

VI.

NOTICE OF THE DISCOVERY OF THE REMAINS OF AN EARTH-HOUSE AT BARNHILL, PERTH. BY ALEXANDER HUTCHESON, F.S.A. Scot., BROUGHY FERRY.

In the month of April last, in the course of the construction of a new road at Barnhill, near Perth, the property of Sir Alexander Moncrieff of Culfargie, K.C.B., some lines of stonework suggestive of a structural formation were uncovered.

The discovery was communicated to Sir Alexander Moncrieff, who immediately stopped the works and made intimation of the discovery to the Society. I was honoured by the Council with a request that I should visit the site and report to the Society.

Despite of certain peculiarities of construction, which, however, are, I think, susceptible of explanation, I had no difficulty in recognising the remains as those of one of the underground structures known as weems or earth-houses, and peculiar to a certain area of Scotland.

I have prepared a plan showing the form and dimensions of the remains, but a few other dimensions and particulars not shown, or only

adverted to, on the plan are desirable. The structure has now unfortunately been removed, the proper completion of the new roadway not having permitted of its retention.

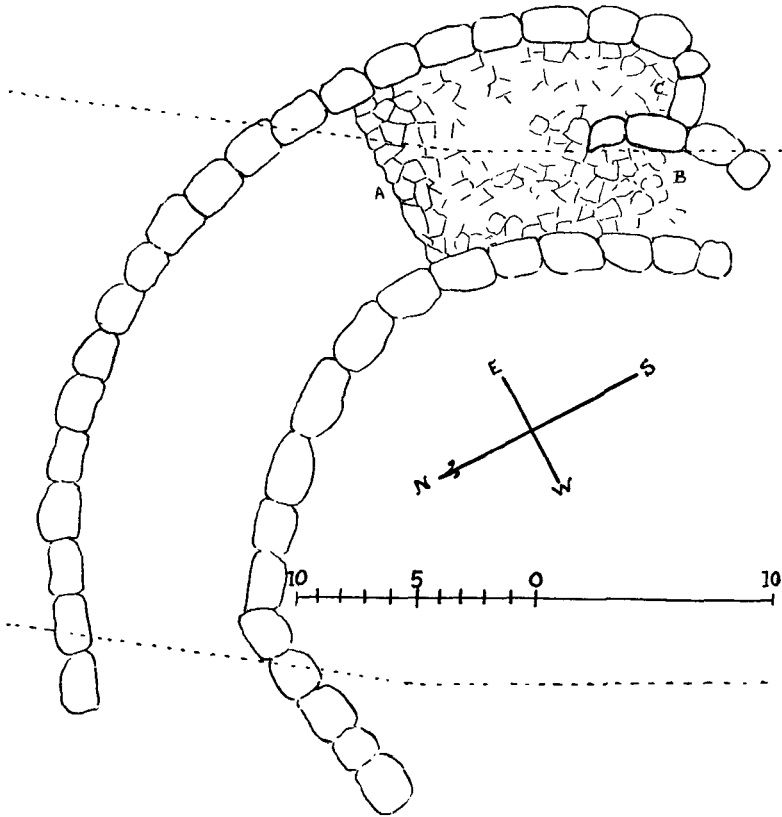


Fig. 1. Ground Plan of Earth-house at Barnhill, Perth.

The entrance to the earth-house, which was only 2 feet 3 inches in width, faced towards the south-west. The wall forming the left-hand side of the entrance was continued inward to form the western

wall of the earth-house, but the right-hand side of the entrance was prolonged inwards only 6 feet 4 inches, and then formed a projection, behind which was a recess 3 feet in depth and about 4 feet in width. The entrance passage, this recess, and a portion of the structure extending backward 8 feet from the inner end of the passage were rudely paved with stones. From this point the earth-house exemplified the usual characteristics of its class by sloping downwards and curving rapidly to



Fig. 2. View of Earth-house from lower end. (From a photograph by Mr A. M. Rodger.)

the left for a distance in all of about 45 feet from the entrance, measured along the medial line, to where the two side walls abruptly terminate, having doubtless been cut off when the public road between Perth and Dundee was diverted and cut through it, presumably in the early years of last century.

And now as to the features of the situation. It is well known that these structures have been commonly found occupying level or at least

arable ground, in other words, sites suitable for, and in modern times given over to, agriculture; hence they have been generally discovered by the plough coming into contact with the roofing slabs, and so leading to an examination of the obstruction. But the Barnhill earth-house has differed from the usual type in occupying the summit of a rocky knoll, where presumably, if covered or roofed over in the usual way with large slabs of stone, it must have been partially formed above ground, and afterwards covered from sight by earth being heaped above it to such depth as afforded that concealment which seems to have been the invariable rule, if not indeed the originating cause, of the typical form of these structures. No covering slabs now exist, nor has any evidence of them here been discovered. The walls were dry-built, and formed of a single line, or rather of superincumbent lines, of stones.

The stones of the first or lowermost line average 2 feet 6 inches long, 2 feet high, and 1 foot 6 inches thick. They are water-rolled and ice-scratched boulders of whin, diorite, granite, etc., nowhere exhibiting tool-marks or any evidences of artificial shaping. The stones had, however, been placed with some recognition of a principle of construction. They were set with their longer axes in the line of the wall, and had their smoothest and flattest surfaces facing inward to the earth-house, but nothing of the nature of what is known among masons as 'bonding' was visible. At the date of my visit practically only one tier of stones remained, with here and there portions of a second tier; but I learned from the workmen that before the artificial character of the remains was recognised, one and in some places two tiers of stones had been removed from the walls. The result of this removal has been to deprive us of the possibility of now deciding whether the walls in their complete state were erected with that inward convergence of the upper part which characterises these structures, but a consideration of the available evidence does not support such an assumption.

I am therefore inclined to believe that the walls were originally erected

practically perpendicular, and banked up behind by the stiff subsoil to give stability to this otherwise weak wall.¹

It was a singular place to select for an earth-house. The rock, which protruded through the surface at the apex of the knoll, must have shown the prospective builders what they had to expect in forming there an underground structure. Are we therefore to assume that they contemplated a certain amount of scarping of the rock² to attain their ends? I was at first inclined to think so, from certain appearances of the rock, which forms everywhere the floor, shelving downwards at the entrance, and also on the left side about half way towards the end; but on reflection I gave this up, since, even if necessary to scarp the rock at the entrance and further in, it was not necessary to make this supposed scarping extend underneath the stones forming the side walls, which, on examination, it was found to do. I therefore concluded that the supposed scarping was only the natural slope of the rock; and in this opinion I was glad to have the concurrence of Mr Alex. M. Rodger, Curator of the Museum of Natural History, Perth, who is well acquainted with the geology of the district. It seems, therefore, that this structure, which conforms to so many of the features of an earth-house that it seems impossible to assign it to any other known class of early structure, yet differed from the type in having been only partially excavated, and consequently formed partly above ground, being afterwards covered over with soil so as to be hidden from view, as all others wholly excavated were.

I have said that the rock is everywhere the floor of the structure. This is true even where the floor has been paved, as I found by lifting a portion of the pavement, which is composed of flattish cobbles, each of them from 9 inches to a foot across. They exhibit no signs of dress-

¹ One at Kinord, Aberdeenshire, has its walls constructed of single boulders set on edge or on end. *Scotland in Pagan Times*,—The Iron Age, pp. 291-2.

² In an underground structure of this type, but probably of later construction, discovered at West Grange of Conan, Arbroath, the walls are partially cut out of the rock, which also for a considerable portion of its length forms the floor of the chamber. *Ibid.*, pp. 294-5.

ing, but have been laid with their smoothest or flattest sides uppermost, and close on the rock. Their presence here was doubtless to furnish a better and smoother floor at the entrance than the rugged surface of the rock itself would afford.

From the entrance the floor sloped pretty equally downwards until it attained a depth of 4 feet 6 inches at a point opposite to the end of the



Fig. 3. View of Earth-house, showing pavement and recess on right of entrance. (From a photograph by Mr A. M. Rodger.)

west wall. Here the rocky floor began to slope upward again, and had risen about a foot when the end of the eastern wall was reached. Beyond this point, as already explained, a portion of the knoll together with the earth-house had been cut away in the alteration of the public road between Dundee and Perth, so that, unless some record has been elsewhere preserved of the discoveries of that period, it may be impos-

sible now to determine how much further or in what direction the structure may have extended.

It was unfortunate that before my visit the interior was cleared out down to the rock, and the material spread out on the surface of the new road. I was informed the men were careful to keep a good lookout for relics, and some bones and a broken nodule of black flint were picked up and preserved, but a practised eye might have detected other articles. I cleaned out carefully the joints and cavities of the rocky floor and between the paving stones, but beyond a thin slab of black flint, about an inch square and dressed on one edge, and a few pieces of charred wood, nothing of interest was detected. The flint may have travelled from the surface, but was found between two of the cobblestones in the recess at the entrance.

My thanks are due to Sir Alexander Moncrieff for so obligingly supplying workmen to clear the floor and make other excavations in aid of these investigations. I am also indebted to Mr James T. Sellar, of the firm of Messrs R. H. Moncrieff & Co., W.S., Perth, Sir Alexander Moncrieff's agents, for accompanying me to the site, and affording me much valuable assistance at my first and subsequent visits when the secondary excavations were being made.