

IV.

AN ACCOUNT OF THE EXCAVATION, ON BEHALF OF H.M. OFFICE OF WORKS, OF ANOTHER PREHISTORIC DWELLING (No. V) AT JARLSHOF, SUMBURGH, SHETLAND, IN THE SUMMER OF 1934. BY ALEX. O. CURLE, C.V.O., F.S.A.Scot., F.S.A.

During the course of the excavation of Dwelling No. i in 1932, it was ascertained that indefinite remains of building were hidden under many feet of sand at the outer end of the original entrance passage. At the close of last season's exploration the foreman, before leaving, cleared away a deep accumulation of superincumbent material in order to facilitate research when the excavation was recommenced this summer.

On resuming work the evidence of structure actually exposed was found to be rather disappointing, but at one end of the area there was laid bare the top of the wall previously located trending eastwards into uncleared ground.

After some preliminary exploration at a higher level, when considerable foundations of a late mediæval building were exposed, excavation was proceeded with along the line of the aforesaid wall, and this led finally to the clearing of another dwelling, No. v of the prehistoric group (figs. 1 and 2).

Immediately above the wall-head lay a bed of dark-coloured soil, 2 feet in depth, and free from intermixture of stones, or other debris, representing the accumulation of sand converted into humus during the lengthy period that must have elapsed between the abandonment and ruination of the dwelling, and the occurrence of a subsequent settlement on the site. The period of the latter was represented by burnt broken stones and peat-ash, to a depth of some 15 inches, resting on a bed of charcoal from 1 to 2 inches thick, largely composed of small twigs, probably of heather. This deposit in all likelihood was referable to the period of the Norse occupation in the ninth or tenth century, great quantities of similarly burnt broken stones being subsequently found in the adjacent Norse settlement. Higher still lay much debris from the ruin of the mediæval building.

When cleared the dwelling was seen to consist of two portions—an inner and earlier section, and an outer and later court.

The former presented a fairly close analogy on plan to the dwellings

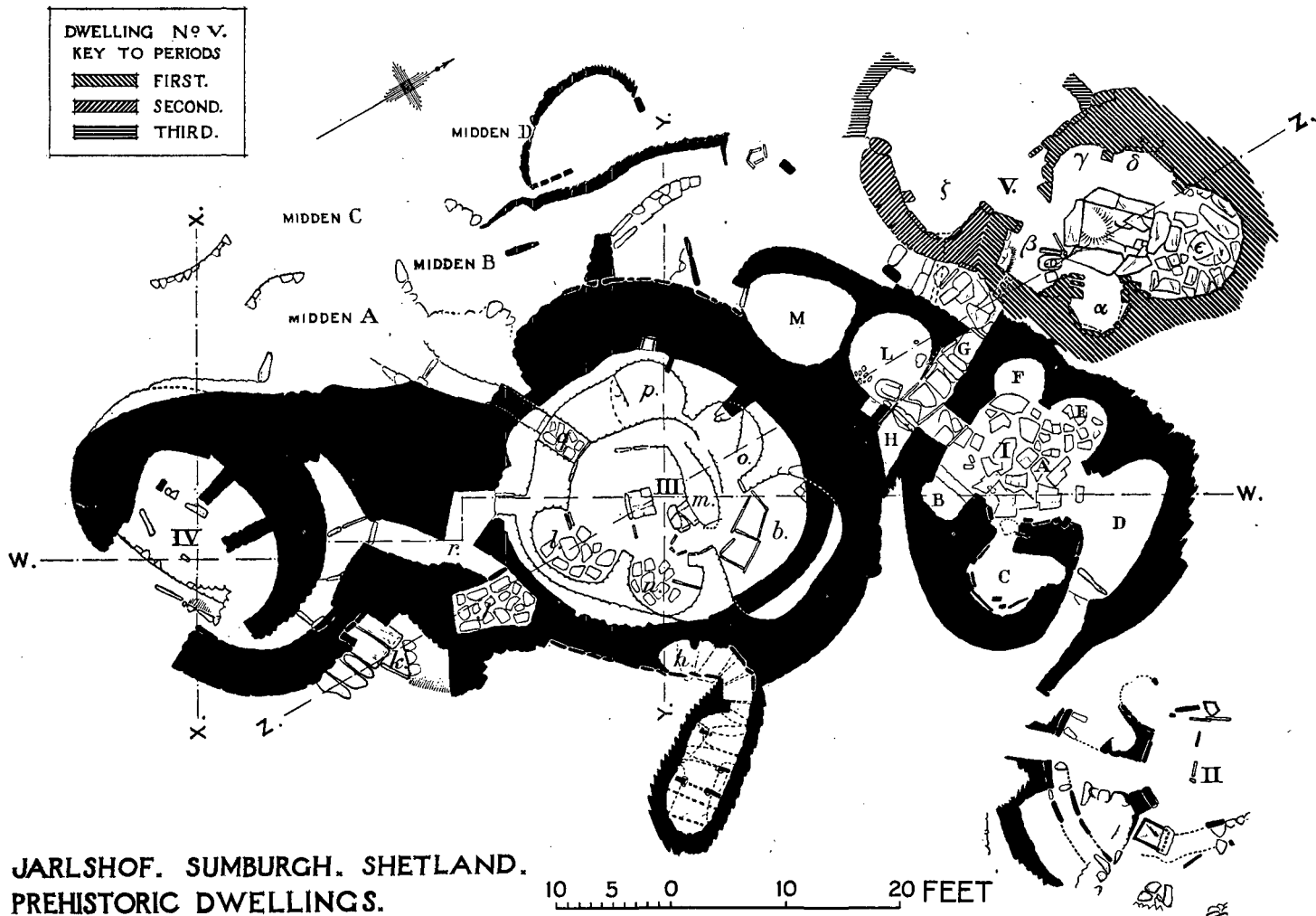


Fig. 1. Plan of Group of Prehistoric Dwellings Nos. I to V.

EXCAVATION OF PREHISTORIC DWELLING AT JARLSHOF. 87

Nos. i and iii previously excavated, in that it consisted of a central court, a terminal chamber opposite the entrance (ϵ on plan) lying at right angles to the main axis of the dwelling, and lateral cell-like chambers, two on one side (α and β), and probably in the original plan, two (γ and δ) on the other.

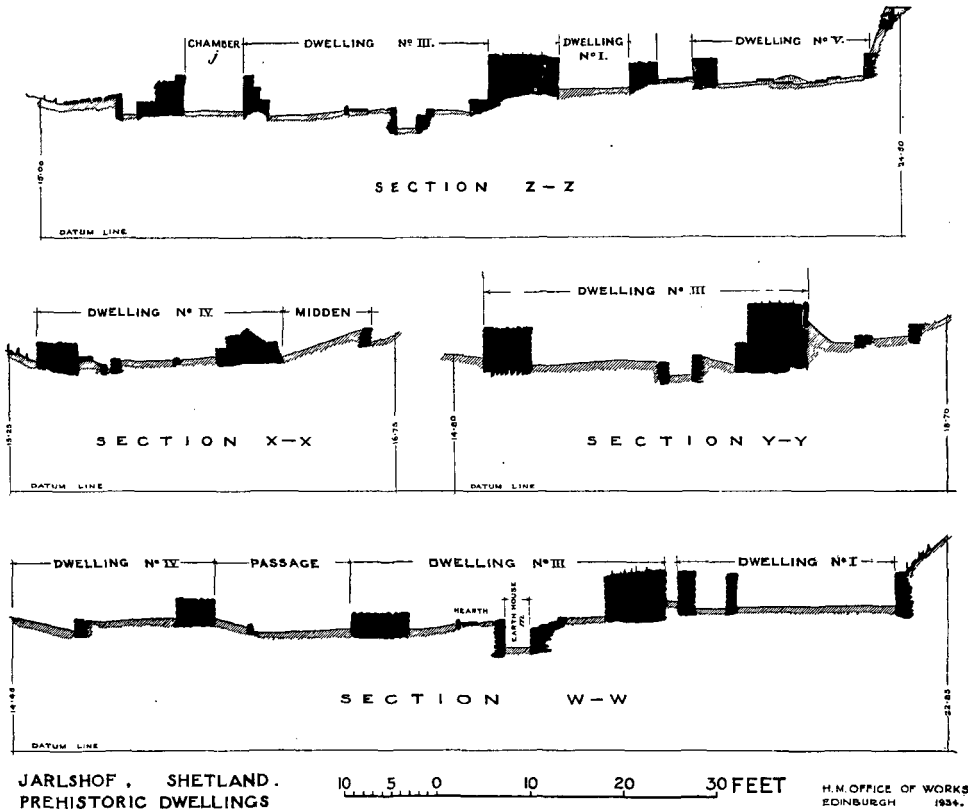


Fig. 2. Sections through Dwellings Nos. I to V on Fig. 1.

From front to back this inner portion measured 17 feet 4 inches, while between the fronts of the lateral chambers the breadth was 9 feet 6 inches. The terminal chamber measured 10 feet in length by 6 feet 6 inches in breadth: the lateral chambers α and β —the former rounded at floor-level, the latter straight-sided—measured respectively 5 feet, and 3 feet 6 inches in both directions (fig. 3).

The entrance to this portion of the dwelling was much broken away, but as far as ascertainable it had measured some 3 feet in width.

Towards the centre of the floor was a rectangular area, measuring 6 feet by 3 feet 10 inches, and surrounded by heavy flags laid on their sides (fig. 4). When first uncovered, the peat-ash on the surface of this area clearly indicated its use as a hearth. On removing the ash, two



Fig. 3. Inner and Earlier Section.

layers of paving were uncovered beneath, which, however, had been disturbed at the inner end. Wondering whether this enclosure could possibly have been a well, for the surrounding flags were not laid on their edges as is customary in a kerb for a hearth, an examination was made of the soil beneath. This was found to be black, and greasy to the touch. It had been observed that the paved floor of the terminal chamber was dished, as if to direct the flow of water, or other liquid, towards the centre of the dwelling. The condition of the soil beneath the secondary hearth

at once provided the explanation of what had previously been baffling. Here had been a tank to receive the urine from animals standing in the end chamber, and possibly also used at the same time as the site of a manure-heap. The flags around the area kept the sides dry, and pre-



Fig. 4. Enclosed Area in Inner Section.

vented the edges from breaking down. Additional evidence of the presence of an animal in the dwelling was furnished by the discovery of the vertebra of a whale (fig. 5), inserted into a wall which had been built, probably for the purpose, across the lateral chamber γ , on the north side of the court.

The vertebra, placed at about 2 feet above the floor-level, was so set in the wall that the side of the canal down which passed the spinal column, protruded from the wall-face, and so provided a loop to which a

tether could be affixed. The actual vertebra, though complete when found, was in a disintegrating condition, so a fresh bone of almost identical size, fortunately found at the back of a crofter's house, was procured, and has been substituted for the original.



Fig. 5. Whale's Vertebra inserted in Wall (centre of fig.).

On the opposite side of the court, and partially in front of chamber β , lay the quern used by the household for grinding their grain (fig. 6). No rubbing-stone was actually beside it, but one found a few feet away was obviously the original article and was replaced. The quern, measuring 2 feet 3 inches in length, was of the type universally found in this group of dwellings, a heavy oblong stone, which, when subjected to considerable wear, resembles a trough from which one end has been removed—hence the term “trough quern” has been applied to it.

Unlike the usual quern found in the course of the excavations, which

was frequently lying inverted, this one lay in the position in which it had been carefully placed, and steadied. A heavy stone lay against it to keep it stable, extending from the wall of the adjacent chamber on one side, while a thin slab was fixed in the ground in contact with it on



Fig. 6. Quern Stone with its Rubber, *in situ*.

the opposite face. The quern was set with a considerable slope towards the front and an inclination to the right, so that the meal, as it was produced, should be directed to a shallow groove cut in the front edge, which acted as a channel to conduct it into a small triangular compartment, formed with thin stones set on edge, and closed where there was an open angle, with yellow clay. Similar material lay spread on the floor of this pocket with the obvious purpose of keeping the meal free from impurities. Set at an angle to the slab alongside the quern on the right was another slab, similarly on edge, making as it were a corner in which

a receptacle holding the grain could be placed within easy reach of the grinder at the mill.

In order to prevent the loss of grain, no doubt a precious commodity, or, perhaps, to afford greater stability, a large lump of clay (visible in the



Fig. 7. Pots of Steatite, *in situ*.

illustration) was placed at the junction of the supporting stone with the quern on the left.

Clay was evidently in considerable request. In chamber *a*, along the east wall, there lay a flagstone supported at one extremity on the small caudal vertebra of a whale packed in at base with small stones, beneath which was a bed of yellow packed clay, measuring some 12 inches in breadth and several inches in depth, evidently a store of material.

On the west side of chamber β was a narrow bench, formed between a large flat boulder and the wall, whereon was found a collection of four

small four-sided steatite vessels (figs. 7 and 8). Three of these appeared to have but newly left the maker's hands when placed where found, as they were free from any signs of use. Two of them, inverted, stood on



Fig. 8. Four Pots of Steatite found in Chamber.

pieces of slate, while the third, also inverted, rested on a discarded vessel, the bottom of which had been knocked out or worn away. Possibly the fresh pots had been set aside to harden, as steatite toughens by exposure, before being put into circulation. Two of the vessels were broken when found, but were easily put together again.

A large slab placed on edge lengthways near the centre of the wall at the back of chamber *a* (visible in fig. 4) is an unusual structural feature.

An outer court (fig. 9), measuring 13 feet by 17 feet, as shown on the plan, had been added to the original dwelling in a subsequent occupation, to be used, probably, for the accommodation of such animals as the inmates of the dwelling possessed at the time when the site of the former manure heap was converted to a hearth.



Fig. 9. Outer Court.

Evidence of this was a drain, passing through the south wall out of a small angular access. It measured at intake 1 foot in height by 5 inches in breadth, and where it left the wall on the other side, 1 foot 8 inches by 7 inches. Originally it had been carried beyond the wall, its course being marked by two flags set on edge 10 inches apart, and a flag forming a floor. Later on, when a third occupation of the site came about, this drain was abandoned, filled up, and covered beyond the wall-face so as to serve as a step on a stair, which was then con-

structed leading down to Dwelling No. i (fig. 10). Within the dwelling the intake still remained open, and when found it contained a collection of shells of limpets, a couple of fish vertebra, some teeth of oxen, and a spatulate tool of stone. When originally constructed this drain must have debouched on ground unbuilt on, otherwise it would have



Fig. 10. Stair to Dwelling No. i.

delivered its effluent directly into chamber L of Dwelling No. i. It is thus evident that Dwelling No. i did not exist either during the first or second periods of occupation of Dwelling No. v, but that it was a later construction at the time of the third occupation, when the two dwellings were connected by a passage and stair. Moreover, the sherds of pottery, referred to hereafter in describing the relics, found on the floor of the later extension of No. v, bore a close resemblance to wares found in No. i.

The stair which consisted of five steps was neatly formed with flat beach stones for treads, 2 feet 3 inches in width, and from a higher level, curved round to the right into the passage leading to the original entrance to No. i.

In clearing away the sand, which covered the stair at the turn, and some 5 inches above a step, there were found eight pieces of sword moulds of clay. These were evidently some of the discarded fragments from the moulds broken up in Dwelling No. i, and thrown over the wall as explained in a previous report. No fragments of moulds were found in any part of Dwelling No. v. It is therefore evident that that dwelling had long fallen into ruin, and been covered with sand when the sword-smith arrived to manufacture the weapons and tools of bronze.

The original entrance to this outer court was marked by a very large quern stone, showing little indication of use, set up on end pillarwise, on the south side, and shown in the background in fig. 9. Though the opposite portal had disappeared its bed was still recognisable below the surface, filled with cleaner sand than the discoloured material that covered the floor. Across this entrance at a later date a thin wall, as shown on plan, had been constructed, which had, apparently, curved round and met the west wall of the original dwelling, but owing to the proximity of the "Jarlshof" gable further exploration of its course was impossible.

The Relics recovered from the site were not very numerous, and in general character resembled those found at the lowest level of the other dwellings. Slate knives, slate saws, quartz scrapers, and spatulate tools of slaty stone, were all found, but the slate knives and saws (fig. 11) were more numerous than elsewhere, there being thirteen of the former class represented by complete tools or parts, and twelve of the latter. Quartz scrapers were fairly common, nine being found. On the other hand, there was a marked absence of the various rude stone implements such as clubs, "hatchets," etc., found on the other sites. Part of only one handled club was found. A group of six very rudely fashioned spatulate tools of slaty stone, five of which are illustrated (fig. 12), were found together in the inner section. Hammer-stones in the form of abraded pebbles, as recovered in such quantities, especially from the later levels in other sites, were absent from this dwelling. Three round hammer-stones, two of them of quartz, were alone found.

Bone artifacts were not common. In all, nine were recovered (fig. 13). Of these five came from the inner portion of the dwelling, and four from the outer just in advance of the position of the entrance to the former.

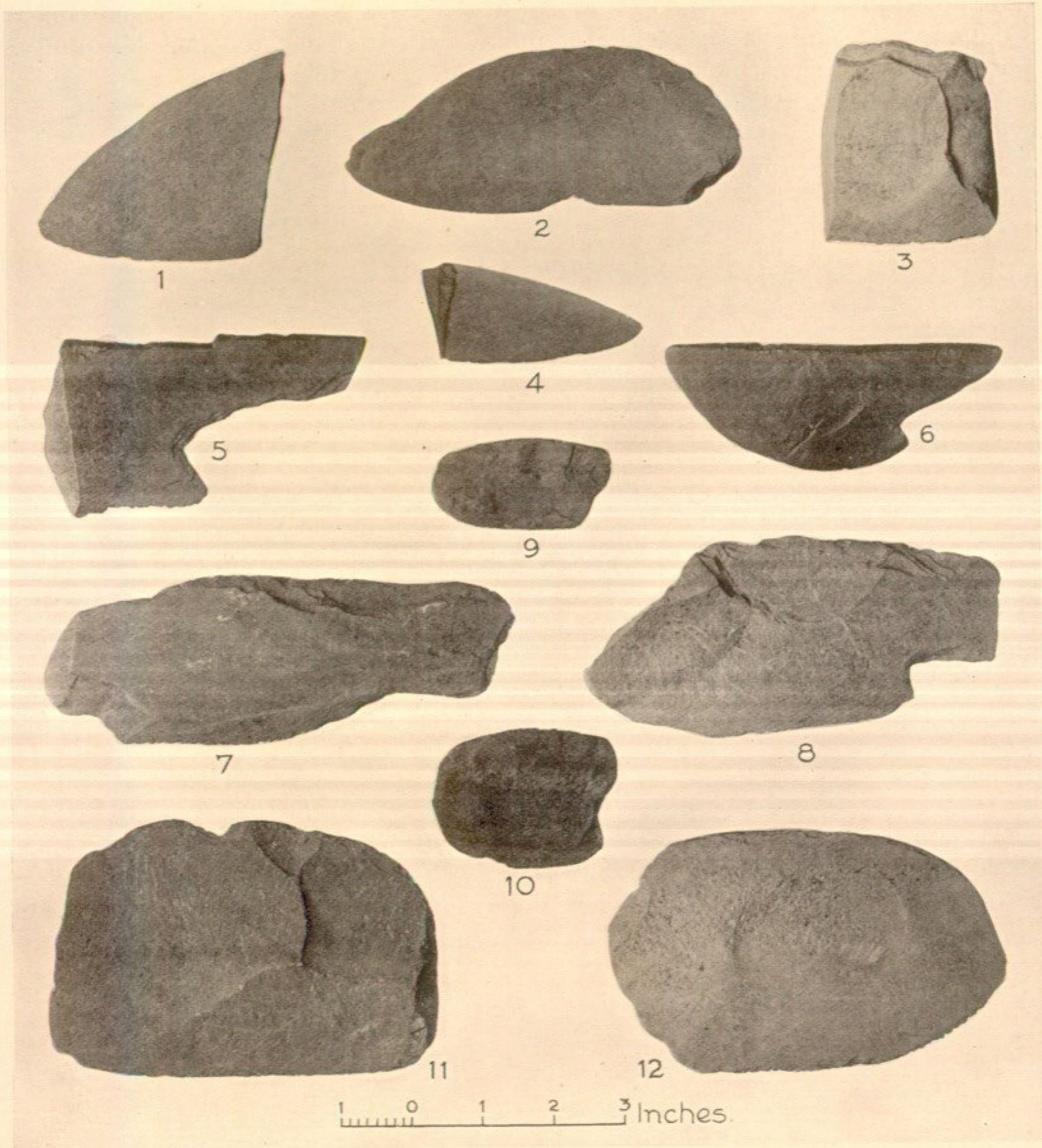


Fig. 11. Implements of Slate.

They are piercers, with one exception (No. 1), which is a chisel-like tool made from a cannon bone, and furnished with a socket. The cutting edge is amissing. It is of lighter make than the socketed chisels found in later dwellings which, as a rule, are made from larger bones.

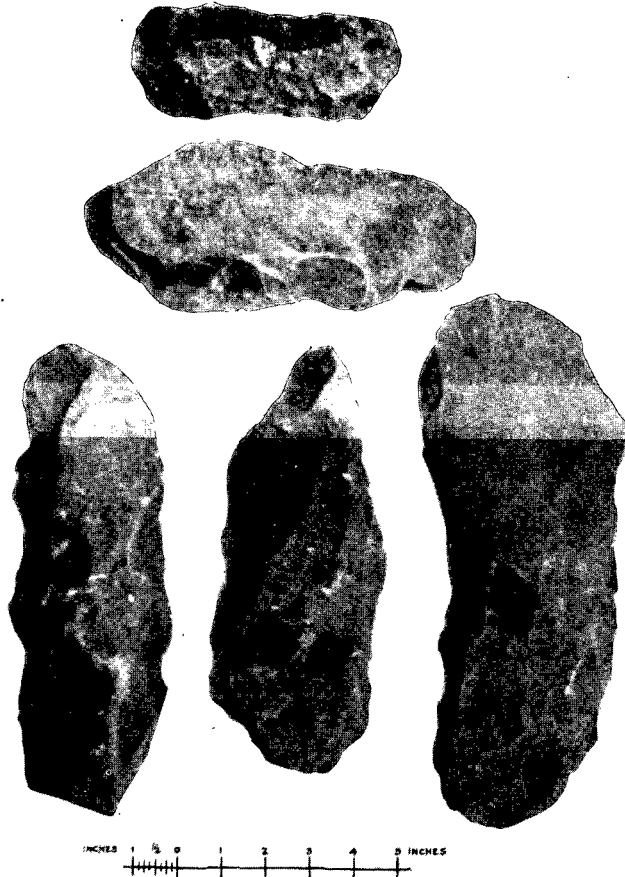


Fig. 12. Rudely fashioned Implements of Stone.

The most remarkable relic was a stone object found in the centre of the original dwelling (fig. 14). It measures $3\frac{1}{2}$ inches in length by 2 inches in depth. In shape it is oblong, with flat sides, ridged and bevelled on the top and at one end, rounded at the other end and on the under side,

which is also slightly concave in the centre. The bevelled surfaces point to the object having been used as a polisher. Another smaller object,

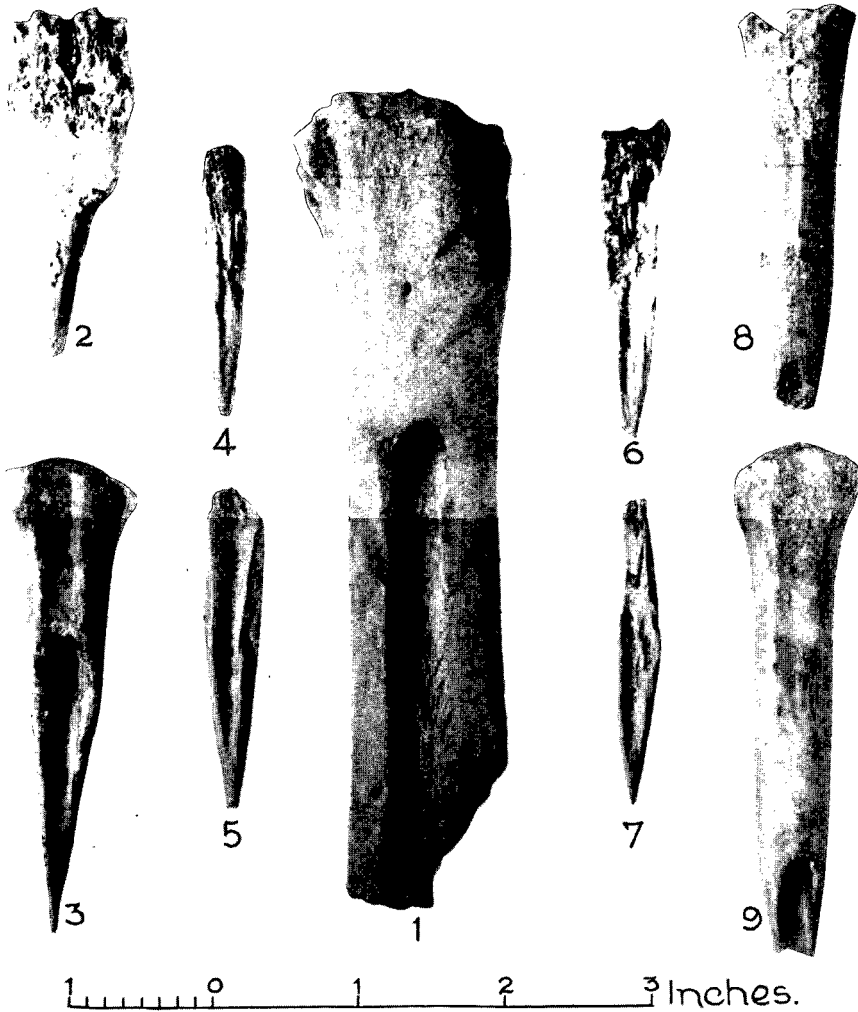


Fig. 13. Implements of Bone.

measuring 2 inches in length, found likewise in the original house, has also obviously been a polisher (fig. 15). It is coffin-shaped, due, however, to the fact that it has obviously been fashioned from the corner,

at base, of a four-sided vessel of stone, a sooty discoloration being still visible on the exterior. The edges have been rubbed to a bevel. Numerous pieces of pumice, which had been used as abrasive, were found at various levels.

Several pieces of heart-shaped perforated slates, common in the other

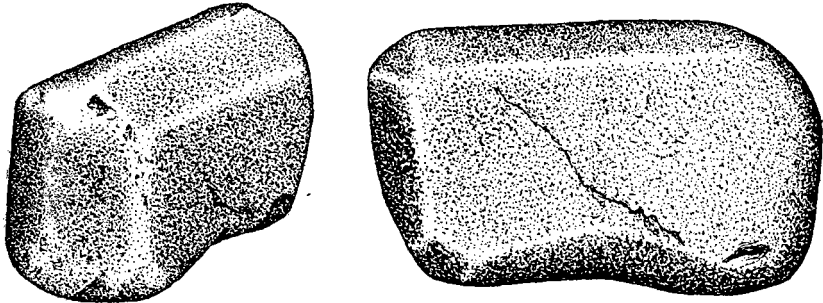


Fig. 14. Stone Polisher—two views. (‡.)

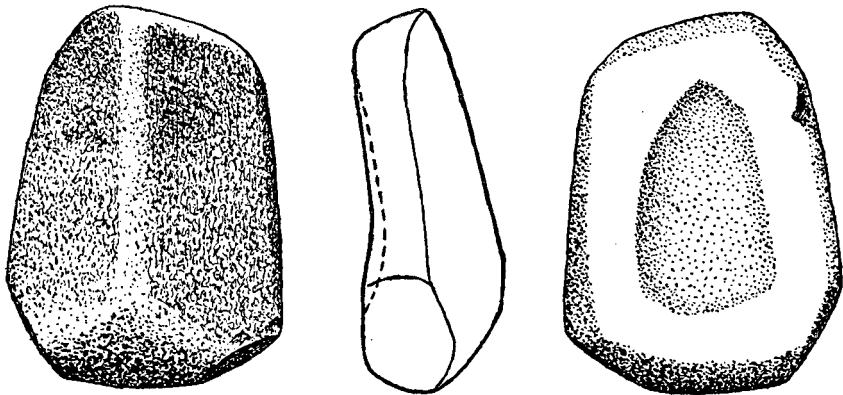


Fig. 15. Stone Polisher—three views. (‡.)

dwelling, were recovered—chiefly from the end of the inner section. One in complete condition (fig. 16) was found standing vertically, point downwards in the sand, and one almost complete, with two or three imperfect examples had been employed to supplement the paving. In Dwelling No. i one of these objects was also found standing vertically in the sand as if it had fallen from above.

At the entrance to the original dwelling there was found an exceptional specimen measuring only 5 inches across (fig. 16), in place of 8

or thereby in the usual examples. The perforation is correspondingly reduced, and is too small for the insertion of more than a couple of fingers of an adult's hand. The pointed end is slightly worn as if by use.

Relics were found at the level of the wall-head as well as on the floor,

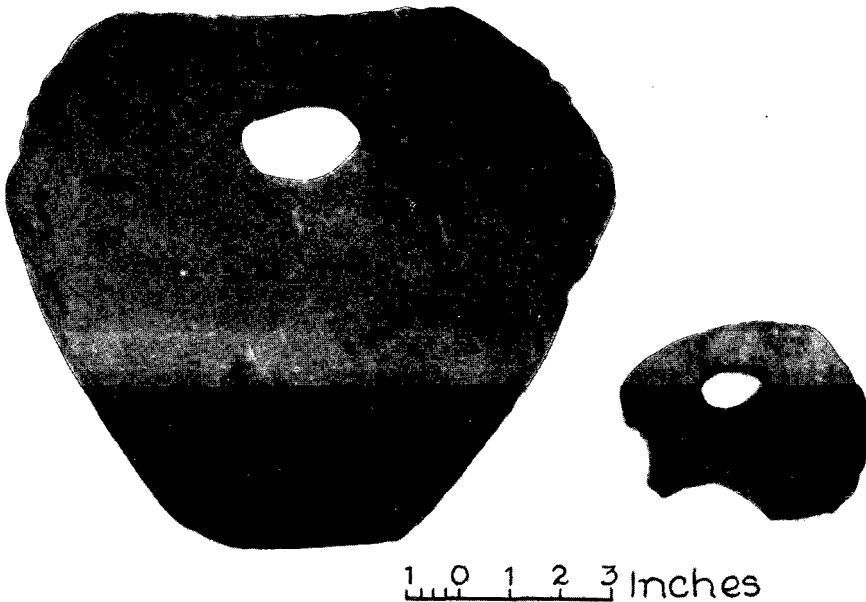


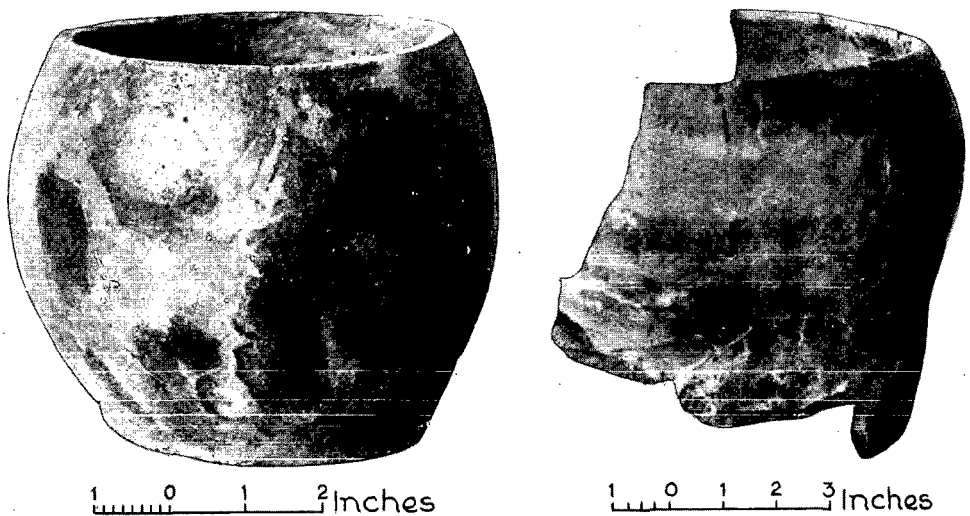
Fig. 16. Shovel-like Implements.

with no apparent difference in character between them. The knives and saws illustrated in fig. 11 were found as follows:—

Nos. 1, 9, and 11 came from the floor of the inner section; Nos. 2, 3, 5, 7, and 8 from the outer section; No. 10 from the entrance; and Nos. 4, 6, and 12 from the level of the wall head on the south side of the inner section. The head of an iron rivet, probably of the Norse period, and another piece of iron were found at floor-level. Presumably they had been in a wooden post driven into the ground at a much later date, as they obviously had no connection with the dwellings.

There was not much pottery recovered. From the site of the hearth, above the midden, in the original dwelling, came a number of sherds

belonging to a cooking-pot which has been reconstructed (fig. 17, No. 1). It is of dark material, containing much steatite in the body and measures $5\frac{1}{4}$ inches in height and the same in diameter at mouth. Sherds of another and larger vessel which has been partially reconstructed, found just above floor-level, has measured $8\frac{1}{4}$ inches in diameter at the mouth, and is of a pinkish-buff colour, with little or no steatite in the body, and is remarkable for a bulge at the shoulder-level (fig. 17, No. 2) giving it



No. 1.

Fig. 17. Vessels of Pottery.

No. 2.

an ogee outline. Unfortunately no portion of the base was recovered to supply a complete section. From the secondary court in front of the original dwelling there came a portion of the base of a vessel, of a purplish tint, and heavily loaded with steatite. It bore a very close analogy in colour and composition to a sherd found in excavating Dwelling No. i. From the same position there came some pieces of hard red ware, with unusually thick bases (fig. 18), and several pieces of a large pot with incurving rim and very vesicular texture, both analogous to wares found in No. i.

The facts that the freshly fashioned steatite vessels should have been left untouched after the house was evacuated, and that the quern should be still *in situ* as placed, seem to indicate, not only that the

dwelling was suddenly abandoned, but also that no marauder seeking booty had visited the site ere it fell to ruins, and the mantle of sand had enveloped it within its folds.

The close similarity of the relics from the level of the wall-head to those from the floor, suggest also that no great lapse of time occurred in the covering of the ruin.

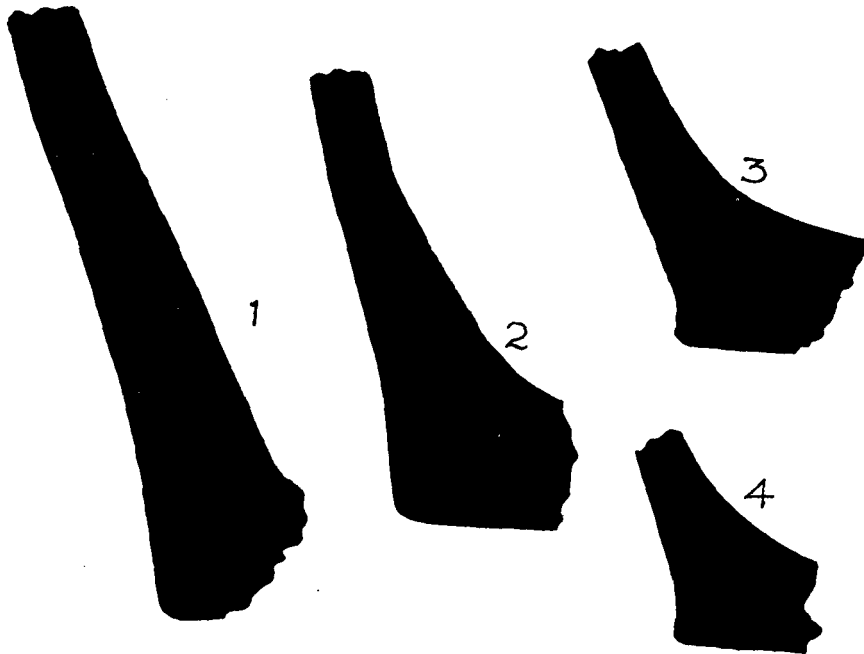


Fig. 18. Sections of Sherds of Red Ware with thick Bases.

A REVIEW OF THE RESULTS OF THE EXCAVATION OF THE PREHISTORIC GROUP OF DWELLINGS.

With the excavation of Dwelling No. v the exploration of the prehistoric settlement at Jarlshof appears to have come to a close, for unless, as is quite probable, more dwellings lie concealed beneath the ruin of "Jarlshof" itself, there do not appear to be any more outside it to the east and south. Accordingly, a general review of the results of the four years' excavation appears now to be justified.

In all, five dwellings have been excavated, either completely or in part. Of these the earliest was probably Dwelling No. ii, the most

easterly of the group. Unfortunately, the building had been much pillaged in the distant past for stones, and only a fragment of the plan could be recovered. It showed two phases in its occupation.

From it there was recovered, protruding from the angle of a slate-box, a sherd of coarse pottery decorated with a zone, bounded with parallel impressed lines, and containing zig-zag, or chevron ornament, in the same technique; the character of the ornamentation being that of Hallstatt pottery of the early Iron Age of Europe. No other pottery similarly decorated has been found at Jarlishof. Slate artifacts, chiefly in the form of spatulate implements, were common on the site, but there was a complete absence of saws or knives of slate, and of scrapers of quartz, objects all found in other dwellings. Bone implements were rare, as also were sherds of pottery. The relative antiquity of this dwelling, as compared with that of its immediate neighbour, was demonstrated by the relation of a stratum of blown sand to the foundation-level of the latter, and the floor-level of the former. This stratum, which lay conformably over the whole site of Dwelling No. ii, had obviously been deposited shortly after the outer wall of Dwelling No. i had been built, as only the foundation course of the latter was beneath its level, while the floor-level of the former was buried, not merely beneath a layer of dark soil, but beneath the sand to a depth of $2\frac{1}{2}$ feet, indicating a considerable lapse of time between the abandonment of the one dwelling and the construction of the other.

Dwelling No. v, the excavation of which is reported above, may be regarded as next in chronological order. It produced, as stated above, knives and saws of slate, scrapers of quartz, and a few implements of slate. Pottery was not abundant. There was evidence of three different periods in its occupation. The first, which was confined to a dwelling with chambers, showed a plan with a small central court, lateral cell-like chambers on either side, and a long transverse chamber at the inner end. The second period brought about the addition of an outer court from which a drain was constructed through a small recess in the south wall. In the third period a wall, lighter in character than the other walls in the building, was erected across the entrance to the secondary court, and carried northward into an area which cannot now be conveniently explored. At this period also the drain was closed and a stair constructed partially across it leading to a passage giving access to Dwelling No. i. Had this drain not been closed, it would have led straight into Chamber L of that dwelling.

The pottery from the interior of Dwelling No. v differs from that found elsewhere. Certain sherds recovered, however, from the outer

court, and presumably referable to its latest occupation, closely resemble in character sherds from Dwelling No. i.

Dwelling No. i, erected probably during the third period of No. v, also showed three phases of its occupation. It consisted of a construction comprising a small central court, lateral chambers, and a transverse chamber at one end, as in Dwelling No. v. In its earlier periods there was connected with this building across the passage of entrance, a circular chamber, possibly part of some earlier construction. On the floor of the passage was a double layer of paving-stones. From the passage an entrance at right angles gave admission to the main part of the dwelling. Presumably after the end of the second of the occupations, this entrance was blocked, and the passage and stair thrown out of use, while a new entrance was opened out at the other end. In the third phase a chamber on the south side was altered and furnished with a door, and possibly remained the only habitable portion of the dwelling.

During this last period the house was occupied by a bronze worker, who cast swords, axes, etc., in clay moulds. To release his castings he broke the moulds and disposed of the fragments where the presence of the sharp-edged pieces would be least inconvenient. He threw them into a small lateral chamber that had been closed: he also threw them over the end wall into the passage, as well as into the chamber beyond, and on to the stair. But in neither chamber, passage, nor stair, did they rest on the actual floor, but in the sand above it, thus supplying a definite chronological horizon.

This dwelling produced saws and knives of slate, scrapers of quartz, socketed chisels of bone, and pottery somewhat analogous in character to sherds found in Dwelling No. v, and referable to a late occupation of that house.

Dwelling No. iii, adjacent but not in communication with No. i, also showed that it had been occupied in three distinct periods. The plan of the earliest of these is closely analogous to that of Dwelling No. i, leaving out of account the odd chamber on the right of the passage of the latter.

The relics found were of the same character as in the other dwellings mentioned, but in respect that fragments of clay moulds for swords, etc., were numerous among them, the earliest of these occupations evidently approximated in date to the latest of No. i. It may even have been slightly anterior, as the pottery found in it, without any steatite in the body, appears to be of earlier date than that recovered from the main structure of the latter.

The second of the occupations showed a distinct change of plan, the old arrangement having been completely abandoned. The dwelling

appeared to have been converted into a workshop, with a large circular hearth in the centre, and a series of cubicle-like cells formed along one arc only. An earth-house appears for the first time.

There was a marked change in the character of the relics. Socketed chisels of bone, saws and knives of slate, and scrapers of quartz are all conspicuously absent.

Numerous fragments of moulds show, however, that the culture is still that of the late Bronze Age.

A complete change has taken place in the style of the pottery. Black polished ware with a hollow beneath the rim makes its appearance, and also a ware with straight sides and a flange projecting inwards, closely analogous to late Bronze Age pottery from All Canning's Cross Farm, Wiltshire, and from Scarborough.

In the third period the plan closely followed that of the second, with a large central hearth, and cubicle-like chambers on one arc only. It was also provided with an earth-house.

There is an absence of the rude stone implements so numerous in the lower levels, and an increase in the number of hammer-stones and pounders. Fragments of moulds for casting bronze weapons, etc., are totally absent.

The pottery bears, however, a fairly close resemblance to that found at the level of the immediately preceding occupation of the site, but seems to show signs of decadence in form, though it is obviously of the same style.

Dwelling No. iv, between No. iii and the sea, was only partially excavated as the structural remains exposed bore a close analogy to those removed from the centre of Dwelling No. iii at the two higher levels in order to reveal the earlier plan, and on that account it was considered desirable to leave them undisturbed. No portion of a mould was found in this dwelling, though the pottery, with an inturned rim or flange, was clearly akin to that found in the second occupation of Dwelling No. iii. It seems probable, therefore, that the inhabitation of Dwelling No. iv at the level exposed, occurred subsequent to the second phase of occupation of Dwelling No. iii and previous to the third occupation of that dwelling.

Dwellings No. iii and No. iv were obviously constructed to some extent on the ruins of a still earlier period, remains of which formed a connecting link between the two.

The fact, revealed in the above summary, that there can have been little contemporary occupation of the various prehistoric sites in this settlement, requires an explanation.

From the plentiful animal remains, and the presence of numerous

querns, coupled with the general absence of fish-bones, it seems probable that the occupants were pastoral in their habits, rather than seafaring. The site is one which has been much affected until recent times by moving sand, blown in from the arid surface of the isthmus behind it. At least one deep stratum as well as various deposits of blown sand were encountered in the course of the excavation. It is suggested, therefore, that the sand from time to time overwhelmed the adjacent pastures, and patches of corn land, and invaded the dwellings to such an extent as to render them uninhabitable. In the course of time, as, from some unascertained cause, the sand-storms grew less violent, and vegetation reasserted itself, forming humus on the former sites, a new generation would return to the ruins, reconditioning them to their needs, and taking advantage of the fresh pastures. Over several hundred years history repeated itself, and so we have at Jarlshof a series of distinct occupations on a small area, ranging from a time considerably before the advent of bronze to Shetland, to a period when iron had been completely established as the metal for weapons and implements, and not long before the date of the construction of the adjacent broch.

Major A. A. Gordon, C.B.E., etc., for several weeks rendered me assistance, which I here gratefully acknowledge, as I do also the constant help of the officials of the Office of Works, Mr J. B. Mackay, the draughtsman, and Mr Laidler, the foreman. The excellent staff of local labourers brought the same zeal and intelligence as formerly to the execution of their task.