. In the evening the ice made a noise so like the regular firing of half-minute guns, as to excite, at first, an idea that we heard the guns of a ship. The temperature at six o'clock in the evening was as high as 74° in the shade.

Clapperton Island lies in latitude 69° 41½' N., and nearly in the longitude of Fort Franklin, from which it is distant three hundred and thirteen miles in a straight line; but the distance

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between the nearer part of the Great Bear Lake and the Arctic Sea here, does not much exceed one hundred and ninety miles.

Tuesday,
25th.

Taking advantage of a light breeze and very fine weather, we embarked at midnight, and crossed over to the east side of the bay, passing through some heavy streams of ice by rather intricate channels. At half past five in the morning of the 25th, we landed on a point of the main shore, and Mr. Kendall took observations for three sets of lunars. On re-embarking we proceeded a few miles further, when a heavy gale of wind suddenly springing up, we ran for shelter into a small creek at the extremity of a cape, which I named after the distinguished traveller Captain G. F. Lyon, R.N. The bay which lies betwixt it and Cape Parry, was called Darnley, in honour of the Earl of Darnley. The distance from Clapperton Island to Cape Lyon is fourteen miles.

The country in the neighbourhood of Cape Lyon presents a surface varied by gently swelling eminences, covered with a grassy sward, and intersected by several narrow ridges of naked trap rocks, rising about one hundred and fifty feet above the general level. The trap ridges, when they reach the coast, form high cliffs, and the clay-slate and limestone lie in nearly horizontal strata beneath them. The view inland was terminated by the range of hills which we had seen at the bottom of Darnley Bay, to which the name of Melville Range was now given, in honour of the Right Honourable the Lord Viscount Melville.

From the top of the highest trap-hill, near the extremity of the cape, we saw some heavy ice to seaward, but with enough of open water for the passage of a ship; and, occasionally, during our stay, there was an appearance of land to the north-westward, occupying two points of the compass; but we were uncertain whether it might not be a fog-bank hanging over a field of ice. If it was land, it could not be less than twenty-five or thirty

miles distant, and must, from the portion of the horizon it occupied, be a large island. Upon the summit of the hill we erected a pile of stones, and deposited another letter for Captain Parry, containing a short account of our proceedings.

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July.
26th.

A gale of wind detained us two days at Cape Lyon, during which Ooligbuck supplied us with rein-deer meat, and Mr. Kendall obtained several sets of lunars. The latitude of our encampment, by the mean of three meridian observations, was $69^{\circ} 46\frac{1}{2}'$ N.; and the longitude, by lunar distances, $122^{\circ} 51'$ W. The temperature of the air, during the gale, was about 45° , that of the water 35° . During our stay at Cape Lyon the tides were regular, but the rise and fall were short of twenty inches. At midnight on the 26th of July, the sun's lower limb was observed to touch the horizon for the first time since our arrival on the coast. Some old winter houses were seen in our walks, but we perceived no indications of the Esquimaux having recently visited this quarter.

The gale moderated on the 27th, and at eight in the evening it was sufficiently abated to permit us to proceed on our voyage. After rowing about two miles, the horns of a deer were seen over a rock at the summit of a cliff, on which M'Leay, the coxswain of the Union, landed and killed it. This poor animal had been previously wounded by an Esquimaux arrow, which had broken its shoulder bone. The jagged bone-head of the arrow was buried in the flesh, and its copper point bent up where it had struck the bone. The wound was open, and seemed to have been inflicted at least a fortnight before, but the animal was still fat. The extremity of Cape Lyon lies about three miles north-east of the encampment we had left, and in its neighbourhood the cliffs form bold head-lands, and several small rocky islands. Soon after rounding it we came to a projecting point, consisting of cliffs of limestone, in which there was a re-

Thursday,
27th.

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27th.

markable cave, opening to the sea by an archway, fifty feet high and twenty wide. The walls of the cavern were two hundred feet high, and a large circular aperture in the roof gave free admission to the day-light. Mr. Kendall named this point after Mr. Pearce, a particular friend of his.

Friday,
28th.

The night was fine but cold, the temperature having fallen to 35° soon after we started, and at midnight the sun sunk for nearly half an hour beneath the horizon. We passed much heavy stream-ice, and towards the morning a quantity of new, or, as the seamen term it, "bay ice," having formed on the surface on the sea, the boats were so much retarded that we put ashore at four o'clock of the 28th, to wait until the increasing heat of the day dissolved it. The point on which we landed was named after Admiral Sir Richard Godwin Keats, G.C.B., Governor of Greenwich Hospital, and lies in latitude $69^{\circ} 49' N.$, and longitude $122^{\circ} W.$, being about eighteen miles distant from our encampment on Cape Lyon. The rocks at Point Keats consist of flesh-coloured sandstone. The Melville range of hills approaches there within eight or ten miles of the sea, and the intervening country is traversed by ridges of greenstone. On the coast from Cape Lyon to Point Keats there is a line of large drift timber, evidently thrown up by the waves, about twelve feet perpendicular height, above the ordinary spring tides: a sufficient proof of the sea being nearly clear of ice at the time it was thrown up; for the presence of any considerable quantity, even of stream-ice, prevents the waves from rising high. After two hours halt, the bay-ice having dissolved we re-embarked.

From Cape Lyon to Point Keats the coast runs nearly east; after quitting the latter we found it trending a little to the southward, and from a point, which was named in honour of John Deas Thompson, Esq., Commissioner of His Majesty's Navy, it has nearly a south-east direction. We landed a little

to the eastward of Point Deas Thompson, to take a meridian observation for latitude, in a small bay, bounded by cliffs of limestone, one hundred and forty feet high, in which the waves had sculptured some beautiful Gothic arches. From the summit of the cliffs we saw a dark appearance in the eastern horizon, but it was too indistinct to permit us to decide whether it was land or merely a fog-bank. To the eastward of these cliffs the coast decreased in height, and, at the distance of five miles, we passed a small river, which was named after Francis Palgrave, Esq. Near this river, on the summit of a cliff, which was twenty-five feet high, we noticed several large logs of drift timber, with some hummocks of gravel, that appeared to have been thrown up by the waves. A portion of the Melville Range lies within three miles of the shore there; and one of its most remarkable hills was named after my esteemed friend, William Jackson Hooker, LL.D., Regius Professor of Botany in the University of Glasgow; and another after Colonel Colby, of the Royal Engineers, one of the Members of the Board of Longitude. About four o'clock in the afternoon we came to a stream flowing from a lake, and as it was an excellent boat harbour, we entered it and encamped. It was named Roscoe, after the eloquent historian of the Medici; and a conical hill of the Melville Range, visible from its mouth, received the name of the venerable geographer Major Rennel.

We passed this day through heavier and more crowded streams of ice than any we had previously seen on the voyage. The navigation amongst it was tedious and difficult, and just before we put ashore much motion was imparted to it by a fresh south-west wind. The temperature during the day varied from 35° to 50° . The mouth of Roscoe River lies in latitude $69^{\circ} 41' N.$, longitude $121^{\circ} 2' W.$, and is forty-eight miles distant from Cape Lyon.

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28th.

1826.
July.
Saturday,
29th.

We embarked early on the 29th, with a fair wind; but the ice lay so close, that we could not venture to set more than a reefed foresail, and were ultimately obliged to lower the sail entirely, and to find a passage through ice with oars and poles. The pieces of ice were of sufficient magnitude to deserve the name of floes, and were sometimes several fathoms thick. They were all moving before the breeze, which caused them to arrange themselves in the form of streams parallel to the coast, and, consequently, left lanes of open water in the direction of our course. These lanes, however, were continually changing their form; and, on several occasions, when we had been tempted by the favourable appearance of a piece of open water to venture from the coast, we had great difficulty in extricating ourselves from the ice which closed around us. The thickness of the ice led me to conclude that the sea had not been long open in this quarter; and I observed that the vegetation was later on this part of the coast than on the western side of Cape Parry.

For the first twelve miles after leaving our encampment, the coast was low and sandy; the Melville Range still forming the back-ground, at the distance of four or five miles from the sea. The low beaches were terminated by a rocky headland, which obtained from us the name of De Witt Clinton, as a testimony of our sense of the urbanity and love of science which had prompted his Excellency the Governor of the State of New York* to show so much attention to the members of the Expedition, in their passage through his government. Some miles beyond Point De Witt Clinton we came to a steep cliff, where the ice was so closely packed that we could not force a passage. The cargoes were, therefore, carried along the foot

* Since the above passage was written, the world has had to mourn the loss of this distinguished statesman and philosopher.

of the cliff, and the boats launched for a few yards over a piece of ice. In this operation, the shelving base of an iceberg, which had formed under the cliff, and still adhered to it, but which was undermined by the waves, gave way whilst several of the men were standing upon it; but, fortunately, it did not upset, and they received no injury, as it was large enough to support them in the water. At nine o'clock, A.M. we were stopped by the closeness of the ice, and put ashore until the tide or wind should produce some change.

The tides, since leaving the Mackenzie, had never been observed to have a greater rise than eighteen inches; but, in the neighbourhood of our encampment, the sea-wrack and lines of drift timber indicated a washing of the sea to the perpendicular height of twenty feet. The country in this vicinity consists of a bluish limestone, interstratified with slate-clay: and naked and rugged ridges of trap rocks rise in various places above the general level. The soil is composed of clay and limestone gravel. The latitude of our encampment was ascertained, by meridian observation, to be $69^{\circ} 29' N.$; its longitude was $120^{\circ} 20' W.$; and its distance from Roscoe River was twenty-five miles.

A breeze of wind from the land having opened a passage two miles wide, we embarked at two o'clock in the morning of the 30th, and ran seven miles under sail; when, having overtaken the ice which had passed in the night, we found it too closely packed to allow us to proceed. In making for the beach, the *Union* narrowly escaped being crushed by two large floes of ice, which came together with violence just as she was about to run betwixt them. The *Dolphin* had sailed through the same passage not two minutes before. From an eminence near our encampment, we had the unpleasant view of a sea covered, as far as the eye could reach, with ice, excepting a

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29th.

Sunday,
30th.

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30th.

few lanes of open water far to seaward. The tide fell here seven inches in the morning, and eleven in the evening, although the north-west wind increased in the afternoon to a pretty strong gale. The greater fall of the water with that wind, showing that it found an exit to the eastward, relieved us from an apprehension, which we had begun to entertain, that we were entering a deep bay, which might be encumbered by the drift-ice for many days. Much ice drove past us in the course of the day, before a west-north-west wind, its progress being only slightly checked for a time by the flood tide. Recent footsteps of a small party of Esquimaux were seen on the beach. Our encampment was situated in latitude $69^{\circ} 24' N.$, and longitude $120^{\circ} 03' W.$

Monday,
31st.

Embarking on the 31st, at two o'clock in the morning, we succeeded in getting about six miles through the ice, when we were again obliged to put ashore at the mouth of a small river, which was named after James Buchanan, Esq., his Majesty's Consul at New York, whose friendly attention to the officers of the Expedition well entitled him to their gratitude. After waiting for awhile the tide loosened the ice a little, and we made some progress by debarking upon the floes, and pushing them apart with poles, until a sufficient opening was made. This operation was tedious, and not devoid of hazard to the boats, arising from the rotatory motion frequently given to the floes, by the pressure of the body of the ice. At noon, an observation for latitude was obtained on a projecting point, which was named after William Tinney, Esq., of Lincoln's Inn. At three in the afternoon, our progress being again arrested by the compactness of the ice, we hauled the boats upon the beach, and M'Leay having killed a fat buck rein-deer, the party had an excellent supper after the fatigues of the day. The length of the day's voyage was twenty-two miles; the latitude of our en-

campment $69^{\circ} 17\frac{1}{2}'$ N., and its longitude $119^{\circ} 27'$ W. The coast line in this quarter is lower, few of the cliffs exceeding forty feet in height, and there is a greater proportion of flat beach than occurs nearer Cape Lyon. The ground is strewn with gravel, apparently arising from a limestone conglomerate which exists there in considerable quantity. The Melville Range is within four or five miles of the shore at this place, and does not rise more than five hundred feet above the sea. Many small rivulets flow from the rising grounds into the sea, through wide gravelly beds, indicating that at times they swell into large torrents.

A light westerly wind having opened a narrow channel between the ice and the shore, we embarked early in the morning of the 1st of August, and, three miles from our encampment, came to a river, which discharged itself by various shallow mouths, separated by sand banks. Its westernmost and easternmost mouths were five miles apart; and the latter, which was the largest, was one hundred and fifty yards wide. Although the outlet of this river is so much barred up, it discharges a considerable volume of water, and probably has its sources in the hills which are visible from the northern shores of Great Bear Lake. It was named after John Wilson Croker, Esq., Secretary to the Admiralty. Further on we had a view of a high island, lying ten or twelve miles from the shore, which received the appellation of Sir George Clerk's Island. M'Leay, who was now acknowledged to be our best hunter, was sent in pursuit of a deer, which we saw from the boats, and being successful, we landed to cook our breakfast, after having rowed twenty miles in the course of the morning. An observation for latitude was obtained a mile further at a point which was named after Waller Clifton, Esq., Secretary to the Victualling Board. The coast here makes a turn to the southward, and about six miles further on, where it resumes its easterly direction, a river about

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31st.

Tuesday,
August
1st.

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August.
1st.

one hundred yards wide flows into the sea, betwixt two sand hills. To this river Mr. Kendall gave the name of Inman, out of respect to the Reverend and Learned Professor of the Royal Naval College at Portsmouth. A conical hill, about ten miles distant, in a south-west direction, was named after the late President of the Royal Society, the highly distinguished Sir Humphry Davy, Baronet. This was the last part we saw of the Melville Chain. We encamped at half-past seven in the evening, under a high cliff of limestone, having advanced during the day thirty-seven miles. The point on which we encamped, received from Mr. Kendall, the name of Wise, after Captain M. F. Wise, of the Royal Navy, under whose command he sailed in His Majesty's ship, Spartan. It is situated in latitude $69^{\circ} 03\frac{1}{2}'$ N., longitude 118° W.

The coast from Cape Clifton to Point Wise consists of limestone in horizontal layers, forming cliffs, which are separated from each other by intervening shelving beaches, and it is skirted to the distance of a quarter of a mile by rocky shoals, having sufficient water on them for our boats, but not enough to admit the heavy ice. This was the cause of our making greater progress than we had been led to expect from the appearance of the ice in the morning. The cliffs at Point Wise are two hundred feet high, and from their summits, the ice appeared closely packed, as far as the eye could reach; no lanes of open water being visible. It was, however, composed of pieces, and not a continuous field, for we could distinctly perceive that several of the hummocks it inclosed were in motion. This was the first time during the voyage that we saw ice so closely packed as to appear impenetrable to a ship when impelled by a good breeze, but it is necessary to state that, even from a considerable height, we could not tell with certainty the state of the ice six miles off; scattered pieces at that distance assuming the appearance of a close

pack. The weather this day was fine, the temperature varying from 43° to 50° .

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Wednesday,
2nd.

Soon after setting out on the 2d, the temperature, which had been about 40° throughout the night, fell to 34° , and a fog came on. The wind also freshening and putting the ice in motion, the boats received some heavy blows; but we continued to advance, though slowly, and with much caution. About ten miles from our encampment, we passed the mouth of a small river, which was named after Captain Hoppner, of the Royal Navy, second in command to Captain Parry, on his third voyage of discovery. Towards noon the fog cleared away, and a meridian observation was obtained in latitude $68^{\circ} 56' N$. Three miles further on we arrived at the mouth of a wide but shallow river, which flowed over a rocky bottom, betwixt two sand hills, and joined the sea by several mouths, separated by shoals. To this river Mr. Kendall gave the name of his friend, Lieutenant Harding, of the Royal Navy. Five miles beyond this river, on the extremity of a rocky cape, the Esquimaux had constructed several store-houses, of drift timber, which were filled with dried deer-meat and seal-blubber; along with which, cooking kettles, and lamps made of potstone, copper-headed spears, and various other articles, were carefully laid up. The ashes of the recently extinguished fires showed that the natives had quitted this place only a few days, and we felt much pleasure in figuring to ourselves the surprise and joy with which they would behold, on their return, the iron utensils that we deposited in the store-houses for their use. The cape received the name of "Young," after the learned Secretary to the Board of Longitude.

From Cape Young we had a view of the sea thickly covered with ice, of a greater thickness than any we had previously encountered; and we perceived that there was a deeply indented bay lying in our route, and so filled with ice, that our only me-

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2nd.

thod of passing it appeared to be by keeping close to the shore, although under the disadvantage of trebling the distance. The coast in this quarter is similar to that which we had passed on the two or three preceding days, and is formed of high limestone cliffs, with intervening shingly beaches; but the country is still more barren, the quantity of limestone debris almost excluding any soil. Flat limestone rocks, having only a few inches of water upon them, skirt the beach, and terminate like a wall in four or five fathoms water. The ice was closely packed against these rocks, and for five miles after passing Cape Young, we made a way for the boats only by the constant use of the hatchet and ice-chisel, and gladly encamped at six o'clock in the evening, after a day's voyage of thirty-one miles. A herd of twenty rein-deer were grazing on the beach, but our hunters were too much fatigued to go in pursuit of them. The encampment was situated in latitude $68^{\circ} 53' N.$, and longitude $116^{\circ} 50' W.$ The temperature varied in the course of the day from 34° to 50° . We observed that the ice continued to dissolve, but not so rapidly as in the month of July, when the sun did not sink below the horizon.

Thursday,
3rd.

We resumed our operations on the morning of the 3rd at the usual hour, and with great labour made a passage for the boats. At eleven o'clock we landed to refresh ourselves on a projecting point at the western entrance of a deep bay, having previously passed a river which was about one hundred yards wide, but very shallow. After breakfasting, and obtaining a meridian observation in latitude $68^{\circ} 53' N.$, we pushed off again, and for some time made very slow progress. The shores of the bay consisted of beds of limestone, which, shelving into the water, were covered with masses of ice, forced up by the pressure of the pack outside. We were, therefore, compelled to work our way in deeper water, and there the boats, which led by turns, were occasionally

exposed to the hazard of being overset by pieces of buoyant ice, which frequently broke off from the bases of the floes. In the language of the whalers, the ice is said to *calf*, when masses are detached in this manner, and they are sometimes of sufficient magnitude in the Greenland seas to endanger large vessels. The Dolphin was, at one time, nearly crushed to pieces by the closing of two floes; but, fortunately, she had reached a small recess, just as they came in contact, and they recoiled sufficiently to leave a passage for her exit, after she had sustained the trifling damage of a few cracks in the upper planks. The rays of the sun, and the waves acting on the surface of the floes, had, by thawing them irregularly, formed lakes of fresh water of some extent upon their surface. When these pieces of water were of sufficient depth, we availed ourselves of them to make some progress in our voyage, and in this way we frequently sailed over a considerable thickness of ice.

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3rd.

At four o'clock P.M. we had advanced five miles, when to our joy we found a lane of open water, which permitted us to cross to the other side of the bay, where we encamped in latitude $68^{\circ} 51\frac{1}{2}'$ N., and longitude $116^{\circ} 03'$ W., having sailed in the course of the day eighteen miles and a half. The bay was named Stapylton in honour of Major-General the Honourable G. A. C. Stapylton, Chairman of the Victualling Board; and on ascending a rising ground we perceived that it communicates with a long, narrow lake. A few miles from the coast the land rises from three to five hundred feet above the sea, and presents many precipitous limestone cliffs, and chains of small lakes. The country is very barren, the only plant we gathered being the yellow poppy, (*papaver nudicaule*.) By our reckoning we were now nearly in the longitude of the mouth of the Coppermine River, but about seventy miles to the northward of it, we, therefore, entertained an opinion that we were coasting a narrow peninsula, and that we should soon have

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the pleasure of perceiving the coast take a southerly direction. It was, consequently, with some hopes of beholding the sea on the opposite side of the peninsula that I walked seven or eight miles to the eastward in the night, but I was disappointed. In my way I had occasion to wade through a small lake, when two birds, about the size of the *northern diver*, and apparently of that genus, swam, with bold and angry gestures, to within a few yards of me, evidently very impatient of any intruder on their domain. Their necks were of a beautiful pale yellow colour, their bodies black with white specks. I considered them to belong to a species not yet described, and regretted that, having left my gun at the tent it was not in my power, to procure one of them for a specimen.

Friday,
4th.

Embarking at three A.M. on the 4th, we found little difficulty in reaching the eastern cape of Staphylton Bay, the wind having formed a narrow channel between the ice and the shore in the night. The temperature was low, and in the morning some new ice was formed which we easily broke. We noticed several eider ducks breaking a way through the thin ice for their young ones with their wings, and in this operation they made greater progress than we did in the boats.

On reaching the cape* which was named after Vice-Admiral Sir William Johnstone Hope, G.C.B., we descried another point about four or five leagues distant, bearing east-north-east, the intervening bay being filled with closely packed ice. We were now within twelve miles of Cape Young, after a laborious navigation of four times that distance, and the prospect of another bay, equally unpromising, was very vexatious; but our apprehensions were increased by the view of a continuous line of land, extending from north-north-west until it was hid behind the nearer cape, which bore east-north-east, for we feared that it might

* Its latitude was ascertained by meridional observations to be 68° 58' N.

prove to be a continuation of the main shore. Our crews, though concerned at the delay that so much ice was likely to occasion, set about overcoming the obstacle with a hearty good will, and after an intricate and troublesome navigation of ten or twelve miles amongst the ice, we found the bottom of the bay more open, and were enabled to cross over to the eastern side where we encamped. This bay received the name of the eminent astronomer James South, Esq.

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Mr. Kendall having gone to ascertain from the higher ground the trending of the coast, returned in about two hours with the cheering intelligence that the land to the northward was unconnected with the main shore, and that he had seen the latter inclining to the south-east, with a much more open sea than we had lately been accustomed to. As soon as supper was over, I also set out to enjoy the gratifying prospect, and from the extremity of the cape on which we were encamped, and which was named in honour of the Right Honourable Lord Bexley, I beheld the northern land running from north-north-west till it was lost in the horizon on a north 73° east bearing. It seemed to be pretty high but not mountainous; and although broken towards the east, the principal portion of it appeared to be continuous. This island, by far the largest one that was seen, either in the present voyage or on Captain Franklin's former Expedition, was named after that most distinguished philosopher Dr. Hyde Wollaston. The main shore had a direction nearly parallel to Wollaston Land, its most distant point in sight, which I estimated to be fifteen miles off, bearing S. 61° E. On the strait, separating the two shores, I bestowed the names of our excellent little boats, the Dolphin and Union. It varies in width from twelve to twenty miles, and to the eastward seemed to contain merely detached streams of ice, not likely to obstruct the progress of a vessel; but to the westward lay the closely packed ice, filling

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South's Bay, and extending to seaward. The ice did not, however, entirely close the strait, for I could discern lanes of open water towards Wollaston Land. The packed ice which we had seen lining the coast between Point Clifton and Cape Bexley, may be perhaps considered as an illustration of the remark made by Captain Parry, that the western sides of seas and inlets in those latitudes are more encumbered with ice than the opposite sides; and it is very probable that a ship might have found a passage by keeping along Wollaston Land, an opinion which the appearance of the ice, as seen from Cape Bexley, tended to confirm. The latitude of our encampment was $68^{\circ} 58' N.$, and its longitude $115^{\circ} 47' W.$; it was within ten miles of our encampment of the preceding night, although we had travelled twenty-five miles in the course of the day.

Saturday,
5th.

The party embarked on the 5th, at the usual hour in the morning, with their spirits pleasantly excited by the intelligence of the favourable trending of the coast, communicated by Mr. Kendall, and after doubling Cape Bexley, proceeded under sail, before a west-north-west wind, with a rapidity to which they had lately been unaccustomed. The point of land which Cape Bexley terminates, consists entirely of horizontal beds of limestone, and is nowhere more than three hundred feet above the sea. On the west side, the water is two or three fathoms deep, close to the shore, and the land attains its greatest elevation by a steep rise from the beach. On the east side there are some precipitous cliffs, but the coast in general is skirted by shelving rocks. No soil was seen on the Cape, nor any appearance of vegetation, the ground being everywhere covered, to the depth of a foot, by fragments of limestone, which are detached by the frost from the solid strata lying beneath. We were much puzzled at first with the appearance of several parallel trenches, a foot deep, running for a great distance amongst the fragments, but on

examination they were ascertained to originate in fissures of the subjacent strata. Much quartz being intermixed with the limestone of Cape Bexley, the fragments which covered the ground had, by the action of the weather, lost most of the softer calcareous matter, and were converted into a kind of rasp, very annoying to pedestrians, being capable of destroying a pair of stout English shoes in a walk of a few hours.

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At eleven o'clock we came to a pack of ice abutting against the shore, but while we halted to cook breakfast, the wind opened a way for us. In the course of the morning we passed many heavy streams of ice, separated by lanes of open water, which would have afforded an easy passage for a ship. Having obtained a meridian observation for latitude, we re-embarked, and pulled for five miles through an open channel, to Point Cockburn, on the opposite side of a bay, which appeared to be four or five miles deep, and to be quite filled with drift-ice. Many deer were seen grazing near this point, but we did not stop to send a hunter in pursuit of them. We afterwards crossed several other indentations of the coast, skirted by reefs of limestone and low islets, and encamped on Chantry Island, lying close to the main shore, in latitude $68^{\circ} 45' N.$, longitude $114^{\circ} 23' W.$, having sailed thirty-nine miles in the course of the day. Two islands, lying opposite to our encampment, received the appellations of Manners Sutton and Sir Robert Liston's Islands. The degree of motion in the ice, which was drifting between these islands and the shore, indicated a stronger current of both flood and ebb than we had hitherto seen.

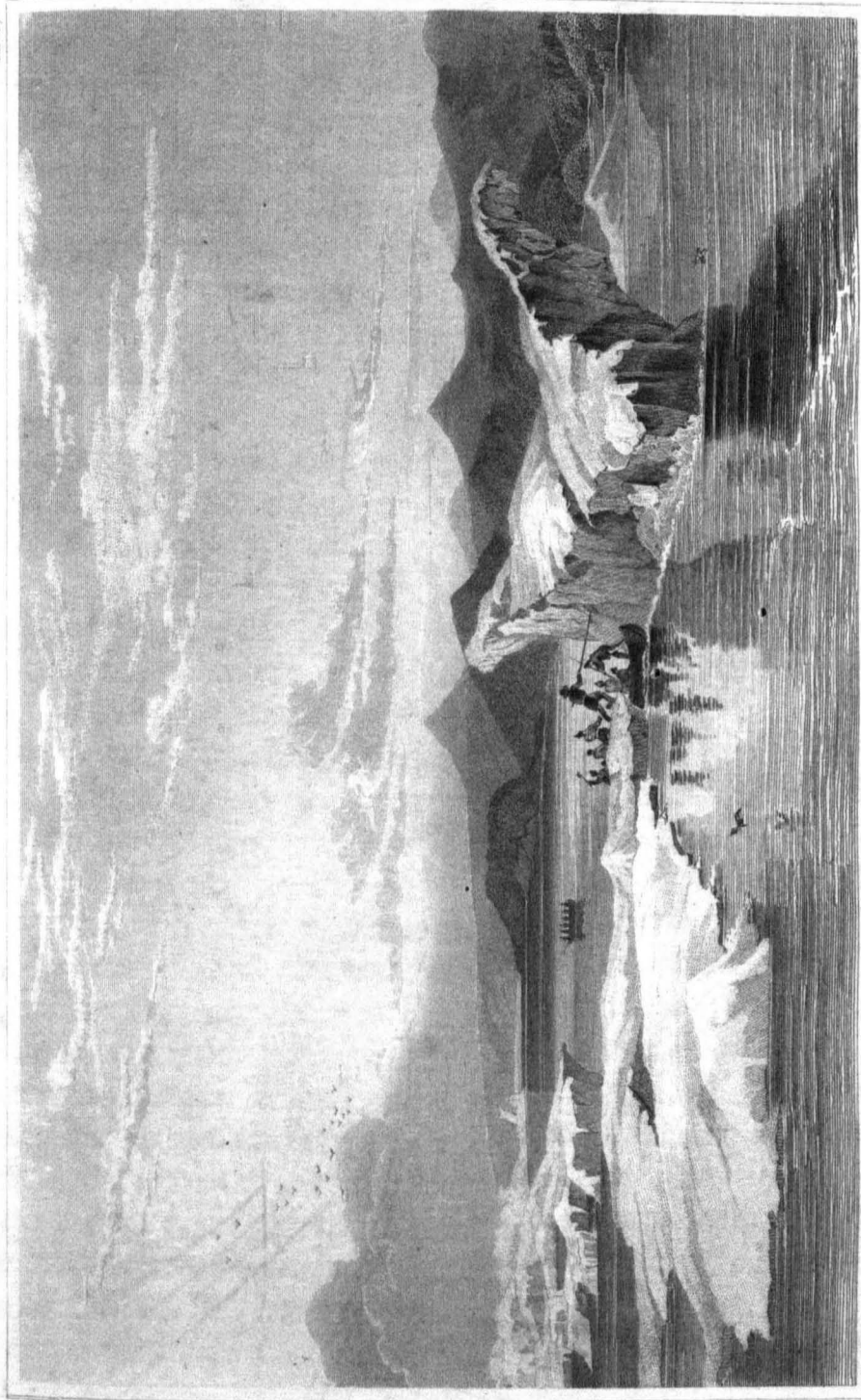
On the 6th, we commenced the day's voyage at three in the morning, but were compelled to put ashore soon afterwards by a stream of ice barring our way. At six o'clock, however, the flowing tide opened it sufficiently to enable us to push the boats

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along with poles, our progress being occasionally facilitated by the rocky reefs, which kept the heavier masses from pressing down upon us. Much of the ice lay aground, in nine fathoms, but none of it rose more than five or six feet above the surface of the water. We estimated the velocity of the flood tide, off some of the rocky points, at three miles an hour, and at such places we had much trouble in endeavouring to keep the boats clear of the drifting ice. The circular motion which the pieces occasionally acquired was particularly difficult to guard against, and had we not depended on the tongues of ice, which, lying deep under water, prevented the upper parts of the floes to which they belonged from coming in contact, we should scarcely have ventured amongst them. We did not, however, entirely escape, for the Dolphin was caught between a floe and a piece that lay aground, and fairly raised out of the water by the pressure, which broke one of her timbers and several of her planks. We put ashore on a small island to repair the damage, and during our stay Mr. Kendall had a meridian observation in latitude $68^{\circ} 36\frac{1}{2}'$ N. Another island, lying about two miles from the main land, was distinguished by the name of Aylmer Bourke Lambert, Esq., Vice-President of the Linnean Society. The sea water there was beautifully clear.

At half-past one, the Dolphin being again rendered sea-worthy, we prosecuted our voyage until five P.M., when the flood-tide set with such velocity round a rocky point, and brought so much ice with it, that we considered it prudent to put ashore. The violent eddies in the currents there, and the sudden approach and collision of the large masses of ice, reminded us forcibly of the poet's description of Scylla and Charybdis. The length of the day's voyage was twenty-one miles, and our encampment was situated in latitude $68^{\circ} 32'$ N., longitude $113^{\circ} 53'$ W. The temperature at nine P. M. was 60° .



Drawn by B. N. Kendall.

Engraved by E. Fisher.

THE MOUNTAIN SCENE AT THE MOUNTAIN HOUSE.

Mr. Kendall and I took a walk of some miles along the shore, and were happy to observe the coast inclining to the southward, although no doubt now existed as to our accomplishing the voyage sufficiently early to allow us to cross the barren grounds, to the eastward of Great Bear Lake, before the cold weather set in. The flowering season for most of the plants on the coast was already past, but our route for the remainder of the distance to Bear Lake, inclining much to the southward, would naturally have the effect of prolonging to us the duration of the summer. A conspicuous hill, discovered in our walk, received the name of Mount Barrow, in honour of John Barrow, Esq., Secretary to the Admiralty; and two islands in the offing were named after Commanders Bayfield and Douglas, of the Royal Navy, to both of whom the officers of the Expedition were indebted for much assistance and personal kindness, in their progress through Canada. The interior of the country was flat, but the limestone formed cliffs on the shore two hundred feet high. From the form of the islands, I was led to believe that they consisted of trap rocks. Wollaston Land, as seen from the encampment, appeared to recede gradually from the main, and it sunk under the horizon, on a north-east bearing. By estimation, the most easterly part of it which we saw, is in latitude $68^{\circ} 45' N.$, and longitude $113^{\circ} 53' W.$ The navigation of the Dolphin and Union Straits would be dangerous to ships, from the many sunken rocks which we observed near the southern shore.

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Embarking at two A.M. on the 7th, we crossed a deeply indented bay, which was named after Lieutenant-Colonel Pasley, of the Royal Engineers, to whose invention we owe the portable boat, named the Walnut-shell, which we carried out with us. On the east side of Pasley Cove there are some bold limestone cliffs, that form the extremity of a promontory, to which

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we gave the name of Cape Krusenstern, in honour of the distinguished Russian hydrographer. It lies in latitude $68^{\circ} 23' N.$, longitude $113^{\circ} 45' W.$, and is the most eastern part of the main land which we coasted. From a cliff, two hundred feet high, two miles to the southward of Cape Krusenstern, we had a distinct view of the high land about Inman's Harbour, on the western side of Cape Barrow, which was the most easterly land seen on this voyage, and lies in longitude $111^{\circ} 20' W.$ The space between Capes Barrow and Krusenstern is crowded with islands.

By entering George the Fourth's Coronation Gulf at Cape Krusenstern, 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 five thousand pounds was established by his Majesty's Order in Council, but as it was not contemplated, in framing the Order, that the discovery should 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.

While the party were at breakfast I visited Mount Barrow, which is a steep hill about three hundred feet high, surrounded by a moat fifty or sixty feet wide and twenty deep, and having a flat summit bounded by precipices of limestone. Three banks, like causeways, afforded the means of crossing the moat, and the hill altogether formed a remarkably complete natural fortification. The Esquimaux had marked most of the prominent points in this quarter, by erecting piles of stones similar to the cairns built for land-marks by the shepherds in Scotland. These erections were occasionally noticed after doubling Cape Parry, but they were more numerous here. The ice which we saw this day was in form of loose streams, and offered no material impediment. Several wreaths of snow lay at the base of the cliffs

that had a northern exposure, being the remains of that which had accumulated in the winter.

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The latitude $68^{\circ} 13' N.$ was observed at noon on a low point which projected from some higher lands. From this point, which was named after Edward H. Locker, Esq., Secretary to the Royal Hospital at Greenwich, we had a view of Cape Hearne, the form of which I thought I recognised from my recollections of it on the former voyage. We reached Cape Hearne in the evening, having in the afternoon skirted a low and indented coast; a bay immediately to the north of it was named after Captain Basil Hall, of the Royal Navy. Cape Hearne itself is a low point, not visible from the mouth of the Coppermine; but the high land behind it, when seen from a distance, appears like a steep promontory, and is that designated as Cape Hearne in Captain Franklin's chart of his former voyage. The latitude of this cape is $68^{\circ} 11' N.$, and its longitude $114^{\circ} 54' W.$ The length of the day's voyage was forty miles. Many deer were seen here, and Ooligbuck killed a very fine one in the evening. After encamping I went a few miles into the interior, and found that the country was composed of limestone, which rose by a succession of terraces to the height of about three hundred feet above the sea. The heat of the day was considerable, the thermometer, when exposed to the rays of the sun, indicating 86° , without the bulb being blackened, or any other means used to retain the heat.

Embarking early on the eighth, and passing through several loose streams of ice, some pieces of which were twenty-four 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 three hundred and fifty feet. I named this well marked point Cape Kendall, after my highly esteemed friend and companion,

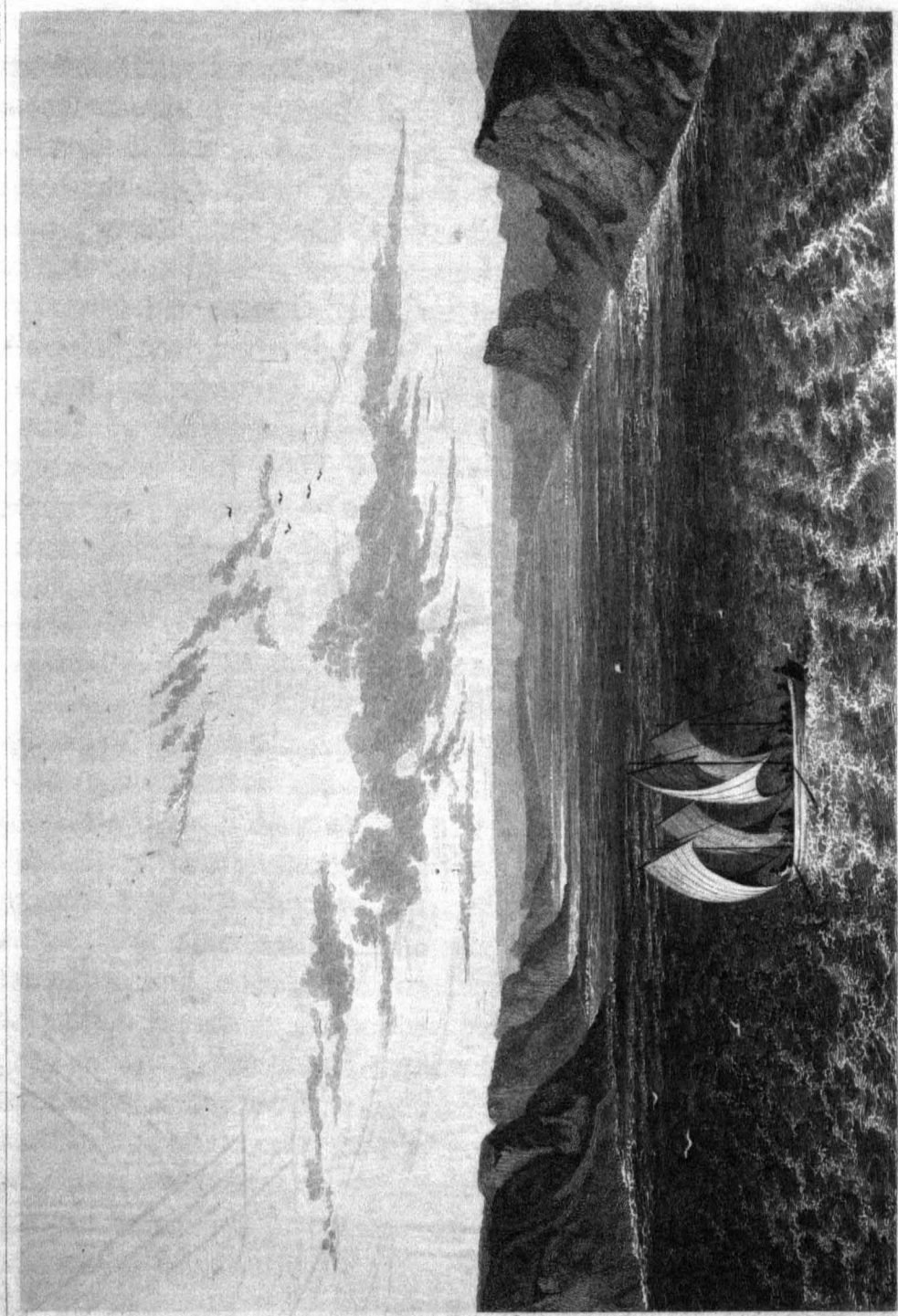
Tuesday,
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and had the pleasure of pointing out to him, from its summit, the gap in the hills at Bloody Fall, through which the Coppermine River flows. Mr. Kendall having taken the necessary bearings and sketches for the completion of his chart, we descended 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 disappointment which often springs 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 trending 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 $67^{\circ} 58' N.$, and its longitude by reckoning was $115^{\circ} 18' W.$

Re-embarking, we steered for the mouth of the Coppermine River with the sails set to a fine breeze, plying the oars at the same time, and on rounding Cape Kendall, we opened a magnificent inlet, or bay, rendered very picturesque by the manner in which its lofty cliffs came successively in sight as we crossed its mouth. We distinguished it by the name of our mutual friend and companion Captain Back. One of Couper's Islands, on which we landed, consists of greenstone, rising from the water like steps of a stair; and from its summit we perceived that a low piece of land, which, on the former voyage, had been mistaken for an island, was, in fact, the extremity of Point Mackenzie, and that Richardson River was merely a ravine, now dry*. Having reached the mouth of the Coppermine River, we

* Captain Franklin has since transferred the name of Richardson to the Bay between Point Mackenzie and the mouth of the Coppermine River.



Drawn by E. N. Kendall.

Engraved by E. Fisher.

SEVENTHION CROPPING BEACON LIGHT.

Published May 1858, by John Murray, London.

encamped within a hundred yards of the position of the tents on Captain Franklin's former Expedition. Some half-burnt wood, the remains of the fires then made, were still lying on the spot; and I also recognised the Esquimaux stage, which we visited on that occasion, but there were no skins nor utensils on it now.

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The completion of our sea voyage so early in the season was a subject of mutual congratulation to us all; and to Mr. Kendall and myself it was highly gratifying to behold our men still fresh and vigorous, and ready to commence the laborious march across the barren grounds, with the same spirit that they had shown in overcoming the obstacles which presented themselves to their progress by sea. We all felt that the comfort and ease with which the voyage had been performed, were greatly owing to the judicious and plentiful provision of stores and food which Captain Franklin had made for us; and gratitude for his care mingling with the pleasure excited by our success, and directing our thoughts more strongly to his party, the most ardent wishes were expressed that they might prove equally fortunate. The correctness of Mr. Kendall's reckoning was another source of pleasure. Having been deprived of the aid of chronometers, by the breaking of the two intended for the eastern detachment of the Expedition, during the intense winter cold, our only resource for correcting the dead reckoning was lunar observations, made as frequently as opportunities offered; yet when we approached the Coppermine River, Mr. Kendall's reckoning differed from the position of that place, as ascertained on Captain Franklin's former Expedition, only twenty seconds of time, or about two miles and a half of distance, which is a very trifling difference when the length of the voyage and the other circumstances are taken into consideration. The distance between Point Separation and the mouth of the Coppermine River,