

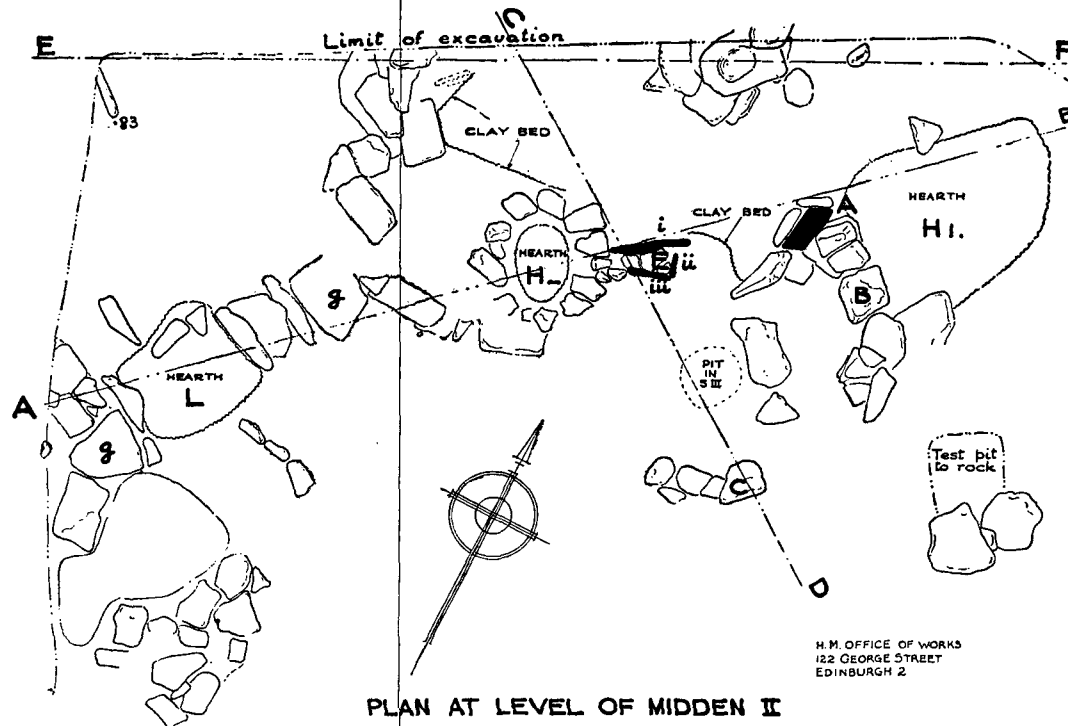
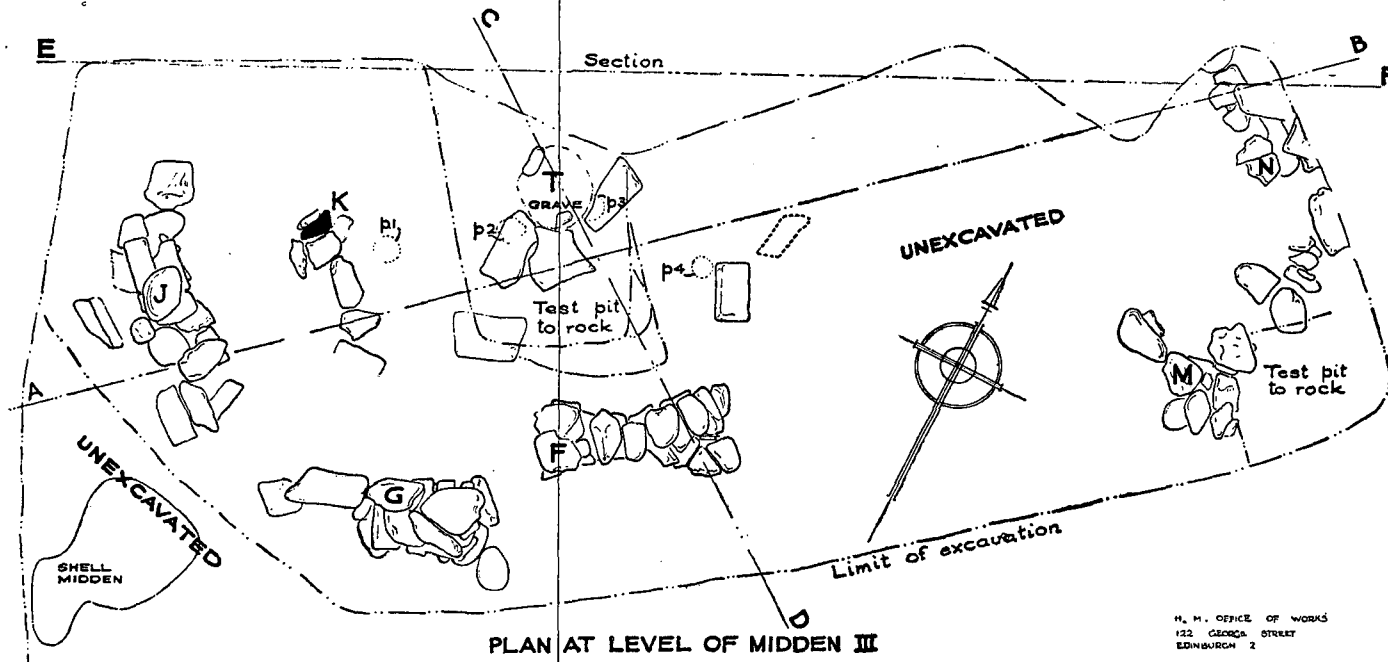
II.

EXCAVATIONS CARRIED OUT BY H.M. OFFICE OF WORKS
IN THE BRONZE-AGE LEVELS AT JARLSHOF IN 1937.
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When I arrived on 14th July an area, north of Bronze Age Dwelling No. II, in the north-east corner of our land had already been cleared under instructions from Mr Richardson. Some ruinous Viking floors and wall stumps were exposed along the western margin of the area, but

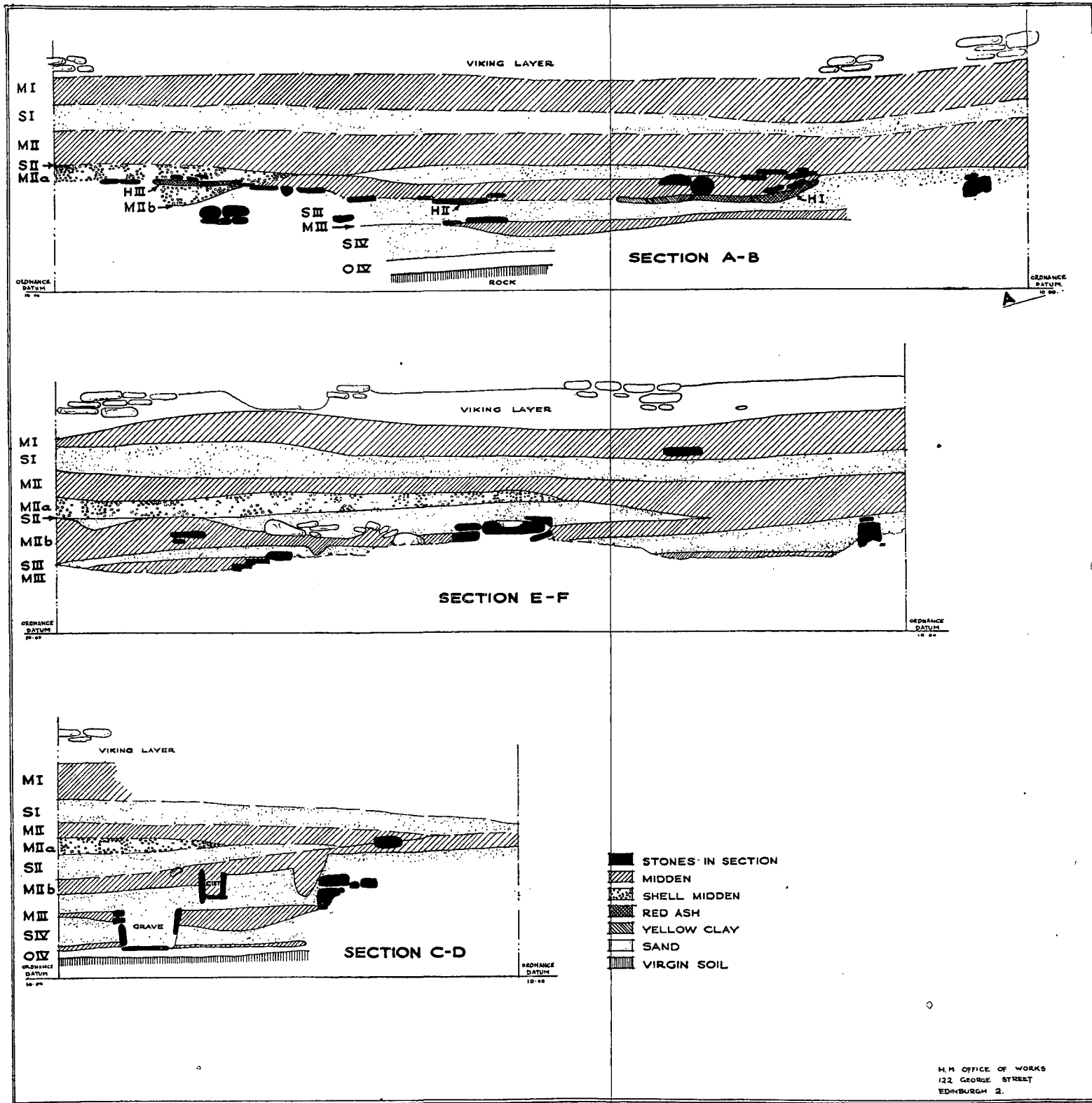


Fig. 1. General view of Constructions in Layer O II.



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PLATE XVII.



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over an irregular space, about 45 feet by 25 feet, midden layers of dirty sand and a clean sand-blow, interpolated between them, had been removed until a chaos of stones and some apparent wall tops were exposed. Under the Inspector's direction this area was subsequently excavated by layers under my supervision. We thus discovered first some fragments of a building represented by a pillar stone, A, a segment of wall adjacent to it, B, a second segment, C, a large clay hearth, H1, north of AB and to the south a cist, E, and some paving, gLg (fig. 1). These rested on or were sunk in a well-defined but irregular "floor," O II, that sloped down westward from 15.5 to 13.6 feet above O.D. Under O II the tops of earlier walls were already protruding. So the more ruinous structures of O II were removed that the more perfect antecedent walls might be conserved. An earlier occupation level, O III, was thus laid bare. Finally in vacant spaces test pits were sunk from this level to virgin soil that lay about 11 feet above O.D.

Mr Richardson had also directed the sinking of a series of trial pits in squares 10/19, 18/19, and 18 B. Of these No. II in square 18 B disclosed good walling under sand at about 19 feet above O.D. Under the Inspector's direction this pit was accordingly extended. After removing some ruinous Viking foundations in consultation with the Inspector we here exposed an interesting strip of boundary wall, some 27 feet long, belonging to the Bronze Age settlement and connecting up on the south with other walls and associated occupation deposits, which could not be explored this season, and were accordingly covered over again.

STRATIFICATION IN THE NORTH-EAST CORNER.

Archæologically the most interesting of the year's results was the insight gained into the stratigraphy of the site and so into the sequence of its occupations. The profiles, exposed in the walls of the deep excavation in the north-east corner, and our own observations reveal the following layers (Plate XVIII): below mediæval and/or Viking foundations is a reddish stratum containing ashes and relics of Viking age. It passes over gradually into a bed of dirty black sandy material that I term M I, the base of which is best defined by some paving slabs exposed in the north-west wall of the cut (section EF: the slabs are visible in fig. 2). Below M I all round the section is a sand-blow, S I. This appears often only 6 to 12 inches thick, but is really deeper—16 inches in places; its upper layers have been stained with organic matter from M I save where horizontal slabs under the latter have prevented

percolation. The base of the sand-blow is marked by a band of ferruginous concretion that appears in the profile as a very undulating line. S I is the sand-blow deposited, according to Curle, "soon after the wall of Dwelling No. I had been erected." It rests conformably on another deposit of black material, M II, varying in thickness from nearly 4 feet on the south to barely 2 feet on the north wall of the excavation.

M II is divisible over most of the area into three parts. At its top the layer is formed mainly of dark stained sand. On the south-west this layer, 18 inches thick, covers a tougher bed, M IIa, full of shells. The shell midden is 18 inches deep on the south-west wall and eastward as far as wall F-J, but it continues as a thin band, 4 to 6 inches thick, eastward up to the middle of H1 and southward as far as C. In the central area M II is interrupted by a second sand-blow, S II, immediately below M IIa. The sand-bed attains its maximum thickness of 1 foot or more over Q and north of A, but it thins out to a barely perceptible streak and never reaches wall C on the south. M IIb, the basal portion of M II under S II and elsewhere, is tougher than the top layer and resembles a true occupation deposit. At its base is a layer of yellow clay on which stone A stands and which, baked hard and reddened by heat, forms the basis for H1. South of cist E its place is taken by the layer of slabs at *g*.

The clay, the slabs and the wall stumps B and C rest in their turn upon a bed of clean sand, S III, the top of which slopes up eastward from 13.5 to 16.25 feet above O.D. This sand covers and buries the wall stumps F, G, and J, and an occupation deposit, O III, at their bases. Against the walls and south of them O III is represented merely by a tenuous band of discoloration in the sand, which none the less contains sherds and implements and which lies nearly horizontal 13 feet above O.D. Farther north and west it is flush with the surface of a dense midden deposit M III attaining a depth of 9 inches and consisting of closely packed bones mixed with sherds and a few implements.

M III and O III rest on a bed of pure sand, S IV, but 15 to 18 inches down S IV is discoloured by a brownish band 3 to 4 inches thick. From this layer we recovered a few shells, including an oyster-shell, and some stones, broken, but probably by natural agencies. A passing occupation, O IV, buried by S IV, is therefore possible but not certainly established. About 8 inches below this ambiguous band the perfectly clean sand rests on sterile clay, bluish and greasy, which covers the rock-head between 10.85 and 12.15 feet above O.D.

CONSTRUCTIONS. EXPOSED.

The area of our deep digging was selected because no buildings of the Viking or broch periods covered the earlier constructions. At the base of M I are a few slabs, possibly remains of pre-broch buildings. Even the structures corresponding to O II are very ruinous. The best



Fig. 2. Pillar A, and Slabs lying over H1.

preserved were buried by, and therefore anterior to, S II, and accordingly to M IIa.

A chaos of stones in the sand-blow S II undoubtedly marked the ruins of Bronze Age walls, but only the pillar-stone A, two courses of masonry at B with two connecting stones, and perhaps three stones at C, survive (fig. 2). B and C rest directly on sand at 15.6 feet above O.D., with a tough occupation deposit over it, which slopes down northward. Stone A, 2.5 feet high, is very neatly pinned up with wedge-stones, and rests at 14.2 feet O.D. on a thin layer of yellow clay. But on the south

side of the pillar the actual floor seems marked by a slate slab at 14·9 feet, upon which traces of peat ash were observed.

North-east of A-B the clay bed extends to form the basis of the hearth, H1—a red baked area about 6 × 4 feet square. Near its centre the peat ash is 5 inches deep, with its surface 14·3 feet above O.D., but the edges are formed of clay burned almost to pottery and folded up to form a rim on the north-west at 15·1 feet. No sort of kerb surrounded H1, but it was found covered with two layers of slabs, that looked like a pavement when first exposed (fig. 2). They may once have stood upright and formed sides to an oven or similar structure over and round H1, but in the thin clay and soft sand below no sockets for the slabs could survive. Beyond the raised rim of H1 the occupation layer under M II becomes tenuous and the whole deposit contracts to the north and east. To the south the clay extends as far as H2, and is continuous with the tough occupation layer at the base of B and C.

North of A the yellow substratum extends under the walls of our excavation. Resting upon slabs 6 inches above it, 4 feet north-west of A, stands a trough-quern formed from a block 2 feet long by 1½ feet wide by 6 inches thick in which has been worked a completely closed oval depression 15 feet long by 11 feet wide by 4 inches deep. Two convex oval rubbers were found on the north-west side of H1 and a third on the south-eastern edge. South-west of A the box or cist, E, has been sunk into the floor defined by the occupation layer between A, B, and C (fig. 3). It is paved with a very thin "slate" slab that runs under the south side stone E III. The latter is not parallel to its stouter northern counterpart E I, but the clay luting at its base follows the line of its present position. The cist is 1 foot 1·5 inches deep, and contained some stones that may once have covered it.

West of E a ring of small stones, laid on the tough occupation floor, surrounded an area of thin red and black ash, H2 (fig. 1). To the north, under the wall of the excavation, begins an area where the yellow clay has been baked red as in H1, and which I accordingly term H3. South-west of H2 a series of flat slabs took the place of the yellow clay and suggests a pavement, though the slabs may have fallen. They seemed to lead up to another area of laid clay, L, which at its centre had been reddened and formed a hearth nearly 4 inches thick. In the base of M IIb between C and E a round depression had been sunk in the sand of S III to a depth of 12 inches at its centre. It contained only the usual midden material.

Though these fragmentary ruins do not suffice to define a dwelling such as Curle found farther west and nearer the shore, they at least

denote an occupation area. And the vague floor at the base of M II did yield a number of relics, which will be described below.

Under S III the wall stumps, J, G, and F, corresponding to O III, look like remnants of the boundary wall of a dwelling (fig. 4). They



Fig. 3. Cist in O II level and mouth of Pit T below it.

are only one course thick, faced on the north-west, and must have been built up against sand banked outside them (fig. 5). At the ends they are strengthened with piers. They stand on loose sand. At their foot was no hard floor, only dirty sand that was, however, full of sherds and bones. Within the area the walls should enclose, a number of slabs were found lying in the sand; as pottery was found under, not over, them they had presumably fallen. The tall pillar, K, 3·5 feet high, was in fact found thus lying prostrate, but its socket was so clear that

we ventured to set it up again (fig. 4). No hearth was found within the area bounded by FJ in so far as it was explored. (Though cist E was dismantled and then set up again, we left pillar A and H1 intact as memorials of the period denoted by O II, so that the space beneath them could not be explored.)



Fig. 4. Inner Faces of Walls in Layer O III looking south-west.

Instead of a hearth we found beneath the O III surface-level of 13 feet above O.D. a dense midden, M III, composed of closely packed fragments of bones, shells and sherds, filling a hollow in the underlying sand. The depression, beginning with a depth of 9 inches about 5 feet north-west of K, extends for 13 feet, contracting to 4.5 inches under H1; south-eastward it extended up to the north-east "end" of wall F2 and westward to about H3. The pottery from M III is identical with that from the O III level outside it, *e.g.* at the base of J.

A cylindrical pit, T, 2·2 to 2·5 feet in diameter, had been dug through M III and the underlying sand to a depth of 18 inches, *i.e.* to 11·45 feet above O.D. (*cf.* fig. 3). The uppermost 9 inches of the pit were filled with loose rather dirty sand in which lay parts of the occipital and left temporal bones of a human skull, three clubs—one very finely shaped, with a pecked handle—a Skail knife and a flat elongated rubber. Lower



Fig. 5. Outer Face of Walls G and F from south.

down the sand-filling was dirtier and greasier and comprised small lumps of yellow clay, similar to that underlying M II. There were flat slate slabs, covering the sand, at the bottom of the pit, and against its south-west wall a stone on edge supporting two horizontal stones just up to the O III level. Two other tilted slabs seemed to have walled the pit to a depth of 10 inches below that same level. A slab lying horizontal, at the same level, has been broken along the edge to fit the mouth of the pit.

Pit T perhaps contained a funerary deposit and had been dug after the deposition of M III. Owing to the disturbance involved in sinking cist E into the O II floor, and the narrowness of S III in the critical region, I cannot say whether these deposits were absolutely intact precisely at the critical point immediately over T. The bits of yellow

clay in the pit might well have got there in digging through the clay bed under O II. In that case the pit need not be older than O II, though it certainly existed when S II was deposited.

After removing M III four circular discolorations, p^1 - p^4 , were observed in the underlying sand. On cleaning out they were found to run down to 11.8 feet above O.D., or 1.2 feet below the O III surface. One, p^4 , contained four feet of a cow. It is more likely that these cavities represent places where baskets or other perishable containers had stood than that they were post-holes. In addition to walls F-J, a pier, M, and a row of stones, N, at the north end of the excavation belong to the O III phase. Plenty of typical sherds were found at their bases.

O III and M III yielded plenteous relics of occupation. Among the shells, mussels, rare in higher levels, were especially noted. Sherds were very numerous, and will be described below. No structures were found beneath these deposits, which must rank as the earliest occupation, at least in this corner of the site.

NOTES ON THE RELICS.

As in previous excavations, *stone tools* were found in embarrassingly large numbers. Quartz tools, mainly scrapers, were collected by the hundred in M III as much as in M II.

Rough flaked stone or "slate" implements, whatever their real functions, can be classified typologically on precisely the same principles as flint tools, as I hope to show elsewhere. Here I content myself with giving the results from an application of the major division into core and flake implements: 41 tools from M II and only 4 from M III are cores; 30 from M II and 3 from M III, flakes.

Tools shaped by pecking come from M II only, save for the specimens from the pit, T, the attribution of which is uncertain. The perfect club from this deposit is 20 cm. long over all. The flattened pear-shaped body, which is smooth, has a maximum width of 8.8 cm., 4 cm. from its end, but contracts to 7.2 cm. at its butt. From this projects the rounded handle, pecked all over, 8 cm. long and 5.8 cm. wide at its base.

Skaill knives, formed by splitting pebbles, just as at Skara Brae in Orkney, had not previously been reported from Jarlshof, but were found abundantly this year, but exclusively in M III.

Polishing seems to have been resorted to for sharpening the edges of two slate "knives" (one from M III) and a thin slate "chisel" from M II. In M III under one of the slabs of pavement, *g*, lay a polished implement of fine-grained stone (fig. 6, 3), probably a "Picts' knife,"

such as are so common in Shetland, rather than an axe. It is triangular in plan and 1.2 cm. thick at its stoutest. The base of the triangle has been ground to a bevelled edge but the longest side has been chipped to form a scraper. An end-scraper formed by chipping a polished pebble was found in M II beneath the wall stumps B and C (fig. 6, 2).

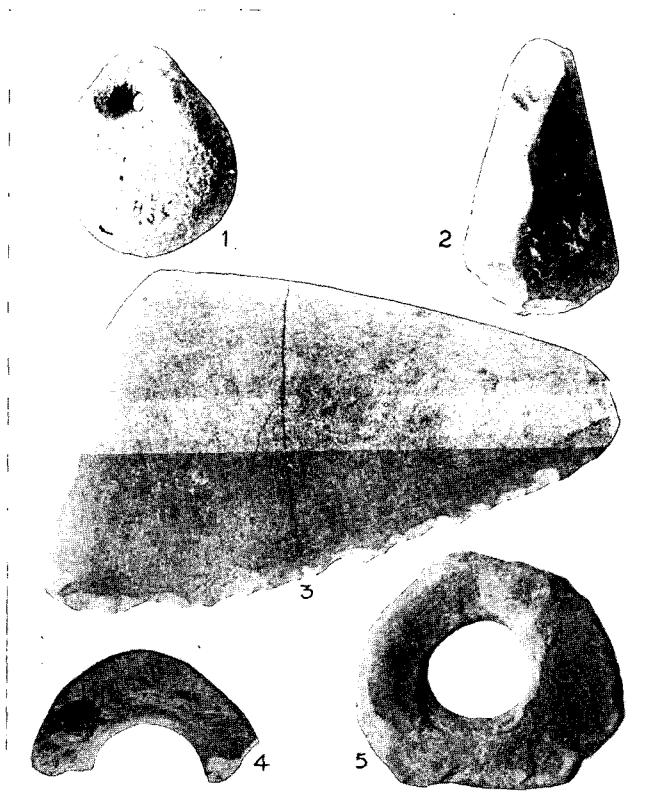


Fig. 6. Stone Artifacts.

A faceted sandstone polisher, 18 cm. long and 11×8 cm. thick at its centre, was found at the base of M II.

Three grain-rubbers from M II are subrectangular (23.5×15.7 cm.) and convex on both faces to fit a trough-quern; a fourth is more elongated. The rubber from pit T was almost circular in plan.

Bone Implements.—Piercing tools can be divided into three groups and are distributed as follows: (i) splinters polished to a point—7 from M II, 3 from M III (fig. 7, 3); (ii) marrow-bones of birds and small

mammals split longitudinally from the articulation—0 from M II, 6 from M III; (iii) marrow-bones split obliquely near one end of the shaft—1 from M II, 8 from M III.

Two-pronged implements (fig. 7, 4, 5) are confined to M III and represented by four specimens; they are generally made on marrow-bones.

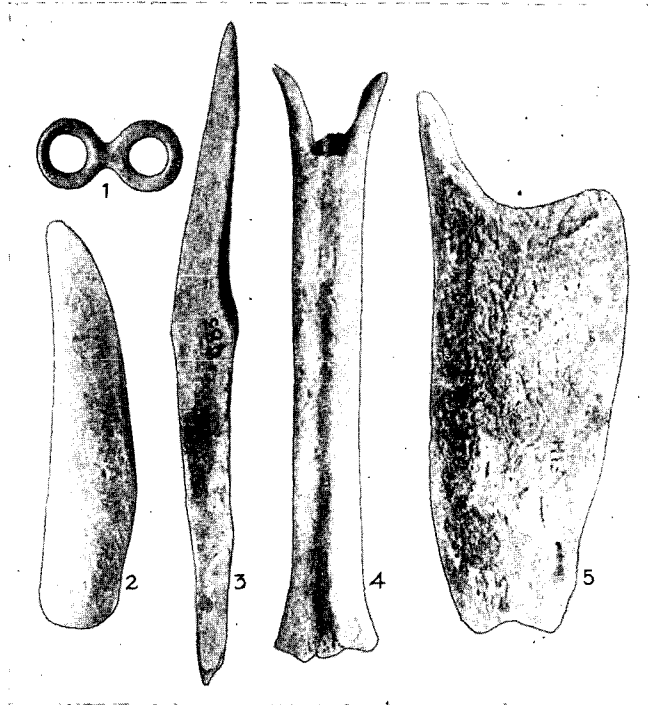


Fig. 7. Bone Artifacts.

Three shovels made from bovine shoulder-blades were found, 1 from M II and 2 from M III.

Oval implements worn along the edges are a novel type at Jarlshof, peculiar to M III. Fig. 8 is made from an ox's shoulder-blade with the crest rubbed down; fig. 9 from a slice of red-deer antler. With these were associated flake implements of slate of the same oval plan.

Fragments of five bowl-shaped steatite vessels were found in M II (fig. 10, 3), none in M III.

Pottery was rare in M II. The fragments all belong to thick vessels without any ornamentation. One rim is bevelled internally (fig. 10, 1),

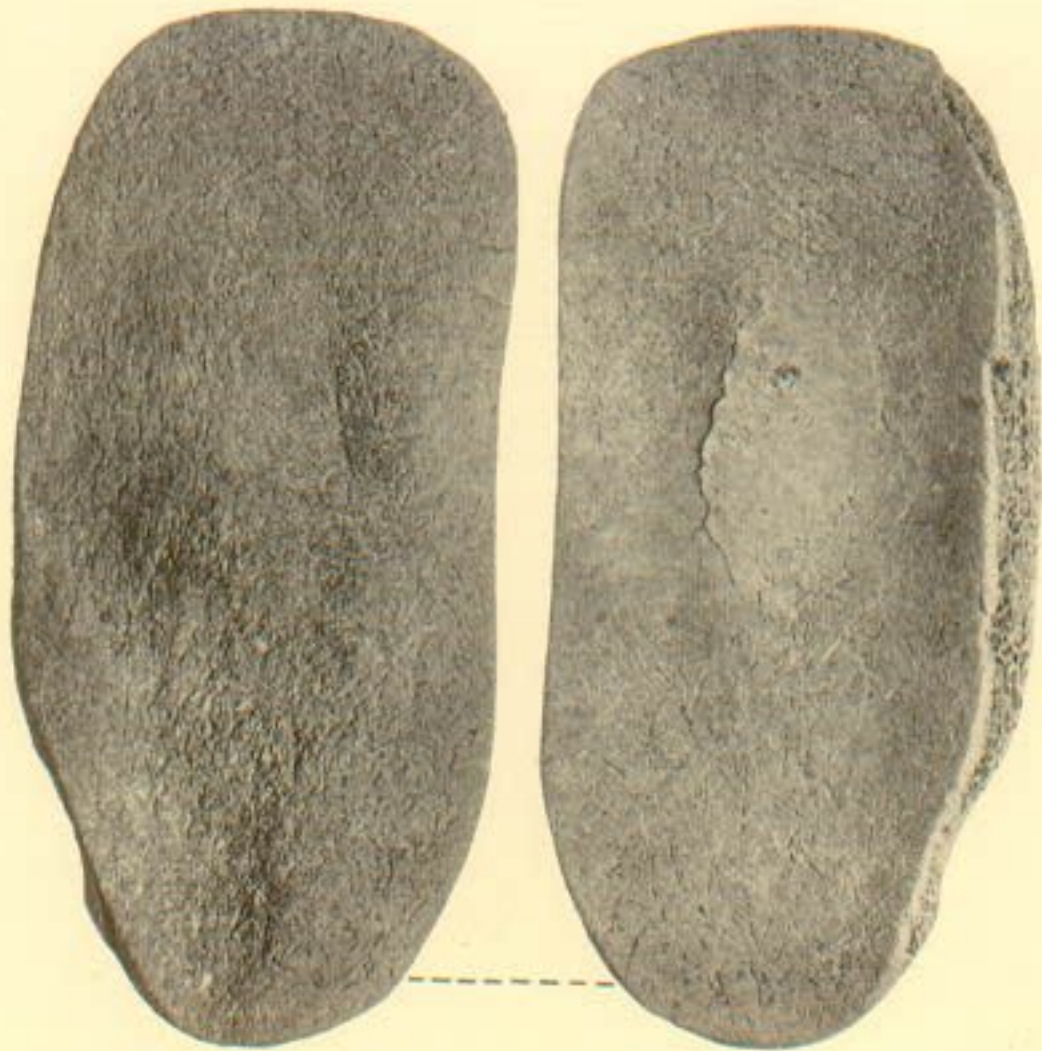


Fig. 8. Oval Implement of Bone from M III.

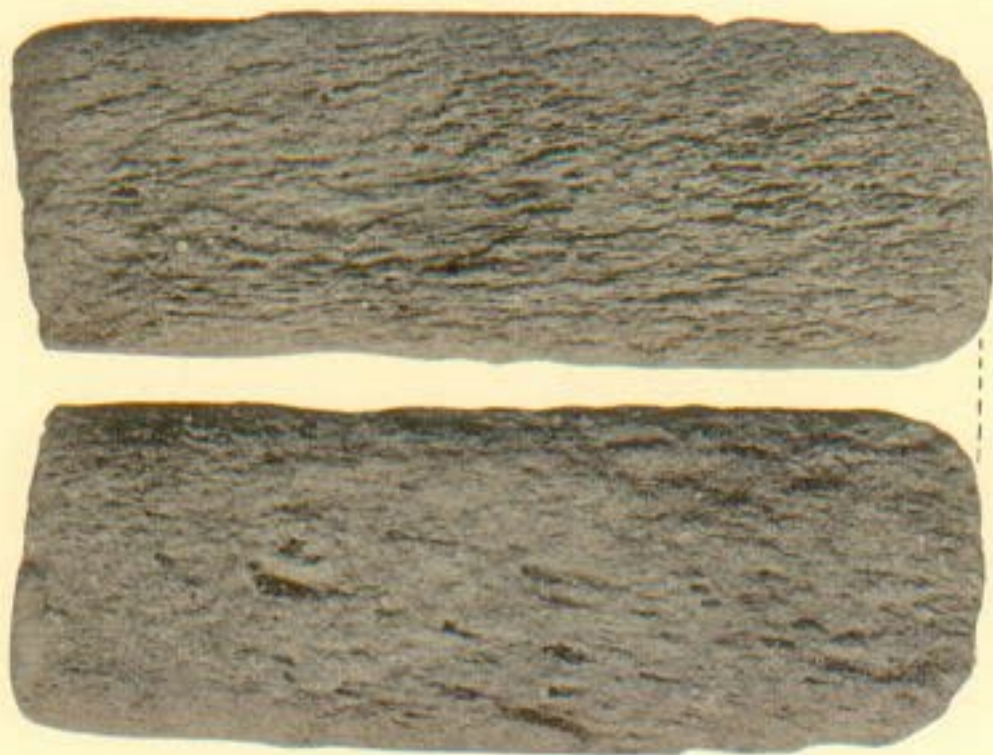


Fig. 9. Subrectangular Implement of Antler from M III.

another shows an external groove below the lip, recalling the stone vessel of fig. 10, 3. The pottery from M III is very abundant. The ware has a soapy feel and exhibits conspicuous remains of grass temper (fig. 11, 1). The surface is generally smooth but not burnished. The ware was so soft that the fragments recovered were too distorted to permit of the reconstruction of any complete forms. The rims are simply rounded; no flat bases were observed, so that the pots may have been round-bottomed. Several sherds have been perforated for mending (fig. 11, 4). Some sherds are decorated with coarse punctuations, but are too small for any design to be recognised (fig. 11, 2, 3). This ware is not paralleled in earlier finds from Jarlshof and indeed seems

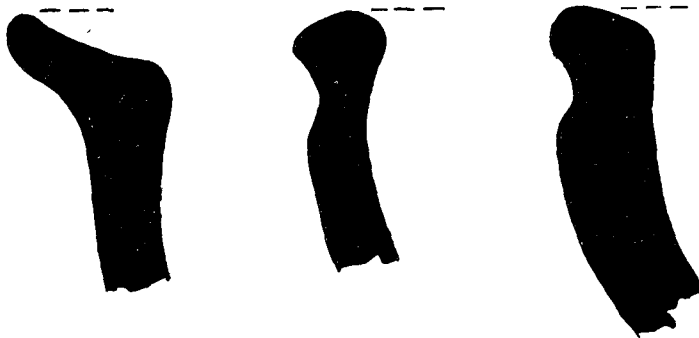


Fig. 10. Rims of Pots and Steatite Vessel from M II (natural size).

to be a new variety to Scottish archæology. The use of grass temper curiously anticipates the Viking practice, but our soft fabrics, so different from the hard ware of the Norsemen, were all found securely sealed under undisturbed prehistoric middens and sand-blows.

Three slate rings were found in M II (fig. 6, 4, 5). H6 is broken; it was .6 cm. thick and 1.4 cm. wide, the aperture exceeding 2.5 cm. H 81 and 95 were unfinished: the former has an over-all diameter of 6.2 to 6.8 cm. and an aperture of 1.2 cm., the second an over-all diameter of 4.8 to 6 cm. and an aperture of 2 cm. Several unperforated discs of the same order of magnitude found in M II may represent a preparatory stage in the manufacture of such rings.

The most remarkable object found in the prehistoric levels during 1937 is the bone plaque shown in fig. 12. It lay at the point marked 83 on the plan at the base of the thin sand layer intercalated between M IIa and M IIb. One side is decorated with finely engraved lines in a style reminiscent of the schist plaque-idols and croziers of the Portuguese Copper Age and of the decoration on Early Bronze Age daggers and

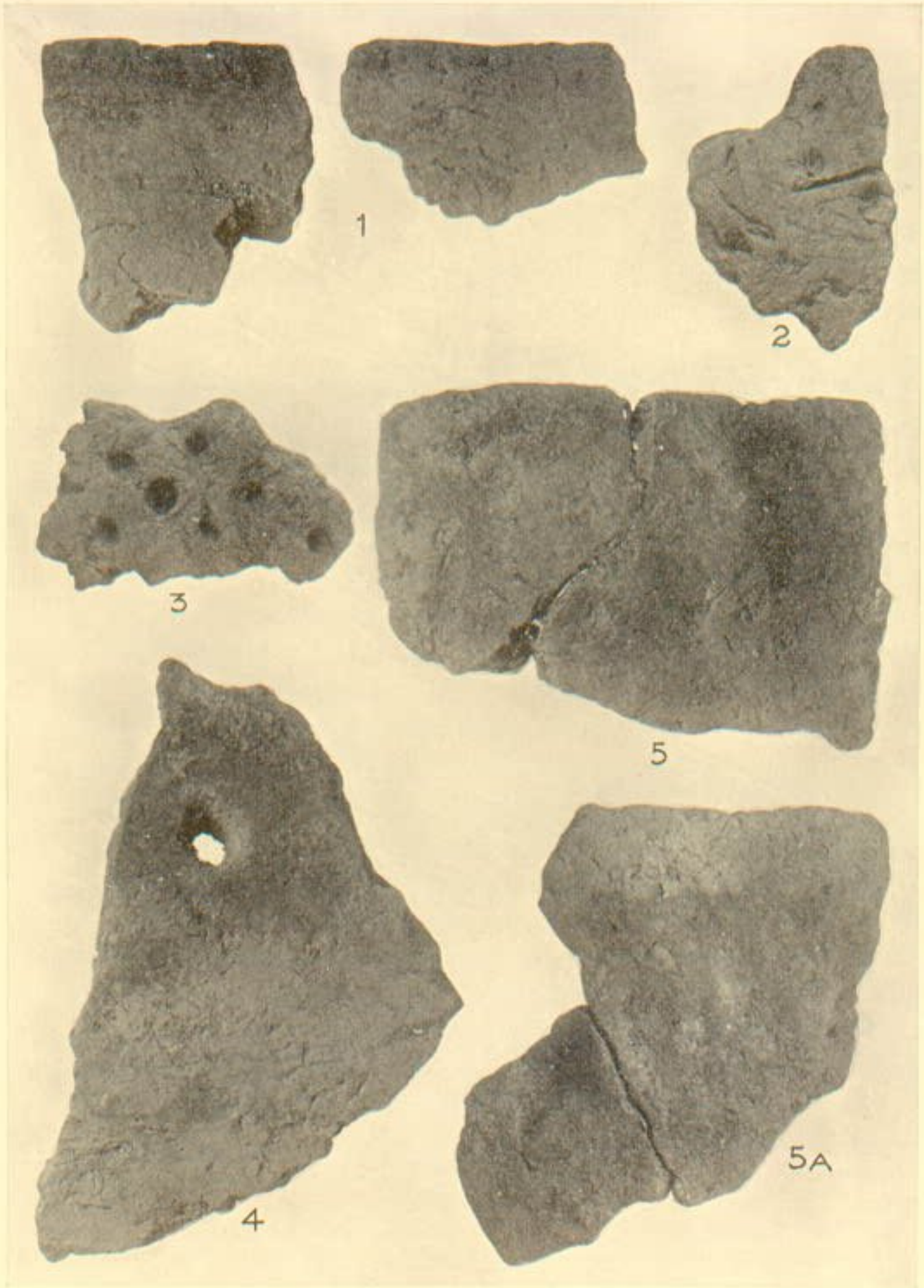


Fig. 11. Pot-sherds from M III (natural size).

ornaments. Mr Richardson suggests that it was the plate of a dagger-sheath.

The double ring of bone (shown in fig. 7, 1), apparently a copy of a

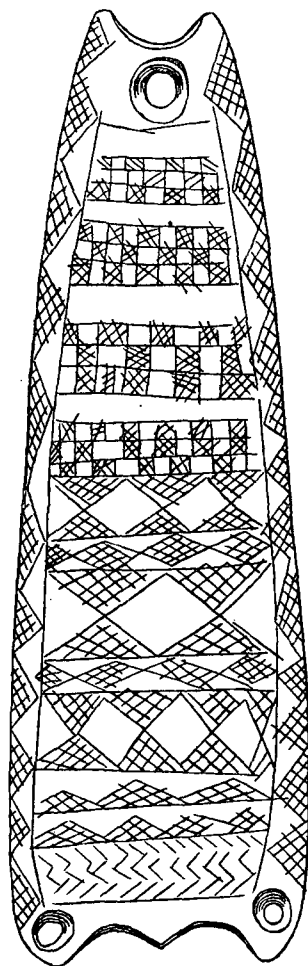


Fig. 12. Engraved Bone Plaque (natural size).

metal mount, was discovered before I arrived, probably in M II. At the same time three hollow button caps of thin bronze, much corroded, turned up apparently in S III just over the stones at N.

It is not easy to fit the cultures revealed on the floors of these very ruinous dwellings into any one of the stages outlined by Dr Curle. On

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purely stratigraphical grounds the relics from M II should be comparable in antiquity to those from Dwelling No. II and belong to phase I as defined in *Proceedings*, vol. lxx. p. 249. But the discovery of the three bronze buttons before my arrival might be taken as a warning not to apply thereto the term "pre-metallic." The culture of M III, characterised by novel pottery and bone implements, must on stratigraphical grounds be regarded as still earlier, indeed the oldest culture yet recognised at the site. Its archaic character is quite in harmony with such a view.