

## I.

### EXPLORATION OF CIRCULAR ENCLOSURES AND AN UNDERGROUND HOUSE NEAR DINNET, ON DEESIDE, ABERDEENSHIRE. BY THE HON. JOHN ABERGROMBY, *Secretary*.

On the narrow neck of land between Lochs Davan and Kinord—locally pronounced Da-wan and Kinner—and also on the slopes of Culblean Hill, there are several circular enclosures, circles of stones, alignments of stones and cairns, which were first noticed by the Rev. J. G. Michie, then minister of the parish. He believed they were the remains of the Pictish village of Devana, and dated from about the time of the Roman occupation of Britain.

Last year Professor Ogsten of Glen Davan called the attention of Dr Robert Munro, F.S.A. Scot., to these curious structures, which are supposed not to be found in other parts of Scotland, and they visited them together. It was Dr Munro's intention to excavate these enclosures himself this year, but as in spring he found this would be impossible, I offered to undertake the work, so that no time should be lost. In company with him and Dr Ogsten, I made a preliminary visit to Dinnet in the second week of July, and began operations on the 17th August 1903, which lasted for four weeks. All these structures are on the property of Mr Barclay Harvey of Dinnet House, who kindly granted permission for the excavations to take place.

A walk of about a mile and a half from Dinnet station, first northwards along the high road, and then sharp to the left towards the farm of New Kinnord, takes to the neck between the two lochs, which has the form of a low ridge or hog's back, sloping northwards and southwards. On the crest and south side of the ridge there is a birch wood, which formerly covered the whole neck, and these enclosures were first noticed some years ago, when the wood was cut. None of them are marked on the 6-inch Ordnance Survey map. Except round the margin of Loch Davan, the northern slope of the neck, where the trees have been removed, is remarkably stony. Everywhere larger or smaller blocks of grey hornblende meet the eye and encounter the foot, so that in many places it is impossible to take a step without kicking a "blue heathen," as these stones are locally termed. A short distance down the slope towards Loch Davan, at the east end of the neck, there are three or four enclosures and one or two less well-defined ones, all close together. At the same level, but a quarter of a mile to the west, there is a group of three well-marked enclosures and a circle with stones at intervals. A little to the south-west there is another circle, perhaps two.

Between these two groups of circular enclosures may be observed long lines of stones, which seem to be artificial, stretching in an uneven course, sometimes from east to west, sometimes from north to south. In their present state they are not walls, and perhaps were never destined to serve as such. Sometimes the stones are single, sometimes there may be several to represent the thickness of a wall. In places the stones are great large blocks that would take three men to move, elsewhere they are smaller and partly embedded in the ground. There is nothing regular about them except their continuousness, and the constant small changes of the direction of the alignments is inexplicable. The most northerly alignment begins at the eastern side of No. 3 enclosure and after a zigzag course of about 300 yards, disappears among the stones that strew the surface. These alignments may have been boundaries, though the spaces they bound seem too contracted and

too stony to be worth the trouble of marking out in so laborious and special a manner.

The westerly group of three enclosures was the first to be explored. The most westerly of these is No. 1, which differed from the others in that it was impinged upon by a circle with stones at intervals in such a

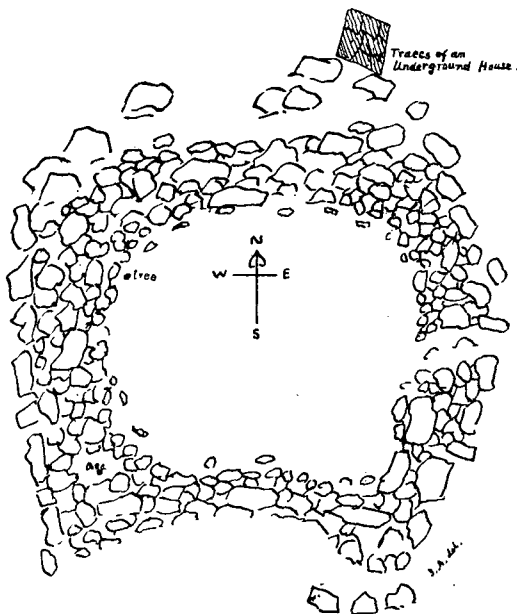


Fig. 1. Ground Plan of Enclosure No. 1. (Scale 24 feet to an inch.)

way that its southern circumference was slightly bulged inwards. No. 2 lies 40 feet east of No. 1, and has the peculiarity of being paved with stones. No. 3 lies 36 yards 1 foot from No. 2 in a direction north 60° east (magnetic).

The outside diameter of No. 1 (figs. 1 and 2) is about 58 feet and the internal diameter 32 feet, with an entrance to the south-east. The walls, which are in a dilapidated condition, cover the ground for a width of

from 13 feet to 17 feet, and enclose a slight hollow. The general form is somewhat of a horseshoe, in consequence of the bulging in of the southern segment of the enclosure. The floor lies about 4 feet below the top of the low mound of the circle to the south, and 2 feet 2 inches below the slope of the hill to the north. On the west side, where the



Fig. 2. Enclosure No. 1, excavated.

wall is best preserved, excavation showed that the foundation-stones reposed on the fine yellow gravel underlying the upper layer of humus from 10 inches to 12 inches deep. Here the wall was 4 feet high, or 3 feet above the present level. The stones are not laid in regular courses, but in the northern segment larger stones are found on the original outer and inner faces of the wall, with smaller stones between.

At present, except towards the west, all the stones have fallen down the slope of the hollow forming the enclosure, so that along the crest of the slope no two stones are left one on the top of the other. Some of the stones are of large size, and though partly embedded in the ground, measure 4 feet 10 inches by 2 feet 8 inches, and 3 feet 8 inches by

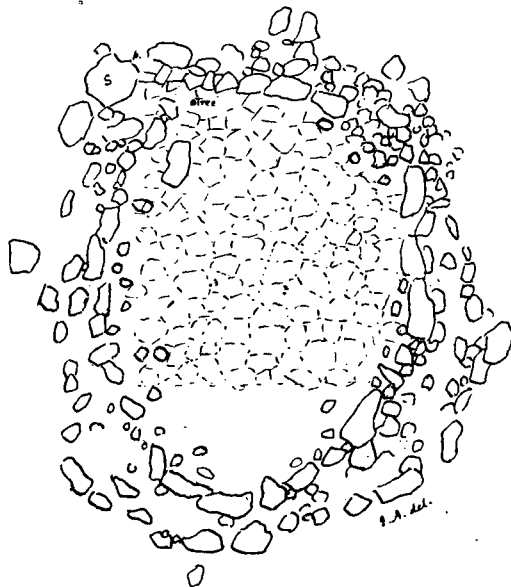


Fig. 3. Ground Plan of Enclosure No. 2. (Scale 24 feet to an inch.)

2 feet. A trench cut from north to south and another from east to west across the floor of the enclosure and carried down to the pan brought no relic of any kind to light. Owing to the constant rain, the trenches soon filled with water, and it was useless to attempt to riddle the soil extracted.

No. 2 is a saucer-like depression, somewhat oval in form (fig. 3), with its longer axis running north and south. The external diameters are

63 feet and 56 feet, the internal ones 47 feet and 39 feet. The floor lies 3 feet 2 inches below the top of the hill slope on the south side and 2 feet 9 inches below it on the north side. Some of the stones of the enclosure are of large size. Though partly embedded in the soil, two of



Fig. 4. South end of Enclosure No. 2.

them measure 4 feet 3 inches by 4 feet by 3 feet 4 inches, and  $4\frac{1}{2}$  feet by 3 feet 3 inches by 2 feet 4 inches above the surface.

For a distance of 34 feet from the north the floor is paved with large stones, many of them of very regular quadrangular form, requiring two men to lift. The pavement extends up to the very end of the northern part of the enclosure, and terminates at the foot of some large stones set

on end, that bound the inner edge of the circle in this direction. At 6 feet from the south end was found a fragment of hard, glazed pottery, showing wheel-marks on the bottom. At  $22\frac{1}{2}$  feet from the north end was another fragment of the same pottery. Both were at a depth of 3 inches to 4 inches below the surface. In making a cross cut from

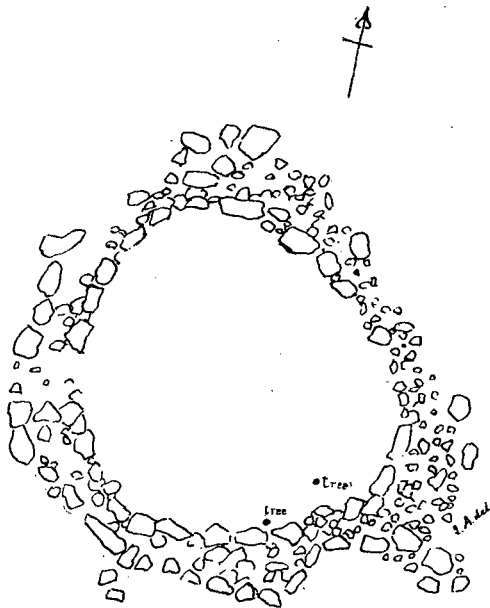


Fig. 5. Ground Plan of Enclosure No. 3. (Scale 24 feet to an inch).

west to east, a fragment of dark glazed pottery, consisting of part of the neck and handle of a small jug, was discovered at the depth of a foot from the surface, as it had slipped between the crevices of the pavement. It differed from the other fragments in being glazed both on the inner and outer surface. Four more pieces of the same jug were picked out of the matted roots of the grass growing on the top of an adjacent stone. In the central excavation, at 17 feet from the south end, several small pieces of charcoal were brought to light. The con-

tents of the trenches were riddled, but the only objects found were a tiny fragment of the glazed ware and a stone disc, 4 inches in diameter and  $1\frac{1}{2}$  inches thick, flat on one side, which seems to exhibit signs of use, and resembles others from the Culbin Sands, *Mus. Catal.*, p. 94, and *Proceedings*, vol. xxxvi. p. 36.

No. 3 (fig. 5) has an external diameter of 52 feet and an internal of

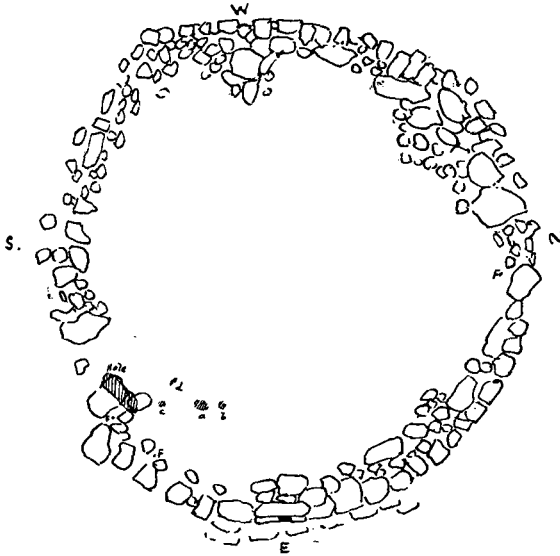


Fig. 6. Ground Plan of Enclosure No. 4. (Scale 24 feet to an inch.)

36 feet. The floor is flat and not dished as in Nos. 1, 2. A trench 12 feet wide was cut across it from north to south down to the yellow gravel. At 19 feet from the north end, at a depth of 3 inches, just below the turf, a small piece of a flint flake, showing conchoidal fracture, was picked out, and not far off were small bits of charcoal. All the stuff taken from the trench was put through the riddle, but nothing save a very few small pieces of charcoal were observed.

No. 4 (fig. 6) lies about a mile west of the triple group on the slope of



Culblean Hill, facing the east, on a steep incline of about one in five. The external diameter is 60 feet, and the internal one 50 feet. The walls, or rather their structure and foundations, are better preserved than in the previous examples. Although the upper side is  $1\frac{1}{2}$  feet below the surface of the slope, the internal area shows no hollowing, and is

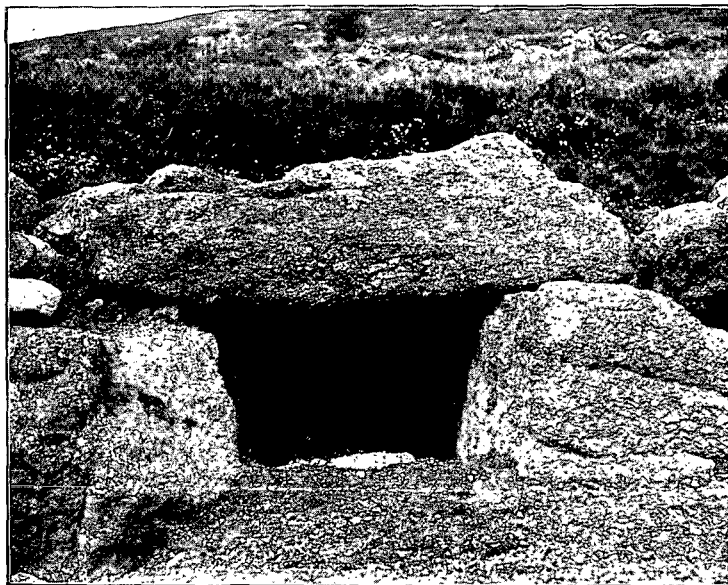


Fig. 7. Orifice in Wall of Enclosure No. 4.

formed by the natural level of the hill. The entrance faces Mount Keen to the south.

At the lowest point of the enclosure, on a level with the ground, three large stones are arranged to form a quadrangular orifice (fig. 7), 1 foot 9 inches wide, 1 foot high, and reaching 2 feet back, where it was closed by another large stone. The stone on the right side is a nearly quadrangular block of granite, measuring 4 feet 2 inches by 1 foot 9 inches by 1 foot 9 inches. The stone to the right of it was still larger,

5 feet 8 inches by 2 feet 3 inches by 10 inches. The stone forming the left side of the orifice was also large, but of more irregular form; that to the left of it measured 4 feet by 2 feet by 1 foot 3 inches. A specially close examination failed to explain the purpose of the orifice. Nothing was near it or below it except the skull of an old fox, which lay under the right-hand stone, and part of the lower jaw, which was missing, was picked up a few inches distant in the earth in front of the orifice. As there was a rabbit burrow close to this point, he may have met his death in pursuit of a coney.

The whole of the internal area of this enclosure was trenched down to the hard pan; some of the stuff was riddled, and all the stones of the wall, from the south entrance round by the orifice to the north side, were uprooted and shifted forwards, and the ground below excavated to the hard pan. The depth at which this was found varied greatly. At the centre it was only some 9 to 10 inches below the surface; at the north side and just behind the orifice it lay fully 3 feet below the surface, and 3 or 4 yards to the right of the orifice it was found at a depth of 3 feet 8 inches.

In the course of the excavation three pieces of flint, showing signs of work, though none is an implement, were picked up. Their positions are marked on the plan by the letter F. One was found at a depth of 3 inches and 1 foot from the inner side of the wall towards the north. The other two lay 3 or 4 inches below the surface, in the fine yellow gravel under the wall, a few feet east of the entrance, and about 6 feet apart.

Small pieces of charcoal occurred at a good many points at various depths, especially in the eastern half of the area, and sometimes below the wall. The morsels found just above the pan, at depths of 2 feet 8 inches and 3 feet, are hard to explain, though the circumstance may perhaps be attributed to the movements and disturbance caused by rabbits, moles, and earthworms. At the point *a* on the plan, 17 feet 8 inches from the left-hand stone of the entrance, at the depth of 1 foot, a thin layer of charcoal and burnt earth was encountered, covering an area of about 2 feet square; 5 inches lower was another layer, and about

the same depth a third stratum of the same stuff. Though all this was carefully riddled, nothing was found. A small patch of burnt earth and ashes was found at *b* at a depth of 14 inches. At the point *c*, 13 feet from the entrance, about 1 foot from the inner side of the wall, and at a depth of 2 feet, a small pocket of burnt earth and charcoal was cut out and riddled, but with no result. A little more was observed at *d*.

Just to the right of the entrance, and below the wall, a hole  $6\frac{1}{2}$  feet long by 2 feet wide, excavated 20 inches into the hard pan, which is nearly as hard as stone, was discovered. The bottom of the hole was 3 feet 4 inches below the surface, but its purpose was not ascertained. A few small pieces of charcoal lay above the hole, but none in it. There were no signs in the overlying gravel and earth that a hole had been sunk, though bits of broken pan were observed not far off, between the yellow gravel and the dark earth overlying it.

By removing all the stones of the eastern semicircle of the enclosure, a better opportunity was afforded of observing the construction of the wall. The foundations were very well and firmly laid, and were embedded from 6 inches to 12 inches in the clean yellow gravel. As there was no thin layer of decomposed black vegetable matter beneath the stones, such as would have been present had the stones been laid on a grassy or heathery surface, it is probable that a shallow trench, a few inches deep, was first cut to receive them. The wall was about 5 feet thick, and composed on the whole of an inner and outer circle of large stones, some heavy enough to require three men to raise, with a packing of smaller stones between. The stones of the outer ring were laid lengthways, with a short end to the front, and slant slightly inwards. Below the largest stones, which seemed to lie on the surface and form the foundation, there was often a bedding of smaller stones, though some of these were of fairly large dimensions. On the steepest part of the slope, for several feet on each side of the orifice, there was a sort of platform or batter, about 2 feet wide, in front of the wall, evidently placed there to strengthen and retain it where the thrust was greatest. The total height of the wall when complete could

hardly have exceeded 3 feet, for few if any stones seem to have been removed on the north side, where in one part three layers of stones were still in place. On the south side the stones were fewer in number, and some of them may have been removed, as in the old leases certain tenants had the right of taking them away for building purposes. On Culblean Hill all the stones are granite blocks which are suitable for building; the hornblende found on the neck of land between the two lochs is not so used.

No. 5 enclosure is somewhat larger than No. 4, having an internal diameter of 42 feet; it lies 42 feet from it in the direction north 10° west. The entrance was from the south-east. An area 20 feet square round the centre was trenched down to the hard pan, which was encountered at a depth of from 16 to 18 inches, but nothing was found, not even charcoal. But outside the enclosure on the south side, in a trial excavation measuring 10 feet by 5 feet, a little charcoal and burnt earth in some quantity was found under a stone, but nothing else. Just outside the enclosure on the north-east side, Greig, one of the workmen, who had a remarkably keen sight for flints, picked up a small but very well made flint arrow-head of Neolithic type at the mouth of a rabbit-hole. Towards the south-east there is a recess formed in the centre of the wall, measuring 2 feet 10 inches by 3 feet by 2 feet 10 inches high. A large stone, forming part of the front of the original wall, has been utilised, but other stones have been displaced from their old position, and the sides are built up with small ones. It has all the appearance of being a temporary shelter of relatively recent construction. No plan was made of this enclosure, as it offered no special feature to distinguish it from others.

No. 6 is a small enclosure, lying about 120 yards north-east of No. 4, in a fold in the ground at a considerably lower level. To the east and south-east is a small watercourse. On the west side the walls are some feet lower than the crest of the rising ground in front of them. In other directions they are on the same level as the ground outside. A trench 10 feet wide and 37 feet long was first cut from east to west, as

at 10 feet from the east end there was a small mound 10 feet in diameter and 6 inches high, which looked as if it might be sepulchral. On removing the earth above it down to the pan, what seemed to be a paved area was disclosed. But further investigation showed that two or three of the stones were embedded so firmly in the pan that they could not have been placed there, and the whole pavement, as well as the mound above it, was evidently natural. Except a few pieces of charcoal, nothing was found in this trench. The whole of the southern half of the enclosure was then trenched down to the hard pan, but without success. The plan made of this enclosure was unfortunately lost.

#### EXPLORATION OF A CIRCLE AND UNDERGROUND HOUSE.

As no finds of importance had been yielded by the exploration of the enclosures, their age and destination still remaining uncertain, it became necessary on 5th September to examine more thoroughly the circle lying south of No. 1 enclosure, and actually in contact with it. It consists of a low circular mound about 1 foot high, in some places from 12 to 14 feet wide, in others less, bounded by a circle of largish stones, placed at intervals. The outside diameter is about 60 feet.

As early as 19th August, quite by accident, a trial trench had been made in it, which disclosed at a depth of 17 inches a piece of rough pavement (fig. 8), 33 feet long and 7 feet wide, of curved form, partly following the periphery of the circle. Charcoal and signs of fire had been observed on its surface at various points along its whole length. On 22nd August the exploration of the circle was resumed, and the pavement was found to cover a length of 56 feet, but it narrowed to 4 feet 3 inches in width, and seemed to come to the surface and there disappear. About 15 feet of the pavement at the north end was lifted and found to rest on fine yellow gravel. Traces of fire, such as charcoal, burnt earth, and a white sand containing diatoms,<sup>1</sup> the result of burning

<sup>1</sup> Extract of a Letter to Dr Ogsten from Professor Trail:—"The charcoal still retains enough of its structure to show that it is from a conifer, and I have no doubt that it was wood of a Scotch fir (*Pinus sylvestris*). The earthy matter is very largely

peat, were abundant, both above and below the pavement. Though all this burnt stuff and the earth near it was carefully passed through a fine riddle, nothing was found, no sherds of pottery, no animal bones or food



Fig. 8. Pavement in the interior of the circle.

sand (like that along the Dee) mixed with finer particles, and seemingly compacted in part with iron oxide. The iron might be merely from the soil. Was there any sign of metal weapons or articles?

“The finer particles show no trace of structure, but mixed with them lie a number of diatoms, suggesting a mixture with the diatom earth. There seems no marl, at least there is no effervescence with acetic acid. May the stuff in part be the ashes remaining after cremation of a body? The use of turfy peat (along with wood or alone) might account for the sand and diatoms.” Dr Ogsten had submitted to Professor Trail of Aberdeen some of the charcoal and white sandy-looking stuff, for his opinion upon it.

refuse. It was on account of finding so little that the excavation of the circle had been temporarily abandoned.

From about the point *a* on the plan (fig. 9)<sup>1</sup> a trench 5 feet wide was now cut in a direction south 20° east (mag.) towards *b*. Down to a depth of 2 feet the humus was unusually dark. At 6 feet 9 inches from *a* and at a depth of 2 feet there was a cavity or pocket containing a layer of ashes and burnt wood from 6 to 9 inches deep. It was covered by a good-sized stone which lay 6 inches below the surface, and may have been one of the paving stones. Under another stone, 8 feet from *a* and 1 foot 1 inch below the surface, was a quantity<sup>9</sup> of charcoal, burnt earth, and white diatomaceous sand. This extended for a foot in width across the trench. The burnt stuff was riddled, but produced nothing. Between 8½ feet and 11 feet from *a*, at a depth of a foot, there were continuous traces of burning across the width of the cutting. At a distance of 22 feet 10 inches from *a*, at the depth of a foot, a flint pebble, showing conchoidal fracture and rough chipping at one edge, was picked up. At 23 feet from *a*, charcoal and burnt earth for the space of a foot were again encountered. At 32 feet from *a*, under two large stones, lay a quantity of burnt earth, white diatomaceous sand, and charcoal, in a layer 2 inches deep and 3½ feet wide. These stones, which formed the limits of the circle in the direction *b*, were squarish blocks, measuring on an average 2 feet by 2 feet by 1 foot 3 inches. The whole contents of the trench for the first 10 feet from *a* were riddled, but without result. This portion of the area seemed to be unpaved, but from 10 feet to about 22 feet in the direction of *b* there was a paved surface.

<sup>1</sup> On the last day but one I had the misfortune to lose my note-book, containing all the notes and working plans drawn to scale on the ground, that I had made during a month's work. Fortunately, every evening I used to transcribe my notes, and had had time to make fair copies of the plans of enclosures 1-4, so that much was saved. But the plans of the circle and details of the underground house I have not been able to restore exactly. Before leaving Dinnet I made a plan of the circle after some of the stones had been removed during the excavations, and after all the holes had been filled up and the turf replaced. It is not so satisfactory as the plan that was lost, but is sufficient perhaps for the purpose.

From the point *c*, 10 feet from *a*, a cross-cutting was made to the right and left in order to trace the extent of the paving. That to the right proved that the pavement was continuous with the end of the 56 feet of pavement disclosed on 22nd August. What was now exposed was very rough, and lay immediately below the grassy surface.

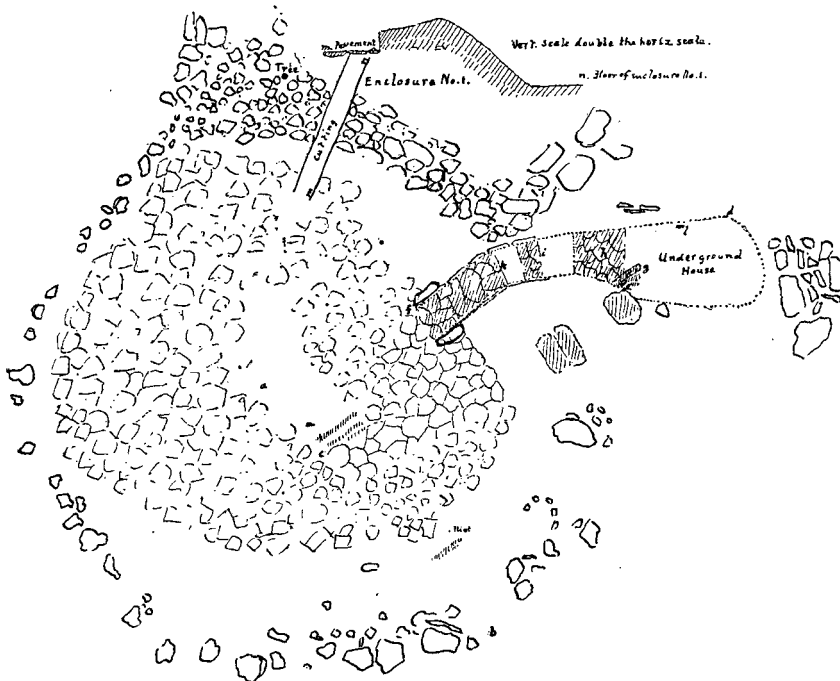


Fig. 9. Ground Plan of Circle and Underground House adjoining Enclosure No. 1. (Scale 24 feet to an inch.)

In the cutting to the left, in the direction *d*, the paving ceased at 22 feet from *c*, but it was remarkably level and well laid. At 26 feet 4 inches charcoal was encountered at a depth of 18 inches, and a stone blackened by fire. Between 27½ feet and 32 feet from *c* some large stones were found, from 9 inches to 12 inches below the turf. They rose



up like the base of a wall, and formed a flat, paved-like surface on the top. They lay on the periphery of the circle, and bounded it in this direction.

Although the circle ended here, the trench was continued in a north-easterly direction to *d*, a distance of 54 feet 9 inches from *c*, so as to examine a slightly curved hollow in the ground a short distance beyond. The end of the hollow which lay to the right of *d* was marked by a deep setting of large stones, as shown on the plan. At 34 feet more charcoal and a layer 3 to 4 inches deep of the white sand was observed, the lowest layer being 2 feet below the surface. The space between 36½ feet and 40 feet from *c* was occupied by a huge stone *e*, lying across the trench. This was afterwards found to mark the edge of an underground or earth-house. The whole of the stuff henceforth extracted was the filling in of this dwelling, for the roof had disappeared, and the interior was occupied by loose mixed earth and stones. The excavation was carried down to a depth of 6 feet, to the floor of the earth-house, and it was found that the lower 4 feet had been cut out of the hard and solid pan.

At 54 feet from *c*, at a depth of 2 feet, half of a burnt hazel-nut was picked up. At various points and depths, such as 2 feet 8 inches, 3 feet 4 inches, and 5 feet 2 inches, a few small pieces of charcoal were found while excavating the trench; and at 2 feet beyond the point *e*, at a depth of 3 feet 4 inches, small particles of burnt bone occurred, with small bits of charcoal. At 2 feet 10 inches from *e*, and at the same distance below the surface, two or three more small pieces of bone and charcoal were observed, and also on the pan at a depth of 5½ feet.

The excavation now took a direction, slightly curved, in the direction of *f*. At a depth of 2 feet 8 inches and 1 foot from *e*, we came on what looked like a small wall *g*, 3 feet long and 2 feet 2 inches wide, with one end resting against the side of the earth-house. At 1 foot 7 inches in front of the wall, at a depth of 2 feet 9 inches, an angular piece of iron was picked out, and a little below it many small particles of burnt

bone mixed with charcoal. At a depth of 6 feet, in the angle formed by the wall, though this did not reach quite so far down, was a stone, well blackened by fire, and many particles of bone. Quite in the angle was a layer of black ashes, overlying  $2\frac{1}{2}$  inches of red, burnt earth, the whole covering an area about 4 feet long by  $2\frac{1}{2}$  feet wide. The depth from the surface was 5 feet 7 inches. Riddling the stuff did not result in any find.

At 3 feet 3 inches from *e*, at a depth of  $3\frac{1}{2}$  feet, part of the upper stone of a quern, which when whole had a diameter of 16 inches, was unearthed.

Beyond the wall, on the floor of the earth-house, was a very smooth pavement *h*, of 12 to 14 flat stones, measuring 5 feet 10 inches by 4 feet 6 inches wide. On lifting the stones they were found to cover a trough-like cavity sunk into the pan, measuring 4 feet by 2 feet by 15 inches deep. The stuff from the cavity was riddled when sufficiently dry, but only particles of charcoal and one or two of burnt bone were observed. It may be that the whole floor of the house was originally paved, and that this was a portion of it. For a few feet further on another bit of pavement *i*, 3 feet long, was brought to light at a depth of 5 feet from the surface. Below it was a saucer-like depression, a few inches deep, containing a very few minute fragments of burnt bone and some larger bits of charcoal.

Continuing the excavation, it was found that the floor gradually rose, and was succeeded by a pavement *k*, 10 feet 10 inches long, which fitted on to it, and continued to rise till it joined the pavement of the circle without any break or discontinuity whatever. The circle and the underground house are therefore intimately connected. It is the first time that the exit from an earth-house has been found to lead out upon a circular paved space, bounded by a low mound, with a setting of stones at intervals. The entrance to the house was from the south-west, and above ground it was marked by two stones, one on each side, of considerable dimensions, requiring three men to move. That on the left measured  $3\frac{1}{2}$  feet by 2 feet 7 inches by 1 foot, and about half of it was

embedded in the ground. The side walls of the interior, from the entrance to nearly as far as *e*, were partly composed of very large stones, with a smooth surface on the outside, and these had evidently been selected and laid in position with care.

The far end of the underground house was also cleared out, and about 6 feet from *d*, at a depth of 6 feet 1 inch, two largish pieces of burnt bone and a mixture of smaller particles and charcoal were found in a small cavity, covered by a flat stone *l*. It had the appearance of being an interment. With the exception of occasional particles of burnt bone and charcoal, nothing of importance was brought to light; but it was found that the far end of the house was somewhat enlarged, and the walls were composed of the hard pan. The plan of the earth-house here given is only approximately correct, for the reasons given in the note above. Its total length was about 41 feet.

Some 15 feet of the pavement of the circle in the cutting between *c e* was now lifted, beginning at the north-east end. Occasionally the stones were found in two layers, and in any case they lay on the fine yellow sandy gravel. As each of the large flat stones was raised, where the pavement was best it was found to overlie burnt earth, pieces of charcoal, burnt wood, and occasional particles of bone. One area, showing strong traces of fire, was from 5 feet to 6 feet long, others might be 2 feet square. All this showed that the circle was in use before the pavement was laid down, and that this improvement was an afterthought.

#### TRACES OF ANOTHER UNDERGROUND HOUSE.

On the north-east side of No. 1 enclosure there is a curved hollow in the ground, about 30 feet long and 6 feet from the wall, which looked as if it might contain another underground house. As it was the last day and a short one, being Saturday, there was only time to sink a trial trench across the hollow. At a depth of  $7\frac{1}{2}$  feet we came upon a fine piece of smooth, well-laid pavement, 5 feet 10 inches wide by 5 feet 8 inches long, the length of the excavation. Only a few pieces of charcoal

and particles of bone were brought to light, but it was evident that we had hit upon another underground house. As there was no time to make a complete exploration of the site, the hole dug was filled in again and returned. But its position is now known for any future explorer.

An underground house at Milton of Whitehouse, between two and three miles to the north of the Dinnet example, presents certain features in common with it. It was first described by Mr G. Gauld in *Scot. Notes and Queries*, vol. ix. p. 147 (1896), and then commented upon by Mr D. MacRitchie in *The Antiquary*, vol. xxxiii. p. 135. Both seem to have had a roof of timber, and in the Milton example the inner end of the dwelling is paved. In front of the entrance, at a distance of about 18 feet, there is also a paved space measuring about 7 feet 9 inches by 5 feet 3 inches, but raised from 10 inches to 1 foot 8 inches above the level of the ground. Mr Gauld took it for an altar. The differences, however, between these two eirde-houses are considerable. At Milton the entrance lies on the top of a knoll, and nearly the whole length of the dwelling is on a slope. The entrance is partly blocked by a slab 2 feet 4 inches in height, while at the bend, which forms nearly a right angle, the narrow passage is nearly filled by a granite slab 3 feet 11 inches high.

The distinguishing feature of the Dinnet earth-house is that it is connected with a paved space surrounded by a very low, scarcely perceptible ring-wall of earth, along which there is a setting of stones at intervals. Here the cooking seems to have taken place, to judge from the numerous marks of fire, though it is remarkable that no regular fire-place, no refuse, and no sherds of pottery were brought to light. The burnt bones, as a rule, were in an exceedingly comminuted state, but some larger pieces were submitted to Professor R. Reid of Aberdeen. In a letter to Dr Ogsten, he says the only fragment, of the nature of which he can be satisfied, is the small piece of the shaft of the long bone marked No. 1. It is certainly not human, and seems to have belonged to the humerus of a small animal such as a cat. He can make nothing

definite of the other fragments, but his impression is that they are not human.

What was the object of these walled enclosures, Nos. 1 to 6, described above? As the excavations yielded practically nothing, I can only suppose that they were cattle-pounds, where the beasts were enclosed at night to preserve them from wolves and human marauders. The traces of fire found in No. 4 do not militate against this suggestion, as in olden times passing sick cattle through fire was a recognised specific.

The comparatively late date of these structures, supposing, as may reasonably be done, that they are contemporary with the earth-house, is sufficiently indicated by the quern and the fragment of iron. The fragments of glazed pottery from No. 2 may possibly show that this enclosure was in use up to a relatively recent period.