

## II.

## ACCOUNT OF THE EXCAVATION OF A HUT-CIRCLE WITH AN ASSOCIATED EARTH-HOUSE AT JARLSHOF, SUMBURGH, SHETLAND, CONDUCTED ON BEHALF OF H.M. OFFICE OF WORKS IN 1935 BY ALEXANDER O. CURLE, C.V.O., LL.D., F.S.A.Scot., F.S.A.

A few years ago there was exposed on the extreme western limit of the area on which lay the group of prehistoric dwellings Nos. i-v at Jarlshof, and the associated middens, a stone wall of low elevation in the form of an arc of a circle, but it was not until the workmen, in tidying up the area after the close of the excavations in 1933, discovered an associated earth-house that it was deemed necessary to make a thorough examination of the site.

This resulted in the exposure of a circle (plan, fig. 1) formed with a dry built wall, composed of comparatively small flat stones and placed in revetment against the face of a bank (fig. 2). On the western arc the wall had been entirely removed. At most its height remained to only about 18 inches. The circumference of the circle, which was fairly regular in form, was some 25 feet. Subsequently an inner bank had been formed, in part revetted with a wall, and in part with flat-sided boulders, forming an arc running from opposite points in the circle and reducing the interior by about one-quarter, the remainder forming an oval measuring some 22 by 19 feet. This inner wall was, however, not all of one period. A portion at its north end was better constructed than the remainder, which was very rude and lay upon soil at a higher level. The longest axis of this later enclosure lay from north-west to south-east. The entrance to the earth-house, situated at the northern extremity, was beneath a lintel placed in alignment with the inner face of the secondary bank. It was apparent that the outer wall had been cut through for the construction of this underground chamber, as the wall, where this had occurred, dipped noticeably owing to the removal of the sand in its immediate vicinity (fig. 3).

On the floor of the segment cut off by the later construction there was little evidence of occupation either by discoloration or the finding of relics, the only object found being an imperfect slate tool with a serrate edge obviously referable to a much earlier period (fig. 4). A large

upright slab firmly fixed and set on edge projected from the face of the wall on the north-east, and following its direction, an upright stood at right angles to the face of the wall on the opposite side of the circle. Two other upright slabs stood up from the surface placed radially, one towards the south and the other towards the south-west. Behind the former a pit had been dug to a depth of nearly 2 feet, and filled with stones evidently to maintain the stone in position. The purpose which these uprights served is not obvious, but it may have been connected with some arrangement for covering over a small segment of the interior, as appears to have been done in an area to be dealt with hereafter.

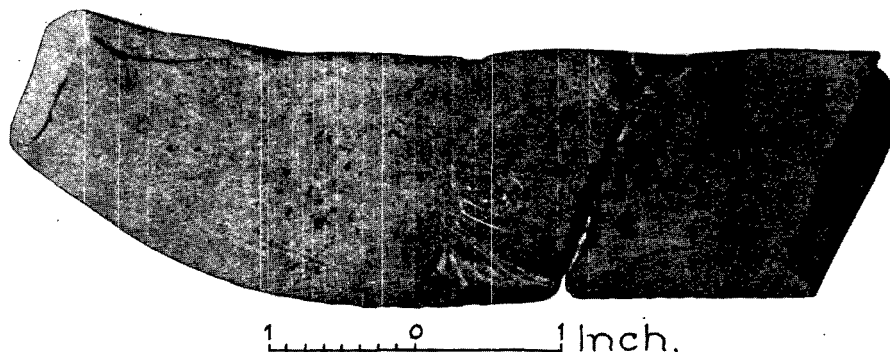


Fig. 4. Slate tool with serrated edge.

Across the western half of the circle, relative to the later level of occupation, lay a confused mass of fallen or disturbed stones, suggesting that a wall had crossed a part of the interior, no actual foundations of which, however, were discovered. Near the centre of the interior, as reduced, lay a small heap of peat ash, and three flags in its immediate vicinity, which might have formed a kerb for a hearth.

The appearance of the entrance to the earth-house indicated that in the final stage of occupation of the circle it had been put out of use for the accommodation of human beings as entrance to it and exit could only be effected with difficulty. A lintel some 3 feet 4 inches in length rested on built jambs, which reduced the opening to 2 feet in width. Recessed beneath this, as shown in the illustration (fig. 5), was a vertical face of walling resting on a second lintel, measuring altogether 18 inches in height, beneath which was the commencement of the passage to the underground chamber. In front, on the floor of the hut-circle, there was a small paved area measuring some 4 feet square and outlined with

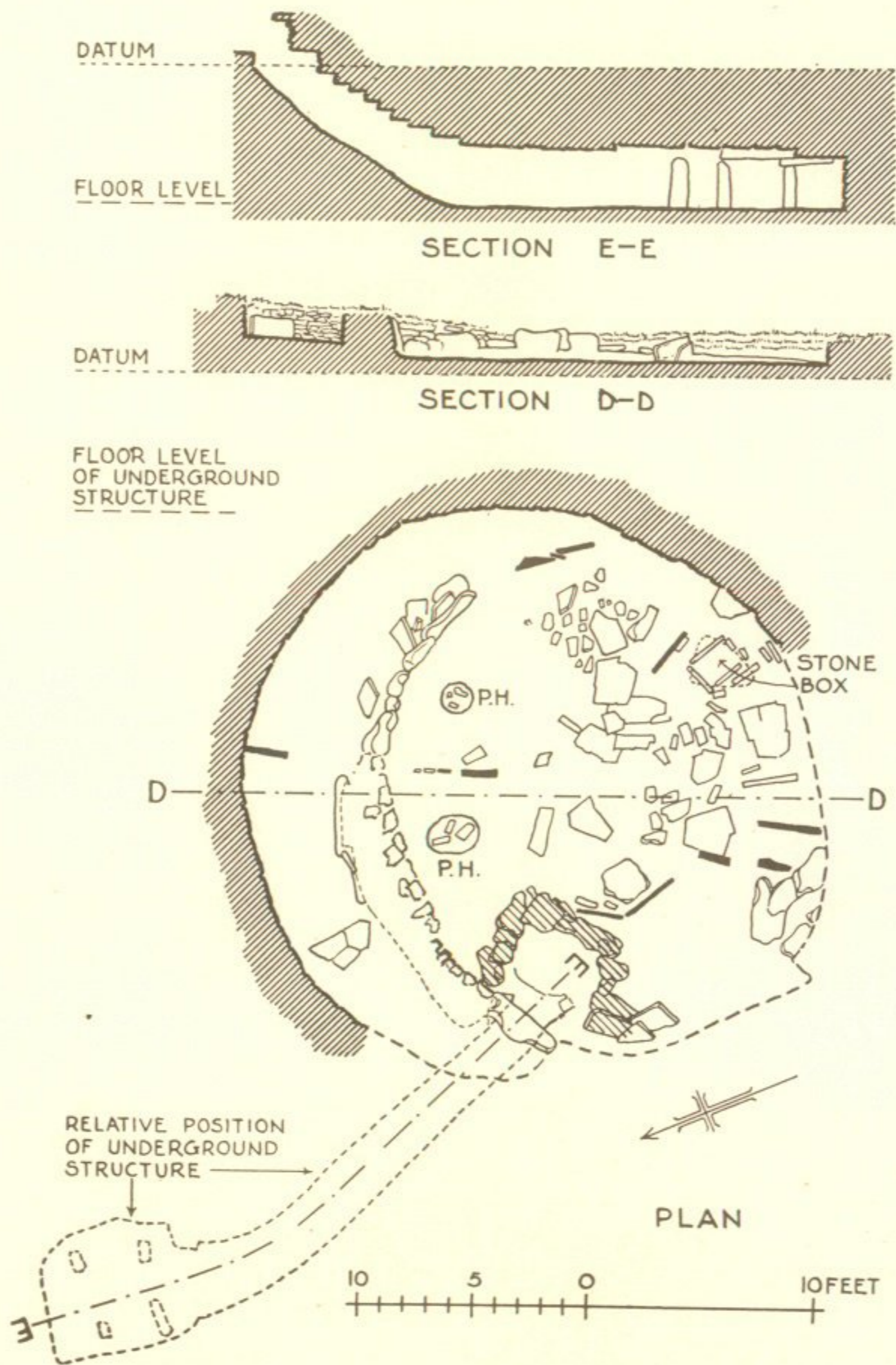


Fig. 1. Plan of Hut-circle and Earth-house.





Fig. 2. View of Hut-circle from the west with entrance to Earth-house in foreground.



Fig. 3. View of Hut-circle from the east with entrance to Earth-house in central background and supposed site of Hut on right.



boulders shown on the plan (fig. 1). The entrance itself was down a vertical shaft, partially recessed below the lintel, the recessed wall forming the inner face of the shaft, beneath which was the actual commencement of the passage. Fig. 6 shows the restricted space of the final period, with the head of a man who is standing inside.

Within, the access to the chamber consisted of a passage 20 feet in length, unpaved, roofed with stepped flags at a height of 2 feet, and



Fig. 5. Entrance to Earth-house as originally constructed.

sloping for the first 10 feet at a gradient of almost 1 in 2. From 2 feet wide at the entrance it expanded to slightly over 3 feet at the inner extremity. The chamber itself, which was roughly rectangular, measured some 6 feet in length by 5 feet in breadth, the floor space being, however, interrupted by four oblong stone pillars which helped to support the roof of flagstones. The space within this diminutive chamber was further contracted by the lowness of the roof, which was only some 2 feet 8 inches above the floor. During the latest period, with which we are at present dealing, the chamber had evidently ceased to be occupied, and the passage came into use as a dump for refuse shot down the entrance. On its surface, especially at the upper end, the sand was much discoloured and

there were lying in it many bones of sheep and oxen, shells of limpet, and a few cockles and razor shells. A number of large stones also lay on the passage, and from it there were recovered several pieces of pumice; five or six good pounders with the ends much abraded; a triangular plate of bone rounded on the edges (fig. 7, No. 1); a splinter of bone which appears to have been employed as a fabricator (fig. 7, No. 2); another worked splinter of bone (fig. 7, No. 3), and a portion of a rib-bone also worked



Fig. 6. Entrance to Earth-house in final period.

(fig. 7, No. 4). Two large sherds of a coarse pot and a small piece of a shouldered bowl resembling such as came from the upper level of Dwelling No. iii and analogous to a sherd found in the earth-house *h* of that dwelling, were also recovered (fig. 8, No. 3).

Above the paving at the entrance there were found a number of bone objects similar to those found in the later occupations of the prehistoric dwellings at Jarlshof (fig. 7) (cf. *Proceedings*, vol. lxxviii, p. 273, fig. 40).

It was obvious that such a restricted entrance was not as it was when originally constructed. Accordingly the paving within the enclosure was removed, and beneath it there was found a layer of animal bones, obviously food refuse. Beneath this was uncovered a firmly bedded sill, in front of which the soil was clean and firm. The outer stones of

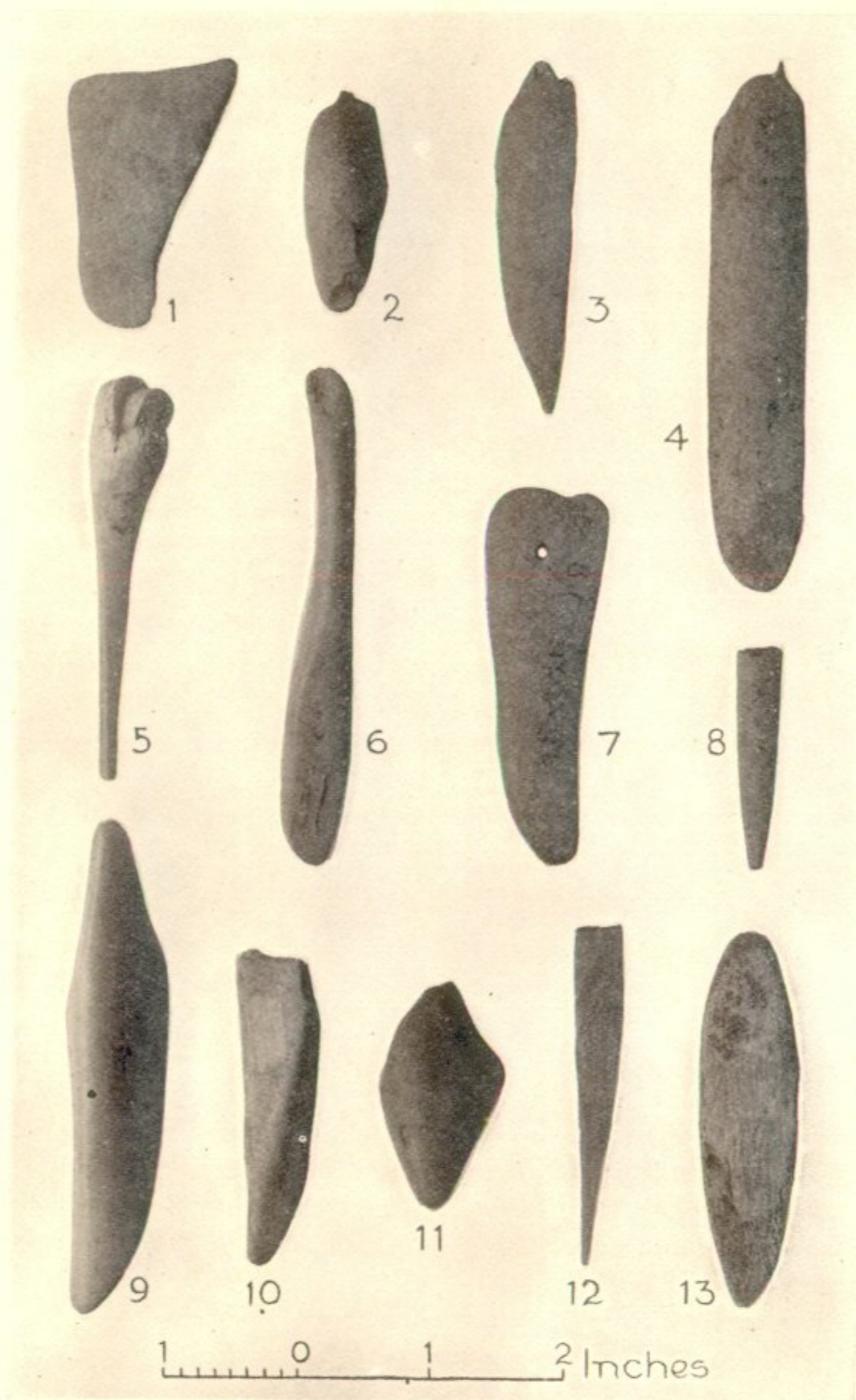


Fig. 7. Objects of Bone from Hut-circle and Earth-house.



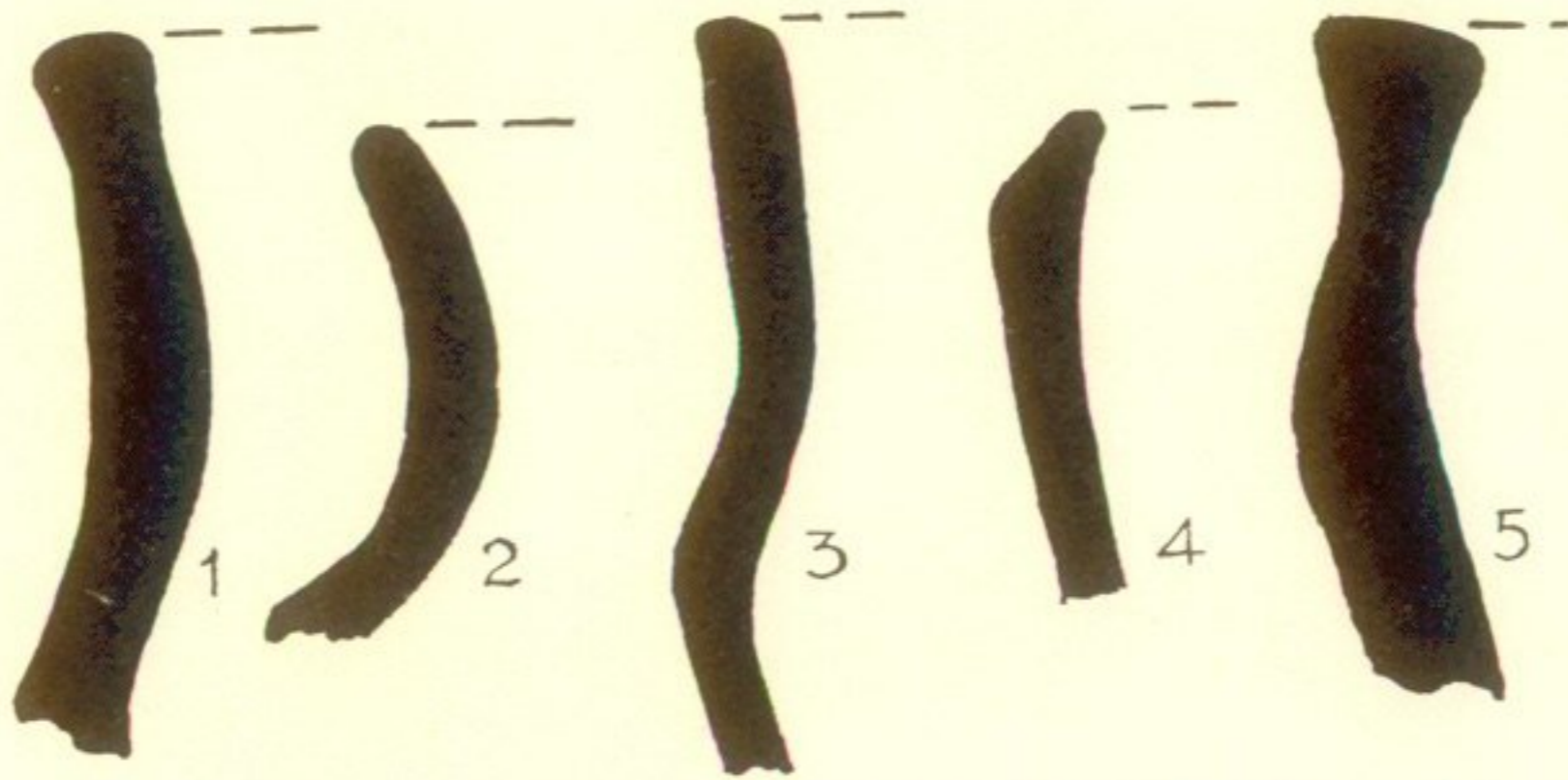


Fig. 8. Sections of Pot-rims found in Hut-circle and Earth-house. (†.)

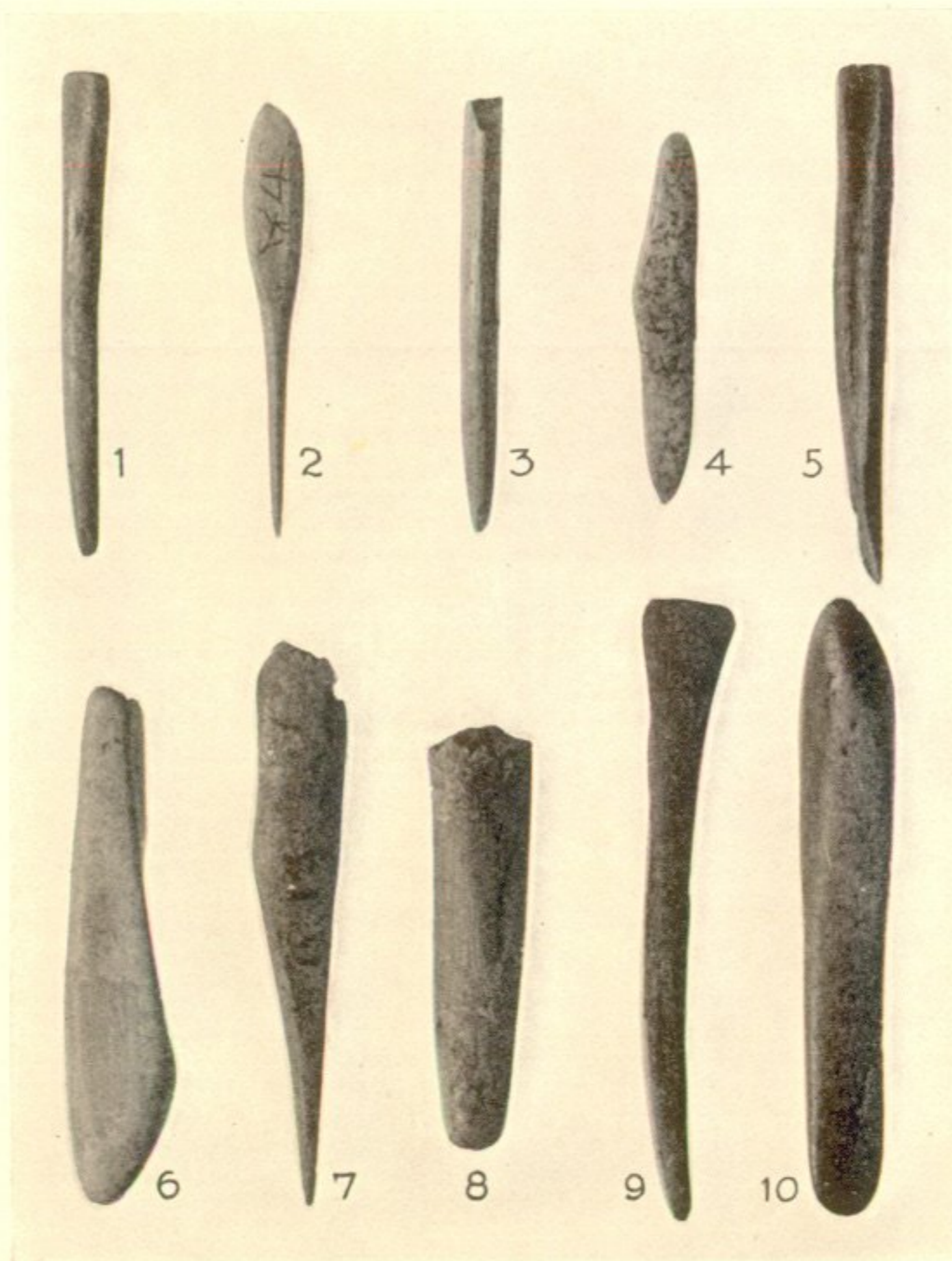


Fig. 9. Objects of Bone from Hut-circle. (†.)



the enclosure were also secondary as they rested on sand partially covering two kerb stones belonging to an earlier period. As a protection the stones of the enclosure were left *in situ*.

This evidence of an earlier and later period of occupations at the mouth of the earth-house and within it bore out the conclusion above stated regarding the two periods of the inner diminishing wall, and led to further examination of the hut-circle. Between the outer wall and the inner segment there was no signs of an earlier and later occupation. Within the latter, however, beneath several inches of sand, the former was quite evident, and produced several interesting features. In a hole to the west of the enclosure and before the entrance to the earth-house, numerous sherds of coarse pot were found mostly belonging to one vessel, and a pot-lid which had probably covered it. Unfortunately the upper portion of the vessel with the rim had entirely perished. Near the centre a heap of peat ash indicated the site of a hearth beside which lay the remains of another cooking-pot crushed beneath a stone. On the western arc, adjacent to a large upright, lay a small vertebra of a whale measuring  $6\frac{3}{4}$  inches in height, which had been hollowed out to a depth of 4 inches. Further round the western arc towards the south, and close to the firmly wedged upright previously mentioned, there was revealed a small stone box covered with a triangular slate measuring 2 feet 7 inches at base by 1 foot 11 inches through the apex (fig. 10). The box on which this lid rested measured 1 foot 9 inches by 1 foot 5 inches at surface, and 12 inches in depth (fig. 11). It was filled to within 4 or 5 inches of the top with discoloured sand containing a few animal bones and shells. The bottom was formed of clean sand and gravel. There being a luting of clay in one angle only it was obviously not intended to hold water.

My attention having been drawn to an oblong lump of clay lying a few feet westward of the southern end of the inner wall I found on examination that it was lying on pure sand. Further exploration showed that this was a natural deposit extending to an indefinite depth. This led to an examination of the condition of the surface soil in the immediate vicinity, with the result that there was found over the triangular area enclosed between the south end of the inner wall the line of stones projecting from it near the centre of its length, and the irregular line of tumbled or displaced stones running from the face of two large stones placed in alignment which had probably formed the southern end of the inner wall, a very thin deposit of discoloured surface soil overlying pure sand, contrasting with a considerable depth of discoloured surface elsewhere within the enclosure. The triangular area is noticeable on the right of the illustration of the hut-circle (fig. 3).





Fig. 10. In centre triangular Cover of Stone Box.



Fig. 11 Stone Box with Lid removed.



A possible explanation of this phenomenon is that within this area was a hut, the sleeping place of the inhabitants when the earth-house was not in use, the floor being covered with hides. It will be remembered that the floor of the earth-house in the lowest level of Dwelling No. iii was in a similarly clean condition.

Likewise the floor of the underground chamber connected with this hut-circle, the occupation of which, for reasons previously stated, obviously belonged to this earlier period, was so free from discoloration as to be recognisable with difficulty. It is improbable that a circle of 20 feet diameter or more was ever roofed over, especially in a country where there was no timber, and the absence of material in the interior is evidence against there having been a bee-hive roof over any part of it. The inference appears to be that while the main part of the circle was an open court, as in other prehistoric dwellings, *e.g.* the dwellings at Jarlshof, and at Wiltrow, and the brochs, a portion was set aside and roofed with skins as a hut and sleeping place for the occupants. Two post holes were discovered, identifiable by the stones placed upright within them, one within the triangular area and one between it and the entrance to the earth-house.

A number of relics were recovered, referable to this earlier occupation. From the floor of the earth-house there came a fusiform object of bone (fig. 7, No. 13), a highly polished rib-bone of a sheep, a pot-lid  $5\frac{1}{4}$  inches in diameter, and a piece of coarse pot. On the circle, in front of the entrance to the earth-house, were found two bone pins (fig. 9, Nos. 1 and 3), a blunt-pointed implement  $5\frac{1}{8}$  inches long (fig. 12, No. 3), a small lozenge-shaped object of bone  $1\frac{3}{4}$  inch long (fig. 7, No. 11), and a hammer stone. From adjacent to the whale's vertebra previously mentioned came a piece of steatite, 2 inches in length (fig. 13, No. 3), with a constriction in the middle of its length, also 13 hammer stones. There were also found one half of a ring of stone (fig. 13, No. 2), a polished stone disc,  $2\frac{7}{8}$  inches in diameter (fig. 13, No. 1), and a piece of cetacean bone with impressions on the surface of the point of a sharp tool (fig. 12, No. 4).

The only other objects found were from the centre of the circle, and consisted of an adze-like object of bone, the cutting edge of which was broken off, made from the distal end of the metapodial of an ox,  $4\frac{5}{8}$  inches in length and pierced with a hole  $1\frac{5}{8}$  inch in diameter towards the process end (fig. 12, No. 1); and at a short distance to the eastward, the process end of another bone of the same character which had been similarly treated, but broken across the perforation (fig. 12, No. 2). These two objects possess a particular interest in being of a type found in considerable numbers at Skara Brae, Orkney, by Prof.

Gordon Childe,<sup>1</sup> and also because they are the first examples of the adze or chisel-like tools found at Jarlshof with the socket hole running horizontally through the tool instead of placed vertically in the head of it.

In clearing out the filling of stones which had been employed to buttress up the upright stone adjacent to the stone box on the western side of the circle, at  $9\frac{1}{2}$  inches below surface level there was found a segment

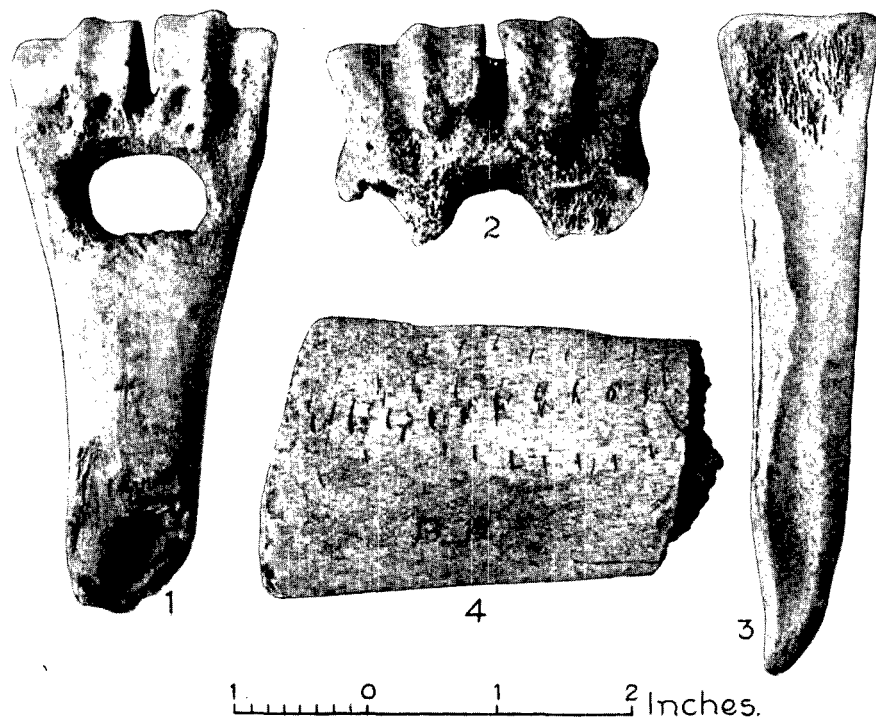


Fig. 12. Adze-like Tool and other objects of Bone from the Hut-circle.

of an armlet of steatitic stone, measuring  $2\frac{1}{4}$  inches along the chord and perforated at one end (fig. 13, No. 4). This segment in form closely resembles another found in Dwelling No. iv,<sup>2</sup> and others found in the latest occupation level of Dwelling No. iii.<sup>3</sup>

A few rims of pots were found, the sections of which are shown in fig. 8. They present such close analogies to sections of sherds found

<sup>1</sup> *Skara Brae*, p. 124, where the type is discussed, and other finds noted.

<sup>2</sup> *Proc. Soc. Ant. Scot.*, vol. lxxviii. p. 258, fig. 30, No. 1.

<sup>3</sup> *Ibid.*



in earth-house *h* belonging to the latest occupation of Dwelling No. iii, shown in *Proceedings*, vol. lxxviii. p. 292, fig. 57), that there can be little doubt that the hut-circle in its earlier period and that earth-house were in contemporary occupation.

With the examination of the hut-circle and of its associated earth-house the excavation of the group of prehistoric dwellings along the south-east margin of the Jarlshof site has now been completed, and as I do not

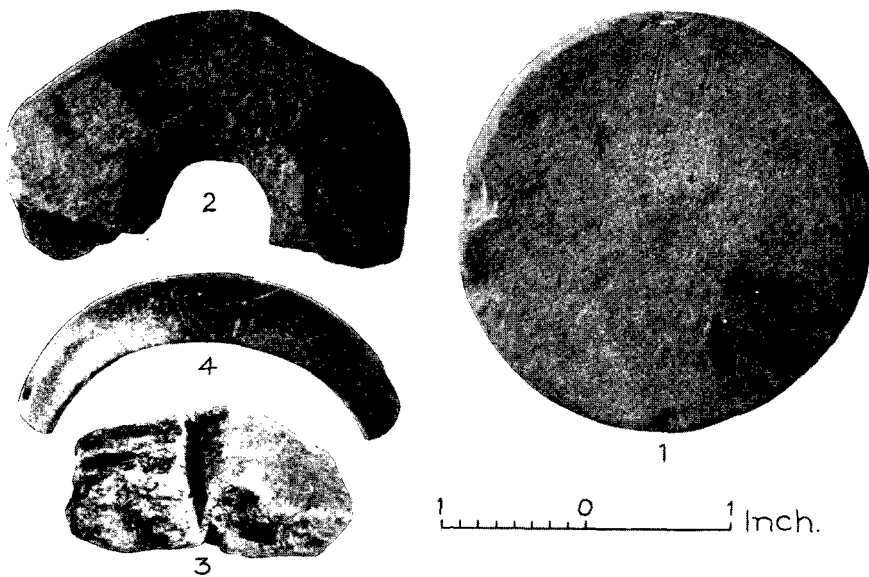


Fig. 13. Objects of Stone from the Hut-circle.

intend, in the meantime, to return to Shetland, I think it desirable to draw attention to certain features that have emerged, and indicate some inferences that may be drawn from them provisionally, and in this connection I desire to include the excavations at Wiltrow previously described this session, with those at Jarlshof.

Three cultural periods have been noted. The first—pre-metallic, when stone and bone appear to have been entirely employed for tools and implements, and presumably for such weapons as were in use. The second—a bronze culture, which did not bring about the supersession of the primitive tools and implements, but obviously, from the evidence of the moulds, did introduce the sword and the axe, the latter possibly

being also used as a weapon, or for use in the manufacture of swords, as, for example, in the shaping of the wooden patterns which were undoubtedly employed. Otherwise in a treeless land there was little need of sharp-edged tools. Lastly, an iron culture, which, though it probably superseded bronze in the purposes for which metal was used, had not, when met with at Wiltrow, provided a substitute for the stone from which the primitive tools and implements were made, though the complete absence of the stone implements from the hut-circle and the later levels of the other dwellings, points to the fact that by the time of their occupation this had occurred.

We have also met with three distinct classes of pottery. That belonging to the earliest period when the vessels were of the flower-pot form or bowl shaped, sometimes with one or, more rarely, two bead-mouldings on the rim. Second, pottery with deeply incised decoration forming lozenge and chevron ornament, found at Wiltrow; and lastly, the pottery of the subsequent periods at Jarlshof, with the frequent occurrence of shouldered vessels, pots with inverted rims, and occasional finger-tip impressions. The first class of pottery is not affected by the advent of the bronze culture; the second, so far as is known, is associated entirely with the early iron culture, and presents a somewhat close analogy with pottery found in the Hebrides; while the last, making its first appearance in the second bronze period, continues developing until the end. It finds its analogies in places as far distant as All Cannings Cross in Wiltshire and Scarborough in Yorkshire.

There have been revealed two definite types of dwellings—the oval or elliptical type, with an entrance at one end, an open court in the centre, a transverse chamber at the back of the court, and two small chambers on either side; and the circular dwelling showing cubicle-like chambers on the inside of the outer wall, the considerable use of large stones set on edge in the construction, and the addition of an earth-house or underground chamber.

The first type, now introduced for the first time, we may call indigenous, and with it is associated, except at Wiltrow, the primitive class of pottery. The second type, though seemingly in use during the second period of bronze in Dwelling No. iii, is more definitely associated with the later iron period when the rude stone implements have apparently been superseded.

What are the inferences which may be drawn from these facts? In the first place the introduction of bronze does not seem to indicate anything of the nature of an ethnic movement, the advent of immigrants with fashions in implements and in pottery of their own, which would



have superseded those of the native inhabitants. It points rather to the advent of one or more smiths, or of a few individuals who settled among the native population and plied their craft. In other words, the addition of bronze weapons to the general equipment of the natives did not displace the primitive stone culture. There having been a distinct hiatus between the first occupation associated with the elliptical plan of dwelling and the advent of the bronze smiths, and the second with the circular dwelling and the third class of pottery, it seems evident that in the latter case there was a larger influx of people who brought with them a new culture implying change in architecture and pottery, the abandonment of the rude stone implements so characteristic of the earlier period, and the introduction of the earth-house.