IX.—EXCAVATIONS AT THE NATIVE SETTLE-MENT AT HUCKHOE, NORTHUMBERLAND, 1955-7.

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WITH REPORTS ON POTTERY BY J. P. GILLAM, C. THOMAS AND G. C. DUNNING.

INTRODUCTION (fig. 1).

In the region of the upper Wansbeck valley a series of upstanding bluffs, thrusting to the north and west, form a belt running from Rothley Crags in the north, through Shaftoe Crags, down to the hills of Ingoe in the south. Ridges of tougher grits and sandstones of the Upper Limestone group of rocks have been broken down into isolated crags, whose scarps face towards the original sources of the ice and whose southern and eastern lee slopes are usually long tapering inclines with comparatively gentle contours.

A number of these crags are crowned with native settlements enclosed by a varying number of banks and ditches, none of them large or particularly impressive. Interspersed between these sites, generally on lower ground, are the eastern outliers of the rectilinear-shaped settlements and enclosures which are so plentiful in North Tynedale and Redesdale.¹ Between the bluffs runs the Roman road, the Devil's Causeway, making for the river crossing and the Roman fortlet at Hartburn.

¹ Sites of this nature excavated to date have yielded evidence of occupation in the Roman period, *History of Northumberland*, vol. XV, 35. They will form the subject of a future paper.

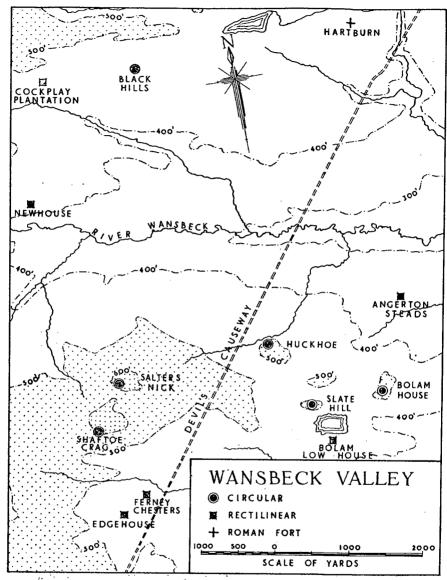


FIG. 1. NATIVE SETTLEMENT.

The settlement at Huckhoe, as the name suggests, is situated on one of the "crag and tail" formations detached from the main Shaftoe Crag outcrop. It was selected for excavation by a study group of the Department of Extra Mural Studies, King's College, Newcastle upon Tyne, in order to determine if the sequence observed on certain hillforts and settlements much further north in the Tyne-Forth province was to be obtained in south-east Northumberland.2 Although there are sites nearer to the main centres of native population in the north of the county which exhibit obvious signs of expansion or more than one occupational phase,3 there are also many, like Huckhoe, on which such developments are not so apparent from surface observation. Apart from general accessibility, the advantages in the choice of this area in the Wansbeck valley seemed to be in the presence of a Roman road and fortlet and a number of native settlements exhibiting typological differences, all lying in fairly close proximity to each other.

The group is grateful to the trustees of the Middleton estates and to Mr. Arthur, the tenant farmer, for permission to carry out limited excavation. Equipment was provided by the Department of Extra Mural Studies, King's College, and a grant of twenty-five pounds was given most readily by the Society of Antiquaries of Newcastle upon Tyne. Even so the project would not have been possible but for the continuous support which the writer has received from the group.

THE SITE (fig. 2).

The settlement lies on top of the bluff slightly above the 500-foot contour line commanding an extensive view to the north and east. To the south the prospect is restricted by

² R.C.A.M. Scotland, *Roxburgh*, vol. I, 18-20 for summary.

³ Of the published plans see Greaves Ash and Lordenshaws, *History of Northumberland*, vol. XIV, 36, and vol. XV, 30.

Slate Hill, and to the west by the sharp line of Shaftoe Crags. On the north and west there is a steep wooded crag face, with an outcrop of flaggy sandstone below the brow, passing down into a bank of earth and talus. The north-east approaches remain fairly steep, the upper part of the slope having two shelves which in earlier references⁴ have been taken as the site of a trackway leading down from the settlement to a nearby spring and stream; from present surface indications they would appear to be partly the result of cultivation.

A low grass-grown mound of earth and stones, bearing the obvious marks of robber-trenches, runs around the hill, closely following the sweep of the crag on the north and the west, except where its line has been interrupted for a short distance by the creation of an artificial fox-earth. The enclosed area is approximately one acre. A dip in the mound in the east indicates the position of the entrance facing the long, gentle slope to the Angerton meadows.

On the south and south-east is a second running mound, now almost ploughed out. This lies some fifty feet beyond the inner mound at a point where a transverse wall runs between the two, close, by the present field boundary. Some distance short of the line of the entrance to the inner enclosure it terminates in an irregular turf-covered pile of stones which seems to be the result of field clearance carried out during more recent ploughing. Beyond this point the plough ridges continue almost up to the line of the inner enclosure.

Immediately beyond the outer mound is a ditch, so obscured by later ploughing that it has escaped the notice of previous writers. Although all surface traces quickly disappear as it runs towards the east, its line can be followed, particularly before the periodic "cleaning" of the pasture, by the presence of small isolated beds of nettles amongst the fairly widespread thistles.

⁴ Proc. Soc. Ant. Newcastle, ser. 3, X, 247; MacLauchlan, Eastern Branch of Walling Street, sheet 1; Hodgson, Northumberland, II, I, 342-3.

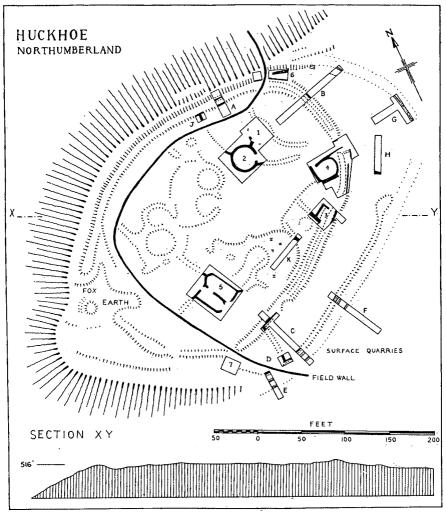


FIG. 2.

Traces of circular stone huts and courtyard walls are to be seen in the interior of the inner enclosure, but the rectangular buildings, mentioned by Hodgson and MacLauchlan as being in the southern part of the site, were not discernible amongst the general disturbance in that area until after excavation.

Visible features not mentioned in earlier references are the internal compound, apparently divided into two parts, lying to the south of the entrance into the inner enclosure, and a small rectangular building overlying the enclosure wall in the same area.

THE EXCAVATIONS.

Unfortunately certain limitations imposed after the excavations had commenced prevented an early and systematic exploration of the area beyond the inner enclosure. For convenience the excavations are described with reference to structural phases.

PHASE I: THE STOCKADED ENCLOSURES.

The earliest recognizable structural phase took the form of enclosures encircled by wooden stockades, demonstrably earlier than the stone walls which superseded them. Stockade trenches, not apparent from surface indications, were found in cuttings A-F and in areas 3 and 4. Although three different lines of trenches were found there is some reason to believe that all may have been in contemporary use, even if not of contemporary construction.

Area 4 presented the best picture of the probable nature of the inner stockade (figs. 3 and 4 and plate XXXVI, figs. 1 and 2). A trench one foot six inches to two feet wide and almost two feet deep had been cut into the rock and the upcast of sandstone chippings thrown out to the sides. Packing stones were so arranged in the trench as to indicate a stockade composed of upright close set timbers, the largest of which

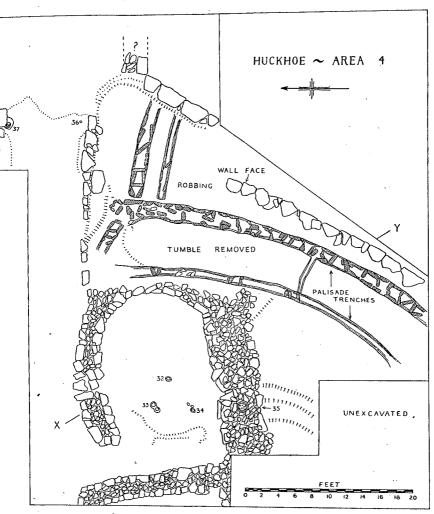


FIG. 3. ENTRANCE INNER ENCLOSURE, PHASES I AND II.

must have approached one foot in diameter; one burnt oak stump found in position near to the entrance was eight inches thick. Almost six feet within the line of this trench was a second trench, one foot wide and slightly over one foot deep, running parallel except where it disappeared in the soft disintegrating rock at the south end of the excavated area. Packing stones firmly jammed between the rock face of this trench showed that there had been posts or batons at intervals of eight feet, possibly for some form of crossbracing to the main stockade, although at no point was there any evidence to suggest that the stockade had been used as a revetment to an earthen ramp which at first sight such bracing might imply. The possibility that the two trenches were in contemporary use at some stage was further illustrated by the manner in which the outer trench turned inwards at the entrance towards the inner trench, thus in some measure resembling the "hairpin" ends of the double palisades of the enclosures at Hayhope Knowe⁵ and Craik Moor,⁶ Roxburgh, and probably Brandon Moor,⁷ Co. Durham, to take only the nearest known examples. However, in these instances, the union between the two palisades was complete and the posts in both trenches were uniformly and more widely spaced.

In view of the differences in size and the absence of a complete union of the trenches at Huckhoe perhaps two constructional phases should be seen, in which the outer trench was secondary, possibly a replacement, attended by a change in the function of the original inner trench. It was clear that replacement trenches were sometimes constructed even though it entailed the obvious labour of cutting an additional trench in rock. The transverse trenches which swung outwards from the entrance lay in such close proximity to each other as to exclude the idea of simultaneous construction or use. Here the larger trench which still had some

⁵ P.S.A.S., LXXXIII, 45ff.

⁶ R.C.A.M. Scotland, *Roxburgh*, II, no. 650.

⁷ Aerial photograph by Dr. J. K. St Joseph, University of Cambridge.

of its packing stones in position was no doubt the later replacement; on the other hand there was no direct evidence, apart from similarity in size, to connect the smaller transverse trench with the inner of the two perimeter trenches, although the possibility is worthy of note.

The system of parallel perimeter trenches was found underlying the later inner enclosure wall, in whole or in part, in every cutting except C, where only the large outer trench was present one foot beyond the outer face of the wall (fig. 4). Here it was overlaid by the later transverse wall, and stopped short half-way across the main cutting, indicating the possibility of a subsidiary entrance at this point. A break also occurred in the line of the inner trench in area 3 (fig. 10).

Between forty and fifty feet beyond the inner stockade a third trench was found in cuttings B to F. In all cuttings except B it lay beneath the remains of an outer enclosure wall which sealed the associated layer of disintegrated sandstone upcast. This trench also had been designed to support upright closely set timbers, although they had been less substantial than those of the inner stockade, since the average width and depth of the trench was slightly less at one foot six inches (plate XXXVIII, fig. 2). The precise course and length of this stockade was not determined, but in view of the fact that it ran out towards a crumbling rock scarp in the small cutting between area 6 and cutting B, it appeared unlikely that it had ever encircled the crag top. It could well have been no more than an arc drawn across the gentle lee slope. Its absence in cutting G showed that the entrance through both stockades had been in direct line and, at the same time, that the outer stockade had not been associated with the ditch beyond.

It is not known for certain if the two stockades were in contemporary use, but in this connection the trenches which swung outwards from the entrance through the inner stockade were thought to be most significant. The line of these trenches did not appear to be in keeping with the idea of a

"hornwork"; on the other hand their purpose clearly could have been to connect the two stockades, thus creating an outer enclosure useful as a corral for live-stock. None of the cuttings, although admittedly limited in extent, had produced evidence for any structures in the space between the two stockades. Unfortunately the run of the transverse trenches had been cut short by quarrying of the rock scarp in phase II (below) and cutting H, which could not be made until towards the close of the excavation, failed to reveal any return trenches from the presumed line of the outer stockade. No further opportunity occurred to test the point, but it is just possible that this cutting was made in the line of an entrance into the enclosure. Whatever the true relationship between the stockades may have been, additional prominence was given to the idea of their contemporary use by the similarity in plan and the function of the later enclosure walls

Both stockades, constructed at least in part from oak,⁸ had been burnt eventually, leaving a small amount of burnt wood on top of the upcast and in the trenches. Whether the burning had occurred because of accident or intent is not known; however, the disarrangement of the packing stones and the absence of large quantities of burnt wood in the trenches and on the upcast suggested that a good many of the posts had been sufficiently undamaged to make removal possible. Dr. Kathleen Blackburn of the Department of Botany, King's College, who examined the specimens of burnt wood, expressed the opinion that one stump found in position near to the entrance, area 4, had already partly rotted before burning.

In a different geological and probably climatic context the estimated life of a 12-in. diameter oak post has been given as 40-80 years before replacement would be necessary (Thorny Down, Wilts., *Proc. Prehistoric Society*, VII, 17).

⁸ A sample of burnt wood from immediately within the inner stockade in area 3 was composed chiefly of small branches of ash, with some pieces of hazel and birch. The nature of the stockade precluded interlacing with branches as suggested in connection with the slightly staggered posts of the palisaded enclosure at Hownam Rings, Roxburgh, P.S.A.S., LXXXII, 202.

PHASE II: THE STONE ENCLOSURE WALLS.

As already stated, each stockade trench was overlaid in most areas by a stone enclosure wall, resting directly upon the trench and associated upcast. Although a certain amount of earth and upcast had silted into the trenches, there was no indication of any intervening level or turf line between trenches and walls.

(a) The Inner Enclosure Wall (fig. 4 and plate XXXVIII, fig. 4).

This proved to be the more substantial of the two walls and had measured up to ten feet thick at the base. Extensive robbing, in some sections along the top of the wall, made it difficult to estimate its original height, but the amount of tumble was not large and it appeared unlikely that it had ever been very high. It was composed of an outer face of sandstone blocks made up with smaller packing stones and backed by rubble. Except in cutting A there was no hint of a sheer inner face, although on occasions a line of larger stones indicated the presence of a low retaining kerb. If this were the case the substantial width of the wall need not necessarily be taken to imply great height.

In cutting A the wall had been set back a little from the scarp edge which the earlier stockade had been able to follow so closely, and in cutting C the flat platform of rock immediately behind the stockade trench had no doubt governed the choice of building line there. The remains of the outer face in cutting B had been pushed forward at some time, but this could well have been the result of later stone robbing.¹⁰

(b) The Gateway (figs. 3 and 4).

Certain alterations had been made at the entrance, where the soft rock had been quarried or dressed down so as to

¹⁰ There was no evidence to support the idea of deliberate scarping as found on some hill-forts in S. Scotland.

⁹ The absence of well constructed inner faces on similar sites is not unusual, e.g. in Northumberland, Witchy Neuk, Arch. Ael., ser. 4, XVI, 132, and Ingram Hill, Ibid., XX, 112.

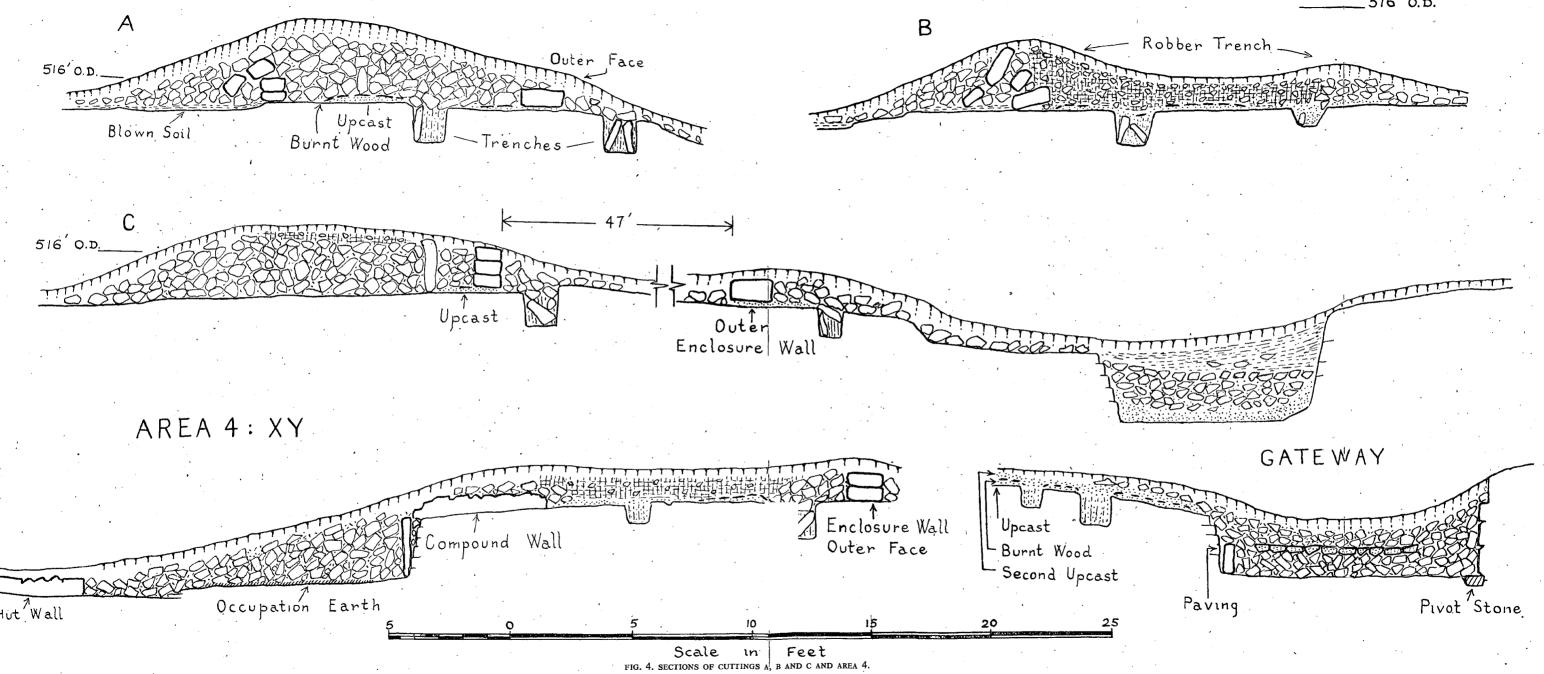
present a vertical face for the passageway and at the same time establish a flat surface of good hard rock for the roadway. This would account for the additional upcast of disintegrated sandstone chippings which not only covered the stockade trenches in this area, but in so doing sealed the thin layer of burnt wood lying on top of the original upcast. To the south side of the entrance the rock had been quarried or dressed down in like manner to give a sheer face over two feet high, thus cutting short the run of the transverse trenches. Both vertical rock fronts were faced with large stones, some of them placed on edge. Towards the rear of the entrance passageway the character of the facing changed abruptly to a more neatly formed facing of smaller stones, suggesting the possibility of later reconstruction.

Whether or not the enclosure wall had been widened to correspond with the bastion-like effect created in natural rock is not known;¹¹ at this point the wall had been dismantled almost completely by modern robbing, as the presence of an eighteenth-century glass bottle and clay pipestems testified.

The gateway itself was ten feet wide and had been closed by a single gate, which could hardly have been very substantial. A pivot-stone bearing a socket six inches in diameter and depth was set into a hole cut into the rock on the north side of the entrance. It was well worn in such a manner as to demonstrate that the gate had opened inwards up against the north facing of the passageway. Two small holes on the south side of the gateway, one cut into the rock floor and the other into the end facing stone two feet above road level, no doubt served as slots for gate fastenings.

Although the road surface had been covered by tumbled stone from the enclosure wall at some stage, it was clear that the entrance had continued to be used after this event, even if on a much reduced scale. The debris had not been cleared out of the passageway and only the roughest of pathways was constructed over the tumble for a distance of

¹¹ Cf. Witchy Neuk, op. cit., 132.



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about six feet within and without the line of the original gateway. After this point all traces of the secondary pathway disappeared, so that it was not possible to determine any relationship between the pathway and the nearest internal building. The pathway was subsequently covered by further but less substantial tumble.

(c) The Outer Enclosure Wall.

Any estimate of the size of this wall had to include the amount of tumble in the ditch beyond. Even so it was apparent that it had been less substantial than the inner wall. One course of inner facing stones was still in position in cuttings C, E and F, where they rested upon the upcast from the outer stockade trench. In cuttings B and J nothing remained except a scatter of loose stones; on the other hand the position of the ditch gave a reliable indication of the line followed by the wall which reappeared as a low mound of rubble in area 6. Unfortunately the discovery of the junction between inner and outer walls was denied by additional robbing for the modern field wall which had removed the facing stones of the inner wall. Beyond cutting E in the south-west the course of the outer wall remained uncertain; it was not present in area 7.

The presence of the stub end of the ditch in cutting G showed that the entry through the outer wall must have been slightly to the south of that through the earlier stockade.

(d) Transverse Walls (fig. 2).

The presence of the transverse wall in the south-west clearly brought the two enclosure walls into direct relationship with each other. It was built on bed-rock and butted on to the face of the inner enclosure wall, although no clear junction could be found with the outer wall, since there the facing stones were no longer in position. What was almost certainly a second transverse wall was encountered at the south end of cutting H.

Similar cross walls are found on a number of settlements

in Northumberland¹² and although in some cases later circular stone huts spill over into the compounds so formed, it is probable that in the original plans they served as enclosures for stock. This would explain the spacing out of the enclosure walls and, at Huckhoe, the placing of the single ditch on the far side of the outer wall.

(e) The Ditch (fig. 4).

It was possible to empty the ditch only in cuttings C and E, but elsewhere the position of one or both lips and the presence in it of tumble from the outer wall was firmly established. It was flat bottomed, on average eight feet wide and from three to four feet deep. Both size and shape seemed to be consistent with the idea of stone quarrying as much as defence.¹³ Clean sandy silt containing pieces of disintegrating sandstone filled the bottom nine inches and was overlaid by a fairly compact layer of sandstone rubble which had come from the wall side of the ditch. There were no finds in these cuttings. Permission was obtained to make one long cutting beyond the line of the ditch, but this yielded nothing of interest (fig. 2, F).

DATING OF THE ENCLOSURES: PHASES I AND II.

Before proceeding to an examination of the interior it will be as well to discuss the sequence so far observed.

There were few finds associated with the stockade trenches. A flint button-scraper came from amongst the decayed sandstone upcast in area 3, and a few sherds of plain pottery possessing a texture closer to that of the Bronze Age cinerary urns of the area than the so-called Iron Age ware, were found in the stockade trenches and on the upcast beneath the later enclosure walls. However, the sherds were

¹² e.g. Greaves Ash, Northumberland, XIV, 36; Lordenshaws, Ibid., XV, 30; Middle Dean, Antiquity, XVII, 139; Weetwood, MacLauchlan, Eastern Branch of Watling Street, 71; The Ringses, Doddington, Arch. Ael., ser. 4, XXIV, 145.

Cf. also Hill Slope Forts and Related Earthworks in S.W. England and S. Wales, Arch. Journ., CIX, 3ff.

13 Cf. Ingram Hill ditch, Arch. Ael., ser. 4, XX, 112.

so fragmentary that it would be unwise at this stage to place too great emphasis upon them.

Double and single palisades or stockades similar to those at Huckhoe are well established in the pre-Roman sequence further north in the Tyne-Forth province and elsewhere.14 In south-east Scotland they may have been constructed initially during the second or more probably the first century B.C. and were current until shortly before the Roman period.15 At Cappuck, Roxburgh, a palisade trench belonging to a native settlement or enclosure had been deliberately obliterated when the Agricolan defences were erected.16 In Northumberland the only known comparable palisaded enclosure at Ingram Hill was not datable, although it also was superseded by a stone-revetted enclosure wall and shallow ditch.17 An additional example may exist at Witchy Neuk, Hepple, but further excavation will be necessary to prove the point.18

How quickly and in what circumstances the construction of the enclosure walls followed upon the dismantling of the stockades at Huckhoe is not absolutely certain. It could be argued that the trenches by their very nature would long be evident to serve as building lines. Nevertheless the almost exact similarity in line, plan and probably function of the enclosures in both phases, in addition to the manner in which the enclosure walls rested directly upon the upcast from the trenches, points most forcibly to continuity of occupation and almost immediate replacement.

The stone enclosure walls themselves yielded little evidence of use in assessing a firm date for the change-over. Three broken rotary guerns of a type current in the area in

¹⁴ P.S.A.S., LXXXIII, 63, for list.

¹⁵ Hayhope Knowe, Roxburgh, Ibid., 45ff., and R.C.A.M., Roxburgh, I, 19-20.

¹⁶ P.S.A.S., LXXXV, 142 and fig. 2.

17 Arch. Ael., ser. 4, XXXIV, 154. Reasons were advanced for possible contemporary use of palisade and enclosure wall but they are not conclusive.

18 Ibid., XVI, 132, and plate XVIII, fig. 2. See also the much smaller pre-Roman enclosure at Corbridge which may be no more than the steading of basic family unit contemporary with the larger palisaded settlements, although other parallels were sought. Arch. Ael., ser. 4, XXXIII, 222-4.

the first and second centuries A.D. were found amongst the tumble which had come from the inner wall, but these provide only a rough terminus post quem. On the other hand it is quite clear that at least the inner wall was in use, in some form or other, until quite late in the Roman period. Sherds of imported amphora sealed beneath the first tumble in the entrance passageway show that the gateway was open in the second century A.D. or later. The tumble from the inner wall in area 6 sealed a sherd of probably second-century date and lastly, in area 4, a rim of early fourth-century date was found on bed rock beneath two and a half feet of tumble from the same wall.

There was nothing markedly defensive about the settlement such as might cause concern to Imperial authority and, as we shall see from the evidence in the interior, the most likely stage at which to see the construction of the stone enclosures is in the early Roman period. Indeed the earliest known stone hut in the settlement was certainly not constructed before the early second century A.D.

THE INTERIOR.

The Post-Holes.

No post-holes were found between the inner and outer enclosure lines of phases I and II or, as could be expected in view of the superimposed alignments, beneath the inner enclosure wall. All that can be said conclusively about the sequence of those post-holes within the inner enclosure, when clearly they did not form part of the excavated stone structures, is that most of them were earlier than individual stone buildings and some preceded the earliest of these buildings.

Sections were not easily obtainable because of the rock faces; indeed the best method of dealing with the smaller holes was to remove the filling intact where this was made possible by the matting of grass roots. Except when adjoining replacements had been made, the holes were generally circular in shape, with perpendicular sides and flattish

bottoms. Many of them bore marks of vertical tooling on the sides.

A table of dimensions is given below; the serial numbers refer to the numbered holes as they appear on the various plans. It should be borne in mind that the unyielding nature of the sides of the holes would render unnecessary any great depth in order to achieve stability for rigid structures.

	Inches			Inches			Inches	
No.	Diam.	Depth	No.	Diam.	Depth	No.	Diam.	Depth
1	7	5	19	19 × 16.	14	38	24	2
2	12	9	20	18×12	10	39	-18×8	10
2 3	9	11	21	26×20	11		22 }	22
4 5	9	18	22	18×12	13	40	18 × 8∫	10
5	12	10	23	21×15	10		21	22
6	10	12	24	22×15	8	41	5 ´	5
7	12	12	25	15×12	6	42	5 5 5 5	6
- 8	12	12	26	8	7	43	5	8
9	12	12	27	13	8	44	5	7
10	12	9	28	8	7	45	5	8
11	10	9	29	8	7	46	5	4
12	30×24	18	30	33×15	16	47	6	5
13	24×18	12	31	33×15	15	48	11×9	13
14	13×15	13	32	9	8	49	8	9
15	12	5	33	9	7	50	9	7
16	23×20	9	34	9	5	51	10	9
	9 }	9	35	21	14	52	24×13	15
17	14 ′	12	36	4	2	53	12	8
18	30×20	16	37	Gate-Pivot		54	11×10	9
						55	13	12

In area 5, the post-holes nos. 49-55 (fig. 6) were sealed by the make-up material used in the levelling of the broken rock surface for the floor of a later circular stone hut. This hut itself preceded rectangular stone buildings and, as we shall see, seemed to have been occupied by the second half of the second century A.D. (cf. fig. 5 with fig. 6). Since this building was the earliest known stone hut on the site it seemed reasonable to associate the holes with the phase I stockades.

Similarly the majority of the large post-holes in area 2

were clearly earlier than the circular stone hut. The holes either underlay the walls (e.g. fig. 8, nos. 13, 14, 18, 22, 26 and 27) or bore no relationship to the hut and had been deliberately and carefully levelled where they occurred in the area of the hut floor (e.g. nos. 21, 23-25). On the other hand holes nos. 15 and 17, lying outside the hut, presumably had not required such treatment, and apart from a small amount of packing were filled with wind-blown soil. No. 16, emptied of all packing stones, had served as a coal store at a later date, probably when the hut was occupied. No. 18, apparently a replacement for the adjoining hole, contained a saddle quern, used as a packing stone, and a plano-convex flint knife of Bronze Age type.

In the area of hut 1 the holes nos. 1-11 were generally smaller and more regular in outline than those in area 2, which may indicate some difference in use or chronology, although in common with the larger holes they had been levelled up when hut 1 was built.

None of the holes already described could be related to any form of early dwelling. Only the clearance of a much greater area, which was not then possible, would have been likely to have presented a true picture. In view of the number of broken rotary bun-shaped querns built up into the walls of the later buildings and the particular grouping of holes bearing a close resemblance to each other, e.g. fig. 8, nos. 6-11, it is tempting to identify some of them as being connected with structures of agricultural use, such as drying racks and small raised granaries found on many Iron Age sites much further south.¹⁹ On the other hand no storage pits were found and in the lack of more definite evidence this must remain no more than a suggestion.

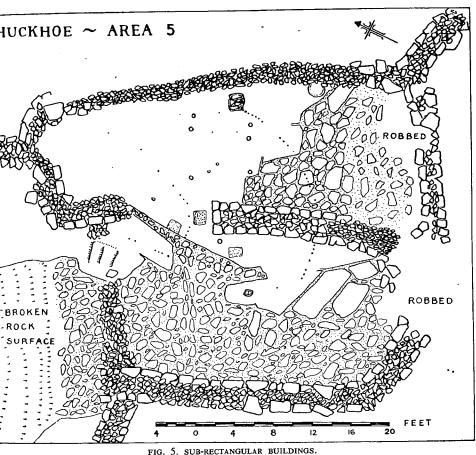
THE CIRCULAR STONE HUTS AND INNER COMPOUND.

Area 5 (figs 5, 6 and 7 and plate XXXVII, fig. 2).

In this area there had been at least one circular stone-

¹⁹ e.g. Little Woodbury, Proc. Prehistoric Soc., VI, pt. 1, 94ff.; Wandlebury, Proc. Camb. Ant. Soc., L, 12.

walled hut, superseded by two rectangular buildings with a joint central wall. The broken rock surface had required an amount of levelling with packed stones and earth to provide



a flat area for the floor and hut walls. A coin of A.D. 119 in good condition, conceivably lost during the process of levelling, was sealed most securely beneath the make-up material.

Although no stonework from the original hut wall remained, its position was indicated quite clearly by the post-holes at the doorway (fig. 6, nos. 39 and 40) and an arc of small holes cut into the bed-rock and the stones used for levelling. These small holes, about one inch in diameter and less in depth, no doubt had been intended to give stability to a wattle and daub covering for the inner face of the hut wall which had been removed when the later rectangular buildings were constructed. Size and extent showed that they could not have supported posts for a wooden building. A few small scraps of daub in some of the holes remained as testimony of this unusual refinement bestowed upon the south side of the hut. One stone, bearing a small hole on the underside, had been removed from its original position in the arc during the later clearance and was found between the hut and the smithing hearth to the south. Further series of small holes marked the positions of internal partitions. The building had been about twenty-six feet in internal diameter.

Of the pairs of post-holes at either side of the doorway the outside ones were secondary. Their inside edges had been cut in a slight arc to avoid removing the sides of the larger post-holes in the rear. These outer holes had been intended for rectangular timbers, possibly to give protection or reinforcement to the main door-posts. Only part of the worn rock threshold remained in position, the inner edge of which had been cut down as if to serve as a door-stop. A broken slab of rock showing the same wear as that on the threshold was found amongst the secondary levelling at the south end of the east rectangular building, no doubt having been removed from the entrance to the hut after its disuse. It is possible that eaves drip in addition to the normal traffic hastened the process of weathering which was most noticeable on the outside edge of the threshold. Although no pivot-stones were found in position, the upper stone of a bun-shaped quern, showing wear in the hopper consistent with later use

as a door-pivot, was discovered a short distance away built into the wall of the later rectangular building. Such an ambitious building seemed to demand a door; indeed in view of the wide entrance double doors could have been used.

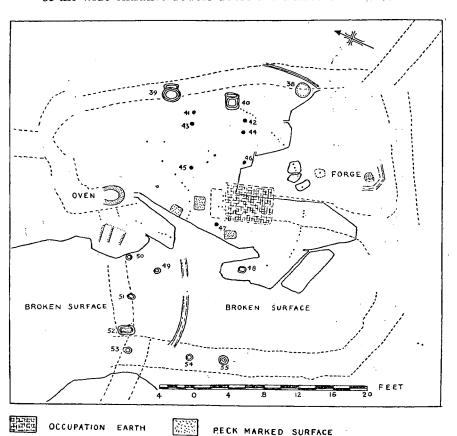


FIG. 6. AREA 5, EARLIER FEATURES.

There were no post-holes for central roof supports. An open frame of four or triangle of three upright cross-braced posts standing on the rock floor could have been employed, but even these would have benefited only too obviously from

the extra stability and rigidity afforded by post-holes. Presumably the radial roofing spars would be tied concentrically and the outside ends butted into the hut wall; even so it is difficult to see how the partitions themselves could have given support to anything but a light roof without some form of careful cross-bracing.

No hearth was found, but the remains of a small clay oven underlying the central wall of the later rectangular buildings possibly belonged to the hut at some stage. A shallow fissure in the rock surface, the outline of which was still preserved by some edging stones in the made-up floor, seemed to have served as a drain.²⁰ Of the three tangential walls radiating out from the later rectangular structures, those in the north west and south east corners of the excavated area were demonstrably earlier than these buildings in that they continued beneath their walls. For this reason all three tangential walls have been associated tentatively with the circular hut in the reconstructed plan (fig. 7), where no doubt they served to link it with the main enclosure wall and other huts in the area as in the case of huts 1 and 2 (below).

Fortunately the spread of the occupation earth found near the centre of the hut, and almost certainly associated with it, had been sealed and thus preserved by the joint central wall of the later buildings. This was one of the two areas in the whole of the excavations where any occupation spread was found; generally the rock floors were clean apart from tumble or fine wind-blown soil beneath turf level. In this instance, in addition to pottery in the native tradition which is of little use for dating, it contained Samian ware of the second half of the second century and fragments of a cooking pot of the later second or early third century A.D.

Lead drippings, iron cinder and pieces of coal in the occupation earth helped to establish the contemporaneity of

²⁰ An extension of the excavated area to include unbroken rock surface showed that this was not part of a structural trench of an earlier circular building.

the hut and the remains of the small smithing hearth or forge to the south, where similar material was found sealed beneath the extension to the levelling for the floor of the

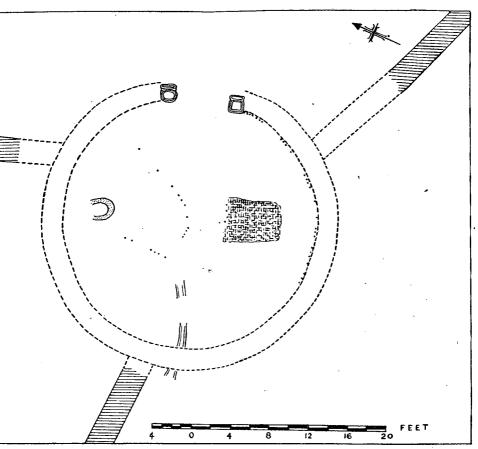


FIG. 7. CIRCULAR HUT, AREA 5.

later rectangular building. The hearth had been in a small rock-cut depression in which there were also a few sherds of imported amphora of the second century A.D.

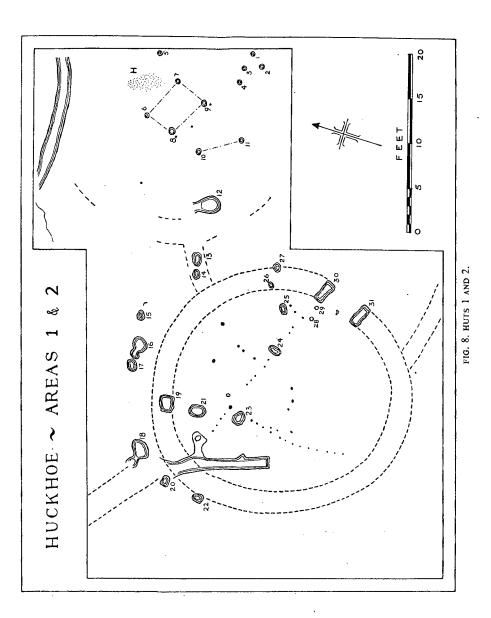
Holes nos. 41-47 (fig. 6) presented difficulties. They did

not appear to be associated with the circular hut or the later rectangular buildings. The fillings consisted of small sand-stone chips and packed earth. Although their layout at first sight suggested the possibility that they could have been used to give stability to posts supporting a raised entry to a low stone-walled hut of some twenty-five feet in diameter, with hole no. 47 as the post-hole for the central roof support, their dimensions and precise relationship seemed to be against this. On the other hand, similarity in size and shape was indicative of a common purpose. In general character they resembled most closely the holes in area 1 which have been ascribed tentatively to subsidiary structures for agricultural uses, in existence before the stone-walled hut in that area was constructed.

The reasons for the shallow circular depression (no. 38), the nearby rock-cut groove which was only three inches wide, and the peck-marked areas on the hut floor are also problematical. Two small holes in the flat rock surface in the south west of the excavated area were similar to those used for the hut partitions, and probably indicated the beginning of the floor space of another hut.

As far as the circular hut is concerned, in consideration of the condition of the coin and the pottery finds from the whole area, it seems reasonable to see it occupied in the second half of the second century A.D., although the precise life-span cannot be certain. The evidence over the whole site is hardly sufficient to support the idea that the settlement suffered in the widespread destruction which overtook the military works in the Roman province at the end of the second century A.D. One rim of probable early fourth-century date, although found outside the area of the hut, was nevertheless sealed by the central wall of the later buildings, and may point to a longer life-span for the circular hut than the few sherds in the occupation material at first suggests.

Areas 1 and 2 (figs. 8 and 9, plate XXXVII, fig. 1).
Here two circular stone-walled huts fronted on to an



Q

enclosed forecourt. A short cross wall ran between the two buildings closing off the forecourt from a "backyard" formed by two branch walls running back in the direction of the main enclosure wall.

The walls of hut 1 had been robbed extensively, but enough remained to show that it had been slightly smaller and less elaborate than hut 2, though essentially of the same construction. Where they still existed, the wall faces were of well chosen sandstone blocks containing a core of packed rubble and earth scrapings. Four small, widely spaced holes slightly over an inch in diameter chipped in the very broken rock floor were all that remained to mark the line of an internal partition. An area of burnt rock (fig. 8, H) indicated where the hearth had been. Although there were no postholes where the door was presumed to have been, a pivot-stone lay beneath the tumble a few feet away. There was no occupation spread on the floor and the only finds were a few scraps of coarse native pottery in the cracks and the rock fissure at the back of the hut.

Hut 2 was not an exact circle but otherwise had been well constructed with an internal diameter of twenty-three to twenty-five feet. The slight flattening of the perimeter in the east could have been the result of later rebuilding. It is possible that the position of the doorway had been determined and laid out before the walls were brought up to it, since the large holes on either side were partly overlaid by the ends of the perimeter walls. Although the packing in the large holes consisted of small stones which presented no pattern, the manner in which the bottoms of both holes were cut at two different levels suggested that each had been intended for two substantial posts rather than large stone door jambs which surface appearances favoured. No pivotstones were found in position and the smaller hole (no. 29) on the north side of the doorway showed no signs of wear; nevertheless the carefully cut right-angled groove in the centre of the doorway doubtless was intended for a central door fastening of some sort, although there was no wear in

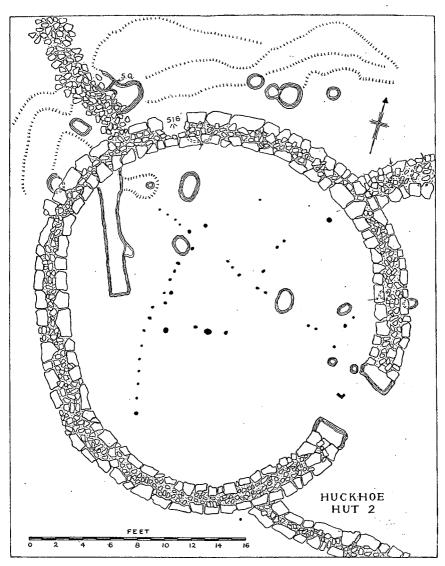


FIG. 9. HUT 2.

the groove suggestive of such an advanced form of fastening as a sliding vertical bolt.21

This building also had been divided by partitions into a number of compartments, outlined by holes chipped into the rock flood.²² These holes were larger than those in the circular hut in area 5 but seldom exceeded two inches in diameter and depth, except where the rock surface had broken away at the edges. Once again there were no postholes for central roof supports. Although the hut wall was so carefully constructed as to have been capable of taking some amount of outward thrust from the roof and additional support could have been obtained from the partitions, which in this instance were more substantial, it is considered that some form of cross-bracing would still be required for anything other than a light roof. A small number of iron nails found in the cracks in the rock floor probably came from the roof spars.

A natural rock fissure which ran out from the innermost compartment towards the natural slope at the back of the hut had been widened in parts to act as a drain. No hearth was found but an area of discoloured and broken rock surface near to the centre of the hut could be taken to mark its position.

The small cutting J showed that the "backyard" wall had continued up to the main enclosure wall, despite the fact that in this instance the junction had suffered from the intrusive burial of a dog. Only one course of large blocks of rock were found in position at the back of the main

²² The entrances into the compartments were quite evident. For similar divisions *cf.* e.g. Milton Loch Crannog, *P.S.A.S.*, LXXXVII, 142; Gunnar Peak, Northumberland, *Arch. Ael.*, ser. 2, X, 12-37; Carry House, Northumberland, Arch., XLVII, 362; Edgerston, Roxburgh, Hut 4 (?), R.C.A.M., Rox-

burgh, I, 226.

²¹ Had double doors of equal width been used, one would expect such a groove to have been set slightly to one side. In the absence of pivot-stones the possibility of the adoption of an elementary "hook and eye" hinge was considered, however much such an idea appeared to be out of context. However, pivot-holes and stones appear to be normal in the Roman military buildings of the frontier, although some of the metal strips terminating in an eye and hooked "holdfasts" in some of the museums might repay examination (cf. Ward, Romano-British Buildings and Earthworks, 268-70).

enclosure wall, but there was no opportunity to pursue the suggestion created by the evidence from cutting A that the inner edge of this wall had received special treatment in the area of the "backyard".

The front courtyard wall and cross wall between the two huts were much better preserved, with at least one and sometimes two courses of facing stones in position. There was no break in the cross wall, consequently direct access to the backyard from the huts and the front courtyard was not possible. It appeared from surface observation that this hut group was the only one to possess such a courtyard, but there was no means of knowing whether it was part of the original plan or not.

Structural similarities between hut 2 and the hut in area 5 gave a strong indication of the possibility of contemporary occupation. The floor of hut 2 yielded only two fragments of Romano-British coarse pottery, one of which came from a rock fissure and was datable to the mid-second century. An investigation of the cores of the walls of hut 2, and of hut 1 where the facing stones still existed, produced sherds of coarse pottery of the second century A.D., in such positions that left no doubt as to the fact that they had been in the earth scrapings taken from some previous occupation. few small scraps of Samian ware were also found on the rock beneath the wall of hut 2. In addition the cross wall between the two huts contained some fragments of coarse pottery and two rims datable to the late second or early third Two very worn pieces of Andernach quernstone also had been incorporated into the packed rubble core. Although the cross wall could have been a secondary feature. a terminus post quem in the later second or early third century was indicated for the hut group as it then stood. A limit was set to the possible life-span of these buildings, though not to the occupation of the site as a whole, by the discovery of four sherds of post-Roman date in the interstices of the rubble overlying the cross wall, in such a position as to suggest that the wall had already tumbled when the sherds were deposited. Mr. C. Thomas has proposed a date in the late fifth or early sixth centuries for these sherds. It is conceivable that the hut group might have lasted into the post-Roman period; as a type of traditional home, the circular stone hut had a long life in the highland zone.²³

Broken beehive-shaped querns with flat grinding surfaces were found in the rubble and earth cores of the walls of both huts and in the tumble from them: one particularly fine specimen had been used as a facing stone in the wall of hut 2.

Inner Compound Wall (figs. 2 and 3).

This had been a substantial wall about four feet six inches wide and faced on both sides. A terminus post quem for its construction was provided by a sherd of mid-second century date sealed beneath the rubble core in close proximity to post-hole no. 35. Unfortunately, the junction between this wall and the main enclosure wall had been robbed away by the eighteenth-century robber trench.

The Hut, Area 4 (fig. 3 and plate XXXVIII, fig. 1).

There were no surface indications of this hut. Attention was directed to the possibility of its existence when it was found that the small rock scarp which the inner compound wall ran along had been faced with stone slabs set on edge. In plan the building appeared to be secondary to the enclosure gateway and to the compound wall, since a marked change in "building line" occurred at the junction between the north wall of the hut and the entrance passageway. There were indications also that structural alterations had been made to the building itself during its life-time. The position of the original entrance in the north wall was marked by facing stones running through the width of the wall and flat stone slabs covering the broken rock surface presumably where the threshold had been. It seemed most likely that the original north wall of the hut had described a complete

²³ See e.g. St. Cuthbert's Dwelling on Farne, Antiquity, XV, 88; Crock Cleuch, P.S.A.S., LXXXI, 38.

arc so as to meet the compound wall further west than the point at which the existing straight wall butted on to it, in which case holes no. 32-4 could usefully have held roof supports. This being so, the straight west wall would represent later rebuilding.

Such pottery as was found confirmed the impressions already created by the structural peculiarities of the building. In the thin band of greasy occupation earth which survived in places on the damp rock floor were fragments of a vessel of third- or fourth-century date, whilst one sherd of the same vessel was sealed beneath the rubble core of the west wall. A number of broken bun-shaped rotary querns and scraps of Romano-British coarse pottery which were not closely datable also came from the earth and rubble cores of the north and west walls, in which they must have been incorporated at the time of building.

It is considered that the use of the word "guardchamber" as a description of this building is misleading in view of its possible secondary status and the nature of the settlement. On the other hand so-called "guardchambers" occur occasionally in the walled settlements of Northumberland.²⁴ None of them have been investigated thoroughly, so that their exact relationship and purpose is not known for certain. In this instance it did not appear to be the best of buildings for permanent habitation. In periods of heavy rainfall the water must have collected behind the inner compound wall and seeped through into the building. Over the years this seepage had worn a channel in the rock surface.

THE RECTANGULAR BUILDINGS.

Area 5 (fig. 5).

Sometime after a jar of probable early fourth-century date had reached the site, the circular stone hut or its remains had been cleared away, the made-up area extended in a much less efficient manner to cover the smithing hearth and its

²⁴ e.g. Greaves Ash, Prendwick Chesters, Smalesmouth.

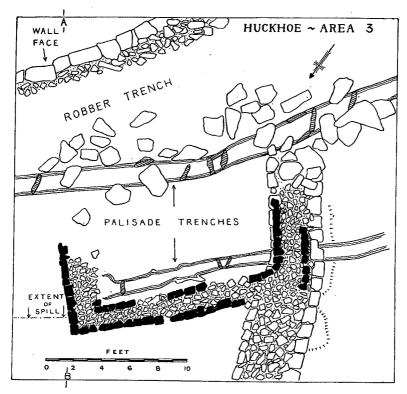
associated material, and two sub-rectangular buildings with a joint central wall constructed over the area. The remains of these two buildings had subsequently been robbed most extensively, particularly towards the south end, where there were robber pits probably made in the thirteenth century.²⁵

As far as could be ascertained from the remains, the two buildings had each possessed one apsidal end.²⁶ There appeared to have been two entrances, one in the north wall of the west building, where two shallow steps in the rock surface marked a change in rock level, and the other in the joint central wall allowing access to the east building from the west. There were no clues as to how the buildings had been roofed, if indeed they had been roofed at all. A suggestion as to use was given by the bronze terret ring found on bed-rock beneath the wall tumble at the north end of the east building, but it is of an early type and could well have been a survival from the occupation of the circular hut.

Fortunately the packed earth and rubble extension to the floor at the south end of the east building yielded fragments of late fourth-century Romano-British coarse pottery and a single rim of post-Roman ware in the same fabric as that found in area 2. These lay where they had been trampled into the top of the earth filling and can be taken as an indication of the late Roman and post-Roman occupation of the buildings. In the rubble cores of the walls of the buildings and amongst the material used for the extension to the levelling were sherds of Romano-British coarse pottery, including some datable to the early to mid-second century A.D., Clearly these had come from the earth scrapings of

²⁵ A report by Mr. G. C. Dunning on the interesting sherd of medieval pottery, found in the robber pit on top of the remains of the south wall of the east building, is given below. It is conceivable that the robbing in this instance may have been carried out by the inhabitants of the nearby medieval village of Bolam.

²⁶ Comparisons in the case of such elementary buildings may be misleading, but *cf.* especially houses at Cow Green, Westmorland, R.C.H.M. Westmorland, p. xlvii, and foundations on the latest level, Traprain Law, A. H. A. Hogg in Aspects of Archaeology, 210.



SECTION A~B

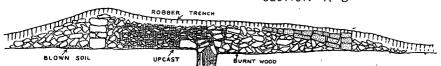


FIG. 10. AREA 3.

previous occupation, including no doubt that of the earlier circular hut. In addition a broken quern of Romano-British type with raised collar was found amongst the tumble from the central wall.

Rectangular and sub-rectangular buildings occur quite frequently in northern settlements,27 although methods of construction and materials used appear to vary considerably. It may well be that eventually their dates, and purposes, will be found to exhibit the same diversity.

Area 3 (fig. 10).

In this area a small rectangular stone building had been constructed over the top of the tumble from the main enclosure wall and on the remains of the broad wall which divided the inner compound, to which reference has already been made. The whole of the south end of the structure had been robbed away, but enough remained to show that the building was of the crudest construction. The tumble from the enclosure wall had been cleared out from the interior so that the rock surface could be used as a floor. A stone spindle whorl was the only find within the building. If the presence of the sherd beneath the tumble outside the entrance through the inner enclosure wall is to be taken to indicate that this wall was still in use in the early fourth century, then it is certain that the hut was not built before that time. Little more can be said about it except to point out the similar occurrence at Ingram Hill, Northumberland, where one of the undated rectangular buildings appeared to have been constructed partly over the enclosure wall.28

²⁷ e.g. Northumberland: Gunnar Peak, second century A.D. (Arch. Ael., ser. 4, XX, 164); Ingram Hill, not dated (Ibid., 110); Mill Knock, not excavated; Riding Wood, not excavated.

Cumberland and Westmorland: Ewe Close, Cow Green, Ewe Locks, Burwens (for summary see P. Corder in Aspects of Archæology, 84) and Castle Folds by Great Asby (Trans. C. & W.A.A. Soc., XXXIII, 234).

Traprain Law (Aspects of Archæology, 210).
Edlington Wood, Doncaster, third century and other enclosed groups.

Cf. also Pant y Saer, Anglesey, sixth century, and other enclosed groups of circular huts and rectangular buildings illustrated in R.C.A.M., Wales.

28 Arch. Ael., ser. 4, XXXIV, 153, fig. 3.

SUMMARY

(a) Sequence

The earliest known settlement on the site was enclosed by wooden stockades of a type current elsewhere in the Tyne-Forth province in the first century A.D. Although there were two lines of stockades it is possible that they formed part of the same double enclosure. These were replaced eventually by stone enclosure walls, in such circumstances as to suggest a continuity of occupation. The precise date of this event is not known, but the earliest known circular stone hut in the interior of the inner enclosure was probably occupied by the second half of the second century A.D. On the assumption that the stone enclosure walls were more or less of simultaneous build with the earliest interior stone buildings, it will be necessary to envisage the stockaded enclosures continuing through into the second century A.D. -at least a few generations later than the examples so far excavated in S.E. Scotland. This need not be surprising in view of the fact that the site never possessed defences in the order of a pre-Roman hill-fort.

From this stage onwards the picture, though lightly drawn, appears to be one of almost continuing occupation throughout the Roman period into post-Roman times. One hut group as it now stands must be given a terminus post quem in the later second or early third century and yet another hut was occupied in the third or fourth century. Two rectangular buildings were in use in the late Roman and post-Roman period possibly down to the later fifth or early sixth century. At least the inner enclosure wall continued to serve in some form or other until the early fourth century or later.

Bearing in mind the unavoidable lack of precision in dating some of the coarse pottery, it is considered that the evidence is not sufficient to indicate that the settlement suffered to the extent of abandonment in any of the mis-

fortunes which overtook the Roman military frontiers. The small community was receiving Romano-British coarse pottery, however scanty in quantity, which in the *broadest* interpretation is datable from the late first to the late fourth century.

The picture in this area of S.E. Northumberland doubtless will be clearer when nearby sites such as Slate Hill, with its more defensive character, and the rectilinear-shaped settlements, all small and comparatively low-lying, are fitted into the context.

(b) Economy.

The planning both of the stockaded and stone-walled enclosures suggests a community engaged to some extent in stock farming. Most certainly the area between the two enclosure walls seemed to have served as a corral for stock, although it is not surprising that few bones survived in the lime-hungry soil.²⁹

Only one saddle quern was found but over thirty broken upper stones of rotary querns were discovered. Most of these were of a type apparently current in the area in the first and second centuries A.D. and were in contexts on the site which agree with this provisional dating (see Querns below). This could be taken to suggest an increase in cereal cultivation, possibly in the early Roman period, when the demands of the northern campaigns could have led to an intensification in the production of both corn and hides by the native communities in south east Northumberland. Nevertheless such evidence should be treated with reserve since the small number of base stones found is not without significance; they probably provide a surer indication of the amount of milling taking place at any one time than the upper stones, which would break more easily. Moreover, although the number of upper stones is large when compared

²⁹ A few small fragments sealed beneath the inner enclosure wall were carefully pieced together and identified by Mrs. R. Larwood as the cannon bone of a (?) domestic sheep, fragments of a rib, and fragments of a hoof core.

with the finds from other excavated sites in the northern area, it should be stressed that nothing in the way of storage pits or proven associated field systems were found, so that there is no clear evidence to support the idea of any radical changes in the methods of cultivation.³⁰ Whether one can assume a recession in crop growing and a concentration on pastoral farming in the later Roman period, in view of the virtual absence of quernstones in a late context, is a matter which will require further investigation on similar sites in the area. Evidence for textiles was slight and is not sufficient to warrant any suggestion of notable expansion in this direction, such as seems to have been the case in other parts of the country during the Roman period.³¹ Only three spindle whorls were found.

Coal and occasionally cinder was present on the site in fair quantity and in such contexts as to show that the community was probably obtaining it from local outcrops by the second half of the second century A.D.³² That its use in smithing was probably appreciated, or at least attempted, is illustrated by the coal found embedded in a metal cinder from the small smithing hearth (see Metal and Coal below).

More Romano-British coarse pottery than pottery in the native tradition was found on the site. This is no doubt a reflection in part of the proximity of a Roman road and the fact that for long the settlement lay near to or within the Roman frontier or sphere of influence. The same road would continue to serve as a route long after the military forces and officials for whom it was designed had left the

³⁰ For a discussion of developed cultivation in the Tyne-Forth province see R.C.A.M. Scotland, Roxburgh, I, 21. It is clear that there are few sites of this type with associated field systems in S.E. Scotland. In Northumberland some of the rectilinear-shaped settlements of the Roman period appear to have associated field systems but at least one of these has now proved to be later than the original settlement (report forthcoming).

³¹ Since this report was written the evidence for the northern area economy

³¹ Since this report was written the evidence for the northern area economy has been discussed more fully by Professor S. Piggott in *Roman and Native in North Britain* (ed. I. A. Richmond), 1-27.

³² Cf. Coal at Gubeon, Northumberland, Arch. Ael., ser. 4, XXXV, 179. For summary of coal on Roman sites in area see Ant. Journ., XXXV, 204.

country and it could have been by this and similar roads that the pottery of the post-Roman period reached the site, probably from the western seaboard.

Throughout its history the settlement showed little sign of expansion, but this need not imply that the overall native population of the area was static. Other sites, particularly the rectilinear-shaped settlements, will need to be taken into account eventually in considerations of this nature.

FINDS.

POTTERY.

Samian Ware.

Fig. 11, no. 1a, b, c. Dr. 37, decorated, small "s" potter.

Three small fragments from the same vessel, showing ovolo, beadrow and small "s" decoration, and two rim fragments probably from the same vessel. No. 1a was found on bed rock near to the oven and beneath the central wall of the two rectangular buildings, area 5; no. 1b and c came from the occupation earth sealed by the central wall, area 5. The work of this potter occurs on Antonine Wall sites and is present at Corbridge in the second of the two Antonine levels, where, Professor E. Birley informs me, several pieces have been found in the end of period destruction. (Arch. Ael., ser. 4, XV, 282, and Stansfield and Simpson, Central Gaulish Potters, 244.)

Dr. 18/31. Eight fragments probably from the same vessel; found in the occupation earth beneath central wall, area 5.

Dr. 33. Five sherds all showing signs of burning and acid decay and two of them perforated by 3-mm. holes for repair after breakage; found beneath and in central wall of rectangular building, area 5. (The pieces of lead found in the area were too large to have formed part of a casting or rivet, see note on Repairs to Roman Pottery in *Trans. C. & W.A.A. Soc.*, n.s., LVII, 25.)

In addition to the above, nine fragments were found; six came from beneath the tumble and central wall, area 5, two small scraps from beneath the south wall of the hut in area 4, and two from beneath the wall of hut 2.



FIG. 1.



FIG. 2. STOCKADE TRENCHES, AREA 4.

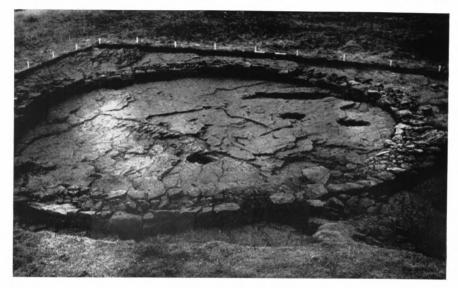


FIG. 1. HUT 2.

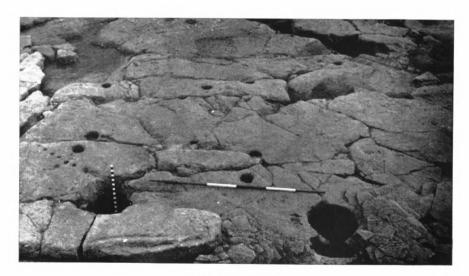


FIG. 2. HUT, AREA 5.



FIG. 1. HUT, AREA 4.

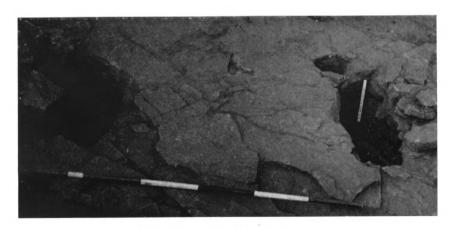


FIG. 3. ENTRANCE, HUT 2.



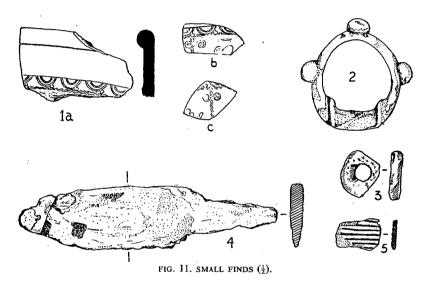
FIG. 2. OUTER STOCKADE TRENCH.



FIG. 4. INNER ENCLOSURE WALL, AREA 3.

The Roman Coarse Pottery by J. P. Gillam.

One hundred and eight fragments, representing some forty separate Romano-British coarse pottery vessels and one imported amphora were found. Few pieces are large enough to repay illustration, and of these few none came from unusual vessels; the vessels are therefore defined, without illustration, with reference to the type series published in



Arch. Ael., ser. 4, vol. XXXV. The majority of the fragments came from provincial vessels and they are therefore readily distinguishable from the finer pottery imported from overseas, from that produced locally in the native tradition, and from that assignable to other periods. Descriptions follow.

- 1. Wall fragment from a bulbous vessel in smooth orange fabric; probably from a second-century flagon; found on bed rock between hut 1 and the tumble from the inner enclosure wall, cutting B.
- 2. Fragment from the foot ring of a flagon in orange fabric with grey core; probably second century; found in the tumble from the wall of hut 1.

- 3. Fragment from the neck of a narrow-mouthed cordoned jar in grey fabric; cf. type 28; mid-second century; found in the rubble and earth core of the west wall of the hut in area 4.
- 4. Two fragments in light grey fabric with black polished surface of Upchurch Ware; probably second century; found in rubble and earth core of north wall of east building, area 5.
- 5. Three fragments from a fine-walled Castor beaker, with pinkish body and dark brown coating; late second to early third century; two fragments found loose on top of "transverse" wall, cutting D, and the third on the rock between the two enclosure walls, cutting C.
- 6. Small fragment of rustic ware in typical dark grey fabric; late first to early second century; found amongst the outside tumble from the north wall of the hut in area 4.
- 7. Fragment from the shoulder of a jar or cooking-pot in grey fabric, showing horizontal groove; cf. type 101; late first to early second century; found in rock fissure, area 2.
- 8. Fragment from the moulded base of a jar in grey fabric; cf. types 101-114; late first to early second century; found on bed rock beyond the spill from the inner enclosure wall and beneath the northwest wall of the rectangular building, area 3.
- 9. Fragment from the rim of a jar or cooking-pot, in grey fabric with darker surface; cf. type 115; early to mid-second century; found amongst the outside tumble from the north wall of the west building, area 5.
- 10. Fragment from the plain cut-away base of a vessel in white fabric; Romano-British, but not closely datable; found on bed rock clear of the tumble from the inner enclosure wall, cutting B.
- 11. Ten fragments from the plain cut-away base of a cooking-pot in dark grey slightly gritty fabric, smoked externally; *cf.* types 118-131; mid-second century; found in earth and rubble core of wall between huts 1 and 2.
- 12. Twelve fragments from the base and wall of a cooking-pot in black fumed fabric; burnt red-brown in places, with right-angled cross-hatching; also shoulder fragment, in identical fragment, which does not join; cf. type 141; late second to early third century; found in occupation earth beneath central wall of rectangular buildings, area 5.
- 13. Fragments from the simple rim of a jar in hard gritty dark grey fabric; probably early fourth century; found beneath south end of central wall beyond presumed line of wall of circular hut, area 5.
- 14. Fragments from the rim of a jar in good quality black fabric with white calcite grit; cf. type 160; early to mid-fourth century; found on bed rock beneath tumble from inner enclosure wall, area 4.

- 15. Sixteen large fragments from a wide-mouthed bowl or jar, similar to but not identical with types 189 and 190, in light grey porous fabric with blue-grey surface; probably third or fourth century. One fragment came from outside the hut in area 4, beneath the tumble from same, one from beneath the west wall, and the remainder from the occupation earth within the hut. Two fragments of similar fabric were trampled into the surface of the made-up floor at the south end of the east rectangular building, area 5.
- 16. Part of a carefully turned footstand of a vessel in dark grey fabric with buff surface; probably an imitation of a Samian form and therefore possibly of late fourth century date, though earlier imitations are known; found beneath top soil on top of tangential wall NW corner of area 5.
- 17. Two fragments, one burnt, from the flat rim of a bowl in grey fabric; cf. type 218; early to mid-second century; incorporated into the levelling-up material above smithing hearth, area 5.
- 18. Two fragments from the down-turned rim and wall of a bowl in black fumed fabric; cf. type 222; late second to early third century; found in the earth and rubble core of the wall between huts 1 and 2.
- 19. Three fragments giving the profile of a straight-sided flanged bowl, with inturned rim, in grey fabric now much pitted with corrosion which has obscured any internal wavy line which may have been present; cf. type 232; late fourth century; found in surface of made-up floor, south end of east rectangular building, area 5.
- 20. Fragment from the flange of a mortarium in orange fabric with traces of a white slip; cf. type 245; mid-second century; found on bed rock beneath south wall of hut, area 4 (inner compound wall).
- 21. Twenty-four fragments from some twenty different vessels of indistinguishable type, all are most certainly Roman, but none can be more closely dated. The fragments were found as follows: On rock surface between hut and inner enclosure wall, cutting B; rock fissure floor of hut 2; in earth and rubble core of wall between huts 1 and 2; in occupation earth, floor of hut, area 4; beneath walls of huts 1 and 2; amongst make-up material for floor, south end of east building, area 5.
- 22. In addition to the Romano-British fragments there were also twenty-nine fragments from a south-Spanish globular amphora in typical sandy yellowish-brown fabric; three large rim fragments of typical form and one large body fragment were found in mutual association near to the smithing hearth and beneath the make-up for the later floor, area 5; one large fragment from a handle of circular section and six body fragments were found in the earth and rubble core of the north wall of the hut and in the tumble from same.

area 4; eighteen large and small fragments in typical fabric were found scattered as follows: beneath the wall of hut 2; in the earth and rubble core of the wall between huts 1 and 2; beneath the central wall, near to the oven, area 5, and in the occupation earth beneath the southern stretch of this wall; on rock bottom in the main entrance. The vessel (or vessels if the scatter implies more than one) was almost certainly imported in the course of the second century.

While, as perhaps was to be expected, more vessels are assignable to the middle or later half of the second century than to any other period of comparable duration, both earlier and later vessels are present. The earliest fragments may well be as early as the late first century, and are certainly not later than the early second century; the latest fragment may well be as late as the late fourth century, and is certainly not earlier than the middle of that century.

Wheel-Made Post-Roman Sherds by Charles Thomas.

The group of sherds in question all represent a technically competent pottery. The fabric is finely sorted, the fractures, which tend to be rough, show clear lamination, and the paste, which from a fresh exposure streaks easily on to paper with a light pinkish-orange colour, contains occasional fragments of a darker bright red material, in grains up to 1.5 mm. in length.

Firing has produced an external colour which varies from dull orange-pink to a pearly-grey shade. In a few instances, I observed a trace of some external slip or wash of much the same colour, on one sherd with signs of burning.

The closest parallel is afforded by a group of unpublished sherds from the Dalriadic fortress of Dunadd, Argyllshire, now in the National Museum of Antiquities, Edinburgh. The sherds do not readily come within any of the categories that I have proposed for the post-Roman wheel-made pottery in western Britain, and it is uncertain at Dunadd whether they should be seen as fragments of lagenæ and thus connected with the trade in wine and oil, or as pieces of domestic crockery (jars, bowls, etc.).

The Dunadd sherds labelled 687 and 690 are wheel-made, with exterior surfaces carbonized; the interiors show strong finger corrugation, as do those from Huckhoe, and the colour is pinkish-buff, the fabric (again like Huckhoe) showing sparse and very tiny mica particles. Whereas the *form* is most closely matched here, the *colour* of the Huckhoe examples is seen in three other sherds from Dunadd (332, 337, 261) which belong to a vessel with a thin, smoothed wall and are again a pearly colour, shades of pink, grey and buff being intermingled. The paste of these three is again strongly laminated and contains the same very fine mica.

Controlled abrasion pH tests on the sherds, in which the principle is that sherds from the same source should show the same degree of acidity in the fabric, gave the following average figures:

Dunadd 332, 337, 261 pH 5.8—6.1 Dunadd 687, 690 pH 6.4 Huckhoe (from three sherds) pH 6.4

These figures are sufficiently near to each other to be significant (for instance, sherds of Class A i, a fine red ware, of much the same date and context, can be as high as pH 90).

In attempting to suggest a date for the Huckhoe material, I am influenced by two things: the excavator's assurance that the sherds cannot readily be matched by any forms of Roman pottery known locally, and the supposed dates of the nearest parallels. The latter is, of course, afforded by Dunadd. This place can hardly have been occupied much before the end of the fifth century, when a branch of the Dalriadic Scots from Ulster established themselves there; a possible upper limit is given by its supposed siege and sack in the early eighth century.

Confirmation, in part, comes from Ireland. The group of sherds from Dunadd, 332, 337, and 261, are exactly matched by sherds (D.I./T 1, T 3, T 4) from Dalkey Island, off the coast just south-west of Dublin: like their Dunadd counterparts, they exhibit lamination, tiny red particles in the fabric.

very fine mica, strong internal finger corrugations, and the same strange pearly colour.

I was able to examine these some little time after I had reported on a larger group of imported sherds from the same site, to which I assigned a late fifth- or sixth-century date on entirely independent grounds (connected with the form of the amphora involved). These facts lead me to suggest that a similar date, which as we have seen accords with the known history of Dunadd, would be appropriate for the Huckhoe sherds.

One of the latter is of special interest,33 being a welldefined rim. The form is a familiar one in the post-Roman world. Whilst the sherd itself should be considered as part of the group described above, the form is most commonly found in my group E, a wide range of similar jars, with low bowls not unlike the Crambeck examples, and little beakertype cups. E ware occurs fairly widely in post-Roman western Britain, the best known instances being at Garranes, co. Cork (see P.R.I.A., XLVII, section C, 2 (1942), p. 126 fig. 18). It is particularly strong in the north Irish sea region, being known from a number of sites in Ulster: it also occurs at Dunadd, at the Mote of Mark on the coast of Kirkcudbrightshire, and I rather think even further east, in eastern Dumfriesshire. The ware itself is highly distinctive and not at all like the Huckhoe-Dunadd-Dalkey Island group, but it has in common with it the occurrence of particles of "red grog" in the paste and certain variants of E ware, particularly in Ireland and at the Mote of Mark, tend to approach the Huckhoe sherds in colour and feel. The range of pH values that I have obtained from E ware also centre on a figure of pH 6.4. These two facts may eventually indicate a common continental area of origin, possibly in western France.

Whilst it is clearly beyond my powers to comment upon the idea of post-Roman occupation at Huckhoe, I feel the evidence outlined above does strongly point to a post-Roman date for these sherds. Nor should this be a surprise. Some

³³ Found on made-up floor, south end of east building, area 5.

time before seeing the rim sherd I had commented to Mr. Jobey (in lit.) upon the inherent likelihood of the spread of such wares from the western seaboard inland and eastwards, along the Solway-Tyne line—in this case, one might suppose the Irthing-South Tyne gap, where Hadrian's Wall crosses into Cumberland, to be the route. Kenneth Jackson's recent masterly study of the little-known Northern British kingdoms (Antiquity, XXIX (1955), p. 77) is the background against which we should see this: we might further suspect that such trade is not likely to have survived the sixth century, and that the early rather than the later part would be the safest context in which to see such imports.

Note. I must acknowledge the kindness of various friends in this short study: R. B. K. Stevenson (Edinburgh) for allowing me to use the Dunadd sherds, G. F. Mitchell and D. Liversage (Trinity, Dublin) for permitting me to examine, and to comment upon, the Dalkey Island finds in advance of their own publication, H. N. Savory (Cardiff) for the pertinent suggestion that the Dalkey Island sherds of this group may belong to a jug or jar, an idea which probably fits the Huckhoe material as well. The only available catalogue of all these post-Roman wares, up to December 1955, occurs in Proc. West Cornwall Field Club (NS), vol. I, appendix for 1956: "Excavations at Gwithian, Cornwall". For a similar instance of post-Roman sherds in an earlier fort, see my note on Chun Castle, Cornwall, in Ant. Journ., XXXVI (1956), p. 75.

Note on a Medieval Bowl by G. C. Dunning.

The rim sherd is made of very hard fine sandy ware, grey in the core with a whitish layer beneath the greyish buff surface. The rim is heavily flanged on the inside, to a width of 0.8 in., and is from a large bowl 15 in. rim diameter. The complete bowl was probably about 5 in. deep with a sagging base as restored in the drawing (fig. 12).

Bowls with heavily flanged rims, sometimes inturned even more than on the Huckhoe bowl, are one of the characteristic forms of Late Saxon cultures in East Anglia and the eastern Midlands.³⁴ In these regions they date from the ninth or

³⁴ G. C. Dunning, "Medieval Pottery", in K. M. Kenyon, Excavations at the Jewry Wall Site, Leicester, pp. 222-9. J. G. Hurst, "Saxo-Norman Pottery in East Anglia", Proc. Camb. Antiq. Soc., XLIX (1955), 43-70: L (1957), 29-60.

tenth century onwards, and persist to a varying extent into the twelfth century.

Pottery similar in character and of about the same range in date has been found at several sites in York, notably at St. Mary's Abbey and at Hungate. It is likely that the Late Saxon pottery at York is diverse in origin. Some of it, notably the fine-quality glazed wares of "Stamford" type and the shell-filled coarse wares of "St. Neots" type, originated in the eastern Midlands or even further away in East Anglia. Another group of pottery at York is closely matched in rim-forms and fabric by the products of a kiln at Torksey in Lincolnshire, and probably reached York along the water-

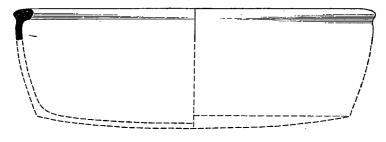


FIG. 12. MEDIEVAL BOWL $(\frac{1}{4})$.

ways of the Trent and Ouse. Yet another group, not closely paralleled elsewhere, is likely to be of local origin at York or made in the vicinity.

These recent discoveries at York suggest that there, as elsewhere further south in the Midlands, the Late Saxon styles formed the background to early medieval pottery. In his studies of the medieval pottery found at Carlisle, 35 and the distribution of certain types of cooking-pots and bowls with out-turned flanged rims of the twelfth century in North England, 36 Mr. E. M. Jope suggested that these developed out of tenth- or eleventh-century shapes in the north-east, independently of the contemporary pottery of southern

³⁵ Trans. C. & W.A.A. Soc., n.s. LV, 79ff., especially 82, 87. 36 Ibid., 323.

England. The Huckhoe bowl appears to bear no relation to these other groups, but to be more directly related to the bowls with inturned flanged rims at York and their ancestors further south in the Late Saxon period. The date of the Huckhoe bowl is, in the present lack of well-dated material in the north, a matter of opinion; the devolution of its rim and the quality of the ware suggest that it may provisionally be referred to the thirteenth century.

Native Pottery.

Although an amount of native pottery was found, there are few rims. The sherds are mainly from the walls of pots and show the normal curved or oblique breakage planes of this type of coarse hand-made pottery.

Not a great deal can be added to what has been said about similar crude pottery elsewhere.37 However, there is a noticeable difference in texture between the small number of sherds found on three occasions in the stockade trenches. or on the associated upcast, and those from other areas of the site. The comparative earliness of these few sherds is well established. Although they contain the usual grits, and show finger impressions in common with the other pottery, they are very waxy to touch. Indeed the nearest approach to them is to be found in the undecorated portions of Bronze Age cinerary urns in the area. Colouring of the outside surface is mainly buff to pink, whilst the core and inside surface is dark grey. Most of the fragments appear to come from stout-walled vessels, one of which possessed a base with a pronounced kick-out. There are also a few sherds of the same fabric from a smaller vessel, from which one small scrap of broken rim was recovered. It is worth noting that there are a few fragments of pottery with the same feel and appearance from the site at Gunnar Peak. Northumberland. Although they have not received specific mention hitherto, they were labelled as having come from

³⁷ e.g. Aspects of Archaelogy, 214; Arch. Ael., ser. 4, XX, 100, and XXXV, 173; P.S.A.S., LXXXIV, 152; The Stanwick Fortifications, p. 38.

the "east side of the entrance", where the remains were thought to belong principally to the earlier, pre-Roman (?) period.³⁸

As for the rest of the native pottery, a few varieties of vessel can be recognized, such as a small bowl with a fairly round belly and everted rim, a large vessel with an incurving rim which is a common type in the north of England and southern Scotland, a straight-sided pot with a simple roll rim, and what may have been a fairly wide-mouthed bowl with a drawn-out everted rim. It has been demonstrated already that at least some of these forms had a long life. Moreover, with such simple types it is probably unwise to place any great emphasis on similarities and differences.

- Fig. 13, no. 1. Rim fragment from a wide-mouthed pot; red inner and outer surfaces and grey core containing large grits; carbon encrustation below rim; found in core of south wall of hut in area 4 (inner compound wall). Fragments of similar ware came from various parts of the site. Some had been incorporated into the make-up material of the floor of the circular hut, area 5, and can therefore be said to have been produced some time before the later second century A.D. Similar pots have been found at Gubeon, Northumberland, associated with late first or early second century pottery, at Ingram Hill, Northumberland, not dated, at Hownam Rings, Roxburgh, with third century pottery, and at the Palace, Yeavering, in a post-Roman context.
- 2. Incurving rim from a similar vessel with a grey core and buff surface; found on rock surface beneath tumble from enclosure wall, cutting A.
- 3. Plain roll rim of straight-sided pot; dark grey throughout and containing grits; found beneath tumble from walls, hut 2.
 - 4. As 3 but with flat-topped rim and slightly angled side.
- 5. Broken rim of small round-bellied vessel probably with a fairly wide mouth; in dark grey fabric containing small grits; found in occupation earth beneath central wall of rectangular buildings, area 5.
- 6. Fragment of everted rim, angle not certain; grey fabric containing small grits; found beneath central wall, area 5.
- 7. Small fragment from a simple rim showing finger-nail marks beneath the turn-over; the core is grey and the surfaces, which are

³⁸ Arch. Ael., ser. 4, XX, 160 and 168; sherds in Black Gate Museum, Newcastle upon Tyne.

very waxy to touch, are red; found beneath inner enclosure wall, cutting C.

8. Fragment from a substantial vessel with a base which kicks out at the bottom; grey core with large grits and buff outer surface which is slightly waxy to touch and shows impressions of vertical finger smoothing; found beneath "backyard" wall, area 2.

9. Base of round bellied bowl; brown surface and grey core containing large grits; found beneath inner compound wall, area 4.

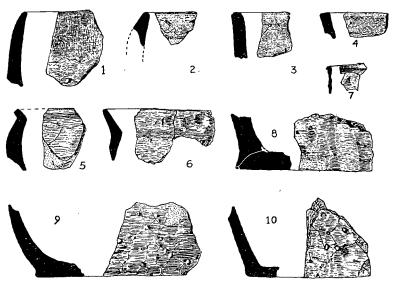


FIG. 13. NATIVE POTTERY $(\frac{1}{4})$.

10. Fragment of a base of large vessel; surfaces buff to red and grey core containing large white calcite grits; found beneath tumble from inner enclosure wall, area 3.

METAL

Coin.

Hadrian: Sestertius.

Obv. () TRAIANUS HADRIANUS AUG. burst r.

Rev. PONTMAX TRP OT COS III S C in ex.

Jupiter naked to waist, seated l. on low seat without back, holding Victory on extended r. hand, vertical sceptre in left.

A.D. 119 (Mattingly vol. III, 406). Found beneath the made-up floor of the circular hut, area 5.

Bronze Terret (fig. 11, no. 2).

A terret with round knobs on the outside of the ring belonging to Leeds' type 7 (Celtic Ornament, p. 125). The general overall distribution of this type is almost entirely between the two Walls. Although the type has been stated to have had a long life in the Roman period in the north (S. Piggott, P.S.A.S., LXXXVII 22), the majority of the finds are in an earlier rather than a later context. At Traprain Law they appear to end abruptly at the close of the second century A.D. (E. Burley, Ibid., LXXXIX, 136).

It is made from very hard bronze and has been cracked beneath one of the knobs in antiquity; found on the rock floor of the east rectangular building beneath the tumble from the north wall, area 5

Decorative Strip (fig. 11, no. 5).

A fragment of bronze decorative strip, bearing six parallel grooves in which there are the remains of red enamel inlay. The strip is badly corroded and it is difficult to see if the enamel has been laid in continuous or hyphenated lines. During the course of expert cleaning by Mr. Noel Shaw, traces of what appeared to be leather were noticed on the plain back. Presumably it has come from a belt or harness equipment; there remains part of a broken eyelet for a rivet or wire fastener on one edge. It was found in the occupation earth beneath the central wall, area 5.

Decorative strips with similar holes for attachment to equipment have been found, e.g., at Glastonbury (*The Glastonbury Lake Village*, vol. I, plate XLIII, figs. E131, 146, 147) and Llyn Cerrig (*A Find of the Early Iron Age from Llyn Cerrig Bach*, plate Vb).

Knife (fig. 11, no. 4).

A badly corroded iron knife with a broken tang; length $5\frac{1}{2}''$, width $1\frac{1}{2}''$; Iron Age type which lasts into the Roman period, cf. Maiden Castle, p. 273, Traprain Law, P.S.A.S. LV, 193, Wandlebury Proc. Camb. Ant. Soc. L, 19; found amongst the make-up material for later floor near to smithing hearth, area 5.

Nails.

Several nails of various sizes, rectangular in section, with small heads and chisel-like points, were found on the floors of huts 1 and 2, in the tumble from the north wall of the hut in area 4, and near to the smithing hearth in area 5.

Hook (?)

Part of a very corroded hook (?) together with other scraps of unidentifiable iron objects, in which there is little metal left, were found near to the smithing hearth, beneath the make-up for the floor of the east building, area 5.

Iron Cinder.

The small rock-cut hearth in area 5 contained iron cinder in which were embedded small pieces of coal. Dr. R. F. Tylecote, Department of Metallurgy, King's College, has given the following

report:

"In preparing a specimen of the cinder which usually consists of iron oxides, reducing agent and slag, a one-inch cube of iron was found embedded in it. This was found to be formed from about twelve laminations of wrought iron with carbon varying from zero to 0.2%. It was of good quality with little slag, and no signs of welding apart from the varying carbon content and irregular edges. The mean hardness was 102 D.P.N.

"A micro-section of the cinder produced a structure very different from that of smelting cinder, and consisted of a granular ferric-oxide and magetite embedded in a glassy matrix. This would seem to be the agglomeration of scale which had fallen off the metal during the process of heating iron in a smith's hearth. It does not appear to be a cinder from a smelting hearth.

"A square section of nail, found near to the hearth, was also examined, and found to be of similar good clean grade of wrought-

iron with a hardness of 110 V.P.N."

Lead.

Five pieces of lead were found in the occupation earth of the

circular hut and close to the smithing hearth, area 5.

One of these pieces had been made up into a spindle whorl (fig. 11, no. 3). Similar lead spindle whorls have been found at Glaston-bury. Two of the pieces appear to be drippings from smelting. Although the lead has a low silver content and could have come from a Roman source, the fact that veins of lead with the same low silver content do outcrop in the area should not be overlooked. Lead has been noticed in small veins at Whelpington, Ridpath, Fallowlees and Elf Hills. Small pieces of lead have been found in a circular hut of the Roman period in the rectilinear-shaped

39 Glastonbury, I, plate XLV.

⁴⁰ Hodgson, Northumberland, II, i, 289n. and II, ii, 392.

settlement at Gunnar Peak⁴¹ and also at Blue Crag native settlement.⁴² The sheet lead from the site at Worm Law is most likely of later date.⁴³

GLASS.

Bead.

A small annular yellow bead was found in the earth and rubble core of the wall of hut 2 and thus presumably belonged to the occupation anterior to the hut. Small annular yellow beads range widely in provenance and date. This example is particularly small, being only slightly over 4 mm. in diameter, and 1.5 mm. thick. The central perforation is 2 mm. in diameter around which there is a flat surface 1 mm. wide. I am grateful to Mrs. C. M. Piggott for allowing me to consult her most comprehensive but as yet unpublished catalogue of beads, from which it is apparent that the closest parallels to this bead are to be found at Meare, Somerset. These she has described temporarily as "facetted". A date for such beads in the Tyne-Forth area has been estimated as first or second century A.D., although how long they persisted is uncertain. They appear to have been introduced first in S.W. England.⁴⁴

Microscopic examination showed that the bead is not homogeneous but consists of yellow particles finely dispersed in a clear matrix. Dr. K. H. Jack, Chemistry Department, King's College, identified weak X-ray reflections after prolonged exposure as being from lead antimonate. "Naples Yellow", "Florentine Yellow" and "Galliolino", alternative names for lead antimonate, have been used for colouring glass and enamels from the earliest times to the present day. The yellow colour can also be produced in most glasses and enamels by direct addition of one of the antimony oxides (information from Dr. R. Iley, Associated Lead Manufacturers Ltd.).

Pendants.

Two fragments of opaque white glass pendants, Kilbride-Jones' sub-type 3A, 45 were found. One which is c. $1\frac{5}{3}$ " in diameter came from amongst the tumble from the wall of hut 2, the other c. 2" in diameter was lying on top of the remains of the outer enclosure wall

⁴¹ Arch. Ael., n.s., X, 25.

⁴² Proc. Soc. Ant. Newcastle, ser. 4, II, 138-143.

⁴³ Berwick Nat. Club, 1858-62, 439.

⁴⁴ P.S.A.S., LXXXVII, 80ff. and Appendix A.

⁴⁵ Ibid., LXXII, 366-395.

in area 6. He was of the opinion that this type belonged to the first half of the second century A.D., with an area of distribution in this country chiefly confined to the district between the two Walls. More recently it has been shown that similar white armlets or pendants are probably a "mechanically aerated" form of the common ice-green glass and that the colouring is not due to the addition of tin or other elements. 46

QUERNSTONES AND RUBBERS (fig. 14).

Forty-eight quernstones or parts of quernstones were found. This total is made up from one saddle quern, two rubbers, eight bottom stones of rotary querns, and thirty-seven upper stones of various rotary types. In addition there are some fragments of querns of Andernach lava from different parts of the site which are not included in this total. Although three of the bottom stones are not in any way damaged, only one upper stone is in first class condition. It is not surprising therefore to find that the majority of the querns had been discarded and reused as building material.

The excess of upper over lower stones may be due, at least in part, to the higher breakage rate of upper stones, weakened as they are by hoppers and socket-holes. In only two cases has it been found possible to join pieces together to form reasonably complete upper stones; these fragments came from widely different parts of the site.

With the exception of three beehive-shaped upper stones of igneous rock, presumably from the drift, the stones are of sandstone and in most cases this appears to be local stone similar to the Ingoe Grits of the Shaftoe Crags.⁴⁷ I am grateful to Dr. D. A. Robson of the Department of Geology, King's College, for examining samples from the quernstones and from the Huckhoe quarry.

⁴⁶ Ibid., LXXXVIII, 208.

⁴⁷ For the suggestion of local manufacture of quernstones in a settlement see Carry House, Northumberland, Archwologia, XLV, 355-374. The proposed quern "factory" at Farhill Crags, Northumberland (Antiquity, XVII, 137) is not substantiated (Proc. Soc. Ant. Newcastle, ser. 5, I, 350).

The classification used in the following descriptions of selected stones is in the main that followed by Dr. C. Curwen in *Antiquity*, XI, 133-151.

Rubbers.

Two halves of different rubbers, c. 5" in width and height, were found, one in the levelled floor of the circular hut and the other in the core of the west wall of the west building, area 5.

Saddle Quern (fig. 14, no. 1).

The length is 11", and the steepest incline of the grinding surface to the horizontal is 17°. This stone was reused as a packing stone in p.h. 18, area 2; in the filling of the same hole was a broken planoconvex flint knife.

Flat Beehive Rotary Querns.

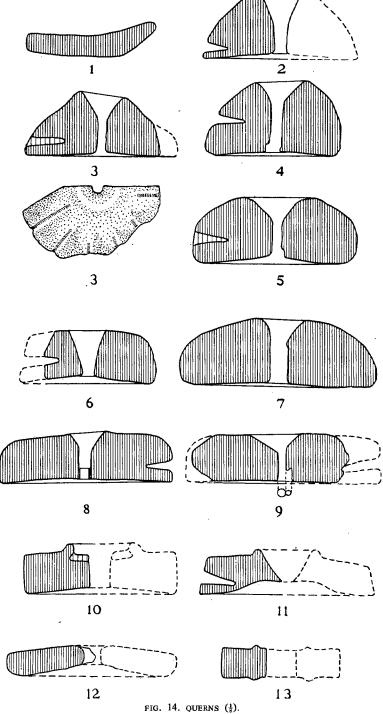
Thirty-five upper and seven lower stones of this type were found, of which a few are listed below. In all cases the grinding surfaces are flat or almost flat, but the upper stones range in profile from something approaching the conical to a low bun-shaped stone.

(a) "Conical" Upper Stones.

The outer surface of these stones is not so rounded as the bun-shaped querns, and some approach the Puddingstone type in profile although they do not show any marked carination. Occasionally there is a slight concavity on the outside surface at varying distances below the hopper lip, as if a legacy from the Hunsbury type with collar. Stones with this outline are to be found in a number of northern museums, e.g., Newcastle, Chesters, Carlisle, but their exact provenance is seldom recorded. By profile analogy such stones were probably in use in this area at least in the first and second centuries A.D. (cf. Newstead, pit XLVI, A Roman Frontier Post and its People, p. 146, also Antiquity, XI, 17).

Fig. 14, no. 2. Part of upper stone of well-dressed sandstone; d. 13", h. 6\frac{3}{4}", built into west wall of west building, area 5.

Fig. 14, no. 3. Part of upper stone; d. 13", h. $5\frac{3}{4}$ " but has been



taller; the outside surface is decorated with radial grooves c. 1" wide and $\frac{1}{4}$ " deep; found in rubble core of south wall of west building, area 5.

One third of an upper stone of igneous rock similar to no. 2; d. 13", h. $5\frac{1}{2}$ " but has been taller; the hopper merges gradually into the feed-pipe; found amongst the tumble from the north wall of the hut, area 4.

Half of upper stone of fine-grained sandstone; d. 12", h. 5" but has been taller, since the impression of the original handle hole is still visible on the grinding surface; similar to fig. 14, no. 3 but has no decoration; found amongst the make-up material of the floor of the west building, area 5.

(b) Bun-shaped Upper Stones.

The majority of the stones from the site fall into this category. On the evidence available such querns have been found in a first and second century context on sites in northern England and southern Scotland. On the other hand the upper limit of their life-span on native settlements in the north has not been determined satisfactorily. The feed-pipe is generally fairly narrow, the hopper V or U shaped, and the grinding surface flat or very slightly concave. As is the case with the stones already mentioned, the present heights are not necessarily indicative of the type, since many of these upper stones have been worn down to such an extent that the socket-holes for the handles have had to be renewed.

Fig. 14, no. 4. Upper stone of well-dressed sandstone; d. 12", h. $6\frac{1}{2}$ ": Although the passage of the grain down the feed-pipe would be eased considerably by the presence of the niche, this has the appearance of being the result of uneven wear from the iron spindle rather than purposeful cutting. This stone, although broken in two, is complete, the two halves having been found at some distance apart. One was built into the wall of hut 2 and the other was found amongst the tumble from the wall of the hut in area 3.

Small fragment of upper stone of local sandstone, similar to no. 5; found in the core of the wall of hut 2.

One quarter of a similar stone; d. 15", h. $5\frac{1}{2}$ "; found amongst the tumble from the wall of hut 1.

Fig. 14, no. 6. Part of upper stone of fine-grained sandstone; d. $11\frac{1}{2}$ ", h. $4\frac{1}{2}$ "; built into the wall of hut 1.

Part of upper stone of local sandstone, similar to no. 4, including

niche in feed-pipe; d. $14\frac{1}{2}$ ", h. $5\frac{1}{2}$ " but has been taller; there are signs of rotary wear within the hopper consistent with the secondary use of the stone as a door pivot; found built into the wall of the east rectangular building, area 5.

Fig. 14, no. 7. Part of upper stone of igneous rock; d. 16", h. $5\frac{1}{2}$ "; found amongst the tumble from the north wall of the east building, area 5.

Fragment of upper stone of fine-grained sandstone; d. 14", h. 6"; after breakage the stone had been used as a whetstone, before being built into the rubble core of the west wall of west building, area 5.

Broken upper stone of local stone, similar to no. 6; d. 12'', h. $4\frac{1}{2}''$, but has been taller; there is a worn-out socket-hole for a handle in grinding surface, with traces of iron at the closed end; found amongst the tumble from the inner compound wall, area 3. The possibility of the use of iron shafts or sheaths for wooden handles has been discussed in Arch. Ael., ser. 4, XXXV, 177.

Broken upper stone of local sandstone; d. 14", h. $4\frac{1}{2}$ ", but has been taller; similar to no. 5 except that there are three radial decorative grooves on the outside, as on no. 3; found amongst the tumble from the north wall of the hut in area 4.

Last in this series come two wide and rather flat-topped upper stones. Typologically these stones are later than the preceding querns with the more humped profile, although the socket-holes for the handles are still in the side of the stones and have not yet moved into the upright position as is found on some of the derivatives of the flat beehive-shaped stones from the Scottish brochs (Antiquity, XI, 148).

Fig. 14, no. 8. A complete upper stone of coarse-grained sandstone, undamaged except for a hair-line crack across the radius; d. 15", h. $4\frac{1}{2}$ ". There is a slight suggestion of a collar around the hopper. This is the only stone possessing an iron sleeve in the lower part of the feed-pipe; even so the wear on the sleeve is uneven. It is obvious from the wear on the lower part of the feedpipes of many of the stones that they did not have such sleeves. The stone was built into the east wall of the east building, area 5.

Fig. 14, no. 9. Broken upper stone of local sandstone; d. 15", h. 4"; found outside the entrance to hut 1. A special hole has been made for the spindle, thus allowing an uninterrupted passage for the grain down the feed-pipe. The wear on the hopper suggests that the stone was used as a door-pivot stone after the initial breakage.

Romano-British Querns with Collars or Projecting Hoppers.

Two stones were found which bear a general resemblance to the projecting hopper type of later Romano-British quern as described by Dr. Curwen. Many similar querns are to be found in museums along Hadrian's Wall but their exact provenance is seldom recorded. Generally the profile of the collar is more rounded than the examples given by Dr. Curwen, and the hopper is sometimes round and not square or rectangular. Although the upper stones possess a rynd, the lower stones are not necessarily pierced, and the spindles may be set into them. The method of fixing the handle varies from the normal side socket-hole of the beehive-shaped querns, to an upright handle secured in a metal band which encircles the circumference of the stone. Although the lifespan of this type of quernstone on native settlements in the north is not known, similar stones have been found elsewhere in what appears to be a fourth century context, e.g. Antiquity, XI, 143, and Arch. Ael., n.s., XIII, 374.

Fig. 14, no. 10. Fragment of upper stone of local sandstone; incl. thickness $3\frac{1}{4}$ ", found in humus at inside edge of tumble from the inner enclosure wall, cutting A. Not enough of the stone remains to be sure of the correct diameter, or the shape of the hopper; there is an undercut niche beneath the inside of the collar to take a metal rynd.

Fig. 14, no. 11. Small fragment of upper stone of coarse sandstone; d. 15", thickness 3"; found amongst the tumble from the

central wall of the two rectangular buildings, area 5.

Fig. 14, no. 12. At first this was thought to be a fragment from a flat thin upper stone similar to that found at Torwoodlee, Berwickshire. However a closer examination of the wear on the stone suggests that it may be a lower stone of the fully-pierced type. It was found on the floor of the east building, area 5.

Andernach Stone.

Small fragments of well-worn quernstones were found amongst the rubble and earth core of the wall between huts 1 and 2 and beneath the north wall of the east rectangular building, area 5. The

⁴⁸ P.S.A.S., LXXXV, 109.

importation of such stones does not appear to have continued into the later Roman period.⁴⁹

DECORATED QUERNS.

Two decorated querns described above call for further mention. The decorated querns of North Wales and Ireland have been known for some time and have been discussed by Mr. W. E. Griffiths in the *Ulster Journal of Archæology*, vol. 14, where their localization is stressed and a few decorated querns recorded in Scotland are understandably regarded as strays. The two decorated querns from Huckhoe by themselves do not alter the picture to any great extent, but they do not stand alone, and it is now clear that Scotland and the extreme north of England constitute at least a third area in which decorated querns are to be found.

In addition to the Huckhoe stones which fall into Griffith's "rectilinear" decorative class, the following decorated flat beehive-shaped stones have been found in the area. The list is not meant to be exhaustive.

Newcastle upon Tyne, Castle Museum. One conical and one bun-shaped quern, both decorated with radial grooves on the outside surface; the exact provenance is not known but they are almost certainly from Northumberland.

Newcastle upon Tyne, Joint Museum, King's College. One conical-shaped stone decorated with radial grooves which has come from the collection of local stones in the Black Gate Museum.

Carlisle, Tullie House Museum. At least four bun-shaped stones with radial grooves on the outside surfaces, and one rather tall stone bearing concentric grooves.

Penrith (?). There is a beehive-shaped stone with radial grooves illustrated in *Arch. Ael.*, n.s., XII, plate XVII, no. 24. This stone does not appear to have been lodged in any local museum.

Brampton, Cumberland. A bun-shaped quern with slight but decorative concentric moulding is noted in *Trans. C. & W.A.A. Soc.*, LIII, 209.

Corbridge, Roman Station Museum. One complete and one broken bun-shaped quern, both decorated with radial grooves.

⁴⁹ I. A. Richmond, Roman Britain, p. 169.

It is also apparent that similar decoration was used occasionally on the flatter Romano-British type of quern, e.g., at Chesters and Corbridge Museums (Northumberland), as well as on other types, e.g., at Traprain Law (Scottish National Museum of Antiquities), and more recently the thin upper stone with concentric grooves from Dun Cuier, Isle of Barra, illustrated in *P.S.A.S.*, LXXXIX, 327.⁵⁰

MISCELLANEOUS OBJECTS OF STONE.

Grindstone (fig. 14, no. 13).

A fragment of grindstone of fine-grained sandstone, with round axle hole; d. 10", thickness $2\frac{1}{2}$ "; found on top of the rubble core of the transverse wall, cutting D.

Whetstones.

Two were found, both of sandstone; one came from amongst the tumble from the wall of the east rectangular building, area 5, and the other from the tumble from the wall of the rectangular building, area 3

Stone Disc or Stopper.

A circular disc of coarse sandstone was found in the make-up material for the floor of the circular hut, area 5; d. $1\frac{1}{2}$ ", thickness $\frac{1}{2}$ ". Stone discs of various sizes occur in small numbers on similar sites, e.g., Gunnar Peak, Northumberland, in Arch. Ael., ser. 4, XX, 169. See also Hildyard, Summary of Research in Weardale.

Pounders.

Three sandstone hand pounders with percussion marks at both ends were built into the core of the central wall, area 5.

Pot-Boilers.

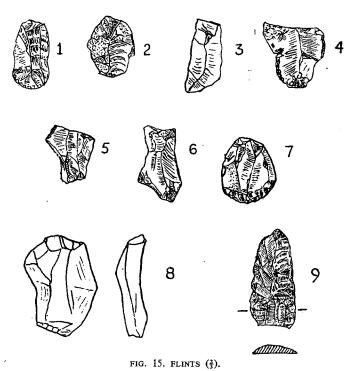
A number of cracked and reddened pot-boilers came from the floor of hut 2.

⁵⁰ I am grateful to Mr. R. Hogg, Keeper of Archæology, Tullie House Museum, and to Miss A. Henshall, Asst. Keeper, Scottish National Museum of Antiquities, for information about stones in their keeping and for making them available for inspection.

Ornamented stone mortars or "creeing-troughs" of later date are found occasionally in W. Northumberland (Arch. Ael., n.s., X, 24).

Spindle Whorls.

One of micaceous shale with an hour glass perforation was found on bed rock within the hut, area 3, and a second of sandstone came from the rubble and earth core of the cross wall between huts 1 and 2.



Grooved Stone.

A rectangular-shaped sandstone block, $10'' \times 7'' \times 4''$, bearing a groove on one edge, was found amongst the rubble remains of the outer enclosure wall in area 6. Three similar stones were found at Jarlshof, two in situations referable to the early period (P.S.A.S., LXVIII, 276, especially fig. 44, no. 2, although the Huckhoe stone is larger). Their purpose was not obvious, but it was suggested that they could have been used for keeping a rope in position. The Huckhoe stone does not exhibit any features which can be used to clarify the purpose of the grooves.

FLINTS (fig. 15).

- 1. End-scraper from beneath the inner enclosure wall, in the upcast from the stockade trenches, area 4.
- 2. Scraper of honey-coloured flint from the earth and rubble core of the wall of the west building, area 5.
- 3. White patinated flake from the core of the wall between huts 1 and 2.
- 4. White patinated end-scraper from filling of hole on north side of entrance to hut 2.
 - 5 and 6. Scrapers from rock fissures, area 5.
- 7. Button-scraper of honey-coloured flint from on top of upcast from stockade trench, beneath inner enclosure wall, area 3.
- 8. End-scraper with thick white patina, from amongst the tumble from the north wall of the hut in area 4.
- 9. Plano-convex knife of honey-coloured flint, broken at the blunt end, from the filling of p.h. 18, area 2.

COAL.

Pieces of coal, never larger than nut size, were found on every part of the site excavated except beneath the enclosure walls. Pieces occurred quite frequently in the earth and rubble cores of the walls of huts 1 and 2 and the rectangular buildings in area 5.

A microscopic examination of the coal samples was made by the National Coal Board, Scientific Dept. (Coal Survey), Sheffield. It was found that the assemblages of microfloras were predominantly of Lower Carboniferous as distinct from Coal Measure species, although there was a small admixture of the latter present in one sample. The age was placed tentatively as Upper Bernician, i.e., the coals from which the bulk of the samples originated were those of the Limestone Group. Moreover there appeared to be coal from more than one of the Lower Carboniferous seams present.

The suggestion that there was coal from more than one outcrop seam is perfectly feasible, in that, of the known Lower Carboniferous coal outcrops in the area of Huckhoe, the Little Limestone seam outcrops some four miles to the west of the site and the Chapel House seam apparently a quarter of a mile to the east of the settlement.⁵¹ On the other hand the Coal Measure coal lies a number of miles to the east.

⁵¹ Information from Mr. A. H. Edwards, Chief Coal Survey Officer, Durham and Northumberland Division, N.C.B.