

II.

EXCAVATIONS OF THREE NEOLITHIC CHAMBERED CAIRNS
—ONE WITH AN UPPER AND A LOWER CHAMBER—
IN THE ISLANDS OF EDAY AND THE CALF OF EDAY
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CAIRN, HUNTERSQUOY, EDAY.

With the approval of the proprietor, Major Harry H. Hebden, M.C., and under the auspices of our Society, in 1936 and again last year, I had the privilege of excavating certain prehistoric monuments in the islands of Eday and the Calf of Eday in Orkney. Two of these structures lie in the main island, the first being situated in the middle of a field 500 yards south-west of Carrick Farm and about 200 yards east of the ruined croft of Braeside. The latter name appears on the Ordnance Survey Map, but according to the proprietor the locality is more correctly known as Huntersquoy. On the map the site is identified as "Erd House" and "Standing Stones" jointly, but otherwise it does not seem to have been recorded.

No appreciable mound marked the position, which was overgrown with grass, peat, and heather. The existence of building was revealed by a lintel lying at ground-level over the entrance of a choked-up passage on the east, and by a small opening marked X on plan (fig. 1), which was broken through the northmost lintel of a slab roof covering a debris-filled underground chamber. Besides these evidences, the stumps of two slabs, Y, stood up on end near the middle of the site above the roof of the chamber. Their presence on the spot no doubt gave rise to the term "Standing Stones," but the name, as will be explained later, has been misapplied.

Excavation disclosed, not an "Erd House," as stated, but a neolithic burial cairn of very remarkable construction, since it contained two separate but contemporary chambers disposed in an unusual manner one above the other. Each chamber has been provided with a separate entrance-passage at its floor-level, the openings to them being placed diametrically opposite one another on the circumference of the cairn in a line running east and west. The lower chamber is entirely

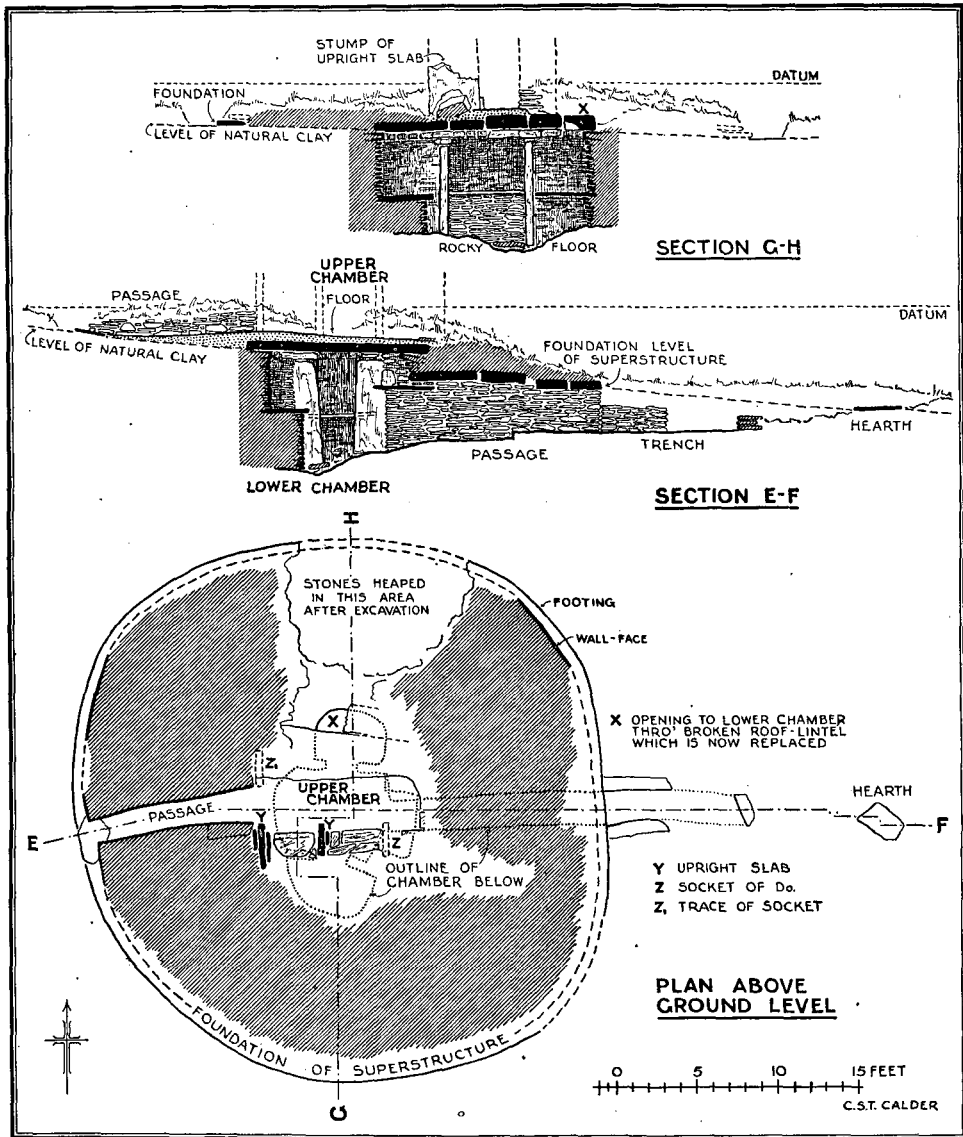


Fig. 1. Cairn, Huntersquoy: Plan and Sections.

subterranean, and the upper has been constructed in the mass of the superstructure above the natural level of the ground.

Evidently in constructing the cairn the first step had been to dig out a hole of suitable dimensions to contain the sunk chamber and passage and facing the sides throughout with a lining of rubble masonry. This lining was well built of red and grey sandstone and was 2 feet thick where measurable at the entrance. The excavators had dug down to a rough natural bed of rock which served as the floor of the chamber, the whole being roofed in by massive slab lintels, approximately at surface-level. Above this level rose the superstructure, which conformed to the slight downward slope of the ground from west to east. It appeared to have been founded on a thin layer of blue clay¹ overlying the red-clay subsoil, the outermost lintel of the entrance to the lower chamber being incorporated in the eastern arc of the foundation course.

Above ground the cairn was confined within the periphery of an irregular circle measuring from 33 to 36 feet in diameter (fig. 1). For the most part the walling around the margin had been reduced to only one course of masonry, but at two places in the northern half where more than one course survived it was seen that the lower or foundation course projected 5 or 6 inches from the face of the upper as a footing. A short length of face on the north-eastern arc consisted of four stones coursed on an inclined plane with their lower ends resting on the footing. Whether this inclination of the facework formed part of an intentional design in an outer casing wall or whether it was merely due to settlement following disturbance can hardly be decided on the meagre evidence such a short length of face supplies.

Beyond the limits of the superstructure an open trench (fig. 2) had also been formed and it extended in front of the lower passage for a distance of 8 feet 6 inches, where three courses of masonry, laid transversely, seemed to mark its termination. For the half of its length, next the entrance, the clay sides of the trench were faced with a lining of stonework, but those of the outer half may never have been similarly faced. At least on the north, where the side did not appear to have been disturbed, the face of the clay was in alignment with the stonework lining. A race-bond separated the lining of the covered passage from that of the open trench. The masonry facing of the latter survived to a height of 1 foot 6 inches only; it may have been carried higher but presumably never supported lintels. Obviously an open trench was a necessary adjunct to a passage built entirely underground, and it is

¹ It is understood locally that a stratum of blue clay occurs only at the south end of the island of Eday, from which point—5 miles away—it must have been brought to the cairn.

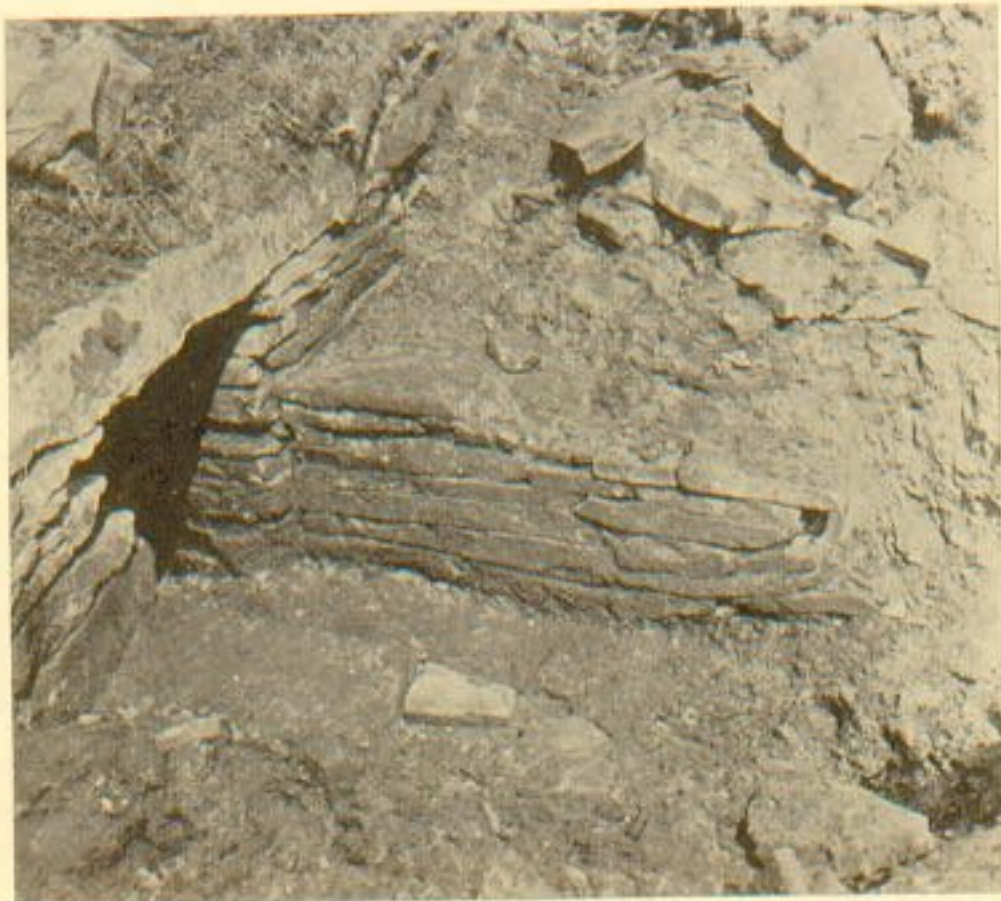


Fig. 2. Cairn, Huntersquoy: Entrance to Lower Chamber, with stone-lined trench in front.

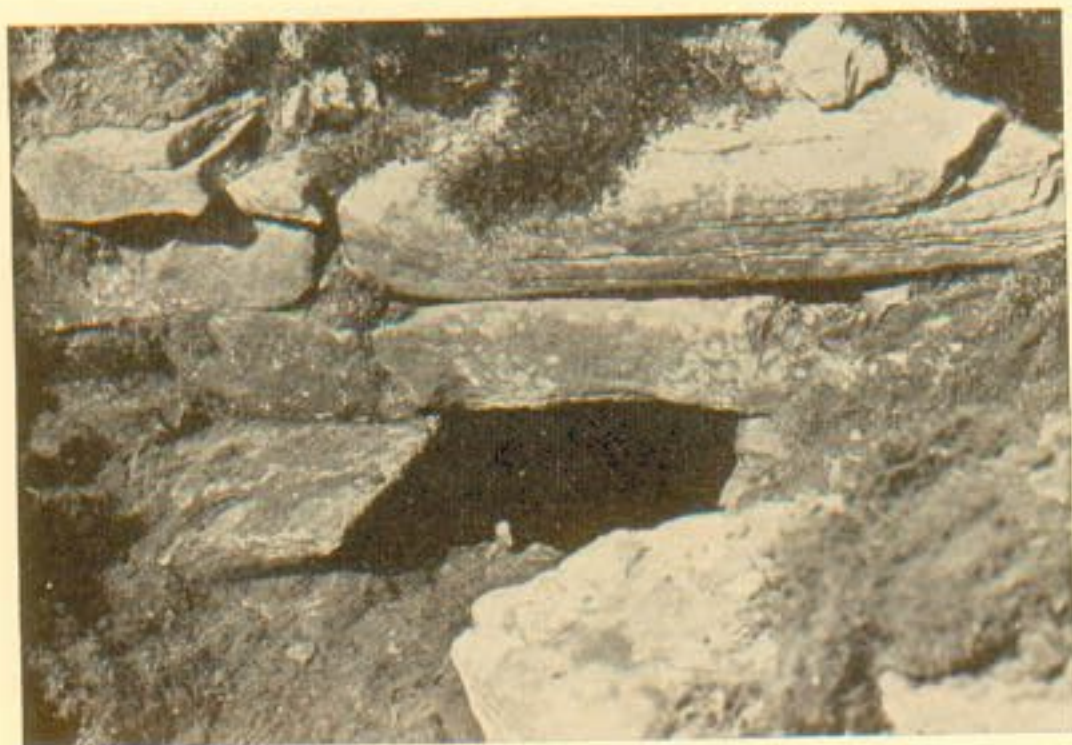


Fig. 3. Entrance to Cairn on Viquoy Hill, showing beginning of stone-lined trench beyond the margin of the superstructure in front of the outermost lintel of the passage.

a feature of frequent occurrence in cairns elsewhere. It may be noted specially in connection with a chambered cairn 500 yards distant on the top of Vinguoy Hill,¹ but in this case the linings of passage and trench are continuous, without any intervening race-bonds (fig. 3). Such trenches would be filled in and camouflaged after each burial in order to conceal the entrance and keep out unauthorised persons.²

On the surface of the clay subsoil, 7 feet 6 inches in front of the outer end of the trench, a thin flat stone had been laid for use as a hearth (fig. 1). It measured 2 feet 6 inches by 1 foot 6 inches and had been cracked and discoloured by the action of fire. On top and around it was a quantity of peat ash and small-sized, jaggedly fractured, burnt stones—a few similar stones mixed through the infilling towards the outer end of the trench were also noted. The hearth may be contemporary, but no evidence was found to prove whether it was associated originally with the burial rites or with a later use for domestic purposes.

As already mentioned, both chambers in the cairn belong to the same period, and each may be regarded as typifying a local variety of its kind of monument. The upper conforms to the short-stalled type and the lower is an example of a class containing cells and recesses. Treated individually it is difficult to decide which of the two would rank as the more important. The claim for the lower to be the principal tomb is strengthened by its greater inaccessibility and by its apparently intentional concealment. At present, being intact, it is the more impressive, but what little is left of the upper, which has been considerably denuded and despoiled, is enough to suggest that it was equally imposing in appearance.

Such a two-storeyed arrangement is so rare that it is known in only one other example, at Taiverso Tuick³ in the neighbouring island of Rousay. The presence of two chambers in the latter has been known for some time, but owing to its unique character a contemporaneity of dating had been viewed with suspicion until the point was settled when the structure was completely exposed by excavation last year. Mr James S. Richardson, H.M. Inspector of Monuments for Scotland, informs me the evidence obtained now shows conclusively that the chambers are original features. In many respects the cairns of Huntersquoy and Taiverso Tuick resemble each other, the similarity between their lower chambers being specially marked. Their upper chambers

¹ *Arch. Jour.*, vol. xx. p. 34.

² *P.S.A.S.*, vol. lxviii. pp. 324, 325, fig. 7; *ibid.*, vol. lxxi. pp. 117 (fig. 3), 122; *ibid.*, vol. lxxi. p. 300; *An Inventory of Ancient Monuments in Anglesey*, p. 44.

³ *Ibid.*, vol. xxxvii. p. 73 ff. See also a report of the more recent excavations which, it is expected, will be published soon in a volume of *P.S.A.S.*

diverge more from each other in design but the construction of each with upright slabs projecting from the side walls emphasises the connecting link. The lower chambers have also points in common with a single-chambered cairn on the Calf of Eday, also described in this paper.

When operations began, the lower chamber and its passage were found to be more than half-filled with stones, earth, and mud. This material was cleared away, but seepage water continued to collect and ultimately covered the floor to a depth of more than 2 feet before it rose to an outlet-level at the mouth of the passage. As the water hampered progress it was necessary to cut a makeshift drain from the outer end of the trench, and the digging of this involved the removal of the hearth previously mentioned. Without proper drainage, however, it seems likely that water will always gather in the bottom of the chamber.

The passage (fig. 4) measures 13 feet 6 inches in length and 2 feet 6 inches high by 2 feet wide at the mouth, but the height increases inside. At a distance of 4 feet 2 inches inwards the lintels rise 5 inches, and at 5 feet 7 inches there is a descending step of 4 inches in the floor. The innermost lintel drops 4 inches, but the level of the floor underneath is 1 foot 2 inches lower than at the mouth. Five flat slabs form the lintelled roof and measure from 2 to 4 feet wide by 7 inches thick, except the innermost, which is from $2\frac{1}{2}$ to 4 inches thick. The floor seemed to have been levelled with a layer of prepared blue clay.

The chamber is entered at the middle of its eastern side. Its greatest dimensions (in its upper half) are 12 feet 10 inches long by 6 feet wide. The width is exclusive, however, of a recess, 2 feet 4 inches deep, in the wall above the passage opening, beside which the chamber is 5 feet 10 inches high. The height is almost 7 feet on the opposite side where the irregular floor is lowest, but if a flat stone laid in a rough cavity here, as shown in section AB, fig. 4, is *in situ* this dimension would be slightly less. The roof lintels, of red or grey sandstone, are laid transversely to the longer axis, which is approximately north and south. These are five in number and vary from 2 to 4 feet in width and from $6\frac{1}{2}$ to 10 inches in thickness. As in the passage a layer of blue clay seems to have levelled up the unevenness of the rough floor.

The chamber is subdivided into three compartments by two pairs of large upright slabs projecting from 1 foot to 2 feet 3 inches from the side walls, into which their outer edges are engaged. The slabs are from 6 to 9 inches thick and reach almost to the roof, the intervening spaces above their tops being filled by "eke-stones," and in three of them also by a large cantilever-like stone jutting out from the wall-head immediately under the roofing slabs. Each pair of uprights forms a transverse

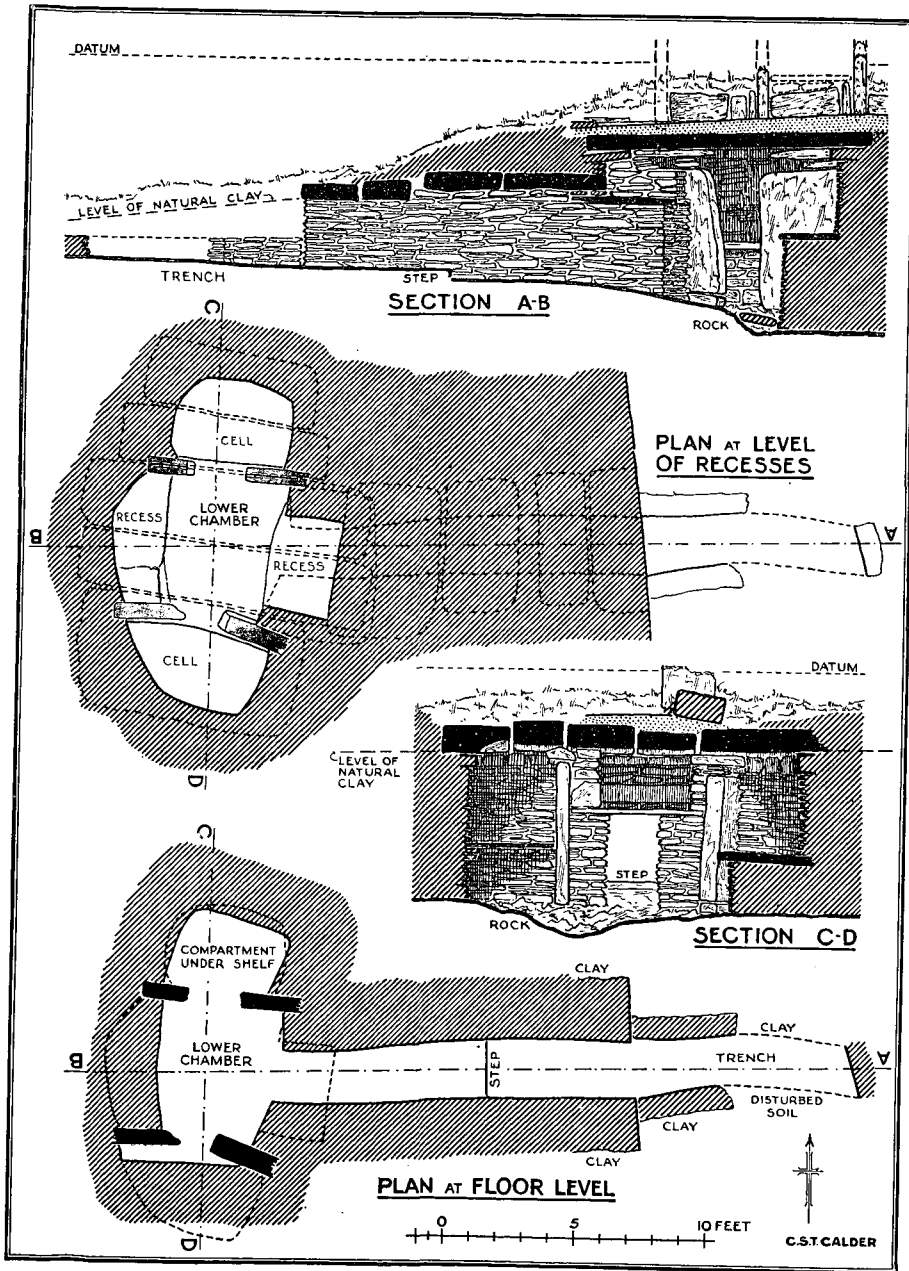


Fig. 4. Cairn, Huntersquoy: Plan and Sections of Lower Chamber.

partition. The two stones are set in alignment edgewise from opposite side walls with an interval, from 1 foot 5 inches to 1 foot 9 inches wide, left between their inner edges to form a portal between each compartment. Between the partitions, which are set 5 feet 3 inches apart, the space on the west side opposite the entrance is stall-like, while the spaces on their farther sides, constituting the end compartments, terminate as cells with rounded walls.

Several uncommon features present themselves in the compartments. The stall-like space of the central one is filled in solid with built masonry to a height of 3 feet 6 inches above the main floor. A single stone, $2\frac{1}{2}$ to 5 inches thick, rests on top of this seating, and forms at once a ledge or shelf and also the bottom of the upper part, which is left as an open recess up to the roof. On the east side the recess above the entrance, measuring 3 feet 2 inches wide by 1 foot 11 inches high, has been constructed in the walling up to the roof, and its bottom is the same slab that serves as the innermost lintel of the passage. In the southern compartment, which is occupied wholly as a cell measuring 5 feet 7 inches wide by 3 feet deep and 4 feet high, the bottom is also raised 2 feet 4 inches above the main floor. It consists of a large single slab, 4 inches thick, which is bonded into the wall where available, and is supported in front next the uprights on built masonry presenting a solid face. The northern compartment is distinguished from the last by the absence of any similar masonry across the front. At least, if such stonework ever existed no trace now survives, and the present appearance of the compartment is that of a tier of two cells, one above and one below a stone shelf. The upper measures 4 feet 6 inches wide by 3 feet 3 inches deep and 3 feet 9 inches high; the lower, 4 feet wide by 3 feet deep and only 2 feet 2 inches high. Owing to the rocky floor of the latter being very uneven, and in places rising higher than the general floor-level, it is questionable if this part were ever intended to be used for burial purposes, the main repository for the remains of the dead probably being that of the upper. The shelf, a thin slab only $1\frac{1}{2}$ inches thick, is now broken, but its fractured edges still project from the walling, into which it has been bonded. Immediately below it two or three courses of stones are corbelled out slightly from the face to act as a scarcement giving additional support. The compartments are all roofed over by the main lintels, and their walls are curvilinear on plan but not "bee-hived" in section. Round the wall-head the topmost course of masonry is built of larger stones than the rest, and it projects about 2 inches from the face below. The stones in it vary from 6 to 9 inches high, while those in the wall generally are barely 2 inches high on the average.

Dilapidation of the superstructure leaves the original aspect of the upper chamber a matter of some conjecture. Before excavation the most notable features remaining were the stumps of the upright slabs, Y, mentioned earlier as "Standing Stones." These are set parallel to one another, 3 feet 3 inches apart, and each has been made firm with packing stones at the base (figs. 5 and 6). Major Hebden recalls that



Fig. 5. Cairn, Huntersquoy: Interior of Upper Chamber showing Stumps of upright Slabs with bench foundation between, and also the Entrance passage.

many years ago the stones were broken by a shepherd. The taller now measures 2 feet 9 inches wide by $4\frac{1}{2}$ inches thick and 2 feet 6 inches high inclusive of earth-hold, and the shorter, similarly, is 1 foot 11 inches by 6 inches and 1 foot 5 inches. Actually they represent two of the divisional slabs of the upper chamber. Between them, and on the outer side of the southmost at ground-level, a single course of stones has been laid on bed, and together these constitute all the structure that is left of the chamber, but the original floor, which is a thick layer of prepared clay, still survives to a large extent. Also the passage leading to the chamber is clearly defined throughout the whole of its length by the

lowest two or three courses of its masonry on either side, up to 1 foot 2 inches high on the north and 9 or 10 inches high on the south (fig. 6). It penetrates the cairn on the level of the higher ground on the west and has been provided with a thin stone sill at its mouth, projecting in line

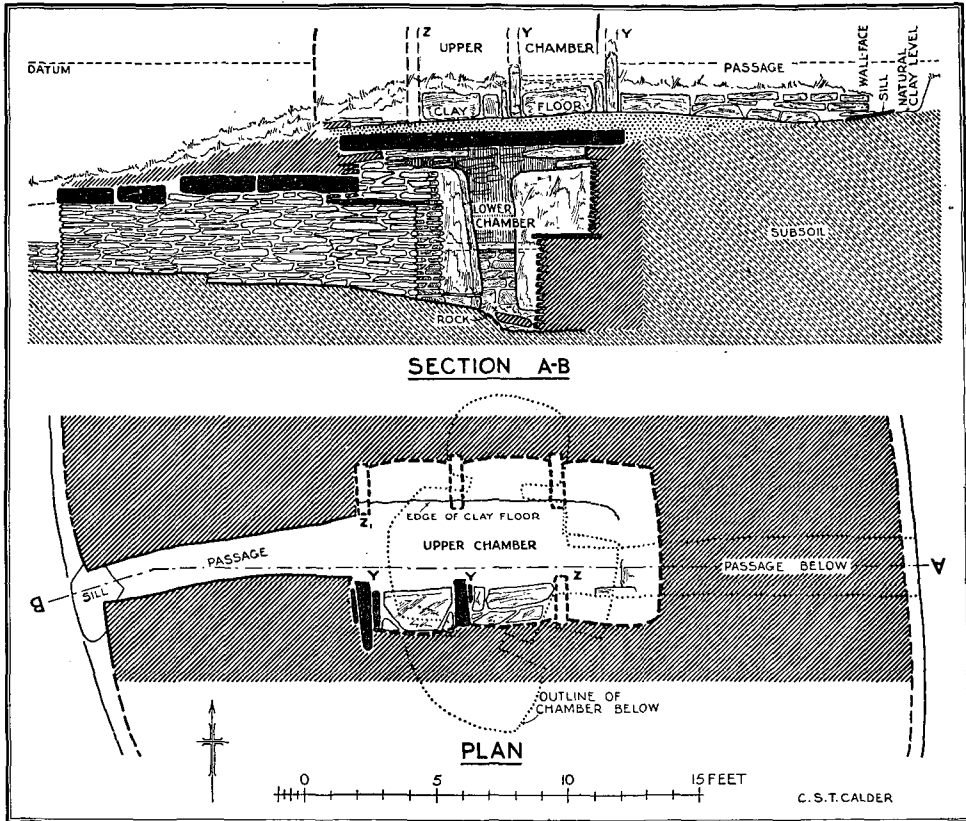


Fig. 6. Cairn, Huntersquoy: Plan of Upper Chamber showing conjectural outline, and section through Upper and Lower Chambers.

and level with the footing course. The passage is 10 feet long, 1 foot 5 inches wide at the mouth, and 2 feet $2\frac{1}{2}$ inches wide where it enters the western end of the chamber (fig 5).

Confirmed so far as the available evidence allows, and based for the rest on what has undoubtedly been a similar type of chamber in a cairn on the same island,¹ the suggested restoration of the plan of the upper chamber as indicated by a broken line in fig. 6 is felt to be justified. It

¹ Described in the report of the second cairn (Sandyhill) following.

is assumed to have been of rectangular shape, measuring 11 feet 6 inches long, including the uprights in rear of the entrance, by 6 feet 6 inches wide, and it occupies a central position in the superstructure immediately over the lintels of the lower chamber. It is also assumed to have been partitioned off into three compartments by two pairs of opposed upright slabs, with a third pair completing that end next the entrance, while the opposite end has terminated probably in a built wall. Despite the absence of wall-face in any part of the chamber its line, sufficient for guidance, can be fixed between the remaining stumps by the course of bedded stones, already referred to, the back of which would presumably have been set hard against the face of the wall. The outer edges of the upright slabs themselves would have been fixed in the wall-face for firmness, but in this case with slight hold. As usual, communication between the compartments would have been made through the central gap left between the inner edges of each pair of stones forming a partition, and the whole would have the appearance of a chamber with a row of stalls on either side. In addition to the stumps *in situ* the position of a third upright is assured by the finding of the socket-like impression of its base, Z, sunk to a depth of about 3 inches in the red clay of the floor which extended under the stonework. Traces of the groove of a fourth were also observed next the entrance at a point marked Z1 on the plan. The single course of stones beside the stumps rises from 8 to 12 inches above the floor and, in my opinion, can only represent the supporting masonry of a bench or shelf, and a thin flat stone that was of such dimensions as would fulfil this purpose was found loose on the floor in front of the space between the stumps. It is indicated in its re-set position by a dotted line on section A-B, fig. 6. No doubt, each stall would be provided with a shelf, since this is a feature not only of the chamber below, but of many others of the period. The shelving of the innermost compartment may have returned along the end wall, but generally the shelves finish directly on or into the end wall, as in the cairn at Sandyhill which follows, and in another on the Calf of Eday.¹

The prepared clay floor of the upper chamber has been laid on top of the lintels of the lower, and it has a slight downward fall of 5 inches towards the east, where it is broken off in the damaged and reduced surface slope of the superstructure. Here it is 2 or 3 inches thick, but its thickness gradually increases to 7 inches in front of the eastern stump and to as much as 10 or 11 inches in front of the western. The present northern limit of the clay is marked on the plan, but beyond it

¹ *P.S.A.S.*, vol. lxxi. p. 117, fig. 3, and p. 121.

everything has been destroyed during a previous digging when the lintels of the lower chamber at that part had been left exposed. The prepared clay also covered the passage for the greater part of its length, growing thinner till it died out some 3 feet or so from the mouth.

There were few relics, but since access could be gained to the interior within living memory it is evident that the cairn had been robbed of

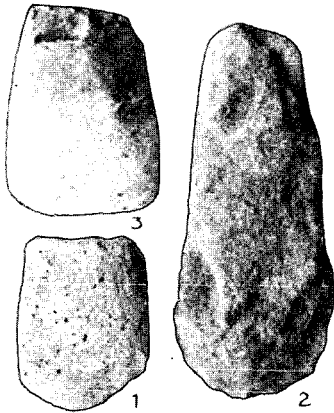


Fig. 7. From Cairn, Huntersquoy:
(1) Axe; (2) Axe-like implement.
From Cairn, Calf of Eday: (3) Axe.

its contents on some earlier occasion. The cutting half of a smooth axe of sandstone and a rude but well-shaped axe-like implement made by chipping (fig. 7, Nos. 1 and 2) were found in the clay floor just beyond the step of the lower passage. The axe measured $3\frac{1}{2}$ inches long to the break by $2\frac{3}{4}$ inches wide across the sharp edge and $1\frac{1}{4}$ inches thick; the rude implement, which had rounded ends, measured $7\frac{3}{4}$ inches long by $3\frac{3}{8}$ inches at one end, tapering to 2 inches at the other and 1 inch thick.

In the area in front of the stumps of the uprights in the upper chamber, very small fragments of thin-walled pottery vessels were recovered from the floor, into which they had been trampled. Two of these pieces were decorated with a pattern of incised lines.¹ A few small flint flakes and pebbles, two of the bits calcined, were also picked up. From the surface near the edge of the cairn came two pot-lids of stone, each about 12 inches in diameter, and also a piece of burned pumice-stone. The broken axe and incised pottery alone may be assigned to the Stone Age.

CAIRN NEAR SANDYHILL SMITHY, EDAY.

The second cairn of the series has been erected on the high ground less than a quarter of a mile west-south-west of Sandyhill Smithy and about 160 yards north-east of the old U.P. Church, beside the public road. The ruins were enclosed in a fairly conspicuous mound, which was covered with peat and heather like the surrounding area. So far as I am aware no record of a former exploration exists. The estate factor recalled that the mound had been dug into many years ago, but the digging cannot have been extensive. There was a hollow in the top, which, however, seemed due to the collapse of the chamber roof

¹ See "Report on the Pottery" annexed.

and the subsequent growth of vegetation in conformity with the irregular surface of the ruins. In the hollow the broken heads of two upright stones protruded above the turf, but a third stone appearing similarly was not deeply embedded nor was it structurally connected with the cairn.

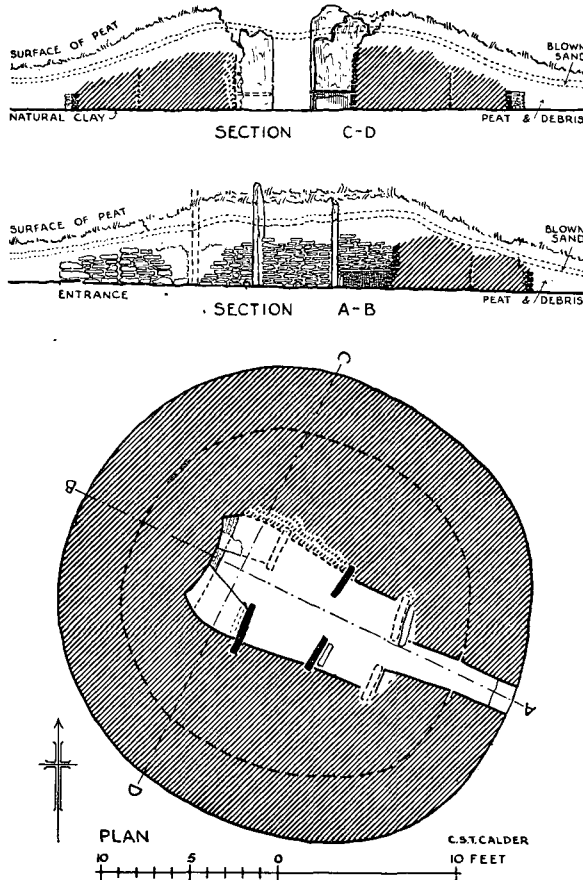


Fig. 8. Cairn near Sandyhill Smithy: Plan and Sections.

The cairn is circular on plan (fig. 8), a fact discovered by making a series of fourteen short trial trenches along the circumference at intervals sufficiently close together to establish the continuity of the outline. It is of small size, measuring only $26\frac{1}{2}$ feet in diameter, and it had been founded on the clay subsoil. The outer wall-face of rubble, horizontally laid and averaging 3 to 4 inches in each course, survives only to a height of 1 foot 2 inches above the foundations. A chamber with a passage

leading into one end of it from the east-south-east is contained within the structure. The passage was at least 7 feet 6 inches long, but this dimension may have been greater if the inner end, which is damaged, had been finished with upright slabs as indicated by the dotted lines on the plan. Its width is 1 foot 9 inches, but its height is not ascertainable as the roof-lintels have disappeared and its broken-down walls now rise only to a height of 2 feet. A large flag-stone forms a sill at the mouth, and at a distance of 3 feet 6 inches inwards from the opening a race-bond appears in each side wall, thus showing that the cairn has been built in a double thickness of walling. This method of building in two or more rings is a common one in Neolithic cairns.

The chamber is roughly oblong on plan. Its precise length depends on the interpretation of the damaged end of the passage, but it has been either 11 feet or 11 feet 6 inches, and it widens gradually from 5 feet 3 inches to 6 feet 6 inches towards the inner end. Presumably the roof consisted of slabs, all of which have been removed, and the rubble walls, built of flattish stones averaging $2\frac{1}{2}$ or 3 inches thick, have been much destroyed and reduced in height. They rise at most 3 feet 2 inches above the floor, which seemed to be made of natural clay.

Excluding the probable pair of stones at the entrance end four others, arranged in pairs, had subdivided the chamber into three compartments. Only three of the slabs survive but the fourth was determined by a groove in the floor where its base had rested. The slabs measured from 4 to 6 inches thick, and the tallest stood to a height of 5 feet 9 inches to its weathered top, above which level the walls had probably been carried well up before being roofed over. Communication between the compartments was obtained through a central gap between the inner edges of each pair of stones in alignment, the interval being 2 feet 3 inches in the case of the only two slabs left in this position.

The stalls, set one on either side of each compartment, vary in size from 3 feet 3 inches to 4 feet long, and from 1 foot 6 inches to 2 feet 4 inches wide according to the projection of the uprights. A stone shelf, 2 inches thick, occupies the whole area of the southern stall of the innermost compartment (fig. 9). It has been built into the wall at a height of 10 to 12 inches above the floor and the end next the upright is supported by a slab on edge with an "eke-stone" on its top. The corresponding northern stall has been furnished with a similar shelf. Shelves may have been contained in the other stalls but none now remains. Below the shelves, the inner end wall of the chamber is built straight across with masonry having a batter on the face as the courses ascend, but above the shelves the wall assumes a peculiar convex

outline on plan and the face is vertical. The wall-face of the entrance end and those of the northern stalls in the middle and inmost compartments, together with their dividing upright slab, had been torn out down to the very foundations. So complete a removal suggests that the destruction must have been done purposely, as there was no indication that the walls had caved in of themselves. This condition is probably due to a much later domestic occupation of the chamber, which was attested by a thin layer of compacted peaty earth, represent-

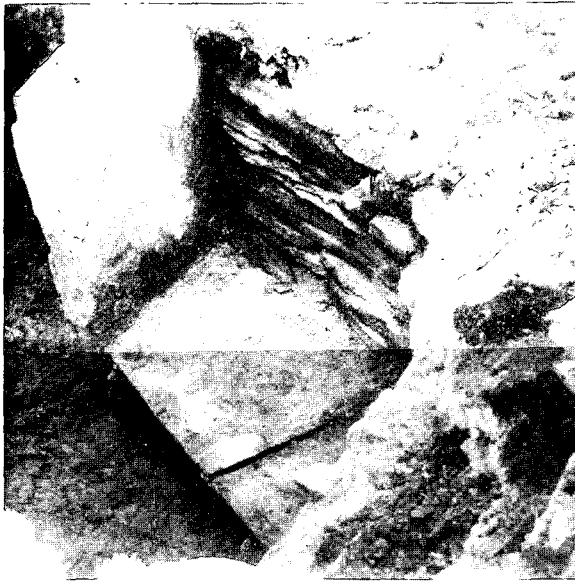


Fig. 9. Cairn near Sandyhill Smithy: Stall with Shelf in End Compartment.

ing a secondary floor. The accumulation rested on a layer of blown sand 10 or 12 inches above the original floor, and it was thickest in the central compartment. Through it were traces of burning and several flakes of flint were gathered from its surface. Above this level the chamber was filled with large stones and a few boulders. High up in the debris a not very large number of the stones had a clean appearance, free of earthy matter, as if they had been thrown back after a comparatively recent digging. This may well have been the case considering the attempted exploration previously mentioned. On top of the in-filling there was a layer of peaty earth 12 inches thick under a layer of blown sand 4 or 5 inches thick, and above that again a second layer of peat, also 12 inches thick, extended to the surface. These layers were

regular over the mound and showed little disturbance even in the hollow where digging was said to have taken place. The sand-layer in the peat covered an extensive area of ground round about and probably Sandyhill derived its name from this occurrence a long time ago.

On debris at a height of 2 feet 3 inches above the floor of the passage and 4 feet 9 inches inwards from the mouth, a short length of masonry in two or three courses, about 2 feet long and 1 foot high, was all that remained of the face of a built wall of a later period.

The stalled type of chamber has generally been associated with a cairn of long shape, as in other Orkney examples in Rousay and Eday, which may contain as many as fourteen two-stalled compartments¹ but Sandyhill cairn is not the sole exception of round shape. As well as Huntersquoy, last described, there is one at Unstan² on the mainland of Orkney, one near Bigland in Rousay,³ and probably another on the Calf of Eday.⁴ The latter, however, does not stand in a cairn by itself but is wholly enclosed in the walling at one end of a long stalled cairn. Nor has its chamber been nearly so high as the others, but it has a definite connexion in being stalled and shelved.

Pottery from Sandyhill cairn⁵ was found crushed and embedded in the original clay floor of the central compartment. The fragments represented two different vessels, one plain and one decorated with incised ornamentation. Both are assignable to the Stone Age. Some fairly large pieces of charcoal (willow) were mixed with the potsherds and the clay round about was discoloured by soot and burning.

Four rude stone implements found in the infilling above the later floor-level consist of:—

A spatulate tool made by chipping, pointed at one end and straight at the other, which is slightly broken. It measures $7\frac{1}{8}$ inches long by $2\frac{7}{8}$ inches wide and $\frac{7}{8}$ inch thick.

An implement of roughly oval section, made by chipping and measuring $7\frac{1}{4}$ inches long by $2\frac{7}{8}$ inches wide and $1\frac{1}{4}$ inches at its thickest part.

A roughly cylindrical pounder worked at both ends, one of which is partly broken. It measures 7 inches long and $2\frac{1}{2}$ inches in diameter.

An oval-shaped pebble of quartzite, measuring $3\frac{5}{8}$ inches long by $2\frac{3}{4}$ inches wide and $1\frac{1}{2}$ inches thick. It has been abraded round the edges and on both sides, but particularly at one end by use as a hammer-

¹ *P.S.A.S.*, vol. lxx. p. 409, fig. 2.

² *Ibid.*, vol. xix. p. 341 ff.

³ In course of excavation by Walter G. Grant, Esq.

⁴ *P.S.A.S.*, vol. lxxi. p. 117, fig. 2, and p. 124, fig. 8.

⁵ See "Report on the Pottery" annexed.

stone. It is also rubbed flat and smooth on one side by use as a polisher.

Two roughly circular stones, probably used as pot-lids, were also found. They measure 4 and $5\frac{3}{8}$ inches in diameter respectively and each is $\frac{5}{8}$ inch thick.

With the exception of the polisher the implements are made of sandstone, and all may be tentatively assigned to the Early Iron Age.

CAIRN, CALF OF EDAY.

The third cairn (fig. 10) is said to have been excavated by Mr Robert J. Hebden, grandfather of the present proprietor, about the middle of last century. At any rate, at his request, what is presumably the same

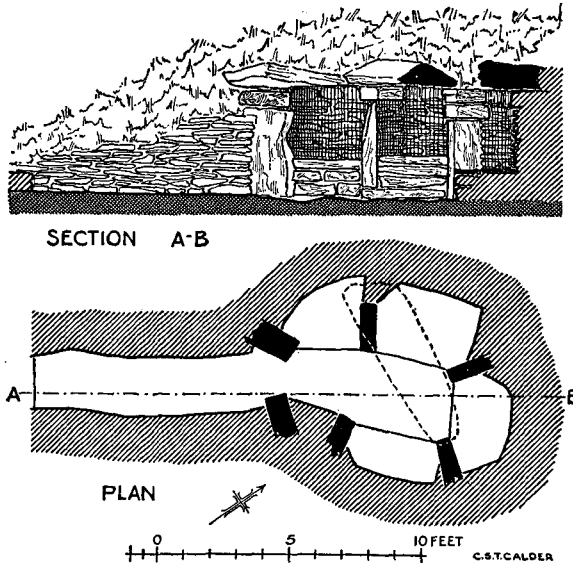


Fig. 10. Calf of Eday: Plan and Section.

monument was examined by Farrer in 1855¹ and again by Petrie in 1859² as no other structure which would correspond with their notes is known. According to the oldest inhabitant it remains in much the same condition as in their day, and consequently it is difficult to reconcile their descriptions with what they must have seen at the time. Each records that it was simply a hole in the ground covered over

¹ *P.S.A.S.*, vol. ii, part ii, pp. 156-7.

² *Proc. Orkney Ant. Soc.*, vol. v, p. 19.

by a single slab, whereas the chamber has a series of four recesses or cells in its upper part, which was evidently the only portion that had then been exposed. It is all the more surprising that these two authorities did not mention these recesses since they were at pains to plan and describe in detail a neighbouring cairn,¹ about 70 yards to the north-west (middle cairn, fig. 11), which contained very similar features. Farrer and Petrie, however, mistook the purpose of both of these monuments and classed them as Subterranean Houses, meaning Earth-Houses, by which name they are designated on the Ordnance Survey

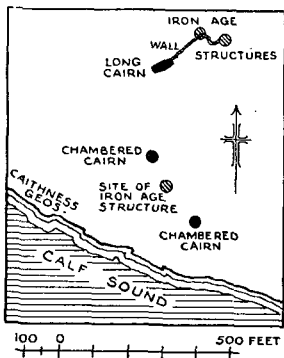


Fig. 11. Calf of Eday: Map of Monuments.

Map. Subsequently, Petrie² revised his opinion of the neighbouring cairn and called it a burial cairn, which it is. The cairn is the southmost of three Stone Age tombs in a group of monuments situated near the southern shore of the Calf of Eday (fig. 11), but neither Farrer nor Petrie was aware of the nature of the northmost, which was excavated and recorded only recently.³ No mound marks the spot nor is there any detail left as evidence that a superstructure had ever existed, and the interior is now open to the sky. What building remains, has been constructed below ground-level in an excavation scooped down to the natural rock in the face of a slight slope which is now covered with peat and heather. When the chamber was approached it did look rather like a hole in the ground, but the entrance noted by Petrie was only a break through the walling near the top of the chamber above the inner end of the original passage. The latter was discovered after the digging commenced, and a depth of only 6 inches of soil had to be removed from the interior of the chamber to reach the bottoms of the recesses, which immediately made apparent the real purpose of the structure.

The passage, measuring 9 feet 8 inches long by 2 feet wide, leads into an end of the chamber from the south-west (fig. 12). No complete lintel survives but a height of 3 feet 3 inches is ascertainable from the broken ends of the innermost one remaining in the walls. From these ends to the front the sides of the passage gradually decrease in height to 1 foot, their tops having been destroyed. Two courses of stones,

¹ *Proc. Orkney Ant. Soc.*, vol. v. p. 19.

² *Archaeological Journal*, vol. xx. p. 36; *P.S.A.S.*, vol. lxx. p. 226, fig. 8.

³ *P.S.A.S.*, vol. lxxi. pp. 115 ff.

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rising 9 inches above the floor, seem to be all that is left of a wall-face across the outer end and suggest that access had been gained through some sort of a drop entrance. That these do not constitute a step in the floor as might be expected is a point deduced from the fact that the side walls terminate here and the natural clay rises behind as high as the stones themselves. At the inner end two opposed upright stones, built edgewise into the side walls with slight projection, separate the passage from the chamber and reduce the width of the opening to 1 foot 3 inches.



Fig. 12. Cairn, Calf of Eday: Entrance passage, looking into Chamber.

The chamber is 4 feet 3 inches high, and on plan shows a central space, much like an extension of the passage, which brings it into the corridor type of monument. It measures 6 feet 4 inches long and its width increases from about 2 feet behind the entrance to 3 feet towards the inner end. These measurements are taken at floor-level, but in the upper stage off which the recesses open the over-all dimensions are 8 feet 8 inches long by 7 feet 3 inches wide. The floor is rough and rocky, but a considerable quantity of fine clay spread over it suggests it was purposely levelled up with a layer of this material.

In the disposition of the recesses, two on the west side, one on the east, and one in the northern end (fig. 13) the lay-out corresponds to that of the four cells opening off a corridor in the neighbouring cairn. They are irregularly shaped on plan, the first on the left being like a

quadrant and the others more or less oblong. None is more than 3 feet 10 inches wide nor more than 2 feet 9 inches deep, and their height is from 2 feet 6 inches to 3 feet. Upright slabs, projecting edgewise from the back walling and reaching almost from the main floor to the roof, separate the recesses from each other. Between their tops and the roof the intervening space is filled by "eke-stones" which transmit the weight of the roof lintels to the uprights, all by this means being kept firmly in position. By virtue of the positions of its uprights the end



Fig. 13. Cairn, Calf of Eday: Interior of Chamber, showing recesses at north corner.

recess assumes a more closed-in and cell-like appearance than any of the others. The bottoms of the recesses are raised above the central floor-level by masonry built between the uprights to a height of 11 inches in the case of the lowest, on the east, and 1 foot 7½ inches in that of the highest, second from the entrance, on the west. It is probable that this masonry had carried a single slab forming the floor in each recess, but these have either disappeared or are broken. Three of the recesses still retain their heavy roofing slabs in alignment with the main roof and the fourth is partly covered by another which spans the chamber from side to side, as indicated by the dotted line on plan. The wall-head course in the end and in the eastern recess is built of larger stones than in the rest of the walling, which generally consists of thinnish slabs. In parts the walls are curvilinear on plan but there is no vertical corbelling.

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Only one relic was obtained: the cutting part of a smooth axe of sandstone (fig. 7, No. 3) which was found embedded in the clay floor just inside the chamber. It measures $3\frac{1}{4}$ inches along the cutting edge and tapers to $2\frac{3}{8}$ inches at the break in a length of $4\frac{1}{4}$ inches, and it is $1\frac{3}{8}$ inch in thickness.

I wish to express my gratitude to Major Harry H. Hebden, M.C., for his hospitality and assistance in various ways during the course of the excavations. The Society is also indebted to him for his generosity in presenting many of the relics to the National Museum. I have to thank our Society, under whose auspices the work was carried out, and also Mr A. J. H. Edwards for his Report on the Pottery. It is impossible to single out specially for acknowledgment any one of the workmen, but their useful contribution as a team is much appreciated.