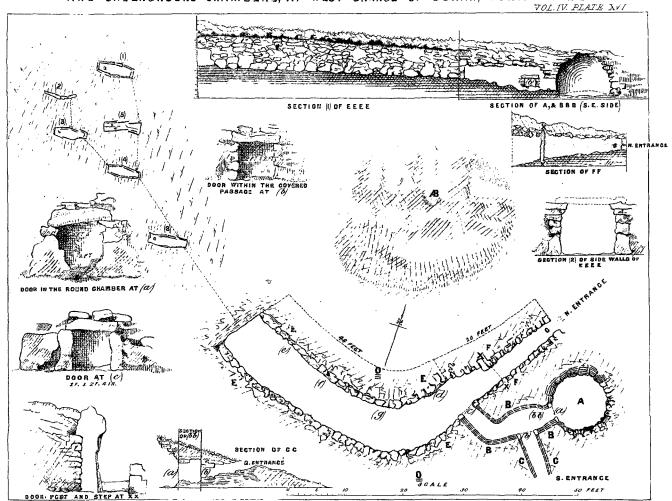
AN ACCOUNT OF THE EXCAVATION OF THE ROUND OR "BEE-HIVE" SHAPED HOUSE, AND OTHER UNDERGROUND CHAMBERS, AT WEST GRANGE OF CONAN, FORFARSHIRE. By A. JERVISE, Esq., Brechin, Cor. Mem. S.A. Scot. (Plate XVI.)

It was in the spring of 1859 that the "bee-hive" shaped house (if it may be so termed), and other underground chambers, were discovered in a field on the farm of West Grange of Conan, near Arbroath. As these chambers have now been excavated, I beg to submit the following account of them to the Society, accompanied by ground, elevation, and sectional drawings, together with such fragments of stone, bronze, iron, and pottery, as were found in and about the works, as well as some remains of skeletons from graves adjoining. The chambers are situated in a field about five miles north-west of the town of Arbroath, on the west side of the old Forfar road, and near the south-west extremity of the parish of St Vigeans. The substratum is composed of the Old Red Sandstone, which prevails in this district of Angus, dipping towards the south-east, and so close is the rock to the surface, that in some places it forms the face of the field.

The chambers occupy the south-east slope of the highest point of the field, from which there is a singularly extensive, varied, and interesting prospect, being from 400 to 500 feet above the level of the sea. In clear weather the coast of the shires of Haddington and Berwick may be seen, with the promontory of St Abb's Head in the extreme distance. In the middle distance lies the fertile plains and cultivated hills of the East Neuk of Fife, with the stately ruins of the cathedral, and the modern buildings of the interesting old city of St Andrews. In the more imme-

## GROUND, ELEVATION, AND GECTIONAL DRAWINGS, OF THE BEEHIVE HOUSE AND UNDERGROUND CHAMBERS, AT WEST GRANGE OF CONAN, FORFARSHIRE.



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diate foreground to the westward, washed by the German Ocean and the River Tay, are the Links of Barry and Carnoustie, the reputed scene of a conflict between the Scots and the Danes. Directly south, standing in bold relief against the sea and sky, rise the picturesque ruins of the Abbey of Arbroath, its modern church spires, numerous "lang lums," or steam-mill chimneys, and its dwelling-houses. To the east of Arbroath are the remarkable marine caves, which are so curiously described by an old minister of Murroes, and the promontory of the Redhead, the socalled "Rubrum promontorium" of the Romans, betwixt which and the underground chambers are the sites of several old places of worship, and some reputed scenes of early strife. Among the former is the strangely situated and Romanesque church of St Vigeans, with its sculptured stones; and among the latter the doubtful but not improbable battle-field of "Druim-derg-Blathmig" (? Kinblethmont). In the distance on the south-west are seen the hills near Dunkeld, and some other of the Perthshire mountains; nearer the remarkable heights of the Law of Dundee and the Hill of Laws, the summits of both of which, more particularly the latter, possess antiquarian peculiarities of no common kind. On the north are the famous hill forts of Caterthun, and the old passes of Glenesk and Cairn-o'-Mount; and on the east the Grampian range nearly as far as Aberdeen, including Fordoun, the ancient seat of St Palladius. Beyond Fordoun is Redykes, a reputed scene of the battle of the Grampians.

Such is an epitome of some of the more remarkable points which present themselves to the spectator in looking from the site of the underground works; and although the mention of these is in no way calculated to elucidate the history of the chambers, it may not be altogether uninteresting to those unacquainted with the district in which they are situated.

It ought to be stated that the discovery of these subterranean buildings was purely accidental, and arose from the lifting of a large stone which obstructed field operations. On removing the boulder, which was the top or centre stone of the round or "bee-hive" shaped house, a vacuum was observed. This induced further search on the part of the farmer and his servants, and the report of these in the newspapers suggested that measures should be taken to have the works fully excavated and explored. This was determined upon in the spring of 1860, when, by

<sup>&</sup>lt;sup>1</sup> Edward's Description of the County of Angus. 1678.

request of my friend Mr Stuart, the Secretary to the Society, I agreed to superintend the business, in which I received valuable assistance from Mr David Lindsay, son of the farmer.

Workmen (some of whom were kindly sent for the day by Mr Pierson of the Guynd) were first employed in the excavations on the 27th of April 1860, when by previous arrangement Messrs John Stuart, Joseph Robertson, and Robert Chambers came from Edinburgh, accompanied by Mr Macdonald, town-clerk of Arbroath, and several others.¹ Owing to the scarcity of labourers, and immediate attention to my own official duties being required, the excavations were postponed for a time. They were finally resumed, and finished in the following spring, when, after a vast deal of labour, and no small expense, the chambers were cleared of stones and rubbish, and a good part of the adjoining ground trenched over, the latter of which expedients led to the discovery of the graves, the rudely paved circle, as well as the broken bronze ring, &c., which will be afterwards adverted to.

On clearing the round or "bee-hive house," it was found that the bottom was formed of the solid rock, out of which it had been excavated to the depth of several inches on the north. On the south it was built of rude undressed stones, and, as was the case with the whole of the built portion of the work, it was constructed in what is commonly called the Cyclopean style of masonry, and without the least indication of lime having been used in its composition, the interstices being filled with earth and small stones. The stones used in the building of the roundhouse, as indeed throughout the whole, were a mixture of the Old Red Sandstone and of the coarse boulders common to the district, most of which bore the appearance of having been "water-worn." This chamber (marked A on the plan, Plate XVI.), which converges towards the top, is about 7 feet 6 inches high; and although not quite circular, it averages about 10 feet in diameter at the bottom or floor.

From the west wall of the round house, raised about a foot from the floor, entering at the grotesquely-shaped door (a) (see Plate XVI.),—the lower portion of the sides and sill of which are composed of the rock,—is the passage B, the bottom of which is wholly, and the sides mostly; cut

<sup>1</sup> In Proceedings, vol. iii., pp. 465-471, a notice of the works will be found, by Mr Stuart, which was read to the Society after the visit here mentioned.

out of the rock, and in the irregular manner indicated by the plan. This passage varies both in height and breadth, and at about 12 feet from the entrance, it takes a sudden curve towards the north-west. It is covered with flag-stones, and leads by the carefully constructed door (c) to the passages E and F.

The long passage E, so far as can be ascertained from the present state of the walls, averages about  $5\frac{1}{2}$  feet in height; and from the middle of the door (c) to the extremity on the north-west, it is about 46 feet long. As indicated by the drawing, the passage varies in width from  $7\frac{1}{2}$  feet at the north-west point, to  $6\frac{1}{2}$  feet at the middle of door (c), its greatest width  $(8\frac{1}{2}$  feet) being about 6 feet from the end. Like passage B, the bottom is wholly, and the end mostly, formed by the natural rock. The floor is uneven, and has a fall towards the entrance (c) of about 3 feet. The walls converge slightly, as shown in section (2) of E (see Plate XVI.)

Passage F is about 20 feet long, ascends abruptly from the entrance (c) towards the surface, to the height of about three feet, where at G there appears to have been a direct entrance to the galleries E and F. This entrance could not have been more than 18 inches high, and apparently  $2\frac{1}{2}$  feet wide. The passage is partly formed out of the rock, the rest "being made up," as it is termed, of earth and stones. At X there stood a rude undressed boulder of about 5 feet in height, which projected from the north wall into the passage, having very much the appearance of a door-post. (See Plate XVI.) It was strongly wedged into the wall by stones, and probably with the view of making it more secure, the foot of it was strengthened on the north-east by a stone which stretched from wall to wall, forming a sort of step of about 6 inches in height.

Passage C, which is situated on the south side of B, appears to have been another entrance to the chambers. It is covered by undressed flagstones, with the sides partly, and the bottom wholly scooped out of the natural rock, the latter being somewhat in the stair-step form, as indicated in the drawing. The south aperture or opening measures about 27 by 22 inches, and the inner door or entrance (b) (see Plate XVI.) is about 2 feet square.

With the exception of the round-house, and the passages B and C, which, as already stated, are covered by rude freestone flags, no covers were found upon the rest of the work, except at (d), where there was a

single flag in a half-fallen state, owing, apparently, to a part of the wall having given way. This stone was about 6 inches thick,  $2\frac{1}{2}$  feet broad, and nearly 5 feet long. Under the north end of it were found the pieces of pottery now exhibited, also the scooped-out stone vessel, and part of a quern or hand-mill. The pieces of pottery or fragments of urns indicate the existence of several distinct vessels; and a quantity of clammy or damp earth, mixed with particles of bones, was found adhering to the yellow-coloured pieces of pottery (which, by the by, reminds one of a Roman amphora), as well as lying beside them. Quantities of wood, charcoal, and calcined bones, apparently those of animals, and some horses teeth pretty entire, as well as bits of rib, leg and other bones, were found in various parts of passage E, particularly at the point marked (f) in the drawing. At (e), the curious bronze needle, with eye at one extremity, and measuring  $2\frac{1}{4}$  inches in length, was found among the rubbish.

The covers of passages E and F being gone, the trenches were filled with an immense quantity of rubbish and loose stones, which rendered the clearing both tedious and difficult. One or two of the covers were got among the rubbish, the rest, doubtless, had been taken away, and used for some utilitarian purpose; but as the side walls had suffered comparatively little by their removal, they must have been lifted with considerable care. It is probable, that if these chambers had contained anything of antiquarian value, it had been found when the covers were removed; for apart from the fragments now exhibited and noticed, nothing of any moment was got in the course of the late excavations.

There is no appearance of a well near the works, unless the round-house had been used for that purpose, of which, however, there is now no evidence; and a sufficiency of water (as is yet to be seen) could have been obtained from a hollow in the field, immediately below the south entrance to the chambers.

On trenching that portion of the field marked AB, about twenty feet north-east of passages E and F, and within a few inches of the surface, the soil was found to have been excavated to the depth of some inches; it was about twenty yards in circumference, nearly circular in form, and was laid with rude flagstones. The paving was unequal, and much broken; and among the flags at AB were found the portion of a bronze ring or armlet, the upper stone of a quern, and a number of other stone vessels, as well

as the two small perforated pieces of lead, resembling weights, sinkers, or plummets. The vessels were mostly in a very rude, if not in an unfinished state. All of them bear marks of the chisel; but whether they have any claim to antiquity, it is possibly more difficult to say. On the east side of the circle are two or three trenches filled with earth and stones, somewhat resembling drains. Most of the pieces of the corroded iron implements (like knives or spear-heads, also presented with the other relics to the Museum) were got here, and some pieces in E.

North-west of passage E were found a cluster of coffins, composed of rude stone slabs, which were severally disposed as shown in the plan. The coffins Nos. (1) and (5) contained human skulls, which lay near the west end, and other portions of decayed bones. Grave (1), which was about 54 feet long, by about 17 inches at the broadest point, had much the shape of the wooden coffins of modern times: the sides were composed of three unequally-sized flagstones, with one at the head and one at the foot—the rock forming the bottom. With the exception of (5), the other coffins were similarly constructed, and shaped pretty much like No. (1). Near the head of (3) lay a small clear pebble, and a little farther down was found the bone of the lower jaw. About the middle of (5), which was the nearest of any to the surface, there was a small dark-green heart-shaped pebble, and another of nearly the same colour, but of a common form; also two brownish-coloured pebbles, and the fragment of a ring of cannel coal or ebony. This grave was differently constructed from the rest, and partook more of a square form, and, like (3), it had a top or lid of thin flagstones. The lids of the other four were gone, as well as the north side and ends of (2), through which the plough appears to have passed frequently, although the grave was not previously noticed. The common-shaped pebbles herewith sent were found scattered in the graves (1), (3), and (6).

It were idle to conjecture regarding either the age, or the people, to which these singular works belonged. The spot was uncultivated, and clad with whins and broom until a recent period. Local tradition says, that in remote times there was a building called "Gregory's Castle," and that the stones of it were used to erect some of the neighbouring old mansion-houses. So far as known, none of the ancient proprietors of the district bore that name; neither did any of the old churchmen of

the shire, with the exception of Gregory, who was the first archdeacon of the Cathedral Church of Brechin, 1202-18, then bishop of that see, and died in 1246. But here conjecture must end; for, notwithstanding that the bishops of Brechin had considerable interest in the immediate neighbourhood of Conan, both secular and ecclesiastical, it cannot be identified, so far as I am aware, with the lands now known by that name. It is also matter of record that a family assumed the surname of Conan, and was designed from these lands in the time of William the Lion, and subsequently; also that King Alexander II. gave the monks of Arbroath a grant of the right of free forestry over the lands of Dumberach and Conan; and that King Robert the Bruce subsequently gave them the park of Conan, and Dumbarach in warrenry. It need scarcely be added, that, down to the time of the Reformation, Conan was held under the superiority of the Abbot and Convent of Arbroath. From that period until the forfeiture of 1716, the lands belonged first to the noble family of Hamilton, and next to that of Panmure. Since 1716 Conan has had several possessors, and West Grange now belongs to Dr Crighton.

In the hollow towards the south-east of the subterranean chambers, and about half a mile distant, are the ruins of an old place of worship, the reputed cell of St Vigean, who, according to Boyce, flourished during the tenth century. Near it are the remains of a so-called Druidical circle. On the north-west is the hill of Cairn Conan, the cairn upon the summit of which is clearly artificial,-probably sepulchral,-and there the court of the barony was held in old times. To the south-west is a huge monolith, called the "Cauld Stane o' Crafts." It stands upon the boundary of the parishes of St Vigeans and Carmyllie; and, in common with many such relics, its origin is attributed to a native amazon, who, while carrying it (as tradition says) from the sea-shore in her apron to the county town of Forfar, the string of the apron broke at the place where the stone now stands! "Crofts" is the name of the farm, and the monolith is also called the "Harestone," a name which, taken into account with the fact of its being upon the boundary of the parishes of St Vigeans and Carmyllie, may be considered as significant of its use,

<sup>&</sup>lt;sup>1</sup> Regist. Episc. Brechin., vol. ii. p. 256, &c.

<sup>&</sup>lt;sup>2</sup> Regist. Vet. de Aberbrothoc, pp. 40, 162; 76; 220.

since, as shown by Borlase, the word Harz means a bound, a limit, a hindrance, derived from Armoric, as "men-hars, a bound-stone."

It ought to be added, that, since the excavation of these chambers, they have been visited by a vast number of people of all classes, and from many distant parts of the country. Still, I am sorry to say, that, like too many objects of antiquity in this country, they have not passed undisturbed; indeed, the hands of the mischievous have been so busy in throwing down and breaking the walls of the long passages, that, with the view of preventing further injury, it has been deemed advisable to fill up the passages, and close the entrance to the round-house. This, however, is the less to be regretted, since the works have been thoroughly excavated and searched, and accurate drawings made of the chambers. There were accidental scratches upon some of the stone, but no Runes or other significant markings.

Mr Stuart noticed the similarity of the remains found in connexion with *Raths* in Ireland, and thought it probable that a fort had originally been placed on the Hill of Conan.