

IV.

A LONG STALLED CHAMBERED CAIRN OR MAUSOLEUM (ROUSAY TYPE) NEAR MIDHOWE, ROUSAY, ORKNEY. BY J. GRAHAM CALLANDER, LL.D., F.S.A.SCOT., DIRECTOR OF THE NATIONAL MUSEUM OF ANTIQUITIES OF SCOTLAND, AND WALTER G. GRANT, F.S.A.SCOT. WITH A DESCRIPTION OF THE SKELETAL REMAINS, BY PROFESSOR ALEX. LOW, M.A., M.D., F.S.A.SCOT.

On the south-west coast of the island of Rousay, Orkney, about 100 yards south-south-east of the broch of Midhowe, is an oblong grass-covered mound which lies roughly parallel to, and about 22 yards distant from, the seashore (fig. 1).¹ Before excavation it measured about 100 feet in length and about 30 feet in breadth, its main axis running 11° west of north magnetic, nearly north-north-west and south-south-east. The top stands about 9 feet high and some 35 feet above high-water mark. On the landward side the mound merges gently into the adjoining field, which rises in a gradually steepening ascent towards Mansemass Hill; on the side towards the sea the ground falls away in a slight slope to the edge of a low cliff. Apart from its shape, which formerly was partly obscured by a dry-stone dyke running along its crest, the only indications that it was artificial were the tops of a row of stones peeping through the turf in a straight line near its western margin. To ascertain the character of the monument a short length of this line of stones was laid bare and a shallow trench driven across the mound as far as the dyke on the top. These excavations disclosed a cairn of stones with a wall-face on the outside and with chambers inside. For about a quarter of the length of the mound the wall-face, which runs in a straight line, was laid bare as far as the south-western corner. This corner was square, the southern end being built at right angles to the

¹ When Mr Grant decided to excavate this site he asked Mr J. Hewat Craw to supervise and describe the operations. In July 1932 the entrance passage and the first three cells were examined, and some trial excavations were made at other parts to determine the limits of the structure within the mound. In July and August 1933 the remaining nine cells were explored, but Mr Craw had to return home before the work was completed, leaving Mr Grant and myself to finish it. Before his lamented death a few weeks later Mr Craw had drafted a preliminary report on the work of 1932, which, however, had to be recast in view of later discoveries. He had also kept very full working notes of the 1933 operations. Having followed the whole course of the excavations, we have been able to complete this account from the material left by Mr Craw and from our own observations. Mr Grant has now conveyed the custody of the monument to H.M. Office of Works.—J. G. C.

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main axis of the cairn, while the south-eastern corner was rounded. A short section of the straight wall-face near the centre of the eastern side, and the curved northern end were also cleared, but not to the foundation.

No further excavation for the purpose of exposing the remaining part of this wall was undertaken in 1933, as it had been decided to hand over the monument to the custody of H.M. Office of Works, which Department, in the course of the operations necessary for its preservation, would uncover the entire periphery.¹ This work was carried out during



Fig. 1. Midhowe Chambered Cairn: View from south-west, showing Foundation of Outer Casing Wall and Face of Part of Inner Wall.

the present summer, when the remains of the face of an outer wall or casing were exposed at an average distance of 5 feet 6 inches, and 7 feet 9 inches outside the inner wall on the east and west sides, and 5 feet 9 inches and 4 feet 6 inches from it at the north and south ends, the intervening space being packed with small stones (fig. 2). As in the case of the inner wall, the outer one is practically straight at the sides and curved at the north end. The south end is similarly curved round the corners, while, as we have seen, the inner one is straight, except at the south-east corner. The extreme length of the building is 106 feet 9 inches and the breadth 42 feet 6 inches.

The height of the inner casing still standing, as exposed by the

¹ This work was done after the paper was read, but before it went to press.



Fig. 2. Midhowe Chambered Cairn: View of Outer Casing Wall (1) and Inner Wall (2).

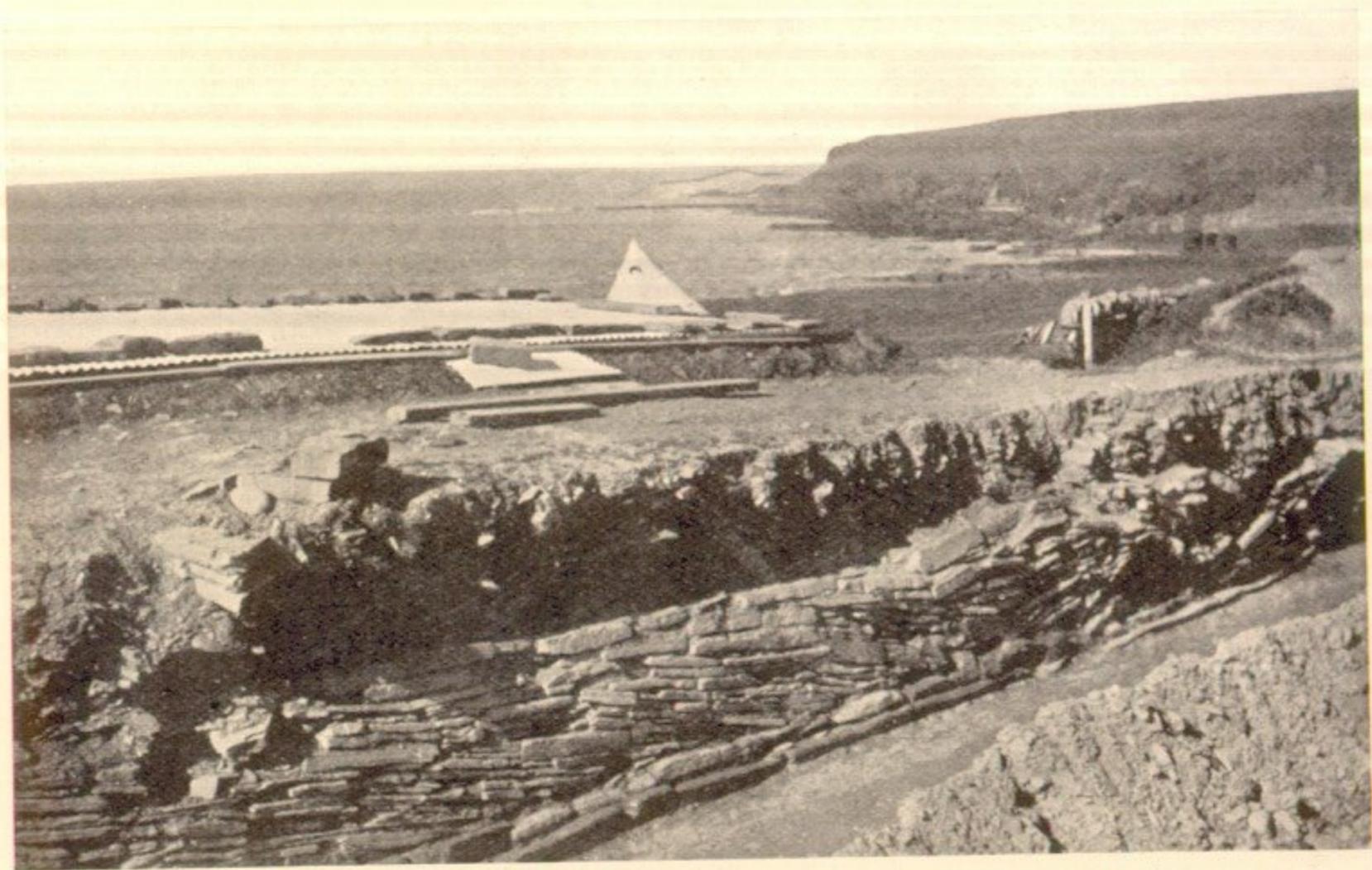


Fig. 3. Midhowe Chambered Cairn: Outer Casing Wall, east side, and Chamber covered with corrugated iron pending preservation work.

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Office of Works, varied from about 4 feet to nearly 5 feet on the east or landward side, and from $3\frac{1}{2}$ feet to 6 feet on the west, the central section on each side being best preserved. This face of walling was nearly vertical and the stones were, as in ordinary building, laid on the flat.

Along the greater part of the west side nothing remained of the outer casing wall except the displaced foundation courses (fig. 1), but nearing the north end it survived to a height of about 2 feet. Along the east side (fig. 3) and round the north end it showed remarkable structural features. There were two foundation courses, each formed



Fig. 4. Midhowe Chambered Cairn : Lower Part of Casing Wall where direction of slanting stones alters (1) and (2).

of slabs 4 inches to 5 inches thick, the lower projecting 3 inches to 4 inches outwards from the upper, which in its turn projected the same distance from the wall-face above it. These stepped foundation courses extended about three-quarters along the east side from the south corner, and were traced in places at the north end. In other parts the two foundation courses were laid flush. Above the foundation the stones in the face of the wall were set obliquely, their edges to the outside sloping downwards from left to right from the east side of the entrance passage round the south-east corner, and along the east side as far as the turn in the north-east corner. Here the direction of the stones was reversed, the slant downwards being from right to left (fig. 4). This latter arrangement was probably continued round the north end and along the west side and south end as far as the entrance passage, as portions of it remained in position at the first-mentioned place, and

between the south-west corner and the entrance. Above the oblique building was what might be called a string-course, formed by slabs laid flat. At the best-preserved part the height from the top of the foundation courses to the top of the string-course was about $2\frac{1}{2}$ feet. On the upper side of the string-course was a scarcement about 5 inches wide, above which the face of the wall was continued upwards by stones, again built obliquely, but slanting in the opposite direction from those below, thus forming a sort of herring-bone pattern (fig. 5). Only a short length of the upper face remained, about half-way between the middle and

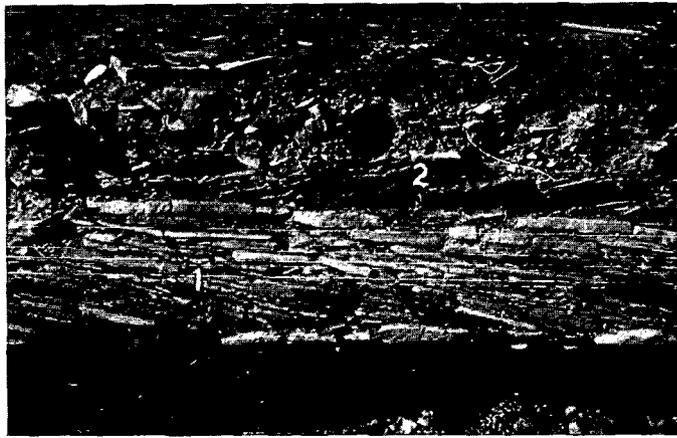


Fig. 5. Midhowe Chambered Cairn: Face of Casing Wall, showing lower (1) and upper (2) parts slanting in opposite directions, with string-course between.

north end of the monument, where it survived to a height of about 1 foot at most.

Very little of the outer casing remains at the south end, as so much of the building has been taken away that the face of the inner wall is exposed (figs. 6 and 7). All that survives of the outer face is about 6 feet on either side of the doorway of the entrance passage leading into the burial chamber. On the west side it is no more than 10 inches in height, and on the east about 2 feet, but it is reduced to the foundation courses by the time it reaches the south-east corner. The doorway has been carefully built up flush with the outer wall (fig. 7).

The entrance passage was originally 12 feet 9 inches in length, but the surviving portion from the face of the inner wall to where it enters the gallery is 8 feet 6 inches. It measures 3 feet 3 inches in width at the opening in the inner wall, slightly more at the centre, and 3 feet 1 inch

at the inner end. Just before it enters the gallery two steps, each about 9 inches in height, lead downwards (fig. 8). The walls of the passage still



Fig. 6. Midhowe Chambered Cairn: South-east corner, showing Line of Outer Casing Wall (1) and of Inner Wall (2).



Fig. 7. Midhowe Chambered Cairn: South end, showing Entrance in Outer Wall blocked up.

rise to an average height of 2 feet 6 inches, but, as none of the lintels survive, the original height cannot be ascertained.

The burial chamber, completely filled with stones which had fallen in when the roof collapsed (fig. 9), is divided into twelve cells by large

upright flagstones, measuring from 3 inches to 9 inches in thickness, bonded into the lateral walls opposite each other and projecting towards the centre. As excavated, the interior of the building looks like a long narrow byre, with twelve stalls on each side, separated from one another by short trevisses of slabs (fig. 10 and Pl. V.). The well-built dry-stone



Fig. 8. Midhowe Chambered Cairn : View of Entrance from the interior.

walls are vertical. At some points, indeed, in the cells near the entrance, appearances at first suggested that the roof had been corbelled inwards, but later on it became evident that the inward thrust had been produced after the collapse of the structure. The west wall of Cell No. 5 showed a distinct straight-jointed break, the significance of which is not obvious. It is just possible that the portion further north represents an after-thought, in the form of an extension of the chamber; but this is doubtful, as the break occurs near the centre of the cell. At its inner end the gallery is not closed by ordinary walling, but by a large slab, 3 feet

3 inches high, set on edge. The last cell, No. 12, is divided into two compartments by three low slabs, also set on edge. These form a partition that extends from wall to wall across the passage-way, and they are so arranged that the one in the centre overlaps the two at the sides. The inner compartment is paved with flags, and the west side of the outer is partitioned off with a slab set on edge.

The gallery measures 76 feet in length. As its lateral walls are not in exact alignment the cells are of varying breadth, the first four measuring about 6 feet 6 inches, those in the centre up to 8 feet, and those at the northern end about 7 feet 3 inches. The distance between the upright flags separating the cells ranges from 4 feet to 7 feet, and their inward projection from 1 foot 6 inches to 2 feet 4 inches, leaving an open space of from 3 feet to 4 feet in the centre between the inner ends of the opposite pairs. The two tallest of them are near the centre of the gallery, between Cell No. 6 and Cell No. 7, where the flag on the east is 7 feet 6 inches high and the flag opposite, on the west, 7 feet. The others diminish in height as they approach the ends of the structure. Those between the six southern cells range from 6 feet 9 inches to



Fig. 9. Midhowe Chambered Cairn : Debris from collapse of Roof.

4 feet 6 inches, the shortest being at the inside of the entrance passage. The tops of several of these have broken off naturally at an angle, and in the case of three on each side, the void so formed has been filled with stones laid on the flat to secure a more level surface. The slabs between the northern cells are more regular in height, the average being about 5 feet. They have been dressed in a most unusual fashion, their upper part having been smashed off with heavy blows of hammer-stones, struck downwards in a slanting direction and delivered first on the one side and then on the other. This is clearly seen in fig. 10.

The roof seems to have been lintelled. Probably slabs were placed longitudinally on the tops of the upright stones close to the side walls, and the intervening space in the middle covered with lintels laid transversely. Numerous flat stones that would have been suitable for this purpose were observed amongst the fallen debris with which the gallery



Fig. 10. Midhowe Chambered Cairn: View from north, showing tops of Slabs dressed off.

was choked. As in many of our other Scottish cairns, there would doubtless be a thick covering of stones, built on the top of the lintels to keep them in position when complete, before the monument became obscured by the natural accumulation of soil and decayed vegetation.

At the northern end of the cairn are the remains of what may have been an entrance passage (fig. 10), the bottom of which is about level with the top of the slab which forms the end of the chamber already described. On the west a wall, now 8 feet 3 inches long and 2 feet 3 inches high, slants slightly outwards towards the exterior, and the corresponding wall on the east has been destroyed save for a short length where it

joins the gallery. It has been suggested that this gave access to an upper chamber in the northern half of the cairn. As things are to-day, there would be little space between the floor and the roof of such a structure, but it is certain that the monument has been much despoiled and that it must originally have been very much higher. Seeing that barely four miles to the south-south-east on the same island, at Taiverso Tuick, there is a chambered cairn with two storeys, it may well be that the inner portion of the Midhowe cairn had likewise been two storeyed. The presence of a wall-hold above the low divisional slab on the west side of the end cell, 3 feet 9 inches from the floor, and of a slight scarcement immediately adjoining it in the north-west corner of the cell, strengthen the claim for an upper storey at this part. The wall-hold and scarcement are shown prominently on the right-hand side of the foreground of fig. 10.

From the south end of Cell No. 7 to the northern end of the gallery, at a height of about 5 feet 6 inches above the floor, on the east side, is a wall-head finished with a paving of thin slabs which extends back from the face of the wall from 12 inches to 2 feet 6 inches.¹ There is no corresponding feature in the first six cells nor on the west side of the gallery at any part. If we are right in our suggestion that there had been an upper storey in the inner half of the gallery, the height of the wall-head would fit in quite well with the floor of the upper chamber.

It is impossible to give any indication of the height of the suggested upper compartment, but when we see that the outer upright wall on the east side, even in its dilapidated condition, still rises 1 foot higher than the wall-head in the gallery, we may be sure that the central ridge of the roof, even though it sloped back from the wall in a gentle rise, would be a good many feet higher. Allowing the height of the outer wall above the scarcement to have been the same as the part below, at the very least, and calculating the rise in the roof at only one in four, there would be plenty of room to allow a height of about 5 feet to the upper storey.

At the floor-level on the *east* side of each of the seven cells, Nos. 5 to 11, is a low bench or shelf, from 9 inches to 18 inches high (fig. 11). This had been formed by placing a line of small slabs, set edgeways, between the outer ends of the upright flags and using them to support a close-set series of flat slabs which stretched back to the lateral wall. These shelves had been disturbed and badly broken when the roof fell. On

¹ This was discovered during the operations carried out by the Office of Works. The individual paving-stones have not been outlined on the plan, to prevent confusing them with the low shelves at the ground level beneath.

every one of them except that in Cell No. 11 were the remains of from two to four human skeletons. In the south end of Cell No. 6 the remains of three skeletons in a very fragmentary condition were placed under the shelf as well. Two skulls were recovered from the inner compartment of Cell No. 12. On the *west* side of the chamber



Fig. 11. Midhowe Chambered Cairn: Inner end, showing low Shelves on east side.

there were no shelves, and only one deposit of human remains was found, this coming from Cell No. 8.

NEOLITHIC BURIALS AND RELICS.

Twenty-five individuals—seventeen adults, six young persons from fourteen to twenty years of age, and two children under four—were represented by the remains found in the primary burials at the bottom level, on the shelves, or on the floor.

Generally speaking, the bodies had been placed with their backs

to the eastern wall, and so faced the central passage. Those at the southern end of the cells lay on their left side and those at the northern on their right. Most of the skeletal remains had been deposited on the top of the low shelves between the divisional slabs. Only four deposits were found under the shelves and three on the floor without any structural arrangements.

Cells Nos. 1 to 4.—No human remains were found at the Neolithic level in any of these divisions.

Cell No. 5.—Four deposits of bones representing four individuals



Fig. 12. Midhowe Chambered Cairn : Skeletal Remains at north end of Cell No. 5.

were found here. At the south end were the remains of the skeleton of a young person, perhaps from fourteen to sixteen years of age, lying on its left side, the skull in the south-east and the knees drawn up. At the back near the centre were the collected remains of the skeleton of an adult male, the limb bones being placed against, and parallel to, the wall, with part of the skull above them. Nearer the front of the shelf, but slightly to the north, was another skeleton, that of a young man from sixteen to twenty years of age, which had been placed in a crouching position on its left side. Heaped up in the north-east corner was the skeleton of an adult male; the pelvis lay in the corner with the broken skull in an upright position above it, the left side towards the wall, and above these were ribs and limb bones surmounted by the lower jaw. The photograph (fig. 12), shows this jaw lifted down and placed in front.

Cell No. 6 contained four deposits, the first three lying on the shelf and the fourth beneath its southern end. In the south-east corner were the remains of the skull of an adult, who had been laid on the left side. The vertebræ lay along the wall and the knees were drawn up in front. About the middle of the cell was a broken skull, part



Fig. 13. Midhowe Chambered Cairn: Southern half with Skeleton in south end of Cell No. 7.

of a lower jaw, and other bones of a second adult. The skeleton of an adult male lay against the north-east corner. The skull was placed upright facing the passage, the knees were well drawn up, and the left humerus stood high up near the skull. From the position of the pelvis and other bones it appeared that this body had been placed in a sitting position. The fourth deposit, that under the shelf, was not bulky, but three individuals—two adults and a child from three to four years of age—were represented by the bones.

Cell No. 7.—In this cell were three deposits. The skeleton of

a young male, sixteen to twenty years of age, lay on its left side in the south end. The skull stood upright in the south-east corner facing the passage, the spine lay along the wall with the elbows at the sides and the hands in front of the breast, while the knees were drawn up (fig. 13). In the north end were the remains of a young individual, from sixteen to eighteen years old, lying on the right side. The skull reposed face downwards about one foot from the wall, the spine was much bent, a femur lay at right angles across the shelf, and the heels were well drawn up. In front at a slightly lower level was the skull of an adult male, face downwards with its back to the wall, with some vertebræ and other bones.

Most of the pottery, as also the flint knife, came from the opposite side of this cell, but a few pieces were found trodden into the floor of the passage.

Cell No. 8.—This cell yielded three deposits. Placed in a reclining position on its left side against a sloping slab in the south-east corner were the remains of the skeleton of a child, probably from two to four years old. The skull stood upright facing the passage, the pelvis lay against the wall, and the knees were drawn up. Near the middle and about one foot from the wall were the fragments of an adult's skull, and a few inches farther north more cranial fragments of a young person. The fairly complete skull of an adult female lay in the north-east corner, the crown towards the passage. All the teeth were dislodged, but the lower jaw, which was placed with the chin towards the south, retained several.

On the opposite side of this compartment, lying on the floor, were the scanty remains of an adult skeleton, one small piece of burnt bone, and some fragments of charcoal. This was the only burial deposit found on the west side of the gallery.

Cell No. 9.—Three groups of bones were recovered from this cell, having apparently been placed under the shelf (fig. 14). A skeleton of an adult male lay on the left side with the skull in the south-east corner. The knees were drawn up and the vertebræ lay along the wall. In front and almost touching this skull was part of another, that of a young man perhaps under twenty years of age. In the north-east was a skull of an adult male placed face downwards in a slanting position on its right side, as well as leg and arm bones.

Cell No. 10.—In this cell were two deposits, one at the south end and the other rather north of the centre. The first, the remains of the skeleton of an adult female (?), lay on the left side in a contracted position. A rib of an ox was found amongst the bones. The second, the remains of an adult, also lay on the left side with the head and back close to the wall.

Cell No. 11.—Although there was a shelf in this division no human remains were found either above or below it.

Cell No. 12.—On the paved floor on the east side of the inner compartment of this cell were two skulls, too fragmentary to determine sex or age, placed crown upwards and within 3 inches of each other.

Although most of the skeletal remains in the different cells must have been considerably displaced and some of them broken when the fall of the roof took place, and although many of them have disappeared through decay, it is quite evident that some of the burials had been made after



Fig. 14. Midhowe Chambered Cairn: Skeletal Remains in Cell No. 9.

the tissues had wasted away. This was particularly noticeable in the case of the second described skeletal deposit in Cell No. 5, where the long bones were built up along the back wall with the skull on the top of them. The deposit of bones under the shelf at the south end of Cell No. 6 contained the remains of no less than three individuals, but as the total quantity of bones of which it was composed was very small, one is tempted to wonder whether only a few bones of the different bodies had been selected for burial in this place. At all events, the flesh must have disappeared, unless dismemberment has to be considered, before their last deposition took place. In several places only the skull was found.

No human remains were found in the first four cells at the Neolithic level. As some of the inner cells had apparently been used partly as

ossuaries, may it not have been that some of the bodies had been deposited in the cells near the entrance and left there till the flesh and soft parts had decayed, after which the bones were collected and deposited in what was meant to be their final resting-place? If this be so, this cairn must have been used as a burial vault during a lengthy period of time.

Only one implement belonging to the period of the burials was recovered. It was a nicely fashioned knife of brown flint mottled with white, measuring $2\frac{1}{16}$ inches in length, $\frac{7}{8}$ inch in breadth at the widest part, and $\frac{3}{16}$ inch in thickness. The base was oblique and the convex edges met in a rounded point. It was carefully flaked along the edges and across the back, the under side being undressed (fig. 15). This was found with the pottery shards on the west side of Cell No. 7.

Fragments of the shell of an egg, possibly of a rock-pigeon or an owl, were found beneath one of the arm bones near the centre of the east side of Cell No. 5. On the floor under the bones found below the shelf in the south end of the east side of Cell No. 7 was a vertebra of a fish, and on the same level in the south corner on the west side of the same cell, where most of the pottery was discovered, were the skull of a bird, a vertebra of a fish (sea-bream), and many mice bones (Orkney vole). More mice bones were got in the immediate neighbourhood scattered through the fallen debris to a height of 12 inches above the floor.

Compared with the large quantity of pottery found in the much smaller chambered cairns at Unstan and Taiverso Tuick, in Orkney, the number of fragments recovered from the cairn at Midhowe must be considered disappointing; still, shards, mostly small, from seven urns were forthcoming. Three of these at least were of the Unstan type¹—that is, they had belonged to shallow, flat bowls with a rounded bottom, an upright wall often slightly everted at the lip, and a pronounced carination or keel at the junction of the wall and the base.²

¹ It has become the practice of some archaeologists to designate this variety of ware as Windmill Hill pottery, after the famous and prolific site in Wiltshire so ably excavated by Mr Alexander Keiller, but fragments of fifteen similar vessels, some nearly complete, were found at Unstan in 1884, nearly forty years before the discoveries at Windmill Hill; six more examples were recovered from the cairn at Taiverso Tuick thirty-six years ago, and the type is present in the pottery found, more than twenty-three years ago, at Eilean an Tighe, North Uist, Outer Hebrides. As it has been the custom of archaeologists to name types of prehistoric relics after the places where they were first discovered, it is only right to call this class of pottery after Unstan, the first British site on which it was found.

² *Proc. Soc. Ant. Scot.*, vol. lxiii. pp. 40-44, figs. 4-11 and 13.



Fig. 15. Midhowe Chambered Cairn: Flint Knife. (†.)

The pottery consists of:—

1. Rim and wall fragments of a plain dark-coloured vessel, possibly over ten inches in diameter at the mouth, with a slightly everted rim and a rounded moulding, $1\frac{1}{4}$ inch below the lip (fig. 16, No. 1, and fig. 18, No. 1), found amongst the bones in the centre of the east side of Cell No. 8.

2. A large piece and many small fragments of a shallow, round-based urn with a vertical wall, a slightly everted lip rounded on the top, and

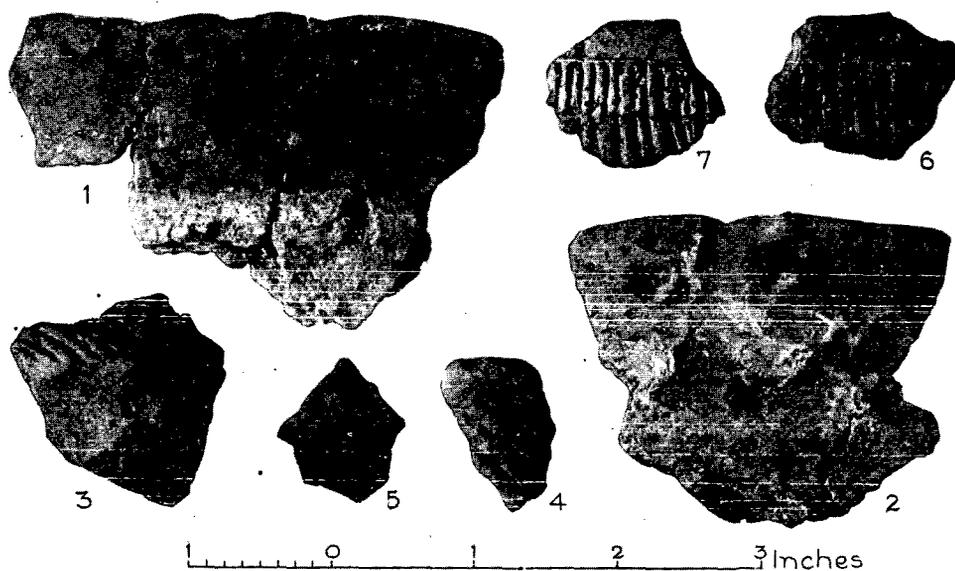


Fig. 16. Midhowe Chambered Cairn: Fragments of Clay Urns.

showing a prominent carination at the junction of the wall and the base (fig. 17, and fig. 18, No. 2). The ware is thin, $\frac{5}{16}$ inch at most, and it is of reddish-brown colour. The wall shows three deep grooves under the lip, made by the stab and drag process, and the space below is occupied with vertical straight lines incised by the steady stroke of a pointed instrument. The vessel has been 9 inches in diameter at the mouth, and about 3 inches in height. It was found lying half on its mouth on clay on the west side of Cell No. 7.

3. A few fragments of a shallow carinated urn of thin, light brown, vesicular ware, with a slightly everted upright wall and rounded base (fig. 16, No. 2, and fig. 18, No. 3). The vessel has been about 10 inches in diameter at the mouth, and the wall is only $\frac{5}{16}$ inch thick. On the

latter are two rows of widely spaced dragged finger-nail markings. It was found on the west side of Cell No. 7.

4. A small fragment from the junction of the wall and rounded base of a carinated urn of reddish-brown vesicular ware, decorated above the carination with groups of incised lines slanting alternately from right to left and from left to right. This came from the west side of Cell No. 7 (fig. 16, No. 3, and fig. 18, No. 4).

5. Two small fragments of very dark-coloured pottery, one from the rim and the other from the wall of an urn. The rim portion, which is slightly everted and rounded on the top, shows lines incised from

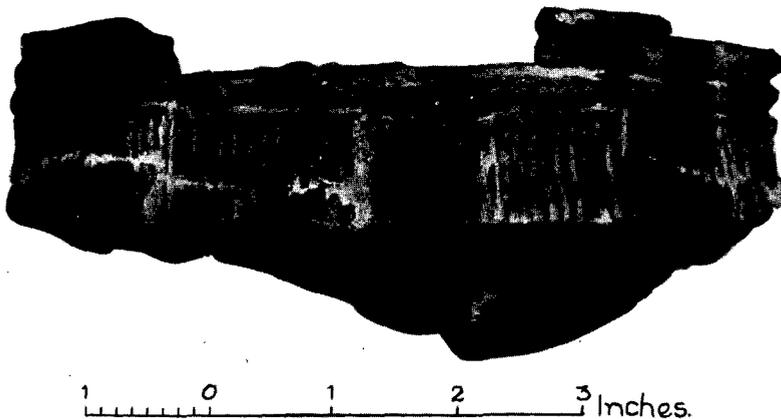


Fig. 17. Midhowe Chambered Cairn: Part of Clay Urn.

right to left, and the wall portion incised chevrons (fig. 16, Nos. 4 and 5, and fig. 18, No. 5). Probably they belong to the same vessel. They were found on the west side of Cell No. 7.

6 and 7. Two small rim fragments of two vessels of dark-coloured pottery of vesicular texture. Both are ornamented under the lip, which is vertical and rounded on the top, with two narrow bands of short, vertical, incised lines, bordered above and separated from each other by single transverse lines (fig. 16, Nos. 6 and 7, and fig. 18, Nos. 6 and 7). In one a small part of the inside of the base is to be seen, showing that the bottom had been curved; in the other the wall has been rather higher. These were found on the west side of Cell No. 7.

The pottery is all thin and of good texture. Several pieces contain a slight admixture of stones crushed small, a feature hardly observable in those of vesicular texture. At least three of the vessels represented

by the shards are of the Unstan type of Neolithic pottery. The inside of the largest of these fragments (fig. 17) shows a slight glossiness, a feature remarked on many of the urns from the Unstan cairn.

We have seen that the form of some of the vessels from Midhowe is the same as many of those found at Unstan and Taiverso Tuick. A few of the shards from Eilean an Tighe, North Uist, Outer Hebrides, belong to vessels of the same shape. In the ornamentation also there are resemblances. One of the commonest designs at Unstan and Taiverso Tuick was groups of lines slanting alternately to the right

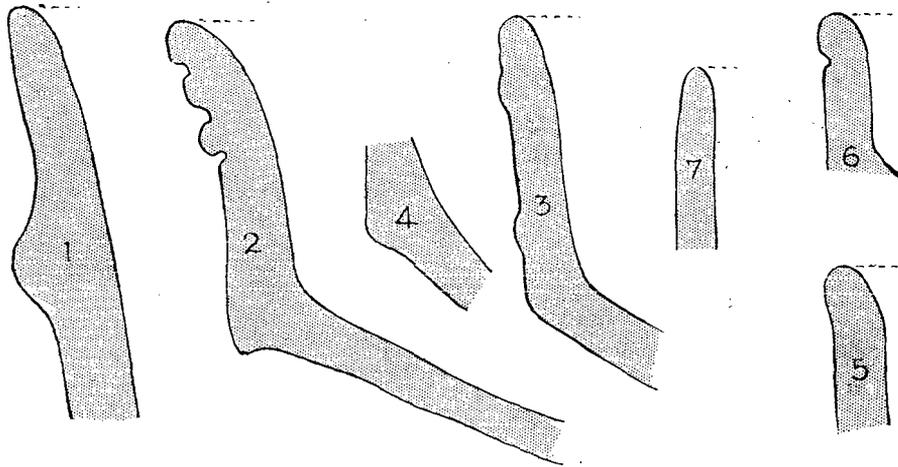


Fig. 18. Midhowe Chambered Cairn: Sections of Pottery. (†.)

and to the left. It occurs on one shard from Midhowe (fig. 16, No. 3), and is also to be seen in the pottery from Eilean an Tighe.¹ The ornamentation of the best-preserved piece from Midhowe consists of transverse lines with vertical lines below. Two pieces from Eilean an Tighe are similarly decorated.² Dragged finger-nail impressions occur on pottery from Midhowe; Unstan; Kenny's Cairn, Caithness;³ and Glenluce Sands, Wigtownshire.⁴ Some of the pottery from the last two localities have also pinched markings.

Most of the pottery was found in the stall on the west side of Cell No. 7, but a few shards came from the passage in front of this stall and of Cell No. 8, which adjoined it. Pieces of one urn were discovered in direct association with human remains on the east side of Cell No. 8.

¹ *Proc. Soc. Ant. Scot.*, vol. lxiii. p. 89, fig. 53, No. 8.

² *Ibid.*, vol. lxiii. p. 89, fig. 53, Nos. 13 and 14.

³ *Ibid.*, vol. lxiii. p. 86, fig. 51, No. 5.

⁴ *Ibid.*, vol. lxiii. p. 86, fig. 51, No. 4.

It is difficult to understand why the great bulk of the pottery should have been placed in one cell and on the side of it opposite to that on which all the bodies except one were found, and why such small fragments should have survived. It is possible that when later burials were taking place the pottery vessels deposited earlier had been broken, some of the pieces being thrown aside and others trampled underfoot.

The only relics found at the floor-level of Cells Nos. 1 to 4 were part of a red-deer antler and a heap of limpet-shells amounting to about three gallons in quantity, which came from the north-east corner of Cell No. 1.

LATER BURIALS AND RELICS.

We have seen that the whole of the chamber was blocked with stones fallen from the roof. Food refuse in the form of bones of ox, sheep, and red-deer, with fragments of three antlers, one broken across a perforation, fish-bones and some limpet-shells, were found all through the debris. In addition, two skeletons were discovered in Cell No. 4, at a height of about 4 feet from the floor of the chamber. These had been buried after the collapse of the monument. The first skeleton, that of an adult male, lay in a crouching position in the south-east corner of the cell, the head to the south facing the east. The other skeleton, that of an adult female?, lay in the north-west corner of the cell, but the body had been placed in a rudely formed cist-like structure, measuring 2 feet 6 inches square, the east side formed by a slab set on edge and the south end by small flags laid on the flat. The other side and end were formed by the western wall of the cell and the divisional slab on the north. Like the first skeleton this one had been buried in a crouching position on the right side, the skull lying to the south facing the east. The skulls were too fragmentary to indicate whether the people were long- or round-headed.

In addition to the food refuse already referred to, there were picked up amongst the fallen material five hammer-stones, a stone pestle, measuring $7\frac{1}{2}$ inches long and $2\frac{1}{2}$ inches in diameter, a rude stone implement of the type found in such abundance in Orkney and Shetland, smoothly pointed at one end and chisel-shaped at the other, measuring $14\frac{7}{8}$ inches in length (fig. 19), a fragment of another similar object, and a part of a club-like implement of stone pitted by use at one end, measuring $11\frac{1}{2}$ inches in length.

A few small shards of hand-made pottery of light brown colour, containing a slight natural mixture of small stones, were found 15 inches under the surface near the north end of the cairn. The ware was of quite good quality with a smooth outer skin, but none of the pieces

was large enough to indicate the shape of any part of the pot or even the thickness of the wall. Part of what looked like the handle of a mediæval jug of red pottery, without any traces of glaze, was recovered half-way up amongst the debris on the west side of Cell No. 6.

Projecting outwards from the north-east and south-east corners of the monument are two well-built walls showing an average breadth of about $4\frac{1}{2}$ feet. The best-preserved one, on the north-east, rises to a height of about 4 feet, where it abuts on the cairn. This wall dies out 68 feet from the cairn, and the other 45 feet. In the north-east projection was an opening 2 feet wide, 36 feet 6 inches from the cairn, and in the south-east projection, about $3\frac{1}{2}$ feet from the main building, was a similar opening, measuring 2 feet wide on the north side and 3 feet on

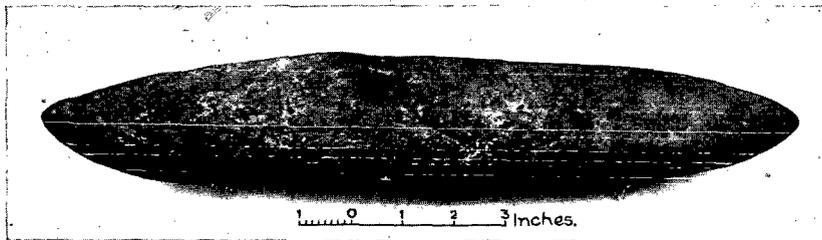


Fig. 19. Midhowe Chambered Cairn: Rude Club-like Stone Implement.

the south. These projecting walls are suggestive of the horns seen in the horned chambered cairns of Caithness and other parts of the north and west of Scotland; but the foundations of these walls are from 9 inches to 12 inches lower than the base of the cairn, the foundation courses of which run right through them. The character of the building is different from that of the main structure, and the projections do not connect with it in the fine flowing curves of the typical horned chambered cairn. No traces of similar constructions were observed at the north-west or south-west corners. It would thus seem that the projecting walls are secondary, and probably were erected at a much later time than the cairn.

Lying against the north-west corner of the monument was a heap of stones and debris in which was found a cist-like structure.

The Midhowe cairn with its peculiar structural features is the first of its kind to be recorded, and it adds another to the already numerous varieties of the chambered cairn of Scotland, long and round, horned and unhorned. Although we have used the term "cairn" in describing this monument, it is not a cairn, which is a heap of stones, in the strict

sense of the word. It has been an imposing structure, carefully built and doubtlessly rising to a considerably greater height than its present condition would indicate, and the name of mausoleum may well be applied to it.

The chambered cairns of Caithness and Orkney generally have the main chamber domically roofed by inward corbelling, but at Midhowe the roof has been formed by lintels, and, to judge by present appearances, the cells have been highest in the centre and have gradually decreased in height towards the ends. Other cairns having chambers of approximately regular width have been excavated at Yarhouse (Yarrows), Caithness,¹ and at Unstan, Orkney.² At the former place there are two cairns and at the latter one, all three being round. The two Yarhouse cairns have three compartments separated from each other in a fashion similar to those in the Midhowe cairn, and one of them has also the inner end finished off with a large slab (fig. 20). The Unstan cairn, famous, as we have seen, for the large amount of pottery it yielded, lies about thirteen and a half miles to the south-south-east of Midhowe, on the neighbouring island of Mainland, and it is the one which most closely resembles our example. It contains a chamber of fairly regular width, measuring 21 feet in length, divided into five cells by projecting lateral slabs, the tallest of which is about 5 feet high (fig. 21). The entrance passage, however, does not run into an end chamber in the line of its main axis, but penetrates from the eastern side of the cairn into the second cell from the south near its centre. Thus the cairn at Unstan has two end cells closed at the back, while that at Midhowe has only one. The backs of these cells are to a certain extent similar in construction. At Unstan they consist of a slab with building above, and at Midhowe of a slab only. There is a further resemblance in the southern cell at Unstan to the northern one at Midhowe; both are subdivided into two compartments by slabs set on edge, but at Unstan they are placed longitudinally and at Midhowe transversely. In the Unstan cairn there is in addition a small cell on the west side of the gallery. Such cells occur in varying numbers in many of the north country chambered cairns, but there is none at Midhowe.

There are three partially denuded cairns on Rousay—one, the Knowe

¹ *Proc. Soc. Ant. Scot.*, vol. vi. p. 444, pl. xxvii, No. 2.

² *Ibid.*, vol. xix. p. 343, fig. 1.

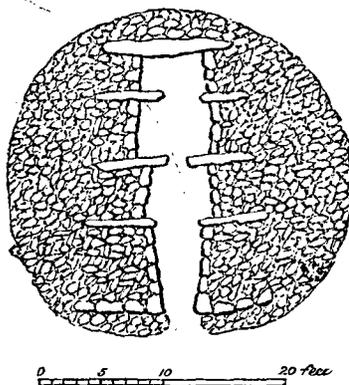


Fig. 20. Plan of Chambered Cairn at Yarhouse, Caithness.

of Ramsay, near the long-horned cairn, the Knowe of Laird, at Hullion; another, the Knowe of Yarso, at Frottoft; and the third, the Knowe of Lingro, at Lingro—which though much shorter seem from surface indications to be of the same class as the Midhowe cairn.

The peculiar method of dividing the chamber of a cairn into compartments by slabs projecting from the sides, which is seen so often in Orkney and Caithness, no doubt has been brought about by the

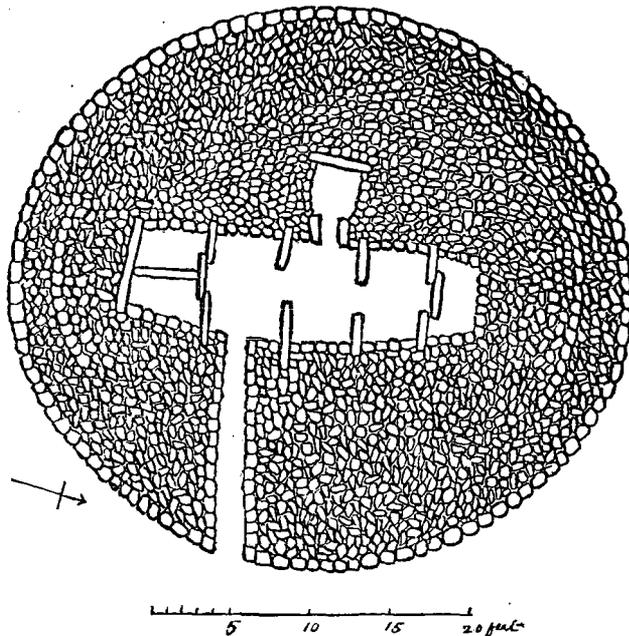
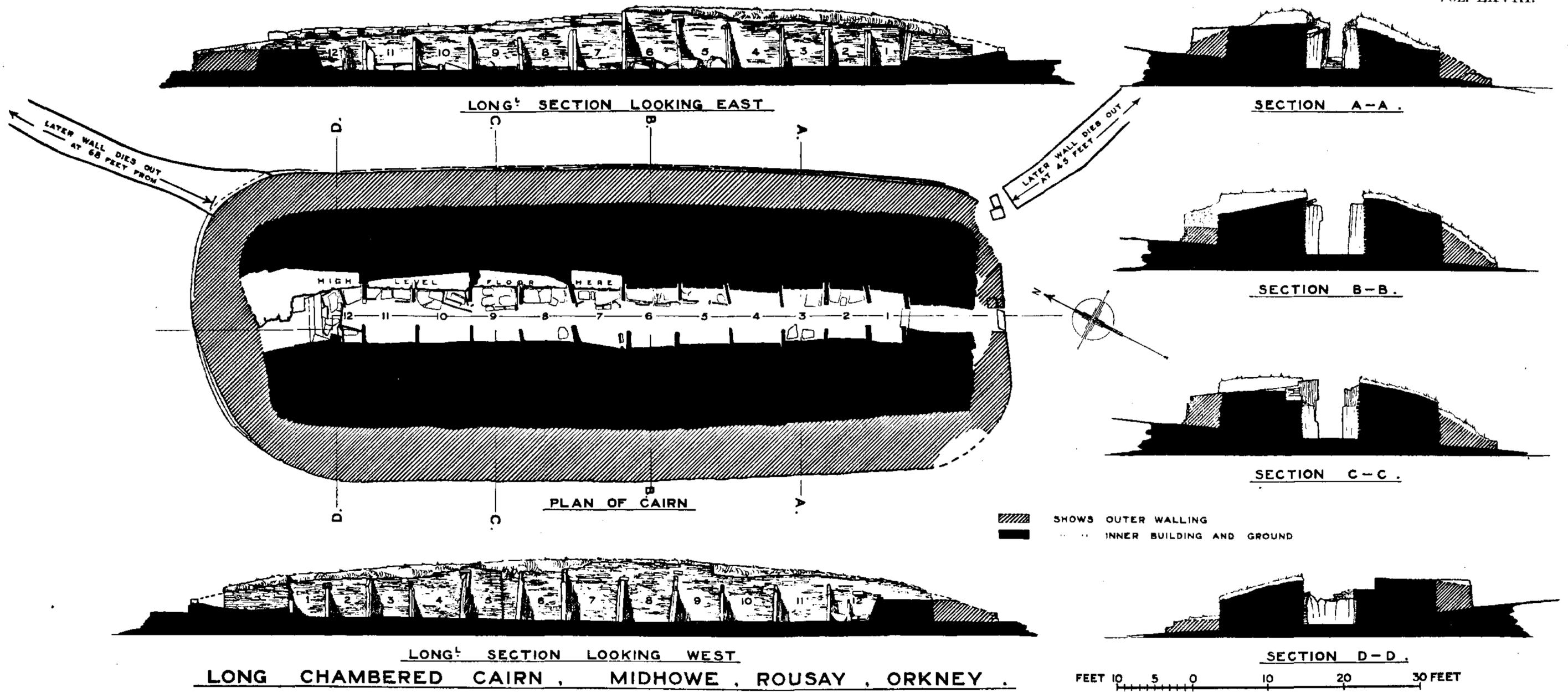


Fig. 21. Plan of Chambered Cairn at Unstan, Orkney.

character of the local building material. The stone of the Old Red Sandstone formation, which extends over such a considerable part of both counties, splits readily into slabs of varying thickness, and where it is exposed to the elements abundant material requiring a minimum of work to make it suitable for building is available. To this day field-boundaries in Caithness are often formed by rows of slabs, set on end, instead of by dry-stone dykes.

We are indebted to H.M. Office of Works for permission to reproduce plans (Pl. V.) and photographs shown in figs. 1 to 7, and we should like to acknowledge our obligation to Mr James K. Yorston, Corresponding Member, and to his son James, who did the actual work of excavation in such a careful and intelligent way.



Midhowe Chambered Cairn: Plan and Sections.

J. GRAHAM CALLANDER AND WALTER GRANT.

PLATE V.

[To face page 342.

DESCRIPTION OF THE HUMAN SKELETAL REMAINS.

By Professor ALEX. LOW, M.A., M.D., F.S.A.Scot.

In this collection, while the bones from each chamber have been carefully sorted out and kept separate, a study of the skeletons is difficult, on account of the fragmentary condition of the bones.

The human remains represent twenty-five skeletons recovered from the Neolithic level, and two skeletons of later date recovered from the high level in 1932. Of the twenty-five skeletons from the Neolithic level,



Fig. 22. Midhowe Chambered Cairn : Profile View of Skull No. 12.

seventeen are those of adults; six of young individuals from fourteen to twenty years of age; and two of children from three to four years of age.

In many instances the articular extremities of the long bones are defective, while the shafts are well preserved, the fractured ends showing a characteristic dead-white appearance. However, from the material available from the Neolithic level it is possible to learn a good deal as to the physical characters of the builders of the chambered cairn.

Skulls.—The skulls are mostly broken into such fragments that it has not been possible to reconstruct them. Three skulls are practically complete except for the mandibles; the face region of one skull and four separate incomplete mandibles admit of some measurements being recorded.

Skull No. 12, from the north end of Cell No. 6, is that of a male beyond

middle life, the sutures being mostly obliterated except those in relation with the temporal bone. It is rather small, with a cubic capacity of 1375 c.c. of mustard seed. The cranial wall is of average thickness. The profile view (fig. 22) shows a long skull with face relatively long and slightly prognathic; the glabella and superciliary ridges slightly marked with no depression at the root of the nose; the forehead receding but bulging in its upper part ("frontal boss"); vault rather low and



Fig. 23. Midhowe Chambered Cairn: Vertical View of Skull No. 12.

sloping down to the projecting occipital region. The vertical view (fig. 23) shows the relative length as compared with the breadth; the length-breadth index of 73.5 places the skull in the *dolichocephalic* group. The occipital view (fig. 24) is pentagonal in outline with the parietal eminences placed high up and the sides flattened. The face is moderately long (fig. 25), the nose narrow, and the orbits rectangular and of medium height.

Skull No. 3, from the north end of Cell No. 9, is also that of a male, and the condition of the sutures would indicate an individual about forty-five years of age. It has the same general characters as Skull No. 12, but it is slightly longer and the frontal region is somewhat broader.

As shown in Table I., the measurements and proportions of the two skulls are very similar.

Skull No. 6, from the south end of Cell No. 8, has female characters, and, further, along with the skull is a piece of pelvic bone which is that of a female. The vault and face are shorter and broader and the orbits narrower. The length-breadth index is 75.1—*mesaticephalic*.

A feature of the skulls is that the crowns of the teeth are much worn, and while there are no signs of caries the tooth-sockets show evidence of infective processes. Further, several of the separate pieces of jaws show marked irregularity and crowding of the teeth, and in one case impaction of the wisdom teeth: troubles we usually associate with modern civilisation. It is a remarkable coincidence that in each of the three skulls the mandibular articulation on each side shows evidence of

osteo-arthritis, with roughening and lipping of the articular surface; in one instance the smooth articular cartilage must have been completely eroded and the bony surface exposed. Several of the long bones show similar rheumatic changes.

There are a number of separate vertebræ, but there is nothing special to note regarding them except that in several instances they show very marked evidences of osteo-arthritis.

Bones of Extremities.—There is one intact clavicle, a left male bone, short and straight, and only 140 mm. in length.

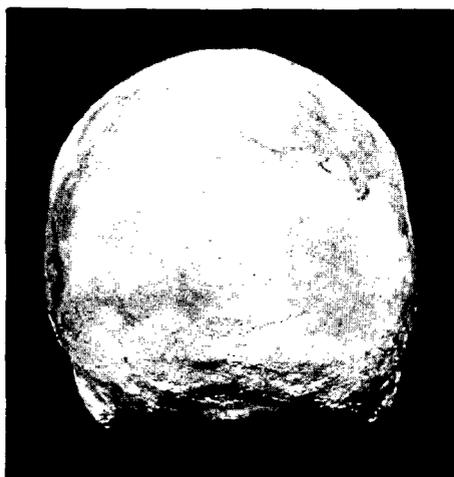


Fig. 24. Midhowe Chambered Cairn: Occipital View of Skull No. 12.

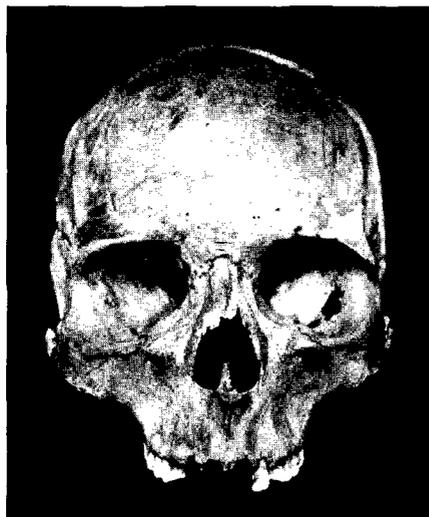


Fig. 25. Midhowe Chambered Cairn: Face View of Skull No. 12.

There are five fairly complete humeri, all of which are those of males. The total lengths detailed in Table II. yield a mean of 303 mm.; a relatively short measurement. The deltoid eminence of these bones is prominent, especially the posterior portion.

Two complete adult male left femora have a maximum length of 425 mm. and 430 mm. respectively; measurements again below the average length recorded for bones belonging to the Neolithic Age—in fact, little more than the average length given for the Neanderthal type of femur. Both femora show well-marked *platymeria* and torsion of the shaft.

Four male tibiæ are short, the total length of the longest measuring 350 mm. There is lateral flattening of the upper third of the shaft—*platycnemia*, and while there is no marked degree of retroversion of the head, the articular facet on the lateral condylar surface is convex, and

TABLE I.

Measurements in mm. of Skulls from a Long Chambered Cairn
near Midhowe, Rousay, Orkney.

	No. 12 from Cell 6 N.	No. 3 from Cell 9 N.	No. 6 from Cell 8 S.	No. 5 from Cell 9 S.
Sex	Male	Male	Female	Male
Cubic capacity	1375 c.c.	1400 c.c.	1350 c.c.	...
Glabello-occipital length	185	190	177	...
Ophryo-occipital length	183	186	175	...
Nasio-inional length	172	180	160	...
Minimum frontal breadth	105	102	95	...
Maximum frontal breadth	112	112	110	...
Parietal breadth	136	138	133	...
Basibregmatic height	127	128	131	...
Biauricular breadth	121	118	116	...
Basinasal length	103	107 ap.	97	...
Basialveolar length	108	106 ap.	93 ap.	...
Nasialveolar height	72	74 ap.	63 ap.	...
Nasimental height . . . . .	...	...	...	116
Bizygomatic breadth	131	...	130	128 ap.
Nasal height	47	54 ap.	45	46
Nasal breadth	23	23 ap.	22	23
Orbital height, R.	33	...	31	32
" " L.	33	...	32	32
Orbital breadth, R.	39	...	39	38
" " L.	39	...	39	39
Alveolar length	57	54	43 ap.	50
Alveolar breadth	58	60 ap.	50 ap.	60
Sagittal arc, 1	127	128	120	...
" " 2	120	130	130	...
" " 3	120	120	112	...
	—367	—378	—362	...
Length foramen magnum	32	31	31	...
Transverse arc	306	298	295	...
Circumference	520	528	504	...
<i>Indices.</i>				
Length-breadth	73.5	72.6	75.1	...
Length-height	68.6	67.4	74.0	...
Gnathic	104.9	99.1	95.9	...
Upper facial	55.0	...	48.4	...
Total facial . . . . .	...	...	...	90.6
Nasal	48.9	42.6	48.9	50.0
Orbital, R.	84.6	...	79.5	84.2
" L.	84.6	...	82.0	82.0
Alveolar	101.7	111.1	116.2	120.0

is continued backwards and downwards on to the posterior aspect; in addition, three of the specimens show a facet on the anterior margin of the lower articular surface; these features indicate adaptation to the "squatting" posture.

There is one male fibula intact, a short, stout bone showing fluting of the shaft, and with the transverse diameter greater than the antero-posterior.

In Table II. stature is set forth as calculated from the long bones, and though there may be a margin of possible error the stature is definitely short. The tallest man was 5 feet 3¼ inches and the shortest just 5 feet 2 inches.

TABLE II.

Measurements in mm. of Bones of Extremities from a Long Chambered Cairn near Midhowe, Rousay, Orkney.

	No. 5 from Cell 9 S.		No. 11 from Cell 7 S.		No. 12 from Cell 6 N.		No. 15 from Cell 5 N.		No. 17 from Cell 5, middle.	
	R.	L.	R.	L.	R.	L.	R.	L.	R.	L.
Sex	Male		Male		Male		Male		Male	
Humerus	295	...	310	...	305	295	303	...	...	...
Ulna . . . . .	...	...	...	...	...	...	...	252	...	...
Femur :										
Maximum length . . . . .	...	...	...	425	...	...	...	...	...	430
Oblique length . . . . .	...	...	...	418	...	...	...	...	...	...
Upper third of shaft :										
Ant. post. diam. . . . .	...	...	...	23	...	24	...	...	...	25
Trans. diam. . . . .	...	...	...	32	...	33	...	...	...	34
<i>Platymetric index</i> . . . . .	...	...	...	71·8	...	72·7	...	...	...	73·5
Tibia :										
Maximum length . . . . .	...	341	...	...	...	344	...	330	...	350
Ant. post. diam. . . . .	...	39	...	...	...	38	...	40	...	45
Trans. diam. . . . .	...	26	...	...	...	23	...	23	...	28
<i>Platynemic index</i> . . . . .	...	66·6	...	...	...	60·5	...	57·5	...	62·2
Fibula . . . . .	...	...	...	...	...	...	...	327	...	...
Stature—calculated	5' 2¾"		5' 3½"		5' 3¼"		5' 2"		5' 3¾"	

Specimens of Scottish Neolithic skulls are few in number, but comparing these skulls with the skulls described by Professor Bryce,¹ from the Chambered Cairns of Arran, we find that they agree in essential respects. While the skulls on the whole are smaller, their general configuration is very similar. Thus the crania are long, with the vertex

¹ *Proceedings*, vol. xxxvi. p. 74.

low and occiput projecting; face somewhat long, with nose narrow and orbits not wide.

It seems clear that we have here representatives of the same dolichocephalic race of short stature that in Neolithic times inhabited Britain.

The two skeletons X and Y recovered from the high level in 1932 are unfortunately fragmentary. Skeleton X, as judged by the pieces of long bones, is probably that of a male.

The bones of Y are more delicate and probably are those of a female. There is a fairly complete right femur with a maximum length of 415 mm. The upper third of the shaft shows flattening—*platymeric* index 70.5. The lower three-fourths of the right tibia is intact, and also shows flattening, and on the anterior margin of the lower articular surface there is a "squatting" facet. Calculated from length of femur the stature is low—5 feet $\frac{1}{2}$ inch.

For the opportunity of examining these Neolithic skeletal remains I am grateful to Walter G. Grant, Esq., F.S.A.Scot., of Trumland, Rousay, who has presented them to the Anatomy Museum, University of Aberdeen.

REPORT ON THE ANIMAL BONES. By MARGERY I. PLATT, M.Sc.,
Royal Scottish Museum.

A number of animal bones occurred in the excavation of this Neolithic chambered cairn found near Midhowe, Rousay, Orkney. Those sent here were found during two successive years of work, and a list of the representative animals is cited below chronologically.

Among Fallen Debris at Higher Levels.

Ox.—The remains of this animal are more abundant than of any other. According to two fragments of horn-cores they appear to be of a shorthorn variety. The teeth are very wide and strong, and there are numerous milk molars. These bovine remains are almost without exception of immature animals.

Sheep.—This is sparsely represented, and there are no horn-cores to give indication of the breed. The measurements of one long slender cannon-bone are given below:

Metatarsal:

Max. length	13.6 cms.
Max. width of proximal end	1.85 "
Max. width of distal end	2.2 "
Min. width of shaft	1.05 "

It would be unwise to draw conclusions from such scanty evidence, but suffice it to say that this metatarsal, though slightly smaller, agrees in proportions with the corresponding bone of the Soay sheep.

Pig.—Numerically the remains of the pig are even less important than the sheep. All the bones are of very young animals.

Red-deer.—Two fragments of an antler represent this animal.

Birds.—The remains of these are both varied and more numerous than either sheep or pig. One or more bones of Buzzard, Falcon, Young Eagle, Cormorant, Shag, and Gannet are present in this section.

Bottom or Neolithic Level.

Cell No. 1.—At this level immature ox and sheep bones similar to those noted above were found, also the skull of an Orkney Vole. The birds represented were Skua, Cormorant, Guillemot, Buzzard, and Eagle. Several large thick shells of the limpet are included, and these are of varying shape. Some have very low cones, and indicate their being taken further down the tidal zone than the shells which occur above the limit of neap tides.

Cell No. 12, at level of two human skulls.—Here were found immature bones of the ox and a few bird bones, including Gannet and Cormorant.

Cell No. 12, nine inches from bottom.—Here were found the pharyngeal teeth of the Wrasse (*Labrus maculatus*).

Cell No. 10, skeleton No. 1.—Bones of the ox and sheep were found here.

*Cell No. 7, west side.*¹—Numerous bones of the Orkney Vole, including lower jaws and fragmentary skulls, were present here. Examination of the teeth show a correspondence with those of *Microtus o. orcadensis* figured by Mr M. A. C. Hinton.² There is no complete skull for comparison of the subspecies; but the length of nasals, alveolar measurements, and the length of the mandible are within the limits of the subspecies *M. o. rousaiensis*. A skull of the Carrion Crow (*Corvus corone*) also occurred here.

Cell No. 7, east side.—A fish-bone was present here, kindly identified by Miss E. Trewavas, B.Sc., of the British Museum, as the vertebra of a Sea Bream (*Pagellus centrodontus*).

Cell No. 6, under a skeleton.—Another vertebra of the Sea Bream occurred here.

Cell No. 5, under a skeleton.—Several fragments of birds' eggshell were found under an arm bone. No identification has been definitely

¹ These were the only non-human bones found on the west side of the gallery at the Neolithic level. All other animal bones were found on the east side in close proximity to Neolithic human remains.

² *History of British Mammals*, part xvi.

made. Our thanks are due, however, to Mr P. R. Lowe, M.B., B.A., of the British Museum, who kindly examined the shell fragments. He ventures the opinion that they are probably Rock Pigeons' eggs or may be Owls'.

MONDAY, 9th April 1934.

SIR GEORGE MACDONALD, K.C.B., LL.D., D.LITT.,
F.B.A., President, in the Chair.

A Ballot having been taken, the following were elected Fellows:—

JAMES DUNCAN, Conservator Anthropological Museum, Marischal College,
Aberdeen, 13 Northfield Place, Aberdeen.

H. H. RODERICK, 12 Battlefield Avenue, Glasgow, S. 2.

JAMES ARTHUR WAITES, A.M.E.E.S., F.R. Asiatic S., 14 Owen Street, Accring-
ton, Lancs.

The following Donations to the Museum were announced and thanks
voted to the Donors:—

(1) By SAMUEL SMITH, Corresponding Member, the Finder.

Rim fragment of a Pitcher of cream-coloured ware with slightly
projecting rim, twelfth or thirteenth century, and fragment of Iron Slag,
found at the mote at Bonnybridge, Stirlingshire.

(2) By R. S. YOUNG, J.P., F.S.A.Scot.

Box of eleven (originally twelve) Hydrostatic Balls, glass "Beads
for proving spirits," made by P. Massino, 1 North College Street,
Edinburgh.

(3) By A. D. LACAILLE, F.S.A.Scot.

Early Acheul Flint Hand-axe (*coup-de-poing*), measuring $4\frac{7}{8}$ inches
in length, found by the donor at Furze Platt, Maidenhead, Berks.

(4) By JOHN BROWN, Flaws.

Weaving Comb of Deer-horn, with seven teeth, one broken, measuring

4 inches in length, found with kitchen-midden refuse while ploughing near an earth-house at Flaws, South Ronaldshay, Orkney.

(5) By HENRY TOD, jun., Ph.D., 35 Oxfangs Road, Edinburgh.

Food-vessel Urn encircled by two cordons, with the upper part of the wall nearly vertical and the lip bevelled downwards towards the inside (fig. 1). The ware is reddish on the outside, but the core is black, and consists very largely of crushed stone. The urn measures 4 inches



Fig. 1. Food-vessel found in Edinburgh.

in height, $5\frac{2}{3}$ inches in diameter at mouth, $5\frac{7}{8}$ inches at the cordons, and 3 inches at base. The top of the rim, which is $\frac{1}{2}$ inch broad, has three concentric lines of impressions made by a whipped cord. The entire wall is decorated with five transverse zigzag lines in false relief, bordered above and below by three lines of whipped-cord impressions, and separated by two, three, two, and four similar markings. The lower part is covered with vertical lines formed in the same fashion, and these are continued across the base. About two-thirds of the vessel survived, and it has now been restored.

Button of Shale of domical shape, slightly imperfect, measuring $\frac{3}{4}$ inch in diameter and $\frac{1}{4}$ inch in thickness, with a V-shaped perforation on the under side, placed slightly to one side. The perforation has been carried right through the object and shows one hole above.

Both were found in February 1934 in a short cist, wanting the cover, lying north-north-east and south-south-west, and measuring about 2 feet 4 inches in length, 20 inches in breadth, and 1 foot in depth, in the garden at 35 Oxfangs Road, Edinburgh, by the donor. The urn lay in the south corner of the cist.

The Caie Stone, a fine monolith, bearing cup-marks, stands about 180 yards to the north-west.

The following Purchases for the Museum were intimated:—

Rudely made Stone Axe with circular hollows on opposite faces, measuring $6\frac{1}{4}$ inches by $2\frac{2}{16}$ inches by $1\frac{1}{8}$ inch, found at Fedeland (Fethaland), North Mavine, Shetland.

Flat Bronze Axe, measuring $5\frac{7}{8}$ inches in length, $2\frac{5}{8}$ inches across the cutting edge, much pitted, found to the west of the site marked "Mote" on the map, at Brocklock, Carsphairn, Stewartry of Kirkcudbright.

The following Donations to the Library were intimated and thanks voted to the Donors:—

(1) By Dr ADOLF MAHR, Keeper of Irish Antiquities, National Museum, Dublin, the Author.

The Blackrock Brooch. (*County Louth Archæological Journal*, 7. 1933.)

(2) By ALEXANDER O. CURLE, C.V.O., F.S.A., F.S.A.Scot.

Roman Britain. (Reprinted from *The Year's Work in Classical Studies*.) Edited for the Journal's Board of the Classical Association. By W. H. S. Jones, M.A., 1918-19.

City and County of Bristol. By W. R. Barker. Bristol, 1901.

Instituttet for Sammenlignende Kulturforskning, Serie C II-3. Nye Boplassfund fra Yngre Stenalder i Finnmark. By Anathon Bjørn. Oslo, 1930.

Föremål i Ståtens Historiska Museum från Antikvitetsarkivets Tid. By Andreas Oldeberg. n.p., n.d.

Statens Historiska Museums Utställning, 1930. Omfattande Föremål från Antikvitetskollegiets och Antikvitetsarkivets Tid. By Andreas Oldeberg.

Särtryck ur Finskt Museum, 1929. Havnelevfyndet. By C. A. Nordman.

Town Planning in the Roman World. By Professor F. Haverfield, LL.D., D.Litt., F.S.A. (*Transactions of the Town Planning Conference*, Oct. 1910.)

Några Träskulpturer från Aeldre Medeltid i Egentliga Finland. By C. A. Nordman. Helsingfors, 1932.

Illustrierter Führer durch das Provinzial-Museum in Trier. By Professor Dr Felix Hettner. Trier, 1903.

Ancient Rome and Ireland. By F. Haverfield. (Reprinted from *The English Historical Review*. January 1913.)

Lincoln City and County Museum Publications. Nos. 7, 14, 16.—Roman Antiquities in the City and County Museum, Lincoln. Parts iii., iv., v. By Arthur Smith, F.L.S., F.E.S., 1909-1913.

The Castle of Newcastle. A Short Descriptive Guide to the Keep, Black Gate, and Heron Pit. Newcastle-upon-Tyne, 1908.

"The Beaton Panels." (9 Photos.)

The London Museum, Saint James's, S.W.1. Catalogue of an Exhibition of recent Archæological Discoveries (Prehistoric and Saxon Epochs) in Great Britain. August, 1932.

The Prehistoric Trephined Skulls of Great Britain, together with a Detailed Description of the Operation probably performed in each Case. By T. Wilson Parry, M.A., M.D.

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