

VI.

THE IRON AGE SETTLEMENT AT HAYHOPE KNOWE,
ROXBURGHSHIRE. EXCAVATIONS 1949.

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CONTENTS.

	PAGE
I. INTRODUCTION	45
II. THE EXCAVATIONS	48
III. INTERPRETATION AND DISCUSSION	58
APPENDIX I. THE IDENTIFICATION OF PALISADED ENCLOSURES FROM SURFACE INDICATIONS, by Dr K. A. STEER	64
APPENDIX II. THE CARBONISED WOODS	67

I. INTRODUCTION.

During recent years, field-work undertaken by the Royal Commission on Ancient Monuments in Roxburghshire has drawn attention to a number of sites characterised by having either a single or double palisade enclosure, or both, and recognisable on the ground without excavation.

In 1948 the excavations at Hownam Rings,¹ a typical Cheviot fort of many periods, revealed an unsuspected single palisade enclosure as its earliest feature, but owing to the disturbances caused by later occupation it was impossible to date it accurately. Consequently, it was decided that the Commission should select a site which from surface observation was known to be enclosed by a palisade, but which had not been overlaid by subsequent occupation or defences, and that this site should be excavated by the writer in close co-operation with the Royal Commission, and with labour largely supplied by the Scottish Field School of Archæology. It was hoped that the results would enable these palisaded enclosures to be approximately dated, and their cultural affinities identified in time for this knowledge to be incorporated in the forthcoming *Inventory* of the county now in preparation by the Royal Commission.

Accordingly, the settlement of Hayhope Knowe at the head of the Bowmont valley and but a short distance from the Northumbrian border was selected, and a month's excavation carried out. This work was done in June and July of 1949. The excavation was based on a survey carried out

¹ *Proc. Soc. Ant. Scot.*, vol. lxxxii. (1948), pp. 193-225.

as part of the routine work of the Royal Commission, and I am grateful to Mr C. T. Calder for kindly supplying me with a working copy of the plan, on which fig. 2 is based.

Method.

A base line having been laid out approximately from east to west of the almost flat hilltop, a grid of twelve-foot squares was laid out on each side of it. The points of intersection of these squares were used as triangulation points.

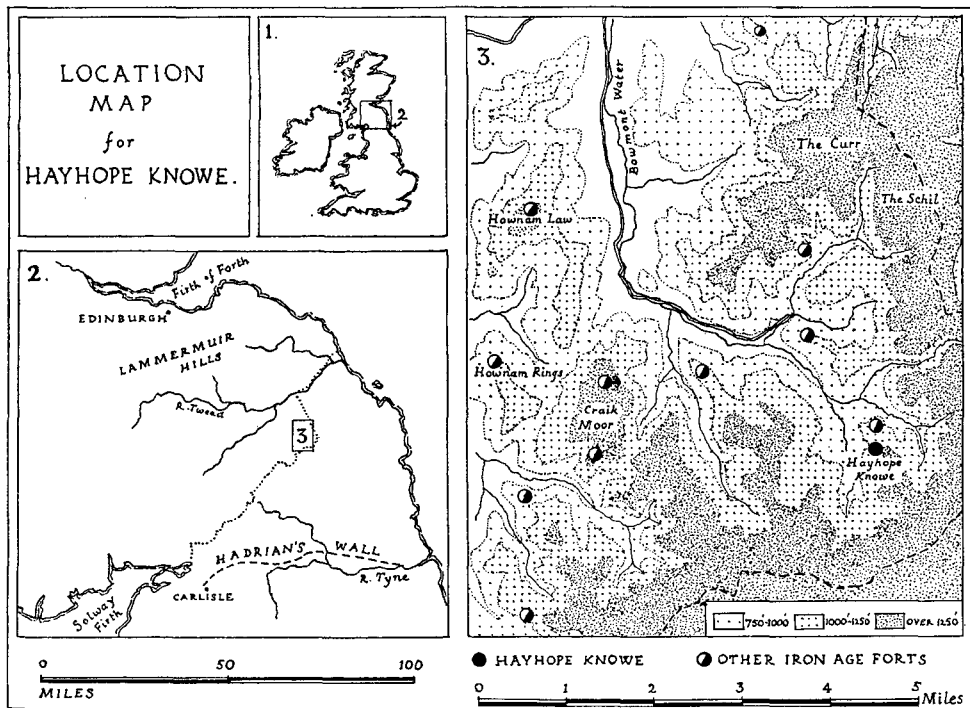


Fig. 1.

Huts were planned at a scale of 3 feet to 1 inch; smaller areas requiring more detail at 2 feet to 1 inch; and all larger plans at 6 feet to the inch. These scales were convenient, for they allowed for reductions of $\frac{1}{3}$ or $\frac{1}{2}$ to be made from the detailed plans on to the larger areas requiring little detail.

The season was extremely hot, and the ground, once exposed, soon became so dry that no colour distinctions were visible. Each twelve-foot square was cleared to the natural crumbled rock surface, the various features revealed were planned, and the square refilled and turfed over as soon as possible to enable us to keep pace with refilling and to give the parched grass a better chance of new growth (Pl. XII, 2).

The Visible Remains before Excavation.

Hayhope Knowe¹ lies near the head of the Bowmont Water, one and a half miles from the present border between Scotland and England, and at

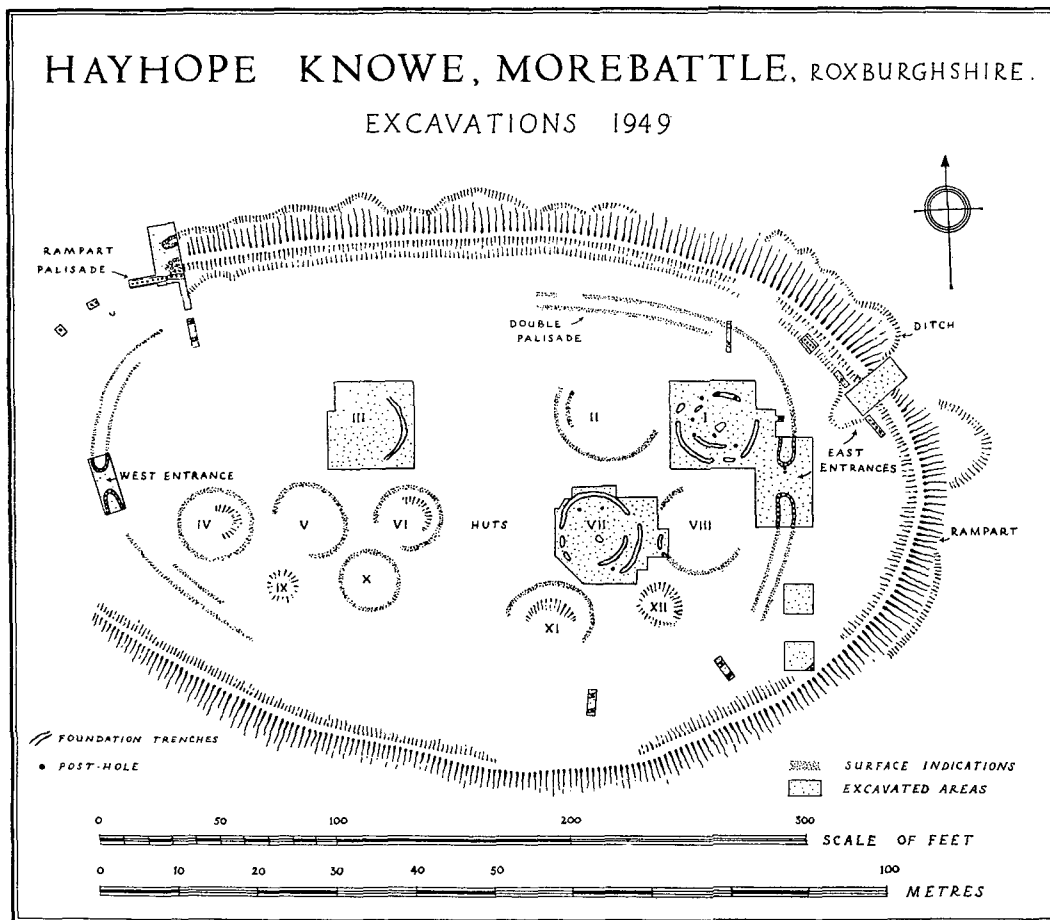


Fig. 2. Plan of Hayhope Knowe.

Based on the survey of the Royal Commission on Ancient Monuments for Scotland.

a height of 1100 feet O.D. (National Grid Ref. 36/860176). The nearest habitation is the farm at Cocklawfoot, to which a farm road runs from

¹ On the name Hayhope, Miss J. O. Ramsay kindly supplied the following information:—

Early forms.

Hayhop(e) RMS 1523, *Harl.* 1757, RMS 1643, 1652-59, 1660-68;

Hayhoip RMS 1610, 1611; *Hayupp* Blaeu 1662.

The name probably means "the valley with an enclosure" (O.E., hege + hop). The phonological evidence is not conclusive as the documentary evidence is late, but the modern HOWIEHILL appears

Belford parallel to the Bowmont Water. The country is open well-drained hill country, and during the Iron Age it may be supposed that most of the lower ground, perhaps even to a height of 800 feet or so, would have been wooded. From Hayhope Knowe the horizon is bounded by such well-known hills as the Schill and the Curr, Craik Moor and Hownam Law, and the Cheviot itself. Hayhope Knowe is most easily approached from the east, where a gentle slope leads down from higher ground to continue the long axis of the hill (Pl. XII, 1). On the north, west and south the slope is more sudden, but at no time can this hilltop have been chosen for its particularly strong natural defences. All but the western end of the hill had been enclosed by a single earthen bank and ditch which, from its abrupt end on the north-west, appeared to be uncompleted (fig. 2). An entrance through this earthwork was clearly visible on the east. About 25 feet within this earthwork two parallel grooves in the rough grass, each a little over 1 foot in width and 5 feet apart, could be seen showing up as slightly darker depressions running concentrically with the earthwork, and resembling in appearance the tracks made by cartwheels. Narrow entrances through these pairs of grooves were clearly visible on the east and west. The character of these had been tested during 1948. They were found to be bedding trenches for palisades, filled with stones originally packed round posts set approximately at 1 foot intervals. Inside this double enclosure were the houses, twelve in number and varying from about 25 to 45 feet in diameter. Grooves in superficial appearance exactly similar to those of the palisade enclosure surrounded some of these houses, and within these in three cases it was noticed there was a concentric but incomplete segment of similar appearance. These houses had been placed on each side of a line running across the settlement between the east and the west entrance, suggesting a village street.

II. THE EXCAVATION.

(a) *The Huts.*¹

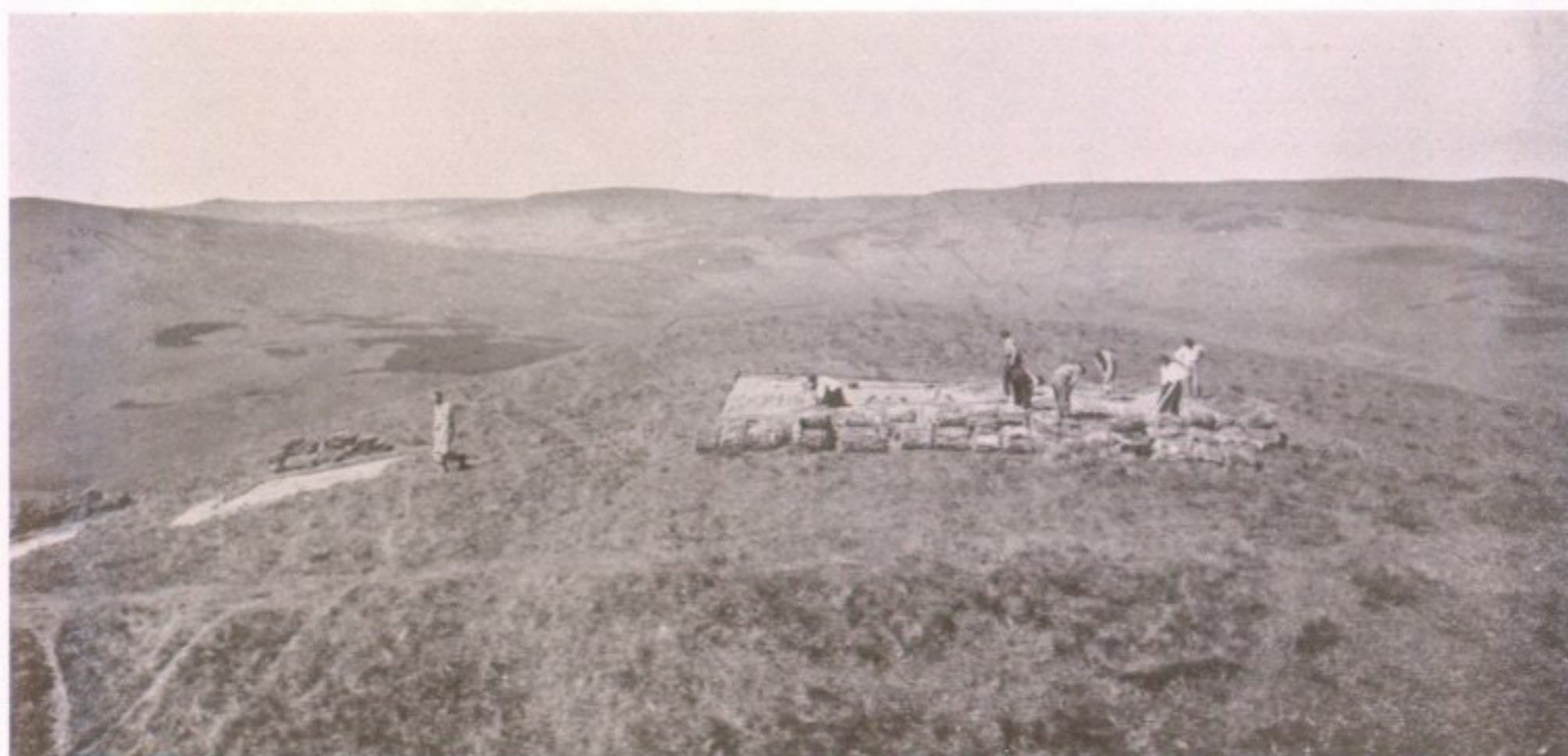
During the season's work three of the houses were completely cleared: both entrances through the double palisade were examined, and the course of this palisade, when not clear on the ground, was verified by excavation. In addition, the east entrance through the earthwork defence was stripped, as was also its termination on the north-west of the hill. It is felt that

in its earliest form as *Howay* ("the hill-fort"). There is no site at Howiehill, but it is a likely site and may have been ploughed away. The third example of the element *hay* in Roxburghshire is *Highchesters* (16th century Haychesters). In each case the name is associated with an early site.

¹ The term "hut" was used throughout the excavation, and the drawings were completed before Dr Bersu, in correspondence with the excavator, asked for a reconsideration of the term, pointing out that these structures were large and should be more properly called *houses*. For convenience in referring to the plans the word "hut" has been used in this section on the excavation, but after this section it has been abandoned in favour of "house."



1. Hayhope Knowe from the North-east.



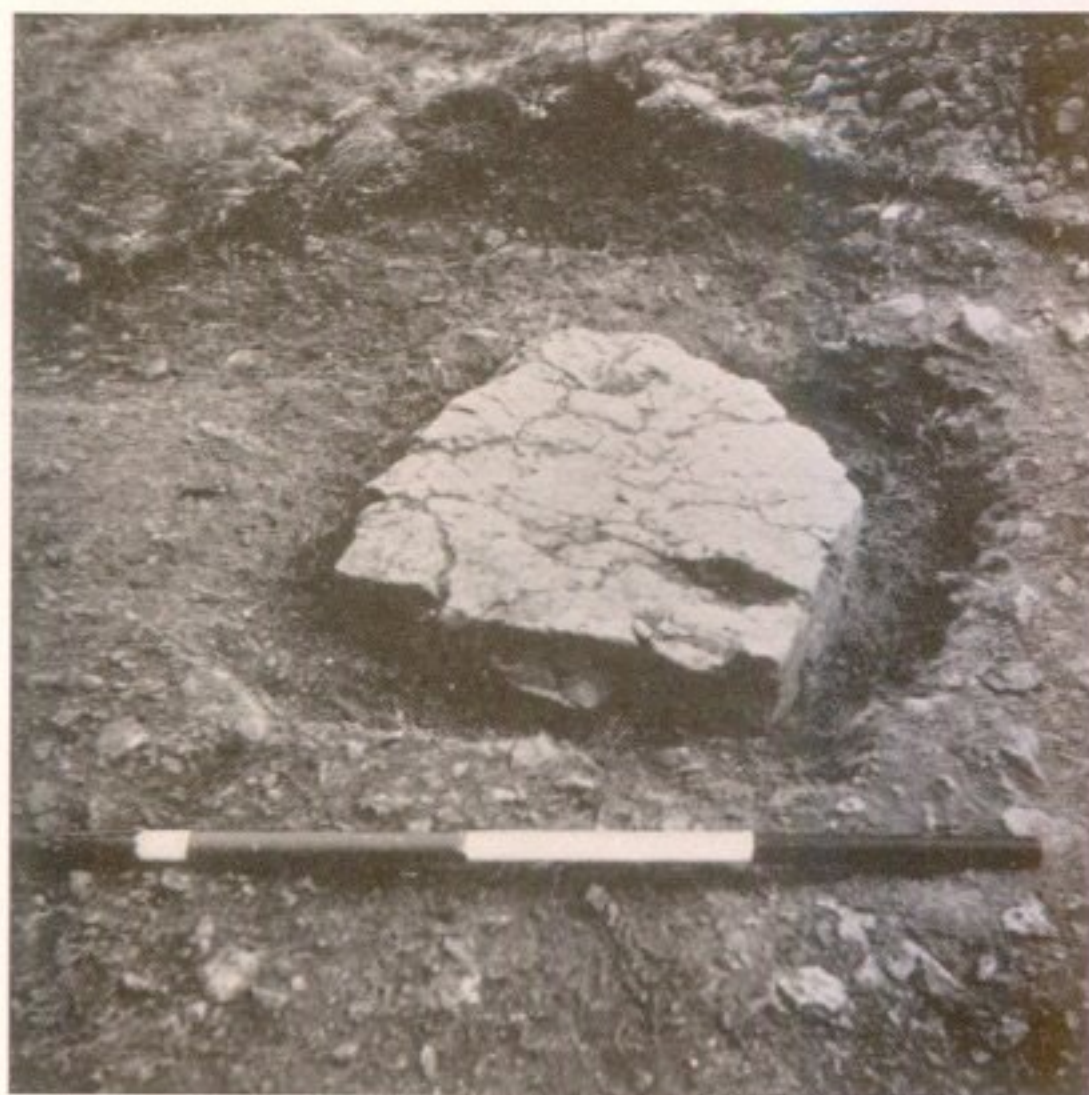
2. Beginning of Excavation.

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1. End of Rampart on North-west.

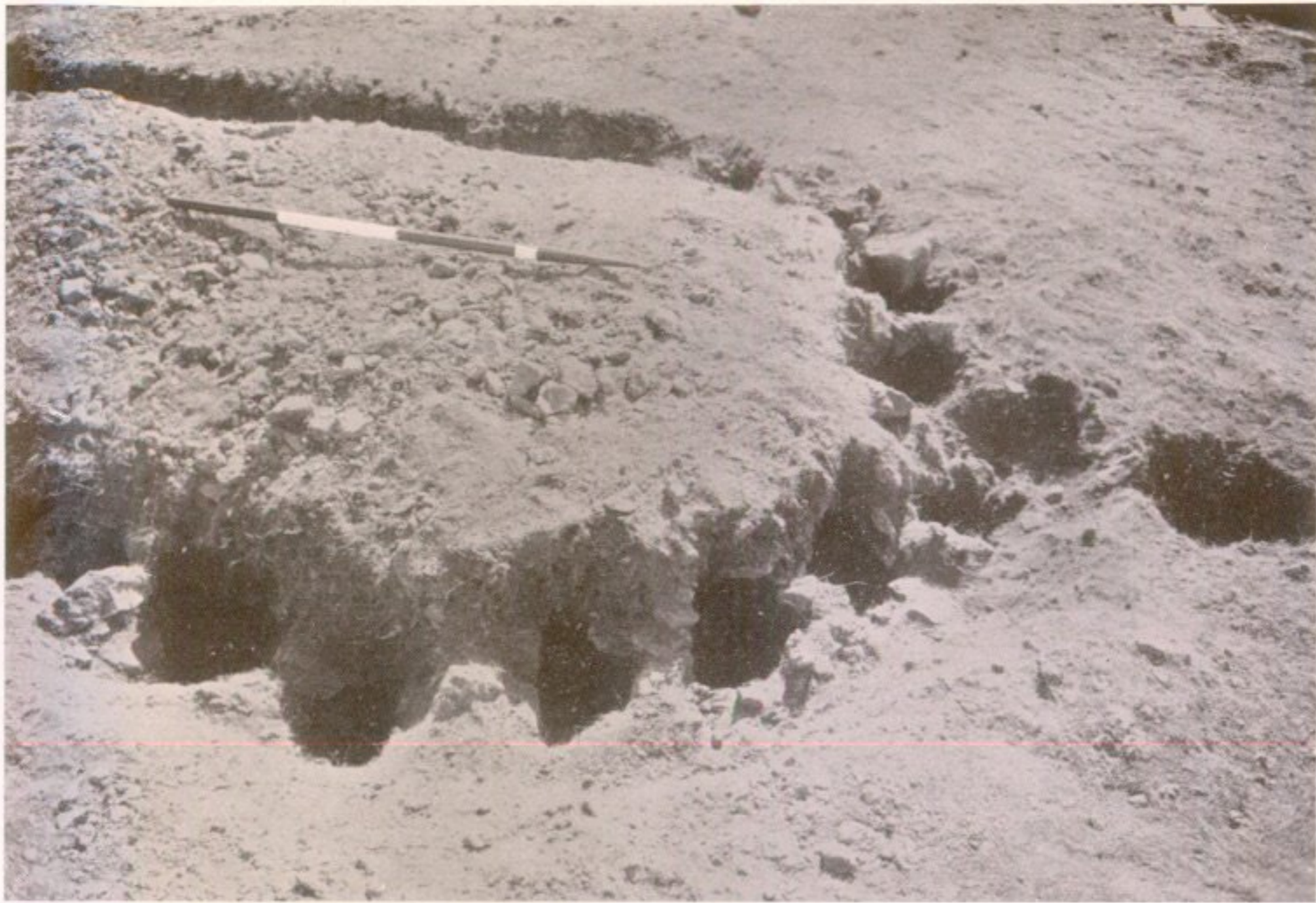


3. Hearth Stone in Hut I.



2. The same: Revetment Palisade continuing.

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1. End of Palisade at East Entrance.



2. The same, but fully excavated.



1. The East Entrance through double palisade.



2. The West Entrance through double palisade.

further excavation on this site, though always desirable, is unnecessary in the present stage of our knowledge. The plans of the remaining houses are likely to be found similar to those already recorded, and, in view of the nature of the finds recorded this year, it is improbable that more light would be thrown on the period of occupation or the cultural affinities of those who constructed the village.

In the following section the excavation of the various features will be described. Their interpretation will be left until a later section, when the form of the houses and the meaning of the double enclosure palisade will be discussed.

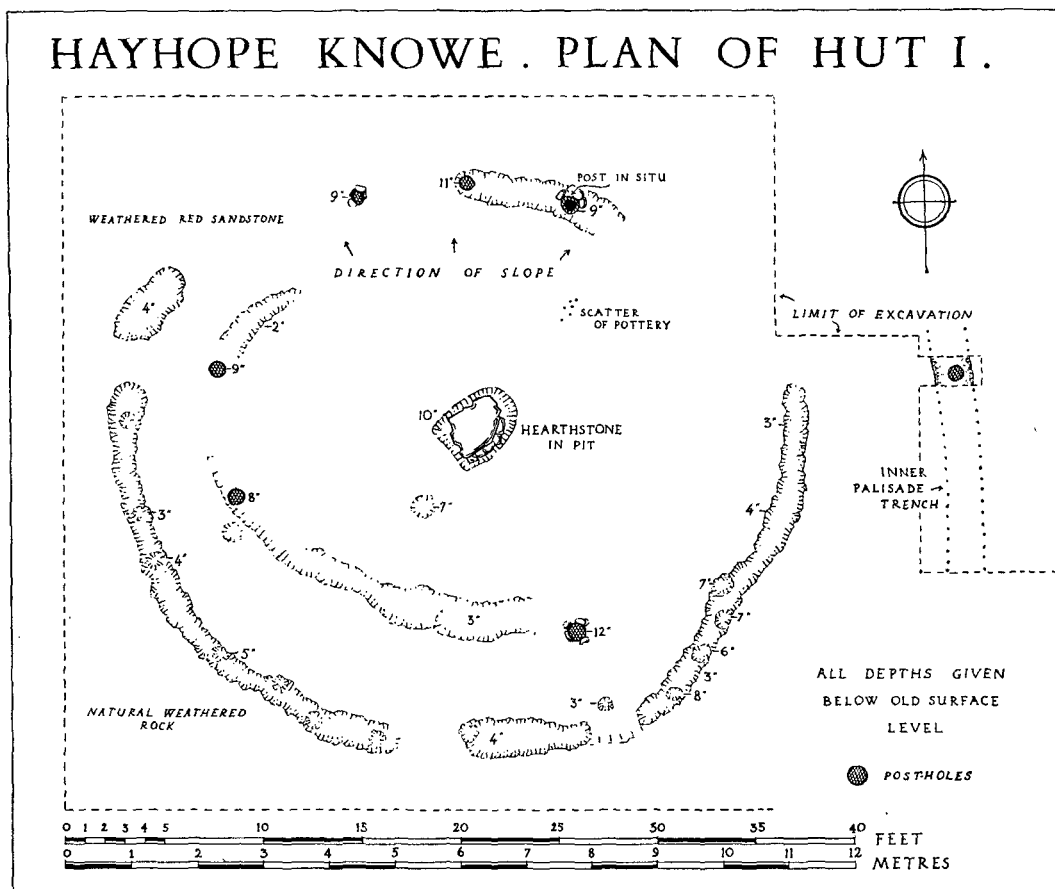


Fig. 3.

Hut I (fig. 3).

This was found to have an overall diameter of 35 feet from east to west and nearly 30 feet from north to south. Only 6 inches of soil had to be

VOL. LXXXIII.

removed, including turf, for the floor of the hut to be uncovered. The ground on which it had been placed was fairly flat, though there was an overall drop of 1 foot between the southern and northern limits of the excavation of the hut, and this may have necessitated a slight modification in the method of construction; but this will be discussed later. A narrow shallow trench, varying from 7 or 8 inches at its greatest depth to the merest trace and approximately 2 feet in width, was traced round the greater part of the circumference of the hut, but it was not recovered on the north-east and north-west, where the ground was noticeably sloping northwards. On the north, continuing the line of this trench were three large post-holes, each over 9 inches deep and approximately the same diameter, and these were placed at intervals of about 5 feet.

This trench had been dug into the natural very weathered red sandstone, and was filled with rubble largely composed of the same material. Except round the post-holes, there were no packing-stones employed. The bottom of the trench was uneven, but it was noticed that there were, every now and then, slightly deeper hollows in the floor which were not considered to be more than imaginary until they were planned, and then their almost consistent interval of 3 feet suggested that they were in fact the vestiges of some structural feature. Numerous sherds of pottery were found in this trench.

The Inner Trench was found to be some 6 feet within and concentric to the outer one, and to resemble it in every way. It was again absent on the downslope and on the east. In the line of its circuit three post-holes were discovered, approximately the same size as those already described. Two of these were 6 feet 6 inches apart on the west, and the other was on the south-east. There were a few sherds of pottery found in this inner trench but noticeably fewer than in the outer.

The Floor was composed of much weathered rock into which had been trampled small sherds of very decayed pottery. A rather large concentration of these sherds was found on the north-east, but no rims or informative pieces were obtained. Occasional very small patches of clay were found on the floor, perhaps the remains of a deliberately placed clay flooring.

The Hearth was centrally placed. It was a long D-shaped pit 10 inches deep into which a large flat slab stone had been placed and packed round with different varieties of stone, after the hearth pit had been in use for some while (Pl. XIII, 3). For when the hearthstone was removed it was found to overlie 3 to 4 inches of burnt soil, pebbles and potsherds, and it seems likely that the hearthstone, which did not show signs of considerable burning, was in fact a later refinement. To the south of the hearth and nearly 3 feet from it was an irregular hole 7 inches deep, which may have been used for some such thing as a hanging crane for use over the hearth.

The Entrance was not definitely identified, but from the gaps in the

trench and the large post-holes on the north it may be inferred that it was probably somewhere on that side.

Hut VII (fig. 4).

Thus hut was, like Hut I, chosen because its superficial features looked most promising, for both the inner and outer trenches were visible, in this case showing up quite strongly.

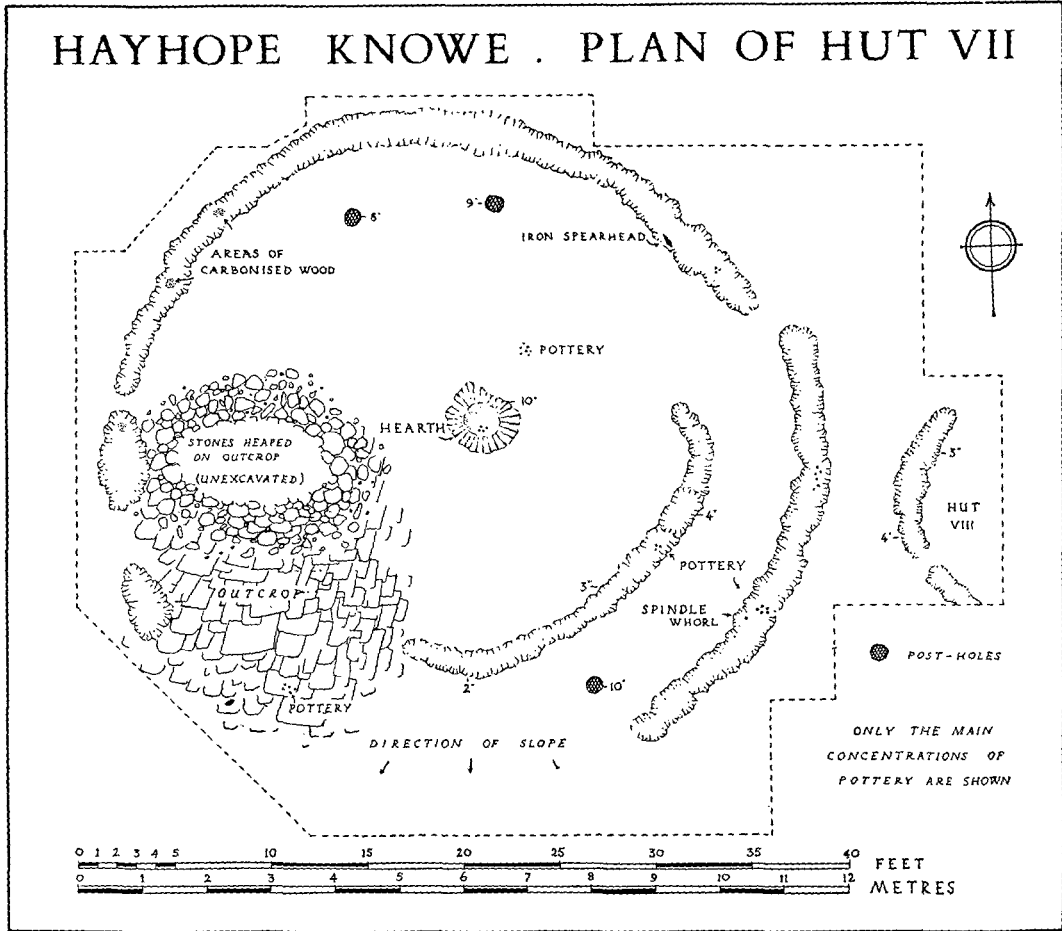


Fig. 4.

On excavation this hut proved to be very similar in places to Hut I. It measured 38 feet in overall diameter from east to west and 36 feet from north to south.

The Outer Trench exactly resembled that of Hut I both in width and

depth, and again it was absent on the downslope, which was this time to the south. Within this hut was an outcrop of rock on to which, presumably in relatively modern times, a heap of stones had been placed. This area was not excavated.

Areas of carbonised wood were noted in two or three places, and may have been the last vestiges of posts set in the trench. Quite a large number of potsherds were found in the trench, and also a much broken clay spindle whorl and a fragmentary iron spearhead (see p. 58 and fig. 10).

The Inner Trench was traced on the south and east only, but two post-holes 7 feet apart on the north had been set in line with its continued circuit. These post-holes were similar to those in Hut I, being 8 and 9 inches deep respectively and the same diameter. An additional post had evidently been found necessary on the down-sloping side on the south of the hut, and its post-hole was found midway between the two trenches. It was 10 inches deep.

The Hearth Pit was again somewhat similar in shape to that in Hut I, and was centrally placed. Its sides sloped not very steeply to a depth of 10 inches. In this pit was quite a large quantity of ash and fragmentary potsherds.

The Entrance must have been on the south, with an approach up a slight rise as in the case of Hut I.

Hut III (fig. 5).

This was farther west than the other two, and was selected because its superficial remains suggested that it possibly represented a different type of construction. On its east side there was a sharp drop of over 1 foot from a curved rocky outcrop above, and this had been used for shelter for the wall of the house which had been built at the foot of its slope.

Practically nothing remained of this hut foundation. A curved length of the outer trench was recovered, as already stated, on the east for some 35 feet, and sufficient remained to show that the hut must have had an external diameter of approximately 30 feet. A few slightly deeper points or carbonised patches in the trench were again at intervals of about 3 or 6 feet. Nothing else was recovered except the slightest possible trace of an inner trench concentric with the outer one but only about 4 feet within it. No hearth was recovered and, apart from slight traces of clay (? the last vestiges of a clay floor) in patches, all other signs of structure had disappeared. This fact was perhaps not so surprising as it at first appeared, since the ground sloped away slightly in all directions except in the east, where the remains of hut foundations were visible. The overall drop from the east to west limits of this excavated area was 3 feet.

It can be seen from the plan that there is no reason to suppose that this hut was different in plan from the two already described.

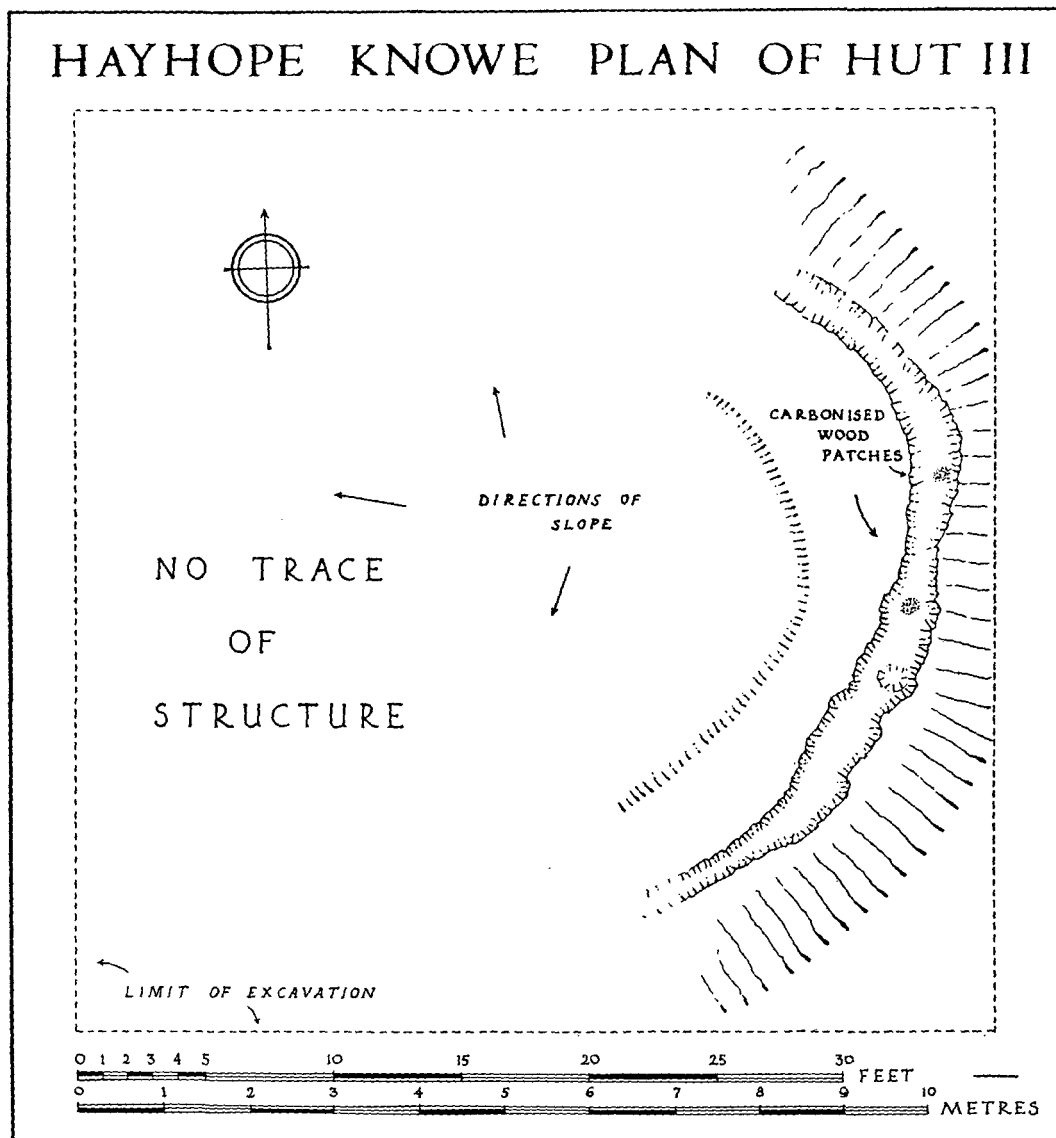


Fig. 5.

(b) *The Double Palisade.*

This double palisade enclosed a long oval area measuring nearly 300 feet from east to west and 175 feet from north to south. As has already been pointed out, this double line was clearly visible along long stretches of its

course, and it had evidently been carefully constructed to enclose the hilltop, and with entrances on the east and west. The two lines were parallel and a little over 5 feet apart, and though invisible for a long stretch on the north and south, a few trial trenches (see plan, fig. 2) were cut to verify its line and in each case it was discovered as anticipated.

In the various cuttings which were made to discover the character of this palisade enclosure, it was found to be quite consistent. Two trenches 2 feet wide and nearly 2 feet deep had been dug as bedding trenches for wooden stockades, the uprights of which had been placed at intervals of a little over 1 foot and packed into position with rubble and large stones (see Pl. XIV, 1 and 2). At each entrance these two trenches returned to join each other in "hairpin" ends.

The East Entrance (fig. 6 and Pl. XV, 1).—The width of the entrance in the east was found to be 10 feet, and the presence of additional post-holes outside the line of the palisade and of a shallow scooped depression across the entrance must imply some kind of gate. On the north side of this entrance, as can best be seen from the plan (fig. 6), were two post-holes a few inches apart and each 6 inches deep, and from these running southwards across the entrance was a shallow depression which, in less rocky soil, might be regarded as the drip channel from a gate. We must argue, however (see p. 59 below), that some 6 inches of soil may have been weathered from the original surface as exposed in Iron Age times, and in that case such a channel as ours must represent a more permanent feature, though no doubt associated with the opening or closing of a gate.

The West Entrance (fig. 6 and Pl. XV, 2) was probably regarded as less important than that on the east, which led straight out along the most easy approach to the hill, whereas that on the west led out to a steep downward slope. The "hairpin" ends of the double palisade were found closely to resemble the arrangement on the east, but here the entrance was only 8 feet wide and the remains left by the gate were more slight. One post-hole only, on the north side and 7 inches deep, suggests such a feature.

(c) *The Earthwork and its Revetment* (figs. 2, 7 and 8 and Pl. XIII, 1 and 2).

The place chosen for the sectioning of this earthwork was on the north-west, where both the earthwork and ditch terminated, and it was desirable to determine whether this abrupt ending of the defences was part of a deliberate design or due to their not having been completed. Accordingly, a cutting 11 feet wide by 24 feet in length was laid out to include the end of the rampart and ditch, and this cutting was extended as required.

The Ditch was found to be 6 feet wide and 2 feet deep, and where it was not cut further to the east it appeared to be rather deeper. Its end was rounded and coincided with the end of the rampart, though 6 or 7 feet out

from it as fig. 7 shows. Between this ditch and the rampart was a steep slope, the subsoil being finer grained than at other parts of the hill, and the

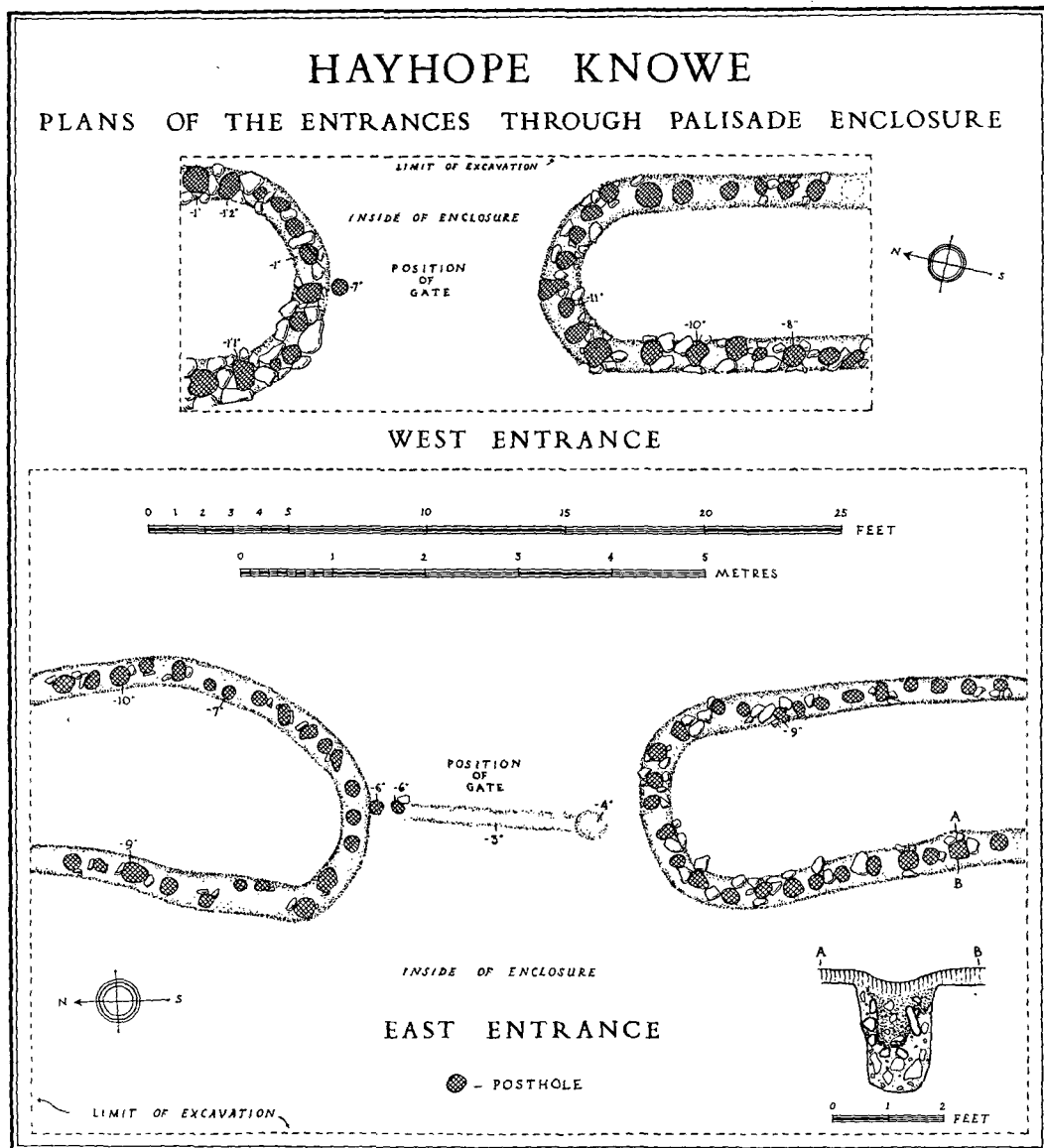


Fig. 6. The Palisade Enclosure Entrances.

filling of the ditch was fine, earthy and stony soil, such as might be expected from hill-wash and from the soil originally removed from it once more being washed and blown into it. There was nothing to suggest that the silting

was slow: more probably it was formed very shortly after the ditch had been dug.

The Rampart was a loose construction of earth and stones, and tapered out in a weak slope against which some larger stones had been deliberately placed. It could never have been the intention of the builders to leave it in this state, and it bears out various other observations which lead to the belief that these earthwork defences were begun but discontinued before they were completed.

The Revetment.—Behind the rampart, and immediately backing against

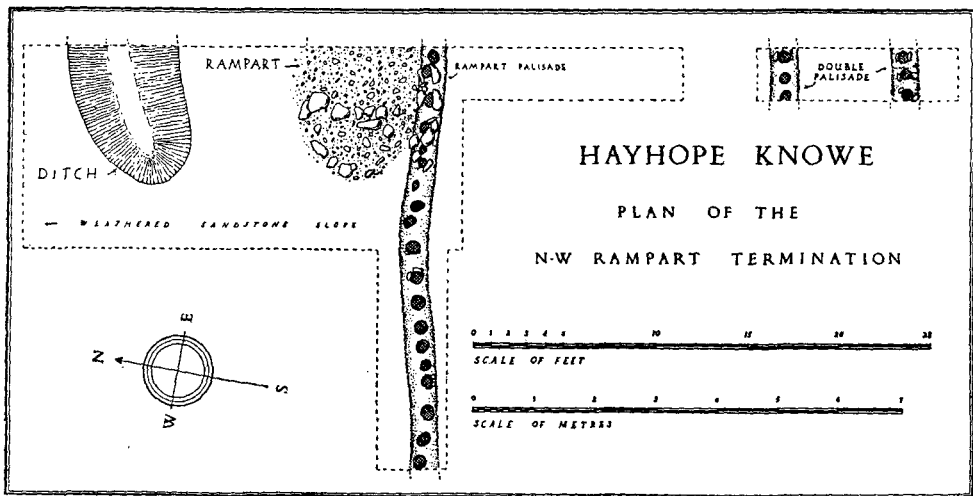
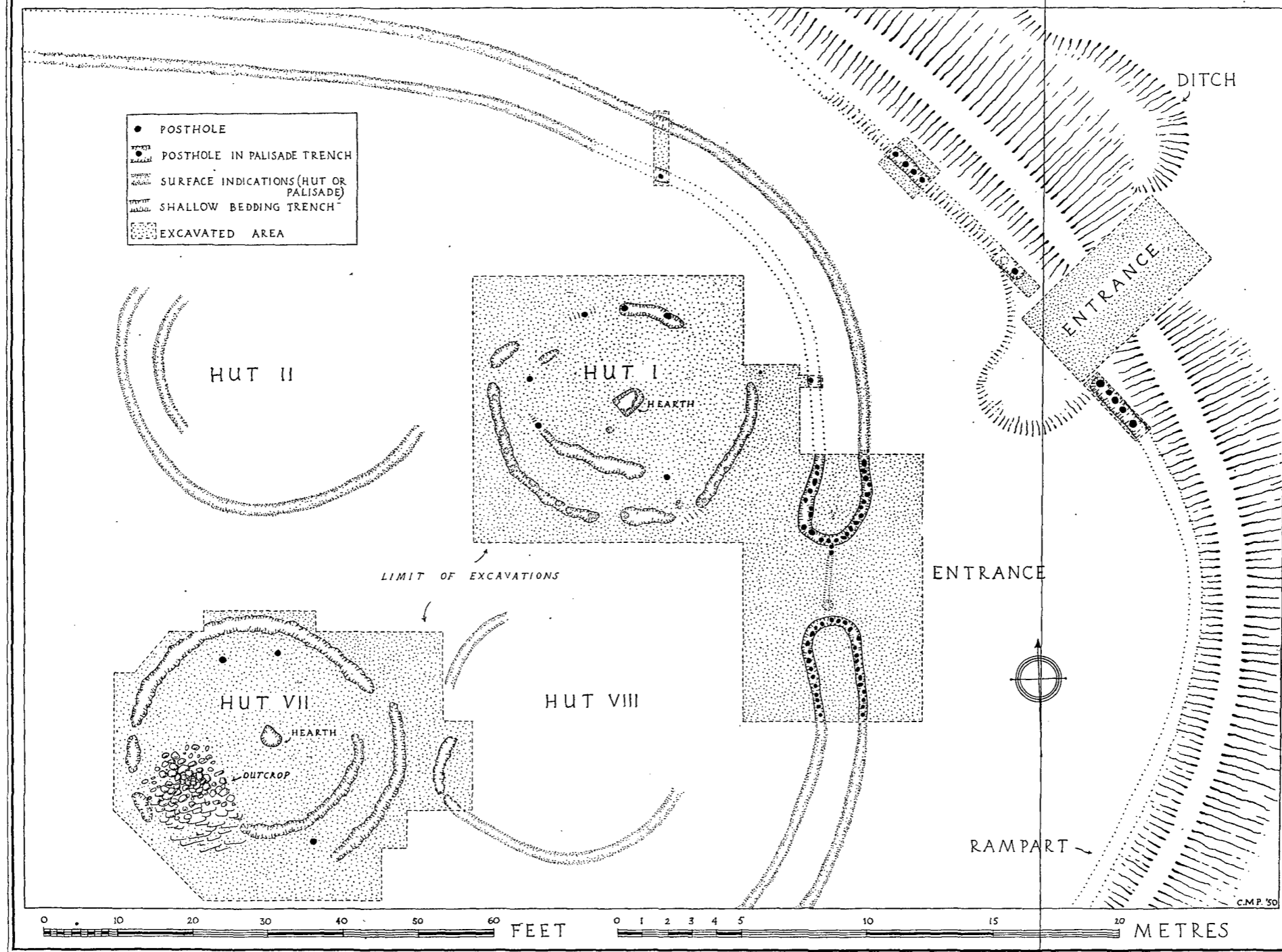


Fig. 7.

it, was found a palisade trench exactly similar to those of the double enclosure already described, and from which in fact it was only 17 feet distant (see fig. 7). The posts had, from the evidence of the spaces between the packing-stones, been about 6 to 9 inches in diameter and placed at intervals of under 1 foot. This feature was completely unexpected, and was so obscure on the ground surface that had this cutting been made before we had had much experience with palisade trenches it might well have been unobserved. A 12-foot-long extension westwards was made to determine whether or not this palisade continued, and it was found that it did. Unfortunately, the point of junction between the inner side of the rampart and the palisade trench so exactly corresponded that it was impossible to discover from the section whether this palisade trench may have pre-dated the earthwork: it certainly could hardly have been made later. But as the two seemed so closely related on the ground, it is reasonable to regard them as chronologically related too, and there is little doubt but that this earthwork (which, from the evidence at the entrance discussed

HAYHOPE KNOWE. EXCAVATIONS AT EASTERN END.



C. M. PIGGOTT.

Fig. 9. Excavations at the Eastern End of the Site.

[To face p. 57.

below, we are again forced to conclude was unfinished) had an inner revetment as part of its design. The revetment had been carried to a greater degree of completion.

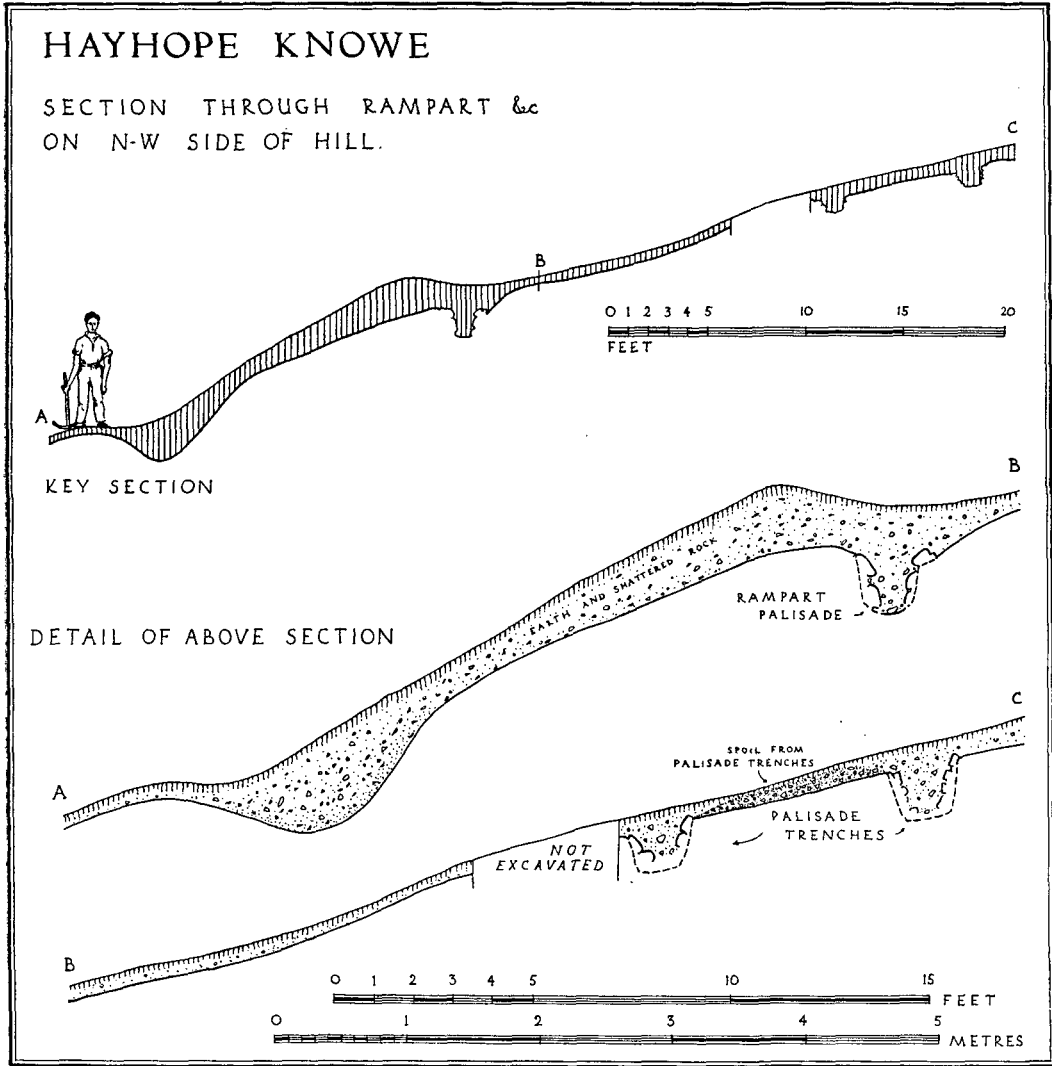


Fig. 8.

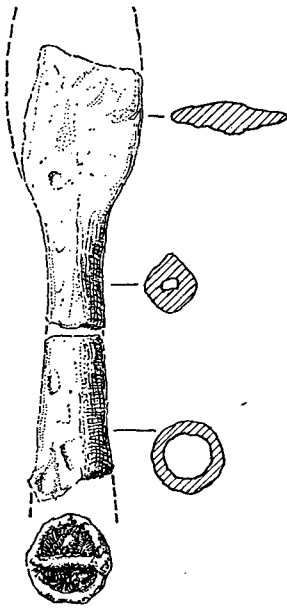
The Entrance (fig. 9).—An obvious break in the earthwork was clear before excavation on the north-east, and this area was stripped and examined for any evidence of gate construction with negative results. It can therefore hardly have been completed. Small subsidiary cuttings were made on

each side of the inner face of the rampart to find the position of the ends of the revetment palisade, and these ends, coinciding as they were found to do with the gap in the earthwork, substantiates the argument for the close association of these two features.

(d) *The Finds.*

Pottery.—A large quantity of pottery was recovered but in a very fragmentary state, and only one plain, rounded rim was included. On the whole, the ware must originally have been finer than is usual in the area of Votadinian occupation, and corresponded more closely with the earliest pottery from Hownam Rings than with anything else in the south of Scotland. None of it was comparable with the heavy thick-sectioned and poorly made ware of the later phases of Hownam, and no Roman pottery was found. No fragment was decorated.

Clay Spindle Whorl.—This was discovered in a very fragmentary condition in the outer bedding trench of Hut VII. It measures two inches in diameter and is undecorated (*not illustrated*).



(Fig. 10. Iron Spearhead from Hut VII.

Iron Spearhead (see fig. 10).—This broken spearhead was found in the outer bedding trench of Hut VII. Native spearheads of this kind are impossible to date very accurately, though they are frequently found on sites of the two centuries B.C. and first century A.D. At Bredon Hill, Gloucestershire,¹ such spearheads were found to have been used by the defenders of the fort in the early first century A.D., and at Hunsbury² they are

probably a century earlier.

III. INTERPRETATION AND DISCUSSION.

This excavation has revealed the plan of a small defended village site probably of the first century B.C. It is a type of enclosure which has not been excavated before, though, as can be seen from the Appendix contributed by Dr K. A. Steer (p. 64), it is now known to be typical of many in Roxburghshire as well, no doubt, as in Northumberland and farther afield. There is good reason to suppose that such enclosures were in fact common enough in the highland zone not long before the advent of the Romans,

¹ *Arch. Journ.*, vol. xcv. (1938), pp. 76 and 77.

² *Ibid.*, vol. xciii. (1936), p. 66.

and with the help of air photography many others will undoubtedly be discovered in other parts of Britain. Many of these may probably, as in the case of Hownam Rings, have been largely obliterated by later occupation, and can only be discovered in the course of excavation.

Our Hayhope huts, or houses, as they should more accurately be termed, have left traces which at first seemed to be unique. But since their recognition similar surface traces are now being recorded by the Commission at various other sites and, like the palisade enclosures themselves, they are in all probability quite common. But it is necessary now to discuss the type and appearance of the houses uncovered at Hayhope.

Three houses were completely excavated and at first sight the plans seem to reveal very little. But it must be remembered that the site is 1100 feet up in what was probably always bare country, above the line of forest growth and exposed to the elements, so that many features of the site may have been washed or eroded away. However, the three plans recovered were consistent in revealing the same type of structure.

The fact that so much pottery remained in the outer circular trench makes it almost certain that this must have been the position of the outer wall of the house against which the sweepings from the floor would accumulate: it must in fact be a bedding trench for the uprights of this wall. But if it is a bedding trench, one might expect packing-stones, and not in any of the houses were these present. Dr Bersu, however, assures me that with timber uprights placed close together such packing-stones would be unnecessary, and the shallow depth of the bedding trench could be accounted for through the weathering away of 6 inches or so of once trampled and muddy soil from an upland site of the character of Hayhope Knowe.

In both Hut I and Hut VII the ground was slightly sloping, and the visible remains were absent on the downward slope, where perhaps the original floor of the house had been made up with dumped soil to make it level. This soil would be the first to be scoured from the slope by wind and rain once the protecting roof had fallen into decay. It may well be that the reason for the relatively few finds from these upland sites lies not so much in the poverty of the inhabitants as in the fact that only chance finds will survive such treatment from the elements. On the downward slope of Hut I the outer bedding trench had disappeared and in its place were three post-holes, showing that extra strong posts had been needed on that slope. Again, in Hut VII the vestiges of the outer bedding trench were absent on the downslope, and once again it appears that an extra post had been required as a buttress on the weaker side. In both these houses and in the slight vestiges of Hut III there were indications of deeper places or of carbonised wood at intervals of about 3 feet, and it is suggested that at these intervals somewhat stronger posts were placed with contiguous though slightly smaller posts between.

What appears to be an inner bedding trench of very similar character was some 6 feet inside all these houses, and this trench included in its line three posts in Hut I and two in Hut VII. It may be supposed that this inner trench was designed to take the main thrust of the roof.

The remains of these houses suggest a reconstruction implying an outer wall of 3 to 4 feet in height and an inner wall of 7 feet or so in height, and probably interrupted every here and there to allow access to the outer parts of the house. With the roof timbers sloping from the outer wall to meet over the middle of the house, a height of approximately 11 feet could be attained. (See suggested reconstruction, fig. 11).

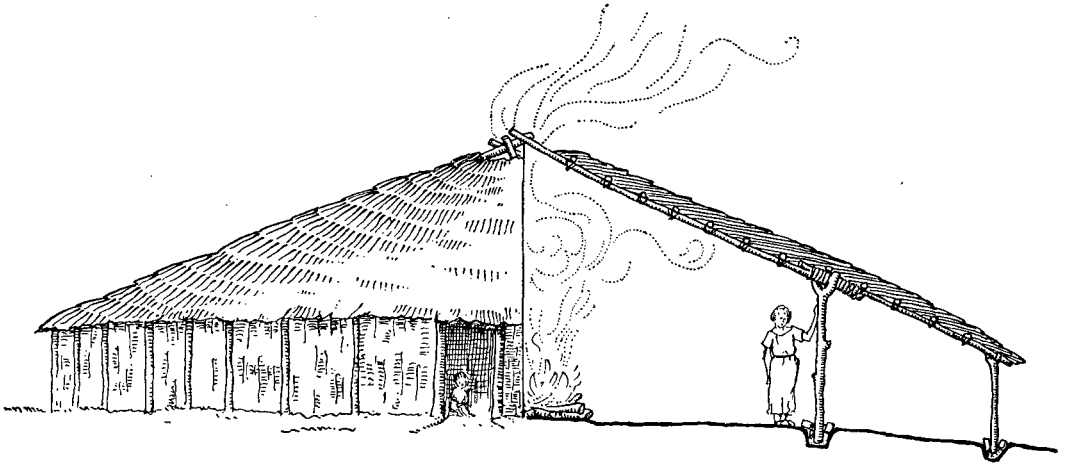


Fig. 11. Suggested reconstruction of a Hayhope house.

It is interesting to find that the eaves can never have been very wide, for the two houses VII and VIII had their outer walls only 3 feet apart, and with eaves of any width it would have been impossible to pass between the houses.

On other excavated sites, shallow foundations, all that remains of a bedding trench, may well have missed the excavator, and it is for this reason that fig. 5, with its lamentably slight traces of any foundation, is published. At the Welsh site of Ffridd Faldwyn ¹ there was found a shallow irregular depression about 2 feet across and partly enclosing an area 25 feet in diameter. Though possibly some sort of gully, this may have been the meagre remains of a Hayhope type of house, and on other sites shallow grooves may be the last traces of similar structures.

The purpose of the double palisade is exceedingly difficult to determine unless we can suppose that originally the space between the two parallel rows of upright posts was filled. It seems pointless otherwise to build a double

¹ *Arch. Camb.* (1942), fig. 9 and p. 39.

fence of this kind. The soil dug from the two palisade trenches must largely have gone back, with large stones specially collected for the purpose, to pack the posts in position, and the remaining soil was evidently thrown between the palisades. But at the most this can only have produced about 1 foot in height, and it can only tentatively be suggested that above this the filling may have been composed of something in the nature of brushwood or heather which would give additional body to the structure and so enable it to be a more effective windbreak. The danger of fire can hardly be used as an argument against such a theory, for with timber and presumably thatched houses with central hearths the losses of property through fire must always have been considerable, and buildings could easily be patched or remade. If something more weighty than timber or brushwood was used, it is hard to see why no signs remain to-day: it would also imply an altogether more substantial enclosure, with some sort of cross-ties to hold the two palisades from falling outwards. In fact it would imply a very simple form of Gallic wall, and for that we have not enough evidence, and it must be left an open question for the time being. One point of interest cannot, however, be overlooked. Whatever may have been the filling between these parallel rows of posts, there was almost surely some sort of hurdling as a revetment to prevent this filling from spilling out between the posts. We know from the analysis of the carbonised wood obtained from the palisade that the woods used consisted of willow and alder, and of these alder, being a durable wood under damp conditions, would almost certainly have been selected for the posts. For the double palisade no fewer than 1600 posts, each 20–25 cm. in diameter, were required, while for the rampart palisade outside another thousand posts would be needed. Supposing that 6-foot hurdles were used, and with the knowledge that to-day 360 hurdles 6 by 3 feet go to one acre of coppice, in all no less than 9 acres of coppice would have had to be cleared to obtain the wood used at Hayhope. And this is still not reckoning for the houses or for the alder posts.

The earthwork and its revetment must be regarded as a later addition, begun but never completed. But its relationship with the inner enclosure could not be obtained stratigraphically owing to the slight depth of soil present, and it is therefore only hypothetically that we can claim it to be later. For it is improbable that people would build an enclosure within a half-completed and larger earthwork. But whether or not the inner enclosure was to be demolished when the earthwork was built, or whether the two were intended to co-exist, with the space between designed for a cattle pound, it is impossible to say. It is equally impossible to be certain that it was ever the intention to continue the earthwork round the steep western end of the hill, but as we know from the gateway that it was never completed as a defence, we can assume that it was completed as far as the revetment only was concerned and then abandoned.

Another somewhat similar earthwork with inner timber revetment was found at Ingram Hill, in Northumberland,¹ in a settlement which may have been terminated by the arrival of the Romans. As a class of structure, however, it cannot be used to indicate any chronological significance, since at Ballycatteen,² in Ireland, it was found to be as late as A.D. 600. The discovery at Hayhope of this internal revetment palisade has resulted in a renewed search for such a feature on other sites, though this is hard to detect and impossible to prove without a small test excavation.

The construction of additional defences at Hayhope may reflect only local conditions of unrest, but more probably it reflects the generally unsettled state of the north in the last centuries B.C. and early first century A.D. For during this time political refugees were on the move from the south before the Iron Age "B," Belgic, and later, Roman peoples, all causing apprehension or unrest within the two hundred years 100 B.C.—A.D. 100.

The relation between large tribal strongholds and small defended settlements has yet to be worked out, but it should be possible before many years to discover the approximate date of many of these hilltop forts and settlements. Hayhope, as has been shown, evidently coincided in its later stages with a sudden emergency which called for greater defensive security. Yet its counterparts at Gray Coat and Greenbrough Hill³ were never defended, and one can assume that the period of occupation of stockaded enclosures began and sometimes ended before the need for war-time defences was felt. The absence of Roman pottery at Hayhope, showing that it had been abandoned before the Agricola campaign; the difference in character between the Hayhope pottery and the native ware of the first century A.D. from Hownam Rings only a few miles away; and the fact that at that site the palisade enclosure was the earliest feature, and ante-dated defences estimated to belong to the end of the first century B.C.—all these emphasise an early date for Hayhope. On the other hand, the spearhead, though not closely datable, is frequently paralleled from first-century B.C. sites, and this fact, together with the recollection that political disturbances were so general after 100 B.C., leads us to suppose that the most probable period of occupation for Hayhope is within the first century B.C. and perhaps nearer its beginning than its end, for the comparable palisade at Hownam seems to have been completely ruined and unnoticeable by the time the wall fort was built.

Farther south, in Cheshire, this problem of palisade enclosures has been studied by Professor Varley.⁴ He concluded that in Cheshire these

¹ "Excavations in a Native Settlement at Ingram Hill, Northumberland," *Arch. Aeliana*, vol. xx. (4th series) 1942, pp. 110-33, and information from Mr A. H. A. Hogg.

² *P.R.I.A.*, vol. xlix, Section C, No. 1 (1943).

³ See below, p. 66-7.

⁴ *Prehistoric Cheshire*, by W. J. Varley and J. W. Jackson (Cheshire Rural Community Council), 1940.

enclosures, with round houses within, belonged to the Ultimate Bronze Age, and that they were not replaced by simple hill-forts of the Iron Age until as late as 200 B.C. It may well be the case that we are witnessing the same change-over happening in Northumberland and Southern Scotland, but, being further from the source of Iron Age influence in the south, it would not be surprising to find it taking place as late as the first century B.C. And if, as late as this, it is correspondingly probable that the types of houses, pottery and metal work and the design of the smaller hill-forts would reflect considerable culture mixture.

Culturally it is hard to place our Hayhope people; they were almost surely of local late Bronze Age stock, in touch with the more progressive and warlike areas of the south at second- rather than first-hand experience. Their methods of defending themselves and their stock are hard to define, since the double enclosure at Hayhope has only one close parallel among excavated sites, and that at many hundred miles distance at Ffridd Faldwyn. Here Iron Age "A" people were probably responsible. Such double palisades may, however, be only variants of the much more numerous single examples (though perhaps implying a faint recollection of Gallic wall building if they were laced across between the upright timbers), and both single and double palisades are common from Sussex (Hollingbury,¹ Harrow Hill,² etc.), Berkshire (Uffington Castle), and the Welsh Marches (Ffridd Faldwyn, Old Oswestry⁴ and Eddisbury)⁵ to Northumberland (Witchy Neuk, Hepple)⁶ and Perthshire,⁷ and generally when excavated have been the earliest defence on the site, Ultimate Bronze Age or Iron Age "A" according to the locality.

Finally, it must be admitted that we have found out little enough of the way of life of the Hayhope settlers. Evidently they expected to live relatively quiet and well-ordered lives, probably stock-raising and hunting. They were experienced in tree felling and in the use of wood, and they evidently spun and wove their clothes. But more about them than this we do not yet know, except that at some time, probably towards the latter part of the first century B.C., they found it necessary to add earthworks to defend their village, but were forced or chose to abandon it before it was completed.

¹ *Ant. Journ.*, vol. xii. (1932), p. 1.

² *Sussex Arch. Coll.*, vol. lxxviii. (1937), pp. 230-51.

³ *Antiquity*, v. (1931), p. 71.

⁴ *Arch. Journ.*, cv. (1950), pp. 41-66.

⁵ *Prehistoric Cheshire*, pp. 64. ff.

⁶ *Arch. Aeliana*, vol. xvi. (4th series), 1939, pp. 129-39.

⁷ For references see p. 64 below.

APPENDIX I.

The Identification of Palisaded Enclosures from Surface Indications.

By Dr KENNETH STEER.

The Royal Commission on Ancient Monuments, during its recent survey of Roxburghshire, has identified eight prehistoric palisaded enclosures, of which Hayhope Knowe is the most remarkable. These identifications were all made from surface indications, whereas the palisaded enclosures previously discovered in Britain have almost invariably been invisible on the ground¹; and in order to help field-workers elsewhere to recognise similar remains before they are destroyed by ploughing or afforestation, the Commissioners have authorised me to take the present opportunity of publishing this summary statement of the evidence, in advance of the detailed descriptions that will ultimately appear in the *Inventory* of the county.

All the monuments in question are situated between 1000 and 1500 feet above sea-level, in the zone of rough pasture that extends from the limit previously reached by rig cultivation to the peat-level.² The palisade trenches are revealed in each case by slight grooves in the turf, caused by the settling of the stone-packing, and in four instances associated huts are disclosed by superficially similar grooves which, as the excavations at Hayhope Knowe have shown, represent the bedding trenches of the hut walls. These grooves are not more than 2 feet wide and 6 inches deep, and are normally only visible from the ground at close quarters, particularly when the grass is tussocky. Provided, however, that they are not masked by heather or bracken, and that lighting conditions are suitable, they cast just sufficient shadow to enable them to be detected on the National Survey photographs when the prints are examined under the magnifying lenses of the stereoscope,³ while the comprehensive view afforded by these photographs makes it possible to isolate the grooves from the footpaths and sheep-tracks which distract the eye of the ground observer. The palisaded enclosures on Hayhope Knowe, Blackbrough Hill, Craik Moor, Stanshiel Hill, Henfield and Fasset Hill were all discovered by this means, although

¹ Palisade trenches have been found in Scotland at the native forts of Inchtuthil (*Proc. Soc. Ant. Scot.*, vol. xxxvi. p. 232, and fig. 19), Orchill (*ibid.*, vol. xxxv. pp. 21-3, and fig. 4), Kempy (*ibid.*, p. 38, and fig. 12), Hownam Rings (*ibid.*, vol. lxxxii. pp. 200-2) and Camp Hill, Braidwood (*ibid.*, present vol., p. 1); and underlying the Flavian defences of the Roman fort at Cappuck (information from Professor I. A. Richmond, who re-excavated the defences in 1949). Of these, only the Braidwood trench has left any indication on the surface, and this indication was not observed until the fort was excavated.

² The discovery of a pre-Roman palisaded enclosure at Cappuck (340 feet O.D.), beside Oxnam Water, shows that the distribution of this type of monument in Roxburghshire was not restricted to the higher ground. Large numbers must, in fact, have existed on the lower slopes of the hills and in the fertile valleys, where they have been obliterated by cultivation, while many hilltop sites are no doubt concealed by later fortifications.

³ Cf. *Antiquity*, vol. xxi. pp. 50-3.

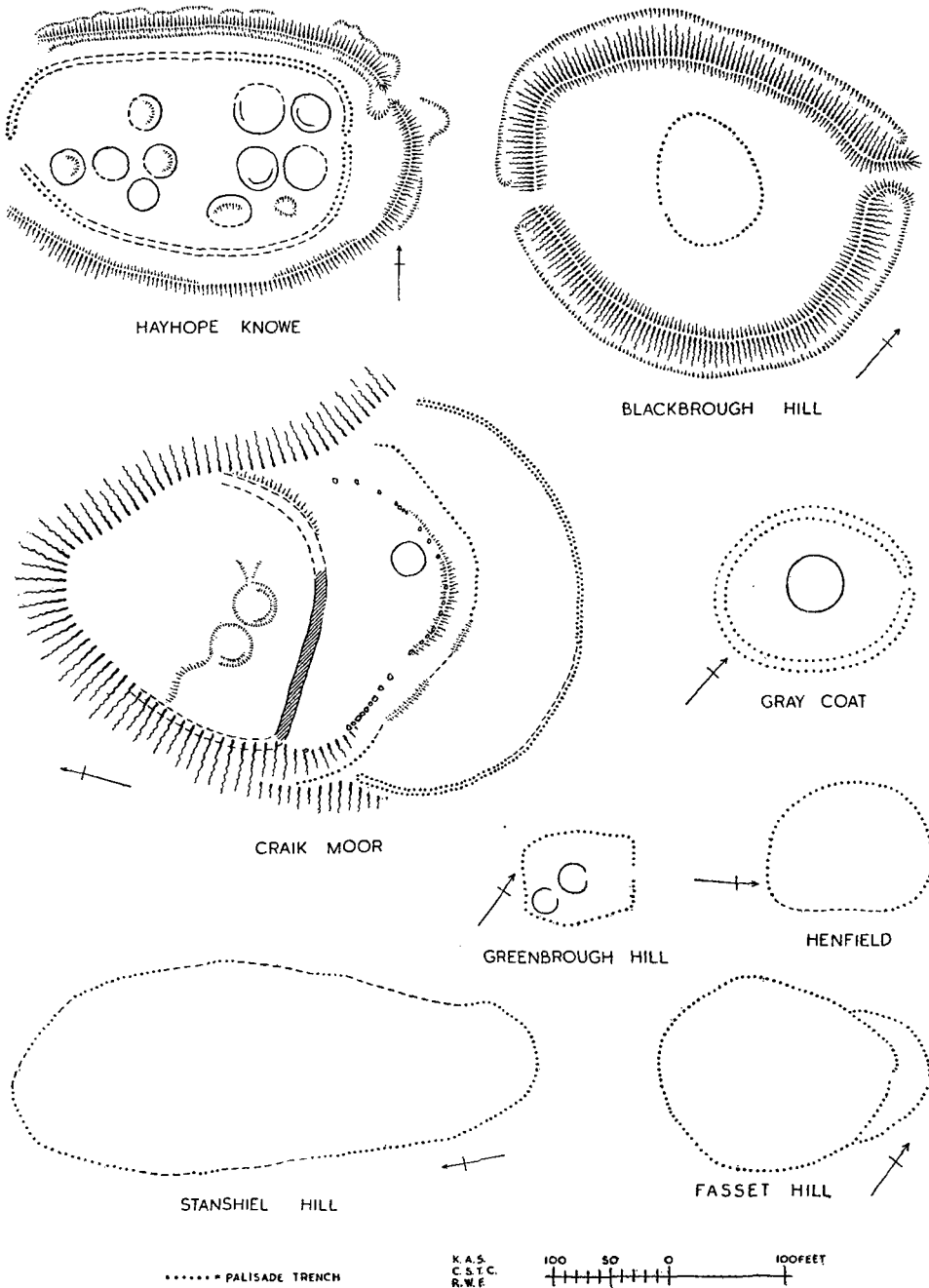


Fig. 12. Palisaded Enclosures in Roxburghshire.

many details were subsequently filled in by ground survey; that on Greenbrough Hill is barely visible on the air photographs owing to its small size and unfavourable lighting, and was found by deliberate search on a likely hilltop; while that on Gray Coat, which has not yet been covered by the National Survey, was encountered by chance during a visit to a neighbouring monument.

The seven additional sites which are illustrated on fig. 12, together with a plan of Hayhope Knowe prior to excavation, are briefly as follows:—

1. *Blackbrough Hill* (6-inch O.S. map, NXXI; National Grid Ref. 36/809177).—An ovoid enclosure, measuring 110 by 85 feet, and bounded by a single palisade which has an entrance-gap in the south side, can be seen inside the fort on the summit of Blackbrough Hill (1250 feet O.D.). As at Hayhope Knowe, the fort defences consist of a single rubble rampart and an outer ditch, but there is no sign of huts either within the palisade or in the space between the palisade and the rampart.
2. *Craik Moor* (6-inch O.S. map, NXXI; National Grid Ref. 36/811190).—On the spur that forms the summit of Craik Moor (1500 feet O.D.) there are some remains of an elaborate palisaded settlement, the northern half of which has been obliterated by a later stone-walled fort. The settlement is enclosed on the south by triple works which extend across the neck of the spur, and comprise (i) an outer, double palisade, the two elements of which vary from 2 feet 6 inches to 6 feet apart, and unite at an entrance on the west side; (ii) a single palisade, interrupted at one point by a gap, 30 feet wide, flanked by slight banks; (iii) an inner line of irregularly spaced earthfast boulders which, for a distance of 150 feet, are embedded in the crest of a low bank some 15 feet thick. The meaning of the latter work, and of the gap and flanking banks in (ii), is not clear. That part of the interior of the settlement which lies to the south of the fort contains one distinct circular hut and vague traces of several more. These huts are all defined by narrow grooves, in contrast to two huts visible inside the fort and presumably contemporary with it, which are bounded by ditches 5 feet wide.
3. *Gray Coat* (6-inch O.S. map, NXXIX; National Grid Ref. 36/471052).—An oval enclosure, measuring 150 by 120 feet within a double palisade, lies on the northern flank of Gray Coat at a height of 1100 feet O.D. The entrance, at the north-east apex, is similar on plan to those at Hayhope, and the interior contains a single circular hut 50 feet in diameter.
4. *Greenbrough Hill* (6-inch O.S. map, NXXI; National Grid Ref. 36/813169).—On the top of Greenbrough Hill (1250 feet O.D.)

there is a small, sub-rectangular enclosure, bounded by a single palisade, and containing two huts, one circular and the other oval on plan. An entrance-gap can be seen in the centre of the north-east side of the palisade.

5. *Stanshiel Hill* (6-inch O.S. map, N XXVI; National Grid Ref. 36/780133).—The whole of the summit area of Stanshiel Hill has been enclosed by a single palisade which is now only intermittently traceable. The enclosure measures 450 by 180 feet, and contains no sign of huts.
6. *Henfield* (6-inch O.S. map, N XXVI; National Grid Ref. 36/753113).—An oval enclosure, measuring 140 by 110 feet within a single palisade, occupies the top of a knoll on the neck between Henfield and Loddan Hill, at a height of 1000 feet O.D. Rig cultivation has obliterated the east side of the enclosure, and no huts are visible in the interior.
7. *Fasset Hill* (6-inch O.S. map, N XXI; National Grid Ref. 36/851206).—On the summit of Fasset Hill (1218 feet O.D.) there is an oval enclosure measuring 200 by 165 feet within a single palisade. The entrance, on the north-east side, faces the easiest approach to the site, and is protected by a hornwork in the form of an outer line of palisading. No ring-groove huts are visible in the interior, but the existence of the hornwork shows that the enclosure was designed for habitation and is not simply a stock-pen.

APPENDIX II.

Report on the Carbonised Woods.

By Mr M. Y. ORR, Royal Botanic Garden, Edinburgh.

1. From inner palisade trench. One fragment of willow (*Salix* sp.).
2. From palisade trench at west entrance. One fragment of ? willow.
3. From rampart palisade. Sample contains some alder (*Alnus rotundifolia* Mill) and willow (*Salix* sp.).
4. Under hearthstone in Hut I. Willow (*Salix* sp.) and alder.
5. Floor of Hut I. Material in an advanced state of carbonisation but alder fragments were detected.
6. Post-hole in Hut I. Willow (*Salix* sp.) and alder (*Alnus rotundifolia* Mill).
7. Outer bedding trench, Hut VII. Contains alder (*Alnus rotundifolia* Mill).
8. Ditto. One fragment suggested willow (*Salix* sp.).
9. Ditto. Sample consists of alder (*Alnus rotundifolia* Mill).