

IX.

AN EARLY IRON AGE HOMESTEAD AT WEST PLEAN,
STIRLINGSHIRE.

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INTRODUCTION.

The homestead described in the following report is situated 3 miles SSE. of Stirling (fig. 7) on the crest of Common Hill, a small hill of elliptical shape on whose south-eastern end stands the mansion of West Plean.¹ Geologically, the hill is a drumlin composed of boulder clay and lying with its major axis approximately NW. and SE. The north-eastern flank, along the foot of which ran the Roman trunk road from York to the Tay, is fairly steep and some 60 ft. in height, but the opposite flank is barely 20 ft. in height, and, like the two ends, is only gently inclined. For so modest an elevation (382 ft. O.D.), the view from the more or less flat top of the hill is a remarkable one. Northwards and eastwards the eye can range without interruption across the Forth plain and along the Ochils from the Stirling Gap to the Lomond Hills; while beyond Stirling, the Highlands of south-western Perthshire, dominated by the peaks of Ben Ledi, Ben Vorlich, Stuc a Chroin and Ben Chonzie, form an impressive background on a clear day. In the other directions the outlook can never have been so extensive, and is at present blocked by trees; but it seems likely that, before the trees were planted, both Torwood broch, 2 miles to the SE. along the line of the Roman road, and Myot Hill (itself crowned by an Early Iron Age fort) some 3 miles to the SW., would be visible through gaps in the adjacent knolls and ridges. The Ordnance Survey *Name-Book*, compiled in the middle of last century, mentions that Common Hill had often been "ploughed and trenched" in the past, and cultivation continued intermittently until a few years ago when the ground was laid down in permanent pasture.

Before excavation, the site appeared as a nearly circular enclosure, measuring about 90 ft. in diameter within a shallow ditch some 10 ft. in average width. A possible entrance-causeway across the ditch could be seen on the north-eastern arc, and outside the ditch, particularly round the south-western half, there were slight indications of a bank. Until 1933, when it was visited by Dr O. G. S. Crawford, this modest little earthwork had received scarcely any attention, and on the few occasions when it was

¹ O.S. 6-inch map Stirlingshire NXXIII NE.; Grid ref. NS(26)/810876.

referred to in manuscript or in print, it masqueraded (as on the Ordnance Survey map) as a "fort."¹ Dr Crawford, however, immediately perceived that the work could not be construed as a fortification of any kind, if only because the ditch, contrary to defensive practice, lies inside the bank; and instead he advanced the hypothesis that it was a Roman signal-station of the type best known in this country from examples on the Gask ridge, between Muthill and Perth, where a wooden tower is enclosed by a circular earthwork.² This identification, which was endorsed by Sir George Macdonald,³ was a compelling one, since it not only took account of the commanding situation of the earthwork, and of its proximity to the Roman road, but also offered an explanation of the internal ditch. For the circular ditch of the typical Gask post was not intended for defence, but was merely designed to keep the interior of the site as dry as possible, and consequently the upcast material was dumped on the outer lip where it would not impede the drainage. On the other hand, Sir George was mistaken in thinking that the Plean enclosure was of the normal size for a signal-station of this pattern. In fact, it covers more than twice the area of the largest member of the Gask series, and it is also considerably larger than the comparable signal-posts at Ardoch⁴ and on the summit of Eildon Hill North.⁵

An opportunity to put the matter to the test came in 1953, when a small excavation was authorised by the Commissioners as part of the preparatory work then being undertaken for the Royal Commission's forthcoming *Inventory* of Stirlingshire. This trial excavation quickly revealed that we had to deal not with a Roman structure, but with a prehistoric timber-built homestead; and as this type of monument had not been previously recorded from the county, it was decided to undertake a somewhat more extensive investigation than had originally been contemplated.

The Commissioners desire to express their thanks to Sir Ian Bolton, Bart., K.B.E., the owner of the site, who not only gave permission to excavate, and provided fencing and storage facilities, but has also generously presented the relics to the National Museum of Antiquities. Financial support was given by the Society of Antiquaries of Scotland, the Christian-bury Trust, and the Scottish Field School of Archæology, and labour was supplied by students and by other voluntary helpers. In the preparation of this report, valuable technical advice and information has been received from a number of specialists, including Dr Elizabeth Knox, who kindly carried out a pollen analysis of an earth sample from the ditch (published as Appendix II); Mr P. S. Green, who identified the charcoal from the

¹ E.g. *O.S. Name-Book*, St Ninians Parish; *New Stat. Acc.*, VIII, 316; *Stirl. Nat. Hist. and Arch. Soc. Trans.*, 1883-4, 18.

² *Topography of Roman Scotland*, 18. For the Gask sites, cf. *P.S.A.S.*, xxxv (1900-1), 25-31; and Collingwood, *The Archæology of Roman Britain*, 58-59 and fig. 14.

³ *The Roman Wall in Scotland*, 2nd edition (1934), 358 note.

⁴ *Arch. Journ.*, xciii (1937), 314.

⁵ *P.S.A.S.*, lxxxvi (1951-2), 202-5.

site; Dr A. S. Clarke, who reported on the animal bones; Mr R. L. Hunter and Dr T. H. Caulfield, who analysed some iron slag found within the earthwork; Messrs. R. J. A. Eckford and W. A. Read, who advised on the local geology; and Miss E. Prendergast of the National Museum of Ireland, Miss A. S. Henshall of the National Museum of Antiquities of Scotland, and Mr L. N. W. Flanagan of the Belfast Museum and Art Gallery, all of whom furnished information about objects in the respective collections under their charge. Lastly, the writer would like to express his personal thanks to Major and Mrs Malcolm Speir for the kindly interest, expressed in many practical ways, which they took in all stages of the work.

THE EXCAVATION.

In 1953 two sections, each 4 ft. wide, were cut across the earthwork at right-angles to one another, and a central area, 40 ft. square, was excavated down to subsoil. In the following year the greater part of the rest of the interior of the enclosure was examined, together with the entrance on the north-eastern arc; but owing to frequent interruptions by rain, and the waterlogged state of the ground, a further week's work was required in 1955 to complete the investigation of a second entrance, discovered on the E. side, and to remove a large section of the ditch filling in search of relics. As finally revealed, the homestead comprised the following four main elements.

- (1) A circular, timber-framed house, situated in the centre of the enclosure and showing two periods of construction.
- (2) An ancillary structure, probably a byre, on the E. side of the house.
- (3) A sunken, cobbled yard.
- (4) The ditch and bank, with the two entrances already mentioned.

It will be convenient to describe each of these elements in turn in the above order.

The Farmhouse (figs. 1-3).

In the central area the work was made easy by the fact that only 10 ins. of turf and humus covered the subsoil, and by a complete absence of stratification. Within this area, a penannular, stone-packed foundation-trench for a wooden wall or fence (Pl. XV, 1), with the entrance facing ENE., was found enclosing twenty-five post-holes (fig. 2, Nos. 1-25). The post-holes had all held stout timbers, measuring 6 ins. to 1 ft. in cross-section, which had been sunk into the ground to depths varying from 10 to 30 ins.¹ All the holes contained minute pieces of charcoal—hazel, alder, oak, birch, and

¹ Detailed measurements are given in Appendix I.

WEST PLEAN - CENTRAL AREA

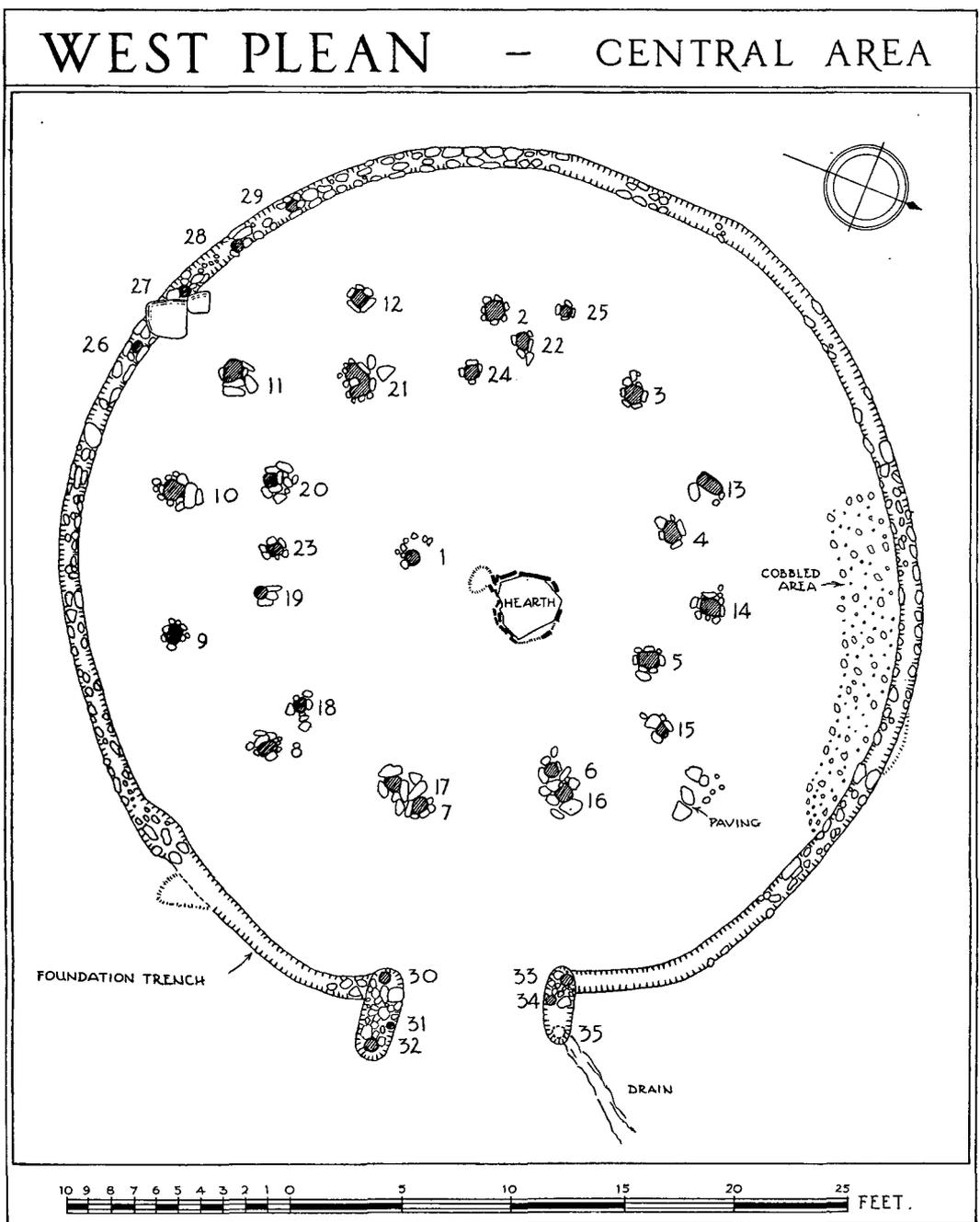


Fig. 2.

willow being identified—but much, if not all, of this charcoal had evidently been deposited after the original timbers had been withdrawn, or had decomposed, since in many cases different woods were represented in the same hole. Despite the fact that no significant differences could be observed in the construction of these post-holes, or in the colour or content of their filling, proof that they were not all of one period was furnished by the adjacent pair, Nos. 7 and 17. At first sight, it appeared as if these posts had been erected simultaneously in a single, large, oval hole, but when the stone packing was removed it was found that there were actually two independent holes, separated by an undisturbed tongue of boulder clay. Clearly, therefore, one of these posts had replaced the other, and it seemed reasonable to suppose that the same was true for the neighbouring pair of posts, Nos. 6 and 16, although in this instance the evidence was ambiguous as the two holes impinged on one another to form a single, figure-of-eight cavity. Once it is recognised that two structures are involved, the disentanglement of their respective ground plans presents no difficulty (fig. 3). For the ring of eleven evenly-spaced posts (Nos. 2-12) with their central post (No. 1) form an obvious entity; while the elimination of these twelve posts from the plan discloses a familiar type of Early Iron Age house, supported on two concentric rings of posts and with a central hearth. The outer ring of posts of the latter structure was bedded in the foundation-trench, and the inner ring is represented by holes Nos. 13-22 with the repetition of No. 3 which is required to complete the circle. Unfortunately it was not possible to determine stratigraphically which of the two structures was the earlier, but the fact that they were built on the same spot, that one post-hole (No. 3) was used on both occasions, and that each plan includes a ring of eleven similarly-spaced posts, must surely imply that both structures were erected by the same people, presumably during a continuous occupation of the site. And this being so, the smaller structure cannot have been ritual in character, like the similar arrangements of post-holes found at the centre of the timber circle known as The Sanctuary,¹ or beneath the Bronze Age barrow at Soesterberg, in Holland,² but must be interpreted as an original farmhouse (hereafter referred to as House I) which was later demolished to make way for a larger and more pretentious successor, House II. House I, then, would appear to have been a simple, round hut, having a conical roof supported by a centre post and a diameter of about 23 ft. As in the case of similar ancient dwellings built in Ireland, the wall was probably formed of hazel and other rods, woven into wicker-work and covered with clay or skins, and the roof thatched with straw, rushes or sedge.³ The three posts Nos. 23-25, which have not so far been accounted

¹ Cf. Professor Piggott's reconsideration of the site in *Arch. Journ.*, xcvi (1939), 193 f.

² *Oudheid. Meded.*, xv, 57.

³ E. O'Curry, *On the Manners and Customs of the Ancient Irish*, III, 31-32.

for, could have belonged to this structure, but it is perhaps more likely that they were connected with the internal partitions of furnishings of the larger house. Similarly the hearth could conceivably be an original feature, since it is situated in the appropriate position for a first-period fireplace, midway between the central post and the house wall, but if so it survived the demolition of House I and became the focal point of House II. The latter house, 38 ft. in diameter, had an outer framework consisting of posts 5 ins. in cross-section, and spaced 3 ft. apart in the bedding-trench, which were presumably the uprights for a wattle-and-daub wall.¹ The doorway, facing ENE., was 6 ft. in width, and was protected by a porch composed of six vertical timbers, three on either side of the entrance (fig. 2, Nos. 30-35); while the hearth, which, as in comparable houses, occupied a more or less central position, had been sunk into the floor, and consisted of a large sandstone flag, bordered by thin, broken fragments of the same material laid on edge (Pl. XV, 2). In the conjectural restoration (fig. 3), the outer wall has been assumed to be about 3 ft. in height, and the inner ring of posts—which served as intermediate supports for the rafters, and perhaps also as stays for internal partitions—about 7 ft. in height, giving a pitch of 25° for the roof. The width of the entrance, however, and the provision of a porch, imply that the doorway was somewhat higher than the outer wall so that it could be entered without stooping. The roof was no doubt thatched in the same manner as House I, and may have been open at the centre to emit the smoke from the hearth. Finally, in spite of the fact that the whole area had been turned over by the plough, natural hollows in the subsoil preserved two types of flooring—a scrap of sandstone paving, and a more extensive area of fine cobbling (Pl. XVI, 1)—in the space between the two rings of posts on the north side of House II. The existence of the paving was not unexpected, for the brief notice of the site in the Stirling Society's *Transactions*, referred to above, quotes a statement by a former herd at Plean to the effect that, in his youth, the "inner circle of the Fort was all paved with stones" and that he assisted in carting them away to do repairs at the farm steading. But the question of which type of flooring is associated with which house, is best deferred until a later stage in the report (*infra*, pp. 242-3).

The few relics recovered from the central area were all found in the humus, and since none of them can have remained undisturbed during later cultivation of the site, their individual find-spots have not been marked on the plan. They are discussed, together with the rest of the finds from the homestead, on pp. 243-7.

¹ Only two doubtful pieces of daub were found on the site (*infra*, p. 247), but the relatively close-spacing of the timbers implies some form of hurdle work, rather than a stone sheathing incorporating isolated wooden posts as at Edgerston (*Inventory of Roxburghshire*, No. 457) and elsewhere.

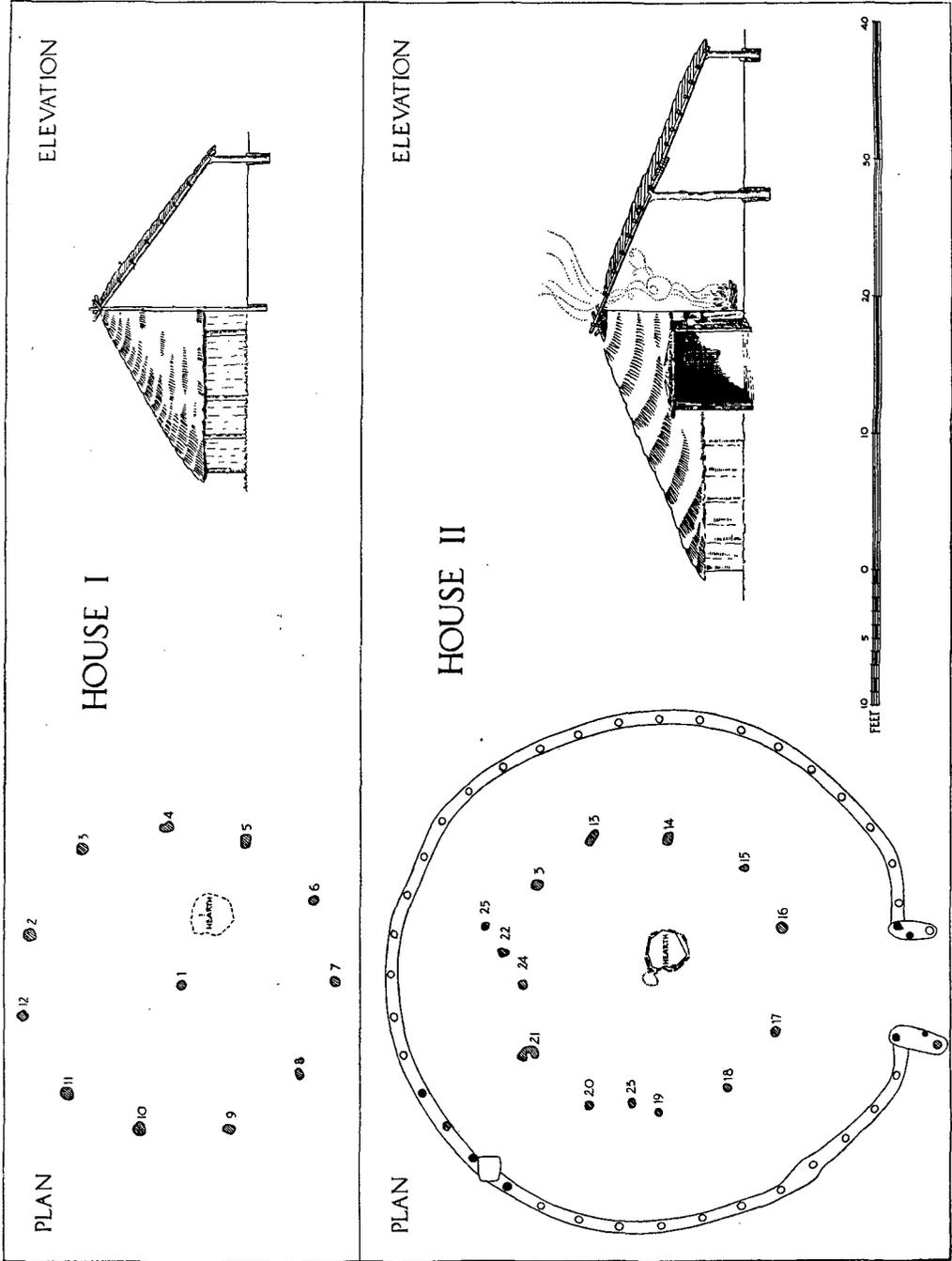


Fig. 3. Ground plans and suggested reconstructions of the successive houses at West Plain.

The "Byre" (figs. 4 and 5).

On the eastern side of the farmhouse, a maze of post-holes (fig. 4, Nos. 36-57) indicated the presence of one or more outbuildings. Four of the holes (Nos. 40, 46, 48 and 52) were quite small and had held only minor struts,¹ but the others, ranging from 8 to 21 ins. in depth, were all large enough to have held posts of similar girth to those employed in the houses. Again, no significant distinctions could be discerned in the method of construction, or in the nature of the filling, of the various holes. Yet here, too, there was a hint that not all of them had been in use simultaneously, since one hole (No. 53) had been carefully sealed by a large boulder on the withdrawal of the post—an action which suggests reconstruction and not the final evacuation of the site. Any attempt to interpret these holes in terms of structures must necessarily be tentative, but it is perhaps worth remarking at the outset that the general pattern which they make *en masse* is not circular, as in the case of the houses, but quasi-rectangular. Can we go further? Assuming that we are not dealing with a lean-to (which would pose serious roofing problems) but with an independent building, it seems permissible, as a first step, to eliminate from consideration the minor stuts represented by Nos. 40, 46 and 48, and also the short line of closely-spaced posts Nos. 49-52, which would appear to have belonged to some sort of screen or fence flanking the south side of the entrance to House II. Next, it will be observed that the two outlying posts, Nos. 36 and 37, which presumably formed one end of the building, are matched by Nos. 39 and 41, and also by Nos. 47 and 55; and that these six holes define a rectangular structure, measuring 18 ft. in length by 8 ft. 6 ins. in width, within which two further posts, Nos. 38 and 42, could be interpreted as supports for the ridge-beam of a gabled roof (fig. 5). Although the evidence is far from conclusive, such a building could well be a byre or barn—the equivalent, in timber, of the stone-built rectangular steadings that accompany the round farmhouses at the Early Iron Age sites of The Allasdale, Barra,² and at Clettraval in North Uist.³ For as we shall see, the West Plean farmer undoubtedly possessed at least one draught animal, and no alternative stabling was available within the compound, unless in the farmhouse itself. Of the remaining seven posts, four (Nos. 43-45 and 54) lie within the confines of the hypothetical byre, and may therefore have been part of the fabric or fittings: but the other three (Nos. 53, 56 and 57) are situated outside it, and, as has already been explained, one of these (No. 53) seems to have been deliberately dismantled at some stage in the occupation of the site. Is it possible, then, that these three posts, together with either No. 44 or 45, represent an earlier squarish structure, measuring about 7 ft. along the

¹ Cf. Appendix I for individual dimensions.

² *P.S.A.S.*, LXXXVII (1952-3), 80-105.

³ *Proc. Prehist. Soc.*, XIV (1948), 46-68.

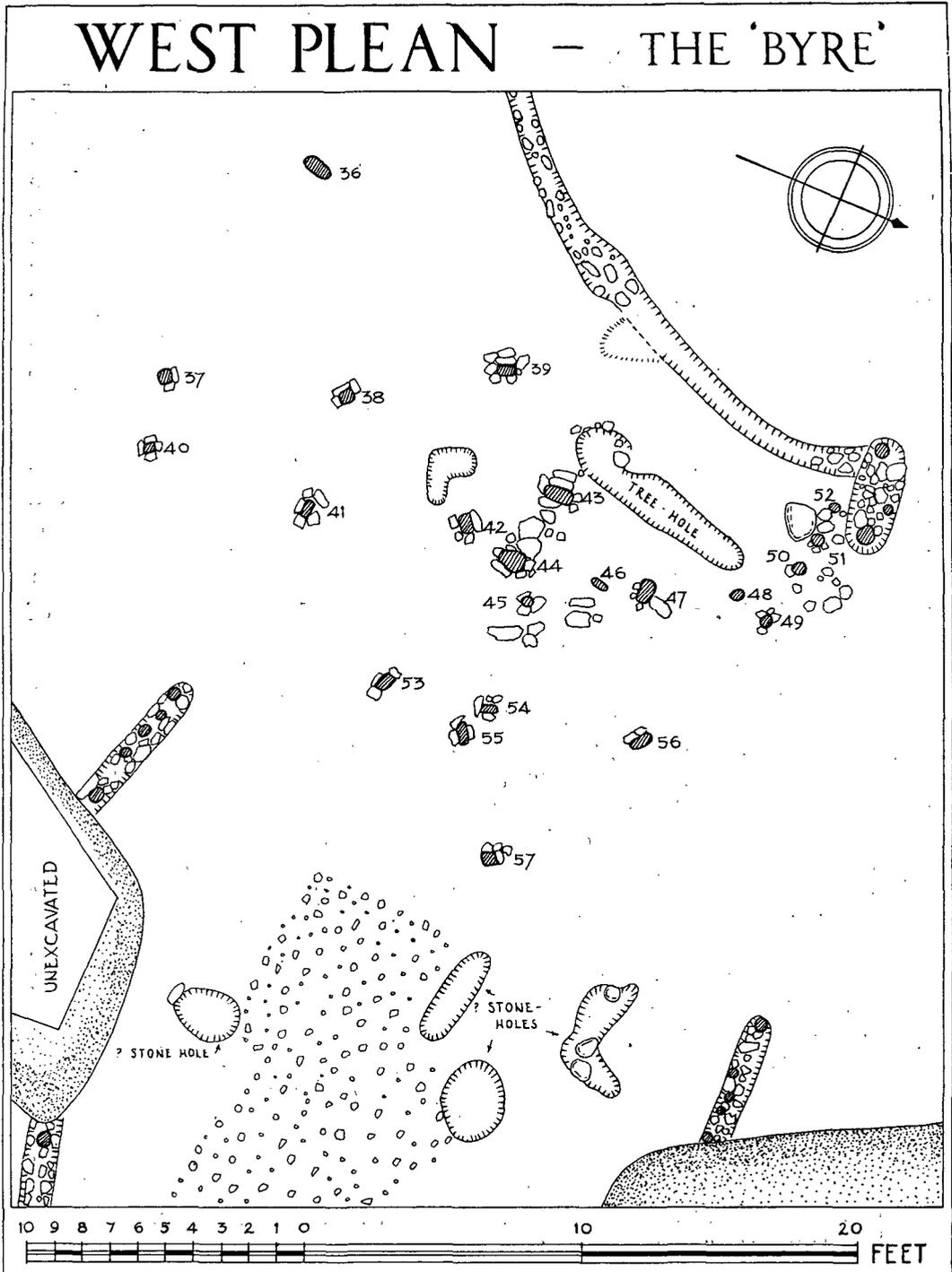


Fig. 4.

sides, which was later demolished to make room for the "byre?" It is true that small structures of this sort are not uncommon on Early Iron Age sites in the south of England, where they are usually interpreted as granaries, built on piles for protection against damp and rats;¹ but no parallels are known from north Britain, and obviously no emphasis can be laid on a facile solution of this kind at Plean in the absence of more specific evidence.

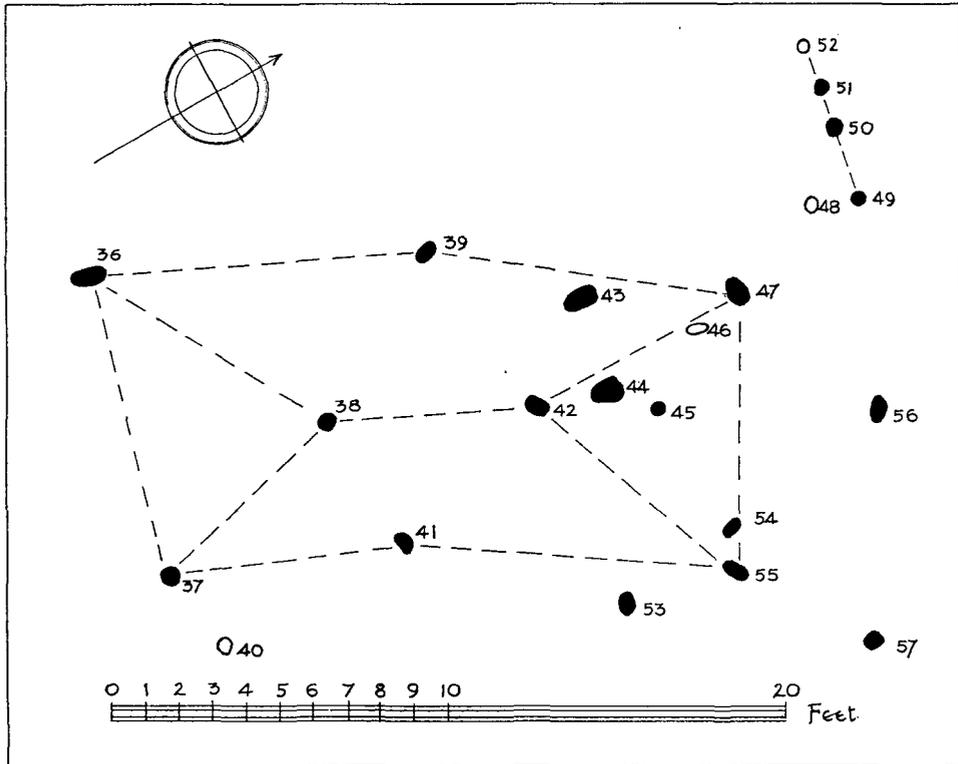


Fig. 5. Conjectural outline of the "byre".

No flooring survived in the vicinity of the "byre," and the only other features of this area were two depressions in the subsoil, the largest of which was almost certainly a tree-hole, while the smaller one was probably the socket left by the removal of a natural boulder during the preliminary clearing of the site. The group of somewhat larger pits shown on fig. 4, between the "byre" and the eastern entrance to the enclosure, were probably also stone-holes: they were not more than 6 ins. deep, and the filling was sterile in each case.

¹ *Arch. Journ.*, xcvi (1939), 220-1.

The Sunken Yard (fig. 1).

Excavation elsewhere in the compound revealed no signs of any further buildings, although six more post-holes (Nos. 58-63), one of which (No. 61) had held a pair of posts, were found at widely separated points.¹ Two small burnt areas, caused by open hearths, occurred in the south-eastern and south-western quadrants respectively, but otherwise the only feature of interest was a sunken, cobbled yard which extended round the northern half of the compound (Pl. XVI, 2). This yard had been excavated to a depth of 18 ins. below the level of the central area (fig. 6, section A-B), and the entrance across the ditch on the north-eastern side of the enclosure led directly into it. Whether the yard was fenced off from the rest of the compound is uncertain, for although five of the six post-holes referred to above lay on, or close to, the margin of the depression, a careful search failed to reveal any more. Somewhat similar scooped yards or courts are, however, commonly present in the stone-walled Romano-British and sub-Roman homesteads and settlements on both sides of the Cheviots, and are usually supposed to have served the dual purpose of enclosing stock and of improving the drainage of the house site.²

The Ditch and Bank (figs. 1 and 6).

That the ditch is an original feature of the homestead would seem to be established beyond doubt by the fact that its centre line, and the outer wall of House I, form concentric circles, and must therefore have been laid out at the same time from a common peg. When sectioned (fig. 6), the ditch proved to vary from 7 to 12 ft. in width, and from 18 ins. to 3 ft. in depth. The normal profile was V-shaped with a flat bottom; but in section G-H an unexcavated ridge of boulder clay, lying transversely across the floor, marked the junction between two digging parties and produced an irregular profile at this point. As the surface indications had suggested, there was an entrance-causeway, 7 ft. 6 ins. wide, on the north-eastern side, but no evidence was found for the existence of any kind of gate. In addition to this entrance, however, a second entrance, of which no traces could be seen on the ground before excavation, was discovered 40 ft. further to the S. In this case the gap in the ditch was no less than 19 ft. in width, and the entrance-passage was flanked by four lengths of palisading—the two shorter lengths projecting inwards from the lip of the ditch, and the other two outwards, as shown in fig. 1. The palisade-trenches were similar in size to the foundation-trench of the outer wall of House II, being 12-16 ins. deep and 12-15 ins. wide, while the uprights were spaced 9-18 ins. apart and packed with stones. The purpose of these hurdlework screens or fences is obscure,

¹ Cf. Appendix I for details of these posts.

² *P.S.A.S.*, LXXXI (1946-7), 138; *Antiquity*, XIX (1945), 83.

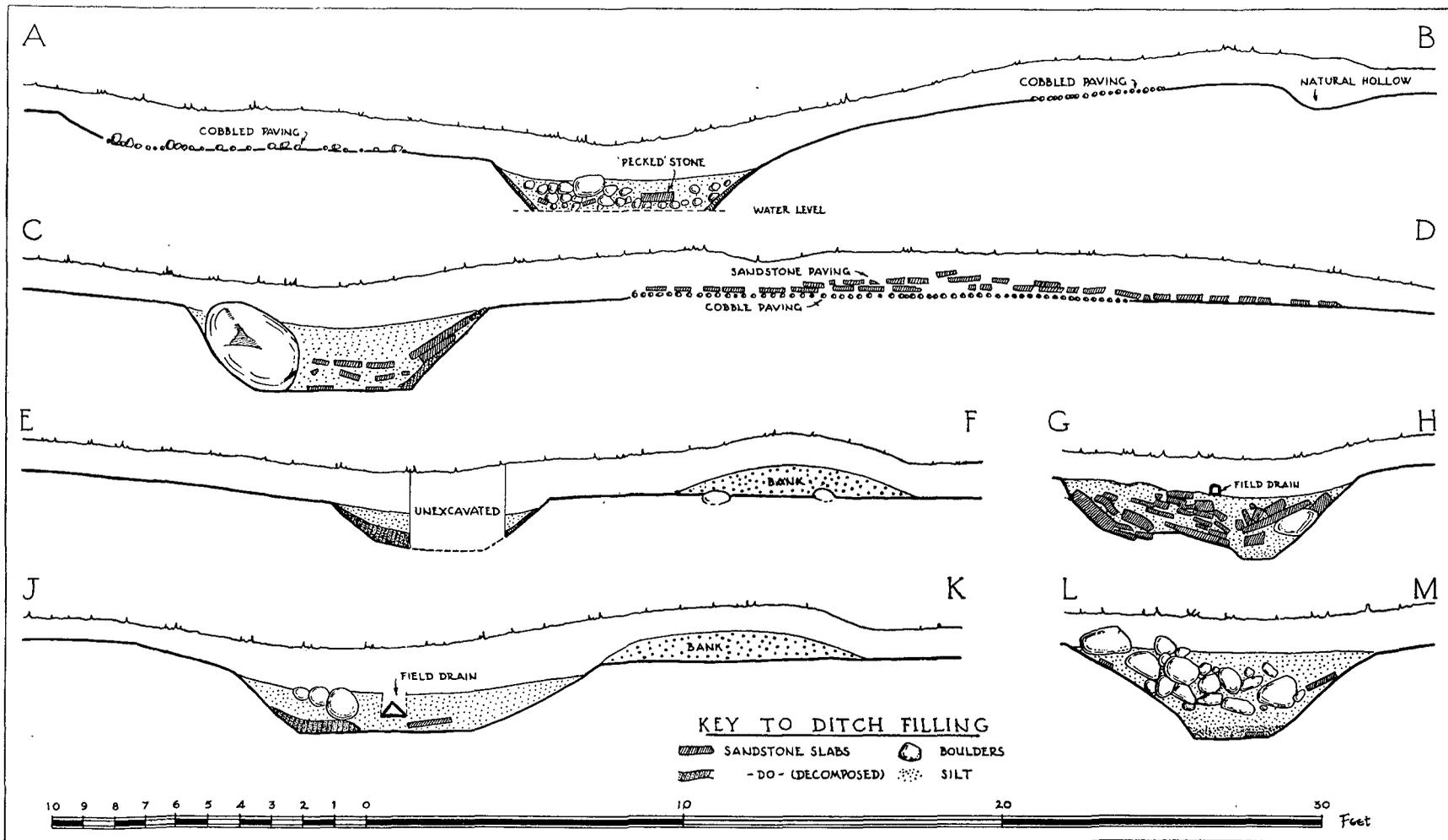


Fig. 6. Sections through the ditch and bank.

and their relationship to the ditch can only be considered in the light of the evidence from the ditch filling which was remarkable and unexpected. Since the various sections produced somewhat different results, it will be necessary to describe briefly each section in turn before attempting to summarise the conclusions.

Section A-B. The bottom of the ditch could not be reached owing to the presence of water, but the upper 12 ins. of filling consisted of cobbles, ploughed in from the yard, mixed with silt and a few pieces of yellow sandstone slabs—the largest of which had a roughly circular, pecked area on one surface (*infra*, p. 247). In addition, the sides of the ditch were stained bright yellow by decomposed sandstone washed down from either lip. Not only was there no trace of a bank at this point,¹ but 8 ft. from the outer margin of the ditch there were some slight remains of a cobbled paving similar to that which covered the floor of the yard.

Section C-D. Here the ditch-diggers had encountered a massive boulder, 3 ft. 6 ins. long, on the line of the scarp, and had left it *in situ*. Otherwise, the only stones in the filling were pieces of sandstone slabs similar to those described in detail in section G-H. Some of them occurred in the primary silt on the floor of the ditch, while there was also a small pile on the counterscarp. Again, there was no sign of an external bank. Instead a cobbled paving started 4 ft. 6 ins. from the outer edge of the ditch and extended eastwards for 16 ft.; while immediately over the cobbling there was a secondary paving of sandstone slabs, very much broken up by the plough. This secondary paving continued for at least 6 ft. beyond the limit of the cobbling, and although it was not practicable to determine its precise extent, probing and trial trenching succeeded in tracing it for distances of 24 ft. and 10 ft. respectively to the N. and S. of the section.

Section E-F. The ditch was not completely excavated, but it was established that the lower half of the filling consisted of decomposed yellow sandstone, and the upper half of silt free from stones. The external bank, formed of upcast from the ditch, was visible in the section: it was set back 4 ft. from the ditch, measured 7 ft. wide by 1 ft. high, and showed no signs of having been revetted in any way.

Section J-K. A band of decomposed sandstone occurred at the junction between the scarp and the bottom of the ditch, and a large slab of the same material, measuring 2 ft. in length by 15 ins. in width, was found in the filling. The external bank was again present but in this case there was no berm, the inner side of the bank resting on the outer lip of the ditch.

Section G-H. The whole of the terminal of the ditch on the W. side of the north-eastern entrance was excavated as far as section line G-H. Apart

¹ The slight scarp which had been assumed to mark the continuation of the bank on this side of the earthwork is actually nothing more than a miniature negative lynchet caused by ploughing away from the site on the last occasion when Common Hill was under cultivation.

from one boulder on the counterscarp, it was entirely filled with slabs of yellow sandstone, measuring up to 3 ft. in length and 2-8 ins. in thickness, which had been deposited before any appreciable quantity of silt had formed on the floor (Pl. XVII, 1). A number of the slabs were so firmly embedded against the sides and ends of the ditch as to suggest the possibility that they had formed part of a stone lining, designed to prevent the destruction of the causeway by erosion from surface water (Pl. XVII, 2). The remainder, however, clearly represented the debris from the demolition, or collapse, of an adjacent structure. About 150 sq. ft. of slabs were recovered from the filling, but many more had completely disintegrated in the moist conditions of the ditch, and were only recognisable by patches of sand in the silty clay that filled the interstices between the stones. On the floor of the ditch, at the deepest point, were found the right metacarpal and carpal bones of an ox.

Section L-M. The 17-ft. long stretch of ditch between section line C-D and the eastern entrance was completely excavated, and Section L-M has been drawn for comparison with Section C-D. From the entrance as far as Section L-M, the filling was uniform in character—a layer of silt, 9 ins. deep, on the bottom of the ditch being sealed by a compact mass of boulders which had clearly been deposited simultaneously and not piecemeal. No sandstone was present amongst the boulders, but a few isolated slabs were encountered on both the scarp and counterscarp of the ditch, and in the primary silt. The boulders did not extend further N. than section line L-M, but the number of sandstone slabs in the filling showed a marked increase towards Section C-D. And at one point, in the angle between the counterscarp and the bottom of the ditch, there was a small heap of four such slabs, resting one on top of the other, as though they had fallen in together. The only relic found in the filling anywhere in this sector was a stone disc (Pl. XIX, 2) from the primary silt.

Any interpretation of the complicated results provided by these sections must succeed in resolving a number of apparent inconsistencies. In the first place, although the presence of an external bank was confirmed on the S. and W. sides, no such bank was found on the other two sides of the enclosure, where it would, in any case, have encroached upon the exterior paving. Secondly, whereas occasional sandstone slabs in the ditch filling need be nothing more than dislodged paving-stones, the numerous slabs in Sections C-D and G-H (none of which showed any signs of having been used as flooring) must rather represent the debris of a wall; and the evidence from Section C-D implies that the wall stood outside the ditch, and not inside it. This wall cannot, however, have been continuous, since to have extended it round the western side of the enclosure would have entailed the removal of the upcast bank in Section J-K. And even in Sections C-D and G-H the wall was evidently demolished very soon after the ditch was

dug. If, then, the ditch is contemporary with House I, as was suggested above, we are forced into the assumption that the wall, too, was included in the original design, but that before the work had proceeded very far the scheme was abandoned and the finished portions of the wall cast into the ditch. This is manifestly absurd. For it is unthinkable that stones quarried and transported to the site with great labour would be jettisoned in this way, and not put to other practical use. Moreover, we should also have to conclude that House II had no enclosure wall apart from the upcast bank on the S. and W. sides, which, as we have seen, served no structural purpose since it was not revetted in timber or stone. Yet it is precisely in the second phase of occupation that we have positive evidence for the employment of sandstone slabs on the site—the central hearth of House II, and the secondary paving outside the ditch in Section C-D, being constructed in this material. The only means of escape from this dilemma that occurs to the writer is to assume that the ditch is not a primary feature of the site, but that it was dug to replace an original palisade, and adopted the palisade-trench as its centre line. If this is so, and unfortunately it can neither be proved nor disproved, the structural history of the site could be reconstructed as follows. Initially, the homestead comprised House I, and possibly an outbuilding of some sort, set within a circular enclosure bounded by a single palisade. The main entrance to the enclosure was on the E. and was equipped with a "horn-work" in the form of two lengths of palisading which, however, projected internally as well as externally. The purpose of the "horn-work" is unknown: it can hardly have been a purely decorative feature, and yet it does not make the entrance more secure, nor would it have been of any assistance in driving animals into the enclosure.¹ Whether the north-eastern entrance was likewise in existence at this stage is uncertain, since the causeway had been disturbed in recent times when a field drain was laid across it. The sunken yard, and the rest of the cobbling found both inside and outside the compound must, however, belong to the initial phase of occupation.

Subsequently, but not necessarily simultaneously, a number of drastic alterations were carried out on the site. House I was replaced by House II, a larger outbuilding (the "byre") was erected, and a ditch was dug on the line of the original boundary fence. At the main entrance the "horn-work" was dismantled, and its foundation-trenches partly obliterated by the ditch terminals². The ditch itself was not defensive, but was simply intended to drain off surface water from the interior—a very necessary provision on

¹ It may be worth noting in this connection that a palisaded settlement on Fasset Hill, Roxburghshire, also exhibits a forework, though of a different pattern from the one at West Plean (*P.S.A.S.*, LXXXIII (1948-9), 65).

² Alternatively, the "horn-work" may have been retained, and subsequent weathering of the ditch terminals may be responsible for the partial obliteration of the foundation-trenches. No decision on this point could be reached from a study of the remains themselves.

this site as we found in 1954—and the ditch upcast was temporarily dumped on the outer lip. About the same time as the ditch was being dug, large quantities of sandstone slabs, such as may be obtained locally from a number of outcrops,¹ were transported to the site and were used for repaving, both inside and outside the enclosure, and for the construction of a wall in place of the upcast bank. Section C–D shows that this wall cannot have been more than 4 ft. 6 ins. thick at the base, and it was doubtless very similar in design to a modern field wall. Before this wall had been completed, however, the inhabitants were compelled to abandon the homestead, and this evacuation was attended by the collapse or deliberate overthrow of the finished portions of the wall. Round the rest of the perimeter, pieces of sandstone paving from the interior of the enclosure soon collapsed into the ditch, but the boulders found in the filling in Sections J–K and L–M were clearly deposited at a somewhat later date, and probably represent the clearing of the site prior to cultivation.

Although it is to a large extent based on inference, and is no doubt susceptible to amendment in detail, the structural sequence outlined above at least fits the observed phenomena. The significance of this sequence, and analogies for some of the main structural elements, will be discussed after the finds have been described.

THE FINDS.²

1. Pl. XVIII, 1. Sandstone cup with handle. The bowl is circular and measures externally $2\frac{3}{4}$ ins. in height and $4\frac{1}{4}$ ins. in diameter across the top, while the cavity is 3 ins. in diameter and $1\frac{1}{4}$ ins. in depth. The rim is rounded, and the base flattened so that the cup stands firmly without risk of overturning. The handle is in the form of a lug which is placed $\frac{1}{4}$ in. below the rim and projects 1 in. from the wall of the vessel: it is rounded at the end and has a thumb-depression on the upper surface. The only ornamentation consists of an incised line that encircles the rim externally just below the lip.

Stone cups of this kind with either short, or, more rarely, long handles, have been found in considerable numbers in Scotland, the National Museum of Antiquities possessing over eighty of them, and their distribution and date have been briefly discussed by Callander³ and Childe.⁴ As fig. 7 shows, comparatively few have been found on the mainland S. of the Forth-Clyde isthmus, and none at all in the Border counties; but otherwise they range from Shetland to Kintyre, with a marked concentration in Aberdeenshire, and especially in the Howe of Alford. Outside Scotland, the National

¹ *E.g.* Pleanbank Wood.

² Unless stated otherwise, the finds all came from the central area of the site.

³ *P.S.A.S.*, I (1915–16), 145.

⁴ *Prehistory of Scotland*, 246–7.

Museum of Ireland has twelve specimens, and records of two more, the majority of which were found in the northern counties, while there are seven others (all unlocalised) in the Belfast Museum and Art Gallery. At least one has been noted in the Isle of Man, but only one (in Truro Museum) in England.

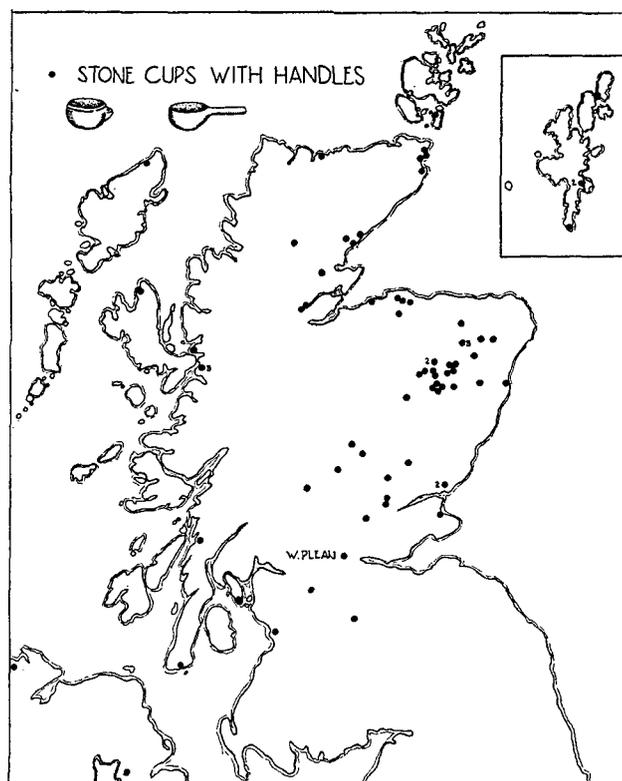


Fig. 7.

A detailed examination of seventy-five of these cups shows that 60 per cent are made of steatite, 17 per cent of sandstone, and 14 per cent of schist. Cups with long handles (*i.e.* over 2 ins. in length) form only 15 per cent of the total, the remaining 85 per cent being short-handled. Roughly 60 per cent of the handles are perforated for suspension, 30 per cent are unperforated and plain, while the rest bear finger and/or thumb depressions which may be on the top and bottom of the handle, on the top only, or on the sides. About half the cups are undecorated, the others being ornamented externally with geometric patterns, usually of a rudimentary character, formed by incised straight lines.

Most of the cups, including all the Irish examples, are casual discoveries with no recorded associations, but a number of the Scottish specimens are reported to have been recovered from structures of various kinds, including "cairns" at Woodside Croft (Aberdeenshire)¹, Gallowflat near Rutherglen,² and Echt (Aberdeenshire);³ a stone circle at Crookmore (Aberdeenshire);⁴ vitrified forts at Barry Hill (Perthshire), Kemp Law (Ayrshire) and Dunagoil (Buteshire);⁵ brochs at Howe of Hoxa (Orkney), Clikhimin (Shetland),⁶ Kintradwell,⁷ Carn Liath⁸ and Carrol (Sutherland), Keiss Road,⁹ Kettleburn,¹⁰ Everly¹¹ and Nybster (Caithness), Dun Beag (Skye),¹² and Dun Telve (Inverness-shire);¹³ the dun known as Druim an Duin (Argyll);¹⁴ a crannog at Hyndford (Lanarkshire) in association with Roman pottery of the 1st century A.D.;¹⁵ an earth-house at Carlungie (Angus);¹⁶ a wheel-house at Jarlshof (Shetland);¹⁷ and a dwelling site at Galson in Lewis.¹⁸

It is evident, then, that handled stone cups were being fashioned in Scotland in the pre-Roman Iron Age (at Dunagoil) and that they continued in use at least until the second or third centuries A.D. Whether their origin is to be sought in the Late Bronze Age, as Childe claimed, is, however, more open to question. For although the style of the ornamentation, with its geometric patterns of straight lines, is in the Bronze Age tradition, there is no proof that the cups said to have been found in cairns, or in the vicinity of stone circles, were contemporary with the monuments concerned. Opinion is also divided about the function of these vessels. That they are ultimately copies of wooden cups and ladles such as have been found in the Lochlee Crannog¹⁹ and elsewhere,²⁰ seems obvious enough; and it is reasonable to suppose that they were actually used as eating or drinking utensils in the N., and in the islands, where wood was hard to come by. On the other hand, as we have seen, their distribution is by no means restricted to the treeless

¹ *P.S.A.S.*, L (1915-16), 145.

² *Ibid.*, XL (1905-6), 47.

³ *Ibid.*, LXVI (1931-2), 102.

⁴ *Ibid.*, I (1885), 116-17. The examples said to have been found within the area of the Hebridean circle at Callernish, and the circle at Whiteside (Aberdeenshire), were not certainly of the type under discussion. The initial notice of the former vessel in *Arch. Scot.*, I, 284 merely refers to a stone bowl, with no mention of a handle.

⁵ *Trans. of the Buteshire Nat. Hist. Soc.*, 1925, Pl. 33.

⁶ But from an immediately post-broch occupation floor, as the excavator Mr J. R. C. Hamilton kindly informs me.

⁷ *Arch. Scot.*, v, 97.

⁸ *Ibid.*, 105 and Pl. XVI, 1.

⁹ *P.S.A.S.*, xxxv (1900-1), 137.

¹⁰ *Ibid.*

¹¹ *Ibid.*, 143.

¹² *Ibid.*, LV (1920-1), 120.

¹³ *Ibid.*, L (1915-16), 250.

¹⁴ *Ibid.*, xxxix (1904-5), 291.

¹⁵ *Ibid.*, xxxiii (1898-9), 381.

¹⁶ I owe this information to Dr F. T. Wainwright. Many of the Aberdeenshire cups were no doubt recovered from the surface dwellings of the earth-house builders.

¹⁷ Information from Mr J. R. C. Hamilton.

¹⁸ *P.S.A.S.*, LVIII (1923-4), 199; *ibid.*, LXXXVI (1951-2), 106.

¹⁹ Munro, *Ancient Scottish Lake Dwellings*, figs. 102 and 104.

²⁰ *P.S.A.S.*, LXXXV (1950-1), 164.

areas; and whereas the steatite cups are normally well-finished, many of the sandstone variety are so crude, and their capacities so small, that by no stretch of the imagination can they be regarded as bowls or beakers. An alternative explanation, namely that the vessels were lamps, derives support from the examples from Nybster broch, Skerray, Dunning, and County Carlow in Eire—all of which are blackened by smoke and soot. But this blackening may be due to secondary usage, as none of the other seventy-one specimens included in the survey exhibits similar traces of fire. Another cup found near Killygordon, County Donegal, appeared to have been used as a mortar for grinding pigments,¹ though again this can hardly have been the primary function of the vessel since a mortar would not require a handle. It would seem, therefore, that while the handled stone cups were initially designed as substitutes for wooden eating or drinking vessels, this original purpose became of lesser importance as the fashion for making the cups spread into other areas, the later examples being put to a variety of uses as the occasion demanded.

2. Pl. XVIII, 2. Irregularly-shaped piece of cannel coal, $\frac{1}{2}$ in. in thickness, with an hour-glass perforation approximately in the centre. One side has been abraded by contact with a rotating surface, 2 ins. in diameter, pivoted in the central hole. The other side exhibits an incomplete perforation.

3. Pl. XIX, 1. Whetstone of fine grained sandstone.

4. Pl. XIX, 2. From the primary silt in the bottom of the ditch. Roughly circular disc of sandstone, $\frac{1}{2}$ – $\frac{3}{4}$ in. in thickness, polished on one surface.

5. Pl. XIX, 3. Half-a-ring of argillaceous sandstone, oval in section. It measures 2 ins. in diameter internally, about $4\frac{3}{4}$ ins. in diameter externally, and 1 in. in thickness. It is too elaborate for a loom-weight and its purpose is uncertain.

6. Pl. XIX, 4. From the burnt area on the south-west side of the compound. Stone disc similar to No. 4 above, but unpolished.

7. Pl. XIX, 5. Segment of a stone ring of micaceous schist, about $2\frac{3}{4}$ ins. in diameter externally, with a V-shaped perforation. Perhaps a loom-weight.

8. Pl. XIX, 6. Segment of a small stone ring, $\frac{1}{12}$ of an in. in thickness. It can only have been an ornament.

9. Pl. XIX, 7. Whorl of schist, $\frac{1}{4}$ in. in thickness.

10. Pl. XIX, 8. Fragment of a perforated object of lignite, seemingly too light for a whorl.

11. Pl. XIX, 9. Part of a whorl of schist.

12. Pl. XIX, 10. Whorl of schist.

13. Pl. XIX, 11. Part of a whetstone.

¹ *P.R.I.A.*, XLII (1931-5), 155.

14. Fig. 8. From the cobbled yard. Nearly half of the upper stone of a bun-shaped rotary quern of micaceous schist. The stone has been broken before use, probably in the process of boring the central hole.

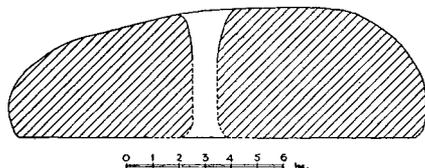


Fig. 8. Upper stone of quern from cobbled yard.

Not Illustrated.

15. From the cobbled yard. A stone flattened at the base and bearing a cup-shaped hollow, $2\frac{3}{4}$ ins. in diameter and $\frac{1}{2}$ in. deep, on the upper surface.

16. From the ditch filling in Section C-D. A five-sided slab of sandstone, 14 ins. long and $3\frac{1}{2}$ ins. thick, bearing on one face a pecked out circular area 5 ins. in diameter and $\frac{1}{4}$ in. in depth.

17. Roughly triangular piece of schist, 4 ins. long, with a fractured perforation on one edge.

18. Small piece of hand-made native pottery of indeterminate age; gritty on the outside and smoothed internally. Also two crumbs of pottery or daub.

Several pieces of iron slag were also recovered from the humus within the circuit of the ditch, and analysis of one specimen showed that it was earlier than about A.D. 1700 since it contained no lime. It is possible, therefore, that iron-working was practised in the Plean homestead, as at The Allasdale,¹ but the evidence does not amount to proof. No crucibles or clay moulds were found, and the slag, together with a number of mediæval and later sherds, may well have been incorporated in street refuse dumped on the land in comparatively recent times.

CONCLUSIONS.

The site at West Plean belongs to a distinct class of monument, comprising small fenced or walled enclosures containing one or (less frequently) two round houses, which is distinguished for convenience by the term "homestead." This simple type of habitation was obviously designed to house only an individual farmer or herdsman and his family and had a long life. Although they still await excavation, the timber-built examples noted on Gray Coat and Greenbrough Hill, Roxburghshire,² are likely to date to the

¹ *P.S.A.S.*, LXXXVII (1952-3), 100.

² *P.S.A.S.*, LXXXIII (1948-9), 65.

Late Bronze Age or to the pre-Roman Iron Age; while stone-walled homesteads with round or oval stone huts became very common in south-eastern Scotland and in Northumberland during the Roman occupation, and remained in use at least until the 6th or 7th century A.D.¹ Before considering the dating evidence for West Plean, it is worth noting that the occupation does not seem to have extended over any considerable period of time. It is, of course, impossible to calculate exactly how long the main timbers of Houses I and II would have stood before natural decay required them to be replaced, but Dr Bersu's estimate of a life of thirty to forty years for the comparable timbers of the Early Iron Age house at Scotstarvit Covert² is probably not far wide of the mark. Since, therefore, neither of the two Plean houses showed any sign of repair, the total duration of the occupation would seem, on this basis, to have been about eighty years at the most, and it may well have been considerably less. This conclusion is consistent with the evidence of the relics themselves, which, meagre as they are, do form a homogeneous group. The majority of them—the handled stone cup, the circular discs, the ornamental stone ring, the perforated object of lignite, the whetstones, and the whorls—can all be paralleled from the vitrified fort at Dunagoil, Bute,³ which is now thought to be not earlier than 100 B.C.⁴ And the fragment of the rotary quern is at home in the same company, although the type to which it belongs is thought not to have been introduced into Scotland before the latter part of the 1st century A.D.⁵ As far as the lower limit of the occupation is concerned, the decisive factor is the entire absence of any Roman material. Bearing in mind the proximity of the homestead to the Roman road (which was open at least as far as Ardoch during both the Flavian and Antonine periods), and the extent to which Roman objects, particularly potsherds, found their way into native hands during and after the Roman occupation, this negative evidence must imply that Plean was abandoned before the Agricolan armies invaded Scotland in A.D. 80.⁶ In short, then, the testimony of the small finds points to occupation within the period 100 B.C. to A.D. 80, and probably late rather than early within that period. It may even be that the evacuation of the site was precipitated by the news of the Agricolan invasion, but this is mere conjecture.

The chief interest of the homestead lies in the radically different plans of the successive houses. As has already been remarked, House II is a variant of a well-known and widely distributed type of Early Iron Age dwelling, in which the hearth occupies the central position, while the roof

¹ *P.S.A.S.*, LXXXI (1946-7), 138.

² *P.S.A.S.*, LXXXII (1947-8), 257.

³ *Trans. of the Buteshire Nat. Hist. Soc.*, 1925.

⁴ *P.S.A.S.*, LXXXIV (1949-50), 129.

⁵ *P.S.A.S.*, LXXXVI (1951-2), 104.

⁶ An instructive comparison may be made with the finds from the native settlement at Edgerston, 5 miles from the same road, which was inhabited in the 2nd century A.D. (*Inventary of Roxburghshire*, No. 457).

is supported on two or more concentric rings of posts. In south-eastern Scotland such houses can sometimes be inferred from surface indications,¹ and have been proved by excavation at the settlement on Hayhope Knowe² and in the homestead at Scotstarvit Covert. The latter site, which consisted of a large house with three concentric rings of posts, set in the centre of a walled enclosure is in fact the closest analogy to the Plean homestead in its final form, and like Plean it is considered to have been built about, or shortly before, the 1st century A.D.³

House I, on the other hand, with its single wall and central post, belongs to an entirely different class of dwelling which was introduced into southern England in the Late Bronze Age, and is best known from the settlements at Plumpton Plain⁴ and New Barn Down.⁵ If, therefore, we are right in thinking that there was no break in the occupation, it seems probable that the two house-types at Plean reflect the peaceful transformation of a native Late Bronze Age site by the adoption of new architectural traditions imported into the region by Early Iron Age immigrants. But there can be no certainty on this point until much more is known about the evolution of both types of structure.

Unfortunately the excavations threw scarcely any light on the economic background and equipment of the Plean household. Most of the implements must have been fashioned of wood, bone, iron or leather and were either removed when the place was abandoned, or have perished in the ground. The only bones present were those of the ox, and the single piece of native pottery found cannot be definitely associated with the homestead. The lack of stabling for more than one or two beasts suggests that the main occupation was corn growing rather than cattle raising, but in the absence of any traces of a contemporary field system the methods and the extent of cultivation are alike obscure. Answers to these and many other unsolved problems must await the excavation of a better preserved homestead than West Plean.

¹ E.g. *Inventory of Roxburghshire*, Nos. 994 and 1044.

² *P.S.A.S.*, LXXXIII (1948-9), 45.

³ *Loc. cit.*

⁴ *P.P.S.*, I (1935), 16.

⁵ *Sussex Arch. Coll.*, LXXV (1934), 137.

APPENDIX I.

THE POST-HOLES.

The following table gives the dimensions (in ins.) of the principal post-holes found on the site.

A. *Houses I and II.*

No.	Cross-section	Depth	No.	Cross-section	Depth
1	9 × 8	15	14	11 × 8	15
2	10 × 10	18	15	9 × 6	14
3	8 × 8	22	16	8 × 7	30
4	11 × 8	16	17	12 × 6	21
5	12 × 10	17	18	8 × 6	20
6	9 × 7	24	19	7 diam.	20
7	8 × 8	14	20	8 × 5	18
8	9 × 5	15	21	12 × 6	12
9	11 × 7	18	22	7 × 4	18
10	10 × 10	16	23	9 × 6	14
11	11 × 8	15	24	7 × 7	10
12	10 × 10	16	25	6 × 6	11
13	16 × 8	11			

B. *The Byre.*

No.	Cross-section	Depth	No.	Cross-section	Depth
36	10 × 6	14	47	10 × 8	15
37	7 × 6	17	48	5 diam.	5
38	7 × 7	16	49	6	11
39	8 × 6	21	50	6 diam.	12
40	3 × 4	9	51	6 diam.	15
41	8 × 4	17	52	4 diam.	5
42	8 × 6	13	53	9 × 5	19
43	12 × 8	14	54	8 × 4	11
44	12 × 8	10	55	11 × 5	11
45	5 × 5	10	56	10 × 5	8
46	7 × 5	5	57	6 × 6	12

C. *Miscellaneous.*

No.	Cross-section	Depth	No.	Cross-section	Depth
58	5 × 5	12	61	Each 5 × 5	15
59	6 × 6	12	62	7 × 6	12
60	8 × 8	12	63	6 × 6	12

APPENDIX II.

ANALYSIS OF AN EARTH SAMPLE FROM THE BOTTOM OF THE DITCH.

BY DR ELIZABETH M. KNOX.

This sample contained a high percentage of pollen of *Quercus* (Oak), with a considerable quantity of *Betula* (Birch) and a lesser amount of *Alnus* (Alder).

Herbaceous plants were represented by pollen of *Cyperaceæ* (Sedges), *Ericaceæ*, a few pollen grains of Thistle, Scabious, Campion, and Spurrey, with very occasional spores of *Sphagnum* and Ferns. Pollen grains of *Cyperaceæ* were considerably commoner than any others.



1. West Plean: western portion of the central area from the south, showing stone-packed foundation trench.



2. West Plean: central hearth.



1. West Plean: cobbling inside the outer wall of House II on the north.



2. West Plean: view of the sunken yard from the north-east.

K. A. STEER.



1. West Plean: ditch terminal in section G-H showing filling of stone slabs.

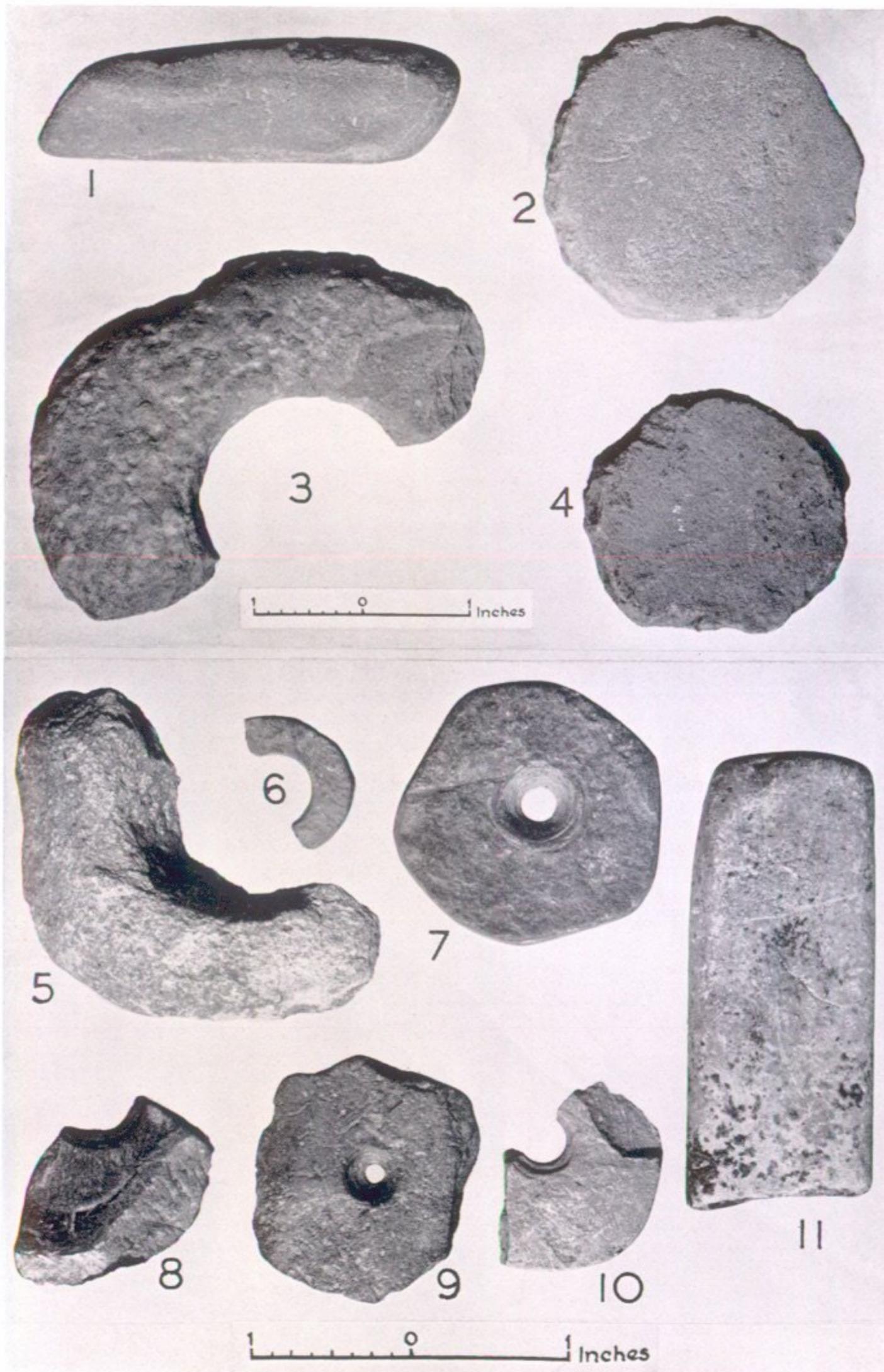


2. West Plean: as above, after removal of loose slabs.



West Plein: objects of stone and cannel coal.

K. A. STEER.



West Plein: objects of stone and cannel coal.

K. A. STEER.