

IV.

NOTICE OF THE DISCOVERY AND EXAMINATION OF A BURIAL CAIRN
OF THE BRONZE AGE AT THE FARM OF GILCHORN, NEAR
ARBROATH. BY ALEXANDER HUTCHESON, ARCHITECT, F.S.A.
SCOT.

On the 13th January of the present year a man ploughing in a field on the farm of Gilchorn, near Arbroath, observed one of his horse's hoofs sink into what he thought was a rabbit-hole. On more careful examination he observed that the supposed rabbit-hole was the cavity of a large urn, which, having been placed in the soil in an inverted position, had thus had its base crushed in by the hoof of the horse. Having spoken of the discovery to his employer, Mr James Bell, farmer, Gilchorn, that gentleman, with praiseworthy personal superintendence, caused the urn to be carefully lifted, and a notice of the discovery shortly thereafter appeared in the *Arbroath Guide*.

It was not till the 27th of the month that I heard of the discovery, which I did through my friend Mr John Carrie, Carnoustie, author of *Strange Things in Angus*, a relation of sundry antiquities in the county, and a gentleman who takes an active interest in antiquarian matters.

I visited the farm on the following day, and then learned that a little urn had been discovered inside the large one. The urns were shown to me, and at my suggestion Mr Bell most obligingly consented to present the urns to the Society, and I had the pleasure of intimating this to Dr Anderson.

Having inspected the site of the discovery, and taken notes, it occurred to me that it would be well to make a further search around the spot where the urns were found, and to this Mr Bell readily gave

his consent. I accordingly had the ground opened, and the results are embodied in the following notes.

Before, however, proceeding to give these, it is proper to mention that Mr Carrie, shortly after the discovery, directed my attention to a notice in a manuscript in his possession of the exploration of a burial mound in this neighbourhood in or about 1808, and which notice is stated to have been written and published in 1810, in a pamphlet entitled *A Tour from Arbroath to Montrose*, by Robert Huddleston, parochial schoolmaster, Lunan.

The course of events revealed by the exploration, which I conducted, convinced me that, despite a slight disparity between the position and characteristics of the Gilchorn site and that mentioned by Huddleston, the mound referred to by him is one and the same with the mound now to be described; and as Huddleston's description is valuable, as supplying the history of the earlier exploration of the mound, it is here given from Mr Carrie's manuscript:—

“The lands of Bryanton, anciently called Bal Brian, lie between those of Gilchorn and Myreside, both of which are parts of the estate of Arniston. Within these two years an antiquity was discovered which had from time immemorial been consigned to oblivion. A tumulus of an elliptical form was cleared off, in order to take it into the adjoining field, when it was discovered to be a burying-place. This was the more unexpected, as uniform tradition pointed it out as a heap of rubbish accumulated in searching for a stone quarry, and an adjoining excavation seemed to confirm the tradition. It was probably the irregular shape which made the tumulus be mistaken for quarry rubbish; however, the workmen were not long in finding their mistake, for they had not proceeded far when they discovered three inverted urns, placed on flat stones, and full of burnt human bones. The urns were formed of clay, indurated by fire, and capable of containing about six Scots pints each. Within one there was another smaller one, unindurated, which contained a few oblong beads made of some black substance, and a few globular beads of silver, of small size and rude workmanship. The urns had no characters, nor any kind of emblematical device. Part of the tumulus which covered these remains was composed of loose earth mixed with stones, and had been dug from the above-mentioned excavation, but this being cleared away left a complete circle, formed of totally different materials. It now became evident that the tumulus was the work of two different periods, if not of two different nations, and that a later addition to it had injured its original circular form. The new-discovered

circle was literally a Gaelic sepulchral cairn. A very thin coat of earth covered the cairn, which had not been intentionally superimposed, like the other part containing the urns, but was the mere effect of vegetation. This circular cairn was formed of whinstones, collected from the surface of the ground, and not a vestige of freestone was found in the whole mass. In the centre of the cairn was found a *kist-vaen*—a stone coffin of the rudest workmanship. It consisted of six flat whinstones, a bottom, a cover, two sides, and two ends. It was exactly five feet long and two deep, and contained nothing but a kind of fat mould. The stone coffin and cairn seem clearly to point out this tumulus as a Gaelic sepulchre, while, on the other hand, the urns seem to indicate that the Romans had made an addition to the tumulus, and buried some of their dead there, during their stay in Angus under Agricola, or some of his successors. If this hypothesis is not well founded, it will be difficult to account for the contradictory formation of this cairn and tumulus.”

The farm of Gilchorn is situated in the parish of Inverkeillor, five miles north from Arbroath, and three-quarters of a mile from Cauldcots Station on the N.B. Arbroath and Montrose Railway. The field in which the discovery was made lies to the north-east of the steading, and at a height of about 150 feet above sea-level, Ordnance datum. About the middle of the field, and at its north side, where it is separated from the adjoining field by a stone dyke, rises a low and rather wide mound of earth, the summit of which may be some 4 feet above the general surface around. The dyke referred to, which runs north-east and south-west across this mound, divides it into two unequal parts, the larger portion embracing about two-thirds of the mound lying on the south of the dyke.

The urn which led to the present notice lay in the south-east border of the mound, and at the distance of 24 feet from the dyke. This urn, as already stated, was inverted, and covered a quantity of incinerated bones. The newspaper report bore that a stone covered the urn. This was not the case. I made careful inquiry on this point. There was no stone either above or underneath the urn, which rested on the subsoil at a depth of about 2 feet 3 inches below the surface. The urn (fig. 1) is of the cinerary type, and must have measured, when complete, about 16 inches high and 13 inches in widest diameter, tapering rapidly to the base, which, having been broken away, could

not be measured. It is of the usual form with a deep overhanging rim, ornamented with oblique lines of punctures, and having a horizontal row of punctures round the middle of its height, where the sloping bottom part unites with the perpendicular upper part of the side.

Within it, along with the bones, lay a very fine and complete small

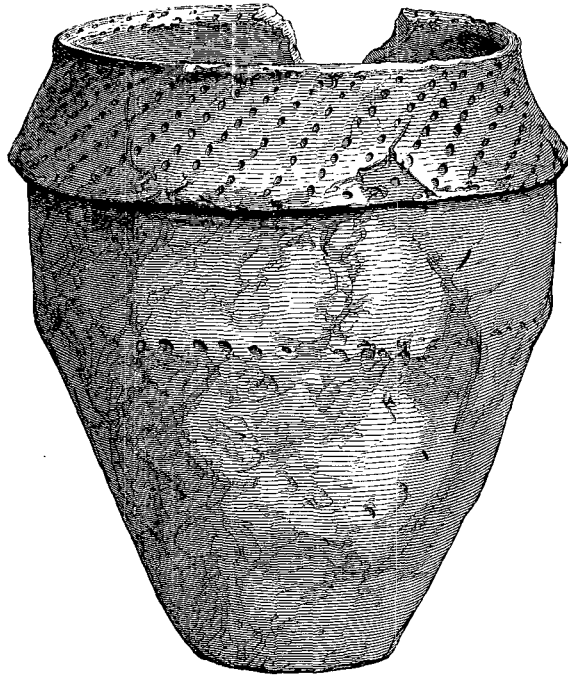


Fig. 1. Urn found at Gilchorn (16 inches high).

cup-like urn (fig. 2), of the same description as those figured and described in vol. iii. of the *Proceedings*, p. 485 (see also vol. ix. p. 189).

This specimen, excepting a slight chip at the lip, is quite complete. It is of a light or yellowish-coloured clay, and measures $2\frac{1}{4}$ inches high, $2\frac{3}{8}$ inches wide across the lip, widening out to $3\frac{1}{2}$ inches diameter at the widest part, then rapidly diminishing to the narrow base, which is

barely $1\frac{3}{8}$ inch diameter. Around the top, which slopes slightly inward, is an impressed zigzag ornament. Immediately beneath the lip, on the outside, are two lines roughly concentric. Then a zigzag pattern, consisting of a repetition of right lines joining each other at an acute angle, like a double V, and all placed to point in a uniform direction. At the band of greatest projection the urn is encircled by three irregular concentric lines. The narrow base has a similar line encircling it. A

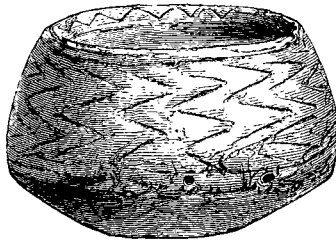


Fig. 2. Small Urn found inside the larger Urn.

distinguishing characteristic consists in the two small perforations, 1 inch apart, piercing the urn at the band of greatest diameter, and just large enough to admit of a small cord being passed through.

The urn seems to have been, or to have become, covered externally over nearly two-thirds of its surface with a thin pellicle of a yellowish-brown substance, inclining to white underneath the projecting ring.

Small urns of this description, where the circumstances of their discovery have been verified, have been always found inside a larger urn of the cinerary type.

On making enquiries, I subsequently learned that another small urn of a different shape was also found inside the large urn. It had been taken to his house by one of the workmen on the farm, and by him placed on the kitchen mantelshelf of his dwelling. The man, when I asked him about it, kindly and readily agreed to give it me for the Society, but on proceeding to his house, to my great disappointment I learned that, unknown to him, his wife, dreading a visit of the spirit of the "craetur 'at wis buried there seekin' its cuppie," had thrown the

"cuppie" into the fire as the best means known to her of preventing the advent of such a very undesirable visitor. There was nothing for it but to lament the survival of such superstitious feeling, which had led to the loss of such an interesting relic of antiquity.

Fortunately a search of the "midden" resulted in the recovery of some fragments of the missing cup, which is plainly seen to have "passed through the fire." From these fragments, the "cup" seems to have been somewhat saucer-shaped. The base measures $2\frac{3}{8}$ inches across, whence the sides slope steeply upwards with a slight ogee-like curve. The man, who apparently deeply regretted the loss of the cup, willingly and intelligently described it to me. He said it was about $1\frac{1}{2}$ inch deep, did not diminish towards the top like the other one, and had no ornament of any kind upon it. This description so far agrees with the fragments remaining, except that it has two parallel lines $\frac{3}{4}$ inch apart under the rim. This interesting specimen so unfortunately lost seems to have been of a variety hitherto undescribed in Scotland. But in Akerman's *Archeological Index* there is figured on Plate II. No. 6 an urn described in Sir Richard Hoare's *Ancient Wiltshire*, a work which I have had no means of consulting, and which, as figured by Akerman, resembles in form the description given by Mr Bell's workman. Moreover, the specimen figured by Akerman is pierced by two small holes, a feature which might serve to identify it with the class of urns now under consideration.

The subject of these small urns has been treated at length by the late Dr John Alexander Smith, in a paper published in the *Proceedings*, vol. ix. p. 189, in which the various suggestions as to their use have been examined and remarked on. The theory has been put forth that they have been intended to contain the cremated bones of an infant, or very young child, and there seems to be evidence that in some cases they have been found to contain the bones of infants; but I think it has been by no means established beyond doubt that this was their primary purpose. Even in those cases where the presence of the bones of infants or children has been proved, it is quite possible that a mistake has been made.

It is so seldom that the discovery of an urn is made by any person

having the competent knowledge and forethought to observe the circumstances and conditions of discovery, that all statements in such cases must be received with reserve, and only accepted when borne out by collateral evidences. In my own experience I have known so many cases of statements made without reflection, or in response to leading questions, break down under cross-examination or "back-speirin'," that it has made me doubly cautious in accepting as evidence the statements of persons not accustomed to observe closely, even when these are educated people.¹

One of the main difficulties in accepting the evidence that these little urns were primarily intended to contain the bones of an infant or very young child arises from the fact that to account for their recurrence one has to suppose, as some writers have done, that the child was sacrificed to accompany its mother to the spirit world, a supposition for which there exists no other evidence.

Doubtless instances are not unknown in modern times of an infant being interred along with its mother; but in this Gilchorn mound we have to face the fact that of five urns discovered from first to last, two of them contained these little urns, and of those two the one most recently found contained two of the little urns.

Dr Smith has related, with a circumstantiality which does not apparently admit of question, the discovery by him of a milk molar in one of the little urns he describes in the communication above referred

¹ A notable instance occurred in my experience some time ago, when a cist had been discovered, and the proprietor of the property having been apprised of it, came with a friend in his neighbourhood, a gentleman of good standing and literary attainments. A small opening only had been made in the cist on its discovery, and this gentleman put in his hand and arm, and discovered an urn, which he brought out. In trying to do this, however, he at first found the opening into the cist too small, which caused a little delay and replacement of the urn until the opening could be enlarged sufficiently to permit of the urn being removed. Need it be wondered at if in this case the urn was "found to be empty"? nor that this gentleman, not long afterwards, on being asked as to the position of the urn, frankly confessed that he did not really know whether the urn stood upright, or whether or not it contained anything, as he had to turn it round two or three times in trying to get it through the narrow opening, and might without reflection have inverted it in the removal.

to. In this connection it might be worth while considering whether the slight bones of an infant or of a very young child would be likely to survive cremation. Is it not a more reasonable hypothesis which ascribes the presence of these little urns in the larger urn to the same principle which dictated under other circumstances of early burial the presence of urns of the food-vessel and drinking-cup type in the interior of a cist? We have also to deal with the evidence of Huddleston, that he discovered in his small urns "a few oblong beads made of some black substance, and a few globular beads of silver."

But there is another hypothesis for the presence of these little urns which calls for notice in the present instance, namely, that they were used for containing sweet-smelling perfumes. The lamp theory may, I think, be set aside. It is somewhat remarkable that the little Gilchorn urn bears in the interior a dark-coloured, ferruginous-looking stain, which covers part of the bottom and of one side. It does not seem impossible that this dark stain may indicate the part of the inner surface affected by a perfume or unguent, which persisted long enough to stain the urn as it lay partly on its side. It is also remarkable that this stain is at the side of the urn furthest from the pair of small holes, by which, had they been at the lower side, any liquid within the cup would have been apt to exude.

It is corroborative proof of the mark being due to the presence at one time of some sort of liquid, that it follows the same line round the sides and bottom of the cup as a liquid would do in such circumstances.

The idea that these cups may have been so used is noticed by Dr Smith; and "incense cups" are referred to in Kemble's *Horae Ferales*, p. 213. They are there described as "of small size, rarely more than 2 or 3 inches in diameter, the sides generally ornamented, and are pierced with holes, rendering the vessel unfit for containing liquid." If it should be questioned whether any substance producing a mere stain could have existed in such circumstances so long as this must have done since the urn was deposited in the ground, it may be answered that animal fats, which might even then have formed the basis of perfumes, will under favouring circumstances survive for long periods. But however produced, there can be no question as to the reality of the stain,

and the interest attaching to the enquiry as to the purpose of these little cups is increased by the features of the specimens discovered at Gilchorn.

On the 12th February 1891 operations were commenced to search the mound. There were present—Mr James Bell, Mr John Carrie, Carnoustie, and Mr J. D. Mackay, Arbroath.

Before proceeding to detail the exploration of the mound, it will be proper to notice the previous examination noticed by Mr Huddleston, so as to furnish, as far as possible, a historical narrative of the sequence of the various discoveries in this burial mound. Huddleston states his belief that two distinct groups of burials had been associated in this mound—the lower one a stone cist sunk in the subsoil, and covered over with a circular cairn of whinstones collected from the surface of the ground, and covered with a very thin coating of earth, not artificially superimposed, but the result of vegetation. Then upon this, as his description would seem to indicate, had been raised another burial mound of earth and stones, which had been dug from another excavation. In this second or upper mound were found the four urns he describes, and which he supposed to be of Roman origin. There is, however, nothing necessarily in all this to suggest two different periods of burial. In regarding the urns as Roman, Mr Huddleston simply fell in with the then popular custom of ascribing almost all ancient remains of which nothing was known to that nation. There can be no doubt that the urns he describes were of the same type as those discovered this year in the Gilchorn mound. There seems to be no reason to doubt the main facts of the discovery as related by Huddleston. He tells that three inverted urns, “indurated by fire,” were discovered full of burnt bones. In one of these urns, he tells us, was found “another smaller one,” doubtless an example of the little urns already noticed. It was, he says, “unindurated,” and contained “a few oblong beads made of some black substance” (doubtless jet), “and a few globular beads of silver of small size and rude workmanship.”

In connection with this the presence of the whitish glass bead to be after referred to, and the possibility of its having been originally deposited in one of the other little urns along with other beads which may

have eluded observation, should not be lost sight of. So far as I am aware, no instance of the presence of silver has been noticed before in connection with a Bronze Age burial.¹

Huddleston refers to another and adjoining excavation, from which he supposes the upper part of the mound to have been formed. He does not indicate the distance away of this excavation, but probably he meant it to be understood to be in the near neighbourhood.²

In one point Huddleston is at variance with the results of this year's operations. He says that the lower cairn was composed of "whinstones collected from the surface of the ground, and not a vestige of freestone was found in the whole mass."

I found, on the contrary, frequent pieces of freestone. The cairn was composed, as such cairns usually are, of stones collected from the surface of the ground, and of various kinds of rock. With one or two exceptions, which will be noticed, no stone bore any tool mark. Since Huddleston's time all evidence of an upper cairn has been completely cleared away.

To refer now to the recent operations, a commencement was made at the point where the urn was found on the 13th January. The hole from which it was dug had been left unfilled in. This hole was cleared out down to the subsoil, a light yellowish-coloured sandy clay or moor-band, upon which the urn had rested. The earth taken out was carefully searched, and all the fragments of burnt bones were picked out. Amongst the earth I found the small oval-shaped bead of whitish glass (fig. 3) already referred to, and



Fig. 3.
Small oval
bead of whitish
glass found at
Gilchorn.

¹ There is no evidence that silver was known or used in the Bronze Age in Britain.

² No such excavation can now be traced. May not this "excavation," as well as the "loose" condition of the upper part of the mound mentioned by Huddleston, indicate that a still earlier search had been made in the same mound, which had probably originally been much larger, or it may show that the mound had been broken into to procure materials for road-making or dyke-building—purposes to which such cairns have been too frequently applied? This supposition might also serve to prove that the features of the mound upon which Huddleston relied for proving his theory of a later addition to its height, disturbing its original form, had been in reality the result only of a disturbance earlier than his day, and previous to which the mound may have been intact and regular in form.

a flake of flint $\frac{3}{4}$ inch long by $\frac{1}{4}$ inch broad, which, possessing a cutting edge, may be regarded as a knife. This flake has evidently passed through the fire when the bones were cremated.¹

It is unnecessary to follow all the steps of the excavation, but merely to give the results, illustrating these where necessary with other particulars.

I have already described the appearance of the mound. When the earth which covered it was cleared away, I found that underneath the earth, and resting on the subsoil, lay a cairn of stones of about 30 feet in diameter, and running up to about 3 feet in height at the summit, which was flattish.

As the cairn was removed, much of it showed plainly evidences of previous disturbance, in the presence of many fragments of burnt bones and burnt wood mixed up loosely with the stones and earth. This previous disturbance has resulted in the breaking up of the urn (fig. 4), which apparently had eluded observation in 1808.

It was found in the cairn at a depth of about 2 feet from the surface. The stones had been apparently piled over it, and by their weight had crushed down upon it as it lay or stood in the soil beneath.

Its fragments were mixed up with earth and stones, and crushed one side against the other. Here also burnt bones were discovered, but reduced to a whitish dust. The urn, as now reconstructed, measures 15 inches in height and $11\frac{1}{2}$ inches diameter at the mouth. It is of the same form as the first urn, but ornamented on the exterior of the overhanging rim by zigzag lines.

Amongst the earth below the urn, and doubtless originally deposited with it, lay a very fine and peculiarly-shaped knife or small dagger-blade of bronze. This most interesting weapon differs in form from those thin triangular blades of bronze which have hitherto in Scotland been associated with Bronze-Age burials. These have been fully described by Dr Anderson in the *Proceedings*, vol. xii. p. 439, and subsequently

¹ The presence of implements and flakes of flint amongst cremated remains is not an uncommon adjunct of cremated burials. In the Dundee Museum may be seen a flint arrow-head and several skelbs and fragments of flint, which have evidently passed through the fire, and which were found, along with cremated human remains, in a cinerary urn found at Dairsie, Fifeshire.

elsewhere, and are now well known and easily recognised, as, although differing in details, their general characteristics are a triangular form, increasing in width regularly from the point onwards to the base or left, where their greatest width is reached, and at this point three rivet-holes attest the method by which the blade was attached to the handle. The weapon found at Gilchorn differs distinctly in its form from the class

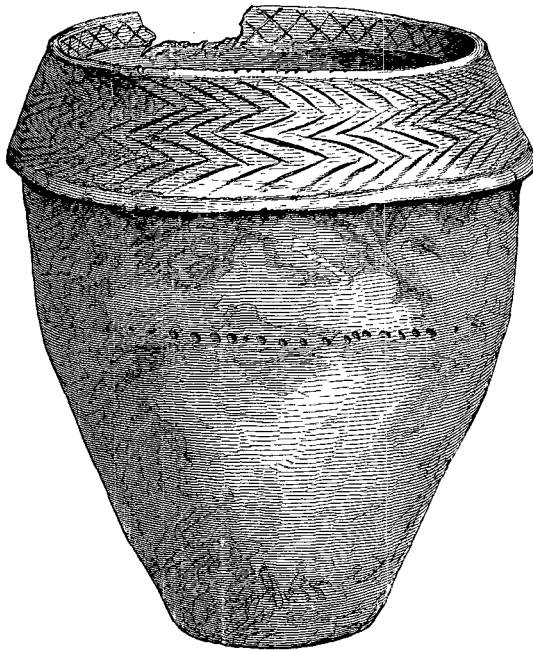


Fig. 4. Urn found at Gilchorn (15 inches in height).

above described. It is more tapering and leaf-shaped, and after increasing in width from the point backwards for about two-thirds of its length, it decreases in width towards the butt-end; and in place of the three rivet-holes which distinguished the other blades, possesses two notches, one on each side, $\frac{3}{16}$ ths of an inch, behind which the tang continues of the full breadth, but rounded off at the angles. The blade was lifted

by one of the workmen, and I could not ascertain whether any portion of the handle remained.

The blade has been slightly broken on the edges, probably in the previous disturbance of the mound. It measures barely 3 inches in length, $\frac{7}{8}$ inch broad at the widest part, and tapering down to about $\frac{1}{16}$ inch broad at the tang. The notches for attachment are cut quite clean, and do not exhibit any evidence of ever having been merely rivet-holes worn through. The blade has a sort of midrib angle, more distinct on one side than on the other, and, moreover, exhibits a flattening along both edges, as if it had been hammered out for greater sharpness. At the thickest part of the midrib the blade measures $\frac{1}{10}$ th of an inch in thickness. It exhibits a beautiful patina, and on one side where it has got a scratch it shows the metal to be of a light, almost golden colour. The shape and notching reminds one of the type of flint arrow-head so common in America. So far as I am aware, no other example of the form of bronze blade here described has been recorded.

The interest in the excavation increased as the operations tended towards the centre of the cairn, particularly as here the workmen came upon a mass of clay underlying the stones, and rising above the subsoil. The clay was of the colour of the subsoil, and differed in colour so completely from the black earth that everywhere filled up the spaces between the stones of the cairn that every one felt we were on the edge of a discovery.

I at once came to the conclusion that the mass of clay represented the materials which had accumulated in excavating a pit in the subsoil, and great pains were taken to determine the whereabouts of the pit. By carefully digging down into the subsoil on the outside of the clay mound, it was seen that no disturbance had taken place on that side. The clay mound was then laid entirely bare, so that its form could be seen. It was then carefully cleared away, without any resulting dis-



Fig. 5. Knife or Dagger-blade of bronze (actual size).

covery, but when the inner edge of it was reached, and in digging down into the subsoil, it was then discovered that the black earth dipped downwards. This black earth was cleared out as far as it was found to extend, when a pit measuring 6 feet by 3 feet, and about 3 feet deep below the surface of the subsoil, was discovered. All round this pit the subsoil stood firm and undisturbed. The black earth and stones in the pit were so slack and loose, with open cavities between the stones where the water had run down the earth from the surface, that there could remain no doubt in my mind that this pit was that in which the cist described by Huddleston had lain, and which was explored in 1808, and confirmed the conviction that had been gradually growing upon me that this was indeed the very mound and cairn described by that writer.

At the bottom of the pit, and close to the east side of it, lay several fragments of small, thin bronze blades, unfortunately much broken; so much so, that it is perhaps impossible to say how many implements they may represent. I incline to think there may have been two implements, as it seems impossible to piece all the fragments into one. They had doubtless been overlooked in the previous exploration, and may have received injury even then. Judging from the fragments left, these blades, like the first one found, must have differed from the thin triangular blades already referred to as being so frequently associated with such burials. Assuming that two weapons are here represented, the following are their measurements and description as far as that can be given from observation of the fragments as I have ventured to arrange them:—

No. 1. Six fragments make a blade measuring now fully $3\frac{1}{2}$ inches in length, tapering, greatest width $\frac{3}{4}$ inch, decided midrib, greatest thickness $\frac{1}{4}$ of an inch, but thinned at edges, having a well-marked midrib, and two small ribs or flutings along each edge, and has evidences on one side of wood adhering to it, possibly part of the sheath.

No. 2. Three fragments, making a blade $5\frac{1}{4}$ inches long, $\frac{1}{2}$ inch broad at the narrow end, whence it widens out to about $1\frac{1}{4}$ inch broad, fully $\frac{1}{4}$ inch thick, and shows a rounded midrib. When found there was attached to it a considerable portion of the wooden sheath, which, since it dried, has separated off.

With the excavation of this pit concluded our operations.

The cairn at this part showed so much disturbance that I did not feel encouraged to pursue the search. I had explored the portion of the cairn lying to the south of the dyke, and as near to the latter as could with safety be done without endangering its foundations. The portion of the cairn lying to the north of the dyke might yield even better results, as it is probable that the earlier operations may have been confined to the southern and larger portion of the cairn.

The evidences adduced by the operations seem to indicate that in the initial formation of the cairn the whole of the superincumbent soil had been first removed down to the level of the subsoil, as the whole surface of the subsoil underneath the cairn was thickly covered with fragments of burnt wood, in some places so thickly that it suggested that here we had the very ashes of a wood fire which had been kindled on the spot; in other parts the ashes were more thickly scattered. I examined many fragments of the ashes, and found them to present the peculiar fibre of oak. I moreover submitted them to Mr J. D. Mackay, cabinetmaker, Arbroath, who agreed in considering them to be fragments of oak.

In different places on the surface of the subsoil, but more particularly to the north of the site of No. 2 urn, were found several fragments of flint, and here also Mr Mackay picked up the very finely-shaped flint scraper now exhibited. The occurrence of implements of flint along with weapons of bronze has been previously noticed.

One interesting feature which may be significant must not be omitted. On clearing off the top of the subsoil, which was uniformly done in order to ascertain if any lower deposit should be indicated, and as nearly below the site of No. 2 urn as I could determine, were found fine circular dark marks from $1\frac{1}{2}$ to 2 inches in diameter, and marking off a roughly circular space of about 2 feet in diameter.

These marks, on being followed downwards, were found to extend from about 9 to 12 inches into the subsoil, gradually tapering in reduced diameter until they disappeared. These marks evidently resulted from some perforation made on the subsoil, which allowed the black upper soil to fall down and fill them up, and seemed to induce a conclusion that pointed wooden stakes or branches had been here inserted, which,

by natural decay, or being withdrawn, allowed the black earth to fall down into the perforations they had made.¹

In any future investigation of urn sites, particular care should be used to ascertain whether the observation now made shall be borne out by further experience.

I have referred to tool-marked stones in the cairn. Two such were discovered.

The first was a roughly square piece of red sandstone, about 2 inches thick, and measuring 6 inches by 7 inches, and having on one side a cup-like depression about 2 inches diameter by $\frac{1}{2}$ inch deep, as if formed by the impress of a tool or instrument used in some hammering process.

The second stone is an irregularly-shaped piece of freestone with rounded angles, and weighing about 20 lbs., and having near a projecting angle a perforation exhibiting an oblong opening of about 1 inch by $\frac{1}{2}$ inch cut quite through the stone, while the sides of the perforation open out filter-wise, and about 3 inches diameter on each side. Such perforations are seen in the stones called "sinker" stones, several of which are in the Museum. Unfortunately, a piece of the stone has been broken off near the perforated angle by the pick, but I do not think the injury affects the evidences of the perforation.

On a review of the results of this investigation, it will be seen that this mound and cairn exhibited in the main features the same characteristics as the cairn at Newtown of Collessie, described by Dr Anderson in the *Proceedings*, vol. xii. p. 439. The features in which they agree are—(1) the layer of clay underlying the site of the cairn; (2) the appear-

¹ This supposition, if it could be established, would go far to explain the recurrence at intervals of single urns, or of groups of urns, in perfect or at least in undisturbed condition, because we must concede the lapse of considerable intervals of time between successive burials, and unless there had existed some method of marking the sites of previous interments there would be a danger of breaking in upon them.

We cannot suppose that the people who took such pains in the interment of their deceased friends and relatives, as the cremation rites and elaborately-ornamented urns and laborious excavations and cairn erections imply, would be regardless of some method of marking the particular spot in the family burying-mound where interments had taken place, and what can be more likely than that stakes or branches would be used? For the purpose of marking the site of an urn burial, stout oaken staves driven well into the ground would prove a very lasting indication.

ance of wood ashes all over this surface ; (3) the existence of a cist of stone slabs containing an unburnt burial ; and (4) the presence of cremated urn-burials associated with implements of bronze. On the other hand, the points in which they differ are as follows :—(1) In the Collessie cairn the cist stood on the natural surface ; in the Gilchorn mound the cist was sunk below the subsoil ; (2) at Collessie, the burnt remains and the associated urns were found sunk in the subsoil, whereas at Gilchorn the urns rested on the subsoil.

From these observations it is evident that we have not yet got at all the facts which may be learned regarding Bronze Age burials in Scotland.