IV.

NOTICES—(1) OF AN ANCIENT CANOE, FOUND IN THE RIVER TAY, NEAR ERROL; (2) A GRINDING-STONE, FOUND ON THE SIDLAW HILLS; (3) A BEGGAR'S BADGE, OF SIXTEENTH CENTURY, FOUND IN DUNDEE; AND (4) A SPEAR-HEAD OF FLINT, FOUND IN THE CARCASS OF A WHALE,—BEING RECENT ADDITIONS TO THE DUNDEE MUSEUM. BY ALEXANDER HUTCHESON, F.S.A. SCOT.

Amongst recent additions to Dundee museum are four rather interesting objects, which I have thought worthy of description, seeing that they possess more than a local interest.

The first in point of importance is a fine example of a native canoe, which was found embedded in a sand-bank in the river Tay on 11th July 1895. I had early notice of the discovery from Dr Anderson, who, in a letter conveying the intimation, suggested that an effort should be made to preserve the canoe in the museum in Dundee, as the National Museum had already several specimens. Thus fortified, I lost no time in communicating with the authorities of Dundee museum; and having received their sanction to take what steps might be necessary to secure the canoe for Dundee, if on examination it was found to be susceptible of preservation, I proceeded to Newburgh, whence the canoe had been removed by the tacksman of the fishings where it had been discovered. I further learned, to my great satisfaction, that the canoe had been claimed by Sir Wm. Ogilvy Dalgleish of Errol Park, as having been found on his property, and that he intended to present it to the museum in Dundee,—a communication which happily rendered further negotiations with that view on my part unnecessary. presentation was in due time made by Sir Wm. Dalgleish, and the canoe has been well placed in the museum by the curator, Mr John MacLauchlan, who from the first took the greatest interest in the discovery.

The following particulars of the discovery may be given.

The canoe was found sanded up in what is known as the Habbie-bank, some 250 yards from the shore, and, as I was informed, very

near to where a similar canoe, but not in such good preservation, was found some six years previously. The present canoe was at first supposed to be the trunk of a tree, which some shifting of the sand had laid bare; and as it interfered with the free use of the salmon-nets, the tacksman determined on having the obstacle removed. To effect this, it was necessary to select the ebb of a stream-tide. On clearing away the sand from the supposed tree, the men discovered that it showed the outlines of a boat, and every care was used to raise the vessel without damage. It is, however, to be regretted that when the bottom was



Fig. 1. Canoe, found in the Tay near Errol (29 feet in length).

reached more care was not taken in the examination of the contents, since relics of some kind might have been met with.¹ When released from its bed the canoe was found to be too much water-logged to float. Accordingly, an iron rod was driven through the bottom and bent so as to give a hold, and by this means it was dragged through the water to the pier at Newburgh, and, by means of the crane there, was successfully lifted on to the pier; and here I saw it on the occasion of my visit on 15th July, and carefully measured it.

The canoe (fig. 1) is cut out of a single oak tree. Its dimensions are length 29 feet 2 inches, width at the stern 4 feet 3 inches, from which it gradually diminishes to a width of 3 feet 2 inches at about 6 feet from the stem, whence it curves forward to a well made cut-water, and upward in the manner of a surf boat, to form a very shapely prow, having in the centre at the top a roughly semicircular hollow, as if for the reception of some projecting piece of wood,—not improbably some sort

¹ A beautifully finished stone celt, measuring 5½ inches in length by 3½ inches in greatest breadth, is said to have been found lying within an ancient cance which was discovered in 1780 when workmen were digging the foundation of Old St Enoch's Church, Glasgow. Wilson's *Prehistoric Annals*, vol. i. p. 53.

of figurehead, of which more afterwards. The prow or cut-water itself bears a rude but forcible resemblance to the head of an animal.

The sides of the canoe—of which one is almost complete, the other only for about two-thirds of its length—rise about 21 inches in height above the bottom, measured in the inside, and are almost perpendicular, which has the effect of giving an almost level bottom, much as in a The bottom measures in thickness from 6 to 7 inches, salmon coble. The stern-board, as usual in and the sides average about 4 inches. canoes of this description, has been formed of a separate piece or pieces of wood placed vertically in a groove formed in the sides and bottom, and, judging from the width of the groove, the stern-board, which was not recovered, must have been about 3½ inches in thickness, and, as in other examples, had been placed forward, in this case about 10 inches from the extreme end of the tree, which was then left projecting behind the stern-board. This was doubtless a device rendered necessary by the form of check for the stern-board, but the projection may have been otherwise useful in stepping on board after pushing off from the shore a contrivance for such a purpose not existing, so far as I know, in any modern boat.

There are few tool-marks anywhere visible, unless along the edges of the check for the stern-board, if the irregularities of width in this check are to be so regarded. In any case, these irregularities suggest either that the workmen did not have his tool under proper command, or did not regard right lines as of consequence in his work, as a modern carpenter would do. If, as commonly supposed, these boats formed from a single tree-trunk were partly hollowed out by the action of fire, great care must, however, have been taken not to allow the fire to proceed too far at a time, so as to secure, when the charred surfaces were scraped down, a uniformity of thickness in the sides and bottom of the vessel. No evidence of charring could anywhere be detected, but certainty may not be attainable on this point, since the surface of the wood everywhere, probably from having been so long under water, exhibited a slightly brittle texture,—a feature which, however, was apparent on the outside as well as on the inside of the boat.

There is no indication of any step for fixing a mast, the presumption

being that propulsion was effected by paddles. At a distance of 7 feet 4 inches forward from the inside of the check for the stern-board, there is an indentation in one side of the canoe (a portion of the other side being awanting at this point) such as would be produced by slightly hollowing out the wood, so that, as it would seem, a cross-piece of wood might be tightly jammed in. And across the bottom there is here a very shallow depression, which shows signs of having been cut, and not worn, as if a thinner board had been fixed across at that place.

At 3 feet 7 inches forward from this exist a similar pair of indentations in the sides, but no corresponding depression across the bottom. The indentations or hollows in the sides are doubtless evidence that at these points seats, or blocks of wood which may have served as seats, had been placed. These indentations begin close to the bottom, and rise only some 6 or 7 inches; and assuming that the supposed seats rose no higher, it would appear not unreasonable to suppose that the seats may have been merely blocks of wood, measuring 6 to 8 inches square or round, placed close to the bottom of the canoe, and fixed in place by the simple method of jamming them tightly in between the sides of the boat, being kept in position by the shallow depressions aforesaid.

Such blocks of wood, tightly jammed across, may, however, have served another purpose. It has been supposed that the makers of these early boats managed to increase their width beyond that which the natural diameter of the tree employed would seem to warrant, by pressing out the sides of the green wood by mechanical means after the heart had been scooped out, and the tree opened up to the boat form. The readiest means for this would be by pieces of wood jammed across from side to side, gradually increasing the length of the pieces as the sides yielded to the pressure.

Whether the evidences of jamming in the Dundee canoe lend any support to the above theory must be a matter for consideration. Such cross-blocks of wood may have served the double purpose of at first widening the boat, and afterwards serving as seats.

¹ A double-bladed oak paddle, as also an oar, were found alongside a canoe in a crannog at Lochlee; and other instances have been recorded. See *Proc.*, vol. xiii. p. 226.

Many canoes of this description have, from time to time, been discovered in various parts of Scotland.

The most remarkable of these discoveries have been made on the Clyde, in the neighbourhood of Glasgow. Of these, eighteen are recorded as having been discovered previous to 1856. What is said to have been by far the largest of the Clyde valley canoes measured 29 feet in length, 5 feet across the stern, with a depth there of 3 feet 4 inches, and in the centre of about 26 inches. Indentations in the sides showed that provision had been made for four seats for the rowers. In the canoe which was found in a crannog in Lochlee, a series of small round holes, placed in rows, may have indicated a method of fixing seats. Indeed, it is difficult to think of any other purpose which these holes could have served.

From the above notice it will be seen that the canoe at Dundee, although not so deep, is longer than the largest specimen found at the Clyde. There is probably not now to be found growing in Britain an oak tree which would supply such another; but large as this specimen is, it has been exceeded in size by other recorded examples. Probably the largest canoe ever found in Britain is preserved in the museum of the Royal Irish Academy in Dublin. It is formed of a single oak tree, and measures 42 feet in length, but is surmised to have measured 45 feet in its complete condition. It was found in the bottom of Loch Owel, in Westmeath, and was cut into eight sections for convenience of transport. There exists in the bottom of it a curious arrangement of apertures, which seem to indicate the attachment of uprights for supporting an elevated deck.²

Perhaps the most remarkable canoe ever discovered in Scotland was in 1874, found in Loch Lotus, in Kirkeudbrightshire. It measured 45 feet in length, and was hollowed out of a single oak tree, but in this

¹ For detailed description of the canoes found in the Clyde basin, see Views and Notices of Glasgow in Former Times, by Robt. Stuart, 1 vol. 4to, Edin., 1848; Ancient Sea Margins, by Robt. Chambers; The Edinburgh Antiquarian Magazine, 1848, p. 168; Buchanan's Glasgow: Past and Present, vol. iii. p. 555; Scottish National Memorials, Glasgow, 1890, p. 14; and various notices in the Proc. S. A. Scot.

² Munro's Ancient Lake Dwellings, p. 9.

length is included a remarkable prolongation of the prow into the neck and head of an animal resembling a horse.

In the head of the figure is a circular hole 5 inches diameter, extending from side to side, as if to indicate eyes. The breadth at the stern was 5 feet. At the prow a small flight of steps has been carved in the solid oak, from the bottom to the top of the prow. The stem is square, and formed of a separate piece of wood, inserted in a groove, about $1\frac{1}{2}$ inches from the extremity of the canoe. There were other features of interest in this canoe.

Examples of the paddles used have been found, as in the Lochlee crannog, where a double-bladed paddle was found, measuring 4 feet 8 inches long and $5\frac{1}{2}$ inches broad. A large oar and portion of another was found in the same crannog. In a crannog at Friars Carse Hermitage, Dumfries, where a dug-out canoe was discovered, a neatly formed paddle was found. Its length was 3 feet 10 inches, the blade taking up 1 foot 6 inches by 5 inches broad. In another instance the blade of an oar was found to be 9 inches broad.

I have referred to the animal's head carved on the prow of the canoe found in Loch Lotus, and to the probability of a similar figurehead having adorned the Dundee specimen. Since that specimen was added to the Dundee museum, an interesting letter appeared in the Dundee Evening Telegraph,⁴ describing a canoe which was discovered in a loch at Kinnordy, Forfarshire, some sixty years ago, and which, so far as I can learn, has never hitherto been noticed. This canoe, it appears, bears on the prow a rude representation of a boar's head.

The following particulars are extracted from the letter in question.⁵

"The canoe is still to be seen in a building, surrounded by a tower, in the south-east corner of the garden of Kinnordy, but has been removed from the basement to the upper storey by Sir Leonard Lyell, the present proprietor, for greater preservation. The measurements of the canoe are—length 14 feet 6 inches, breadth 3 feet, depth 18 inches.

"The circumference of the black oak tree, from which it is made, must have

¹ I have been informed that the native boats in Burmah have the prow formed into an animal's head, and have large eyes painted on, with which the natives believe the boat is enabled to see its way when in motion.

² Pro., vol. xi. p. 21.

³ Munro, pp. 156, 210. ⁴ Of August 19, 1895.

⁵ By the kind permission of Mr W. T. L. Hutcheson, manager, Dundee Advertiser.

been about 7 feet 10 inches. A rude representation of a boar's head still adorns the bow. It is in a remarkably good state of preservation. It was found about the beginning of the present century in the Loch of Kinnordy, embedded in the marl, some 9 or 10 feet deep, by the side of the island, a hillock or eminence near the east end of the loch, but probably the middle of the loch in primitive times before the loch was drained. The discovery was made by workmen digging for marl, which was then a favourite manure for agricultural purposes, now fallen into disuse in this district. From its submerged condition it was removed to the museum beneath the tower in Kinnordy garden by the father of Sir Charles Lyell, a gentleman deeply interested in geological research, where it has since remained. There was also a thunderbolt axe found inside the canoe, which since then has inadvertently been lost. In addition to the canoe, there has also been found the heads of two animals of the deer species, the one bearing 18 points and the other 24, besides two heads of the great ox, one of which is in a better state of preservation than the other, and still contains the teeth in the upper jaw."

From this account it is seen that the canoe found at Kinnordy had the prow shaped into a resemblance to a boar's head. The 'thunder-bolt axe' found in it may have been a stone axe, which are sometimes called 'thunderbolts' by the country people.

In the Loch of Dowalton, in Wigtownshire, in 1863, a canoe was found, measuring 21 feet long, 3 feet 10 inches wide at the stern, of oak, hollowed out of a single tree. The stern was closed by a board sliding in a groove cut in both sides of the canoe, and secured by a thicker piece, 3 inches in height, pegged down over it by way of a cope. A wash-board, projecting slightly over the edge, and pegged into the upper margin of the canoe, ran all round the sides. There were two thole-pins inserted in square holes in each side, and one of the thwarts remained in position. These features of construction probably indicate the highest point attained in the formation and fitting of canoes It does not appear that any of these hollowed out of a single tree. special features had characterised the Dundee specimen, which may rather be regarded as of the earlier and simpler type, having neither thwarts nor thole-pins nor step for mast. If the indentation in the sides near the bottom of the boat indicates the presence there of anything in the nature of a seat, it must have been of the most rudimentary description.

¹ Scot. in Pagan Times: The Iron Age, p. 265.

It is interesting to find in these ancient boats evidences of the superstition which in later times ascribed protective influences to The canoe found in Loch Lotus had the likeness of certain animals. a horse's head carved upon it. The horse was regarded as a sacred animal by the Norsemen, who sometimes attached the skull of a horse to the prows of their vessels. The old Danish boats were termed 'snekkjur,' because they were carved at the prow into the form of a serpent or dragon's head. The Kinnordy canoe, like that at Dundee, seems to have been shaped at the bow into a resemblance to an animal's head, supposed in the former case to have been a boar, and this also was a sacred animal amongst Northern nations. The Anglo-Saxons placed the figure of a boar in their helmets to prevent the wearer from being wounded by any weapon: hence of Beowulf's helmet we are told, "In olden times the armourer had made it, and wondrously adorned it with figures of swine, so that no sword could cut into it." 1

In the Assyrian sculptures at Khorsabad and elsewhere, almost every boat represented bears the figure of the head of a horse or of a lion at the prow. The sculptures of Egypt also represent their boats with the head of a lion or of the lotus, the sacred plant of the country.

The modern figureheads of ships are but the survival of these early forms, which were doubtless due originally to a superstitious idea that protection would be thereby secured against malevolent spirits. An Icelandic law forbade a vessel coming within sight of the island without first removing its figurehead, lest it should frighten away the guardian spirits of the land,²—an interesting reference to movable figureheads. It is not improbable that the hollow in the bow of the Dundee canoe may have been for one of these.

- (2) Grinding or Sharpening Stone from the Sidlaw Hills.—The next article to be noticed is a grinding or sharpening stone, of peculiar characteristics.
- ¹ A bronze helmet, probably Etruscan, found at Vulci, and preserved in the British Museum, bears on the sides two boars in outline. An engraving of it is given in Kemble's *Horæ Ferales*, p. 169.

² Strange Survivals, by S. Baring-Gould, London, 1892

It is a block of sandstone, measuring 1 foot 10 inches long, 12 inches

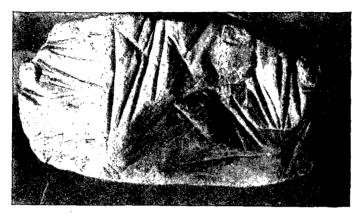


Fig. 2. Sharpening-Stone from the Sidlaws, front view. (1.)

broad, and from 6 to 7 inches in thickness, but rough and irregular in outline. It is thickly scored across in all directions, on both sides and



Fig. 3. Sharpening-Stone from the Sidlaws, back view. $(\frac{1}{v})$

on all the edges, with cuts or scores, evidently made without intention vol. xxxI.

at regularity, and presumably in the process of sharpening and grinding the edges of some sort of implement. The stone was found on the Sidlaw Hills, some 6 miles north from Dundee, by Mr J. Wilkie, a member of the Dundee Working-Men's Field-Club, and by him exhibited to the club, who were divided in opinion, some thinking it an ice-marked stone, others that the marks represented some sort of writ-Information of the discovery was sent to Dr Christison, Secretary of the Society, who recommended them to show the stone to me. Recognising its peculiarities, I suggested that the stone might be placed on view in the Dundee museum, in the hope that some light might be There seems to be no room for supposing the thereby cast upon it. stone to be other than a sharpening-stone, and at first sight I thought it might be one of those stones upon which masons and quarriers are in the habit of rubbing up the edges of their iron chisels. scruting it was seen that the scores were altogether different from these made by masons or quarriers.

They are of all depths and lengths, from the merest scratch up to about 1 inch in depth, and one such score or groove is 9 inches in The scores cross or run into each other at all angles. method is discernible in their arrangement. The grooves are V-shaped, but do not run down to a sharp bottom, indicating that, by whatever implement the grooves were made, it was not such a sharp-edged tool as a knife or a chisel. This was the opinion I had come to; but being desirous of having the opinion of a practical builder upon this point, I asked Mr Alexander Robertson, Downfield, to examine the stone, and report to me what he thought of it, at the same time asking whether he thought it might be a mason's sharpening-stone. Mr Robertson's reply contained the following:-"The question you asked me had my attention, and I may here say it is a likely enough stone for what we call a mason's grozing-stone; and I have seen some of them, after they had been used for a long time, having the appearance at first sight of carving; and I may say that I have been attracted by the appearance of them many a time, and have wondered how such things came by chance; but I am almost certain this stone, although adapted for a grozing-stone, has never been used as such. There is a certain amount of regularity about the cutting of the grooves which I cannot remember ever having seen on a grozing-stone."

Mr Robertson's conclusions, in one sense, are exactly what I expected. He does not think it is a mason's sharpening-stone. It is like one; but Mr Robertson recognises a difference, and thinks the stone may be the work of herd-boys 1 working with a knife or an old chisel. I have, however, anticipated and answered the 'knife and old chisel' theory by pointing out that the grooves are not sharp in the bottom, even when inch deep. But such stones are not unknown to antiquaries. account of the exploration of a crannog at Lochlee, mention is made of a large block of coarse sandstone, having one side covered with deep ruts, supposed to be caused by the sharpening of pointed instruments.¹ Sir John Evans says: "Both slabs and prismatic pieces of sandstone have been found in the Swiss lake dwellings, several of the former with concavities on one or both faces, resulting from the stone hatchets having been ground upon them." More to the point is the 'Stone of the Arrows,' near Aber, Carnarvonshire, which has numerous scorings upon it, $\frac{1}{4}$ or $\frac{1}{2}$ inch deep. Canon Greenwell discovered on a rock in Cumberland about seventy grooves, from 4 to 7 inches in length and about 1 inch wide and deep, pointed at either end, as if from sharpended tools and weapons having been ground in them. The grooves run in various directions, though sometimes in groups of four or five together, which are parallel to each other.2 The Dundee stone exhibits one or two evidences of the grinding process resulting in the formation of concavities, which is another point of resemblance to those ancient examples; and on one of its edges exists what may be regarded as evidence of yet another process, in a hollow or cup rudely picked in the edges and bottom, as if formed in the act of some chipping process.

There is, however, a possible other and more recent source for this stone. For many years past, and perhaps for generations, the Sidlaw Hills have been the resort of bands of itinerant tinkers, who have there made and mended their tin and other metal and horn wares, and for the

¹ Proc. Soc. of Antiq., vol. xiii. p. 207.

² Evans' Stone Implements, pp. 235-6.

sharpening of their tools such a stone as this would be useful and necessary.

Whether, however, this stone be only a tinker's sharpening-stone, or referable to a more remote time, there seems to be at present no sufficient grounds for determining. In any case it seems to be attributable to the metallic ages.

(3) Dundee Beggar's Badge of 16th Century.—It is possible to fix, for



Fig. 4. Beggar's Badge, Dundee. (1.)

the next object to be noticed, a definite period, since it bears a date, and being a very interesting and early example of a beggar's badge.

It is of exceptional interest, as being probably the oldest dated Scottish example yet recorded. It was found about two years ago by a labourer, while engaged at the removal of an old house which stood in King Street, Dundee. No house in that street could, however, be assigned to so early a date as the badge bears, and there is no evidence to show how the badge came to be where it was found.

The badge is of lead, and measures about $2\frac{1}{4}$ inches in diameter by about $\frac{1}{4}$ inch in thickness.

It is plain on the back, but bears in relief on the front, within a raised rim, the town's motto—**GEI GONVm**—the initial letters reversed, and beneath is the date '1549,' and in an inner circle, also in relief, the arms of Dundee, namely, azure, a pot of three lilies argent, supporters two dragons, scaled, wings dependent, with their tails rolled below, vert, over the arms a scroll bearing the motto *Prudentia et Candore*. In the badge this scroll is blank, and probably was always so, as it seems to be too small for a motto.

The date is somewhat indistinct, either from the badge having here received an injury, or from having been originally defective in the casting. The two first figures are quite distinct, the upper part of the 4 is also distinctly visible, and the circle part of the 9 is placed too high to suit any other figure. The 5 is undoubtedly of 16th century form, and is a convincing argument in favour of the authenticity of the badge. The usual loop of attachment to the clothes of the wearer is at the top.

In general appearance the badge resembles other specimens that have The practice of giving badges to those poor persons who been recorded. were authorised to solicit aid from the charitable is of considerable The practice was probably introduced into Scotland from continental cities. In the city of Valencia, in Spain, a writer mentions that in 1393 no poor persons were allowed to beg unless they were attached to their neck a leaden badge, stamped with the arms of the Many enactments occur in the Acts of Parliament of Scotland dealing with the multitude of 'maisterfull and strang beggers' who overran the country, thronging all the highways of the kingdom, before the establishment of a poor law. So much was it felt to be a grievance that in 1424 an Act was passed which permitted sick and impotent persons who were unable to earn a livelihood to beg, and enacted that they should have a badge by way of licence. Municipal enactments were also passed by the various towns and burghs. In January 1558 the town council of Dundee enacted that "no beggars be tholet within this burgh but quhilk are born within the same, and nane of them be suffered to beg except they (having the town's seal upon their hat or cloak) be auld, cruikit, laim, or debilitatit be great seiknes." But the date on the present badge shows that, at least nine years prior to this enactment, a badge having 'the town's seal' was in use. For interesting notices of such badges and of their history, see a paper by J. Balfour Paul, F.S.A. Scot., in the *Proceedings*, vol. xxi. p. 169, where several badges are figured; also the *Scottish National Memorials*, volume 'Glasgow,' 1890, pp. 202, 244, 255-6. By the courtesy of Mr John MacLauchlan, curator of Dundee museum, I am enabled to present a cast of the badge to the Society.

Besides the towns named, the following towns and parishes may be mentioned for which badges are known to exist, with, so far as they have been examined, the legends upon them, given within quotation marks: 'Forfar,' 'Rothesay Parish 1827,' 'Comrie Parish 1778,' 'Keith,' another of same parish bears 'Keith Pauper Badge,' two others unnamed are marked respectively 'B. B.' and 'C. C.', 'Eglsgrig Parish 1773'; and in the latter, it is interesting to note that the letter S twice repeated in the name is in both instances reversed, these resembling the inscription on the Dundee badge, where letters are also reversed. I am indebted to Dr Cramond, F.S.A. Scot., Cullen, for drawing my attention to a peculiar, perhaps unique, specimen of badge from Grange, Banffshire. It is of cardboard, and exemplifies the economical ways of canny folks of the North of Scotland. The card measures $4\frac{1}{2}$ inches in height by $3\frac{1}{3}$ inches wide, and bears the printed words—

"PERMIT

To beg through the Parish of Grange."

Although blank as to beggar's name, the card is signed at the foot "J. M. Innes, Heritor,"—the signature of Sir John Innes of Edingight (supposed date 1840).

Other badges extant are Boharm, St Andrews, Trinitygask, Coupar-Angus, Montrose, etc.

An entry in the treasurer's books for Montrose, 1775, is as follows:—
"To 72 badges for the begging poor, at 4d. a piece, £1, 4s.
"To a brass mould for easting them, 10s. 6d."

I understand this mould is now preserved in the Montrose museum.

(4) Spear-head of Chert, found in the Carcass of a Whale at Coutt's Inlet, Davis Straits.—The last article to be noticed is a flint spear-head,

which owes much of the interest attaching to it to the place of its discovery,—an interest which in this respect may be said to be unique.

While the Dundee whaling 'Eclipse,' commanded by Captain Milne, was fishing in Coutt's Inlet, Davis Straits, a large whale was harpooned and killed. While the animal was in process of dissection, one of the knives came in contact with some hard substance, betokening the presence of some foreign body, which proved to be the lance-head of chert, embedded in the blubber at a depth of about 3 inches from the surface. It measures $3\frac{13}{16}$ inches long, $2\frac{5}{16}$ inches greatest breadth of blade, $1\frac{1}{16}$ inches greatest width of haft, and in thickness about half an inch. It is well made, one side, however, being flatter than the other, in

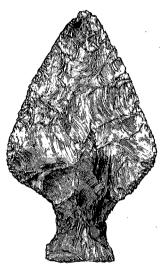


Fig. 5. Spear- or Harpoon-head of chert, from Coutt's Inlet, Davis Straits, found in the carcass of a whale. (2/3.)

consequence of a difficulty in the flaking, which caused a protuberance in the middle of one side.

The form of the spear-head is leaf-shaped, but with a stem, and without barbs.

The base of the stem exhibits a slight swelling, with a flattened helve, which may have been intended to give a butt to the wooden shaft, and at same time act as a better means of securing it thereto. But the butt

method of mounting spear and arrow-heads, so as to secure, in propulsion, greater force of penetration, was well known in ancient times. This has been exemplified in the instances cited by Professor Nilsson in his work, The Primitive Inhabitants of Scandinavia. He says: "An even straight surface of the spear (head) resting against an even straight surface of the haft (shaft) gives the greatest possible strength to the latter to impel forward the former. In the same way, the stone chisels of modern savages are helved, and so were evidently the ancient chisels in old times."

The form of the implement is that of the ancient tokang or harpoonhead of the Eskimo tribes of North-Eastern America. A similar, but not quite identical, form was used for whale lances by the Eskimo of the western coast round Point Barrow, but neither on the north-eastern nor on the north-western coasts are they now in use. An example almost identical with the Dundee specimen is figured in the Annual Report of the Bureau of Ethnology for 1884-5 (Smithsonian Institution), page 491, as an ancient tokang or harpoon-head, now in A. Sturges's collection, New York. It is still attached to the ivory part of the head of the weapon by thongs.

None of the living authorities consulted know of such flint weapons having been used by the Eskimo, who in the present day use spears and harpoons made of or tipped with bone. Flint arrow-heads are occasionally procured from the natives, who, however, regard them as curiosities. The theory of Captain Milne was, that as the Eskimo only attack young whales, there is every probability that this harpoonhead had found a resting-place in the blubber of the whale when young, and during a long lifetime had bothered it less than a 'skelbe' would trouble a human being.

This theory seems likely enough to be true, and it does not render it necessary to go very far back for a period when spear-heads and implements of flint may have been in use among the natives of Greenland. At the same time, the animal in which the spear-head was found was what is known as an 'old mother-whale'; and if, as Captain Milne supposes, the injury was received when the creature was young, it is not

¹ English translation, third edit., London, 1868, p. 172.

improbable that the weapon may have lain embedded in a non-vital part for more than a hundred or even two hundred years. Dr Carpenter, in his work, Longevity in Animals, calculates the age attained by such huge mammals at two hundred to three hundred years. The spear-head is the property of Mr John Mitchell, who has kindly consented to its exhibition to members of the Society.