

XIV.

REPORT ON THE DISCOVERY OF NUMEROUS STONE AGE
HOUSE-SITES IN SHETLAND.

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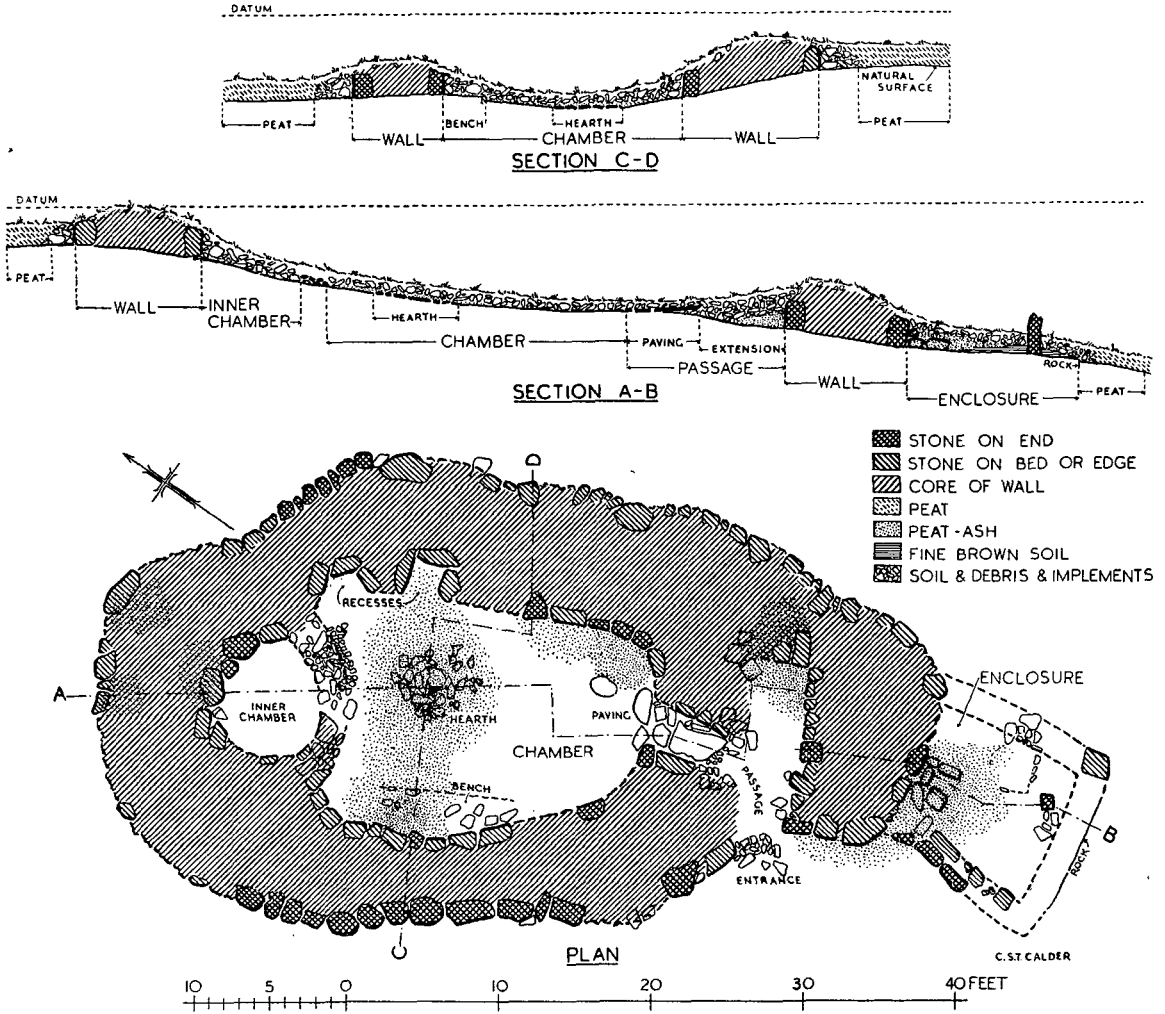
In the *Proceedings* of our Society for the year 1949-50, a report on the discovery of a neolithic temple is recorded.¹ The route to this monument from the nearest roadway led at random for half-a-mile over a stretch of rough moorland and in traversing the area on one occasion from the bridge spanning the Burn of Scutta Voe it so happened that, at a point just over half-way to the temple, I came upon a grassy patch at variance with the surroundings and obviously of artificial creation (O.S. Grid, ref. [N 41 HU 288503]). On the patch there was a low broadly-spread bank which, on plan, followed a sub-oval outline measuring on the axes some 20 by 11 yds. This construction enclosed a slight hollow and its southern end was broken by a dip in the ground where the tops of two earth-fast stones suggested the position of an entrance. In speculating on its origin and use the stead of a house was envisaged and the idea entertained that the structure might in some way be associated with the temple either in period or in some sort of dependency.

With this incentive in mind a trial trench was dug and the fact emerged that the bank concealed the foundations of a stoutly-built drystone wall. In lending support to the theory, this exposure warranted a fuller investigation when time permitted and in the following year a total excavation of the site was undertaken on behalf of the Society of Antiquaries of Scotland.

The resulting operations laid bare the remains of a large house of oval shape and the masonry, in character and technique, closely resembled that of the temple (Pl. XXIX and fig. 1). The walling varied in thickness from 6 to 9 ft. and existed to an average height of 2 ft. 6 ins. It was built with an outer and inner face of rough boulders of large size for the most part and the core was composed mainly of rubble with an admixture of earth. The foundations ran around the brim of a scooped-out interior hollow and rested on a natural gradient of 1 in 9. The top of the stonework was only a spit-depth under the grassy surface and a similar depth of turf covering the sheltered interior overlay an accumulation of debris and soil on the floor, but on the outside of the structure peat had grown to a height of

¹ *P.S.A.S.*, LXXXIV, 185 ff.

1 ft. 6 ins. In over all dimensions the house measured 56 ft. in length by 32 ft. in width and the dwelling comprised a large sub-oval chamber with a



NEOLITHIC HOUSE, STANYDALE, SHETLAND.

Fig. 1.

small circular room opening off the inner end; the larger measured about 21 ft. in length by 15 ft. 6 ins. in breadth and the smaller averaged 7 ft. in diameter (Pl. XXX, 1). The mutual partition separating these apartments was reduced to a compact foundation of small stones except on the western end

where a tusing, 2 ft. thick, still projected from the main wall-face, and in the middle a rough gap with a paving-stone at its front edge suggested the communicating doorway.

Neither chamber was paved and the smaller was featureless, but in the principal one there were two small recesses adjacent to one another at ground-level in the north-east corner. One of them, constructed with sloping sides, measured 3 ft. 4 ins. in width across the opening and was 1 ft. 6 ins. in depth; the other, built with straight ingoings, measured 2 ft. 3 ins. square. Against the wall-face on the opposite side of the chamber a few scattered paving-stones fronted by the trace of a kerb seemed to indicate that a low bench had been formed, probably for use both as a bed and a seat. Between the recesses and the bench a roughly circular area of flat laid stones, burnt and cracked by heat and measuring about 4 ft. in diameter, had been laid as a hearth on which there was an accumulated layer of peat-ash up to 3 ins. in thickness. The ash thinned out towards the edges in a spread extending to the side walling and what were evidently later deposits of ash lay respectively against the inner face of the south-eastern arc and against the north face and on top of the walling of the inner chamber.

The entrance passage, 12 ft. long by 2 ft. 9 ins. wide, led in from the west and opened off the middle of a slight concavity in the line of the outer wall-face near the southern end of the building. About half-way in its length it swung sharply to the left whence it gave access into the southern end of the main chamber. The inner half of the passage was well defined by the bottom course of the masonry of each side wall and it was paved, but the paving and the left-hand jamb of the outer portion was totally destroyed. From the bend of the passage and in alignment with the outer half a small compartment branched off and continued eastwards for a distance of 5 or 6 ft. before coming to a dead end. Its southern side showed a length of well-built walling, 2 ft. 2 ins. in height (Pl. XXX, 2), but the opposite side was entirely missing, and therefore the width was indeterminate. The purpose of this cell-like space is not clear but conceivably it could have been used for storage. In its south-eastern corner a considerable quantity of peat-ash had gathered to a depth of 12 ins. and had spread around the broken end of the back wall into and over the core behind in a manner that left no doubt that its accumulation was due to intrusive fires after the walls had become dilapidated.

Attached to the southern and lower end of the house, traces existed of the foundations of a wall, 2 ft. thick, which apparently had bounded a small open enclosure, presumably of contemporary erection. These were best defined on the western side but were entirely removed on the south and east sides the position of the outer face seemed to be demarcated by a low rock-cut edge. The space enclosed was judged to have been about 10 ft. square and

the area was covered by a stratum of fine brown soil, while near the south side an earthfast stone, 10 ins. by 7 ins. in section, stood upright to a height of 2 ft. 6 ins. At a guess the enclosure could have been a pound for a few animals but subsequently it was put to other purposes as a small fireplace was built in the interior against the outer face of the house (Pl. XXXI). This fireplace was constructed in the manner of a field kitchen, 2 ft. 6 ins. in length, with two stones set end to end on each side, thus leaving between them a vent or channel, 1 ft. 2 ins. wide and 10 ins. deep, which was overflowing with peat-ash in a bed 1 ft. 3 ins. in thickness. The ash was spilled over much of the soil in the enclosure, and over the existing foundations round almost to the entrance of the house.

In the vicinity of the house, particularly westwards, there are several heaps of field-gathered stones and, at a short distance to the north, some stones in an alignment of dyke-foundations have been exposed but no true field boundaries are observable.

The plan which has been revealed shows a hitherto unknown design in the field of prehistoric domestic architecture, which, however, in structural character may be identified as belonging to the period of the temple. It may, with a fair degree of safety, be assigned to the transitional stage between the end of the Stone Age and the beginning of the Beaker period on the evidence of the finds later referred to herein.

The detection of this new type of early dwelling stimulated a very successful search for others in the vicinity and close by the temple itself three more house-sites, confirmed by trenching, were found (fig. 2 (O.S. Grid Ref. 285503)). To the south of these again, on the other side of a high rocky ridge called The Hamars, and only 600 yards distant, another group of three was observed on the slopes overlooking Scutta Voe and the school of Gruting (fig. 2 (O.S. Grid Ref. 2849)). The road to the school cuts right through the middle of the eastmost of these and the schoolmaster's garage is built on the westmost on the south side of the same road, but in both cases the curved ends of the houses are clearly visible as stony banks. In the erection of the garage the schoolmaster stated that he found much peat-ash and several stone implements. The third site, House No. I, of this group, lies 75 yds. away to the north-east of the last on the slopes above the north side of the road, and my attention was first directed to it since it was being dug into by some enthusiastic schoolboys in emulation of my workmen at Stanydale. To avoid the risk of probable disturbance and damage to any important features its further excavation was undertaken under my supervision and it soon became apparent that earlier hands had aided in the destruction of the building which, on total emergence, was found to be in a poor condition (Pl. XXXII). Where a short length of the outer wall-face remained on the north-west in a better state of preservation than the rest it was composed of small boulders placed on end

and in the inner face some stones on edge or end alternated with one or two courses of masonry. Many of the facing stones on each side had been drawn but sufficient was left along with a solid core of earth and stones to enable the general outline to be resolved (fig. 3). The wall, which here again runs round the edge of a scoop on a slope of 1 in 8, ranges from 7 to 12 feet in thickness and at its highest in the centre of the core it rises to barely 2 ft. (Pl. XXXIII).

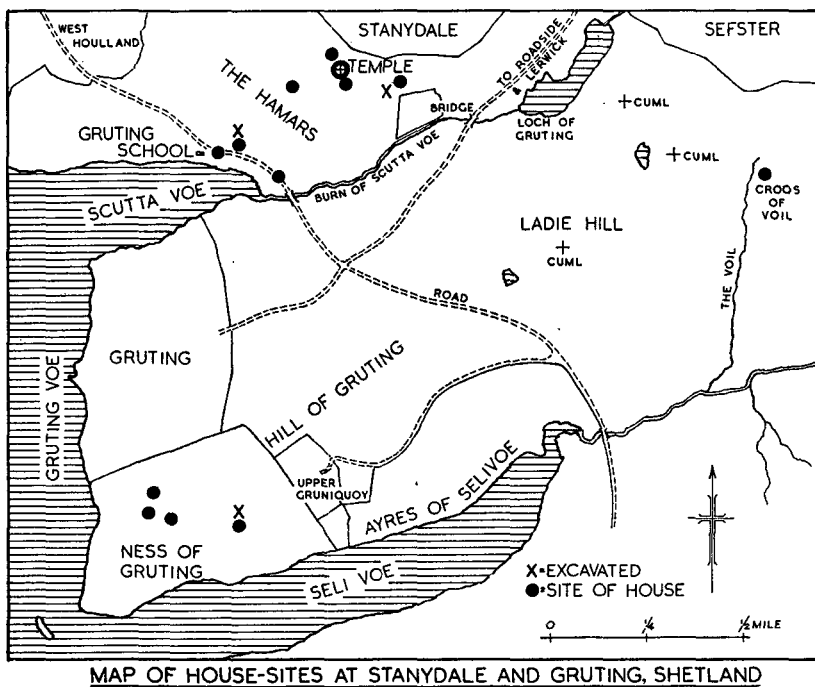


Fig. 2.

The lay-out of the house was very similar to the one at Stanydale and also comprised one large and one small chamber in like disposition. The larger measured 25 ft. by 18 ft. 6 ins. and the smaller, roughly circular on plan, was approximately 9 ft. in diameter, while the over all dimensions of the structure were 50 ft. by 39 ft. 6 ins. on the long and short axes respectively. Access to the main chamber had no doubt been gained by a passage directly through the only gap in the walling at the lower southern end but, apart from a single earthfast stone which probably marked its eastern jamb, the entrance was utterly destroyed. About the middle of the east side of the chamber a small semi-circular recess, 5 ft. 3 ins. by 2 ft., contained a roughly built bench and another bench, 7 ft. 6 ins. by 2 ft. 4 ins.,

was formed in a segment of the inner chamber. The partition between the chambers was much broken down leaving a gap which was later crossed

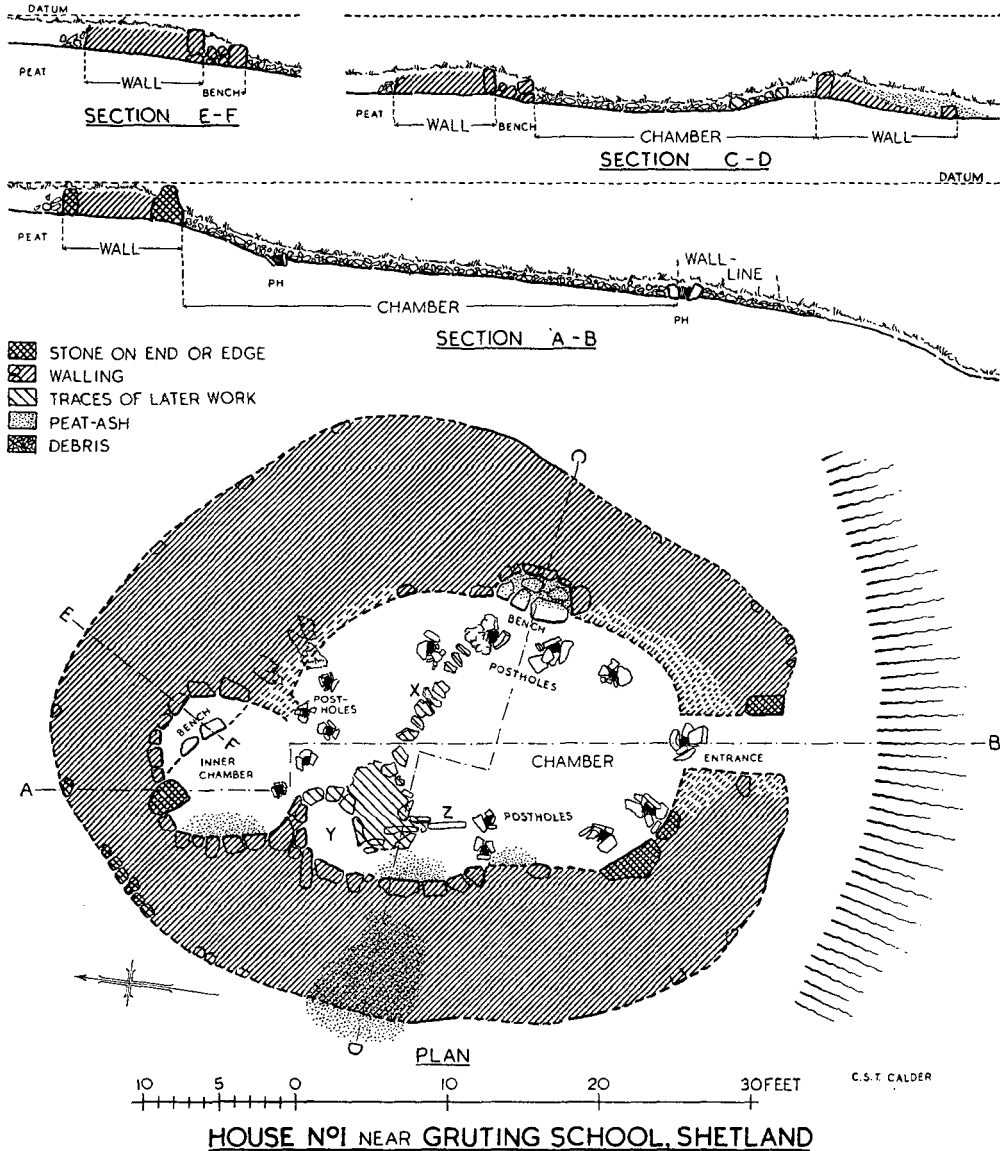


Fig. 3.

by a group of five small postholes sunk into the earthen floor and lined with small flat stones. These were distinct from another series of late and more heavily constructed postholes which were arranged at intervals on a

curve varying in distances up to 3 ft. from the inner face of the main chamber. One posthole was actually placed in the middle of the rear of the original entrance passage, thus apparently causing an obstruction to further access by this means and at the same time denoting a secondary usage or occupation of the building (fig. 3). The postholes of this setting differed from the first group in not being sunk into the floor but only rested on it in a packing of the stony debris which littered the whole floor area to a depth not greater than 1 ft. in places. In the rickle some pieces of flat stones here and there suggested an attempt at paving but the original floor was earthen. Under the debris, too, an irregular alignment of laid stones, marked X on the plan, could be detected in a run obliquely across the chamber and exactly at the point X there was a large and slightly curved rude stone implement in this foundation. It measured as much as 20 ins. in length, $6\frac{1}{2}$ ins. in breadth, about 4 ins. in thickness, and weighed 23 lbs. Another heavy implement in the process of fabrication was found on the site by the schoolboys; it weighed 19 lbs. and was worked to a point at one end but the use to which these massive and unique implements were put remains conjectural. (In the National Museum registration they are numbered respectively HD 1174 and AC 601.) The western end of the X foundation expands into a core of stones faced with a single course of masonry which stops short of the inner wall-face of the chamber and outlines a small oval compartment Y, measuring about 5 ft. by 3 ft. 4 ins., which seems to have been entered through a narrow passage of which a thin squared stone Z may have been the threshold. That the oblique foundation and the cell are the results of secondary alterations is clear since the stonework at the back of the cell is butted on to the broken end of the partition between the chambers. Peat-ash was observed against the west walls of both chambers but no original hearth was revealed. Many mounds of grass-covered field-gathered stones are dotted around the house on the slopes of the Hamars but no field boundaries are visible (fig. 4).

No truly datable relics were brought to light but from the next house excavated and now to be described the yield of valuable clues to help in determining the age of the dwelling was abundant. This site was brought to my notice by one of my workmen, Mr James Henry, and it is situated about a mile south of the last one, on a shoulder of the slopes of the Ness of Gruting above Seli Voe (fig. 2). Surface indications were few and doubtful; there was no enclosing bank but only a hollow of likely shape and size with one or two large stones embedded in it. However to ensure that actual remains existed a trench was dug where walling was to be expected and on the fact being established it was decided to excavate. Indeed, as it turned out later, the building proved to be the most interesting house of the series both in the production of relics and in the presentation of some very peculiar and puzzling structural features. The decision to

wholly uncover the ruins too was a fortunate choice in other ways, for, when operations were well in hand, time was found to reconnoitre the ground in the vicinity and the steads of yet another group of three houses were discovered nearer the point of the Ness (fig. 2).

Once again the plan is sub-oval in shape but in this example it differs in embracing only one chamber with an open apsidal space occupying the inner end instead of a small closed chamber like that of the other houses

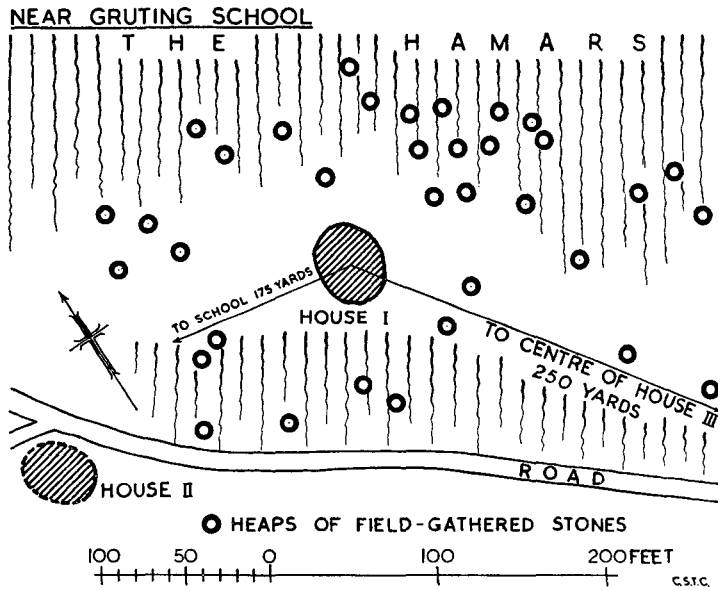










Fig. 4.

above-mentioned (fig. 5). As at Stanydale a curving entrance passage opens into the south-eastern end of the chamber but in this instance the passageway penetrates the wall from the opposite side. The structure is founded on a downward slope of 1 in 8 on the line of its longer axis from north-west to south-east and the interior has been heavily scooped out in a gradual depth to as much as 3 ft. Extremely, the fabric measures 57 ft. by 38 ft. while the chamber is 19 ft. by 14 ft. 6 ins. irrespective of the inner recess which adds another 7 ft. 6 ins. by 6 ft. 9 ins. to the area. The walling varies from 9 ft. to the astonishing figure of 15 ft. 6 ins. around the north-western part where it is increased to this extent by the addition of an inner skin or casing of contemporary erection. Except for small irregularities in outline the outer wall, which is founded on the brim of the scoop, maintains a fairly uniform ring of building throughout. The inner casing, however, which is founded on the sloping sides of the scoop, does

**NEOLITHIC HOUSE NO 1
NESS OF GRUTING, SHETLAND.**

- | | |
|---|---|
|  STONE ON END OR EDGE |  BLACK EARTH CORE |
|  FACING STONES & REVETMENT |  CONJECTURAL RESTORATION |
|  PEAT ASH CORE |  DEBRIS & SOIL |
|  FINE BROWN SOIL CORE |  CARBONISED BARLEY |

- FIND SPOT
- 1 DISH QUERN
- 2 CARBONISED BARLEY
- 3 MACE OR CLUB HEAD
- 4 & 5 TOY AXE HAMMERS
- 6 & 7 POLISHED STONE AXES
- 8 & 9 STONE BALLS
- 10 WHORL
- 11 PART OF KNIFE BLADE
- 12 ? PART OF SPEAR-HEAD
- 13 PLANO-CONVEX IMPLEMENT
- 14 TOY IMPLEMENT

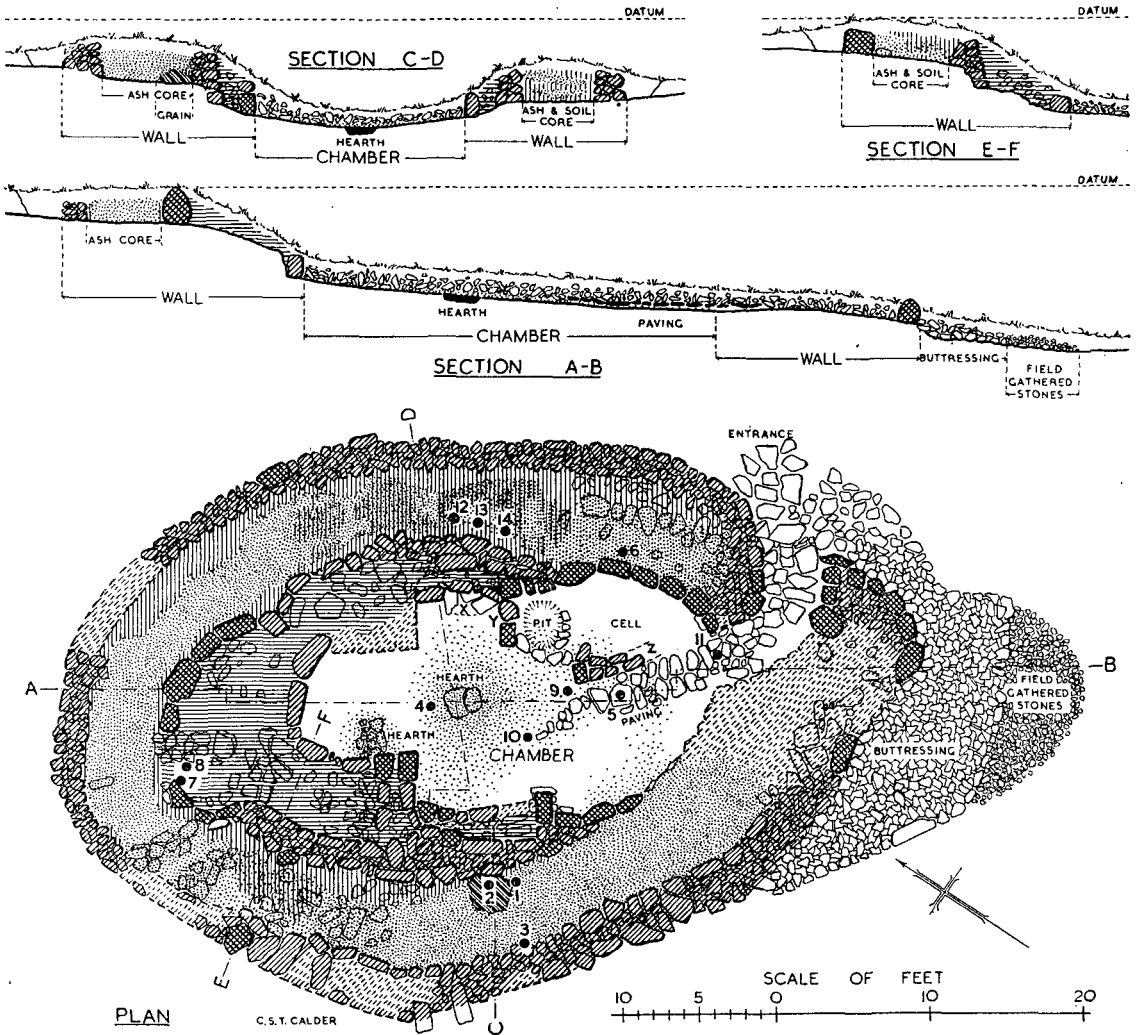


Fig. 5.

not completely surround the chamber but describes a more or less crescentic pattern on its divergence from the main wall at a point near the middle of each side of the chamber. Also at this point where the extremities of the crescent die out they merge in rough bond to become one with the outer wall which, alone from there, encloses the south-eastern end of the house. This method of building in double thicknesses is not entirely strange as it is employed, frequently with more than two rings, in tomb construction of the period in Shetland and elsewhere and it occurs in the "Bunylie Hoose" in Whalsay.¹

The principal wall is built in a common manner comprising a stone-built shell or revetment on each face with the interspace filled with a core of compact material. The outer shell is now in such a destroyed condition that any batter it is likely to have had can only be inferred, but in places where the inner revetment still survives to a height of 3 ft. there is an obvious inward batter to counteract the thrust of settlement in the freer movement of the unbonded core. Unlike the outer shell the inner is not entirely masonry-built but is so only along the sides of the oval, the end arcs being faced with a single line of large boulders. So far as it goes the inner casing is constructed in similar fashion but with only an inner revetment-wall of its own, the main wall in this case being utilised to act as the outer revetment for the confinement of the core; this arrangement clearly shows that the outer wall was the earlier of the two to be built in the sequence of operations.

The inner apsidal recess is constructed wholly in the casing wall and the surviving lowest course of heavy boulders on the northern and western sides is laid against a face of the natural subsoil in an abrupt down-stepping of the scoop. The masonry of the eastern side is missing but its position, shown dotted on the plan, may be inferred from a continuation of the down-stepped face. On each side immediately in front of the apse there is a recess formed partly by the outer wall which constitutes the back and partly by the casing which constitutes the sides, the re-entrant angles being joined in bond. These recesses are contracted in depth by being infilled with the revetment and core of the casing wall, but the purpose of blinding them to such extent in this manner is not clear except that the infilling, along with the casing around the apse, would at least function as a strengthening to the main wall especially where the foundations of the latter are in places perched over the edge on the sloping sides of the scoop (Pl. XXXIV and fig. 5). The western and eastern measure respectively 7 ft. 9 ins. and 5 ft. 3 ins. in width and projecting from the foundations of the latter, three flat stones, marked X on the plan, suggest a low shelf or bench. Beside this, at Y, two slabs on end stand perpendicular to and free of the walling but may be original. Midway between the recesses

¹ To be the subject of a report in a forthcoming volume of P.S.A.S.

there is a hearth, now cracked, but formerly consisting of a single stone measuring 2 ft. 6 ins. by 2 ft., and $5\frac{1}{2}$ ins. in thickness, and another hearth composed of several small flat stones is laid against the western wall of the apse (Pl. XXXV, 1). Around the first there was a hard packing of small broken and well-burnt stones mixed with the peat-ash which covered the actual hearth to a depth of 3 ins. and spread around and outwards towards the side walls of the chamber in diminishing density. The ash varied in colour from buff to red but an accumulation on the hearth in the apse was deep red in tone.

The entrance passage was floored with a double layer of paving-stones and the uppermost continued inwards to the middle of the chamber in single extension evidently as a later improvement (Pl. XXXVI, 1 and 2). Between the double layers of paving where they ended in rear of the entrance a small piece of a porphyritic knife-blade was found and under the single layer in the chamber there was a thin stratum of peat-ash with some shards of decorated pottery. The ash was also traceable below the foundation of a wall, marked Z on the plan, and on eastwardly into a cell and a pit which these foundations enclosed. That being so it is considered that the cell and the upper paving were afterthoughts, but the pit may be original.

At the southern end of the chamber beside the inner half of the entrance passage, the greatest destruction of the wall has taken place and its conjectural restoration is indicated by dotted lines on the plan. The boulders which lined the face of the outer arc here showed a decided outward tilt seemingly due to the thrust and slip of the mass towards the lower end of the house. As if to prevent the tendency of further movement in this direction a considerable area of stones was packed against this end of the house and can only be regarded as a footing or buttressing (Pl. XXXII, 2). Beyond that again there was piled a lesser heap of smaller stones which most resembled field-gathered material thrown aside out of the way.

A field system extends from the house down the slopes of the Ness almost to the shore of Seli Voe and occupies, in scattered patches of cultivated land, an area roughly 200 yds. square. The fields are loosely defined, some by scarps and terracing and others by stones at intervals in the foundation alignments or by grass-covered stony banks. On the same shoulder as the house and about 170 ft. to the west of it, there is an oblong enclosure measuring 87 ft. by 77 ft. and the periphery is marked by a close-set line of foundation stones as deeply embedded in the earth as those of the walls of the house. Animals were probably kept in it but a heap of gathered stones in the middle of it also indicated that it was cultivated at one time and stone heaps occur in most of the other fields of this system (Pl. XXXVII, 3, and fig. 6).

Returning to the house itself it is to be observed that, apart from the missing portion of the wall just noted, a considerable quantity of revetment

and core material remains for the rest of its length and the bulk of the infilling consisted of a mass of pure peat-ash, now removed. This was an

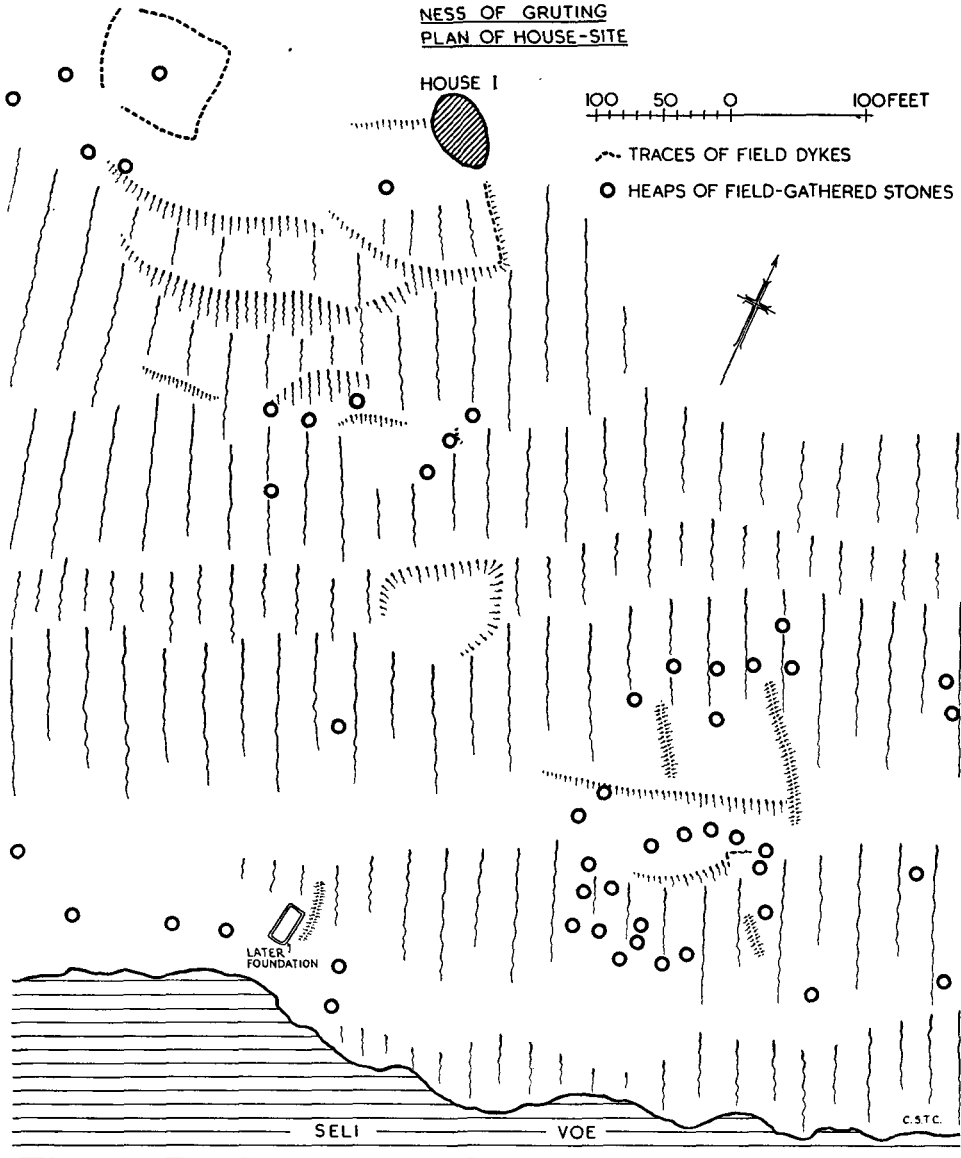


Fig. 6.

amazing substance to find in wall construction and I am not aware of any other instance in which it has been employed solely for the purpose. In

the best preserved portion of the wall on the south-western arc the volume of peat-ash occupied a space measuring 30 ft. long by 5 ft. wide by 1 ft. 10 ins. high, and in another large area around the northern end there was a quantity fully 1 ft. in depth for a length of 25 ft. (Pls. XXXVII, 2, and XXXVIII, 1 and 2). For the rest the ash was augmented by layers of fine brown soil, occasionally in streaks of one and the other, thrown in no doubt when an available ash-heap was giving out and a supplementary filling of soil became necessary. There was only a small percentage of stony material mixed with the core but a larger percentage was present in the core of the casing wall which consisted chiefly of black earth, probably the surface soil at hand from the scooped interior. Artifacts and rude stone implements were recovered from the cores of both walls, but from the ash in the main wall the yield of decorated pottery was prolific and represented some scores of vessels.

The ash filling, I have no doubt, would be as effective in its object as one of earth and in its use here it is implied that a large heap, already mixed with tools and pottery, lay in close proximity to the site and was therefore chosen on account of its accessibility and easy handling in preference to an earth filling which required an expenditure of more labour in the digging. The presence of such a large pile of ash conveniently to hand raises a perplexity as to its source and is a mystery which probably may best be explained away in a suggestion that it was the waste dump of a pottery. The firing of pottery was sometimes done in an open hearth and, in one method, the vessel to be hardened was heavily encased in a covering of peat which was then set alight. It seems not improbable that the ash resulting from constant repetition of the process of baking the pottery may have grown into the large heap that, by good luck and the whim of the builders, eventually found its way into the heart of the wall. Even the great amount of ash that was used in the building may not represent nearly all the initial residue of peat-burning as much of it in a dry powdery state would have been blown away by high winds. Crofters to-day save the ash and scatter it over their cultivable fields but the annual gather from a domestic hearth is a comparatively small accumulation not exceeding two or at most three barrow-loads. A theory has been advanced by some that originally the walling of the house had been constructed with a core of dry peats¹ which, in a later conflagration, had been reduced to the ashy composition as found, but for the following reason that idea is not tenable. An experiment was carried out in the burning of a stated measure of peat with a result which showed the proportion of residual ash to peat was in the region between one-thirtieth and one-fortieth of the natural bulk. The comparison was made with the components in a dry condition and the

¹ Cf. Fraser Darling, *West Highland Survey* (1955), p. 294. "The black house is in direct line from neolithic dwellings. . . . The structure was in dry stone, the walls being very thick, the built stone to the outside and to the inside, and the middle packed with dry peat."

difference in ratio would have been even greater if the residue had been wetted and compacted like that of the actual core. Based on the above calculations the core of pure ash, still existing it will be remembered to a height of 22 ins., would represent an original core of dry peats in a wall rising to a height between 60 and 80 ft. It will no doubt be agreed that a wall soaring upwards to this extent would be an unthinkable and impracticable conception. I am of the opinion that the outer wall of the house rose to only a few feet higher than now seen and that the necessary height for adequate standing-room in the chamber was met partly by the depth of the scooped-out interior.

On the natural soil under the deepest part of the ash near the middle of the western side one of the more interesting and important finds was brought to light. It consisted of a heap of pure carbonised grain, about 28 lbs. in weight, lying against the back of the inner shell of the outer wall and beside it there lay the half of a broken dish-quern¹ (fig. 20, A). A sample of the grain was sent for examination to Dr Hans Helbaek of the National Museum in Copenhagen who is an authority on early cereals. He reported that the grain consisted of barley, partly the naked and partly the hulled form, in a proportion of 3 to 1 and that the former seed was small compared with other finds, but the latter was of a size comparable to many finds throughout the prehistoric periods. Further he added that the naked barley was in an excellent condition and that it was the first time the variety had been found in Britain in a state of preservation worth photographing. Also he supposes that the barley is the most northerly European early grain find and he goes on to say that if the material really is Neolithic or Early Bronze Age then it is one of the most interesting British finds.²

Any uncertainty in the matter may at once be dispelled for I have not the slightest hesitation whatever in stating that the circumstances of the find leave no room for doubting that the grain was other than contemporary with the building of the house. In the first place it lay in a heap directly on the hard natural surface under its deep covering of ash and Neolithic pottery in which there was absolutely no sign of any pocket of disturbance to indicate that the core had ever been tampered with since its deposition. Secondly, there is the fact that the barley lay beside a broken quern, indisputably of the early period. Thirdly, it would seem to be a pointless task for anyone to dig through the core filling simply to bury such waste material as charred grain and a piece of a quern. As waste material not worth the trouble of removing, these items were more likely to have been dumped or left in the position where they would suitably help in a small way to eke out the filling of the core.

Some authorities believe that the survival of carbonised cereals is due

¹ A similar quern was found at Wiltrow. *P.S.A.S.*, LXX, 164, fig. 13.

² Extracts from a letter to Professor Piggott, dated 26th December 1952.

to a degree of charring initially as otherwise in a wholesome state the seeds would either have germinated or been eaten by mice or have simply decayed. Charred grain has commonly been found in early sites where structure has been destroyed by fire, but it is also often the result of overheating in a kiln or pot during the necessary drying process when the climate is damp and as such it is thrown out as rubbish. The excellent condition of the carbonised barley from this house on the Ness of Gruting may be accounted for by having been hermetically sealed under the dense layer of ash, which substance by the way, in keeping out air and moisture, was considered a suitable medium by the islanders of St Kilda in the preservation of eggs.¹

Mention has been made of artifacts and of these relics two polished stone axes, a stone ball and a thin plano-convex instrument of unknown use, all recorded from the heart of the wall must be considered among the earliest. Two boat-shaped miniature or toy stone axes and a holed mace-head or club are distinctly relics of Early Bronze Age type as might also be a small piece of porphyritic knife-blade. Another stone ball was found on and near the end of the paving in the chamber and a small holed disc of steatite resembling a spinning-whorl was trampled into the original floor. The latter was unnoticed until washed clean by rain and it may have rolled into the position where found since it is regarded as later than the rest (fig. 19, J, D, C, B, E, A, F and fig. 20, E).

The question may be asked as to how the chamber was ceiled. The roofs of the houses were no doubt of timber. Construction formed by a framework of rafters, purlins and a covering material like that of the temple at Stanydale. Judging from later building custom in the Hebrides the roof would rest on the inner part of the wall-head and the outer part left exposed as a cat-walk topped with a runway of turf or flat stones sloped to throw off rainwater. Captain Thomas, in writing about old houses in the west of Lewis,² refers to the broad terrace on the wall-head as "an important archaic feature" and Aage Roussell, in describing the black houses there, says "Almost half of the top of the wall projects uncovered beyond the roof and is a favourite playground for children and goats."³ Both authors mention that the walls, from 5 to 7 feet thick, are built with two shells of masonry with an interspace filled with a core of earth or rubbish; the same method, it will be recalled, as that adopted in our Shetland house-sites. The similarity, even in a distant connection, may strike a point of some significance in a suggestion that this characteristic in each case may have been derived from the same traditional source.

Taking the comparison further we find that the Hebridean houses were also founded on a slope which was followed parallelly by the wall-heads and the ridge thus giving a curious lengthwise tilt to the whole fabric. With

¹ M. Martin, *Voyage to St Kilda* (1698), 66.

² *P.S.A.S.*, VII, pt. 1, 153 ff.

³ *Norse Building Customs in the Scottish Isles* (1934).

such a strong bearing on the manner of siting, wall construction and roofing between the Shetland and the Hebridean structures, it may not be amiss to select a few extracts from Roussell on the details of the latter to try to illustrate the probable aspects of the former. He observes that the woodlessness of the country is reflected in the poor construction of the roof. Simple couples of slender boards stand on the inner edge of the wall or are sunk a little way into it. There is neither wall-plate nor pole-plate nor any other connection with the masonry. Only in the widest houses is there a tie-beam and the pitch of the roof is slight. Along the rafters lie purlins and across them the poles which carry the actual roof of heather and straw. As a consequence of the poorness of the roofing material the roof is covered with a network of plaited straw ropes which are stretched down by means of stones just over the edge of the wall. The peat fire burns in the middle of the floor and has the most simple hearth possible, devoid of any kind of masonry or even anything to mark its place. Frequently bed-alcoves are formed in the walls and the spaces are usually of so small a size that a person could not lie outstretched.

In some houses there is no smoke hole or window but the purpose of both is served by two holes about 1 ft. square, in and at the bottom of the thatch. The floor and the ridge have a pronounced fall and it is important to the arrangement of the house that the floor slopes (meaning presumably a slope for drainage purposes). Quite flat building sites are carefully avoided and a diligent search is made for a sloping piece of ground. In other old Hebridean houses recorded by Captain Thomas there is on the right-hand side a bench of wood, stone or turf on which the men sit. Tables and chairs are almost unknown. A straw mat or cowhide forms the door and the house is finished without a piece of metal or a single tool employed in its construction. Thomas arrives at the conclusion that this type of house has probably passed over from the prehistoric population and is devoid of any Scandinavian influence.

So much then for the old Hebridean houses which, though so far removed in time from those in Shetland, seem to have spanned the gap of centuries in conservation of ideas, habits and method of building, for the above description could aptly apply to the Shetland houses that have just been discussed.

The abundance of pottery has already been commented on and there is no distinguishable difference in the decoration and texture of the fragments from the core of the wall and those from the floor. The decoration consists of zig-zag and intersecting line patterns, either with firm grooves or else with comb-tooth indentations (figs. 15, 16, 17, 18). Excluding bits of about half-a-dozen Iron Age pots from a higher level, the fragments of the earlier pottery represent some 120 vessels which can be identified in a general way with Western Neolithic ware from other British sources. There is, however,

no definite link to suggest a close contact with any well-known site that would give a clue to the locality formerly occupied by the Shetland colonists before their migration. The pottery that corresponds nearest in pattern would appear to be that from the Pottery Workshop excavated by Sir Lindsay Scott at Eilean an Tighe in North Uist.¹ But on the subject and relationship of the pottery the further details are fully described in a report kindly undertaken by Miss Audrey Henshall as an appendix to this paper.

Still, it must be added here that very few shards of pottery were recovered from the excavation at the School of Gruting or from that at Stanydale and what there was, was of little value for dating. From the latter site, though, one significant piece was decorated with a corded pattern assignable to the Beaker Period and from the same house there was a leaf-shaped arrow-head of quartz. At all the sites there were numerous quartz scrapers, cores and flakes and also pumice stone, one or two pieces being grooved probably in the process of smoothing down an arrow-shaft.

Besides the particular relics and artifacts which have been enumerated the sites of all the houses are simply littered with rude stone implements. A number over 600 came from the Ness of Gruting, over 250 from Stanydale and 139 from the site near Gruting School (Pl. XXXIX). Along the slopes of the Hamars above the school there are many outcrops which have been used as quarries. Dumps of waste material in front of them contain rock-chippings and flakes in which implements are also found, presumably wasters or left-overs in the manufacture of tools on the spot. These rude implements are found all over Shetland and may be picked up in the open as well as on the early sites. The majority recovered were broken but the greater number being roughly made of free-stone could quickly be replaced by the hands of an expert fabricator. A fair percentage showed a higher degree of craftsmanship and finish than the others. Greater care had been expended on their regular shaping and dressing to a rounded body or a pointed end by a percussion technique or by a frictional smoothing. They varied greatly in size, shape and weight but could be roughly divided into types, such as axes, hammer-stones, picks, shovels, anvil-stones, rubbers, pestles, club-like tools, etc. Their use was attested by pit-markings, abrasions, striations and small fractures, but what precise utilitarian ends they served can only be guessed though domestic and agricultural purposes may be suggested. By themselves the implements are not readily dateable but a certain number, by being formerly in the same context as the ash and the pottery, must distinctively be recorded as belonging to the earliest period though there is scarcely any appreciable difference in technique and form from the rest. An itemised list of artifacts and selected implements is appended together with a general report on the objects, again prepared by Miss Henshall.

¹ *P.S.A.S.*, LXXXV, figs. 7 and 8 and pl. v, 2; 4 and 5.

In connection with the agricultural possibilities there are grass-covered mounds of stones, of various sizes up to about 20 ft. in diameter and 2 ft. high, which are locally called "roonies" and are scattered at irregular intervals around the house-sites (Pl. XL). In his book on "Ancient Emigrants" Brøgger attempts to explain their presence by likening them in appearance with grave-mounds and assumes that they were constructed by Norse colonists. But he then states positively "In a number of cases these burial mounds are situated on farms of the oldest Norse name-types." Unfortunately for his theory some large mounds which he mentions by name and slumps together with the smaller ones under review, are definitely not burial mounds but are actually of a sort well known in archæological circles as burned mounds.¹ Unfortunately, too, his statement has left an impression in Shetland that all these mounds are really Norse graves. Very few of them have been investigated. Some have been demolished in farming and in road-making, but none has yielded Viking relics. Indeed there has never been any trace in them of inhumation nor incineration nor even of any arrangement of the stones to suggest a space for the deposition of a body.

While the connection with farm land is accepted, the association observed is with husbandry of a period round about two thousand five hundred years earlier than the Norse settlements in the islands. It is important to note that a considerable number of stone implements are mixed up with the stones in the mounds. In one heap that was entirely demolished at Lower Gruniquoy, the owner collected twenty-six rude implements and there may have been more, he said, if he had begun earlier to discriminate between the worked and the unworked stones. At another mound beside the house at Gruting School the digging of a small segment yielded seventeen of these objects.

A different interpretation to that of Brøgger is here propounded that the mounds are collections of surface stones gathered in the process of clearing patches of ground to be tilled and that the implements found therein are the discarded agricultural tools which have been left lying about lost, broken and useless, ultimately to find their way into the dump in company with the rest of the field gathered stones. This conclusion is also in agreement with Curle's opinion on his excavation of two of these mounds at Wiltrow.² A local crofter informed me that surface stones littering some of the fields lessened by nearly 50 per cent. the yield of growing crops or of grazing land by the superficial area in the aggregate of good soil covered up, and the practice of gathering stones where necessary still exists to-day.

Besides the above considerations it may also be deduced that the heaps are unlikely to be grave-mounds in view of the fact that there are already

¹ Mounds of fist-sized stones amassed as waste after fracture by fire and water in the process of cooking, often called deer-roasts.

² *P.S.A.S.*, LXXIV, 156 ff.

typical burial-places of the period in the megalithic heel-shaped or round cairns, either chambered or cisted, of which there are still the remains of several hundreds in the islands.

More significant as evidence of the agricultural activities of the early colonists are a series of field systems that are attached to the houses and contain many mounds of gathered stones (figs. 4, 6). The fields, generally curvilinear in outline, range from a single enclosure to half-a-dozen or so and differ in size from about 60 ft. to 260 ft. in longest dimensions. The boundaries are drystone dykes now greatly denuded and in parts missing altogether but the tracks can usually be determined by grass-covered stony banks or by odd stones at intervals in a continuation of the alignment. The larger systems, no doubt formed by adding fields as required, may denote the farmer's increased prosperity or the expansion of his family. At some house-sites where no enclosing dykes were noticed it would appear that only small patches of land were cultivated to meet the owner's needs and small patches sufficed even in recent times as in the Hebrides where barley fields of only a few square yards in extent were harvested by pulling the crops up with the hands, cutting the ears off and carrying them to the kilns to dry.¹

The existence of fields at all implies that protection of crops was necessary against the depredation of animals and also presupposes the keeping of animals in or outside the enclosures, depending on the season of the year. Therefore stock-raising must be accorded a place in the economic management of the household and of some of the animals then existing we have direct knowledge from their actual remains. An examination of a few fragmentary and calcined bones from the house on the Ness of Gruting was kindly undertaken by Dr A. S. Clarke of the Royal Scottish Museum and by Mr J. G. Speed of the Royal (Dick) School of Veterinary Studies. They report the identification of, at least, horse, small adult ox about two-thirds the size of a normal beast, and sheep. It is likely, too, that dog and pig, known from other records should figure in the list. All the animals, it may be surmised, were brought in as young beasts by the immigrants themselves who would appear to be the earliest inhabitants of these distant islands since there is so far no record or trace of any settlers prior to their arrival.

From the foregoing description and details of the typical houses and appendages with all the requisites for self-sustaining husbandry, one can in imagination conjure up quite a vivid picture of the life and economy of the newly established colony. Pottery was manufactured, tools fabricated, soil cultivated and crops grown, grain was harvested, dried and milled, stock was raised, peat was gathered, and cooking facilities were provided.

Obviously we have here a farming community comprising a series of individual farms or crofts, sometimes in isolated units but generally situated

¹ Roussell, *Norse Building Customs in the Scottish Isles* (1934), 11-12.

in groups or townships near the seashore. The distribution of the crofts and the daily life of the people employed in self-sufficing food production does not seem far removed from the habits of the crofting fraternity of the present day and to their agricultural activities I should add those of fishing. The Shetlander is traditionally noted as an expert seaman as is still emphasised in the old tag that he is, first and foremost, a boatman with a croft in subtle contradistinction to the Orcadian who is reputed to be a crofter with a boat. With supplies from both pursuits of beef, mutton, meal, milk and no doubt butter and cheese, fish and shellfish, sea mammalia, birds and their eggs, etc., it is not out of the way to suggest the industry and method of existence of these remote pioneers differed but little from that of Shetland crofters of only two or three generations ago whose life, to quote Professor A. C. O'Dell "was remarkably primitive, although it bore many advantages over crofters in the Hebrides."¹

No defensive constructions appear in the islands at this time and the substantialness of the houses and the extent of some of the field systems would point to a condition in which farm work was carried on over a considerable period in undisturbed and peaceful isolation even after the arrival of the Bronze Age folk who apparently settled down in friendly union with the earlier inhabitants. *A propos* of this contention² Childe avers that intercourse with neolithic families and Beaker folk elsewhere must have been intensive and pacific and this seems to be borne out in Shetland by the fact that the traditional heel-shaped chambered tomb was retained in the main but was structurally modified interiorly to suit the later burial customs of the newcomers in the replacement of the chamber by a cist.

It is to be inferred from the funerary architecture that the colonists, besides devoting their time to secular pursuits, were also inspired by some religious ideals which demanded, at least, some sort of burial ritual and a belief in an after-life. Also some high form of ceremonial worship is surely observed in the erection of the temple at Stanydale which strongly suggests some priestly assemblage and which, to my knowledge, is not the only temple in the islands.³

Such a rich collection of the remains of co-existent structures of the Late Stone Age is seldom to be found so closely intermingled and is probably unsurpassed in any other area of equal size in Britain. The combination of houses, fields, tombs and temples has therefore an added value in affording a more direct understanding and a clearer insight of the structural, cultural and social conditions that prevailed in this primitive community.

From whence these people came to Shetland is at the moment obscure as no parallel buildings are recorded outside the islands and the pottery, which it was hoped might have established a geographical connection only compares,

¹ *Viking Congress* (1950), 6.

² *The Prehistoric Communities of Scotland* (1935), 30.

³ Another temple has since been discovered in Whalsay and will be the subject of a future paper.

in a general way, with the British Western Neolithic ware. One can hardly imagine that the colonists set out on their expedition fully equipped with stores, animals and children for an unknown destination and so by chance arrived in Shetland. More likely the new land was first discovered by some

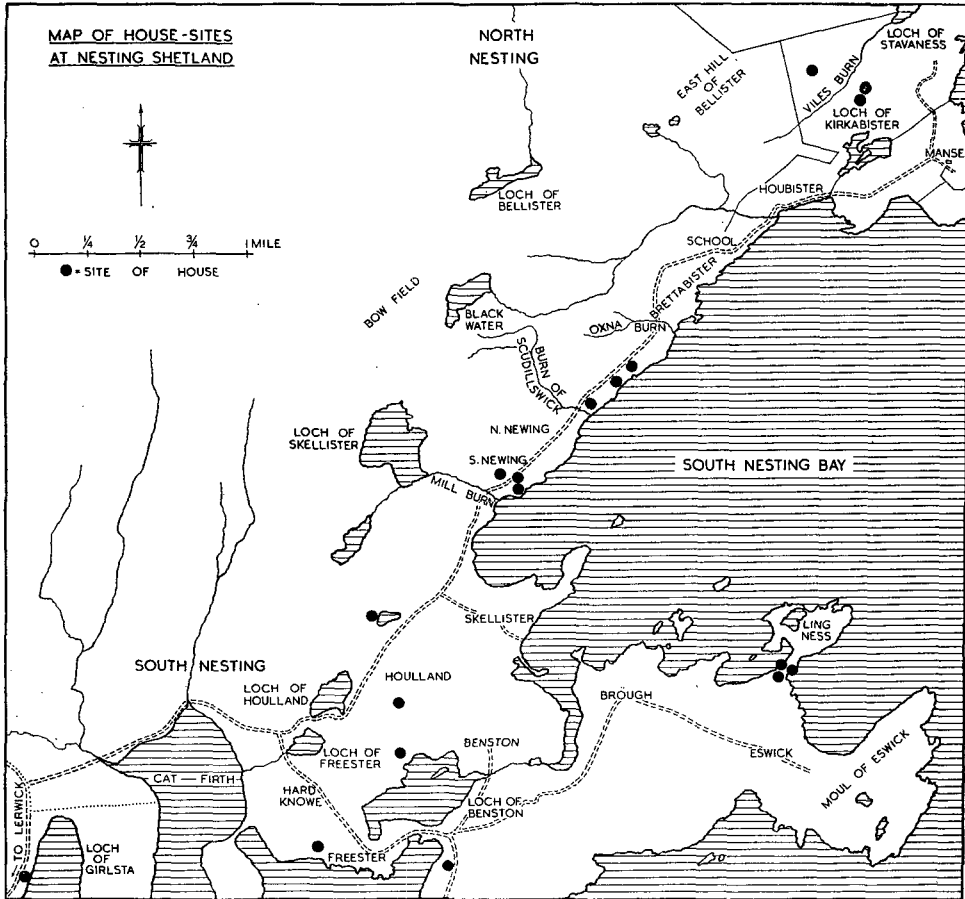


Fig. 7.

adventurous seamen, perhaps blown out of their course in a storm, who were able to return and tell their kinsfolk of the discovery which induced the migration of the whole tribe. In any case it is well known, says Shetelig, that the neolithic peoples could, and did, make long sea voyages such as the crossing and re-crossing of the North Sea direct. To reach Shetland at all in frail primitive craft must have necessitated a long expert and no doubt hazardous voyage for it would appear that the Orkney Islands were by-passed at all events in the way of any permanent settlement by the

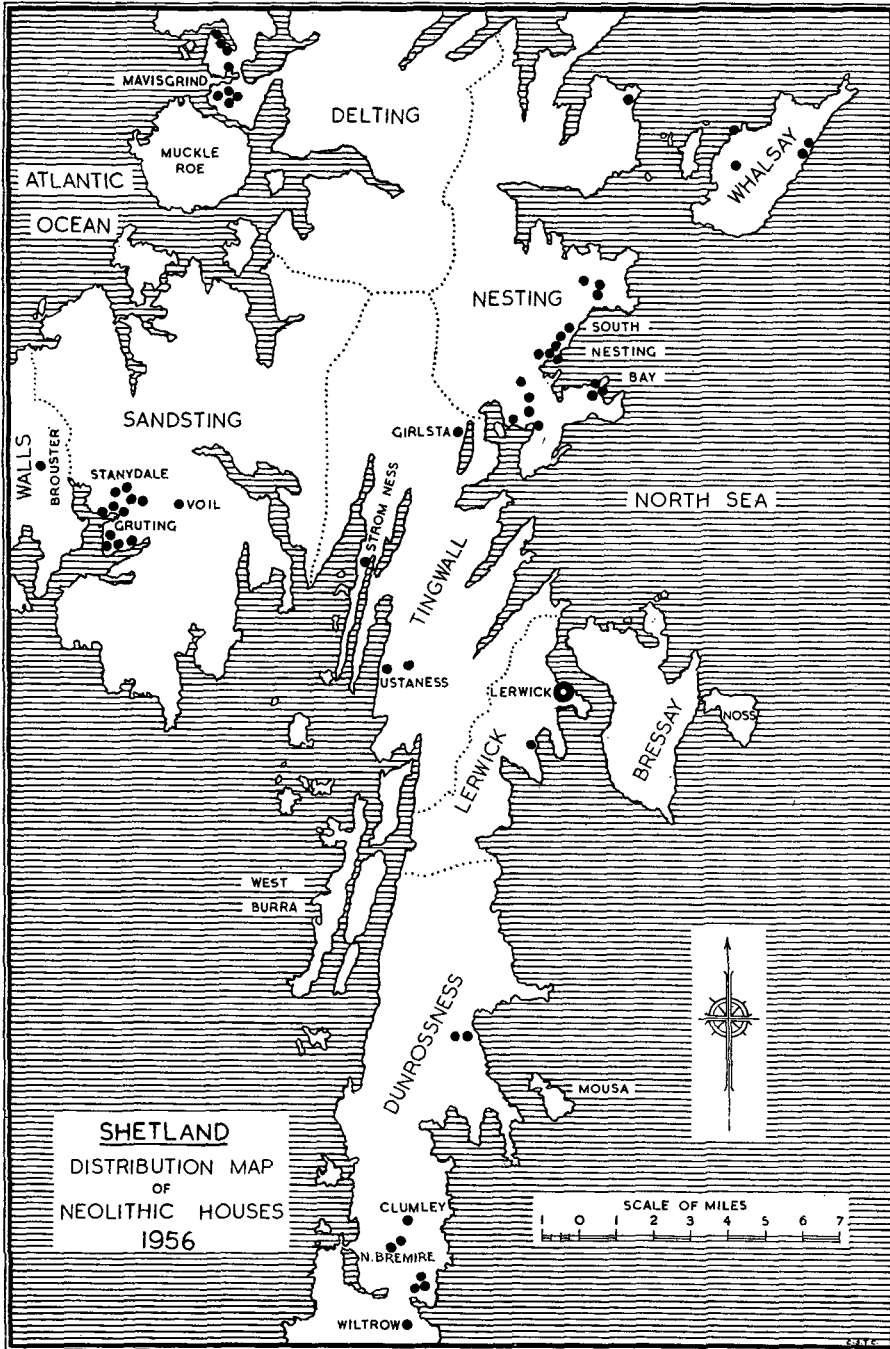


Fig. 8.

immigrants en route for so far no house-site of the type described above has yet been recorded there. Nor does it seem that the neolithic inhabitants of Shetland dwelt in mutual intercourse with their contemporaries in Orkney. The monuments in these respective islands have a totally distinct local development though a remote common ancestry may be propounded. In contrast to the individual houses of Shetland the dwellings in Orkney such as Skara Brae¹ and Rinyo² form a large complex of chambers and passages housing collectively the several families constituting the immediate community. The tombs, too, in Orkney are collective and disagree in character and architectural style with the trefoiled chamber and heel-shaped design of those in Shetland which, there is some reason for believing, are more individual. The cairns in Orkney are elongated with parallel sides and rounded ends or else circular, and the typical chambers are either many-stalled or cellular for a multiplicity of burials which is not provided for in the small standardised cruciform chamber of the heel-shaped cairns. The dissimilarities of these domestic and funerary remains surely betoken a difference in the customs of the Orkney and Shetland communities and clearly underline the lack of mutual contact between them.

Since the discovery of the first house a few interested persons have become sufficiently acquainted with the surface markings to recognise new sites and in this way many others have been brought to our notice. Already the number totals fifty-seven sites in addition to the three described, and all have been personally visited and confirmed. With a few scattered exceptions these are grouped principally in the Gruting, Nesting and Mavisgrind districts (figs. 7 and 8). However, no systematic scrutiny of the comparatively vast extent of the rest of the mainland has taken place, nor have any of the islands other than Whalsay been searched, so it seems reasonably certain that many more sites exist and only await identification. By keeping a purposeful watch for house-sites on holiday rambles Mr Laurence G. Scott, Lerwick, has discovered thirty-one of them and others have been reported by Mr Peter Moar, Mr John Stewart and Mr James Henry. The additional sites are enumerated below and where field boundaries are mentioned these are traceable as either stone-dyke foundations, or stony banks or stones set at intervals in an alignment. It may also be stated that in most if not in all the fields there are many mounds of field-gathered stones.

¹ *P.S.A.S.*, LXV, opp. 76, plan.

² *Ibid.*, LXXIII, 6 ff.

LIST OF UNEXCAVATED HOUSE-SITES

The numbers shown in parentheses at the end of each item refer to the O.S. Map Grid Reference and should be prefixed by the Code Letters (N41)HU.

PARISH OF NORTHMAVEN.

Islesburgh.

1. House No. I lies half-a-mile south-southwest of the farm of Islesburgh and close to the shore near the Minn. A plantie-crub¹ is built in the hollow centre of the ruin which is well defined outside the crub on the north by a stony bank still 2 ft. in height and showing traces of boulder masonry on both faces. At the lower and southern end which, presumably contained the entrance, the bank is more destroyed and impinging on it, also within a stony foundation, there is a hollowed enclosure or annexe measuring, approximately, 26 ft. in diameter from crest to crest. Over the banks the house itself measures a doubtful 52 ft. in length by 42 ft. in width and at varying distances around it a massive boundary wall runs from shore to shore in a rough U-shaped formation, the southern open side being limited by the coast-line. The area enclosed by the wall measures approximately 200 ft. from N. to S. and from 200 ft. on the N. to 230 ft. between the extremities at the water's edge on the south. The wall, which is built of drystone, is 5 ft. thick and still attains a height of 5 ft. in places. None of the other house-sites is surrounded by a wall of such stoutness as this one which is of far greater substantiality and stability than is usual in the general run of field-dyke construction. The site is noted but not named on the 6-in. O.S. Map of Zetland, Sheet XXIX.

On the slopes of Kat Field and 25 yds. to the west of the above remains a large circular field-dyke foundation encloses an area measuring 120 ft. in diameter and 200 yds. away in the opposite direction there are the remains of a heel-shaped cairn near the shore. (334685.)

2. No. II. Near the disused fishing station at Mangaster Voe to the north-north-west of Islesburgh and 100 yds. south-west of Skaw Taing there is a grass- and heather-clad hollow, with a slight bank around it, about 20 yds. from the shore. This has the appearance of a house-site and measures some 50 ft. by 42 ft. on the axial lines, the longer axis following the natural slope from south-south-west to north-north-east. Around the crest of the hollow which is of pronounced depth there is a single and fairly complete line of smallish stones but some are loose and none is deep-set. The line is probably a late setting on top of the old foundations of the house. (331700.)
3. No. III. This is a grass- and heather-clad site of very definite outline on the slopes of the Ness of Islesburgh some 60 yds. from the west shore of Mangaster Voe and almost due west of Innbanks across the Voe. The remains consist of a good bank surrounding an oval hollow, about 2 ft. in depth, in which a curving transverse mound seems to indicate a partition between a main and

¹ A drystone dyke for the raising of young vegetable plants.

an inner chamber. On the north-eastern arc an arrangement of stones suggests a recess in the inner face of the walling and outside on the east there is a small broken and indefinite construction which shows a portion of a curved face of masonry on the west side, the eastern side being missing. The longer axis of the main structure runs east and west and measures 49 ft. from crest to crest, the shorter measuring 34 ft. (333698.)

4. No. IV. On the shore of the voe about 150 yds. south-south-east of the last there is a hollow enclosed by a slight stony bank all distinct from the natural vegetation in the greenness of its grassy surface. Part of the eastern end has been eroded by the action of the sea, but in the remainder a few stones here and there appear to mark the alignment of the inner face of the wall of a chamber. The original length probably did not exceed 50 ft. and the width from crest to crest of the bank measures 37 ft. (334697.)

PARISH OF DELTING.

Four houses are represented by the remains which lie beside the loch of Bays Water on the Ness of Culsetter about three-quarters of a mile south-west of Mavis Grind.

Culsetter.

5. House No. 1 has been hollowed out of the steep slope about 200 yds. to the north-east of the loch and is enclosed by a widespread stony bank except on the eastern arc where it is worn down to only an outer scarp. Several large set-stones break the surface and a few large fallen stones lie in the interior towards the south-east. Near the middle of the north side within the bank three sides of a quadrangular structure remain, the north-eastern end being missing. It is evidently a secondary erection and measures at least 20 ft. in length by 14 feet in width over walls averaging $3\frac{1}{2}$ ft. in thickness. Beside the western end of this building a transverse bank cuts the interior of the house into two parts, roughly one-third of the way from the northern end, and a gap in the bank is left for communication between them. The western end of the house is more deeply hollowed than the eastern and the difference may be due to later alterations. The stead is unusually large and measures 62 ft. by 42 ft. (fig. 9). (332677.)
6. No. II is situated near the summit of an eminence on the east side of the loch about 50 yds. from the water's edge and 175 yds. west-south-west of the croft of Culsetter. Again there is a stony mound and hollow of oval plan, measuring 40 ft. by 30 ft. The longer axis lies north-east and south-west and from the south-west end a length of what seems to be an entrance passage shoots off from the outer wall of the house and also extends into the presumed chamber. The passage is probably of secondary construction. (333676.)
7. No. III lies 200 yds. south of Culsetter croft and about half-way up the slope to the high ground on the east. The enclosing oval bank is missing on the south-west but the surviving portion rises to a height of nearly 3 ft. on the outside and about 2 ft. on the inside. Many large stones still exist in the ruined walling which seems to have been 7 ft. thick. From the northern side of the bank the foundations of a stone wall, 3 ft. in thickness, extend in a straight length of 27 ft. before returning 5 ft. southwards to a broken end. Apparently this was a frontal enclosure when complete, but it is probably of

PLANS AND STEADS OF NEOLITHIC HOUSES IN SHETLAND.

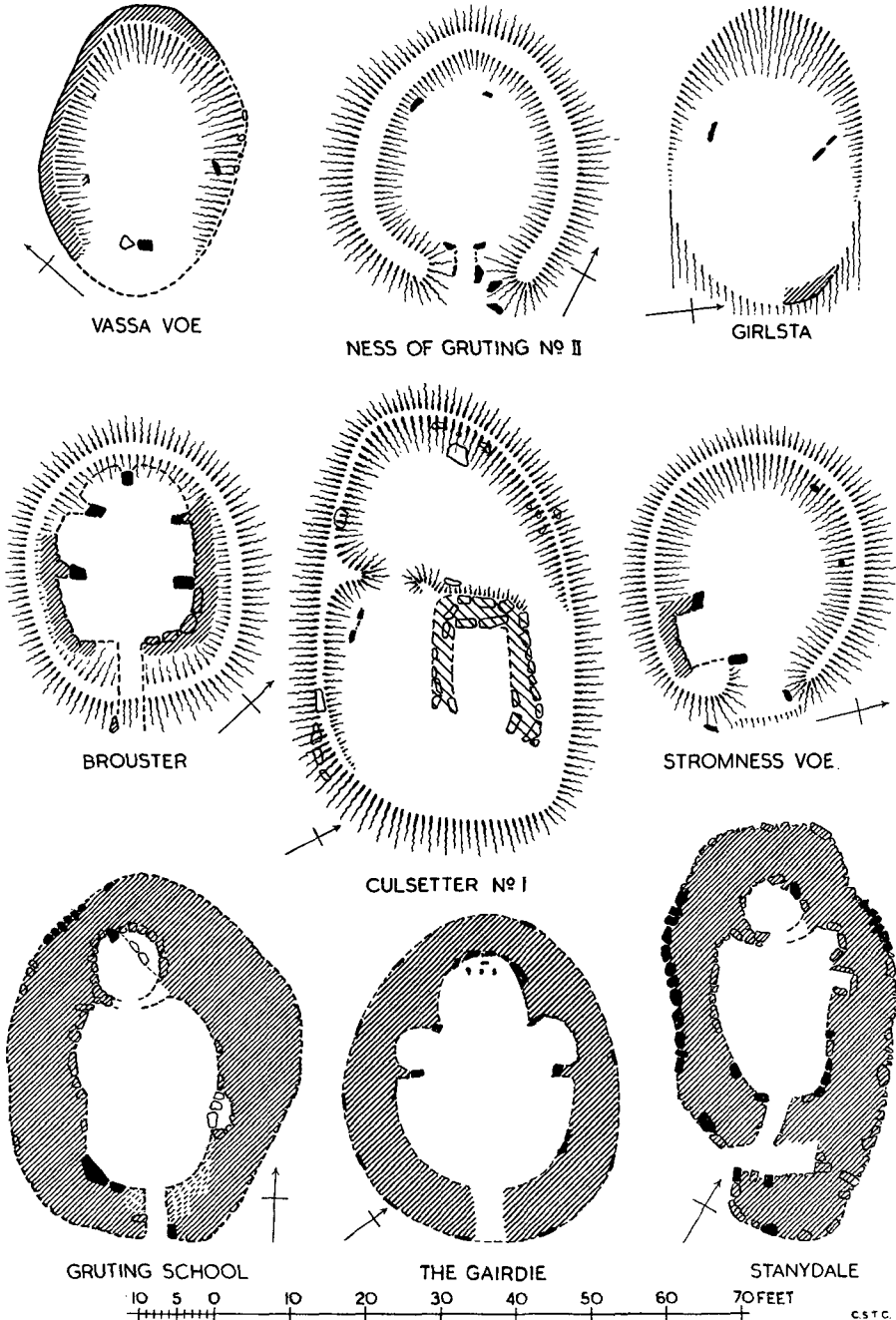


Fig. 9.

secondary erection. The extreme dimensions are roughly 45 ft. and 28 ft. from east to west and north to south respectively. Two rude stone implements were picked up on the site. Both are of free-stone and one is axe-shaped while the other is the broken off-toe of a rounded tool made by pecking but smoothed by rubbing on the underside. (335674.)

8. No. IV is a smallish construction of somewhat different shape and not so stoutly built as the others, but may belong to the period. It lies about 100 to 120 yds. north of Culsetter croft and the bank, $2\frac{1}{2}$ ft. high on the outside and $1\frac{1}{2}$ ft. high on the inside, is rather straight-sided with rounded ends. From east to west it measures 32 ft. and from north to south sides 33 ft. (334678.)

PARISH OF NESTING.

Ramna Geo. Lunning.

9. Some 600 yds. north-east of the township of Lunning and half-way up the very steep hill-side between the cliffs immediately north of Ramna Geo and a local landmark of quartz rock called the "White Sark" there is one of the best-preserved examples of a house-site. The walling is well defined and still stands in several courses of dry-stone masonry to a height ranging from 2 to 4 ft. above the single-chambered interior. It is 10 ft. in thickness mainly, and good lengths of the inner and outer faces are visible. Opening off the chamber on the north side there is a well-built recess in the wall which measures approximately $6\frac{1}{2}$ ft. wide, and 3 ft. deep and still attains a height of about 4 ft. Other recesses are traceable and at the lower southern end the line of the entrance passage, 8 ft. 2 ins. in length and 2 ft. 10 ins. in width, can be made out in its penetration of the wall. The plan is almost circular with an average diameter of 33 ft. and the chamber averages 14 ft. in diameter. An irregularly circular annexe of $29\frac{1}{4}$ ft. in average external diameter is built on the south side with a wall 5 ft. in thickness and a break in its southern arc probably signifies where the entrance has been placed. The site is enclosed by the foundations of a wall on the west running from the White Sark to Ramna Geo. In the *Inventory of Shetland* these remains are noted as indeterminate. Cf. p. 81, art. 1298. (510671.)

East Hill of Bellister.

10. On the glebe lands $1\frac{1}{4}$ miles west of the manse at Nesting and about half-way down the slopes of the East Hill of Bellister the foundations of a house, between 300 and 400 yds. west of the Viles Burn, are fairly well marked by large stones round an oval hollow which is now water-logged. On the north there is a grassy scarp rising 3 ft. to the top of the bank on the outside and on the inside where the inner face of a wall is visible there appears to be radial walls and recesses. The inner end of the site seems to widen but the extreme sizes are approximately 41 ft. by 31 ft. (491591.)

Near Loch of Kirkabister.

11. House No. I. In Stane Field between 500 and 600 yds. north-west of the manse at Nesting and about 400 yards north of the Loch of Kirkabister there is a house-site on a grassy patch in the peat- and heather-clad slopes. A very definite hollow about $2\frac{1}{2}$ ft. in greatest depth is surrounded by a well-defined grassy bank in which a few stones break the surface. The main axis is

roughly from north-west to south-east and measures 47 ft., the transverse axis being 39 ft. In the lower south-east end there is a trace of an entrance in front of which an alignment of eight or nine large stones indicates the remains of a dyke, enclosing a small forecourt 27 ft. long and 23 ft. wide. At the opposite end a bank with here and there a stone showing surrounds a circular enclosure of 33 ft. diameter and impinges on the wall of the house.

(496598.)

12. No. II lies on grass-covered slope 100 yds. south of the last. A strong bank surrounds a hollow, and on the east side a depression may be an impinging enclosure. The tips of large stones show in the bank and the over-all dimensions are $42\frac{1}{2}$ ft. from north-west to south-east and 34 ft. from north-east to south-west.

(496597.)

Hamar Knowe.

13. House No. I consists of scanty remains on the east side of the new road between Skellister and Bretabister and about 200 yds. south of the Oxna Burn.
14. No. II. Also on the east side of the same road about 200 yds. south of the last there is another.

(479570.)

(478568.)

Burn of Scudillswick.

15. Close to the east side of the road between Newing and Bretabister and 50 yds. north of the Burn of Scudillswick there are two plantie-crubs evidently built out of the ruins of a structure beside them. The northmost of these rests on a low stony mound, and laid stones appear here and there on the summit and a few around the scarp. The mound is roughly circular with a diameter of 40 ft. and the proportions coupled with a large associated field in which there are heaps of gathered stones suggests a house-site. The field extends from a line less than 20 ft. from the road right down to the shore of Nesting Bay and measures 430 ft. from north-east to south-west and 390 ft. from north-west to south-east. Inside the boundary there are lengths of similar dyke foundations which indicate sub-divisions. The burn flows through the southern end of the field and on its left bank near the mouth there is a mound of burnt stones measuring 35 ft. by 25 ft. on the axes. The burnt mound is noted in the *Inventory of Shetland*, p. 81, art. 1296 (fig. 10).

(474565.)

South Newing.

16. House No. I is situated on the east side of the road about 70 yds. north-east of the old croft of South Newing between the road and the skeo on Skeohill.
17. No. II lies about 50 yds. to the south-east of the last and nearer to the shore of the West Voe of Skellister.
18. No. III. On sloping ground near the south-western boundary wall of South Newing and 200 yds. west of the road a heap of stony debris suggests the southern half of a house, the northern half being presumably buried in ground slip. There are traces of recesses inside and 20 yards to the north-east there is a plantie-crub, built out of the ruins, in which a rounded stone implement was found (Pl. XLI, 1).

(469560.)

(469559.)

(468559.)

Grunna Water.

19. The site is close to a sheepfold near the west shore of Grunna Water fully half-a-mile west of the township of Skellister. Several large boulders, some loose and some earthfast appear on a slight bank enclosing a hollow oval interior (Pl. XLII, 2). (458549.)

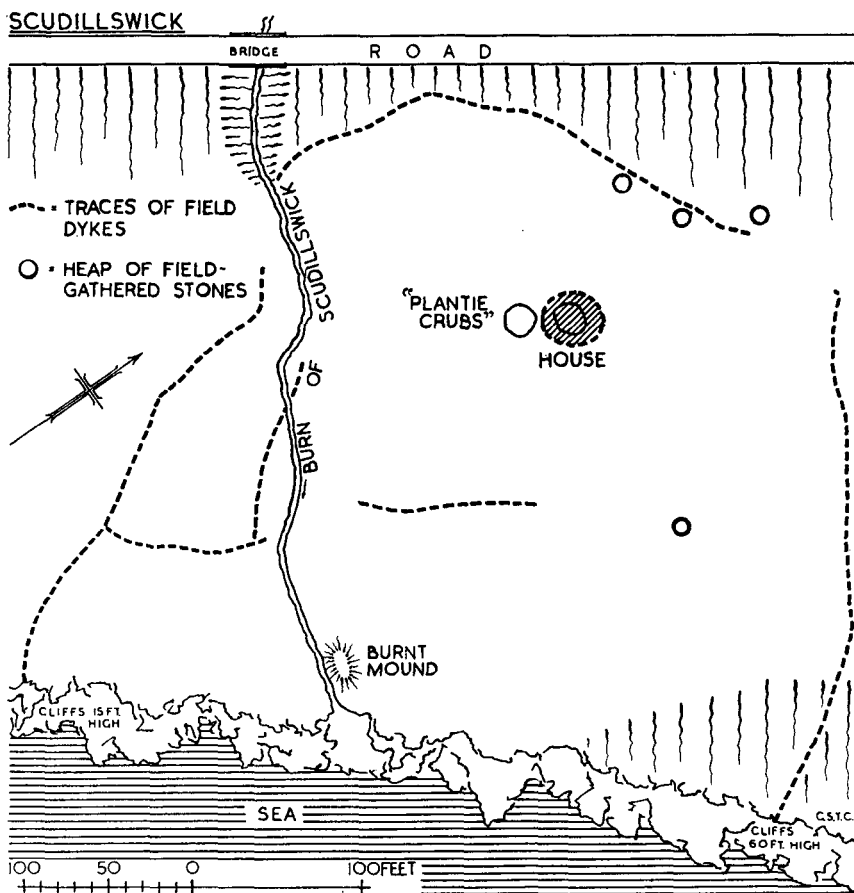


Fig. 10.

Ward of Benston.

20. House No. I lies about 100 yds. north-west of the shore of the Loch of Benston and a pantie-crub has been built on the spot. (460538.)
21. No. II. About 175 yds. south of the Mount of Houlland a stony bank, measuring 45 ft. in diameter is a probable site of a house. This is enclosed within another ring of dyke foundations, not truly circular but measuring 168 ft. each way. (460542.)

Vasso Voe.

22. Midway between the road from Freester to Gletness and the western shore of Vassa Voe, an arm of Catfirth, and fully half-a-mile north-north-east of Railsbrough, the scanty remains of a house lie on the top of a slope between two scarps of rocky outcrop. As well as an oval hollow interior there survives a course of the masonry of the outer wall-face for more than half of the northern perimeter, and at one point on the western side the wall appears to be over 6 ft. thick. One or two other earthfast stones break the turf and the lower south-western end is flattened and indefinite of outline. The axial dimensions are approximately $37\frac{1}{2}$ ft. by $25\frac{1}{2}$ ft. On the south-south-east immediately below the rocky scarps the very incomplete curvilinear track of a boundary dyke encloses a field measuring about 190 ft. in diameter (Pl. XLI, 4, and figs. 7 and 9). (464531.)

Muness, Cat Firth.

23. In a corner formed by the path to the croft of Muness and the road leading from Catfirth to Freester on the south-eastern slopes of Hard Knowe a slight grassy hollow, 32 by 27 ft., and a few earthfast stones appear to be the remains of a house. There is no definite alignment of stones and some large blocks are natural intruders. On level ground from 20 to 40 yds. away from the house set-stones at intervals presumably marks a boundary dyke connected with the site. (453531.)

Dock of Lingness.

On the isthmus at the eastern end of the Dock of Lingness there is a group of three houses within 50 yds. of each other. According to local information the sites were robbed to build the surrounding dykes and a boundary wall that cuts across the neck of the isthmus.

24. House No. I. The middle ruin measures approximately 48 ft. by 37 ft.; traces are slight.
25. No. II to the south of above is a mound, with a few large stones in it, it measures 45 ft. in length, but the width is indeterminate.
26. No. III measures about 40 by 30 ft. but the dimensions are only doubtfully indicated. (489545.)

The Bunzie Hoose, Whalsay.

27. A report on the recent excavation of this house will be published in a forthcoming volume of the *Proceedings of the Society of Antiquaries of Scotland*. (585652.)

Isbister, Whalsay.

28. On sloping ground near a plantie-crub about 100 yds. south-west of the Natural Arch at Gloupa there are the remains of a house wrongly classified as a "Cairn" in the *Inventory of Shetland*, p. 89, art. 1350. Locally it is called "The Gairdie." A series of test trenches established the lines of the outer and inner faces of the walling which is oval on plan and measures along the major axis from north-west to south-east 44 ft., and on the transverse axis $36\frac{1}{2}$ ft. The building contains an inner chamber with an apsidal inner end

consisting of three curved recesses which are defined by orthostats at the points of intersection. The central one is the largest and measures $10\frac{1}{2}$ ft. wide by $9\frac{3}{4}$ ft. deep, and 2 ft. or so centrally in advance from the back of it there are three smallish upright stones spaced equally in a row of 4 ft. in length. This construction is reminiscent of the lower supports of the type of dresser found at Skara Brae in Orkney. The likely position of the entrance is surmised to be through the south-eastern arc near the axial line of the chamber (fig. 9). Some rude stone implements were recovered from the digging. (584646.)

"The Cumble," Whalsay.

29. This site lies just beyond the neck of Sutherness near the north shore of the South Voe of Brough. In the *Inventory of Shetland*, p. 88, art. 1345, it is regarded as an indeterminate type of monument, but suggestive of a "Cairn." However, from its size, shape and appearance, coupled with the facts that much peat-ash is observable in the structure and that rude stone implements are plentiful on the site, the ruins are undoubtedly those of a house. Also, in support of this classification, dish-querns evidently taken from the building are incorporated in a dyke close by. (551654.)

"The Peerie Roonie," Whalsay.

30. The remains, which are known by this local name meaning the "small heap of stones," lie about 50 yds. from the middle of the western side of the Loch of Houll. They are greatly destroyed, but at one or two places short lengths of the inner face of the dry-stone wall of a chamber can be detected. Also a stone-built drain, through which water still flows, runs through the site and probably provided the fresh-water supply when the structure was occupied. In the *Inventory of Shetland*, p. 85, art. 1318, "an entrance-passage 10 ft. long, opening towards the east side" is recorded and the suggested "former existence of a chamber 4 ft. by 3 ft. 6 ins. wide where measurable" may actually have been one of the recesses which are a feature in this early type of house. Peat-ash and rude stone implements found within the structure also support the idea of a house and not that of a cairn as such it is recorded in the *Inventory*. (554640.)

PARISH OF WALLS.

Scord of Brouster.

31. The remains occupy a site on the slopes of the Scord of Brouster a short distance north of the road between the Bridge of Walls and Walls and about 300 yds. west-south-west of Brouster. The stead of the house is represented by an oval grass-covered bank measuring on the outside about 43 ft. by 34 ft. on the axes, the longer dimension being from north-west to south-east. The position of an entrance passage on the south-east is traceable by a gap in the bank and protruding stones and walling in the hollow interior show a probable series of six contiguous recesses around the inner face of the chamber which measures approximately 24 ft. by 18 ft. inclusive of the recesses.

A field system attached comprises five or six fields, totalling some $2\frac{3}{4}$ acres in extent. The boundaries are much denuded, but definite in some parts and traceable in others. One dyke, better preserved than the rest, over-rides the house walling and is consequently of later erection, but it may simply be a rebuilding on the old foundations. The field enclosed by this boundary shows cultivation rigs and in all the fields there are stone gathers.

About 26 ft. to the north of the house there is an oblong dry-stone construction, now deep-set in the soil, which may be original; it measures externally 23 ft. by 19 ft. Two other sub-oval constructions are located in the northmost fields and may also be contemporary. They take the form of grass-covered stony banks and each encloses a hollow. In overall dimensions they average 35 ft. by 27 ft. and the spread of the bank is 7 ft. or 8 ft. in width. These sizes suggest they might be adjuncts to the house but they also compare well enough with those of small houses reported on below (figs. 9 and 11).

(256515.)

SCORD OF BROUSTER

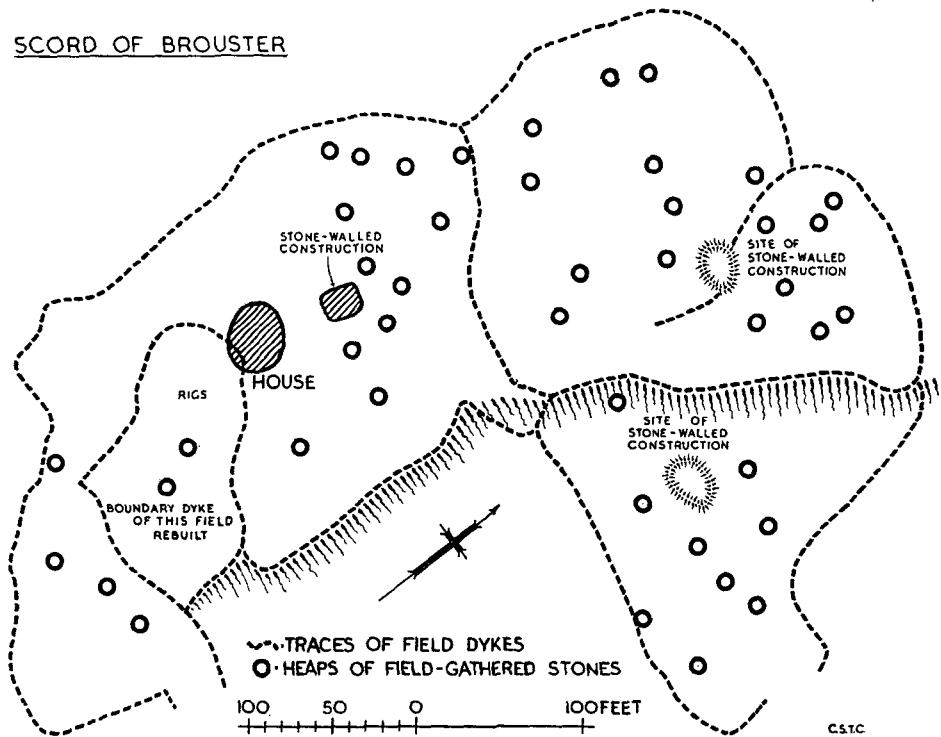


Fig. 11.

PARISH OF SANDSTING.

Beside Stanydale Temple.

32. House No. I impinges on the line of a boundary wall 75 yds. west-north-west of the temple. Oval in outline it measures extremely about 44 ft. by 34 ft. over the surrounding grass-covered bank of wall debris which contains many large stones either embedded or loose. A gap in the north-west end probably marks the position of the entrance (fig. 12). (285503.)

33. No. II lies in what has now become marshy ground 235 yds. west-south-west of the temple and is sited in the north-east corner of the western of two adjacent fields which measure respectively 134 ft. by 160 ft. and 164 ft. by 160 ft. There are slight traces of the usual bank surrounding a hollow and also indications of an entrance at the eastern end. A trench dug on the north side revealed

the dry-built masonry of the inner face of the chamber and peat-ash and two quartz scrapers were found. Over the bank the measurements are 40 ft. by 28 ft. on the axes (fig. 12). (284504.)

34. No. III lies 50 yds. to the south of the temple and is the least distinct of the group. The hollow interior is the most pronounced feature but there are a few stones in curving alignment on the north-eastern arc of the shallow bank

HOUSE-SITES AND FIELDS BESIDE TEMPLE AT STANYDALE •

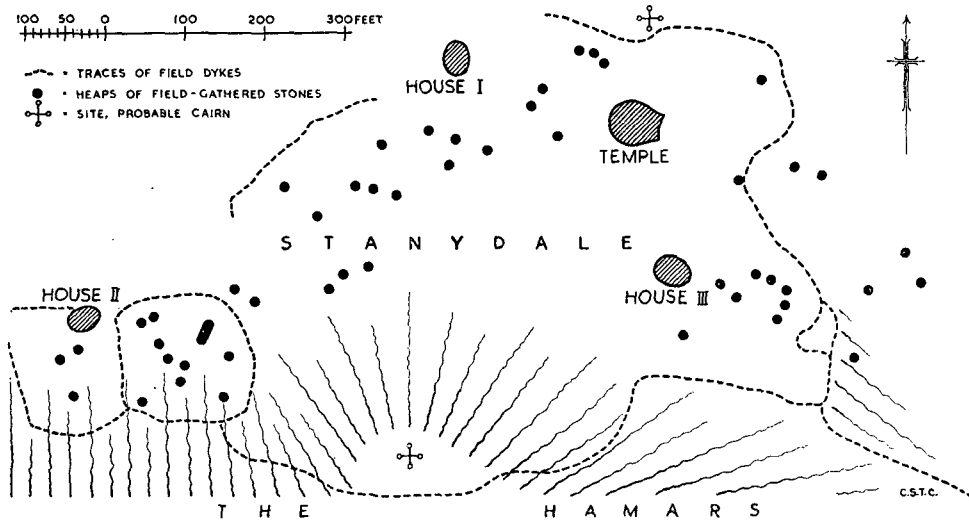


Fig. 12.

where an outer-wall-face is to be expected. A hole dug in the middle of the interior to a depth of 3 ft. through a growth of peat did not strike any noticeable floor-level or other indication of occupation but another hole dug near the northern edge produced a laid stone as if part of a wall foundation and, in front of it, a quantity of peat-ash and two quartz scrapers. The site measures approximately 48 ft. by 38 ft. (fig. 12). (285503.)

The temple and houses Nos. I and III are enclosed within the same field which is of large size, measuring 650 ft. from east to west by 550 ft. from north to south. Its southern boundary rises high on the slopes of the Hamars and the western forms a mutual line with the eastern boundary of the fields at House No. II. Impinging on the boundary at a distance of 40 yds. to the north of the temple there are several earthfast stones in a low mound which are evidently the remains of a contemporary structure, but without excavation its category is indeterminate (fig. 12).

Beside Gruting School.

35. House No. II. The site is on the south side of the road below The Hamars where it forks to the school and is built over and partly destroyed by the schoolmaster's garage, but the curved south-eastern end is traceable in a grassy scarp where some of the outer facing stones project above the surface.

The opposite end has been swept away but the dimensions of the house have been approximately 48 ft. by 44 ft. In preparing the site for the garage the schoolmaster states that he unearthed much peat-ash and several stone implements (fig. 4.) (280499.)

36. No. III. At a point about one-quarter of a mile east of the school the road has cut right through the middle of a house-site, leaving a curved end on each side fairly well defined by stones and banks. The hollow interior is now marshy and round about there are several unenclosed mounds of gathered stones. (282498.)

Croos of Voil.

37. About 600 yds. south by east of Sefster and at the foot of the peat- and heather-clad slopes of the Ward of Sefster a grassy patch a short distance from the left bank near the source of the Voil covers the remains of a house. Dimensions are indeterminate but three earthfast stones in the interior hollow at the north end indicate the frontal stones of radial partitions dividing wall-recesses such as are noticed in several houses of the series. A plantie-crub on the spot has evidently been built out of the ruins and a rude but complete stone implement (Museum Registration No. HD 1593) was found half buried in the mound of the destroyed wall of the house. The implement was lanceolate in shape, smooth pointed at one extremity and roughly squared at the other and measured 13.3 ins. by 3.15 ins. by 1.9 ins. (fig. 2). (303498.)

Ness of Gruting.

38. House No. II is situated on a level shoulder of the slopes of the Ness about 330 yds. due west of No. I (figs. 5, 9, 13) and is well defined by a grass-grown stony bank following a roughly circular outline and enclosing a hollow interior. Two earthfast stones on the north suggest the line of the inner face of a wall and two others, evidently placed one in each side of the rear of an entrance passage, mark the opposite face and limit the length of the chamber at 20 ft. The extreme dimension of the bank is roughly 40 ft. in diameter.

Two field boundaries springing from the house walls are traceable on the north and north-east respectively and a large level area to the north-east of these seems also to have been cultivated. On the slopes immediately south of the house the fields are terraced and are outlined on the down side by heavy scarps, some of which have the appearance of being revetted in stone. In places the terraces have also been bounded or subdivided by dykes and stone heaps are present in the enclosures. Altogether this system comprises ten fields, but this number includes those of House III which cannot be isolated by any distinct line of separation. On the crest of the third scarp down from the house there is an oblong structure, measuring about 14 ft. by 11 ft. overall which may be contemporary as its stone walls sit deeply into the ground. There is a somewhat similar construction in the same field as the house at the Scord of Brouster (No. 31). A large sheepfold on the site is comparatively modern. (278484.)

39. No. III lies 250 ft. to the west of No. II but only very slight traces of the southern half remain on the outside of a plantie-crub which has been built out of the ruins and obliterates the other portion. In the existing bank there is a large earthfast stone on the assumed line of the inner face of the chamber and in front of it a test-hole, roughly 3 ft. in diameter and 1 ft. 4 ins deep,

PLANS OF HOUSE-SITES
NESS OF GRUTING



- TRACES OF FIELD DYKES
- HEAP OF FIELD-GATHERED STONES
- X BANK OF STONE FLAKES AND MIDDEN-DEPOSIT
- 0 5 10 FEET

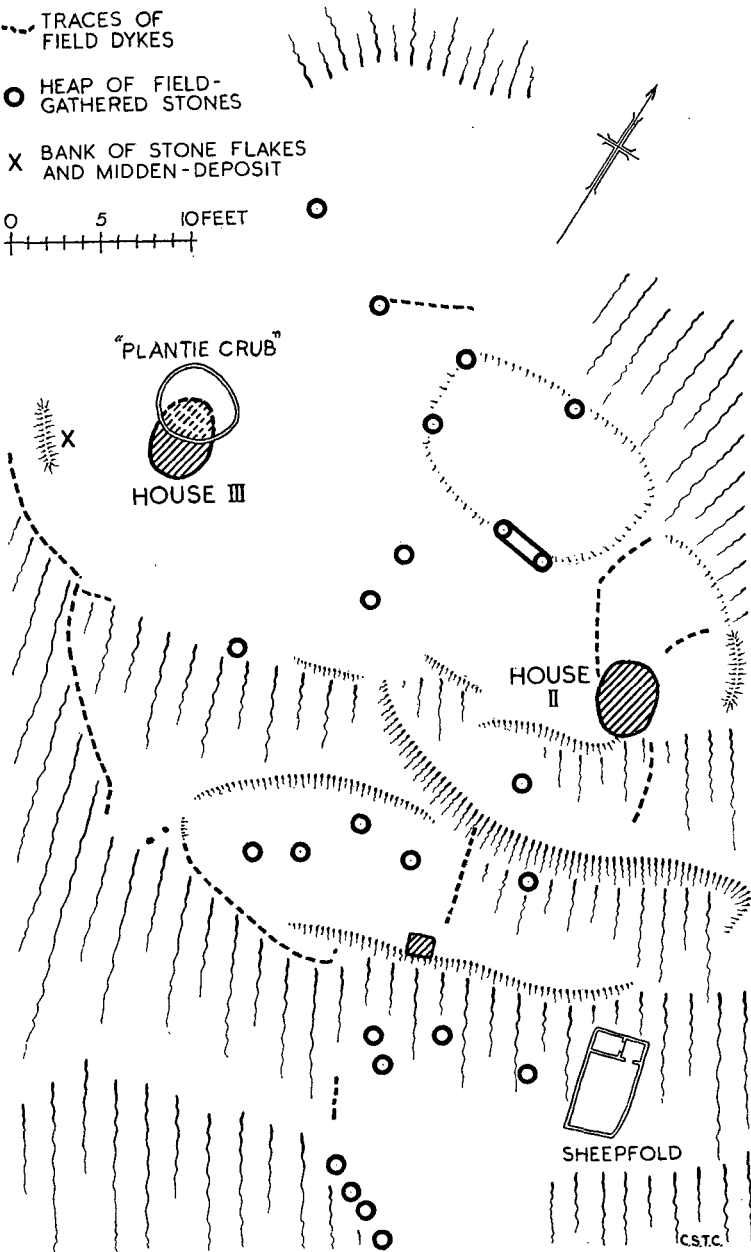


Fig. 13.

C.S.T.C.

was sunk. Out of the hole came pottery fragments of three different vessels and 33 rude stone implements, while a quantity of peat-ash was encountered and suggested a floor-level. A selection of these implements was handed into the Museum of Antiquities of Scotland and the remainder were returned to the hole.

About 20 yds. to the south-west of the house there is a straight stony bank, marked X on the site plan (fig. 13) which, although probable, cannot be said with certainty to belong to the period. It measures 30 ft. in length, 10 ft. in width, and 1 ft. 3 ins. above ground-level, but the excavation of a cross-sectional trench dug by Mr William Kirkness revealed that there was a depth of 1 ft. 6 ins. or so below the present surface. Immediately under the turf animal bones, pieces of a steatite bowl, a rude stone implement and some oyster shells were picked up, and deeper down in the heart of the mound there were more bones and whelk shells. The bones, examined by Dr A. S. Clarke, represented a large type of modern ox, a Celtic ox, a sheep and a pig. The mound consisted chiefly of cores and flakes and unfinished rude implements, all suggesting it may have been the site of a local workshop for the manufacture of these tools. (277484.)

40. No. IV is sheltered at its southern end by a grassy ridge about 90 yds. due north of No. III. Doubtful surface indications in the shape of widespread stony banks along the sides of an oval hollow were confirmed as debris from the walls of a house by the digging of a trench, along the inner edge of the western bank, which exposed the dry-built masonry of the face of the chamber. The entrance appeared to be at the end next the ridge and the overall measurements were 50 ft. by 39 ft. No stone heaps were noticed in the vicinity (fig. 13). (277485.)

PARISH OF TINGWALL.

Loch of Girsta.

41. The site is situated on sloping ground between the main road from Lerwick to Mossbank and the western shore of the Loch of Girsta about 500 yds. from its northern end. It comprises the stead of a house and two fields. The house lies about half-way between the road and the loch and is indicated by a hollow of oval shape measuring approximately 40 ft. by 35 ft. Two or three stones on end protrude above the turf and at the eastern end there is a short length of an outer wall face. At a distance of 8 ft. to the east there is a small field of somewhat pear-shaped outline, which measures 35 ft. by 25 ft. and it leads through a gap on the east again to a larger field which extends down to the water's edge. Here a roughly straight line of boulders marks the boundary while elsewhere the dykes are curvilinear and the enclosed area measures 60 ft. by 52 ft. in greatest dimensions (fig. 14). (431529.)

Stromness Voe.

42. On the west side of the Voe in the second field from the head the house-site lies on the gentler slopes of the Hill of Oligarth. The usual stony mound around a hollow of oval shape marks the spot. The tops of four earthfast stones show through the turf and in the south-eastern arc there is a face of masonry returning as a recess off the single chamber within. In the lower end on the east-south-east an entrance gap is noticeable and overall dimensions of 41 ft. by 36½ ft. are indicated. Traces of dyke foundations remain in front

of the entrance and 160 ft. to the east of it there is a large field, quadrangular in shape with rounded corners, which extends to the shore of the voe and measures 220 ft. by 190 ft. in length and breadth respectively (fig. 14).

The monument is noted as a *Cuml* on the O.S. 6-in. Map of Zetland, Sheet XLVIII, and is described as a *Cairn* in the *Inventory of Shetland*, p. 122, Art. 1508. (388473.)

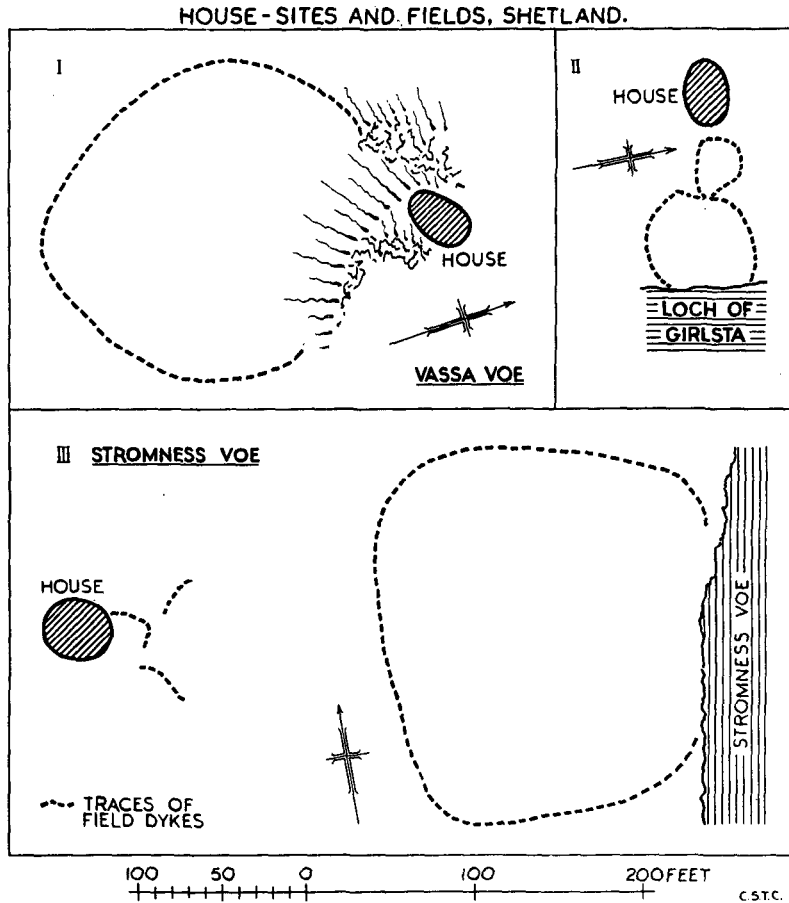


Fig. 14.

South Setter, Tingwall Parish.

43. A number of earthfast stones in a bank of sub-oval formation around a hollow interior indicate the ruins of a house on the gently sloping ground of the bleak peat- and heather-clad moorland fully 600 yds. south-west of South Setter. The longer axis is orientated north-west and south-east and the sizes overall are 36 ft. by 28 ft. The extremities of another bank issue from the southern end of the house and curve in a circle of 31 ft. diameter to enclose a forecourt or pound in front of the probable entrance. (406428.)

Loch of Ustaness.

44. The remains are on the higher ground about 100 yds. from the southern end of the loch and fully half-a-mile west of the above No. 17. It is deeply covered in peat and heather but, where the heather has been burned off, large set stones and one or two lengths of curved inner faces of masonry are revealed in what appears to be a thick dry-built stone wall. This house seems to be as old as, but different in plan from, the others mentioned throughout and comprises two chambers on a line lying east and west. At the southern end of the mutual partition a gap flanked by a large stone, suggested a communicating door and the entrance to the house probably led in through the eastern end of the structure to the smaller of the chambers. From a distance of 25 ft. eastwards of the building a dyke-foundation ran in an eccentric circle to converge on a point against the west wall of the house. Around this again the remains of another dyke encircled the whole at a varying further distance of 110 ft. at most. (399428.)

PARISH OF LERWICK.

Ness of Trebister.

45. On a rough rocky terracing about half-way up the steep slopes of the Ness of Trebister above Pund's Geo on the west side of the Voe of Sound there are substantial remains of a structure in which many large-sized stones are still observable. The general indications strongly suggest a dwelling of the type described. (456395.)

PARISH OF DUNROSSNESS.

Catpund Burn.

46. House No. I is set on a rocky knoll 300 ft. above sea-level on the slopes of the Clifts of Cunningsburgh about 100 yds. to the west of the main road and 175 yds. north of the Catpund Burn. It is of small size, measuring $36\frac{1}{2}$ ft. by 33 ft. over walls from $6\frac{1}{2}$ ft. to $7\frac{1}{2}$ ft. in thickness. The outer and inner faces of the walling are traceable in places by large earthfast stones in curvilinear alignment. An entrance passage, $7\frac{3}{4}$ ft. long and $2\frac{1}{4}$ ft. wide pierces the wall on the south-west and is marked at each of the four corners by an upright stone. (426273.)
47. No. II lies on a level plateau near the Thief's Hole at the 400 ft. contour-level, a short distance to the west of No. I. It is oval in shape, the outside being traceable on the north and south sides as the scarp of a stony bank with large periphery stones here and there. The structure measures extremely along the axis from north-east to south-west 47 ft. and transversely 34 ft. The ruin has been robbed of its stones in the building of a late oblong enclosure on a parallel axis inside the house. This erection measures 22 ft. by $17\frac{1}{2}$ ft. over walls $3\frac{1}{4}$ ft. in thickness. The foundations of a boundary dyke at a distance of 73 ft. on the north-west and south, but widening elsewhere, enclose a field area around the site. (424275.)

Clumlie.

48. The remains are some 45 yds. east of the main road from Lerwick to Sumburgh and about 500 yds. south of the junction to Clumlie. They lie on a grassy

slope and show up as a low bank and hollow measuring 45 ft. by 36 ft. on the axes. The bank is about $1\frac{1}{2}$ ft. high and contains many set stones, while a gap on the south-south-east and a rounded return of the stonework here suggests the position of an entrance. (397185.)

North Bremire.

49. House No. I. The site lies on fairly level ground barely 200 yds. north of North Bremire and the surface indication is a bank just over 1 ft. high at most above an enclosed hollow. Several earthfast stones are set on edge or end, and in the southern sector there is a length of 9 or 10 ft. of an inner wall-face of the chamber. Around the northern arc there are four radially set stones in the front of the inner wall-line from which it may be inferred that recesses were constructed in the walling. A footpath cuts off the east side of the house and round about there are traces of field dykes and stony mounds. Plantier-crubs on the spot have apparently been built out of the ruined structure. The axial dimensions of the bank are 47 ft. and 35 ft. and the walling on the south side appears to be about 9 ft. in thickness. (388175.)

50. No. II. This is again a low stony bank and hollow a very short distance to the north of above and the overall measurements are 40 ft. and 28 ft. The bank rises to a height of 2 ft. on the outside and 1 ft. on the inside. It is much destroyed and only one large upright stone stands above the surface. (388175.)

Dalsetter, Boddam.

The site lies 50 yds. east of the road between Dalsetter and Boddam and about midway between Dalsetter and Dalesbreck to the south. It is of especial interest in that it comprises three houses within a common boundary enclosing an irregular circular area which, in itself however, has been subdivided into smaller allotments. The ruins of the encircling wall, though much denuded and almost totally destroyed near a sheepfold by the roadside, still contains numerous large foundation stones. Nearby on the east side there is another enclosure also showing many large stones in its boundary-dyke, but there is no trace of a separate house-stead, and from here round to the south there are three or four other large curvilinear enclosures connected in themselves and to the first-mentioned boundary. All probably form a complex field system where, in parts, cultivation is testified by mounds of field-gathered stones. (404156.)

51. House No. I is the most northerly of the three and is of oval shape with an interior hollow surrounded by a bank in which a good number of large stones still survive. The bank is fairly well defined on the north and east arcs where a wall-thickness of $5\frac{1}{2}$ ft. is suggested and it is traceable in places correspondingly opposite. A width of $32\frac{1}{2}$ ft. over the banks is obtainable but the length of the longer axes from north-west to south-east is indeterminate.

52. No. II is 20 yds. west-south-west of above and roughly 40 yds. distant from the corner of the sheepfold beyond. It is in much the same state of deterioration as No. I and is heather-overgrown, but traces of a recess opening off the interior are discernible and, diametrically opposite, a gap in the bank points to the position of an entrance. Both features are on the line of the main axis which measures $37\frac{1}{2}$ ft. and transversely the width is 33 feet.

53. No. III is about 100 yds. south-south-east of No. II. The surrounding bank rises about 2 ft. above the general level outside and the interior is slightly hollow. The remains are in poorer condition than the others and measure 41 ft. by 31 ft., the direction of the longer axis being from east-north-east to south-south-west.

Wiltrow.

54. Excavated by Dr A. O. Curle and attributed by him to the Iron Age on the strength of a piece of iron slag which apparently had found its way into the house from the bloomery beside it. Also, it is erroneously described as being of "courtyard plan." The finds of pottery, rude stone implements and quartz scrapers would agree with the typical relics found in the Stanydale and Gruting sites above described. Oval on plan, the axial dimensions are 31 ft. and 25 ft. and the walls range from 5 ft. to 9 ft in thickness. Cf. *P.S.A.S.*, LXX, 153 ff. (396143.)

Jarlshof.¹

- 55, 56, 57. In the complex of buildings at Jarlshof, the three earliest houses, adjacent to one another in a group, would appear to belong to this category and not to houses of courtyard type as they have been so described. They are oval on plan and each contains a main chamber with subsidiary recesses and an apsidal recess or inner chamber. The largest measures 38 ft. by 34 ft. and the entrances all lie towards the south-west. (399096.)

The three houses at Jarlshof are not shown on the Distribution Map (fig. 2), but the three sites excavated and already described are included.

Nos. 1-8, 10-26, 46-53, were reported by Mr Scott; Nos. 41, 43-45, by Mr Moar; Nos. 9, 29, 30, by Mr Stewart, and Nos. 31, 37, 40, by Mr Henry.

To all who contributed information and gave helpful assistance in connection with the above discoveries I wish again to express my sincere thanks and would like to mention especially my gratitude and indebtedness to Mr Laurence G. Scott, for valuable help, hospitality and manifold facilities on the numerous occasions of my visits of investigation without which resources this paper could not have been so fully presented. Thanks also are due to Miss Audrey Henshall for the preparation of the reports on the pottery and implements; to Dr A. S. Clarke and Mr J. S. Speed, for their examination and report on the animal bones; to Mr Peter Moar, Mr William Kirkness and Mr James Henry for their active co-operation and interest during the work of excavation and survey; to Mr Frank Scott and also to Mr Kirkness for the photographs where acknowledged to them in the illustrations; to Mr James M. S. Tait, factor for the owners of the properties, for permission to excavate; to the Society of Antiquaries of Scotland for defraying the working expenses and to the Royal Commission on the Ancient Monuments of Scotland for allowing time off for supervision during part of the operations.

¹ *P.S.A.S.*: LXXXIV, 205 and fig. 10 (p. 201); LXVI, 115; LXVII, 83; LXVIII, 225; LXIX, 86.

APPENDIX I.

Report on the Bone Fragments from House near Stanydale Temple and Houses Nos. I and III, Ness of Gruting.

BY A. S. CLARKE, PH.D., Royal Scottish Museum, AND J. G. SPEED,
F.R.C.V.S., Royal (Dick) School of Veterinary Studies, Edinburgh.

House, Stanydale.

Cremated bones from peat-ash.

Part of talus of ox—about two-thirds normal size—probably fully grown animal.

Portion of epiphysis of a limb bone—cancellous bone only, all surface covering gone—possibly head of humerus of sheep.

Two portions of carpal of ox—small—suggests animal of same size as above.

Fragment of fibula of horse.

Part of mesethmoid bone from ox (probably).

House, No. I. Ness of Gruting.

Very friable enamel plates from tooth of horse—size of animal cannot be estimated.

Teeth in matrix—horse.

Tooth fragments of horse.

Bit of limb bone—probably metatarsal of sheep.

Fragments of sheep teeth.

Part of talus of ox.

Capitulum of rib—unidentified.

Doubtfully distal part of sheep humerus.

House, No. III. Ness of Gruting.

From the bank marked X on fig. 13 to south-west of house:

Part of humerus of sheep.

Part of humerus of Celtic ox.

Part of humerus of large modern type ox.

APPENDIX II.

Pottery and Stone Implements from Ness of Gruting.

By AUDREY S. HENSHALL, M.A., F.S.A.Scot.

THE POTTERY.

In describing the pottery from House No. I at Ness of Gruting, which has produced a far larger amount than any other structure in this group of sites, it is as well to keep in mind the pottery from the houses at Stanydale and Wiltrow¹ and from the temple-site of Stanydale.² The pottery here described is from Gruting House No. I unless otherwise stated. (The National Museum registration numbers are used: it is all classified under HD and only the numbers are quoted.)

The great quantity of pottery found at House No. I is due to rather unusual circumstances. Most of it was found in the filling of the walls which was partly of clean peat ash, but in places ash mixed with soil, or just soil. Most of the sherds were in the clean ash, and a considerable number of these had been reburnt to, in many cases, a harder texture and bright pink or cream colour, though with a few this reburning had increased their friable nature. There is no more than one-third of any pot remaining, and most pots are represented by only a few small sherds. A number of reburnt and normal sherds have been found to join. There are five instances of sherds of the same vessel coming from the wall-filling and house-floor, and one instance from the wall and the pit in the floor. The inference is that the huge quantity of peat-ash is the waste from an undiscovered pottery kiln, and the sherds found in the ash, certainly those which have been reburnt, are wasters thrown out with the hot ash. The accumulated ash seems to have been used very soon afterwards for filling the house wall, for it was quite clean, and a heap of ash would soon be dispersed by wind. So the pottery in the ash probably antedates the house only by a matter of months. All the pottery itself is probably contemporary with the exception of a number of small Iron Age sherds which come mainly from the tops of the walls.

The ware of the Gruting pottery varies greatly. Most of it is hard and fairly heavy with large grits and a fine slip. In some the ware is grey or black with white grits, in others brown with pink granitic grits. However there is some hard and fairly thin ware of good quality; outstanding is 925, with a maximum diameter of about 14 ins. There are also all degrees of friability, the extreme in heavy and crumbling pottery being the large vessel from Stanydale temple.

Although there is a great quantity of decorated sherds, less than half of which are listed here, the decorative techniques are limited. By far the commonest is a profuse decoration by incision or channelling of herringbone, chevrons and diamonds, in general in the same tradition as the pottery of the chambered tomb builders of the Hebrides. The decoration of the internal bevel of the rim and use of panels of vertical and horizontal lines are common Hebridean features. The kiln-site of Eilean-an-Tighe, N. Uist,³ produces the closest parallels to the Gruting pottery, which may be significant in that we are dealing with a domestic rather than funerary range of vessels. But the connection with Eilean-an-Tighe should not be overstressed, as Gruting seldom has elaborate rim profiles and some Hebridean characteristics are quite absent.

¹ *P.S.A.S.*, LXX (1935-6), 153-69. ² *Ibid.*, LXXXIV (1949-50), 194-6.

³ *P.S.A.S.*, LXXXV (1950-1), 1-37.

One feature which should be assigned to Western Neolithic origins is the appearance of lugs at Gruting, one plain, another belonging to the curious hybrid vessel 925. Lugs also occur as one of the Western elements in the Hebridean Neolithic.

In shape there is also a connection with Eilean-an-Tighe, for the large ridged jars with zones of incised chevrons between cordons are related to some of the large cordoned vessels at Gruting, a form which would also appear to be ancestral to the excessively heavy and ill-made flat-based jars from Stanydale temple.¹ This deep straight-sided jar form with a heavy club-rim, but without the cordons, is found at Eilean-an-Tighe and also at sites of the Manx Ronaldsway culture.² However, the precise relationship of these sites has not been worked out and one can no more than indicate certain elements common to them all.³

Gruting has little in common with the Orcadian Neolithic culture, although the typically Unstan motif of hatched triangles is used, not confined to the collar but apparently employed as all-over decoration of a large vessel. This motif also occurs occasionally in the Hebrides.

At Gruting and Stanydale house there is a rare use of shell-edge impressions, and although this is alien in general to both beakers and Western Neolithic ceramic, it is found in N. Uist, at Cletraval,⁴ and on a vessel from Clachan,⁵ and also on sherds from Glenluce, Wigtownshire. Two sherds from Stanydale house, with all-over horizontal shell impressions, are very similar to one from the sand dunes at Hedderwick, E. Lothian (BM 58).

Comb impressions also are rare at Gruting, but are all made with heavy square-ended teeth quite unlike the comb decoration of beakers. The outstanding example is 925, a large vessel of hard dark ware with three cordons, lugs and incised decoration towards the base. The upper part of the pot has all-over comb-impressed chevrons and herringbone. Two cordoned sherds of very ill-fired heavy ware from Mye Plantation, Wigtownshire, also bear heavy slanting comb-impressions, while other sherds with plain or incised walls have transverse comb marks on the internal rim bevel.⁶ A single small rim sherd from the cave site at Rudh-an-Dunain⁷ also bears similar decoration on the wall and rim bevel. Its rim-form suggests a food-vessel; and there is one food vessel from Lunanhead, Angus (EQ 18) with all-over comb herringbone which particularly recalls the Gruting pot.⁸ Various Scottish food-vessels bear heavy comb impressions allied with other decorative techniques.

Two rather rare items at Gruting which should be noted are the use of vertical cordons with incised decoration between, and the use of all-over patternless grooving made by an object causing a double line. Both these devices can also be paralleled in the pottery from the sandhills of S.W. Scotland. A vertical cordon with scratched lattice decoration beside it occurs on a sherd from Mye Plantation.⁹ The patternless grooving has been found on sherds from Glenluce Sands¹⁰ and at Ronaldsway,¹¹ and a similar line is used for the rough chevrons

¹ *Ibid.*, LXXXIV (1949-50), 195, fig. 7, a and b.

² Cf. for instance Ronaldsway pots in *P.P.S.*, XIII (1947), pl. XXIV with Eilean-an-Tighe in *P.S.A.S.*, LXXXV (1950-1), pl. II, 2, and the rim forms *P.P.S.*, XIII, 156, fig. 8, with 916 from Gruting or Eilean-an-Tighe or Rudh-an-Dunain cairn, *P.S.A.S.*, LXVI, (1931-2) 199, fig. 12, and the single thin applied cordon at Ronaldsway, 155, fig. 9, with Eilean-an-Tighe, 21, 1.33 and Gruting 1339. (The cordoned sherds from this pot are very small and are not illustrated.)

³ Piggott, S., *Neolithic Cultures of the British Isles* (1954), 348.

⁴ *P.S.A.S.*, LXIX (1934-5), 500-1.

⁵ *P.S.A.S.*, XXXVII (1902-3), 389, 391.

⁶ *Ibid.*, XII (1876-8), 288-298.

⁷ *B.H.A.* 39 and 41 in the National Museum.

⁸ *Ibid.*, LXXXVII (1952-3), 198-200.

⁹ *Ibid.*, LXVIII (1933-4), 217, 7.

¹⁰ *Ibid.*, XXXVII (1902-3), 390, fig. 8.

¹¹ *P.P.S.*, XXII (1947), 151, fig. 6b.

on such "degenerate beakers" as that from Newhouse, Birsay, Orkney (EG 89).¹

It is difficult to assess the degree of influence from beaker pottery at Gruting. At both Stanydale house and temple there were a few very worn sherds of coarse B Beaker. Among the Gruting sherds 951 is probably nearest to a C Beaker, though the ware is not typical and the steep internal bend to the rim is decorated with incised chevrons and the pattern arrangement is difficult to parallel. It seems that beakers must be the prototype for the group of small flat-based vessels (Group III in the catalogue) which are characterised by slightly convex necks and concave collar immediately above the gentle expansion for the shoulder.

Some of the commoner incised motifs at Gruting such as zones of lattice and horizontal herringbone which occur especially in this group are found on beakers, though actually carried out with a fine comb and thus having a rather different effect, and both motifs occur made by incision or heavy comb on food-vessels. A close parallel to 930 is an unusual beaker from Gryndan, Northumberland (EG 34).²

One vessel from Stanydale temple was decorated with a design of impressed circles,³ which can otherwise only be paralleled in Scotland at the cave site at Rudh-an-Dunain⁴ where it was associated with another sherd already discussed and Beaker sherds, and at the cave at Kildalton House, Islay.⁵ Of course impressed bone-end occurs on various of the Scottish Secondary Neolithic pottery, including a vessel from Unival,⁶ and on food-vessels, but the form of this particular impression recalls sherds from the Swedish dwelling places,⁷ while other features such as the incised herringbone and chevron decoration at Gruting, particularly the horizontal herringbone in short lines as 930, the zones of lattice work and the deep chevrons on the rim of 1337 can also be paralleled at these sites in eastern and southern Sweden. However such devices as pits and perforations are absent from Gruting, and jabbed decoration is virtually so, while these techniques are an integral part of the Baltic repertoire.

Gruting would seem to have connections primarily with the Hebridean Neolithic and especially Eilean-an-Tighe, which itself has some undefined elements in it besides its underlying Western Neolithic origins; the same Western Neolithic influence can be seen at Gruting, in the lugs and some of the hard dark ware. The smaller vessels and some of the motifs suggest a connection with beaker pottery. But Gruting's other connections seem to be with ill-defined western coastal domestic sites (two of them include beaker ceramic among the relics) such as Mye Plantation, Glenluce Sands and Rudh-an-Dunain Cave.

CLASSIFICATION OF GRUTING POTTERY.

I. *Large cordoned jars.*

(a) *Ridged jars.* There are sherds from at least three of these vessels (917 (Pl. XLIII), 1337 (fig. 15), possibly 957) of which the most complete is 916 (Pl. XLIV, fig. 15). In this case the rim is thickened by an applied external bevel, and applied cordons divide the incised pattern, but the rounded base is undecorated. It can be compared with pots 1.1 and 1.10 from Eilean-an-Tighe. The ware is hard, bright pink due to reburning, with much granite grit.

¹ *P.S.A.S.*, LXXXIII (1948-9), 239, pl. xxxvii, 2.

² Abercromby, J., *Bronze Age Pottery*, I (1912), pl. xv, 184.

³ *P.S.A.S.*, LXXXIV (1949-50), 195, fig. 7c.

⁴ *Ibid.*, LXVIII (1933-4), 214, fig. 7, 7.

⁵ *Ibid.*, LXXVIII (1943-4), 120-2.

⁶ *Ibid.*, LXXXII (1947-8), 27, pl. ix, 2.

⁷ *Reallexikon der Vorgeschichte*, IX (1927), Pl. 27, f and k; Bagge, A., and Kjellmark, K., *Stenaldersboplatserna vid Siretorp* (1939), Pl. 41.

There is no base left of the other vessels. 1337 has a different form of rim, similar to the sherd 1357, with decorated internal bevel, the former with deeply incised chevrons (cf. *Reallexicon*, IX, pl. 27, c.) the latter with faint transverse lines.

(b) *Jar, probably with single cordon*, 1339 (fig. 16). Although not restorable, the sherds suggest a vessel similar to 1.33 from Eilean-an-Tighe. It has a slightly everted rounded rim and fragments of a narrow cordon, and is decorated all over with light grooves. The ware is friable coarse grey with a fine black slip. 1459 (Pl. XLIII, fig. 15) seems similar, anyway in decoration. 974 (a) and (b) are two cordon-sherds, the latter with slanting incisions.

(c) *Cordoned jar with comb impressions*, 925 (Pl. XLIV, fig. 16) is the largest vessel from the site with a diameter of about 15 ins., yet of surprisingly thin hard ware, buff-dark grey, ring built. The vessel is divided by cordons into four zones, the upper three decorated with all-over comb-impressions in chevrons, and the lowest with incised triangles, below which the surface is plain. There is no rim nor base. One lug survives and there are traces of another on the middle cordon. This remarkable vessel seems to be a hybrid, Western Neolithic in its ware and the lugs, whilst the comb impressions relate it to west coast sites and food vessels already discussed on p. 383.

Other sherds with comb impressions are mostly similar to 925; one with a rim 924 (fig. 16) is from a large vessel, the decoration in bands of lattice, which relates it to those sherds with incised lattice, especially 920 and 1346.

II. *Other pots related to the Hebridean chambered-tomb pottery.*

(a) *Straight-sided jar*, 1338 (fig. 17) is probably round-based, ring-built and decorated with panels of horizontal and vertical incisions, a motif common at Eilean-an-Tighe, 2.36, Z. 230, 1.33, X. 34.

(b) *Jar with wide grooves below rim*, 918 (Pl. XLIV, fig. 17) is of similar ware to 916, but has no base. The wide grooves recall a similar feature at Eilean-an-Tighe, especially X. 33, though these examples have an outward protrusion of the rim.

(c) *Sherds with hatched triangles*, 926 (fig. 16) of very friable thick ware with large grits and fine slip. The vessel is large with a diameter of 9.5 ins. The all-over pattern in carefully executed grooves consists of at least three groups of horizontal lines with zones of hatched triangles and slanting panels.

1400, although fairly thin ware is from a fair-sized pot, ring built. Probably the zone of decoration comes uppermost. Although the form is not an Unstan bowl, the decorative arrangement suggests relationship with this group. 927-8 (fig. 16) also bears hatched triangles.

III. *Small vessels of curved profile*, probably in shape derived from beakers. The motifs have been already discussed (pp. 382 and 383). A single worn sherd resembling a coarse string-ornamented B Beaker came from Stanydale house.

(a) *With zones of short incisions forming horizontal herringbone.*

The most complete example from Gruting is 930 (Pl. XLIII, fig. 17) of which a tiny sherd of the flat base survives, with three slanting rows of herringbone above. 933 (fig. 17) is very similar, and the wall sherd 1394

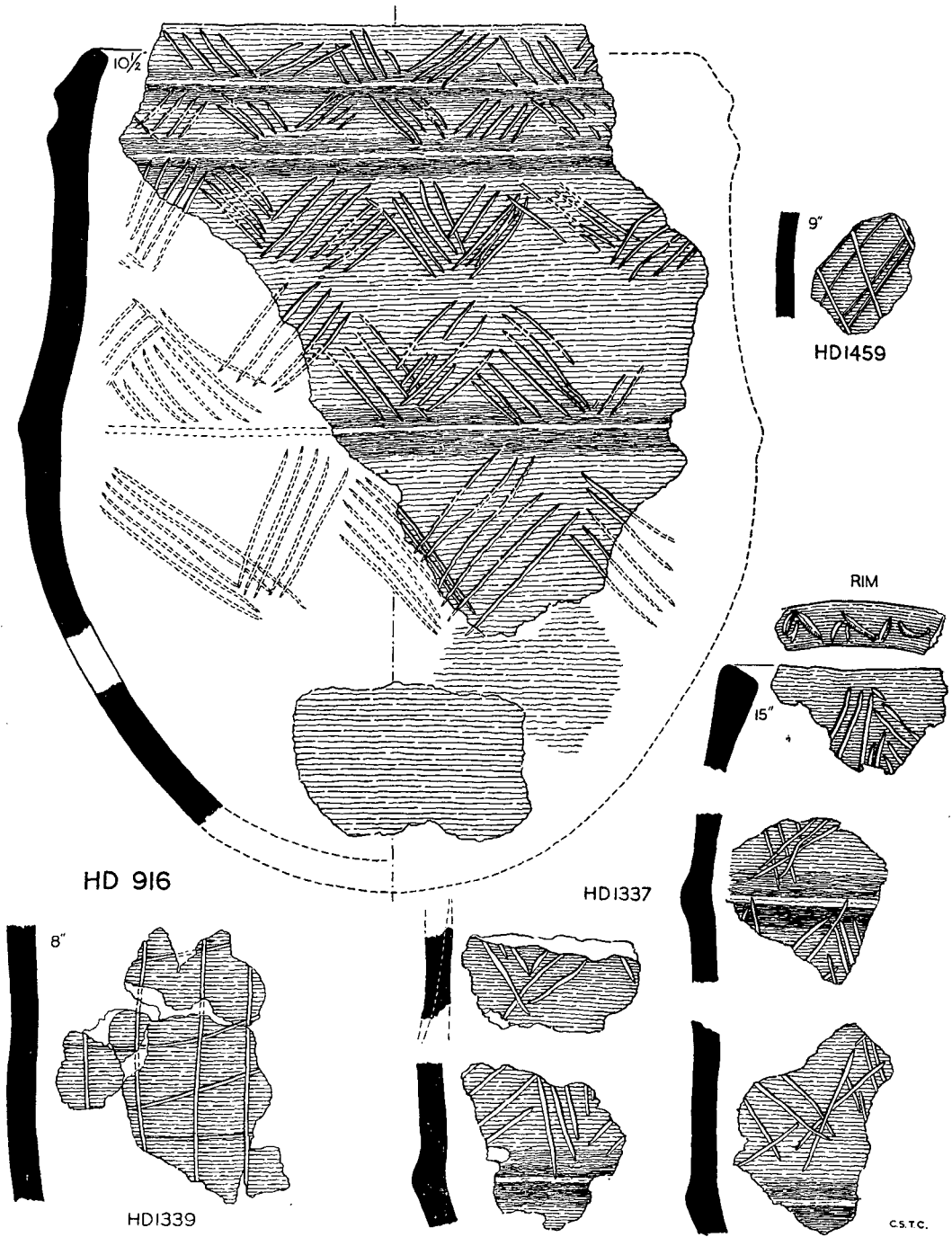
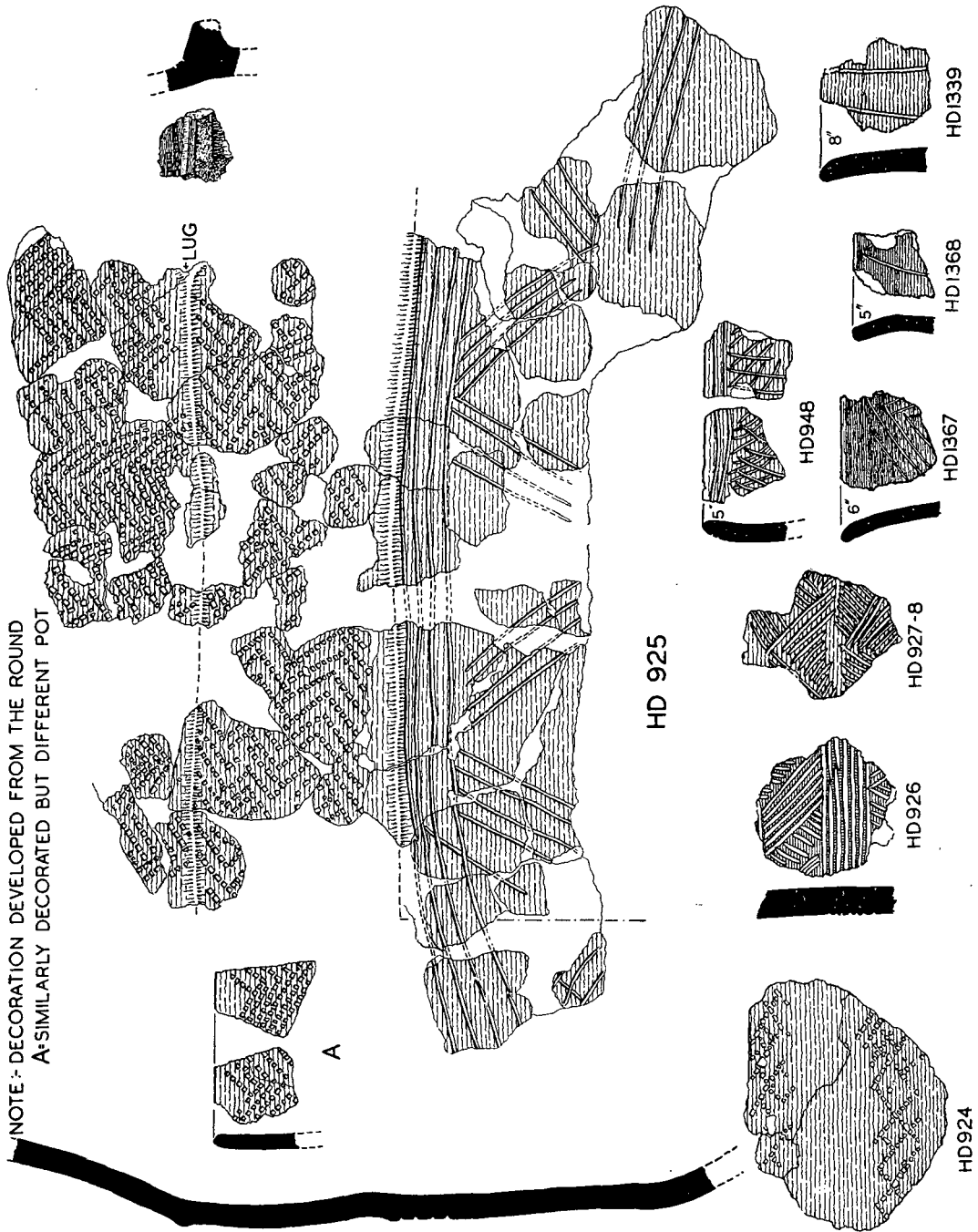


Fig. 15. Pottery from House No. I, Ness of Gruting.



NOTE - DECORATION DEVELOPED FROM THE ROUND
A - SIMILARLY DECORATED BUT DIFFERENT POT

Fig. 16. Pottery from House No. I, Ness of Gruting.

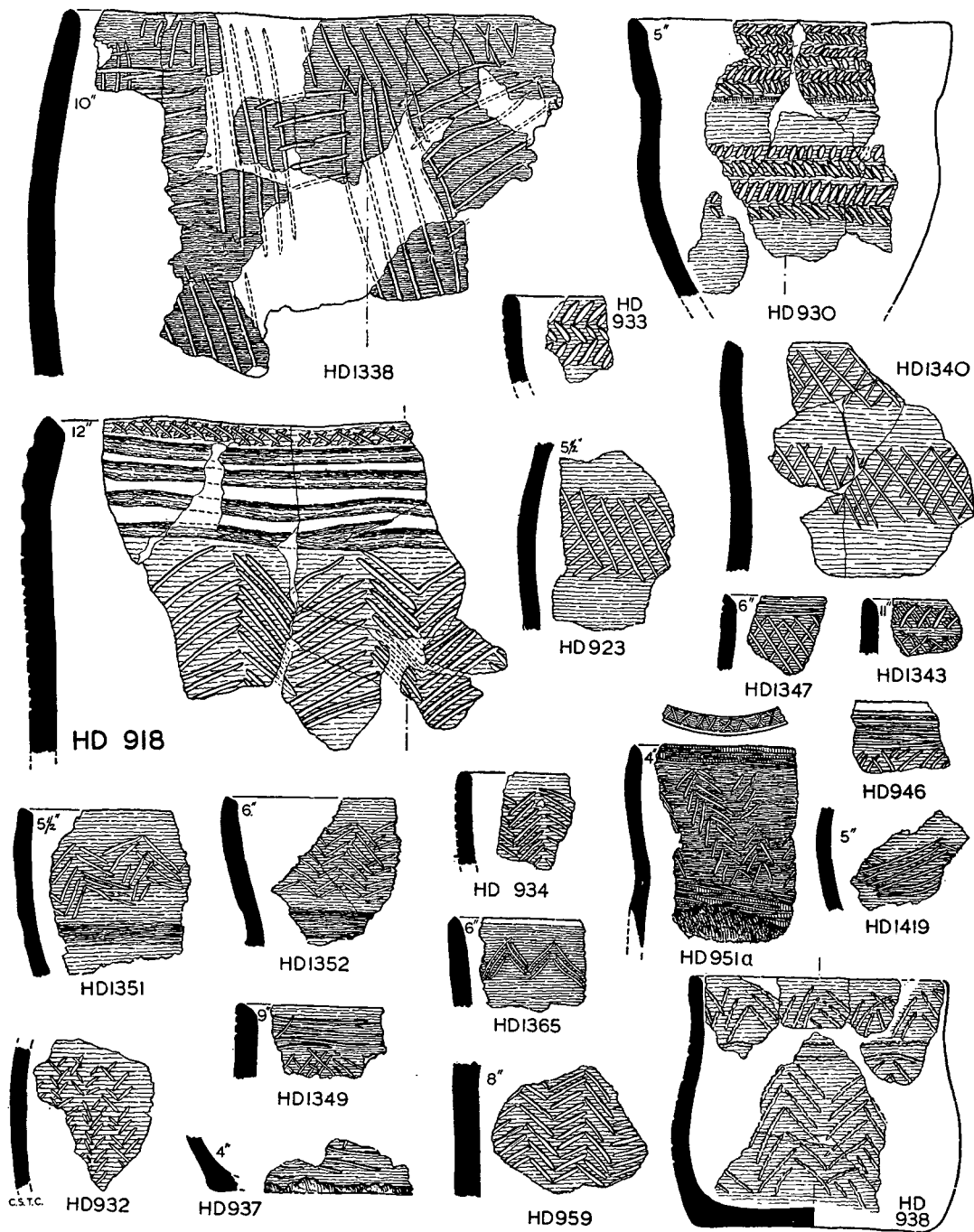


Fig. 17. Pottery from House No. I, Ness of Gruting.

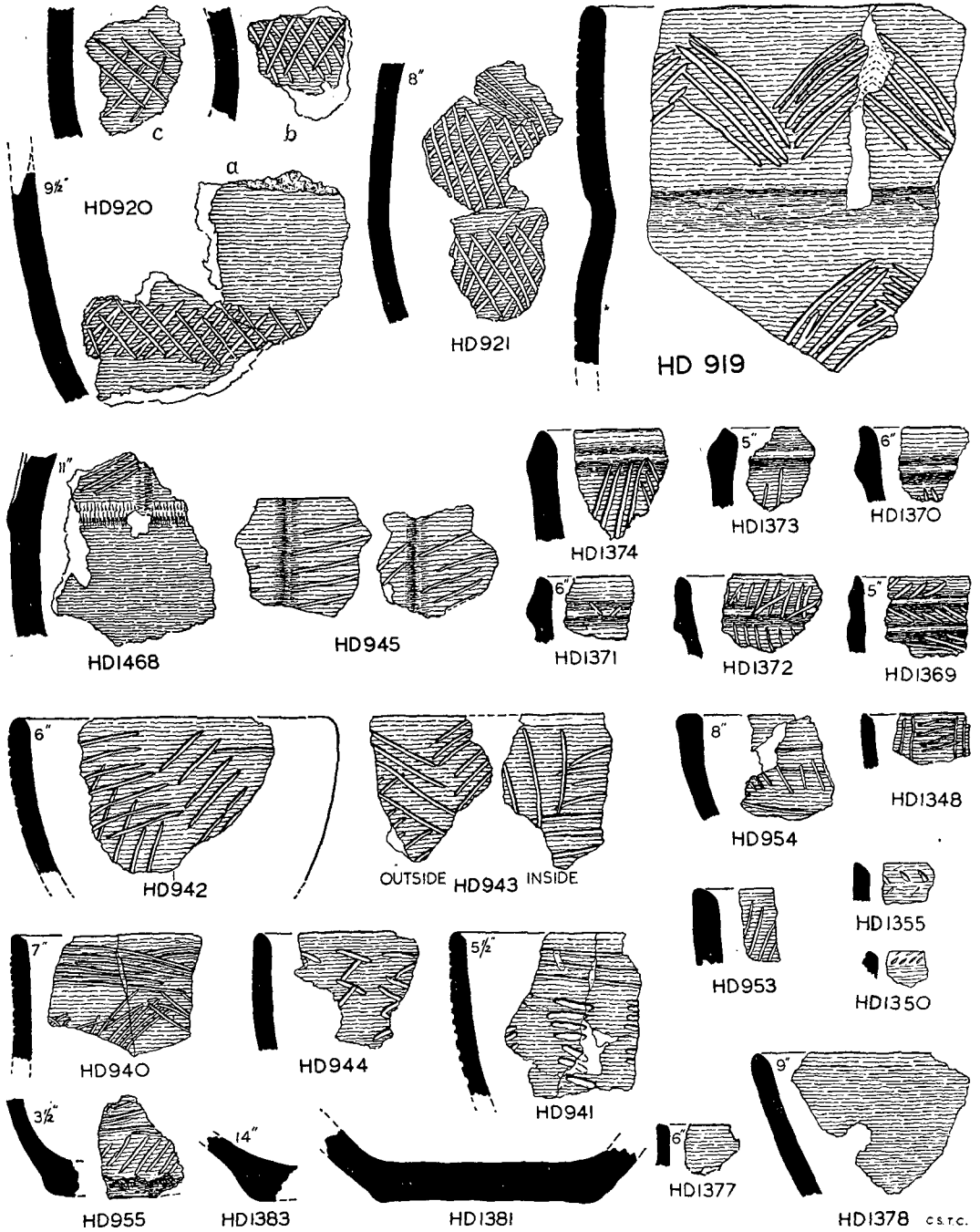


Fig. 18. Pottery from House No. I, Ness of Gruting.

(Pl. XLIII) and 935 1364 (Pl. XLIII) has a plain rim and straight sides ornamented with horizontal chevrons below which is the lattice-pattern typical of section (b).

(b) *With zones of lattice-work.* The most nearly complete pot from Gruting is 1340 (fig. 17) which in profile is close to 930, but a larger and heavier pot. 923 (fig. 17), 1342, and 1344 are wall sherds of this type. Of the similar rims 948 (fig. 16), 1341, 1343 (fig. 17) and 1347 (fig. 17) some have horizontal lines below the edge, and in the case of the last the profile has become angular.

(c) *With incised vertical herringbone.* The largest sherd from this group is 951a (fig. 17) which seems most nearly related to the Beakers, and has a rim diameter of 4 ins. It is hard dark thin ware, ring-built, and the rim has a steep internal bevel with incised chevrons. Outside the decoration is carelessly incised.

The vessels represented by 1351 and 1352 (fig. 17) possibly also 934 (fig. 17) have diameters of 4·5–5·0 ins., but are of thicker fabric. The collar is slightly concave with a noticeable convexity below. Other rims in this group have diameters of about 6·5 ins., 946 (fig. 17), 1349 (fig. 17) and 1359, the last with transverse lines on the internal rim bevel. 1365 (fig. 17) and 1419 (fig. 17) might also belong to this group. Various wall sherds with fine incised herringbone might come from similar pots, some dark and hard as 932 (fig. 17) and some reburnt and friable as 937 (fig. 17) 936 and 965, and that from a rather larger vessel 959 (fig. 17).

938 (Pl. XLIII, fig. 17) is a curious squat vessel with the ornamentation carried out in shell-impressed lines. The ware is hard grey with a fine slip. Other sherds with cardinal decoration are listed below (p. 391).

(d) *Other rim sherds*, 1367, 1368 (Pl. XLIII, fig. 16) and 1339 (fig. 15, 16, 18) have simple rims and everted mouths of hard fine brownish ware and incised decoration.

IV. Large pots similar to III.

(a) *Lattice-work zones.* The wall sherds 920 and 921 (fig. 18) and 1346, which have diameters of 9·5, 8·0 and 10·5 ins., are decorated in the same technique as group III (b). The forms of these vessels are unknown. The size and ware suggests also a connection with 924 where the pattern was comb-impressed.

(b) *With chevrons.* The resemblance between sherds 1351 and 1352 listed above, and 919 (Pl. XLIV, fig. 18) is very close, though 919 is from a large vessel of 9·5 ins. rim diameter. The slight convexity of the collar and concavity of the neck forming a definite junction, are closely similar, as well as the form of decoration.

- V. *Vessels with exterior rim bevels* or cordons below the rim. 916 has already been described (p. 384). 1374 (fig. 18) is a heavy pot with a rim diameter of about 6·5 ins. and deeply incised chevrons on the body. The rim thins to an edge, by interior and exterior bevels. 1373 (fig. 18) is similar but with the exterior bevel becoming concave. 1370 and 1371 (fig. 18) are from harder, finer smaller pots, the junction of the body and exterior bevel being enlarged into a small cordon, whilst 1372 (fig. 18) with less than 4 ins. diameter has the cordon, but no bevel, and a lightly grooved decoration both above and below it. 1369 (fig. 18) is hard, fine ware with

a rim diameter of about 5.5 ins., and is decorated with slanting grooves between cordons, reminiscent of an unpublished sherd from Eilean-an-Tighe (GT 315).

- VI. *Bowls.* 942 and 943 (fig. 18) are rim sherds from open bowls, both of hard buff gritty ware and incised decoration. 942 has a 6-in. diameter but 943 a diameter of 10 ins. and incised decoration inside as well as outside.
- VII. *Vertical cordons and incisions between.* 945 (fig. 18) includes a rim with this feature, of hard black ware. 1468 (Pl. XLIII, fig. 18) on the other hand is from a large friable pot. The comparable sherd from Mye Plantation has been noted (p. 383).
- VIII. *Sherds with patternless grooving.* 958 (Pl. XLIII) includes a number of sherds from large friable pots of unknown form. The grooving is often very light and sometimes with an object making a thick and thin line simultaneously. Comparable sherds have been noted (p. 383).
- IX. *Miscellaneous rim sherds*
- (a) 1348 (fig. 18) and 1360 are from pots of 4 ins. diameter and straight sides, elaborately incised.
- (b) 940 (fig. 18) is particularly hard fine ware, and includes a wall sherd with thickening for a flat base.
- (c) 944 (fig. 18) of hard black ware has a 6 ins. diameter and no base; is incised with vertical rows of single chevrons.
- (d) 941 (fig. 18) is from a vessel of roughish black ware with vertical rows of long irregular impressions below horizontal lines. This arrangement is similar to 977 executed with shell impressions (see below).
- (e) 953 and 954 (fig. 18) are rather heavy, 6-7 ins. diameter, the latter with horizontal lines, one of them crossed by transverse strokes.
- (f) 1355 (fig. 18), a tiny sherd of a well-made pot of 5 ins. diameter and the rare feature of stabs below the rim.
- (g) 1350 (fig. 18) and 1362 are decorated on the internal rim bevel, the former with light slanting strokes and deep jabs below, the latter with light chevrons.
- X. *Cardial decoration.* Besides 938 already described, there are two examples. 939 (Pl. XLIII) consists of many sherds of a vessel of unknown shape but a central diameter of about 6 ins. It is of hard pale grey ware with a particularly smooth finish. It is decorated with one or more bands consisting of two horizontal lines with transverse lines joining them.
- 977 is a small sherd with a horizontal row of short vertical impressions.
- From Stanydale house come two thick pale sherds with heavy horizontal impressions (1083) already noted (p. 382).
- XI. There are fragments of bases of both large and small vessels. Some are decorated to the base, as 955 (fig. 18) and 1350. On many the walls tend to expand on the outside at the angle of wall and base, as 1383 (fig. 18), even to the extent of adding a thickening ring here (1386). One of the most complete bases is 1381 (fig. 18) of heavy friable ware with a fine slip, 3.7 ins. across, with outward-sloping walls.

- XII. *Undecorated.* There is a considerable amount of sherds, mostly very small, including 4 simple rim sherds, 1377 and 1378 illustrated (fig. 18), and a lug, 1476.
- XIII. *Iron Age Sherds* are also small and mainly featureless. One group is thick, pale grey grass-tempered. Another vessel is hard black with grey grits and slight shoulder. Rims are simple, thinning rapidly to a flat edge.

CLASSIFICATION OF STONE RELICS.

The objects selected for presentation to the National Museum of Antiquities of Scotland totalled two hundred and fifty-seven, of which fifty came from the house at Stanydale, thirty-nine from the one near Gruting School and one hundred and sixty-eight from the one on the Ness of Gruting.

These relics vary in size and weight from usable flakes of an ounce or two to heavy tools weighing over twenty pounds.

Those that can be recognised for classification are grouped below and comprise:

from Stanydale, 2 hammerstones, 1 quern rubber, 1 piece of a polished axe, 1 leaf-shaped arrowhead of quartz, 22 scrapers of the same material, 3 scrapers of stone and 1 of flint, and a piece of pumice ground smooth by rubbing.

from house near Gruting School, 2 hammerstones, 1 whetstone, 3 scrapers of stone and 13 of quartz, 1 box of quartz cores and chips, 1 chopper of quartz and one piece of pumice rubbed and grooved.

from Ness of Gruting, 9 axes or parts, polished or partly polished, 2 rude axe-shaped tools, 5 hammers of stone or quartz, 3 knives whole or part polished, 2 stone balls, 4 stone discs, 5 scrapers of stone and 45 of quartz, 4 flakes of stone and 3 of quartz, 3 pebbles, 7 pieces of pumice, half of a trough quern, 1 stone quern-rubber, 2 whetstones, 1 spindle whorl, 4 fragments of a steatite vessel.

I. *Polished stone axes.*

(a) Axe-adze of fine-grain marbled green stone (probably Uyea porphyry), the end abraded and flaked by subsequent use (1526) (fig. 19). From the peat ash.

(b) Two fragments, both of Uyea quartz-felspar-porphyry. 1020, from the peat ash, had a pointed oval section, and the section of 1048 has been rectangular with slightly rounded corners, an unusual shape and probably from near the butt end. There are a number of axes from Shetland made from this stone in the Museum, and it is also employed for other artifacts, e.g. "Shetland knives" and scrapers. One axe was probably associated with a hoard of nineteen such knives at Ward of Shurton.¹

(c) Rough partly polished axes. 1055, from the earth filling of the wall, is partly pecked and smoothed in places near the butt end but large flakes have been removed in use. In 1054 the original surface is pecked but the cutting edge has been re-used for a rubbing operation and the upper end as a whetstone.

¹ *P.S.A.S.*, LXXX (1945-6), 140-1.

(d) Piece of porphyry (1527), possibly the butt end of a very small thin axe or chisel, probably made from a polished implement such as a "Shetland knife"; of the original flat highly polished surface a considerable area on one side and a smaller area on the other remain, whilst its roughly flaked edges are partially polished.

II. "Shetland knives" of Uyea porphyry, probably flensing knives.

(a) A fragment (1023), very thin with a bevelled edge.

(b) Possibly a fragment of an unfinished knife (1528), smoothly polished on one side and slightly polished on the flake ridges of the reverse. Both were in the peat ash.

Half a knife was found at Stanydale temple.¹ The stone comes from Northmavine, and an actual working place is known at Beorgs of Uyea.²

III. Battle axes.

(a) Miniature battle axe measuring only $2\frac{1}{4} \times 1\frac{1}{4} \times 1\frac{1}{4}$ ins. The central perforation has been only just begun (1024) (fig. 19).

(b) Half of a similar axe (1025), with an hour-glass perforation which is very narrow in the centre (fig. 19). Possibly it broke whilst being perforated. Both came from the chamber floor.

A similar axe, but rather larger and more slender, with a straight perforation has been found with the cist burial of a child accompanied by two food-vessels at Doune, Perthshire (EQ 608-10).³ Half of another miniature battle axe, slightly larger than the Gruting ones and a different form, was found at Skooan, Evie, Orkney.⁴

(c) A full-size battle axe (1026) (fig. 19) was found in the peat ash, and is of very soft weathered stone. The upper and lower surfaces are parallel, the sides curved into rounded ends, one slightly more tapering than the other; there is an hour-glass perforation. It is not an easy specimen to parallel, but it would seem to be a degenerate version of the flat axe-hammer, though these have a marked difference between the butt and cutting ends. In England this type, though usually with a straight perforation, is found with A beaker burials and should be early in the battle-axe sequence. In Scotland there is an hour-glass perforation in most examples, and they have a markedly southern distribution, Perthshire, the Lothians, Borders and Wigtownshire.⁵ The only associated example, not a particularly close analogy to the Gruting battle axe, comes from under a cairn containing food-vessel burials at Hagg Woods, Foulden, Berwickshire.⁶

On the other hand one would expect the form of the miniature battle axes to be rather later; a full-size one was found with a cremation and incense-cup and perforated antler-hammer at Stancomb Downs⁶ and others with a grapecup at Windmill Hill and at Wilsford Barrow 18, Wilts.⁷

¹ *P.S.A.S.*, LXXXIV (1949-50), pl. XXII, a, 3; in general see *ibid.*, XL (1905-6), 151.

² *Ibid.*, LXXXVI (1951-2), 171-7.

³ Unpublished.

⁴ *P.S.A.S.*, LXVIII (1933-4), 19.

⁵ e.g. *P.S.A.S.*, XXIV (1889-90), 277; XII (1876-8), 568.

⁶ *Ibid.*, XLVIII (1913-14), 324.

⁷ *Arch.*, 52 (1890), 60.

ARTIFACTS OF STONE FROM HOUSE No.1 NESS OF GRUTING.

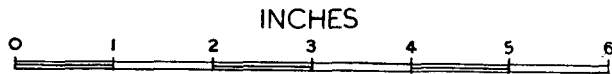
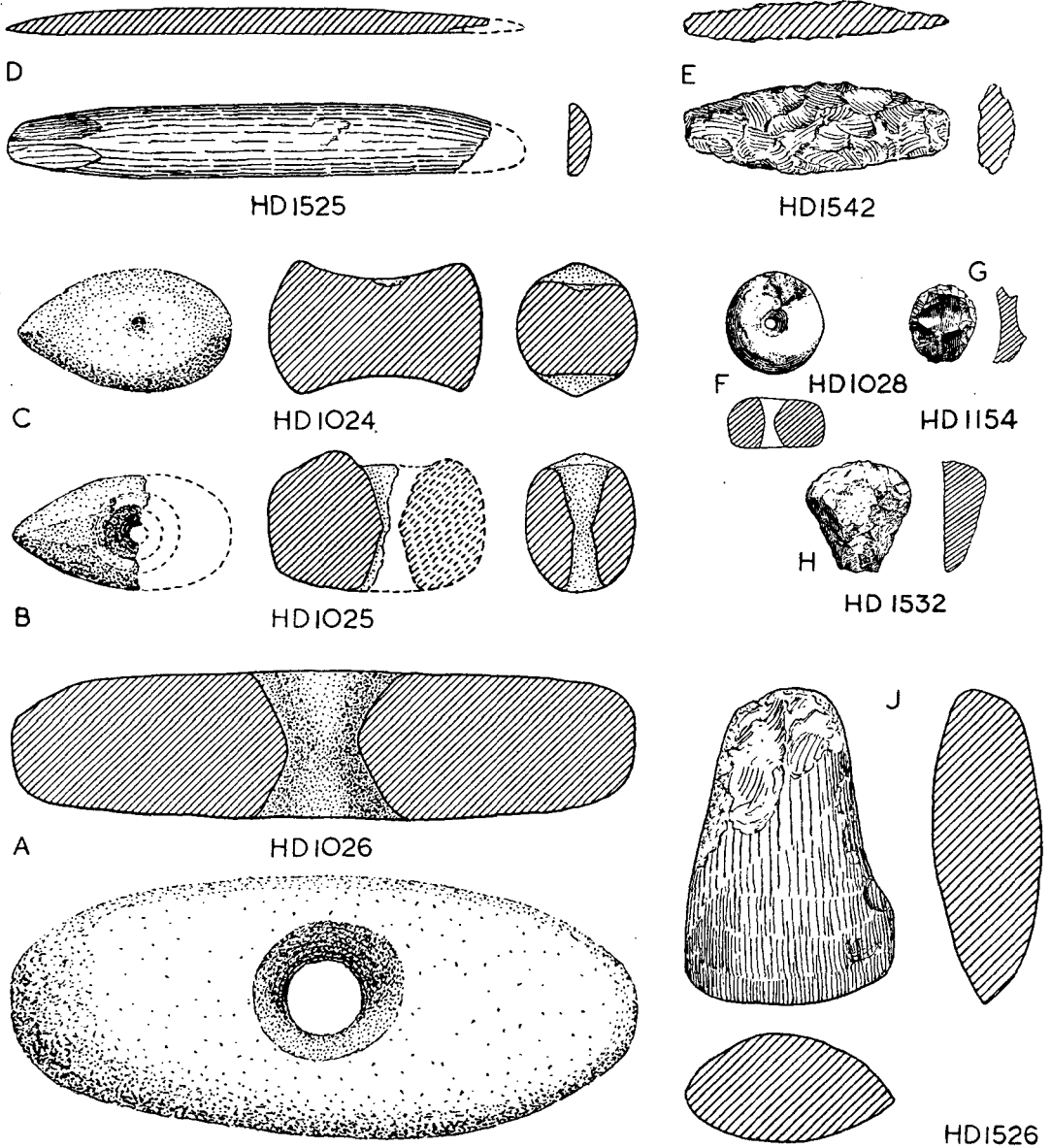


Fig. 19.

C.S.T.CALDER

IV. *Scrapers.*

(a) Quartz was the commonest material, and the scrapers (at Stanydale temple and Wiltrow) varied considerably in size, from $1\frac{1}{2}$ in. to $\frac{1}{2}$ in. across. At Gruting they were found in the ash-core and in the house itself (1000-17, 1143-53, 1516-20). Quartz flakes were also found. The lack of flint at Gruting is obvious, and quartz was the best substitute available. It was being worked in the Bronze Age levels at Jarlshof¹ and at Gruting for a number of cores and flakes were found. A well-made leaf-shaped arrow-head of quartz was found at Stanydale House.

(b) One small example only was made of grey flint (1154) (fig. 19).

(c) Several were made from stone or pebbles (1155, 1521, 1529-41) (fig. 19). Large scrapers $1\frac{3}{4}$ ins. across were made from porphyry, one from a partially polished object (1156-7, 1522).

V. *Stone discs.*

Four flat pieces of stone trimmed into circular discs were found, with diameters ranging from 2- $4\frac{1}{4}$ ins. Such discs are generally regarded as pot lids, as at Jarlshof, but the smaller specimens (*e.g.* 1049) seems rather small for such a purpose. A similar disc was found in the fore-court blocking of Cairnholy I., Kirkeudbrightshire.²

VI. *Trough quern and rubbing stone.*

(a) The broken trough quern (1066) (fig. 20) was found inverted beside the barley in the wall. It is made from a rectangular block of stone, the top surface rubbed smooth but the trough itself deeply pecked and appearing almost fresh. Similar querns have been found in Shetland at the kindred sites of Wiltrow, Stanydale temple, and in the Bronze Age levels at Jarlshof.³ At this site it was noted that the larger and heavier examples appeared in the lower levels, the largest measuring 2 ft. 9 ins. long by 1 ft. 9 ins. wide. The Gruting quern is 1 ft. 8 ins. wide. A quern of this type was found in the passage grave of La Hougue Bie, Jersey.⁴ In Scandinavia they have a long life, from passage grave times to the Early Iron Age.⁵

(b) Half an oval rubbing stone (1548) (fig. 20), the lower surface very smooth, was found in the ash core. A similar intact stone was found at the house at Stanydale.

VII. *Rough Stone Implements.*

About six hundred rudely chipped stone implements, mainly from the peat ash, were found in the Ness of Gruting house. They vary from $2\frac{1}{2}$ ins. long to a usual length of 10 or 12 ins., and a maximum of about 19 ins. They are generally roughly and deeply flaked, but some of the more carefully made specimens have finer flaking or some pecking of the surface. A smoothing of the surface of some varieties seems to be due

¹ *W.A.M.*, LV (1953-4), 324-30.

² *P.S.A.S.*, LXXXIII (1948-9), 121.

³ *Ibid.*, LXVIII (1933-4), 301.

⁴ Hawkes, J., *The Archaeology of the Channel Islands*, II (1937), 205.

⁵ Mathiassen, T., *Danske Oldsager*, pt. 2 (1948), 131.

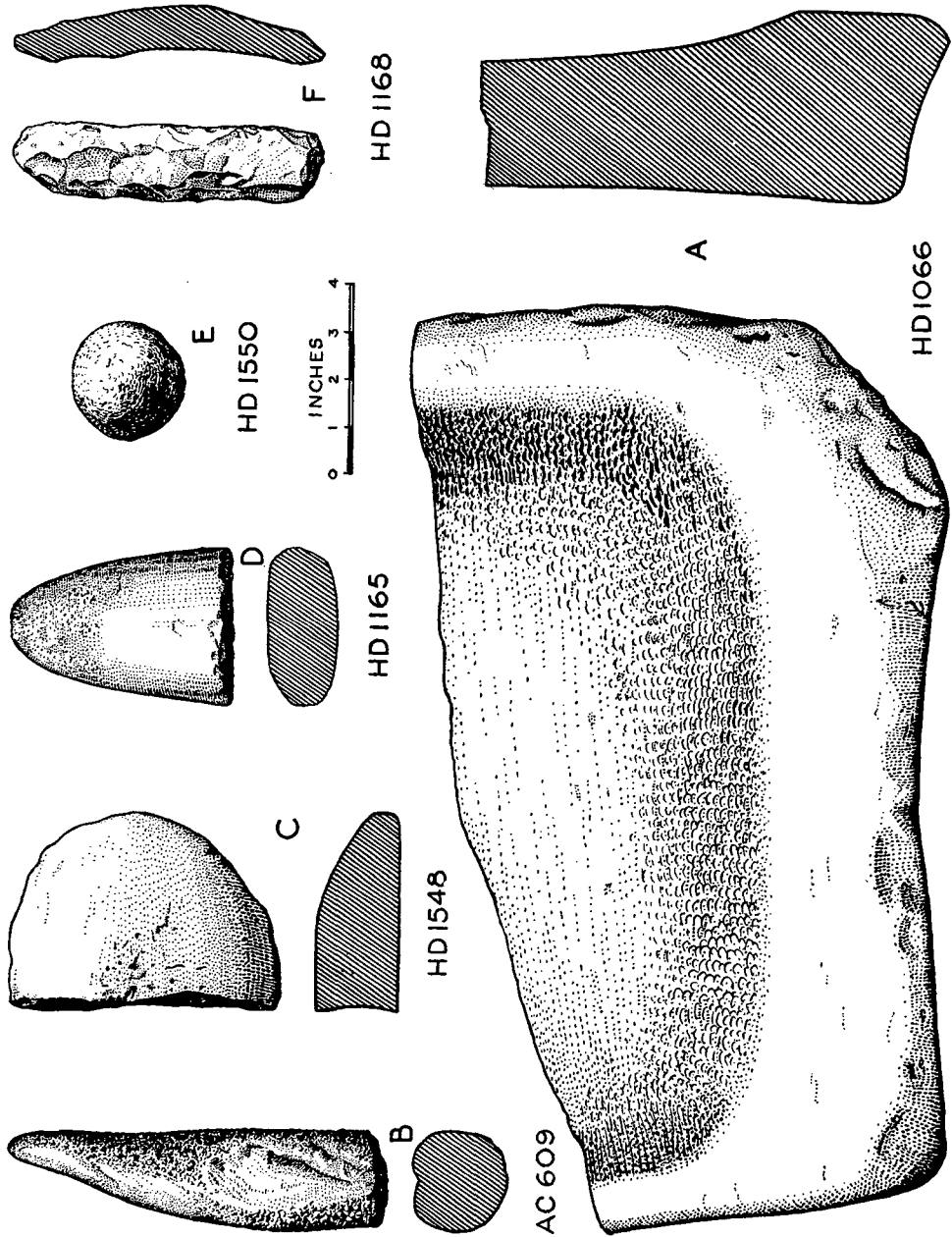


Fig. 20.

to use (e.g. 911, or more completely 1165 (fig. 20)). These implements are known only from Shetland. There are many varieties and a considerable selection is in the National Museum, mainly surface finds. Examples have been found in the early levels at Jarlshof, at Wiltrow and Stanydale temple (all illustrated and showing the general nature of the implements).¹ The remarkable features are their great numbers at the house-sites and the size and weight of many of the specimens.

One type of implement is distinctive and recurs on various sites though not particularly frequently. It is a roughly chipped bar of more or less round section 2-3 ft. long, pointed at one end. This end is more carefully shaped by pecking, but one side is smooth with use. A particularly large specimen from Urafirth, Northmavine, has been illustrated.² The points of such implements were found at Gruting (1164, 846). AC 609 is an example from Lower Gruniquoy (fig. 20). These stones have evidently been hafted as wear only occurs on one side, and the other side, sometimes right down to the tip, seems to have been protected as the pecking is often remarkably fresh. It is possible that these stones are a form of share for an ard, evolved among a people who were used to heavy work in stone, and the weight of the stone might itself have been an advantage in ploughing. The sole of the more primitive form of ard, the crook ard, is more or less round at the nose (which forms the share and actually breaks the soil), and in shape might be compared to the Shetland stone bars. But the fact that the bars are an entity, and the way that one side is unworn suggests a construction with a fore-share more like the Danish bow-ards, though the form of the share in these cases is different, being arrow-shaped and acting as a mould-board turning the soil to one side as it drives the furrow.³

It has been suggested recently that shoe-last celts are stone-shares.⁴

VIII. *Other implements of unknown use.*

1525, which came from the ash, is a long thin polished stone $5 \times \frac{3}{4} \times \frac{1}{4}$ ins., with tapering ends and a hemispherical cross-section (fig. 19). 1523 is a similar rougher object.

IX. *Button or whorl.*

A round piece of steatite, diam. 1 in., $\frac{1}{2}$ in. deep, with a narrow hour-glass perforation, seems likely to have been a bead or button rather than a spindle whorl. It was unstratified. (1028) (fig. 19).

X. *Pumice.*

Five lumps of pumice, of varying texture, were found in the peat ash (1021-2, 1512, 1543-6). They all had narrow grooves evidently caused by being used for rubbing down some object, possibly wood or possibly in connection with pottery making as was suggested in the case of similar pieces at Eilean an Tighe;⁵ pieces were also found at Clettraval,⁶ Jarlshof and Stanydale temple (unused).

¹ *P.S.A.S.*, LXVIII (1933-4), 234; LXX (1935-6), 159-61; LXXXIV (1949-50), pl. 22 (b), 23.

² *Ibid.*, LXXXVI (1951-2), 206, pl. XLIII, 4.

³ For a discussion of prehistoric ards and ploughs, Glob, P.V., *Ard og Plov i Nordens Oldtid* (1951) and Curwen, E. C., *Plough and Pasture* (1946), especially fig 6, 3.

⁴ *Germania*, 34 (1956), 144-7.

⁵ *P.S.A.S.*, LXXXV (1950-1), 33.

⁶ *Ibid.*, LXIX (1934-5), 515.

XI. *Hammerstones, rubbing stones and stone balls.*

Various stones and pebbles which had been used for pounding or rubbing, as well as other implements re-used for these purposes, were found (913, 1050, 1052, 1552-3; 1160-1; 1159, 1551 of quartz). A stone 7 in. long, fractured into a more or less square section, has had one surface smoothed by rubbing or sharpening and seems to have been a hone for small stone implements (1173). There are also three stone balls with an evenly pecked surface (fig. 20 E). One is of granite and slightly elongated (914). Similar stone balls were found at Rinyo¹ and in the chambered cairns of Unival and Cletravel,² at Eilean an Tighe and Ronaldsway,³ and in Stanydale temple.

Conclusions. The stone finds suggest similar connections as the pottery, that is, besides parallels in obviously kindred sites such as early Jarlshof and Wiltrow, with the builders of the chambered tombs and those of the Hebrides rather than Orkney, and contacts with the Beaker and Food-vessel folk. But besides these recognisable elements in the Gruting equipment (and what form of cultural connections they represent is hard to say) there is also an overwhelming quantity of material, particularly the rough stone implements, which appears to be a purely local development in the Shetland Neolithic-Early Bronze Age.

¹ *P.S.A.S.*, LXXIII (1938-9), 27.

² *Ibid.*, LXXXII (1947-8), 29.

³ *P.P.S.*, XIII (1947), 152.

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3. Inner wall-face of Temple.



4. Inner wall-face of house.



1. Outer wall-face of Temple.



2. Outer wall-face of house.

STANYDALE.



1. Interior from the south-east.



2. Wall-face in the compartment off the passage.

HOUSE, STANYDALE.

CHARLES S. T. CALDER.



1. General View from south.



2. Enclosure at south end showing fireplace against the wall of the house.

HOUSE, STANYDALE.



1. House No. I, near Gruting school. Interior from south.

[Photo: F. Scott.]



2. House No. I, Ness of Gruting, showing stone packing against outer face of wall on the south-east.

CHARLES S. T. CALDER.



1. View from north-west showing exterior wall-face.



2. View from north overlooking Gruting Voe.

HOUSE NO. I, NEAR GRUTING SCHOOL.

CHARLES S. T. CALDER.



1. Inner face of wall of chamber on south-west side; recess still showing infilling.



Photo: W. Kirkness.]

2. Recess on south-west side with infilling removed.



3. North-west corner of apse and masonry of mid-revetting wall.

HOUSE NO. I, NESS OF GRUTING.

CHARLES S. T. CALDER.



1. Hearth of chamber and broken dish-quern; top left: hearth in apsidal end.



2. Carbonised barley.



[Photo: Hans Helbaek.]
3. Barley seed enlarged.

HOUSE NO. I, NESS OF GRUTING.

CHARLES S. T. CALDER.



1. Entrance passage.



2. Continuation of paring from the entrance and a small cell with a pit in its far end.

HOUSE NO. I, NESS OF GRUTING.

CHARLES S. T. CALDER.



1. House No. I, near Gruting School; showing secondary cell on west side and three small postholes in foreground.



2. House No. I, Ness of Gruting. Outer wall on north arc showing revetting walls and core of peat-ash and earth.



3. House No. I, Ness of Gruting. Field showing remains of enclosing dyke.

CHARLES S. T. CALDER.



1. Outer wall on south-east arc, showing revetting walls and core of peat-ash.



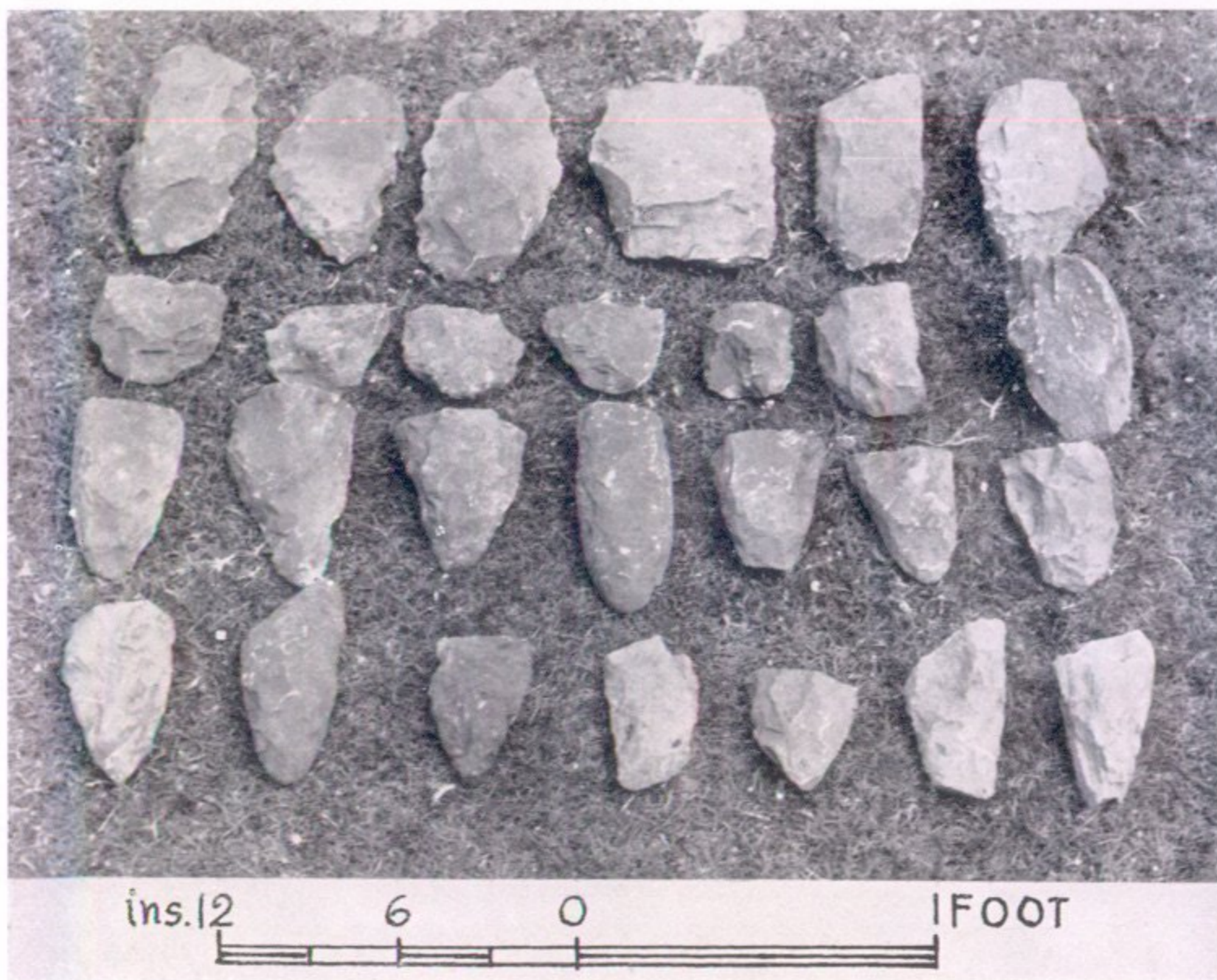
2. As above but with core removed.

HOUSE NO. I, NESS OF GRUTING.

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1. Implements from House No. I, Ness of Gruting.



2. Implements from House No. I, near Gruting School.



1. At crofts in Gruting township; recent gathers.



2. At House No. I, near Gruting School.



3. At House No. I, near Gruting School, partly excavated.

GATHERS OF STONE FROM FIELD CLEARANCES.

CHARLES S. T. CALDER.



1. South Newing (No. 18, III), showing traces of recesses.



2. Dock of Linganess (No. 25, II), showing probable recess.



3. South Newing (No. 17, II).



4. Vasso Voe (No. 22).

HOUSE SITES.



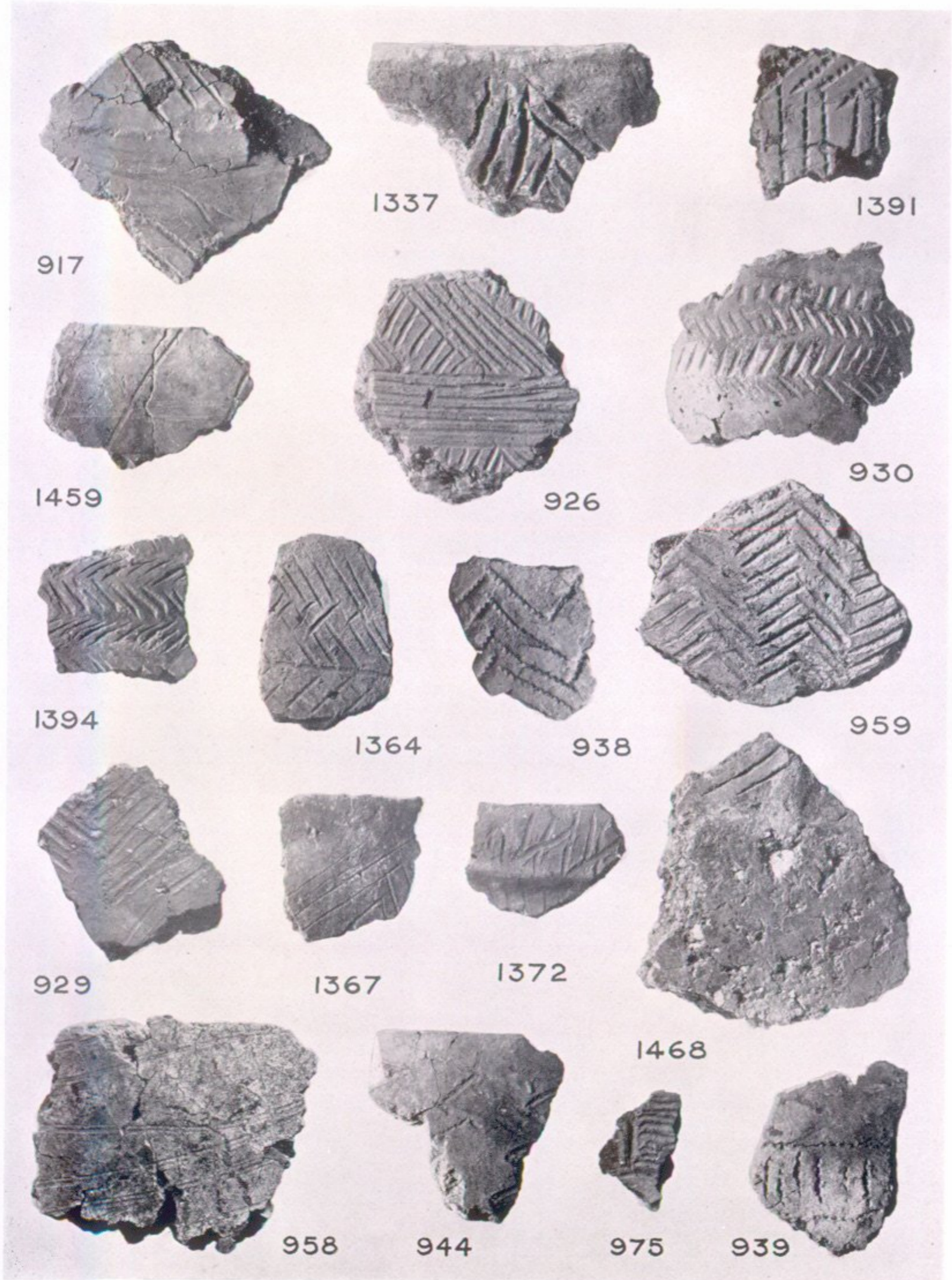
1. House No. II, Ness of Gruting, from east.

[Photo: *W. Kirkness.*]



2. House-site, Grunna Water (No. 19).

[Photo: *F. Scott.*]



Fragments of decorated pottery from House No. I, Ness of Gruting.

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925

919

918

916

Fragments of decorated pottery from House No. I, Ness of Gruting.

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