PAPER II.—A WHALING VOYAGE TO SPITZBERGEN IN 1818.

By JAMES DOUGLAS, M.D.

(Read before the Society, March 23rd, 1870.)

[The perusal of a journal which was kept in high northern latitudes fifty-five years ago, may not be without interest at this time, when so great attention is being given to the late discoveries in the Arctic regions, and to the expeditions now being fitted out in the confident hope of reaching the North Pole, through the open water which is supposed to exist to the north of Spitzbergen.

This journal is given verbatim et literatim, as written at the time; and allowance must be asked for it as the unaided production of a youth of eighteen years of age, who went out as surgeon of a whaler, which, in pursuit of the objects of its voyage, reached the high northern latitude of 81.56.

It was written currente calamo, without any pretensions to style or scientific knowledge, and without any idea of its being seen by any excepting the members of the writer's own family.

The intrepid Arctic navigators—the brothers Dannatt, the Scoresbys (father and son), Capt. Sadler, and others, who navigated the Polar regions at the close of the last century and at the early part of the present, have passed away, and, excepting the younger Scoresby, have left no record behind them. I perfectly recollect, however, that Capt. Ed. Dannatt and Capt. Ashe expressed their belief in the existence of land at or in the vicinity of the Pole. They based their belief on the appearance of the heavy ice and on the detached icebergs which, during the summer season, were drifted by the current to the southward.]

WHILE a medical student in Edinburgh, during the winter session of 1818, I received an appointment as surgeon of the ship *Trafalgar*, of Hull, Captain E. Dannatt, commander, during a voyage to the Arctic regions; and at the same time was notified to report myself at Hull on or before the 12th March, for the purpose of submitting myself to the medical examiner appointed by Government to examine into the qualifications and fitness of candidates. This examination

is not very strict, and consisted in ascertaining that I had served an apprenticeship of five years to Dr. Tho. Law, a nephew of Lord Ellenborough, and that I had passed a session at college in Edinburgh. However, with my certificate of qualification, I entered into office at once, at a salary of four guineas a month, one guinea for every whale caught, and one guinea for every thousand seals killed. I was supplied with everything needful, with the exception of clothes and bedding.

March 13th.—The King's officers came on board this morning and mustered the crew, to the number of 36. This is done by the Government, which allows a bounty of £300 to each ship, as well as the spirits, tea, coffee, sugar, and all other dutiable articles, duty free. On their part, the owners are bound to carry and man at least seven boats, with seven men to each boat. As this, during war-time, is difficult, and as Government is extremely desirous to encourage the fishery, it exempts the requisite number of harpooneers, boat-steerers, and other skilled hands, from the press-gang; and obliges the owners to fill up the requisite crew by taking Shetland-men, in passing: these are a hardy race of men, and, from their almost amphibious habits, are admirably adapted for boat-work.

The fresh provisions and other stores being got on board, the Trafalgar left dock, passed the Spurn-lights with a fair wind, and got fairly to sea with a light S. W. wind, which continued until the 20th, when we made Fair Island, a very rocky, barren, and mountainous-looking place, inhabited by a few poor fishermen, who certainly surprised me by their faculty of keeping their souls and bodies together. There is a very diminutive breed of sheep on the island, with wool of extreme fineness, with which the natives make gloves, mittens, and stockings, of exquisite beauty and quality, and which they bartered with us for any necessaries we could spare to them. In the afternoon of the same day, Sunbrough

Head, the most southerly point of Shetland, came in sight; and we were boarded by a pilot, who took us in due time into Brassa Sound. During my stay in Lerwick I was most hospitably entertained by Mr. Morrison, an agent, who made my stay there a very agreeable one. Next day being Sunday, I attended divine service, where I heard a most eloquent and impressive sermon by a venerable old man, in a church far inferior in architectural beauty to an ordinary barn. The singing was scottice, a regular skirl. next day I went to the top of the hill behind Lerwick, which commanded a view of the land and of a great part of the island. The prospect was grand and sublime in its sterility, extremely rocky, mountainous, and very barren, merely affording pasturage to the diminutive sheep and the equally small breed of horses for which Shetland is celebrated. The town of Lerwick is unpaved and very dirty, particularly in wet weather, which seems to be the normal state of the climate.

The whole trade of Lerwick is carried on between it and Leith in two small sloops, which take to Leith eggs, poultry, stockings, and salted geese,—bringing back such necessaries as they require. Lerwick is principally noted as the rendezvous of the Greenland-men on their way to and from the north, and as the place where their crews are completed. On Thursday I took an excursion inland for a few miles, and was amply repaid for the want of roads by some of the most rugged and romantic scenery I have ever seen, although there were no shady groves and purling streams to grace the landscape.

On returning to the ship I found all hands busy in preparing the ship for the ice. Some were bending gaff-topsails and fixing booms to the main and fore sails, striking the royal masts, and generally putting the ship into such a condition that at any time, and particularly when in the ice or very short-handed, the ship could be worked with very few hands. Others were fitting out a machine called a crow's-nest, to be

placed on the top of the main-top-gallant-mast, to protect the man on the look-out when the ship is in the ice. crow's-nest, as it is called, looks like an old-fashioned pulpit : it is made out of a cask or puncheon, well lined with skins or Russo matts; the very top of the top-gallant-mast serves as a seat: a shifting weather-board protects the look-out, who is able to get in by thrusting himself through a tran-door in the whole affair looks extremely cosy and The Others of the men were engaged hanging up comfortable. quarters of fresh beef and other meat,-among which were a number of legs of mutton intended for the owners and their friends on the return of the ship to Hull. In the evening, as a boat was pushing off from the stairs, two men jostled and fell overboard; one was at once picked up. When pushing off a second time, one of the crew reached to pick up a hat on the water, and found a man under it, senseless; when got on board he soon recovered.

During the remainder of the week the crew were variously employed in preparing the vessel for the ice, and in laying in stocks of eggs, fowls, frozen milk, &c. The crew were again mustered, together with 18 Shetland-men-in all, 54 souls. They were then divided into three watches, and again subdivided into boats' crews-7 boats, with 7 men in each, viz: a harpooneer in the bow, a boat-steerer, who stands on the platform on the stern, and a seaman called a specksoneer, who has charge of the whale-lines which lay coiled in the middle of the boat. The Shetland-men only row: all pull. except the steerer, who steers with a long oar fastened to a pivot on the stern. For some days the ship was prevented proceeding to sea in consequence of gales of wind from the N.W., alternating with heavy fogs. One vessel, the Prescott, Greenlandman, in attempting it, went on the rocks, and was totally wrecked in the Sound by the rocks going through her bottom.

On the 1st of April we succeeded in getting to sea with a fair wind, with occasional heavy squalls. Being Sabbath-day, I,

for the first time, performed my functions as chaplain, by reading the common-prayer used by the Church of England. As the captain, first officer, and most of the crew, however, were Wesleyans, I made compensation by reading the whole or a part of one of Wesley's sermons. The singing was more remarkable for its force than its sweetness. In the evening got a thorough drenching by shipping a heavy sea.

April 3rd.—Wind still fair; great numbers of birds hovering about the ship, rather less in size than a hen, and of a dirty white color; they are very fearless of man, very ravenous, and are sometimes caught by the men with a line and a hook baited with a piece of any fat meat. When taken and daubed over with soot, and let off again, they are instantly set upon and destroyed by the others. They are called Mallemouches, or by the sailors Mollymawks. They are said to be very rarely seen within sight of land. I was very gravely assured that they never approach land, but hatch their eggs under their wings. Whatever my opinion may be as to the former, I yield my full faith in the latter statement.

7th.—Wind still fair, and weather very fine. This afternoon were visited by a "Bottle-nose," the *Delphinus-Delphis* of naturalists; it appeared to be about 20 or 25 feet long. Although the ship was going at the rate of six or seven miles an hour, it kept playing about us for some hours. Its evolutions and gambols on the surface of the water were very beautiful. Many small birds, somewhat less than a sparrow, about the rigging, indicating our vicinity to the ice.

8th.—Very stormy and dark; wind N.E., and excessively cold. As the day advanced it blew harder, with occasional sleet and snow, which rendered the decks dangerously slippery. Towards the evening it blew a hurricane, and the sea ran mountains high. The sails were all clewed up, except the close-reefed fore-top-sail, and that only to give the ship steerage-way.

9th.—Good Friday.—The wind still boisterous, but intermittent. About 11 o'clock we got among the ice for the first time, in 72 north latitude—longitude not known. Ice seemed newly formed, and was in small flat pieces, which, from their friction against each other, were round. This kind of ice is called by the seamen "pancakes." As the ship bored through them, we found the pieces getting gradually larger and larger; and the heavy swell we had in the morning almost entirely subsided. After boring through the ice until moonlight, the ship was laid-to among pieces from 20 to 40 feet in diameter, and of irregular shapes. We now experienced no night, only a duskiness for a couple of hours.

10th.—Weather still stormy, with heavy falls of snow and sleet. A good many seals on the pieces of ice, but the weather too bad to lower the boats for them.

11th.—Wind blowing with increased violence, with a very heavy swell; a circumstance most unusual among ice. In consequence of the ship laboring so hard and beating with so much violence against the ice, were obliged to get out to sea again to prevent the vessel being staved. Intensely cold. About noon the weather cleared up, and we found ourselves close in to the island of Jan Maven. This island was first discovered by the Dutch, and for many years was frequented by them. They built huts for the purpose of boiling the fat of the whale and of the seals. They made more than one attempt to winter on it, but failed, the men being always found dead on the return of the vessels in spring. It is now entirely abandoned to the Polar bears and the white foxes. It is rarely seen by the Greenland-men, and only occasionally by the vessels in search of seals. It is very rugged, rocky. and mountainous; the highest peak is called Beerenberg; it is a volcano, and used to emit considerable quantities of fire, smoke, stones, and ashes. Of late it has been quiet, or, rather, no eruption has been observed, perhaps from not being so much frequented. Several of the smaller hills, from

their appearance, seem to have had a volcanic origin. At night, the wind abating, the ship stood away from the island, lest it should turn calm or blow on shore.

12th.—Weather beautiful and nearly calm; Jan Mayen N. by E., about 12 miles off.

13th.—Wind from N.E. again, and a strong gale. Threw overboard 30 tons of ballast to lighten the ship. Sails close-reefed, and a very heavy sea.

15th.—Gale continues; at noon, by observation, were in latitude 70.26 N., having been driven two degrees to the south by the gale. In the evening, saw the top of Beerenberg for the first time, distant between 60 and 70 miles.

16th.—Weather beautiful and clear; ship beating to windward with all sails set, in a clear sea. In the afternoon were visited by two finners—the Balaena-Physalus of naturalists; they gambolled about the vessel, apparently feeding, for a considerable length of time. The larger one could not be less than 90 feet long. Finners, when full-grown. are much longer than the true whale, and are readily distinguished by a large fin on the back. They are warm-blooded, and breathe the air, which, of course, they are obliged to come to the surface to do. In expiring, they, like all other cetaceous animals, eject a quantity of mucus-not water, as is often supposed. They possess, like quadrupeds, a heart, lungs, diaphragm, liver, &c. They are not so fat as the Mysticitus; the whalebone is shorter, broader, and brittle,—consequently, of no value or use; their velocity in the water is greater, and their progress is performed by much more elevated curves or bounds. In consequence of their amazing muscular strength and activity in the water, they are never attacked by the fishermen.

17th.—Weather dull, with occasional light showers of snow. At mid-day it cleared up, and found ourselves in streams

of thin ice; Jan Mayen N.E., distant about seven miles. The mountain distinctly seen from its base to its top; its height is about 7,000 feet; the summit seemed to be smoking. Saw numbers of seals on the ice, but could not succeed in killing any of them, as, being older and wiser, they tumbled into the sea at our approach.

18th.—Nearly calm, and the weather beautifully clear. We lay close in to the island, so close that we enjoyed a fine view of the icebergs attached to the land. These icebergs are immense masses of ice attached to the land, shooting perpendicularly out of the water to the height of some hundreds of feet; they are generally transparent, and of a delicate light-blue colour. From the innumerable variety of figures they represent, they have a very fine effect; indeed, nothing can be imagined more awful and sublime than such a Polar prospect on a fine clear day: the calmness of the sea,-the infinite numbers and varieties of birds, contrasted with the huge icebergs,—the mountains covered with snow. with occasionally the dark naked rocks at their bases. the evening the scene was enlivened by the arrival of some small Dutch vessels in search of seals. These uncommonly scarce, and are supposed to have taken their annual migration to the north. Many thousands are annually. killed at the west ice, principally by the Dutch, who fit out a great many small vessels for the purpose, and are verv dexterous. They leave Holland late in February or early in March, and proceed direct to the ice, which they strive to make in latitude 67 or 68 N., and return early in Mav. They are generally very successful, much more so than the British, who send no vessels expressly for the purpose. Some of the Greenland-men occasionally call at the west ice, as we are now doing; and if, after exploring it for a few days. they, like us, do not meet with seals, they proceed to the north, to the more profitable fishery of the whale. Seals are gregarious, and at this season are found in flocks of many thousands. At this time they are young; and I do not know

whether it is from their age or from the torpidity caused by the cold, but they allow the sailors to get on the pieces of ice and knock them on the head with a club. After their migration to the northward they are very wary, and make iato the water on the first approach of an enemy.

19th.—Quite calm, and beautiful clear weather; attempted to shoot some birds, but, owing to the extreme cold, I could not hold the gun. The birds principally about the ship are loons, a curious bird, about the size of a wild-duck—black, with a white breast and belly; the wings are placed very far back, the legs long and web-footed: it possesses the singular faculty of being able to fly under water, not so fast as in the air, but still with a tolerable degree of velocity. Flocks of them occasionally pass the ship under water, and in clear calm weather are easily seen from the deck.

20th.—Fine weather, and fair wind. Relinquished our search for seals, and bore away to the north.

21st.—Strong wind from S.E. Ship boring to the north through streams of light ice. Weather extremely cold. During last night lost sight of Jan Mayen and of most of the birds which used to hover around us. Now and then only a solitary bird, called a burgomaster, to be seen; they are very large and tall, and perfectly white. They are seldom or never seen on the water, but either in the air or perched on a pinacle of the ice; they are very shy.

23rd.—At noon we were by observation in lat. 74.30, and weather excessively cold.

24th.—All hands busily employed in fitting-out the whale-boats: six lines, each about 140 fathoms, are smoothly spliced together, and coiled systematically in each boat, from the centre of the coil to the circumference, so that there may be no possibility of their fouling. A harpoon is attached to the line,

by the medium of a few fathoms of very fine and flexible rope. The harpoon itself is about three feet long, and is fitted with a handle six or eight feet long. Each boat is provided with a pole about twenty feet long, called a Jack-staff, carrying the ship's private signal. This is hoisted when any boat has struck a whale, to serve as a signal to the ship, as well as to the other boats, for assistance. There are, likewise, in each boat, three or four lances, to dispatch the whale when exhausted; a wooden kid, or small bucket, to throw water on the line when running out, to prevent combustion from the friction; and two long knives to cut holes in the tail for the ropes used in towing the whale to the ship. There is always a small and sharp axe in the bow, ready to cut the line in case it should run foul. Each boat, fully fitted out, is hung by tackles clear of the ship's side, and can be lowered into the water in a few seconds.

25th.—Passed some floating icebergs, looking like ships under sail at a little distance. Being now on the fishing-ground, a man is constantly stationed in the crow's-nest, on the look-out.

26th.—Fine clear weather; huge masses of ice on all sides, some shooting to a great height, like spires. Some high pieces with flat tops, and the many smaller pieces interspersed, struck me forcibly as bearing a strong resemblance to a large town in winter. By obs. lat. 76.43 N. Cold extreme, everything fluid being frozen on the slightest exposure; even the rum, when exposed on deck, is rendered quite thick, like frozen oil. We now enjoy continual day, as the sun revolves round us without ever setting; the difference being that it is south at noon and north at midnight. Our passage to the north obstructed by packed ice. An immense flock of seals passed us on their migration northwards.

27th.—Early this morning, the ice opening, we made way to the northward, threading through the pieces with great care. Again surrounded by birds—burgomasters, malli-

mawks, loons, dufkies, roaches, and small party-colored birds, called Greenland parrots. From the shelter of the ice the sea is as smooth as glass, and the cold not near so intense. At noon, were by obs. in lat. 77.40 N. During the evening several unicorns. finner passed us. the Monodon-Monoceros of naturalists, came and sported around the vessel. They were apparently from 12 to 20 feet in length. Their color is a dirty white, covered with black spots. The males have one horn projecting from the upper jaw, which varies, according to the age of the animal, from a few inches to 12 feet. This horn is twisted from right to left spirally, and for hardness and capacity to receive polish is equal to the best of ivory; the horn is of no known use to the animal; it is perhaps merely an attribute of the male. made fruitless attempts to strike one, but without success, as they were exceedingly shy.

28th.—The man in the crow's-nest gave notice of a whale coming towards the ship; two boats were instantly manned and lowered. At a short distance it stopped to breathe; the boats were within a few yards of it, when it took the alarm and made off. As it was close to the ship, I had a capital chance of witnessing its motions; it lay half a minute or so on the surface, with the crowu of its head and its back out of the water; it then blew a quantity of air and mucus, like steam, through the air-holes on the top of the head, and gradually sank three or four feet, as gradually rising again; it again breathed and sank. This was repeated several times, till, being alarmed by the approach of the boats, it suddenly ducked its head, curved its back, and, giving its huge tail a flourish in the air, made off. When we on deck saw Mr. Ashe, the first officer, push out his bow-oar, jump up, and seize his harpoon, ready to strike, we made sure of the whale; and when we saw it make off. I know that several lookers-on distinctly broke the third commandment. In the afternoon a number of unicorns sporting round the ship, but we could not succeed in striking one of them.

29th.—At 1 A.M. saw the land to the eastward, and stood towards it till 9 o'clock, when we were close in-shore. presented a chain of high craggy mountains, covered with snow; five of them in particular were very striking and peaked, and appeared to be as high as Beerenberg on Jan Mayen. No signs of vegetation—nothing but icebergs, bare black rocks, and a background of icy mountains. We were on that part of the coast of Spitzbergen called Magdelena Bay. We did not land or make any stay, but proceeded along the coast to the N. We passed several icebergs, some of tolerable size. One we saw at Jan Mayen, 1400 feet high, did not seem much larger than some we see here. Capt. Dannatt and Mr. Ashe inform me that one iceberg near the N. end of the island is not less than 1200 feet. I am never weary of admiring their varied and fantastic shapes and indescribably beautiful colours, which are generally a pure and transparent sapphire blue, with layers of white, which are probably formed by the partial liquefaction congelation of successive falls of snow. These icebergs are all grounded; and those we meet floating at sea are the portions which become detached and fall into the sea, which they do with a great noise and commotion. Continued to the N. Another ship in company. Saw a whale, but as it was pursued by their ships' boats, took no notice of it. Tried to get some seals lying on a piece of ice, but failed. Saw another whale; sent two boats after it; but, after an unsuccessful chase of three hours, they were signalled to return on board.

30th.—Ship plying to the N. through the ice; got a heavy blow from one of the pieces. The London ship in company with us saw and struck a whale, which they succeeded in killing in three hours, but not until it had killed one of their men by a stroke of its tail; his body was put into a box, and placed in the mizen-top for the purpose of being taken home to his friends.

May 1st.—This morning, a few minutes after midnight, a sailor, dressed up with skins, Russo matts, an enormous wig of horse-hair and oakum, came to the ship's bows as Neptune. His wife, as Amphitrite, dressed in an equally fantastic manner, hailed the ship, ordering the sailors to back the main-yard. Then, coming on deck, they were mounted on a gun-carriage, by way of a car, and drawn along the ship's decks to the after-hatchway; they were conducted in state to the between-decks, where, the crew being mustered, Neptune made a speech, that he, the God of the seas, was glad to see them; and as some of them, his loving subjects, had never passed the north cape of Europe (71.10 N.), he would, assisted by his wife, shave them, so that henceforth and forever they might have the privilege of navigating his dominions north of said cape. Those who had not been in Greenland before were brought out, one by one, and, being seated on a large cask, Neptune's wife daubed their faces with a vile composition of soot, tar, and oil, which was scraped off by Neptune with a razor made of a rusty iron hoop. There was no appeal; every one must submit. One or two obnoxious lads were roughly treated: being asked a question, as soon as the mouth was open to answer, the brush was thurst into it. When called up, my plea for exemption would hardly have been listened to if I had not had the key of the spirit-room, and used it The ceremonies concluded with a dance and a forthwith. double allowance of rum. Bitterly cold; ther. 40 below zero. In the afternoon two whales rose near the ship; the boats got very near them, but could not succeed in striking either of them.

2nd.—Thick foggy weather, and intensely cold. The rigging covered with a saltish rheum arising from the sea. It is deposited on the men's faces and clothes; from its excoriating effect on the skin, it is commonly called "the barber." This mist or fog does not exist far above the level of the sea, as in the crow's-nest it is quite clear. The ship laid-to all day.

3rd.—Ship still laid-to by fog; numbers of unicorns about.

4th.—Still laid-to, anchored to the ice.

5th.—Blowing hard from N., with insufferable cold, rendering a person exposed to it unable to articulate from torpidity or contraction of the muscles of the face. Got a very heavy blow from a piece of ice, which made the ship's bells ring, and fairly pitched me out of my chair, under the grate. No material damage sustained. The ice coming down and threatening to close us in, set all sail, and stood away to the S. Passed a Polar bear on a piece of ice, but were too anxious to escape the danger which threatens us to stop and attack it. Compared to what I had seen in menageries, it seemed a large one, but was informed that it was not more than half-grown. In the evening escaped from our dangerous position in the ice, leaving two vessels beset, there to remain in great danger until the ice opens again, or the current carries them three or four degrees to the south.

6th.—Ship still making her way to the southward, among heavy ice. Again in danger of being closed in; the only passage was between two heavy masses of ice, which, under the influence of the wind or current, were approaching each other. When nearly through, the pieces came in contact with the ship, and crushed the two quarter-boats to pieces; extremely glad to get off so cheaply. At one o'clock were out of danger from being beset in the ice. During the afternoon, when walking the deck with Capt. Dannatt, I perceived two objects on the surface of the water. Looking at them attentively, I became convinced that they were two human faces, and at once gave the alarm. A general laugh, and an exclamation that they were a couple of walrusses, set me to rights. We tried to harpoon them, but without success.

8th.—Wind more moderate. One ship in company with us, proceeding to N.W. Ran against a piece of ice, which

started some of the planks on the starboard bow. Noon, lat. by obs. 79.58 N. Saw a whale, and sent 6 boats after it; but after a fruitless chase of two hours they were recalled. At 6 P.M. saw the vessel we had been in company with in the morning, with a signal of distress flying. It had struck upon a piece of ice and been seriously damaged; as, however, it was to windward of us, and as the ice lay very cross, we could not easily get near them, so we pursued our own course. The ship was the Laurel, of Burlington.

10th.—Strong gales of wind and little ice. Saw several whales, but too stormy to lower the boats. In the evening, weather more moderate; received a visit from Capt. Cook, of the *Elizabeth*, of Hull, who had just killed a unicorn, so large as to yield two butts of oil. Just before midnight sent two boats after a whale, but without success.

11th.—Fine weather, and calm. This forenoon an immense sword-fish—Delphinus-Gladiator—passed close to the ship. It is said to be the greatest enemy of the whale; it is very rarely seen so far north. In strength and velocity in the water, it equals, if it does not exceed, any known fish. Weather being so fine and mild, I went a-shooting, and shot a number of roaches, dufkies, loons, and snow-birds. Stuffed a couple of each, and gave the rest to the men for sea-pies.

12th.—Some Dutch ships in company. This morning a whale rose in their midst: each vessel sent two or three boats to wait where they expected it to rise. I anticipated a diverting scene when it did rise, and was not disappointed. All was hurry-skurry and confusion, which frightened the fish and caused it to flourish its tail in the air and make off. Lat. by obs. 79.57 N. Went on board one of the Dutch ships. The captain, a young man, spoke some English. He had been five weeks off Jan Mayen, where he had killed three thousand seals. The masters of two of the other vessels were his brothers. On taking leave, he gave Mr. Ashe and me each a square bottle of very excellent gin.

13th.—Weather calm. Went arshooting, and killed forty-one birds—enough for all hands for a couple of days.

14th.—Beautiful weather; the Lord Wellington and the King George in company. At 9 a.m. two whales rose; each ship sent a couple of boats; one of the fish was struck by a harpooneer of the Lord Wellington, who at once discovered that he had only got fast to a sucker. It was very soon killed, and found to be little larger than a unicorn. The attention of all the boats was then directed to the female, as they all knew, by experience, it would not leave its young one, but would hover about the place. For nearly four hours it ran about like a mad creature, closely pursued by the boats of the three At one o'clock it was struck by a harpooneer of the King George, who, being assisted by all the boats. soon killed it. I have often heard of the maternal affection of the whale, and here saw a fine instance of it. About 11 P.M. we were visited by a very fine sea-horse; made several attempts to strike it, but failed. If shot and wounded, it would make off; if killed, it would sink like a stone. As the ice was closing in, the Lord Wellington and we made the best of our way out, leaving the King George beset.

15th.—Beautiful clear weather; the Lord Wellington in company. Saw two whales; each ship sent two boats after them; the harpooneer of the Lord Wellington struck one; and as the two boats we had sent were off in pursuit of the second whale, Capt. Dannatt lowered two others and sent them to assist the Lord Wellington. Their whale, when struck, went perpendicularly downwards, where it remained upwards of half an hour; it then came to the surface, apparently quite exhausted; and as the boats were scattered about where it was expected to rise, it was immediately harpooned again, and it dived a second time before recovering its breath; but, being obliged to rise to breathe, two more harpoons were driven into it; and as it was from breathlessness obliged to remain to breathe, several whale-lances, some twenty

feet long, were thrust into its body. It made several ineffectual struggles to get away, but was too far spent; and as some of the whale-lances had penetrated the lungs, it began to eject blood; and as eight boats were lying alongside, plying their long lances into its body, it soon expired and turned on its back. At that moment the look-out at our own mast-head called out: "A fall !-- a fall !" Everything was instantly in an uproar: those who were in bed rushed on deck undrest, and tumbled into the boats, which were instantly lowered into the water and pushed off. the man in the crow's-nest pointing with his arm in the direction they were to go. As we on deck could see nothing for the ice, we were told by the look-out that one of our boats was fast to a whale, about three miles to leeward. In a few minutes he called to us on deck to say that the second boat had also struck the whale. By this time, the two boats which had been assisting the Lord Wellington having returned, the ship made sail with all the spare boats in tow. being directed by the man at the mast-head. When near the boats which had struck the whale, the loose boats were cast off and dispersed where it was expected to rise. It did rise quite exhausted, but instantly dived again, and never came up. In the meantime the ice was coming together. and beset the boats; attempts were made to drag up the whale, but without success. The ends of the lines were then taken on board the ship, with the intention of either dragging up the whale or drawing out the harpoons. The lines, however, broke, and the whale was lost. The ship immediately took the boats on board, and rejoined the Lord Wellington.

16th.—Beautiful weather, and quite mild. Ship making her way to the N. through heavy ice. At noon we were by obs. in lat. 80.11 N. The two discovery-ships last year only reached nine miles further, being then stopped by the solid continent of ice.

17th.—Strong breezes of wind. A ship, called the Spencer, of Hull, in company with us. During the forenoon a whale rose; each vessel sent boats after it. After playing about for a considerable time, it was at last struck by one of the Spencer's harpooneers; it was close to us when it was struck a second time, and shortly afterwards a third time. afterwards a serious accident had like to have happened: one of the Spencer's harpooneers, approaching it for the purpose of lancing it, received a blow from the whale's tail, which knocked the boat out of the water; it struck the boat a second time, so that it went to pieces and sank, through the weight of the lines, leaving the men struggling on the surface: they were, however, speedily picked up by the other boats. The harpooneer was standing up, and was knocked out by the first stroke of the animal's tail. did not speak the Spencer, cannot say whether any of the men were seriously injured. In two hours afterwards the whale was killed.

18th.—Beautiful weather, but cold. Saw two whales, but could not succeed in striking either of them; we perceived that one of them had scars on its back, about the size of harpoon-wounds. A flock of wild ducks, with most beautiful and variegated plumage, alighted on the ice close to the ship; they were taller and more slender than English wild-ducks; they flew before I could get my gun loaded. Evening very cold; sea frozen over to the thickness of an inch, forming what is called, by Greenlandmen, bay-ice.

19.—Strong breezes of wind. A whale being seen at a distance, boats were instantly lowered: the crews were as usual in them, when, in his eagerness to get away, the boat-steerer of one of them took the fall entirely off the cleet. The immediate result was that, not being able to support the weight, the stern of the boat dropped and precipitated the men into the water. One had presence of mind to catch hold of the ship's ladder; the other four were struggling in the water astern, as the ship was going at the rate of seven

knots. The ship was instantly laid-to and boats sent to their rescue: before they reached them, however, two had sunk; one came again to the surface, and was laid hold of by a boat-hook; the other was seen under water and brought up by lowering a harpoon. Both were inanimate, and it was only after a long-continued use of the ordinary means that vitality was restored. I am afraid to say how long one of them remained without evincing any signs of life. At any rate, the whale was left undisturbed.

20th.—My 19th birthday. Strong gales of wind, but, as we were among heavy ice, did not feel their effects. two or three whales, and sent six boats after them. whales were not running, but feeding and playing about. One rose near one of the boats, and the harpooneer, pulling the boat right on its back, struck it; it ran a very short distance down, when it came up again and lay on the surface, splashing and flourishing its tail and fins in the air in such a dangerous manner as to prevent any of the boats getting near enough to strike it a second time. After a while, however, it went down, and rose again close to the edge of a heavy floe of ice, where it acted the same game over again: it lay evidently watching the boats; and when any of them attempted to approach it, it turned on its side, shaking its fin in the air, with which it evidently knew that it could destroy them. Mr. Ashe, the first officer, seeing how matters stood, and knowing it would escape if not very speedily secured, got on the piece of ice at a little distance, carrying his harpoon, and, with two of his men dragging the line, made his way until he got just over the whale, when he threw his harpoon with such force as to make it penetrate the whale's body to the stock. It instantly dived, and ran five lines out before it again came to the surface; and when it did, it was as wicked and mischievous as before. One boat at last succeeded in striking it, but, when backing astern again, received a blow of its tail. The harpooneer, seeing the impending blow, leaped back among the men; it struck the boat's bow obliquely, so as

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not to injure it; but the concussion threw the boat-steerer into the water. As the whale began to run, the line was at once divided by the axe, and the boat returned to pick up the steersman, who was almost frightened to death. He did not know how he had got into the water, or what had happened to him: being, however, utterly useless, the crew took him on board the ship, which was close by, and, taking another in his place, joined the hunt again. In the meanwhile, the whale was again setting the boats' at defiance, and it was only after some time that two of them, rowing rapidly past it, threw their harpoons into it. It was then killed, but not until five hours had elapsed from the time it was first struck. When dead, it turned over on its back; holes were then made through its fins, which were lashed across the belly. Similar holes were made in the forks of its tail, through which ropes were reeved, and then, all the boats fastening on, the whale was towed to a neighbouring mass of ice, to which the ship already anchored. The whale being then brought alongside, the harpooneers, with spikes on the soles of their boots, got upon it, and cut a piece about four feet wide by six feet long, leaving its base uncut. A hole was then made. through which the loop of a strong rope was passed, and fastened by a fidd. The rope was then rove through a block in the rigging, and its end taken to the windlass. This arrangement or contrivance not only keeps the carcase steady, but, as the surface is removed, enables the whale to be gradually turned and another surface exposed and removed. When this was done, which only took a few minutes, the harpooneers and steerers cut out pieces of about a ton weight, which were hoisted on deck by ropes and pullies connected with the winches. As fast as these pieces were hoisted on deck, they were thrown down the hatchway between the decks. The lower lip of the carcase was cut up and hoisted on board; the enormous tongue, which is a mass of nearly pure fat, was sent up; the whalebone which is attached to the roof of the mouth was then removed; the

fins and tail were cut off and hoisted up; and the whale gradually turned over, until it was entirely flinched. The whole time occupied was nearly three hours. The fat on the surface of the body was about ten inches thick, which is considered to be very little. The fat on the body of a full-grown female is frequently, I am told, two feet or more in thickness. I am surprised to find the fat firm, and more like gristle than the ordinary fat of animals. When boiled down, however, Mr. Ashe informs me that it yields 75 per cent. of pure oil. While the whale was being cut up we were surrounded by immense numbers of mollymawks and snow-birds, which could easily be knocked down with a stick. The sailors amused me by throwing some pieces of blubber among them, too large for any single bird to swallow; when one got hold of it, he was instantly attacked by the others, and almost torn to pieces, until he quitted it. This went on until some bird more powerful or more dexterous managed to get off with it.



MALE.

1st.-Length of whalebone, seven feet and one inch.

After the whale was flinched, the decks were cleared and cleaned; the ship was cast off from the ice, and stood away to the N.E. One of the men, who yesterday was nearly drowned, suffers to-day from acute inflammation of the lungs.

21st.—Light airs, and beautiful mild weather. In the afternoon two whales rose close to the ship, and remained sporting on the surface in a very loving manner. The boats

were instantly lowered and pulled towards them; one of the boats ran against the whale, and the harpooneer, who had just seized his harpoon, was thrown down; he, however, recovered himself in an instant, and plunged his harpoon into its back. As the whale, however, was in no hurry to go away, the man again seized his harpoon, and, throwing his whole weight on it, gave it a good shove. It then set off nearly perpendicularly downwards, and with such velocity that the harpooneer was hidden in the smoke caused by the rapidity of the lines running round the bolland, and this in spite of the water thrown upon it. A second boat was inst in time to render aid before the lines were run out. The whale came up again in about an hour, nearly dead-not from fatigue or exertion, but from the enormous, almost incredible, weight of water it had sustained. It ran out seven lines, each line 140 fathoms long, and went apparently perpendicularly down; if so, it must have been subjected to a pressure of 980 fathoms of water. But, even if one or even two hundred fathoms are allowed for obliquity, still the pressure must have been almost incalculable. It lay almost motionless, until three boats pulled on its back and struck their harpoons into it: it ran another length of line out of their boats, and then stopped. It was instantly surrounded by all the boats, and in the space of forty minutes more was killed. The ship was again anchored to a piece of ice, as vesterday, and the whale brought alongside and cut up. It also was a male animal, and very lean.



MALE.

2nd.—Length of whalebone, eight feet and one inch.

22nd.—A gale of wind; nothing worth notice.

23rd.—Gale continues with increased violence. Saw two or three whales, but too stormy to lower a boat.

24th.—Quite calm, but a dense fog. We hear whales blowing on every side, but cannot see them. Six boats, however, were sent off with strict orders not to separate. They returned unsuccessful: they heard and saw several, but could not get near enough to strike one. At noon it cleared up, and discovered us in a large basin formed by heavy ice, with numbers of whales sporting about in a very playful manner; but, being quite calm, they invariably made off whenever they heard or saw the boats. In the afternoon Capt. Dannatt got into a boat, and, posting himself on the edge of a piece of ice, resolved to wait in hopes that one would rise near him. He was not waiting more than twenty minutes till one rose about forty yards off. He pulled towards it; but, finding the boat going athwart it, he directed the men to cease pulling, and ordered the boat-steerer to scull quietly. It lay shaking on the surface of the water, as if paralyzed by a sense of its danger, until Capt. Dannatt struck his harpoon into it; it then made off, running only two lines out, when another harpoon was struck into it, and in an hour after it was first struck it was killed. a male fish, but very fat. During the act of flinching, a harpooneer cut his foot severely.

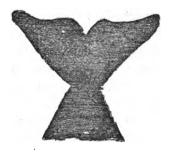


FEMALE.

3rd.—Length of whalebone, three feet and four inches.

25th.—Stormy and cold weather.

26th.—Strong wind and clear. Ship threading her way to the northward. At 5 P.M., after an exciting chase, a whale was harpooned; it ran out five lines, and was killed in two hours and a-half.



MALE.

4th.—Length of whalebone, six feet and six inches.

27th.—Strong breezes and clear weather. At noon it began to blow hard from the eastward, which drove the ice together and obliged us to get out as quickly as possible. At 7 P.M. we got to the open water in lat. N. 79.30, where we again joined the Lord Wellington. In escaping from the ice we left two vessels beset, who were more to leeward than we were.

28th.—A whale was seen, and three boats were sent after it, one succeeding in harpooning it; it ran six lines out, and the greater part of a second boat's lines. It remained nearly an hour before it came to the surface again, and then rose at a considerable distance, and not far from the Lord Wellington. Capt. Dannatt sent two boats to his brother's assistance; both struck it before it went down again, and in 25 minutes more it was killed. As usual, the ship was anchored to the ice. The whale was brought alongside and flinched, to use the common term.



MALE.

5th.-Length of whalebone, seven feet and five inches.

Shortly after it was got on board and the decks cleared, three or four whales were seen, and boats sent after them. The harpooneer who had struck the last whale got close to one of them, but, through the fault of the boat-steerer, not close enough to strike. He threw his harpoon, which did not He, however, was fortunate enough to strike another, which remained down a considerable time. As soon as it rose, three more harpoons were driven into it; but, instead of going down again, as was expected, it set off with great rapidity towards the heavy pack of ice to windward. As the men knew that if it once gained the shelter of the close ice they would likely lose it, the loose boats attached themselves to those fast to the whale, and all stuck their oars in the water, to retard its flight; but in vain: it reached the ice, and the men were obliged to pay away their lines until it stopped, which it did in a few minutes. The men, seeing it blowing, proceeded over the ice with three harpoons; two were stuck into it and the lances freely used, when it made off again, fortunately into clear water, where it was shortly killed. The ship, as usual, was anchored to the ice; the whale was brought alongside, and was flinched. It was a male fish, and miserably lean.



MALE.

6th.-Length of whalebone, seven feet and two inches.

During the time we were occupied in flinching, we perceived that the *Wellington* had got fast to a fish, and, from the length of time taken in killing it, supposed it to be a grown one.

29th.—Beautiful weather. Very nearly run foul of by a Dutch ship, which came so close that I could have jumped on board. It had got two small whales, and had their tails hung up in the rigging. No correspondence in language between us.

30th.—Quite calm, but thick foggy weather. Two ships with us, the Dutchman and a ship from Aberdeen. Great numbers of unicorns and seals around us, but could not take any of them.

31st.—Last night it began to blow from N.E., which drove the ice in large masses down upon us. As we saw no prospect of getting out, we looked out for and found a creek in one of the largest masses, into which the ship was taken. The sails were then stowed and the provisions got on deck, in the case of the ship being crushed to pieces. The ice continues to come down, so that no water can be seen, even from the mast-head. Prospect of getting out only by a change of wind or by being drifted to the southward. Nothing to relieve "the eye" but the bare masts of the Dutch and Aberdeen ships.

June 1st.—Wind N.E. Nothing can be more disheartening than our imprisonment.

2nd.—Early this morning the wind changed to the west. During the day the ice slackened considerably, and as it peeled off to the southward we occasionally caught sight of water. The Dutchman, being nearer the edge, soon got clear and out of sight. Some hours afterwards the ice near us began to move; a lane opened here and another there, and we set our sails ready to take advantage of any channel. We at last cast off, and threaded our way out between heavy floes, leaving the Aberdeen ship to follow, which was then a mile or two astern. Our way, when near open water, lay between two heavy floes. We got safely through, although we found the channel getting perceptibly narrower. then nearly if not quite safe, I went below with Capt. Dannatt; and while conversing, Mr. Ashe came down to inform us that the Diamond, in passing between the two pieces, had been caught by them and crushed to pieces. We ran on deck and found it too true. One of her masts was still upright; the others, with fragments of the vessel, were being piled up among the masses of ice which were broken off by the collision of the two floes. We approached as near as we could with regard to our own safety, although we dared not send them any help. We perceived that they had three boats on the ice, and were putting sails, chests, meat, &c., into them. Some of them at last launched one of their boats over the ice, and came on board of us. The party consisted of the captain, the surgeon, the mates, and several of the men. A signal was made to the others to come off. and one boat came, loaded to the water's edge with men and some of their effects. As about twenty still remained on the ice, boats were sent to bring some of them off, and to say that if they did not instantly come on board they would be They did then come on board, but most lest to their fate. of them quite drunk and shockingly profane in their language. As the ice continued in motion, and was still very unsafe, we got out of it as quickly as we could, leaving the remains of the *Diamond* and her eight whales. Capt. Small, in giving an account of the loss of his ship, said that in following our vessel he perceived that the channel between the floes was getting smaller, and lowered six boats to assist by towing. When, however, escape was seen to be impossible, the men in the boats, as well as those on board, escaped the collision by getting on the ice and out of the way. The men who were towing succeeded in dragging three of the boats on to the ice. Those on board got into the spirit-room before leaving. Some, and only a few, succeeded in saving a few of their effects.

Some Dutch ship being seen to leeward, the men who had last come on board requested to be sent to them. This request was readily granted, and two of their boats were given to them for the purpose; and after the uproar and the disputes about the division of the things saved were settled, they went off, and the others to bed again. About three o'clock we got into a flock of whales. Six boats were instantly lowered, with strict orders not to separate. Two whales were immediately harpooned. In an hour and a-half one was killed and taken in tow by the ship; and soon afterwards the second was killed, and also taken in tow. The boats then struck two others, which were killed without any unusual occurrence. The ship was then, as usual, anchored to the ice, and the whales were flinched.



7th.—Length of whalebone, seven feet.



8th.-Length of whalebone, four feet and nine inches.



9th.-Length of whalebone, six feet and ten inches.



10th.-Length of whalebone, six feet and four inches.

As the difference between day and night can only be distinguished by reference to the compass, and as the occurrences and events of the last two or three days have been so varied and so exciting, they are apt to get confused. I am, however, very decidedly entering the late occurrences on this morning of the 3rd.

Srd.—On this day we spoke the *Middleton*, of Aberdeen. Her captain came on board, and after a consultation it was decided that Capt. Small and a certain number of his men should go on board the *Middleton*. This was accordingly done, and Capt. Small left us with the sympathy of all on board. In the evening, quite calm. The weather being thick and foggy, the ship was made fast to a piece of ice.

4th.—Weather still calm and foggy. Caught a shark ten feet long, and hoisted it on deck for the purpose of examining its structure.

5th.—Still perfectly calm. The *Middleton* and the Dutch ship, with the *Diamond's* men, are in company. They had struck a whale for the Dutchmen, who are very anxious to keep them.

6th.—Gale of wind and hazy weather. Still anchored to the ice. Went on board of the Dutch ship, and was very hospitably entertained.

7th.—Got a channel out, and made way to the northward at noon. We were by obs. in lat. 80.12 N., and still making to the north.

8th.—At two o'clock this morning the *Trafalgar* arrived at the solid ice, which connects with the North Pole. After sailing some hours along its edge, in an easterly course, we bore away to the southward. At noon we were by obs. in lat. 80.44 N., and by Mr. Ashe's observation in 81.01 north. In the morning, before the ship bore away to the southward, it must have been ten or twelve miles farther to the north. At 7 P.M. we made the land, and continued to approach it.

9th.—At 7 o'clock this morning we were close in with Moffen Island, on the northern extremity of Spitzbergen, laying in 80.07 N., and coasted along during the day, with

a light breeze of wind from the N. N. E. This brought us again in sight of some of those magnificent wonders of creation, the icebergs, which have been so well described by one of our English poets, whose name I am unacquainted with:

"So Greenland's rocks, the beauteous work of frost,
Rise high in air, and glitter o'er the coast.
Pale suns, untelt, at distance roll away,
And on the impassive ice the lightnings play.
Eternal snows the growing mass supply,
Till the bright mountains prop the incumbent sky.
As Atlas fix'd each hoary pile appears,
The gathered winter of a thousand years."

And in another part:

"There might you see the length'ning spires ascend, \
The domes swell up, the widening arches bend;
The growing towers like exhalations rise,
And the huge columns heave into the skies."

At six o'clock P.M. we altered our course to the westward again, and at midnight got among light streams of loose and small ice, with here and there a heavy floe.

10th.—Strong breezes and clear weather. Boring our way to the westward with considerable difficulty, being often obliged to make a circuit to get round the floes or keep clear of them, so as to reach open water, the appearance of which we could see in the distance. About two o'clock we reached open water, which was formed by two very large and several smaller floes. The enclosed clear water was about a mile and a-half by a mile broad, and was literally swarming with whales, looking like droves of black cattle in a pasture. All the boats were lowered, with strict injunctions to keep together and not to strike more than three fish at one time. There was, of course, a contest, and a very sharp one—not who should strike the fish, but who

should do so first; for, besides the honor and credit, the harpooneer and stearsman of a boat first striking a whale receive each a guinea, and the rowers seven-and-sixpence each, independently of their share in the general profits of the voyage. Of course, the four loose boats are kept clear and ready to assist. Two of the boats pulled into a creek, and immediately each struck a whale. Another met a whale, and, although at disadvantage, succeeded in getting fast to it. By this time, two ships, the Hurmony, of Hull, and the Union, of Peterhead, seeing our flags flying, arrived as we were killing our three whales. The boats of the Hull ship struck three fish; but for want of proper and timely assistance, one of them, with the six lines, escaped. The Union's boats struck two; but for the want of the aid of the other boats, one of them also got off, with their harpoon and lines attached to it. By this time the three whales we had struck were killed, and the men in the boats were busy getting in and coiling their lines, excepting Mr. Ashe, whose line had got foul of the bottom of the ice. As he was positive that it was a whale he was fast to, he did not strike his jack. While disputing about it, a whale rose not far off, and was espied by two of the boats belonging to one of the other ships, who, however, would not strike it, as they saw a harpoon sticking in its back, and Mr. Ashe's jack flying not far off. Capt. Dannatt, who witnessed the circumstance, immediately called one of our boats; but as their lines were not quite coiled in, it did not come for a few minutes, and by that time the whale had gone. Capt. Dannatt, however, who was in the crow's-nest, observed its course, and directed the boat to lie at a point which he pointed out. The boat had only lain there a few minutes when the whale rose at a short distance and was instantly struck, and, with the assistance of some of the other boats. which by that time had got in their lines, was soon killed. When brought alongside it was found to be the whale which had escaped from the Union, as one of that ship's harpoons.

with six lines, was attached to it. By the time this last whale was killed, hardly a fish was to be seen: all had taken fright and disappeared.

11th.—At two o'clock this morning the ship was anchored to the ice as usual, and the four whales were brought alongside and flinched.



11th.—Length of whalebone, eight feet and three inches.



MALE.

12th.—Length of whalebone, eight feet and four inches.



MALE.

13th.—Length of whalebone, six feet and one and three-quarters inches.



MALE

14th.—Length of whalebone, eight feet and four inches.

During the time the crew were employed in cutting up the whales we were visited by several sharks, and I again availed myself of the opportunity of dissecting one of them. They are most torpid and senseless animals; for, though a knife or a lance is run into them, they retreat a few yards, but directly return again. After the whales were flinched and the decks cleared and cleaned, the ship was cast off, and proceeded to look out for the passage again, but found it effectually blocked up.

12th.—Very thick and foggy; no egress, and the space in which we are confined is evidently less. At noon, saw a small whale and sent boats after it. One boat got near it, but not near enough to strike, and the harpooneer hove his harpoon at it, but did not get fast. Soon afterwards it rose again near one of the boats, and the harpooneer struck at it with such force as to bend his harpoon almost double; but, to his surprise, the man found the weapon remaining in his hand. He had struck it on the crown-bone. Soon afterwards it was struck and killed by the boats of the *Harmony*. Ship still anchored to the ice.

13th.—Weather still thick and foggy—so much so, that objects cannot be perceived beyond the length of the ship. As the space of water in which the ship is confined gets less,

we are obliged to cast off and choose another berth. During the evening the weather cleared up a little, and we found ourselves surrounded by unicorns, but could not succeed in striking one of them. The *Harmony*, however, got one by shooting it with a gun-harpoon.

14th.—Weather still thick and foggy; no egress, but the basin in which we are confined apparently gets larger. To-day, got again two sharks: neither of them had eyes. The sockets remain, but the eye-balls appear to have been taken out, as the remains of the muscles are still to be seen. The cavity of the brain is very small, hardly larger in eircumference than the spinal-marrow. They are, consequently, very tenacious of life. The head of one was cut off, and retained its sensibility for a long time. A fishing-lead was put into its mouth five hours after, and it bit it through with ease.

15th.—Still thick and foggy. The ice has opened; but, on account of the fog, it was thought unsafe to cast off,—so we remain anchored to the ice.

16th.—Still very foggy, and anchored to the ice.

17th.—Quite clear, and fine mild weather. Perceived some vessels coming towards us, and made off to the N. W. with the intention of leaving them and keeping by ourselves. Only one followed us. After sailing eight hours, we came to two heavy floes with a clear passage between them; we ran down, leaving the other ship, which would not follow us. After sailing along the edge of one of the floes for three or four miles, Capt. Dannatt perceived a whale blowing in a hole in the floe. Two boats were sent to the edge of the ice, and one of the harpooneers was directed to proceed over the ice to the hole, and to wait there until the fish appeared again. He went with two of the men dragging the line, and found the whale still lying there. He at once plunged his harpoon

into it, with such force as to overbalance himself and fall into the water. He was with difficulty extricated by the two men who had accompanied him. The whale made into the open water, and was killed in an hour and a-half. While the boats were towing it on board, another whale rose close to them; it was instantly pursued and struck, and in thirty-five minutes was killed. It was only a small one. When the whales were brought alongside, it was perceived that the floes of ice were coming together, under the influence of a current. The whales were immediately cast-off from the ship, and six boats left to tow them; while all sails were set to beat out again. In two hours we had weathered a point, where we considered ourselves safe, and then lav-to for the boats. As it was, we had little time to spare; for if we had not seen the ice in motion when we did, or if we had been a mile more to leeward, we would have shared the fate of the Diamond. We watched the two enormous pieces come in contact with a horrible crushing noise, and saw the fragments piled up to a great height. X mem. ex.

18th.—At two A.M. the boats with the two whales joined the ship, and the usual process was gone through.



MALE.

15th.-Length of whalebone, seven feet and four inches.



FEMALE.

16th.—Length of whalebone, three feet and eight inches.

At ten A.M. spoke the ship we had seen the day before, the Mary and Elizabeth; and as it became foggy, the master came on board and spent the day. In the evening the weather cleared up, and, as the ice appeared to be closing, we tried to get into an adjoining body of water, but were prevented by a piece of ice twice as big as our ship, which blocked up the only channel. Twelve boats were sent—six from each vessel—to attempt to tow it out of the way. In half an hour they succeeded in making a passage sufficient to allow us to pass through, which we did without damage. The Mary and Elizabeth, however, struck one of the sides of the passage, and, recoiling, got jammed fast; and it was only after considerable exertions that she was towed clear. Soon afterwards we saw a whale, and pursued it; but the weather becoming foggy again, the boats were recalled.

19th.—Uncommonly thick and foggy, with very little wind. Early this morning the watch on deck heard repeated calls of "A fall! a fall!" and could distinctly hear the whale-lines running out of a boat, but could see nothing. As all of our ship's boats were on board, we paid no attention to the calls. When another watch came on deck, half an hour afterwards, the harpooneer in charge heard a whale blowing near the ship, and sent two boats after it, but too late. In a short time a boat belonging to the Mary

and Elizabeth came on board, and told us that they had left their ship in pursuit of some unicorns, but, coming across the whale, had harpooned it, and lost it for want of assistance. As they could not find their vessel in the dense fog, they remained on board with us until it should clear up, which it did in a few hours after. During the day we heard the blast of whales, but could not see them for the fog.

20th.—This morning a polar bear appeared near us, on the edge of the ice. He was supposed not to be hungry, as he did not attack us or get into the water, and none were hardy enough to attack him on the ice. After looking at each other for some time a fog supervened, and we saw him no more. In the evening it cleared up, and we found ourselves surrounded by unicorns. Boats were lowered: one of the boats, perceiving three approaching, lay perfectly still on the water, the harpooneer ordering the men to lift their oars out of the water and to be perfectly silent. There were a male with a long horn, a female, and a young one. On nearing the boat the male perceived it, and made off. The female was following, when the harpooneer threw his harpoon, and fortunately with success. It ran two lines out, and on coming up was killed by the other boat. It was brought alongside and hoisted into the ship entire. mouth, throat, and stomach were full of different kinds of small animals and fishes—the greater number like overgrown shrimps; some of them measured four or five inches in length. The unicorn itself was sixteen feet long, and yielded one butt of oil. At nine P.M. made sail to the northward, the current having carried us considerably to the S.W. Parted with the Mary and Elizabeth, who preferred remaining behind.

Early this morning, being at the masthead with one of the spiksoneers, he directed my attention to two objects on the ice, at some distance. As they advanced rapidly towards us, we soon perceived them to be two polar bears—an old one

and its cub. We called out to those on deck, and two boats were manned and lowered, with Capt. D. in one of them. As soon as the bears perceived the boats they got into the water, and swam towards them with astonishing rapidity. When near the boats Capt. D. fired at the old one, but with no apparent effect. He fired again, when the bears turned and made towards the ice; they scrambled up and stood on its edge, shewing no inclination to renew the attack; the boats got closer to them, when Capt. D. fired again, and shot The young one would not quit the dam through the head. the body, but remained until a noose of a rope was thrown over it, and it was dragged into the water, as Capt. D. wished to keep it alive. It was five feet long, and stood higher than a large sheep; when brought alongside, it shewed such ferocity that it was decided to kill it. I found their stomachs perfectly empty. The white bear is very ferocious, and, I am told, very rarely turns tail, as this one did, when wounded. Innumerable stories are told of their attacking the boats. Last season, Captain Hawkins, of the Everthorp, of Hull, attacked a bear in the water; his gun would not go off, and he attempted to run his whale-lance through it as it advanced; the lance, however, struck on its breast-bone, and the bear, wrenching it out of his hand, got into the boat, and seizing him by the thigh, made off to the nearest ice. The men were paralyzed for a minute or two, when they followed the bear, throwing the loose articles in the boat at it; one of them hitting it on the head, it left hold of the captain and followed the boat, which, taking a turn, picked up the captain and took him on board.

Some years ago a bear was attacked by a boat, and in trying to get into the bow the harpooneer cut off one of its paws with his axe; it then got into the stern of the boat, when the boat-steerer jumped overboard; it then cleared the boat, of which it held possession until it was shot, the men, in the meanwhile, hanging on in the water by the oars.

During the day we saw several whales running to the N. W., but could not get near enough to any of them to strike.

23rd.—Early this morning, while coasting along the edge of a floe, saw several whales running in the same direction to N.W. as yesterday, and sent six boats after them. For upwards of six hours they were unsuccessful. At last a boat laying at the floe's edge perceived two whales coming towards them, and as they passed, the harpooneer threw his harpoon at one of them, and got fast. It was killed without any particular occurrence. The ship, as usual, was made fast to the edge of the floe. The whale was then brought alongside and flinched.



MALE.

17th.—Length of whalebone, six feet and four inches.

When finished, stood to the westward, as that was the course taken by the whales.

24th.—Still sailing to the westward. No whales seen.

25th.—Stood to the westward until we were stopped by the ice. We saw no whales, but passed several bears. Got through an opening in the ice, and bore away to the northward.

26th.—Quite calm, and warm weather. We saw two bears on the ice, and sent a couple of boats after them. We lost sight of one of them entirely; the other kept ranging about without perceiving or noticing the boats. After we had left the ship, six of the men, more foolhardy than the others, insisted on attacking it on the ice. They armed themselves with harpoons and whale-lances, and set off, leaving one man in their boat. They had proceeded 150 or 200 yards with great difficulty, on account of the depth and softness of the snow, as well as of the great inequalities of the ice, when the bear either saw or smelt them. At any rate it stopped and turned round, and looked full at them. Whether it was that thew. did not like its looks, or that their courage failed them, but with one consent they turned tail, and made for the boat, tumbling down every few steps; and although the bear paid no attention to them, but was making towards the other boat, they did not stop to see whether its head or tail was towards them until they were safely on board of their boat. In the meanwhile the bear was making his way to the boat in which the captain and I were waiting for him. When he got to the edge of the ice he took to the water, and swam rapidly towards us. When at a short distance, Capt. D. fired at it, and the ball went through its body. It at once turned about and got on the ice, where it rolled over and over, and clapped snow on the wounds in its sides, growling all the while. At last it again got into the water and made towards us. I fired at it, but the gun would not go off, having got wetted with the splashing of the oars. Capt. Dannatt then ordered the boat to be rowed very rapidly past it, and at the moment of passing he thrust the whale-lance through its body; it still swam after us with astonishing rapidity, particularly when the nature of its wounds are considered. However, not being able to get near us, it stopped and tried to get the whale-lance out of its body; it failed, but gnawed the stock in pieces. The boat was again rowed quickly past it, and another lance thrust into it. It then, with great

difficulty, got upon a piece of ice, and crawled to the other side, very evidently with the idea of escaping. It lay on the ice growling at us until it died. In the afternoon a breeze sprang up, and enabled us to pursue our way to the N.W.

27th.—At midnight several whales were seen, and, after many fruitless attempts, a harpooneer struck one of them; it went down, and remained about an hour, when it came up. No boat dared to approach it, as it kept one of its fins menacingly in the air. A harpooneer threw his harpoon at it, and fortunately got fast, but had his boat injured by a blow from its tail. When the whale rose again, it again struck at one of the boats with its tail. The blow fortunately fell short of the boat, but struck the oars on one side, making them fly up in the air. One of the men was hurt by the springing of his oar. In two hours more it was killed. The ship was made fast as usual, the whale brought alongside, and got on board as usual.



MALE.

18th.—Length of whalebone, seven feet and eight inches.

At 7 in the morning the decks were cleared, when two whales were seen. Six boats were sent after them. One was struck and killed in three hours; and after being got on board in the usual manner, the ship was cast-off, and beat towards the head of the floe.



MALE.

19th.—Length of whalebone, seven feet and four inches.

28th.—At three this morning we got to the head of the floe, and saw several whales, and sent six boats in three Two of the boats, while lying at the edge of the ice, perceived a flock of unicorns coming towards them, One of the harpooneers threw his harpoon at one, and struck it; it was soon killed, and was taken to the ship. During his absence his comrade saw three whales coming towards him, and struck one, but for the want of assistance was obliged to let it go, after it had run all his lines out. About the same time a whale was harpooned by one of the other boats, and soon killed; but before the five boats had secured their lines, a barrier of pieces of ice came down and beset them. As this barrier was about a mile and a-half broad, we on board had very serious apprehensions for their safety and for the loss of the whale. The ice continued to come down till six o'clock in the evening, when it peeled off. again as rapidly as it had come down; and in an hour and a-half more the boats and the whale were liberated, after an imprisonment of 15 hours. As soon as they were free, and whilst returning to the ship, they met a young whale, and very soon killed it.



20th.—Length of whalebone, eight feet and eight inches.



21st.—Length of whalebone, three feet.

29th.—Strong breezes, and hazy.

50th.—Quite calm and warm, but still hazy.

July 1st.—Strong breezes. The ship still anchored to the ice. Sent the boats after two whales, but without success.

2nd.—Ship still anchored to the floe.

3rd.—To-day, killed a very large bear, and handed his skin to the sailors to be footed. Ship made out to sea, intending to get to the northward.

4th.—In open sea, and proceeding to the northward. In he evening, fell in with two Dutch ships, clean.

5th.—Stood into the ice again. No whales to be seen.

6th, 7th, and 8th.—Thick and foggy; weather quite warm.

9th.—Made fast to a floe for the purpose of filling our fresh-water casks from the ice. As one of the boats was leaving the ship, the steersman broke his oar in pushing off, and fell into the water; as the boat had way on at the time, it went a short distance ahead; on returning, owing to the unskilfulness of the man who undertook to steer, the harpooneer could not reach him, and he sank. He saw him under water, and tried to get hold of him with a boat-hook, but failed. He was a fine young man—a native of Berwick, and 22 years of age.

11th.—Being nearly full, Capt. Dannatt determined to abandon any further attempts to capture the whale, and to proceed homewards.

13th.—Were surrounded by the remains of a wrecked vessel—loose spars, companion-doors, &c.; among them was a topmast with the name "Rover, of Bristol"; but as no Greenland-man of that name sailed out of Bristol, or out of any British port, it was supposed to be some merchantman who had been driven out of her course and perished among the ice. Among the floating wreck was one piece very suggestive: it was a substitute for a rudder, made out of a topmast and jibboom, with spars fastened across by copper nails, long pieces of iron, ships' bolts, wooden trenails, and rope. It was attempted to be weighted down by seven fathoms of chain-cable. In the evening, got into a stream of ice, on which were immense numbers of seals, but failed to take them.

17th.—Very nearly captured a very large sea-horse, which we found asleep on a piece of ice.



19th.—Were surrounded by immense shoals of herrings, swimming close to the surface of the water, and causing it to present a very peculiar appearance. We tried all sorts of plans to take some, but failed. A number of bottlenoses—"Balæna-Rostrata"—accompanied them, and seemed to be more successful. In the evening a gale came on, and blew with great violence from N. E., which drove the ship at the rate of nine knots, with a close-reefed fore-topsail.

20th.—The gale continues with less violence. In the evening a man on deck declared he saw land, and was heartily laughed at for the idea. A few hours later, however, the weather cleared up, and discovered us close in to Trinity Island, at Jan Mayen, from which we supposed ourselves to be far distant. A very few hours' continuance of the foggy weather would have reduced the *Trafalgar* to the condition of the *Rover*, of Bristol, whose remains we saw a week ago. The ship was immediately close-hauled, and stood to the eastward, giving Jan Mayen what the seamen call "a wide berth."

29th.—We got among great quantities of sea-weeds, herbage, star-fish, &c., indicating our vicinity to land. The nights now are an hour and a-half long.

30th.—Calm. Surrounded for the first time by numbers of large dark-coloured birds, called boatswains by the sailors, from two long, stiff, and sharp-pointed feathers, which form the tail, and give the resemblance to a marlin-spike. They seem to be regular pirates. They do not fish for themselves; but when they perceive any other bird with a fish, they pursue, and do not cease tormenting it until it drops the fish, which they generally secure before it drops into the water.

From this time until our arrival in Shetland, on the 7th August, the *Trafulgar* was generally in soundings, and I

caught abundance of mackerel, coal-fish, cod, and ling. Our stay in Brassa Sound was merely long enough to enable the agent to pay off our Shetland-men. We then proceeded to Hull, where we arrived on the 21st of August, without any particular occurrence.

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