

I cannot play the humorous or the buffoon, but truth, simple truth alone, in such pleasant terms, as I can reduce it to, will prevail. I have nothing to gain, nothing to fear: my own family motto must guide me through-out. Those who despise "Loyal au mort" and loyal to facts, must not depend too much for amusement in this narrative.

Our departure from Upernavik, to use the seaman's well-known expression, was the "hoisting in of our long boat." Henceforth we must be considered at sea, and dependent on our own resources. Cut off, for a series of years, from any but our own companionship, and dependent in no small degree upon the *bonâ fide* constituents of our society, power ceases, and the will of the least amongst us may create *bella, horrida bella*. Upon what a volcano do we stand! The sullex chief, if he be so, must chew the cud, and vegetate year after year in sullessness and vexatiousness of spirit. No such purgatory could exist, better calculated for a man of narrow mind, —none so dangerous to a sensible mind. Such then being our feelings, I proceed, in charity with all men, not perfect myself, and willing to overlook all faults in others, provided they do not, when I tell them of it, still continue to tread upon my corns.

I had a very strong inclination to cut across direct for the west land, under the impression that we should find less obstruction; but the predominant feeling being in favour of Melville Bay, being myself but a Johnny Newcome, I submitted to the ice-masters and others, who thought they knew better, and followed up the whalers, reported to be about twenty days in advance of us. I

am far from believing that I did right, with regard to the shortness of passage; for I firmly believe, a very little perseverance in maintaining our westing would have rewarded us by open water to the westward.

June 21.—The longest day,—and certainly a very long one, to most of the executives at least. Thick fog came on, causing a separation from our consorts, but fortunately cleared up in time to prevent mischief,—for no two appeared to have their heads in the same direction. The ‘Resolute’ alone was standing directly for us, having heard our guns and fog-signals, and answered them. The afternoon turned out beautiful. Aided by a light fair wind, we continued to thread the passages between the icebergs, at one of which we tried the three-pounder, shotted, expecting the concussion of the air would cause some huge fragment to separate, particularly as it exhibited many deep vertical fissures; but not the slightest splinter moved.

We soon reached the termination of the open water, and secured the vessels to the floe or sheet of field-ice, averaging generally from three to four feet in thickness, six-sevenths of which are supposed to be immersed; but we found by experiments, at a later date, that eight-ninths is nearer the truth. The weather being foggy, we were unable to see any distance, or to select any position near to any probable opening.

On the morning of the 23rd, on the fog clearing off, we discovered that we were rather too close to one of the Browne Islands, in four and a half fathoms, added to which the rocks under our bottom were too visible to be pleasant; moreover the ice was drifting us fast

towards the island. The 'Pioneer' was immediately put into requisition, and, having got her steam up, towed the whole Squadron into deeper water.

Had it not been for this unfortunate interference, I should have landed, and obtained observations, to fix some of the other objects in sight, as well as sought for the eggs of eider-ducks, said to abound here. I was only able, on a moving piece of ice, to obtain the latitude, which placed us in $74^{\circ} 7' N.$, the Devil's Thumb bearing north-east fifteen miles; shortly before midnight, the ship was secured to the floe.

About noon on the 24th, the steamers having now become indispensable, they towed the vessels through a lead until eight P. M., when we secured for the night,—or rather to afford the crew rest, for it is almost an absurdity to talk of nights during the summer in these high latitudes. "Midnight" however becomes a term of time; and at this hour a large berg, in rapid motion towards us, compelled us to again resort to our steamers, which towed us sufficiently out of its way, but unfortunately with the loss of two dogs, which, not yet sufficiently familiar to their new masters, and possibly over-fed, preferred amusing themselves on the ice to rejoining their ships. A boat and parties were sent to recover them, but without success. They were again seen on the floe-edge the following day, and the boat sent to endeavour to take them, but although food was taken to entice them, still with no better success; starvation, or the gripe of some hungry bear, would probably very soon be their fate! Little as we knew these poor animals, still their loss was perceptibly felt.

We had now reached "Melville Bay," and the remarkable objects known as "Devil's Thumb," "Sugar-loaf," "Melville Monument," and Cape Walker, familiar to Arctic navigators, were all clearly defined, and apparently very near. But the positions on the chart, if they be truly placed—and we have reason to doubt it—would place us about forty miles from them.

June 26.—Lat. $74^{\circ} 34'$ N., long. $59^{\circ} 23'$ W.—We had a most beautiful day, the sun bright, temperature 36° , and were able to determine our advance to have been about thirty-five miles north and twenty-five miles west during the last twenty-four hours; we obtained soundings, with 320 fathoms; bottom, coarse ground, with stones and coral. Our arrangements for "flitting," or deserting ship, in the event of getting nipped by the ice, were already made, and the necessary provisions for each boat stowed on deck in readiness. Each person was supplied with a bag, in which a complete suit and change of under-clothing were kept stowed, so as to prevent confusion; officers and men were told off to their respective boats; in fact, every arrangement complete for leaving the ship in the most orderly manner.

I think I can perceive the curl of lip of some fastidious friends, who may deem these matters absurd; but there is always an *official* mode in burning, sinking, blowing up, or abandoning a ship of war. Whatever happens in a well-disciplined ship, becomes less inconvenient by every man knowing his duty, no confusion then results, and less loss of life or property is heard of.

It may appear strange, but doubtless it will be remarked in the course of our expedition, that "coming events cast

their shadows before them." About eight this afternoon, the change of tide or current set the western ice in motion southerly. As we had no wish to travel that route, our vessels were removed to the opposite or land-floe, and, as we thought, in a place of safety; indeed, the space of open water seemed to promise us security, and I had intended to remain quiet the ensuing day, Sunday, giving the crews their full day of rest. Shortly before midnight, however, I was informed that the floe was in motion and closing on the 'Resolute,' and that she would probably be "nipped." The others were all more in the cavity of the bay formed by the ice. Before I succeeded in gaining the deck, the 'Resolute' was in agony, and had a considerable list (heeled over). The rudder in a few moments was destroyed, and the pressure then appeared to cease,—the floe brought up, possibly, by some opposition to the northward. The motion of the ice was almost imperceptible, but we had now before us pretty conclusive evidence of the nature of the heavy gripe which this insidious enemy was capable of inflicting almost in dead calm. It was not a direct pressure, but the grinding power of two unequal forces, acting laterally in opposite directions. The best illustration to my fair readers would be to imagine the ship to be the roller of a mangle. The pressure strained the 'Resolute' a little, lifted her above her line of floatation some eight or ten feet; the bells were set ringing, glasses clattering. The sick did not care to remain below; indeed, in a few minutes they might all belong to another vessel, and our noble consort *hors de combat*: and yet not the slightest noise or confusion, and no

apparent fear of wreck ; boats and gear ready on the ice. This was a calm nip, and here it ended, with merely the loss of rudder ; but had the outer floe been pressed by the addition of wind, distant, although not felt by us, and the "*piling*" of the broken floe commenced, which result generally continues until all the weaker points have yielded and the giants are firmly opposed by equal resistance in each other's embrace, the consequences would probably have been serious. In very few minutes every rudder of the Squadron was unshipped and hung to the stern-davits, and parties engaged cutting docks for the vessels, a duty on which the crews were engaged until nearly six A.M. About four the 'Resolute' was released, and docked with us ; and as her rudder was found too much injured for immediate repair, the spare one was got up, put together, shipped, and ready for service before the following noon.

I am aware that my naval friends will require no explanation as to "docking" in ice, but landmen may wish information, and, dry as it may be, I will endeavour to afford it in as few words as possible. I have already observed that the danger consists in being caught between the edges of two fields of ice in motion, and that, when these bodies come into contact, with a force impossible to calculate, all weaker objects, including the icy projections themselves, undergo "the crushing force," until equal forces overcome the causes in operation. It must therefore be very apparent, that where such vast surfaces, miles in extent, are so firmly cemented together, if objects be sufficiently withdrawn into gaps within the line of their opposing vertical projections, they are safe.

It is therefore customary, by the use of ice-saws, varying from ten to seventeen or eighteen feet in length, from a quarter to half an inch in thickness, and about nine inches wide, to saw out a space which will admit a vessel twice her own length, and a few feet wider than her extreme breadth, within the irregular edge, and which will become completely sealed, should an adverse floe close its mouth; or, to refer very simply to every-day practice, it is just backing up some alley, if one is in the way of a runaway beer-drain in the Strand.

In the present case we discovered, even with three ice-masters in each vessel, and much other assembled talent and experience, that there is always much to learn, and moreover, to facilitate any uncommon service, that method is imperatively required. Our docks, constructed in haste, and without previous organization, were imperfect, and therefore we were compelled to cut deeper,—incurring double labour.

As our men and officers were now stationed to each saw-gang, I had the opportunity, as this work was *leisurely done by one watch*, of determining the rate of work on which I could rely in ordinary cases. The average cutting of three-feet ice I found to be at the rate of ten feet in three minutes, which, if no obstacles opposed, and there was external space into which the masses could be floated, would allow of “cutting in” in forty minutes,* or less, if danger threatened. Every officer in command should, whatever may be the service required, estimate, nay determine, truly, the power at his disposal; and not until then is he competent to order, decide on, or reject any contemplated movement where time is involved.

* Later experiments. 1.40, docked; 1258 tons ice removed.

In these our early operations, recourse was had to blasting, to ^{aid} the clearing of the docks. Charges, varying from twenty to four pounds, were tried ; but the least possible quantity of powder which will effect a crack, the more judicious. This is very easily understood by any person endeavouring to extract by one end, and horizontally, a pane of glass from a sash : the entire pane may slide out freely, if whole ; if broken at convenient angles, it may come out by pieces ; but, if severely cracked in *radii* from the centre, it will be so much pressed at the sides as to require to be removed piecemeal. Ice is still more stubborn. I am fully satisfied that no man who really understands his business, and is not pressed for time, will call in the aid of gunpowder. It is highly dangerous to the dock-sides, which it generally splits, and causes to tumble to pieces the instant it becomes relieved from pressure. Blasting ice is in itself quite a distinct science,—as much so as flint-making, pebble-cutting, or geological operations.

But, in dealing in the theoretical points, I must not lose sight of the actual manœuvre, which is of itself quite an exciting spectacle. I have before stated that method is indispensable ; it therefore becomes the duty of the officer superintending to have all his men duly stationed : an officer to each saw-gang and triangle ; the carpenter, with his crew, to line out the dock ; and others ready to carry out any special orders of the chief. The carpenters line out a space of a wedge-shape, once and a half the length of the ship, say a hundred and eighty feet in length, on a middle line, sixty feet wide at the outer mouth, and thirty feet at the inner extreme. The side

lines are then cut by the saw-gangs; and, as soon as they have fairly commenced, diagonal lines are followed up; triangles or jib-pieces (for which see Appendix) are shaped out, which are removed as cut. On the pipe "Dock ship!" the officers with their saw-gangs immediately repair to their proper saws and triangles, and march off to the floe, two to the saw, two to the triangle, and four to the "gins" and "bell-ropes," in much the same order as artillerymen to their gun-gear, and await orders. The first few feet is a silent duty; but "Now, my lads, for a song!" and at it they go cheerily, never forgetting those nearest their hearts, as "Sally is the girl I love so dearly," and similar improvised measures, cheering on the duty, occasionally interrupted by a simultaneous burst, or yell, from some, at least to us, unknown cause.

The icemen of the 'Resolute' consider that vessel to have had a very narrow escape, and I perfectly believe, with them, that no whaler could have withstood the pressure to which she was subjected. The result has produced a more serious preparation for "fitting," and greater attention to boat-fittings. What I had foreseen happened: a shift of wind set our floe in motion; the docks broke up, owing to numerous cracks occasioned by the explosions by gunpowder, and a general movement resulted. A polar bear approached the 'North Star,' but her sportsmen, too eager to get the first shot, fired before he was within range, upon which he very wisely withdrew from such uncourteous company.

June 30.—We had succeeded, after much toil, in cutting and blasting through several necks of ice which separated the vessels, and were again collected, when the

wreck of a vessel on the ice was reported from the crow's-nest.* It was then so foggy that we had been groping our way along the floe-edge, in order to prevent the possibility of parting company. On reaching the wreck, which we found to be still suspended with her bow out of water, by her casks and air contained between decks, I caused the vessels to be secured to the ice, and commenced saving all the available firewood, of which we were in need. By bits of papers and brands upon her spars we discovered that she was the 'Regalia,' of Kirkcaldy, and had but recently been abandoned and set on fire. The hacking of her spars, rigging, etc. appear to have been executed by the most malicious feeling of preventing others from making use of them. The fires were still burning, and it was evident that the crew had not long quitted. We sometimes laugh at the rapidity with which wreckers destroy and carry off property; but in a very short space of time the masts, yards, rigging, etc. of the late good ship 'Regalia' were absent, and stowed somewhere on board the five vessels, which "had not room for another cask of provision." As the hull, in its present position, might endanger some other vessel, I determined to let her go down, and, at the same time, relieve her of some of the casks and staves within. This, one of our twenty-pound cylinders of gunpowder very effectively accomplished, strewing the surface of the sea with the remnants of casks, staves, etc. At this moment our men were at dinner; but the noise of the explosion brought them up, and

* "Crow's-nest," a look-out place, about the size of a cask, constructed at the topgallantmast-head, to watch for whales.

from each ship the boats' crews rushed, as eager for spoil as any of our Sooloo friends · it was diversion, excitement, or that innate habit of mischief and fun implanted in all seamen, for to them no value could attach to these *spolia opima*. It furnished food for contemplation, of a very mixed character. But a few hours since, such might have been the fate of the 'Resolute,' and, in less time than it takes me to commit this to paper, may be our own!

Whilst thus engaged, the fog cleared off, and discovered a vessel under sail to the westward. About four P M. the 'St. Andrew,' of Aberdeen, joined, and I there found part of the crew of the 'Regalia,' who informed me, that if we had hove in sight, we could have saved a great part of her bread and provisions, which would have been most valuable. She had been nipped ten days before, the ice passing entirely through her, meeting at the main hatchway, or, as they termed it, "completely toggling her." The master having given up charge, and released the crew from further obedience, each boat-steerer, as customary, took his boat,—and having provisioned her, the crew then broke into the spirits, and, regaling themselves in the cabin, at their highest pitch of intoxication, ordered the skylight to be closed to keep them warm, when the least motion of the ice might have sent them in an instant to their last reckoning! This was succeeded by every wanton act which madmen could commit. A fire was made upon the rudder lying flat under her stern on the ice, and the ship burned until that end of her sank, leaving her floated merely by the air contained in the bow and

empty casks in the fore-hold. We gave the 'St. Andrew' a tow up to the whaling fleet, which we discovered that afternoon, docking in company with thirteen, about ten o'clock that same evening.

The great floe of Melville Bay, where we were now secured, deserves some little notice. Enlivened, as at present, with a forest of masts and animated beings, its wilderness is not sufficiently contemplated. But let the solitary vessel be there imprisoned, and compelled for weeks, without a consort, to anxiously watch every change, night and day, which may afford her the slightest chance of getting into the "north water," and every inspection must impress upon the mind the dreary monotony of that floe! As far as the eye can range, a painfully white, even surface prevails, here and there broken by a huge iceberg; or where mounds of crushed ice or nips present themselves, piles of rubbly irregularities, like huge paving flags, cause the mind to dwell on the stupendous power engaged. The eyes become painfully affected by the glare, particularly when the sun is bright. The icy surface is generally covered with a fine sheet of snow, or, at times, fine comminuted drift ice, which on close inspection will appear to resemble hailstones.

This floe-covered ocean varies in the thickness of its sheet of ice from two to seven feet, and, where pressure has taken effect, is frequently doubled or trebled by alternate flakes pressed under by the meeting of conflicting floes. It is owing to the pressure of hundreds or thousands of acres against the land-fast ice, catching a vessel unprepared by docking, that these fatal "nips" result.

The computation of the floating weight simply of a surface three hundred yards square amounts to 63,060

tons. With even this insignificant floe, impelled by wind or tide against the frail wooden structure of man, what can avail?—something like the Nasmyth hammer on a nut!

If the vessels intended for the whaling trade were built with a more wedge-shaped bottom, the ice in many instances would merely raise them out of water, and allow them to regain their floatation when it eased; but she would not then hold the cargo which gain requires.

Strong, however, as the 'Assistance' is supposed to be to withstand pressure, I much doubt whether we should come off so well in the event of decided "nip" as many of the vessels here. We are deep, heavily laden; they are light, without cargo, would rise easily, and evade the death-gripe, when we should be crushed.

I much fear that my readers will exclaim, "This is merely a book of disasters: another wreck!" But too true; and this time an unfortunate American. On the 6th of July, in one of those animated moves, when every effort is exerted to get ahead and obtain "the lead" through momentary openings in the ice, the 'M'Clellan' barque, being in advance, endeavoured to pass a narrow opening, in order to reach the next "lead." She had nearly succeeded, but the ice, changing its motion, caught her in the narrows, "nipped" and hurt her badly. In a very short time she was deserted by her crew. On this occasion our crews aided, repaired, and left her, as we deemed, all safe, and her crew were induced to return. But hardly were we all secured in docks, and I was congratulating myself in having thus saved the vessel of our ally, when it was reported "that she had experienced a fresh nip, was driven on to the bow of the 'North

Star,' carrying away her cat-head; and that further assistance was required." Commander Pullen further reported, "that he momentarily expected to lose his bowsprit, if further damage did not result."

Fatigued as our crews were, there was no alternative: all the available hands from the Squadron were sent to the 'North Star;' and the master of the American having abandoned his vessel to me, possession was taken, to save stores, protect property, and to prevent any mad action of the wreckers, which might endanger H.M.S. North Star.

It is unnecessary for me to narrate all that was done. I adopted such measures as secured the 'North Star' from injury, saved a considerable quantity of bread from the 'McClellan,' and eventually allowed the vessel to go down.

The floe about this period presented a very interesting subject for the painter. Several of the whalers were experiencing very decided pressure from without, and astern of these vessels would be seen the various "flitters," boats, sails, provisions, etc., with the crews idly and unconcernedly awaiting the result. The Americans too had not yet selected their vessels, and were, with their boats and chattels, on the floe, sleeping however on board different vessels.

One fact however, totally unlike the old breed of English seamen, I was ashamed to witness,—the childish apathy, or worse feeling, which seemed to pervade them at the moment when their services were most required, and when their exertions might have determined the safety of their vessels. No danger to themselves presented; yet all subordination appeared to cease, whenever one boat-steerer chose to take *his* boat to the ice.

I mark *his*, because I think it is this vicious *principle* of making the boat *his*,* and joining another vessel with her, that causes all this precipitate abandonment, insubordination, and loss of vessel

In the case of the 'M'Clellan,' the first act of the boat's crew of the 'Regalia,' sheltered by her, was to set the captain at open defiance, and her own crew would not put a finger to the work. I firmly believe that if Her Majesty's ships had not been present, sad outrages would have been committed.

I endeavoured to induce the masters of the whalers present to embark part of her cargo of oil, etc., saved, with salvage allowance; but all refused, declaring that by their law (that of the *floe*), all that came over their gunwale was the property of the ship. It is on this principle that they destroy their vessels. The oil then floats; they could take it on the sea, but not from wreck. For the provisions, fuel, etc., I agreed that Her Majesty's Government would pay the owners, on production of my receipts.

About the 20th of July, the whalers having come to the resolution of going south, and not losing more time in trying the uncertainty of Melville Bay, or gaining the "north water" by this route, our letter-bag was despatched by the 'True-love.'

On the 21st, they gradually stole away, leaving us in quiet possession, the 'Alexander' alone determining to stick by us, and to take our latest despatches. The feeling was gloomy, but as the separation directed our energies to our own immediate duty, I was not sorry to

* Why not pass a law to make it *piracy* to take a boat without the master's signature and full consent?

be alone: indeed the companionship and ship-visiting did not agree with my notions.

On the 23rd, the lanes appeared to have been for nearly sixty hours gradually widening; at times the sheets of water broad, and apparently free. Our progress, however, just as we had almost calculated our hours to Beechey Island, became suddenly arrested by fog. The ice also closed in, compelling us to dock; the 'Resolute,' 'North Star,' and 'Intrepid' were lost in fog, but not far distant, as we could hear their return-guns plainly.

July 24.—In $75^{\circ} 36' N.$, $61^{\circ} 51' W.$ —Toiling, towing, and blasting the ice, until eight P.M., when we made fast for the night; about midnight, on the fog clearing off, we discovered the other vessels, about four miles distant to the southward. Being now so far asunder, and the chances of their taking a different lead probable, I made the several rendezvous, pointing out Capes York and Dudley Digges as the two first.

July 25, Sunday.—Quiet as any Sunday could be wished; we distinctly heard the bells of our consorts over the ice, and, having measured base by guns, found the 'Resolute' to be four miles distant.

On the 27th, about midnight, we lost sight of our consorts behind some bergs; they were, at the time, apparently free, and proceeding rapidly by the in-shore lanes. We ran alongside an iceberg, to water from a pool on its summit, effecting our landing on the berg from the foreyard; but the floe threatening to close and press us on the berg, we were compelled to haul off, before we had completed.

The 28th found us moving on cheerily; open water and plenty of room. A bear was discovered on the floe,

to which we gave chase in the gig; the simpleton foolishly took to the water, and gave us a very smart pull; however, poor fellow, he soon discovered that he was not in his element, and sprang upon the first small floe-piece he met, where he took his wounds most courageously, plunging again into the sea to allay the pain. After a very animated chase, and some very bad shots, the balls finding their way to the ship instead of Bruin, he surrendered, turning up suddenly on his back. This was the second killed in Melville Bay, the first by Commander M'Clintock and Lieutenant Meecham, of 'Resolute,' on the 6th instant. This animal, even after a ball had passed through his brain, I was informed by Lieutenant Meecham, was disposed to show fight!

July 29.—Our advance had now become pretty regular, occasionally impeded by sudden meeting of points of floes, but these were soon overcome by blasting. I left the ship today for a short time, with Lieutenant May and Mr. Grove, in pursuit of the rotges, small aquatic birds (*Alca Alle*) about the size of a water-hen. We killed one hundred and fifty; but in the act of picking up the dead birds, a sudden run of the ice took place, at the rate of three knots, driving many of the birds under the sharp ledges of the floe. We killed between five and fifteen at a shot. The ship and 'Pioneer' were temporarily pressed against the floe, but it soon ceased.

On the 30th, we had reached 76° N. and 63° 29' W., and clearly on the verge of our long-desired "north water:" Cape York was in sight, and, towed by 'Pioneer,' we were pursuing our course merrily, hoping to rejoin our consorts there, not doubting but that they had been more fortunate in getting along the land than ourselves.

CHAPTER III.

Native Dogs.—Red Snow.—Cape Dudley Digges.—Game.—Cape Warrender.—Beechey Island.—Rejoined by Captain Kellett.—Cape Riley.—Find Pieces of Whale.—Parting Ceremonies.—Wellington Channel.—Queen's Channel.—Mount Percy.—Winter Quarters.

July 31.—During the night, we had been making good progress, threading the mazes with facility, although occasionally bewildered by fog; but as the sun gained power, this gradually gave way to a beautifully clear morning, and before eight we were able to distinguish the huts of the natives under Cape York: no traces, northerly or southerly, of our consorts. Running close under the southern side of this high cape, we noticed the sledges driving down to the floe-edge, and, accompanied by Dr. Lyall, I went in the gig to visit them, taking presents of knives, scissors, needles, thread, looking-glasses, saws, beads, etc. It was at this Cape that Captain Ommanney examined for traces of Sir J. Franklin, and brought away the native boy called Erasmus York. I much regretted the absence of the Esquimaux vocabularies, none having been supplied to this Squadron, and therefore was totally unable to make them comprehend that three other large vessels were expected; they betrayed no signs of having

seen them. As to inquiry after E. York; they no doubt considered him sold as a slave, and turned their attention more to the business in prospect. But one old man and a boy met us at the floe-edge, the others, although near, having held aloof, in all probability waiting until they were apprised of the turn of affairs. Our traffic with these people, who were filthy in the extreme, cannot prove interesting. In return for our presents, but more particularly in exchange for a boat-hook and a broken oar, we obtained three very fine and handsome native dogs, not differing a hair in marks or colours from each other, being of an iron-grey, whitish beneath, dark stripe on back and shoulders, and strongly resembling a very dark-coloured Arctic wolf.

I was indeed glad to find that the articles which they preferred were likely to be of such value to them, instead of the trumpery gewgaws usually given to these uncivilized beings. As to looking-glasses, if I for an instant imagined they would reflect their own deformities, and induce them to mend, wash themselves, or to scrape off their filth, I would gladly have bestowed on them all our supply. Of wood they appeared to be greatly in need, and had I been aware of it, before leaving the ship I would have given them some of great value, viz. the staves of the great oil-casks picked up from the wrecks. Each of the sledge-runners I noticed, were constructed of no less than nine pieces of oak, partly staves and heads of casks cleverly sewn together, and probably belonging to some vessel wrecked, or procured from the 'North Star' when she wintered a short distance to the northward in Wolstenholme Sound. They were evidently accustomed to

the visits of English, the boy in particular—a much more intelligent lad than York, and very playful, frequently repeating “Yes, yes.” Their tents were pitched on the low ground, under the southern and inner slope of the Cape, which is probably about five hundred feet elevation; but we had seen quite enough of the individuals, not to care about inspecting their habitations, and I had yet to reach the Cape in time to secure observations for time and latitude. On our quitting, several parties joined our friends; and we moved off, directing the ship to proceed towards Cape Dudley Digges, and, if not overtaken by us, there to await my arrival. At the time we landed, eider-duck (*Anas mollissima*), lummes (*Uria Brunnichii*), dovebies (*Uria Grylle*), rotges (*Alca Alle*); gulls, and other sea-birds, were numerous, and the nar-whal (*Monodon monoceros*) was sporting in great numbers.

I omitted to observe, that the rotges shot by us appeared to be absolutely gorged with a small deep-red shrimp, which probably renders the flavour of these birds more palatable than those subsisting entirely on fish. And it frequently occurred to me, that the tinted spots in our vicinity, termed red snow, had some connection with these birds, which build their nests in the cliffs immediately overhanging; and the flock, far from this region, was repeatedly noticed as tinged by them, but certainly not of so bright a lake or crimson as that now noticed by us in this locality, which is not given for the habitat by Sir John Ross; nor did we notice it to prevail much between this and Cape Dudley Digges. A supply of both (occurring together) was taken, and preserved for future examination.

The latitude of Cape York was determined to be $73^{\circ} 53' 47''$ N., and the variation $90^{\circ} 4'$ W.; but we were too late to determine, with any degree of precision, the longitude. It agreed with the observations taken on board. But the coast-line, as placed on the chart, is certainly erroneous, as it makes it *convex*; whereas I plainly saw Cape Dudley Digges, and all the intervening points, in the *concave*, as well as the unnamed island, off, from my position. Several wild flowers, including poppies and saxifrage, were in bloom, and the base of the cliff was well clothed with abundance of long grass.

We regained the ship, about three miles to the northward of Cape York, and had full time leisurely to examine the coast with our glasses, as we were slowly towed by the 'Pioneer.' Where Beverly Cliffs may be, I know not; but no crimson snow now marks the spot.

Towards midnight, we neared Cape Dudley Digges; and as this was the second rendezvous, I landed to erect my beacon, leaving instructions to Captain Kellett to follow to Cape Warrender. It was a cold and dreary job, and, but for the noise of the disturbed birds, which have their nests here, might be pronounced awfully solemn. It was very difficult to find any position on the profile of such a vertical bluff which would conspicuously exhibit my mark; by dint however of scrambling, we found a ledge well suited to the purpose, on which a whitewashed cask was placed, and filled with stones, our cylinder being suspended within reach from a lower level. This completed, I was not sorry to regain my boat, and find myself, after twenty hours' exertion, on my way to my nest. Some few lummes and dovebies

were added to the larder, and a very fine burgomaster (*Larus glaucus*) was winged, but he fluttered so far to leeward that pursuit was not warrantable.

Cape Dudley Digges is a high beetling bluff, elevated about eight hundred feet above the sea, and of a porphyritic character. About five miles north-west from it is a high-peaked unnamed island, termed by some of our men—not inaptly—Desolation Island. Off this I rejoined the ship, which, by the reckoning, would place this island north-west five miles from Cape Dudley Digges. I cannot imagine that our consorts have passed, or some sign would have been left.

Before taking leave of this region of birds, I would wish to record my observations upon the probability of Sir John Franklin seriously thinking of laying in any supply. It is not improbable that they did so for private purposes, or for the use of the sick. But any man traversing latitudes within the Arctic Circle, will be perfectly aware that no salting process would be necessary, where nature takes much more efficacious means, by reason of low temperature.

They are not so easily killed, or taken when wounded, as some may be led to believe; and with four double-barrelled guns, in one hour, but a hundred and fifty were captured, and yet they *swarmed*. But I very much doubt any one killing them with peas, certainly not with “split peas,” with which I think Sir John Franklin’s and other Arctic vessels were supplied. Nor would any rational person so wilfully throw away “pearls after swine,” when abundance of shot was provided by the Government.

But wishing to determine, in the distribution of birds

killed on service, what would be deemed a fair equivalent as compared with meat, I directed a committee to report thereon. The result was, that twelve of these birds (*Alca Alle*) were not deemed more than adequate to one pound of meat. This, then, reduces the question to one of numbers : $12 \times 90 = 1080$ per diem would be required, to afford the crews of the ship and tender with one meal. It is my conviction that, taking a boat's crew, or even two, of our picked men, fit to be trusted with sporting, this number would not be taken in one day, and the opportunity never probably to be repeated. But a much more important matter hinges on it. His vessels, we know from the letters received, were fearfully hampered with coal and provision. Where were they to stow some hundreds of thousands? Moreover it is too doubtful an experiment to try upon a crew, situated as he was to force them, before necessity rendered it prudent, to take a substitute for provision. When birds are issued, it generally is considered in addition, to cheer them, to keep up their spirits; or when game, as deer, musk-ox, etc. can be substituted entirely, or half with half rations, on the march, and where they eat as much as they require, no bad feeling would ensue. But the result in my own ship was, that I did not consider it a safe experiment: it was not necessary, and therefore the birds, when we had killed sufficient, were served out as additional.

August 1.—Lat. $76^{\circ} 3' N.$, long. $70^{\circ} 46' W.$ —Weather very fine; light breeze; the horizon clear, blue, and well-defined, dotted merely here and there with small icebergs; the eye much relieved from the late painful glare of the ice; and the good ship, under canvas and in tow,

gliding smoothly along at the rate of 3·5 knots. After our late dreary confinement in the floe, this was indeed felt as a release,—we breathed freely on our own element. Nothing now was wanting, to complete my satisfaction, but the sight of our consorts, ahead or astern,—the former preferable, as our single steam-tug would soon bring us up with them, at all events, long before we required them in aid of our operations. At this position, I notice that my friend Austin was, on the 14th of August, about ten miles north-north-west of our position; so that we may console ourselves, after all our tedious delay, that we are at least thirteen days in advance of his expedition,—amounting here to nearly half a season.

Notwithstanding much was advanced against the propriety of our early departure from England, I now feel fully satisfied that we were still as late as could be ventured. We have gained greatly in strength, in aptitude for ice-service, and generally better acclimated than if we had made the most rapid progress from the mouth of the Thames to Beechey Island. There are also many minor, but very important considerations, to which it is unnecessary to revert, relating principally to the general health of the crews, of which my mind has been but lately relieved; and this delay has considerably enhanced the value of some individuals, who might otherwise have been deemed fit subjects to be sent home. But we are now in full vigour, ready for any service, and in good training.

On the 2nd of August we had reached the lat. $75^{\circ} 5' N.$, and long. $73^{\circ} 21' W.$, and but few spots of ice visible. These steamers are certainly better than *nothing*, but are unable to tow us more than three and a half knots, under

every assistance of canvas, and at very critical moments, owing to want of power, are under our bows, or possibly foul the towing hawser. Vessels for this service should be independent screw steamers, accompanied by the ships as transports or depôt vessels. The officer commanding should be in the steamer. Hailing and straining the lungs to people always half deaf, is not pleasant to either party, and is productive, by repetition of orders, when not heard or not obeyed, of very unpleasant feelings. Towards the evening, the breeze having freshened considerably, reducing us to close-reefed topsails, we cast off the tow-rope; motion quick and unpleasant, and ship dropping away to leeward very fast.

On the 4th we were again enabled to make all sail, but found we had been driven, by current, to the southward of the entrance of Lancaster Sound, making Cape Walter Bathurst, in lat. $72^{\circ} 19'$, long. $76^{\circ} 20' W$. It is needless to dwell on our misfortunes, or the time taken to recover ground; I shall therefore assume my position off Cape Warrender, on the 7th, whence I despatched Commander Richards to the Cape, to examine for records and sent the 'Pioneer' off to Navy Board Inlet, to report upon the coal and provision deposited there by the 'North Star.' At Cape Warrender Commander Richards left my despatch for the Admiralty, as well as one for Captain Kellett, but could not find the document left by Captain Ommanney. The label of the cylinder, with "Pull out," was found,—apparently intelligible to foxes, as the impression of their teeth was unmistakable. There is, however, from later intelligence from Commander Inglefield, strong ground for believing that not only

this, but my despatches deposited there, were carried off by Esquimaux, whom he met with at Dundas Harbour, a little to the northward, in the summer of 1853.

Captain Kellett evidently had not called here, or he would have left some intelligence. Our progress, unaided by the 'Pioneer,' and contending with adverse wind and tides, was very slow. The weather was beautifully fine, and we anxiously looked out for the return of the 'Pioneer,' whose absence was now very protracted. We had too much spare time to admire the extraordinary singularity of the entire land composing the northern side of Lancaster Sound. One very impressive idea is almost forced upon the senses, and that is, that one line has been common to the entire summits, and at one period the surface must have been continuous, exhibiting an immense surface of table-land, and this, the original feature, was probably level with the ocean; that, either at its up-heaving, or on the subsidence of the waters, it left parallel terraces for hundreds of miles, and the escape of the water channelled deep ravines, or scooped out deep bays, constituting the present castellated eminences. Subsequently, I am led to add—Nor is it to the eye alone, as viewed from the deck of the passing ship, that these ideas are solely formed; it will be noticed hereafter, that a similar course of structure, similar rocks, fossils, etc., pervade this strange region, even to the extreme exploration north of this parallel. By dint of standing close in-shore, and watching every change of tide or wind, we had just gained a position to enable us to "lie up" for Beechey Island, and the breeze continued to favour us, when our curiosity was excited by report from the crow's-nest of a stranger

in the direction of Leopold Island. Many were the conjectures; for under some aspect, totally inexplicable to us, did this stranger present herself distorted by mirage. The *black pendant* soon informed us of her moving power, but the 'Pioneer' it was not; our suspense was not of long duration, for the 'Intrepid' made her pendant, and soon took us in tow, when I learned that our consorts had reached Beechey Island, and not having called at our places of rendezvous, the 'Intrepid' had been sent to look for us.

August 11.—On the morning of the 11th, intending to visit the cairns *en route*, by pulling ahead in the gig, I went on board the 'Intrepid;' but almost at the same instant, noticed a large bear about to visit the very cairn to which I was proceeding. A very short signal to the ship sent her sportsmen to my aid; and landing full in front of the cairn, whilst the officers took it in flank, Bruin came down to meet me, and was duly complimented by both barrels. He scattered along in-shore, and fell under the accumulated wounds of those who met him in retreat. This animal was towed on board, weighed 757 lbs., and measured eight feet seven inches from snout to tail. Having examined the records left at Cape Hurd by Captain Austin and the American Expedition, we moved forward; however, adventures never happen singly. Shortly after noon two walruses were noticed on a floe-piece in our course, and the harpoon-gun put into requisition. The effect was beautiful; passing the harpoon through the monster, and that without leaving him power to get off the floe: it was a dead shot. His companion made a great fuss about it, was treated

with several balls, but eventually retired. This, added to the bear, became a most valuable acquisition to our dogs' food, which had now become very nearly expended.

Shortly after five P.M. we sighted the 'Resolute' and 'North Star,' secured to the floe under Beechey Island, and before seven the 'Assistance' was also fast beside them. When Captain Kellett came on board, to report proceedings since our separation, I found that he had reached Cape York, and communicated with the natives, on the day after, or the night succeeding, my visit, but had not the slightest intimation of their having been visited by us; and strange enough, he saw the boat-hook which I had presented to them. As he did not call at Cape York, Cape Dudley Digges, or Cape Warrender, he had not met with my notices, nor knew of my having passed those stations.

On the 12th August, accompanied by Captain Kellett, and also by an official party under Commander Richards, a close search was made of every likely spot on Beechey Island, but without discovery of further traces. The graves were dug into, but found so firmly frozen that no prospect offered by further disturbance; they were therefore replaced, and completed anew. Upon viewing the spot carefully, I was strongly of opinion that the ships under Sir J. Franklin did not winter on the southern side of Beechey Island, but were in Union Bay. Upon a very careful review of the ground, there are several points, which must have occurred to Sir John Franklin and his talented seconds, which, in my mind, would have prevented them from selecting the southern bay. In the first place, it was at once the opinion of Captain Kellett,

Commander Pullen, and myself, that Erebus and Terror Bay was not a safe position for the 'North Star,' and we determined to seek a better, if possible. Next, if the 'North Star' should have to "cut in," there would be great doubt of her getting out until very late in August, or by the 1st of September. This could not suit the views of Sir John Franklin. With Union Bay the case is quite different, and the ice may be cut or blasted, by watching convenient moments. For two seasons we know that it was free; and now it is all but clearing out, any aid would send it forth; but great labour would be required to cut in or out, to where the 'Erebus' and 'Terror' were supposed to have been. Sir James Ross landed the 'Mary' yacht on the beach of Union Bay, when Erebus and Terror Bay was as fast as at present. But the most convincing evidence to my senses is, the drift-lines of oakum, chips, etc. on the southern bend of Union Bay. I found also in the washhouse (so termed), but which I consider more likely to have been an hospital, similar threads of oakum from the seams of some vessel, with the pitch adhering; but on the curvature on the inner, or Erebus and Terror Bay, no drift whatever was noticed. Everything at the Point indicated that to be nearest to the ships,—the pile of preserved meat-tins, the garden, etc. No direction-posts were noticed but on the north and south lines of Union Bay. All operations discovered are on that coast,—nothing on Beechey Island, excepting the sheltered spot for forge and workshops. So perfectly convinced did I feel upon this matter, that whilst we were examining the drift on the beach, I observed, "Well, let us send two hands across

the ice, to meet us at the point where we strike the bay, and direct them to search the intervening beach for drift-wood." On reaching the spot (the north bend of Union Bay), I found two pieces, one Canada, the other English elm. The men had found nothing.

Proceeding on, we visited the 'Mary,' left by Rear-Admiral Sir J. Ross, and, having taken an inventory of her contents, moved on to ascend Cape Spencer, hoping from thence to obtain some insight into Wellington Channel; but in this we were disappointed, the higher land in rear intervening. We examined the notices, rebuilt the cairn of double dimensions, and returned, somewhat fatigued by one day's labour. I had despatched Commander M'Clintock, in the 'Intrepid,' to report upon the state of the ice in Wellington Channel; but the reports of all the visitors to the leading headlands, which afforded any views up the channel, were rather adverse to open water; some even fancied they saw the icy barrier across the straits.

Today, the 13th, we devoted to the examination of Cape Riley and Gascoigne Bay, accompanied by Captains Kellett and Pullen. We first proceeded to Cape Riley: the result of our search afforded no clue. The circles of stones were clearly those of Esquimaux. The huts had not been temporary habitations; each was perfectly paved, as in regular settlements, and, as is customary with these peculiar people, the slabs had been brought from some distance, as the fragments under the fallen cliff were abrupt, rhomboidal masses, but these were selected tabular slabs, particularly at the graves, misnamed fireplaces. The same loose stones, used by the Esquimaux to steady their tents, might have been used by

Franklin's people. I very much regret that the articles had not been found by us. I am not presumptuous enough to fancy I know more than others, but there is a sort of freemasonry in men accustomed to distress, which enables them to read the movements of others, induced by the recollection of what they have themselves practised. Such a feeling has ever remained fixed in my mind ; but several important questions arise. What tents do we know of having *bolt-ropes*? Why would they cut them off? But, on the other hand, I have had to cut up my sails, to make sandals for my men! Again, for what use was that rake? Not to take objects of natural history, but to detach the edible fuci, which my men and officers have repeatedly seen me seek, and eat with satisfaction. The inner low-water beach and rocks, immediately under the point at Cape Riley, furnish this fucus (dulse).

Captains Kellett, Pullen, and myself have had some little practice in magnetic observations, and we were unanimously of opinion that this station never was selected for such service, or, if so, very injudiciously, as the vertical mass of mountains overhanging would prejudice any results obtained. In plain terms, I believe that some accident occurred there; and possibly they had to cross the bay, to regain the ships, if they were there. Another argument against tents is, that they are supplied by the Ordnance, are not of *canvas*, and could not have the service-mark in their *four-stranded* cords or lines.

This then must still remain clouded in mystery. Another consideration forces itself on the minds of men who work in these temperatures—At what season would they propose to make their magnetic observations? Not at all

probable in August, when Franklin would be bound up Wellington Channel, or homeward; and only in August, or later, when thaw had removed the ice, would we find men groping, with savage adaptation of rakes, in searching the bottom for objects of natural history: one of three objects only placed them there—game, amusement, or distress; I fear the latter. I cannot, painful as the conclusion is, divest myself of the feelings which were impressed on my mind on searching that so-called wash-house. The indelible features of a catastrophe were there: painted canvas, panels, mouldings, oakum from the side-seams of a vessel (wide seams too), pill-boxes, surgeons' phials, rags,—all indicated a house of shelter or hospital; moreover the internal inclination was falling to the centre, as if the casks had formed the side barriers, and the sleepers had slept with their feet towards the common fire. Now, taking into consideration the earliest moment that the ships would embark observatory tents, and with *tent-pegs*, any ground into which they were driven would yield them easily in June, July, and August. I ask, what hurry? And again, in colder months, what would they be employed about in tents? and then, whence the confusion? They could not get out in July. Indeed every suggestion of *hurry* is absolutely untenable. A collection of the articles found was piled up, and ordered to be preserved, and unfortunately was not attended to; for, to my mind, the most important article, the oakum from the seams, was lost.*

* These remarks were penned in August, 1852. I see no reason to alter my opinion now, in 1855: I still believe that position to mark a disaster.

However, I shall now dismiss this subject with Cape Riley. Fossils abound there, particularly fine specimens of the lily encrinite, but the operation was too laborious to procure any connected specimens, the rock splitting to pieces under the slightest concussion.

Moving on towards Gascoigne Inlet, we noticed a bear in distress, that is, puzzled, not knowing how to proceed without confronting us. They are not courageous beasts, and fly from man, if escape is ever open; but this poor unfortunate gentleman was perched at the top of a steep *débris chute*, which had a steeply inclined corresponding glacier on its left. There he stood, as we suddenly came upon him, and most uneasy were his movements,—he paced his quarter-deck in agony. Captain Kellett and myself landed; we both fired from below, and wounded him; I then ascended by the *débris*, backed by my boat's crew, with boat-hooks, etc., and got upon his level, when one ball settled his fate. Poor stupid creature!—never call them cunning more! His den was beneath him, under this glacier, where he might have snugly ensconced himself and laughed at us; and into this refuge did he now try to crawl, as he received his death-wound. We should have been glad of the aid of Gordon Cumming to extricate this monster, as it was no easy matter to pull him out by the hair of his hinder extremities; however, having got hold of one hind leg, he was soon gliding down the face of the glacier, faster than on any “*montagne Russe*,” leaving us very little trouble to get him over the remaining ice into the boat.

Our examination of Gascoigne Bay did not prove satisfactory. There was not sufficient depth of water for the

'North Star' to lie secure, even at its mouth; no shelter from the ice of the strait; and, from the thinness of the floe, it would inevitably break up with the first breeze, leaving her quite exposed to the driving pack. It was therefore decided to cut into Erebus and Terror Bay, where very strong ice still prevailed, notwithstanding some of its outer lines were constantly breaking away. As we neared our ships, I noticed that something unusual was taking place, as the mollymoks and gulls were dashing at pieces of floating matter, with which they were gorging themselves in a most excited manner. I determined therefore to ascertain the object of so much contention, and, much to my astonishment, found the floating pieces to be the outer (or blubber) parts of the white whale, cut into pieces of eighteen inches to two feet square, and evidently by some sharp instrument. Two pieces were taken on board, to be reported on by the ice-quartermasters (whaling-mates), who pronounced them "to have been cut by some sharp instrument, and that they were *recent* and sound." I could therefore only attribute them to some visit of the 'Prince Albert.'*

The 'Pioneer' having returned, and Lieutenant Osborn reporting that he had been unable to find the provisions at Navy Board Inlet, every effort was made to complete her coal from the 'North Star' that evening.

On the afternoon of the 14th of August the 'Intrepid' also returned, her Commander reporting "open water as far as he had been able to examine, but patches of ice in several directions in our route." The leading officers dined with me, and after reading over the several instructions

* This question has never been cleared up.

for their guidance during our separation, our despatches and last letter-bags for home were closed, and delivered to Commander Pullen, in the hope that the 'Prince Albert' might stray this way on her homeward passage. And now a very painful and exciting duty remained to be performed. The crews of the Squadron having been collected under the Union, on the floe, were addressed on their several duties. The beautiful prayer composed by the Rev. H. Lindsay, for the commencement of travelling, was read, and a copy distributed to each person. After many and some very warm expressions and pressures of the hand, we parted to our several duties, Captain Kellett remaining with me to the last; for in such a service there are many last explanations. But on one point a most fervent determination, "God willing," was exchanged, "to communicate in 77° N. and 105° W." About eleven p.m., all our arrangements being complete, I took leave of my companions; and as they passed over the side, the order "Let go the warps" was issued. Towed by the 'Pioneer,' we slowly moved forward, cheering and cheered, until the island intercepted further communication.

We were now entering the threshold of the contested Wellington Channel. Anxiety, deep anxiety, oppressed me; it was unmingled with doubt,—rather the reverse. Through that channel my course lay. If any explanation of my feelings could have been reached, possibly it was nearer to gratitude that Providence had enabled me to be the humble instrument by whom it was to be explored.

By midnight our entrance, to my mind, was no longer doubtful: no trace of opposition,—the clear, deep blue

sea, visible to the horizon, was before us, and, reflected in the heavens beyond, the well-known "water sky" afforded us the cheering hope of passing the Rubicon, the icy barrier of Penny, at Cape Osborne. Every foot advanced raised emotions not to be explained, and the telescope had but little rest, so cagerly did we scan every feature of the surrounding coast-line.

On the morning of the 15th, a small cairn was noticed on a point a little ahead; I quitted the ship in the gig to examine it; it was Cape Grinnell, but no record remained. White whales were sporting very unconcernedly in the brisk tide which, near the Cape, flowed to the southward, but the ship evidently moved rapidly to the northward; this, probably, was merely an in-shore eddy current. How the imaginations of the croakers had conjured up the "barrier of ice," I am totally at a loss to conceive, for here not a particle of ice, to be seen from the land, about eighty feet above the level, could warrant an idea of obstruction.

Passing Cape Osborne about noon, we entered on the chord of Baring Bay, apparently but a slight indentation, and free from ice. Our attention was specially directed to this part of the channel, fully expecting to discover some inlet, stream, or lake, which might afford Mr. M'Cormick some chance of discovering "a lead" into Jones's Sound, but in vain; nor could we find any mountain, hill, or elevation, to correspond with the Mount Franklin of De Haven. Before evening, all fears of barriers had vanished, and our course westerly and northerly was still clear from the mast-head.

About two A.M. on the 16th, we shoaled our water to

thirteen fathoms off a low point of Nobody's Bay on the charts—(there are no less than five of these, merely *bends*, not *bays*, between Cape Hogarth and Cape Osborne); and very shortly after this, the water continuing to shoal gradually, a very conspicuous cairn inland was reported. Before this I had been reposing on my sofa, but this allowed of no further hesitation: with every power of telescope I scanned the pile, and the more I gazed, the more mysterious still it appeared. It was too large for any ordinary cairn, and yet I thought that its regularity could not be mistaken: at one time it appeared to be the remains of a stone house, the chimney-stack alone remaining,—possibly a column of masonry, and the work of man! Under such feelings, leaving the ship to proceed under sail, and casting off the tow-rope, I put myself on board the 'Pioneer,' and proceeded to solve the question, taking with me instruments and chronometer, in order to fix its position. The 'Pioneer' grounding about a mile off shore, I landed on the beach close beneath it; and it being then low water, by the shore, I well knew that she would soon float off. On reaching this remarkable pile, I found it to be one of Nature's freaks. It was apparently the remains of a limestone conglomerate, or dyke, the surrounding rock being tabular, slaty, magnesian limestone, of a much firmer and compact nature, on which the snow or ice acted more directly. However, the looser rocks had fallen away, leaving this pyramidal column standing; its base was twelve feet by six, height twenty feet.

A white hare noticed us, and kept performing most suspicious circles round us, frequently presenting herself

at the opposite point from which she had vanished. Dr. Lyall, who accompanied me, used every endeavour to take her, but she never permitted him to get within range. I once came suddenly upon her, but, not having my gun in hand, she escaped. The determination of this position proved it to be the rise of Point Hogarth, and yet none of Captain Penny's travellers noticed this obelisk! It is situated in lat. $76^{\circ} 12' 52''$ N., long. $92^{\circ} 48' 42''$ W., the variation $146^{\circ} 11' 51''$ W.; a most unmistakable eminence, to which I have given the name of Lyall Bluff, is almost immediately adjacent. The terraced levels were strewn with bivalves, chiefly of the *Mya* tribe. As an example of the notices deposited at each cairn visited by any exploring officer, I beg here to add the one left at this station; they were printed forms, filled in by the officer in command of each party.

*Arctic Searching Expedition, under the Command of Captain Sir
Edward Belcher, C.B.*

DIRECTIONS.

Ships.—'Assistance'; Tender, 'Pioneer.' Wellington Channel.

„ 'Resolute' (H. Kellett); Tender, 'Intrepid.' Melville Island
Lane.

Depôt or General Rendezvous.—'North Star,' Beechey Island.

Left Beechey Island, Saturday, 14th August, 1852, at ten P.M.

Proceeding towards Sir Robert Inglis Bay, westerly.

Day.—Monday: date, August 16, 1852: time, three P.M.

Condition.—All well.

Remarks.—Landed, believing the remarkable stone pillar, inland, to be a cairn erected by human hands. Observed for latitude, longitude, and variation, and to correct chart.

EDWARD BELCHER, Captain,
Officer in Charge.

The day was really entitled to the appellation of lovely;

it was serene and balmy for this climate. Having rejoined the 'Pioneer,' we overtook the ship to the eastward of Cape Majendie, and mistaking it for Cape Becher, on which I determined to land a *cache*, despatched Commander Richards and the master to execute this duty about eleven P.M. The *cache* consisted of forty-two days' rations for ten men, or four hundred and twenty rations, and was intended to relieve our parties who might have to travel back with despatches. About two A.M. our boats returned. The tide running strong to the eastward, prevented our getting much beyond Cape Becher before I gained the deck in the morning, so that, as we progressed, I had the full advantage of scanning the entire coast-line. To the southward, I noticed a shoal islet, not on the chart, and some very remarkable capped table mountains, in a northern deep indentation, to which I gave the name of Barrow Bay, and to the conspicuous little detached table mount, John Barrow Head; saw the islands Parker and Barrow, of Penny, and noticed that any points he might have seen were but the outer spits of several islands covering each other and flanking the northern shore. As to the geography of the place, we were sailing over a great deal of *hard land* of the published charts, without injury to the 'Pioneer' or ourselves! Moving on rapidly under sail and steam, I asked myself the plain question, "Would Sir John Franklin, under such circumstances, stop here, to erect a cairn, with the sea open before him?" I exclaimed to myself, No! and, tainted with some such prejudice, and with such a breeze thinking it would be sinful, on we went. But there is an end to all things,

and so, having reached the end of the far-famed Queen's Channel on this side, and our progress impeded, I thought that some beacon should designate the turning; and further, as it had now become necessary to seek for our next course, I determined on ascending the mount, the base of which I have retained as Cape Sir John Franklin, from whence I obtained a most commanding view of land and ice from north to west and round to the south. But unfortunately, what we little dreamt of when we commenced our ascent of this mountain, was clearly exhibited to our senses, for ten miles beyond the base of our position, an ominous icy barrier prevented further progress westerly! The only chance which seemed to offer was by taking the north, through the inside passage, which yet remained to be examined. Beneath us lay a magnificent sound, hemmed in by two great islands, and until Nature was inclined again to favour us, there we must await her pleasure. To this elevated position I gave the name of Mount Percy, taking possession, in due form, for Her Most Gracious Majesty Queen Victoria; and to the sound beneath, that of Northumberland Sound, in honour of Her Majesty's Minister, the noble Duke presiding over the Board of Admiralty.

Descending in somewhat diminished spirits, I rejoined the 'Pioneer,' recalled the ship, which was fast dropping down into the ice, and succeeded most happily, as things turned out, in securing her that night in safe quarters.

Numbering our particular events, I term the passage of the Queen's Channel No. 1 fortunate. That of securing the ship before she fell into the jaws of that ice, No. 2; for most assuredly her timbers, unless she drifted back in

the direction of the strait by which she entered, and had contrived to reach Barrow's or Sir Robert Inglis's Bays, never would have repassed Beechey Island (if they ever do, as it is). From the summit of Mount Percy, Cape Beecher is shut out, and Baillie Hamilton Island not definable. The Point to which Captain Penny has given the name of Sir J. Franklin, is the point of Long Island, twelve miles southerly, covering Barrow Bay; but as it was manifestly intended by Government that the names of Sir John and Lady Franklin should occupy the limiting points of the Queen's Channel, I have removed them there.

From this point our new world commences; and as I have taken such liberties with Sir F. Baring Bay on my passage up, I think I cannot better place his name, than by giving him the great bight within us, easterly. I have not interfered with any of the points southerly, as named by Captain Penny, but the islands will take appropriate names as may be hereafter assigned to them.

August 18.—Our measures were not taken an instant too soon; hardly were we secured in Northumberland Sound, than the ice began to threaten, and it soon became evident that we must select more secure quarters. However, before the ice had made any breach into our snug position, I ran over with the 'Pioneer' to the northern remarkable island, and from its summit I soon perceived that, for the present, all progress by ship must be stayed. I had also sent Commander Richards to another higher mount, so that our motions, at all events, by ship, boats, or sledges, should be based on some fixed positions. The view from the pinnacle of the island,

which has been temporarily termed Pioneer Island, was truly cheering. To the north and easterly, islands and land as far as the telescope could see. Nothing but ice occupied the arc of the horizon from north to west-south-west. There lay the Arctic Ocean; Cape Lady Franklin, at least our newly-named cape, appeared to bound the southern shore, but the loom of land was evidently visible further to the southward and westward. On my return to the ship, Commander Richards informed me that he thought a very complete little harbour would admit the ship on the opposite side of the Sound. It was found, however, to be unfortunately barred by a ledge of gravel, having only twelve feet; but immediately outside and behind it Nature appeared to have thrown out a rocky spit, which would afford us shelter within, and at the same time be at the line of open water, should occasion require any immediate removal. Into this, as our other position was in very deep water (thirty-six fathoms), and much exposed, we were accordingly transferred, and, as events proved, not an hour too soon. From that spot the ship never moved, nor could have been moved, for any sensible purpose that season! Nor was it possible, had such been the command of their Lordships, to have moved any vessel westerly of that position; moreover, had such been practicable, no man in his senses, having a discretionary power vested in his hands, would disgrace his trust by any such mad attempt, when the special object contemplated by this Expedition could be much better achieved by boat or sledge travelling.

CHAPTER IV.

Frozen in.—Sledge Travelling.—Walrus Shot.—Habits of the Walrus.
 —Village Point.—Esquimaux Hut.—Deceived by Mirage.—Tent
 Equipage.—The Sentinel.—Ice Accumulations.—An Intruder.—
 Exmouth Island.—Rejoining of the Party.—Nip and Piling Ice.—
 Quit Exmouth Island.—North Cornwall.

THE position which we had taken up will be best understood from the small plan of Northumberland Sound, of which a very rapid survey was made during the progress of feeling our way, preparatory to more decided exploration.

Our anchorage, although very nearly land-locked, was very capacious, and afforded great scope for heavy masses of ice to play their pranks. But I consider our principal safeguard from any such visitation consisted in the tidal stream, which set directly parallel to the chord of the bay between our outer point of the peninsula and the opposite southern-horn of the bay; and the motion of the ice from the westward would be further impeded by a long shoal islet, stretching well out to the northward of the great island, and flanked by a smaller one within, on which they all appeared to expend their impetus. The outer point of the peninsula (called Mount Beaufort) was

PLAN
OF
NORTHUMBERLAND SOUND

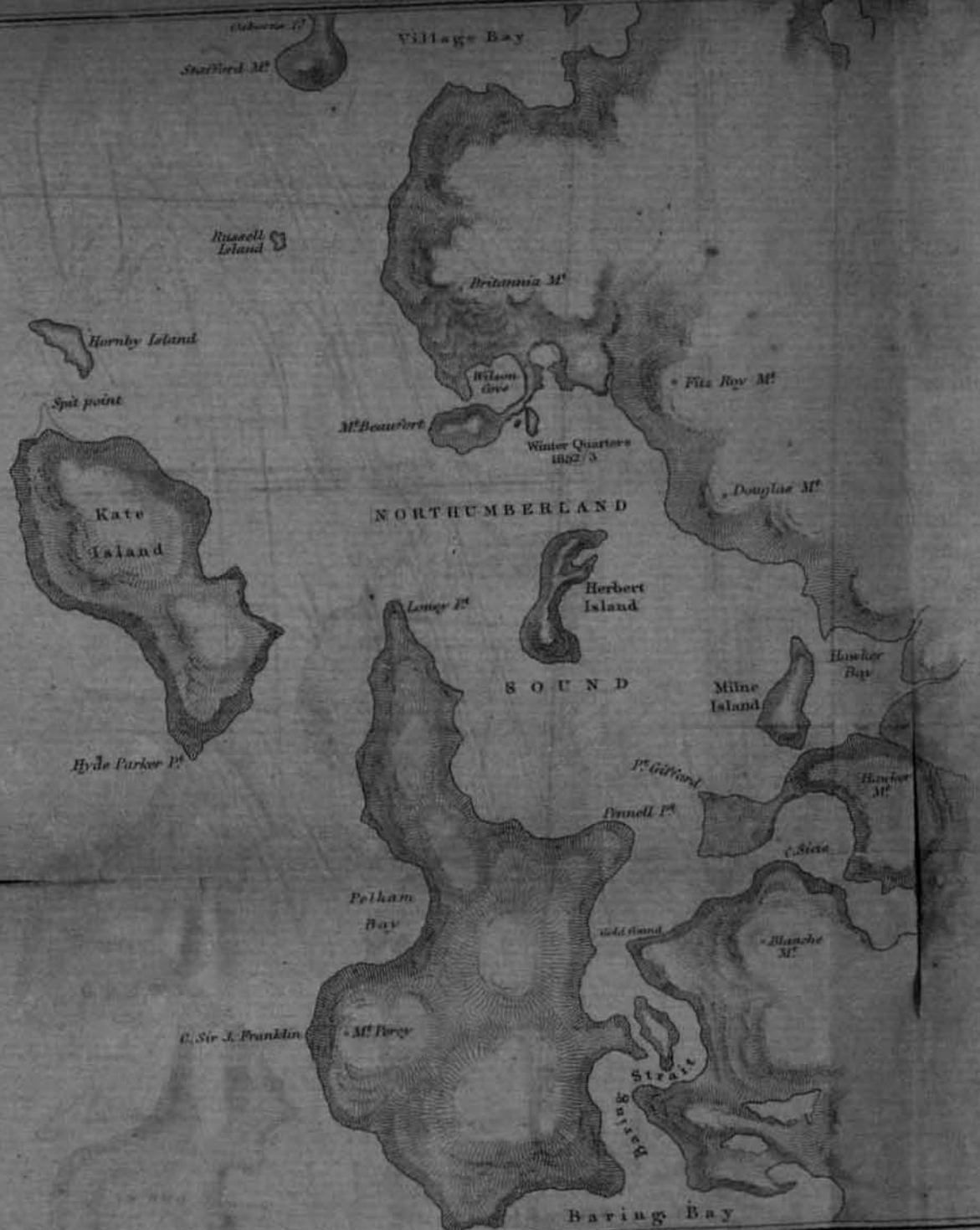
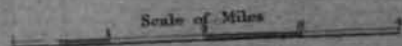
PRINCE ALBERT ISLAND

by
CAPT. SIR EDW. BELCHER
POST OF WINTER QUARTERS

Lat. 77° 52' Long. 97° W.

1852-3

Scale of Miles



our first protection, and the ledge off the intermediate rounding angle our perfect guard.

With a rapidity not at all understood, we became suddenly frozen in, and at a period too when previous navigators would have led us to believe that the ice might "break up" for the season. What impressed me with the conviction that the present occurrence was decisive against further motion, I cannot conceive, nor did I wait to inquire. I had seen enough to instruct me that decision only would enable me to save the remaining part of the season, and, if properly employed, would make a great extent of the northern land, estimated as forty miles distant, British territory.

August 20.—About midnight on the 19-20th, the 'Assistance' ceased her travels for the season. On the 23rd, at 7.30 A.M., three sledges and one boat moved out fully equipped, from the 'Assistance.' The Hamilton boat and Londesborough sledge—the Captain, and Mr. Loney, master. Second sledge—Commander Richards, and Mr. Grove, mate. Third sledge—Lieutenant Osborn and Dr. Lyall. The party consisted of twenty-seven persons, and carried twenty-one days' provision.

A short space was navigable, to which the other boats aided us, but quitted on reaching the outer floe under three hearty cheers. At starting, the 'Hamilton' alone was available for crossing the lanes of water, but this so much retarded us that Commander Richards returned for one of the whale-boats. We had then advanced about three miles. On one occasion we enlisted the services of a piece of loose ice, on which a sledge and crew complete were; by our united sounding-lines, warped across

safely. But it was not a little amusing to watch the countenances of some of the party ferried,—more doubt than confidence prevailing. Here we encamped until Commander Richards returned, or until the following morning, during which time I succeeded in shooting four walrus, two of which I was enabled to secure, but, Dyak fashion, their heads only were at this time taken. During our absence on this journey one of the beheaded carcasses floated near the ship on the floe-piece where I had left him, and was captured, but not, I believe, without further expenditure of ammunition: of this I have no particular evidence: he had no head to speak for himself, and no such trophy was produced. It is not pleasant to narrate acts which bear the impress of cruelty, and I must confess that, on reflection, the killing of four of these animals, without securing them for use, was unnecessary: the sportsman seldom thinks of this. The death of monkeys or parrots, and turtle, where they could not be consumed, has often brought me to the same reflection. But without dwelling further on acts or motives, the duty of naturalist compels me to notice the conduct of these warm-blooded animals on being wounded. The father, mother, and cubs were of the party. On the death of the mother, or rather on receiving her wound in the neck, it was painfully interesting to notice the action of her young: one literally clasped her round the neck, and was apparently endeavouring to aid in staunching the blood with its mouth or flipper, when at a sudden convulsive pang she struck at her infant with her tusks, and repeating this several times with some severity, prevented its further repetition. The male, with a very white

beard (strong horny bristles), came up repeatedly in a most threatening attitude, snorting aloud his vengeance; and well satisfied was I that the floe was my safeguard: doubtless he would have wreaked his vengeance on the 'Hamilton,' and we should have met our punishment. Another, finding that she could not longer swim, deliberately hauled herself up on the floe to die. Now with all due deference to anatomists, who may afford us full proofs of the capability of these animals to walk like flies on our ceilings, I must protest, from frequent observation, against the use of the flipper of the walrus for this purpose. It does not appear to be of greater aid than that of the seal is to that animal; and, strangely, its nails are placed on the upper side of the flipper, some inches within its margin. That the power of exerting the vacuum exists, I doubt not. But here, within a few feet, deliberately did I watch the progress of the animal in effecting its purpose. In the first place, the tail and fins, exerting their full power in the water, gave such an impetus, that it projected about one-third of the body of the animal on to the floe. It then dug its tusks with such terrific force into the ice that I feared for its brain, and, leech-like, hauled itself forward by the enormous muscular power of the neck, repeating the operation until it was secure. The force with which the tusks were struck into the ice appeared not only sufficient to break them, but the concussion was so heavy, that I was surprised that any brain could bear it. Can any one then be surprised, when they are informed, that they "die hard," even when shot through the brain?

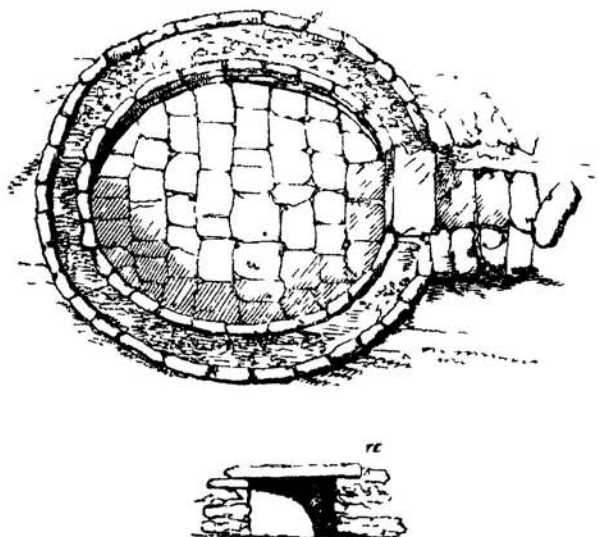
As the 'Hamilton,' our sledge-boat, will frequently

occupy a very conspicuous position in this narrative, I may as well explain that four of these boats were supplied for light ice-travelling, built of canvas and very thin board cemented together, and weighing three hundred pounds. A model of a Norway boat having very kindly been lent to me by Captain Hamilton, the Secretary of the Admiralty, these boats were a modification, improved as the four were successively in progress of building; this, being the last, I selected, and named her after my kind friend. She might be termed a brown-paper boat, but did her duty well with those who knew how to manage her.

As Commander Richards would have much further delay, and my operations could progress without him, I pushed on for the low point in sight, being the extreme seen from Mount Percy. Here we constructed a very large cairn, composed principally of the remains of an Esquimaux encampment, and which gained for the station the name of "Village Point." This village, or encampment, was of the most substantial construction, and from the remains of bones, etc., not of such great antiquity as travellers in these regions are in the habit of assigning. Great ingenuity and labour had been exerted in their construction. They were not superficial, but their foundations were laid at least three feet below the ground,—a matter most difficult to execute, even with our tools, at any season! These foundations were of stone, in double walls, with the interval filled in with fine clay and gravel. The doors faced to the east, and evidently had the long passages usually appertaining to those of settled habitations in Greenland. Further, as noticed at

Cape Riley, all the stones were larger, and different from any others noticed on the Point.*

The general form of these houses was that of an ob-long oval, about ten feet by twelve, having the doorway about three feet wide by two feet six inches in height, on the floor-level, descending easterly to the external adit.



One from which this sketch may be said to have been taken had the flat stone remaining over the doorway, as at *a*. When I venture the observation *recent*, I wish to be understood as having then, on the spot, asserted such to be, my belief, irrespective of later discoveries; and I felt satisfied, from general observation of the operations of nature during a season, on stone and other substances, in these latitudes, that no such long period as “hundreds

* None were seen but those of which the houses were constructed.

of years" could be assigned to them. I have studied this matter lately with some interest. I have dug in the grave-circles (not fireplaces, for they do not contain a trace of fuel); have noticed the bones, as well as the moss, which latter doubtless was deposited with them; but the moss is not that of a long period,—not hundreds, nor fifties of years. I put the question to opponents, Why does the moss exist solely in these structures? It is never seen outside these accumulations of stones, nor does it belong to the locality,—it is marsh moss, brought from a distance. If this moss, torn up and displaced, remains thus in its new locality, why does the common saxifrage, which elsewhere abounds, cease to exist near any of these spots?

But to return to the huts. These structures,—more recent, and unlike anything noticed at Cape Riley,—indicate more purpose, more determination to reside, and are near to the very spot where walrus, seal, duck, deer, etc., are to be met with, and the profusion of such bones indicates this most completely. Deer we know to be in this region; they were fired at by some of our later party and their recent tracks on the snow were evident.

The "teeming of animal life," described by our predecessors at Cape Becher, we have not witnessed, nor have we seen anything to warrant, beyond the chances of walrus, anything worthy of being calculated on to support a party, by the chase, on shore or afloat. Hunger, it is true, reduces the appetite to strange food; but at present no attempt to substitute walrus or bear, for other food, would be relished by the majority.

At this point coal was found, both at the huts and at

the water-line; it had been evidently washed up by the sea; also some few bits of very much decayed wood and a small flaying knife, made of wood, closely resembling,



in every particular, those of ivory found amongst the Western Esquimaux. It was carefully preserved, with other fragments of wood found on this coast-line.*

Our operations here being complete, and no signs of the party yet advancing, launching the 'Hamilton,' we moved forward, leaving behind the necessary instructions for their guidance. This journey, being our first sea expedition, and testing the capabilities of our boat, laden with all the sledge and tent equipage, in rough water, was a most critical as well as interesting experiment. She answered well; was light, and easily handled. Another of the visions dependent on the state of the atmosphere, and so perplexing to Arctic travellers, bewildered us today. This was the impression of a block-house, or square building, on the slope of the north point of Pioneer Island. The nearer we approached the spot, the more we felt convinced that this time there was no illusion. We landed and pushed up the hill, with more anxiety than usual; and scarcely could I credit my senses, when I approached within a few yards of the object, to find it merely a square rock, not exceed-

* Nothing at this point could be traced of any coal-bearing associations, nor were any traces observable on the adjacent land. Bituminous shale was found on a low spit, seven miles to the south-west

ing four feet on its sides, and not more than one foot above the surface of the ground. This was our house! I recollect something, in former voyages, of ptarmigan being mistaken for musk-oxen, but they were more distant and on the snow.

We now pushed forward for a long, low island, about five miles to the northward, appearing in the distance as a mere gravel bank; but this proved to be a deception, of an opposite character. Fortunately, we were favoured by a narrow lane of water, of which, having launched our boat, and stowed our sledge and cargo therein, we made good use, although at any moment the slightest movement of the ice might have pinched her to atoms. We reached it about four P.M., very glad to encamp for the night, and await the arrival of our party. This being a new possession, the colours were duly displayed; it was found to be at least eighty feet in height!

Our mode of encampment, etc., not having been explained in any works published, I shall here give a rough outline of the tent, equipment, etc. The tent is very similar to that of American hunters, with this exception, —instead of two forked poles, and one horizontal, resting in the forks, with the sides pegged down, the extremities of these are framed by two boarding-pikes, forming the pitch or sheers at each end, and a horsehair (clothes) line stretched over these forks, and well secured to the sledge at the back, and by a pickaxe in front, keep all steady,—so long, at least, as they hold. Instead of pegging, the sides are well banked with snow, which retains the heat, and keeps them pretty secure, if well performed; but if not, the breeze is sure to pene-

trate and create more rattling than is conducive to comfort or pleasant dreams. Each person is furnished with a blanket-bag, formed of thick drugget or felt, having an outside shell of prepared brown holland, supposed to be impervious to the air. The officer, who should always occupy the post of honour, is located at the extreme end, and that end is always placed towards the wind, in order to prevent its blowing into the mouth of the tent; he is able, therefore, to feel exactly for himself, as well as those around them. Into this chrysalis bag, by dint of a kind of caterpillar wriggle, each individual contracts himself, endeavouring, by every reasonable mode, to produce a suffocating heat, and using his knapsack, boots, sextant-case, or any other convenient object, for a pillow. Indeed, it is absolutely necessary to place any article, to be worn on getting up, sufficiently in contact with the body to preserve its flexibility, or to prevent it becoming frozen. Over the snow is spread an oilskin canvas and buffalo-robe carpet; and when all are laid out, or have supped, a general coverlet of felt is superadded, which is supposed to confine the accumulation of animal warmth. Cold, it is imagined, does not ascend, nor heat descend; yet it is very distinctly felt in both ways, especially when the warmth produces something very similar to a thaw beneath. But the enemy,—not “the sweet little cherub,” etc., but the barber,—is ever aloft, condensing the breath, and dropping down refreshing snow-showers, which makes one very dubious about exposing his head outside his shell, the lap of which he manages to turn down, and complete the envelope. The cookery and other proceedings are mere

commonplace. In these tents you sleep as soundly as you can fancy, under the temperature, unless the whispers of "bear," or the ominous snuffing of that animal, should induce you to ask, "Who is cook?" As this personage, although permitted to sleep at his post, is the sentinel *par excellence*, he of course has the place next the door, and, if not very sound asleep, is aroused, and betakes himself to reconnoitre; the result may appear in another act.

In the morning we ascended our hill, eighty feet above the sea, to look for our party, and to construct one of those cairns so emphatically recommended in my instructions. These structures are supposed to be of stone; but as the ground here was fine gravel, and frozen hard, enough could not be amassed to support our flagstaff. Necessity, however, effects wonders—at least for temporary purposes; failing in stones and gravel, we had recourse to a peaty moss, found in a kind of morass at the back of the summit. The foundation having commenced with this, the men soon found that the peat mud was warmer than the air, and froze as they used it. Sailors have their ideas of enjoyment; and as this proved a novelty, a new mode of building was immediately adopted, and between peat, with black mud for cement, aided by a sharp frost, a very fine black pyramid arose, quite as solid, so long as frost continued, as any constructed of stone. It was strange, however, that the pond of black mud did not freeze nor lose its temperature during the period we remained at work; our men seemed to enjoy the warm mud, washing their hands in it before retiring, and I have little doubt that, with the

second application of water at the sea-beach, it removed much grease.

At this island we had a very fair opportunity of witnessing the effect of "piling ice," particularly as noticed on all western projections in the Queen's Channel, or beyond, where they are apparently exposed to the whole impetus of the *tides* of the Arctic Ocean. In this instance the ice had been raised, slab over slab, on the north-west point, above the summit level of the island; and at first I was so impressed that it was one solid mass, or that it could not be an accumulation of floe-pieces, that I sent the master to determine the fact, as I suspected it to be part of a berg. But it was simply piled ice, frozen into a mass, and nearly a hundred feet in height. No bergs are supposed to be seen in these seas (?). This island had been the resort of geese and eider-duck in the spring, many of their nests remaining quite distinct, and partially clothed with down. Shortly after our arrival, we were joined by Commander Richards, who had brought the whale-boat; but as I wished the fact determined, as to our depôt ordered to be placed at a point on the coast, I sent his division in-shore with instructions to rejoin me at the Great Red Island (Ex-mouth), then in advance about ten miles.

About eight A.M. on the 26th, we struck our tents, and moved forward, aided by a short lane of water. The day was beautiful, and, with a temperature of 29°, proved too warm for travelling on the floe, which we experienced when we commenced with the 'Hamilton' made fast behind our sledge, Mr. Loney and myself aiding, by helping the boat by the stern over the inequalities.

Method is my invariable rule, even for the most trivial duty. So far I am an advocate for the soldiers' system, or rather what I always look forward to in our profession—the establishment of a distinct corps of Royal Naval Engineers in essence, although that term would now entail confusion, such being applied to the steam department.

“Knowledge is power,” and such power enables every one conducting service of a laborious character to accomplish it with the means at command with less difficulty. The exertion of undue labour at one period of the day, and relaxation at another, when difference of temperature causes very important changes of capability, is to be regulated, and strength husbanded. In order, therefore, to determine our actual rate of travelling, I determined to pace our “spells,” or time employed between breathing or resting places. I had noticed that the duration of a “spell” was subject to the will or caprice of the men, or any one indolent man, if such should be present; and I found it to be an evil requiring remedy.

Having determined, during our times of rest, that my step was equal to 2·33, or 4·66 feet for double paces, I soon arrived, after three hours and forty-six minutes' actual travelling, and pacing 43,620 feet, at the result, that our legitimate scale did not, including the boat in tow, more than average 1·9 miles per hour, exclusive of stoppages; and these I found took the range of spells or time travelling, commencing in the morning at thirty-three to twenty-three minutes before noon, and twenty-eight to thirteen minutes after noon; their strength, to my most perfect conviction, diminishing between four

and six P.M., or immediately after the afternoon's grog, which was consequently discontinued until the proper time, of supper.

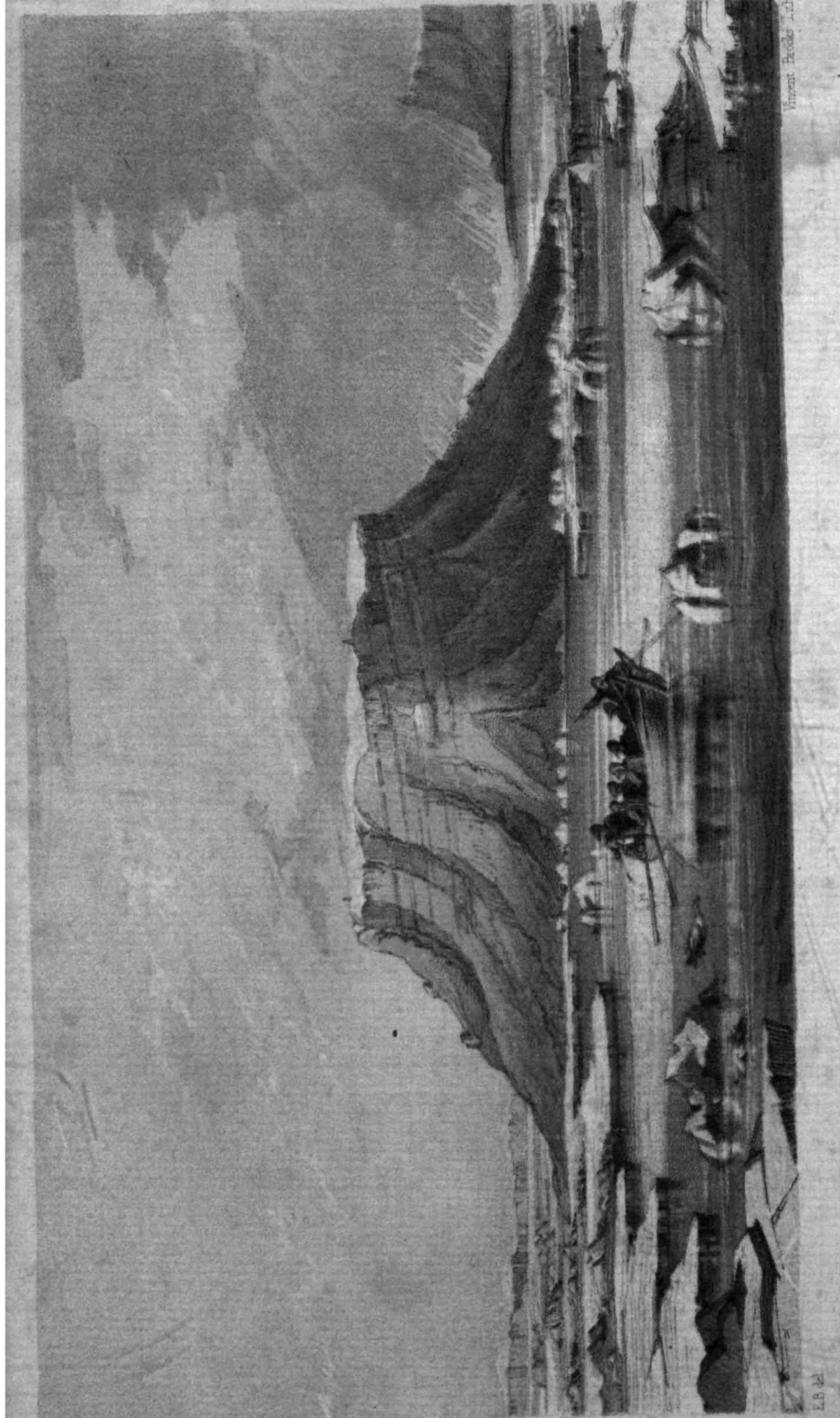
About 5.45 we pitched our tent for the night upon the smooth part of the floe; but just as our pemmican was properly seasoned and ready for distribution, a visitor, not victualled, made his appearance, attracted doubtless by the savoury perfume; this was a polar bear. Our party withdrew into the tent, and the gentleman very deliberately walked up within short pistol-shot, snuffing the air with the peculiar habit of these animals, and contemplating, no doubt, a comfortable meal. A ball through his fore-arm caused him to stagger and attempt escape; but the next, through the heart, from the other barrel, laid him low. Pemmican was entirely forgotten until his skin was deposited beside the tent, our heroes declaring "that they never could get his jacket off, if he once got cold." Poor fellow! his confidence deserved a better return; but his jacket, as well as his fat (for fuel), were now important considerations. Our supper finished, and gun reloaded and placed ready for further service, we withdrew into our shells, and were soon enjoying comfortable dreams, far, very far, from polar bears; but about midnight, his anxious lady seeking him, in all probability, tracked him up to the tent, and there found his head, outer garment, and his slippers, the latter intended for a carriage comfort for a fair friend. Her hard breathing awakened the cook, who, as I before stated, is, in addition to "the little cherub," etc., our only guardian angel, and who whispered along the bag-mouths, "Another bear, Sir."

The heavy blanket overlying me, and the difficulty resulting from the general move of my bedfellows to extricate themselves, prevented my reaching my post, perhaps, as deliberately as etiquette might demand; but I found my gun in hand, and the enemy in front, quite in time for action. The clear light which prevailed enabled me to see the eyes and black-tipped nose within about three yards of the muzzle of the piece, and one ball in the mouth and through the head was, I thought, quite enough to expend; and believing it impossible for the victim to escape, I did not fire the second. She moved away, spouting blood, and doubtless died. Some of our people tracked her for a short distance, but were soon recalled; we had already more than we could conveniently carry, although bear's-grease is with us quite as important as to our friends at home. After flinching this from the skin, the latter became a very useful pad between our ribs and the ice.

About eight we recommenced our journey, determined to use every effort to reach our red-tinted island before encamping tonight. A similar set of experiments on marching, with a little more attention to the periods of rest, afforded two miles* per hour with less fatigue. By two we arrived at the floe-edge, and found open water leading up to the island. Launching the 'Hamilton,' we effected our landing under oars alone, in less than two hours.

August 27.—This island, viewed at a distance of fifteen miles, presented, from its slopes being composed of red sandstone, a very cheering aspect, and was at first

* All distances reckoned in this narrative are geographic miles.



simply named Red Island; but this being the anniversary of Lord Exmouth's action at Algiers, I took possession, with the customary forms, under the title of Exmouth Island, which our observations place in lat. $77^{\circ} 15' N.$, long. $95^{\circ} 50' W.$

The western peak I had before selected from Pioneer Island as my principal station, and from this commanding height I had long anticipated a magnificent view of any lands which might fringe the distant horizon. Such were my calculations when I went to rest; the morning of the 28th was bright and cheering, and, buoyed by hope, gladly did I avail myself of the sun for the requisite observations for securing my position; but in these latitudes time, in every sense, is precious. Trusting to present appearances, I did not ascend the mount until afternoon; and just as I gained the summit, and not without considerable labour, fog—the result of our fine forenoon—enveloped us, cutting off all objects beyond three miles. We constructed two cairns, and continued to wander about the summit, and watch most anxiously until eight at night, for some glimpse, but snow-drift increasing, and temperature falling to 22° , we returned to the beach disappointed.

The bay ice was forming fast, the tide of ebb running strong to the east, past this island, and towards a new channel or sea, to which, as yet, we had not traced land; it was simply a continuation of Jones' Sound, in imagination. The flood set due west; both tides had a velocity, taking the masses of ice carried to windward as a criterion, of two knots.

Recent marks of deer were noticed, both on the sum-

mit and on the slopes, particularly in the now frozen watercourses, which here form numerous radii from the mountain, and where antlers and skulls were frequently found imbedded in the loose sand. Geese, ducks, ptarmigan, and hares must have prevailed in great numbers; but we only noticed about twenty brent-geese, which alighted near us, and were too wary to afford us a meal. The formation is red sandstone, capped about twenty feet on the summit by fossiliferous limestone, in which some large bivalves (pectens, etc.) and some bones were found, unfortunately broken before they were brought to me. Beneath this limestone, the rock is swinestone to about three-quarters from the base, the entire height being 567 feet. In the sandy bed of one of the large gullies a large ball of iron pyrites was found, at first mistaken by one of my crew for a six-pound shot, and brought to me as belonging to one of the missing ships. Some very slight traces of coal were noticed at the wash of the sea, but none *in situ* on the island. No marks of natives were noticed, notwithstanding all these signs of game abounding at some seasons. Vegetation, on the great belt of this island, appeared to be more luxuriant than we have elsewhere witnessed in this region.

August 29.—This being Sunday, I had made up my mind to remain at all events for the day, and eventually even until the rejoining of the absentees. Our scouts soon reported the boats in sight, and before noon, fog still prevailing, Commander Richards and his party rejoined. They had encamped, the night previous, on a low island near us, but it was so beset with grounded and piled ice that even the island had entirely escaped our

notice! Richards had taken possession, appointing himself "Governor," and the others to various places of trust,—an act long remembered as a joke. Some tern were noticed, and a young one just born found on the nest: pretty temperature for rearing it, 22° , 10° below freezing!

The intelligence brought by Richards damped me a little, and caused me to alter my disposition of the service. 'Pioneer's' boat, detached to examine the dépôt, had met with an accident, by which the men got wet and the bread damaged, besides injuring more or less all the dry provision. This compelled me to trust to my own resources, and alter the entire arrangement of the Expedition. I therefore gave Richards the direction of the particular service of exploring the next (Table Island), and of carrying up the coast-line now discovered to Village Point. To myself I allotted the examination of the *terra incognita* of which I had a glimpse from Pioneer Island, estimated in my own mind (but, I very firmly believe, *in nubibus*, amongst others) at eighteen or twenty miles beyond our present position. Fourteen days' provision for ourselves was deposited here *en cache* (with the paws of the bear), and my party were all in high spirits, with "Pet Hamilton" as our trusty friend.

Richards had already found it laborious work dragging the boat and sledge by relays, and could not therefore care much about advance, unless he replaced Mr. Loney. But Richards was the only qualified person to command, and to perform the duty required, being a surveyor. The separation was painful and inconvenient, but the separate command could only confer additional importance. Another consideration also actuated my de-

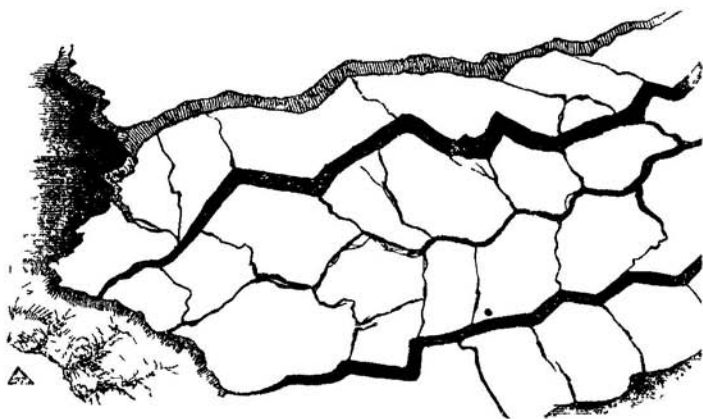
cision. I should leave behind me one of my own officers, who knew my intentions and habits thoroughly, competent to carry out the service, should accident cut me off, and who would advance, or come himself with, the necessary supplies, or aid, in the event of my absence being prolonged beyond a reasonable period.

Shortly after noon he parted for the eastward, in the full hope of achieving something new. I reascended the unfortunate mountain with the same ill-success, but before starting directed the tent to be struck, and the bivouac shifted to the opposite side of the island. My readers will, I fear, charge me with presumption, but possibly I may pay the penalty before the cruise terminates. But our business is to view all obstacles as to be overcome: "nothing risk, nothing gain."

During my detention on this southern and western point, I happened to stray with my gun to the beach, and whilst there heard the peculiar groaning of pressure, or "nip." At first I was unable to distinguish from whence the cause proceeded, but in a few minutes, after watching the dreary white sheet until vision became very imperfect, I noticed, first, an arching of the floe (prevailing here from three to four feet in thickness), then its disruption, and the flakes of ice piling one above another in slabs, until they became influenced by some greater obstruction near the land. Then a very different action ensued. Instead of the great slabs of ice, the opposing and unyielding forces, being nearly equal, caused a comminution, and the powdered substance, resembling white sugar in appearance, tumbled down most gracefully over the before-accumulated slabs, involving all in one

smooth detritus, which (eventually filled in with snow, and freezing into a mass) puzzles us so much, and induces us, without verification, to suspect the masses to be "bergs." But this is but a trivial illustration of the "ice motion" in, and to the northward of, the "Queen's Channel." It is fearful to think of the *possibility* of Franklin's ships entering this region, "to be driven by the pack;" no hope of escape could be entertained: and therefore most sincerely do I wish they cannot have passed up; for as to traces, none could exist, subject to such accumulated dangers as are hourly apparent. But this is more peculiarly forced upon my mind by the events of today. From the summit we noticed the breaking-up of a very great extent of floe, immediately in our neighbourhood: nothing but a diagram can sufficiently illustrate it.

Let the reader imagine the white sheet spread beneath him, suddenly to exhibit the deep blue sea in the cracks,



and then to notice this immense surface, some hundred acres, perhaps loosened by no apparent cause, from late-

ral pressure, fall asunder, float off, and disperse, forming in the space of an hour a dense "pack." Where, then, is the security of docking? It would prove endless labour to dock, unless our missing navigators should in the present instance happen to be to the north of this great opening, when they *might* push some twenty miles westerly,—but never again, I fear, in these high latitudes, to recover easting!

About nine P.M., having utterly failed in gaining even enough to guide me in the direction of "the wished-for haven," and having the only consolation, that as far as I could see in the direction where I knew it must be, open water prevailed to a limited distance, I quitted the mountain, perfectly confident however of success, or that we should reach it by water.

August 30.—Three days had now elapsed, and yet all in mist; the weather had slightly improved, and the sea was apparently open in our intended course: the wind also was favourable for the blindfold expedition. We packed, and started under canvas, the tent-poles serving as sheers or mast, and the tent-bottom as sail, furnishing us completely in the most approved rig of the Malay pirate *prahu*.

At a quarter past eight we left the shore, and proceeded at a very cheering rate, steering by the sun; but the breeze failing shortly after noon, we had recourse to paddles. About one, we made out *terra firma*; but as my western object was clearly defined from Pioneer Peak, and I felt great confidence in "first sight," I pushed on for it, well aware that a latitude alone, obtained there, would secure its position beyond dispute. About a