NOTICE OF A BURIAL PLACE OF THE BRONZE AGE AT BARNHILL, NEAR BROUGHTY FERRY. BY ALEXANDER HUTCHESON, F.S.A. Scot.

At a distance of about a mile and a quarter eastward along the riverside from Broughty Ferry extends a tract of sandy muirland, which, where not encroached upon by the feuing operations in connection with the recent suburb of Barnhill, is still covered with whins and broom. Here, 50 feet above the sea-level and at a distance northwards from the tide margin of some 200 yards, a most interesting series of discoveries of early burials have from time to time been made in recent years. It has been thought desirable to gather into one account all that can now be learned regarding these discoveries, and this paper is an attempt to do so.

The first recorded discovery was made in March 1875, when a new road was being opened up northwards from the public road leading between Broughty Ferry and Monifieth.

In the formation of this road it became necessary to cut into the surface of the muir to a depth of about 6 feet, through stratified sand and gravel, and in this operation the first of the cists were discovered. To render clear the sequence of the discoveries as well as the relative positions of the cists, I have prepared a sketch plan (see fig. 1), on which the cists are numbered in the order of discovery. Cists Nos. 1, 2, and 3 were demolished by the workmen. Shortly after the discovery of cist No. 3, the fact came to the knowledge of Mr James Dickson, contractor for the work, and he having heard that some articles had been found in the cists and carried away by the workmen, threatened the suspected persons with dismissal if the articles were not returned, with the result that an

urn and arrow-head of flint were brought back, with the statement that they were found in cist No. 3. This urn was subsequently deposited on loan in the Dundee Museum, but the arrow-head was handed to a local antiquary, who has since lost it. Attention having thus been directed to the discoveries, a close watch was kept, and cist No. 4 was uncovered.

Care was now taken to have a thorough investigation made, and a number of gentlemen qualified to assist were invited to be present at the opening of the cist. This was done on the 17th March 1875, in presence of the late Col. Guthrie, the late Mr Andrew Jervise, Messrs James MacLaren, architect, Dundee; A. J. Warden, F.S.A. Scot.; John Sturrock, F.S.A. Scot., and others. These discoveries were recorded at length in the local newspapers, and subsequently communicated to the Society in a paper by Mr A. J. Warden on June 14th of same year, and published in the *Proceedings* of the Society for that year.

It is not necessary to recapitulate the information conveyed in Mr Warden's communication; I merely remark, to make the description which follows tally with his, that the cist described by him as the "third," and which seems to have been a child's burial, was in reality the fifth in order of discovery, and is so numbered on the accompanying plan (fig. 1). The most interesting of the discoveries recorded by Mr Warden was undoubtedly the cist No. 4. Of this cist very interesting photographs were made at the cost of the Society. examination of these and of the remains now preserved in the Dundee Museum prove, that Mr Warden had fallen into a strange error in describing the skeleton as "lying upon its left side with face to the north." The photographs are undoubtedly taken from the south side looking northwards. The skull is distinctly visible at the west end of the cist, and the larger photo shows the left orbital hollow lying uppermost and turned towards the spectator, the right orbit being buried in the sand. The left arm, with the forearm doubled up towards the chin, lies uppermost, the radius and ulna being both preserved. right arm had been underneath the body and lay straight down, the forearm being underneath the thighs, the upper part of the ulna for about one-third of its length being distinctly visible until it passes underneath the thigh bones. The legs were doubled up, the left leg overlying the right, and a part of the tarsus or larger bony structure of the left foot being still in position at the base of the leg bone. In regard to the tying of the forearm and thigh bones referred to by Mr Warden, I understand a portion of one of the arm bones, with some of the

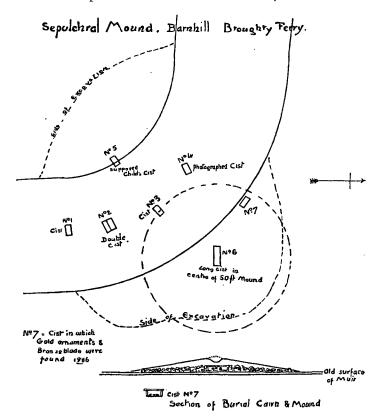


Fig. 1.

supposed cord or woven material, was sent to Edinburgh, and returned with the statement that what had been supposed to be cloth or cord was nothing more than matted rootlets of plants which had made their way into the cist. The skull is well preserved. The lower jaw is gone, but the teeth are in good preservation, and as usual worn down very smooth and flat in the crowns.

Returning to the photographs; in that one which represents the cist on the smaller scale, the side of the mound will be seen on the right hand, while at the base of it lies a quantity of stones from the cairn to be afterwards described. The stratification of the sand is well exhibited in these photos. The larger scale photograph is most interesting, and perhaps unique, as it represents the contents of the cist lying undisturbed as when first presented to view. The skull, with the arm and leg bones angled to suit the crouched-up posture of the body when



Fig. 2. Urn found in Cist No. 4, Barnhill.

interred, are all plainly visible; while the enclosing slabs exhibit the usual encrustation of lime due to the decay of the bones, that on the side slab exhibiting the very outline of the body.

The urn found in cist No. 3 is quite devoid of ornament, is $5\frac{1}{4}$ inches high, $2\frac{1}{2}$ inches across the base, and $5\frac{1}{2}$ inches across the lips, which are $\frac{1}{2}$ inch thick; but in its bulging sides and everted lips evinces that it belongs to one of the forms typical of the Bronze Age, and closely resembles two plain urns, one of rude type, having the same characteristics of form, found with gold ornaments near Duff House, Banffshire, described and figured in the *Proceedings*, vol. xvii. p. 445, the other found

in a cist near Turriff, Aberdeenshire (*Proceedings*, vol. x. p. 740). The ornamented urn found in cist No. 4 (fig. 2) measures 5 inches high and 6 inches across the lips, is squat, bowl-shaped, wide-mouthed, and tapers to a narrow base which is only 2 inches across. The lips are thin in the apex, but thicker below by means of a descending cavetto on both edges, to form a projecting rim externally and internally, whence in the latter a smooth and regular curve runs to the bottom; but on the exterior there are several projecting rings, all highly ornamented with zigzags and notches, and a triple row of zigzags runs round the inside lip. This urn closely resembles one found in a cist at Kingsbarns Law, Crail, now preserved in the Museum (*Proceedings*, vol. x. p. 224).

A bronze blade on loan in the Dundee Museum, and now exhibited to the members, was found in one of the cists opened in 1875, but which one cannot now be ascertained. It is of the same character as those thin triangular bronze blades which have been found occasionally associated with such interments. This is only a fragment, but it exhibits one of the rivet-holes, by means of which presumably these blades were attached to a handle.

In reference to the long coffin or cist which occupied the centre of the cairn, Mr John Sturrock, F.S.A. Scot., who was present when it was opened, informs me that it lay east and west, or contrary to the others, which were mostly north and south, and that the skull lay at the east end; one or two fragments (now in Mr Sturrock's possession) of an urn of rude type and coarse clay, with zigzag markings, occupied the space at the right side of the skull.

The most interesting discovery of all was made on 4th August last year. On that day a workman in the employment of Mr J. G. Paton, The Wild, Broughty Ferry, while engaged removing gravel from the mound, discovered a cist of considerable dimensions. This workman stated that before reaching the cist he had to remove three or four cart-loads of large rough stones, doubtless a part of the cairn after-mentioned. On perceiving the cist and before opening it, he went and told Mr Paton of the discovery, who lost no time in having the cist opened. It is much to be regretted, before doing so, he did not secure the assistance of some persons skilled in such explorations, as features of interest

likely to elude the ordinary observer might have been discovered; as it is, we must now take the circumstances as they have been made public. The top stone was of such size and weight that in order to get it removed it was broken by the workmen, one of the pieces falling into the cist, and thus effectually disposing at the very outset of any possibility of making a careful examination of the contents. No wonder

after this that a paragraph in the local newspaper stated that "inside there was a quantity of dust and a number of fragments of what was supposed to have been the skull." There were, however, recovered from the cist three objects of very great interest,—a small blade of bronze (fig. 3) and two gold discs. These most interesting articles were handed over by Mr Paton to Lord Dalhousie, on whose property the mound was situated, and were by the courtesy of his Lordship finally deposited in the Society's Before referring further to these Museum. valuable relics, I may be allowed now to speak from personal knowledge as to the cist. information of the discovery had been sent to me, but unfortunately I was from home, and only visited the scene of the discovery two days afterwards.

By that time it had been visited by numbers of people, who had trodden down the surrounding ground and excavated materials. The sides of the cist, however, still remained in position, and although slightly fallen in, furnished the following dimensions:—It lay at a depth of about 6 feet below the original surface of the ground, with its longer axis in the direction of N



Fig. 3. Bronze Blade from Cist at Barnhill (actual size).

ground, with its longer axis in the direction of N.W. and S.E.; the former end was 18 inches wide, the latter 2 feet 2 inches, the side towards the north 3 feet 7 inches long, while the southern measured 4 feet 3 inches and about 2 feet in depth, all internal sizes. The stones were all rough VOL. XXI.

unhewn slabs, 3 to 4 inches thick; the one at S.E. end, which was a piece of bluish pavement, seemed to have been roughly squared to fit into its place. The floor of the cist, so far as could be learned, had been paved or laid with selected pebbles of gravel. The top or covering slab was 5 or 6 inches thick, and when entire was about 6 feet by 4 feet. was much honeycombed in one side, as if by the action of water hollowing out the softer parts, and had probably been brought from the neighbouring sea-shore. The stones had been all closely jointed with a fine brownish clay, which when I visited the spot still closely adhered to the edges of the stones. Similar methods of jointing, although rare, have been previously noticed. Dr Stuart, in the preface to the Sculptured Stones, vol. ii. p. 54, thus describes a cist of the Bronze Age of almost similar dimensions and characteristics, examined by him at Linlathen, in same parish, in 1864:—"It was formed of great slabs of sandstone much honeycombed by the action of water. The bottom of the cist was paved with small water-worn pebbles, and the top was covered by an enormous slab of freestone, also honeycombed, measuring about 7 feet by $4\frac{1}{2}$ in breadth. The joints of the slabs forming the cist were closed with clay, on which the marks of the thumbs which had pressed it remained. In the cist an urn and bronze dagger were found" (see Proceedings, vol. xii. p. 449). From the preceding extract the close similarity between the Cairn Greg and the latest Barnhill cist will be apparent.

To return now to the articles found in the cist. Dr Anderson has furnished the following description and notes regarding them:—

The relics consist of a small blade of bronze and a pair of circular discs of beaten gold, somewhat resembling the tops of large buttons. The blade of bronze is of the well-known thin triangular shape peculiar to the knife-dagger blade of the early Bronze Age. It is so thin and so brittle by reason of the decay of the metal that the edges have been all frayed away, partly by contact with the gravel in the cist, and partly by the handling it has sustained since it was found. The butt end still bears the mark of the handle of wood in some specimens, but in this one the part which has been embedded in the handle is gone. The pair of gold discs (fig. 4), which are slightly larger than penny-pieces, weigh only 21 and 24 grains respectively. Their edges are turned over at the back, and the circular margin in front is ornamented by a double moulding beaten up from the back, the hollows between the mouldings being further

ornamented by lines of punctulations made from the front, and showing as depressions on the back. A circle of similar punctulations surrounds the margin of the plain convexity of the central portion of the disc. The exterior moulding is crimped, as it were, with short radiating lines impressed from the front. These gold discs are unique among the known styles of personal ornaments of the Age of Bronze in Scotland. There are also in the Museum a set of four gold discs of similarly thin hammered plate, scarcely thicker than writing paper, which were found with a necklace of amber beads in a tumulus in Orkney, but they are much larger and coarser in workmanship and ornamentation. There can be no doubt that the frequent occurrence of gold ornaments in the graves of the Bronze Age in Scotland is a fact of great significance with regard to the culture and civilisation of the people at a period so remote that it must be referred to a time long previous to the Roman invasion, when the invaders found the Caledonian warriors opposing them with the ordinary weapons and appliances of the Iron Age.

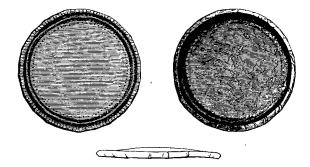


Fig. 4. Gold Discs from Cist at Barnhill, Broughty Ferry (actual size).

Such bronze blades have been occasionally found associated with the presence of urns, and if the Barnhill cist contained an urn, it was doubtless smashed when the top slab was broken.

This latest discovery determined the Society to endeavour to have the remainder of the mound explored, and the permission of Lord Dalhousie having been most readily granted, I was entrusted by the Society with the work of exploration. On August 26, at 6 a.m., operations were commenced. The top of the mound was first cleared away. It was found to consist of, first, a blackish earth intermixed with many

fragments and particles of charred wood. Underneath lay a great quantity of rough stones. As these were cleared away, it was discovered that a circle of the largest of the stones enclosed the cairn or mound, and formed its outer boundary on the muir. From calculations made from what remained of this circle, it appeared to have been about 50 feet in diameter, and seemed to indicate that after the burial No. 6 had been made on the original surface of the muir, the stones had been heaped over and around it to the depth of about 2 feet, and then covered over with black earth and wood ashes so as to bring the centre of the mound to a height of about 4 to 5 feet above the general surface of the muir. When all the stones were cleared off, the original surface was reached, and found to be 6 to 9 inches thick of sandy earth. Underneath lay the stratified gravel in which the cists were found. To avoid useless damage to the gravel, and to economise labour, trenches were then cut at intervals in the gravel, but no disturbance of the natural striation of the ground could be discovered, and it was then clearly seen that no other burials existed within the bounds of the cairn. Other cists may yet exist in the muir to the north and southwards of the road, for it seems evident that there was no necessary connection between the short cist burials and the cairn with its long cist. it is not improbable that the formation of the cairn in that particular spot was a mere accident of selection.