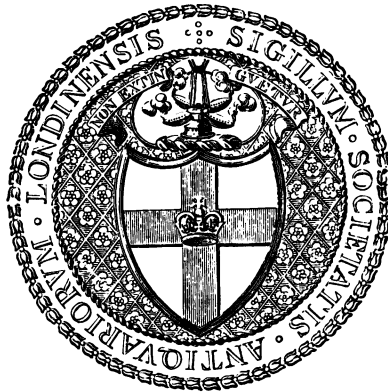


Reports of the Research Committee
of the
Society of Antiquaries of London

No. XVII

The Stanwick Fortifications
North Riding of Yorkshire

By
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President



Oxford

Printed at the University Press by Charles Batey for
The Society of Antiquaries
Burlington House, London
1954

PRINTED IN GREAT BRITAIN

SUMMARY

THE *Stanwick earthworks*, enclosing 850 acres of lowland in northern Yorkshire, are a remarkable and indeed unique complex representing at least four structural phases, three of which were investigated in 1951-2. These three are now shown to be of the first century A.D., and relate to the last epoch of Brigantian independence before the conquest of Yorkshire by the Romans under Petillius Cerealis between A.D. 71 and 74.

Phase I.—The nucleus of the complex was a 17-acre earthwork enclosure of hill-fort type, occupied at least as early as the middle of the century by a native population which was already importing some pottery (notably 'Samian' ware and butt-beakers) from the south.

Phase II.—At a date indicated archaeologically as c. A.D. 50-60, the northern end of Phase I was cut by a new fortification, some two miles in length, designed incidentally to enclose a stretch of the stream which ran close outside that end of the hill-fort. The new area, 130 acres, was manifestly intended to contain an appreciable population with flocks and herds under siege-conditions. Its defences comprised a stone-fronted earthen bank and a flat-bottomed ditch cut through the boulder-clay into the underlying limestone.

Phase III.—Subsequently a further enclosure, covering 600 acres and additional stretches of the brook, was added with fortifications of identical type; but the construction of its main (southern) entrance was suddenly interrupted and the unfinished work was put hurriedly into a state of defence. This episode is most readily explained as a reaction to the Roman advance after A.D. 71. Finally, a considerable stretch of the defences of Phase II was slighted.

The archaeological indications are sufficiently precise to justify their interpretation in the light of the narrative of Tacitus. The political and domestic feud between King Venutius of the Brigantes and his pro-Roman queen Cartimandua came to a head about A.D. 51, whereafter Venutius remained a confirmed and active enemy of Rome. Cartimandua was twice or thrice rescued by Roman troops, and her headquarters were therefore presumably within ready striking distance of the southern frontier of Brigantia; they may have been at the Almondbury hill-fort near Huddersfield. It may equally be supposed that Venutius now rallied the anti-Roman party beyond the immediate reach of Roman intervention, and a site in northern Yorkshire would well

fit the conditions as they affected him. To Stanwick there is in fact no known rival for this episode. Stanwick stands at a natural geographical focus, close to the point where the subsequent Roman (and modern) Great North road was to divide into alternative routes towards the Scottish lowlands: a point strategically suited alike for tribal assembly and for anticipation of an enemy from the south. Phase II is attributed therefore to the fifties of the first century.

The ultimate and irrevocable cleavage between Venutius and Cartimandua came in A.D. 69, when Venutius, 'calling in aid from outside', rose in open revolt against the Romans. The great enlargement represented by Phase III, unfinished at the time of the final assault soon after A.D. 71, is here ascribed to this culminating rally of his tribesmen and allies.

The excavations have thrown some fresh light upon the Brigantian culture of the first century A.D. The character and layout of the fortifications vividly reflect the armament and tactics of the builders; certain of the finds, notably a sword in its wooden scabbard and dated native pottery, advance our knowledge of their equipment or that of their allies; and there is an indication that the basic Brigantian economy, like that of the northern tribes in general, was pastoral and semi-nomadic rather than agricultural and static.

CONTENTS

	PAGE
SUMMARY	iii
PART I	
INTRODUCTION	1
THE CHARIOT-BURIAL(S)	2
STRUCTURAL SEQUENCE	3
SITES EXCAVATED 1951-2	6
ARCHAEOLOGY AND HISTORY	17
STRATEGIC AND TACTICAL FACTORS	23
ENVIRONMENT AND CULTURE	27
PART II	
POTTERY	
(i) Samian (<i>Terra Sigillata</i>)	31
(ii) Other non-native wares	32
(iii) Native ('Brigantian') ware	38
THE SWORD AND SCABBARD (1951)	44
The conservation of the sword and scabbard, <i>by</i> H. J. PLENDER- LEITH, F.S.A.	45
The scabbard, <i>by</i> PROFESSOR STUART PIGGOTT, F.B.A., F.S.A.	48
METAL AND BONE	50
FLINT AND STONE	51
WOODWORK AND BASKETWORK	52

HUMAN SKULL SHOWING WOUNDS, <i>by</i> DR. W. C. OSMAN HILL	. 53
BIOLOGY . . . . .	. 56
(<i>a</i>) Animal bones, <i>by</i> DR. F. C. FRASER	. 57
(<i>b</i>) Coleoptera, <i>by</i> D. E. KIMMINS	. 58
(<i>c</i>) Mollusca, <i>by</i> A. G. DAVIS	. 58
(<i>d</i>) Ostracods, <i>by</i> J. P. HARDING	. 59
BOTANY, <i>by</i> THE STAFF OF THE ROYAL BOTANIC GARDENS, KEW	. 59

APPENDIX

THE GEOGRAPHY OF BRIGANTIA <i>by</i> PROFESSOR I. A. RICHMOND, F.B.A., F.S.A.	61
INDEX	63

ILLUSTRATIONS

PLATES

I. The fortifications north-east of Stanwick Old Hall	<i>Frontispiece</i>
II. Map of the Stanwick earthworks by H. MacLauchlan, 1850	<i>facing p. 2</i>
III. <i>a.</i> Stanwick church and Old Hall, from 'The Tofts'	” 6
<i>b.</i> The fortifications north-west of Stanwick Old Hall	” 6
IV. <i>a.</i> Interior, looking north-east from the south-west corner of Phase III	<i>between pp. 6 and 7</i>
<i>b.</i> Interior, looking north from the southern defences of Phase III	” ”
V. <i>a.</i> Rampart of Phase II south-east of Site B	” ”
<i>b.</i> Rampart of Phase I south-east of Site E	” ”
VI. <i>a.</i> 'The Tofts' earthwork (Phase I) immediately north of 'The Duchess's Walk'	” ”
<i>b.</i> The flattened northern side of 'The Tofts' earthwork, seen across the valley from the north	” ”
VII. Sections, Sites E and G (Phase I)	” ”
VIII. Phase I, Site F: area-excavation	<i>facing p. 8</i>
IX. Phase I, Site G	<i>between pp. 8 and 9</i>
X. <i>a.</i> Phase I, northern side of 'The Tofts' earthwork	” ”
<i>b.</i> Phase II, Site A, view of the rock-cut ditch from the summit of the rampart	” ”
XI. Phase II, Site A	” ”
XII. Phase II, Site A	” ”
XIII. Phase II, Site A	<i>facing p. 9</i>
XIV. Sections, Phase II, Sites A and C	” 10
XV. <i>a.</i> Phase II, Site C	” 14
<i>b.</i> Phase II, Site B	” 14
XVI. Phase III, Site D	<i>between pp. 14 and 15</i>
XVII. Sections, Sites B and D	” ”
XVIII. Phase III, Site H, South Entrance	<i>facing p. 18</i>
XIX. Phase III, Site H, South Entrance	<i>between pp. 18 and 19</i>
XX. Phase III, Site H, South Entrance	” ”
XXI. Phase III, Site H, South Entrance	” ”
XXII. Phase III, Site H, South Entrance	” ”
XXIII. <i>a.</i> Samian pottery from Sites F and A	<i>facing p. 32</i>
<i>b.</i> Brigantian pottery	” 32
XXIV. Butt-beakers from Sites F and A	” 33

xxv. <i>a.</i> Sherds akin to butt-beaker, from York	<i>facing p.</i> 44
<i>b.</i> Fragment of basket-work, from Site B	” 44
xxvi. Sword and scabbard from Site B	” 45
xxvii. <i>a</i> and <i>b.</i> Bronze fittings from the scabbard	” 50
<i>c.</i> Iron shears on Site F	” 50
xxviii. <i>a.</i> Puff-ball, from Site B	” 51
<i>b.</i> Skull showing wounds, from Site B	” 51
<i>c.</i> Oak bowl <i>in situ</i> , Site B	” 51
xxix. Map of the Stanwick earthworks	<i>at the end</i>

FIGURES IN THE TEXT

1. Schematic general plan, showing excavated sites	4
2. Analysis of Phases I-III	5
3. Plan of Phase I, Site F, 'The Tofts'	8
4. Plan of Phase III, Site H, South Entrance	16
5. Sections at A-B and C-D, South Entrance	17
6. Map showing relationship of Stanwick to Roman roads. After MacLauchlan	24
7. Samian pottery from Sites F, A, and B	32
8. Section through Site F, Ditch A	33
9. Pottery from Site F	33
10. Section through Site A, Ditch	35
11. Pottery from Sites A, B, and D	37
12. Brigantian pottery, latter half of 1st century A.D.	42
13. Brigantian pottery, latter half of 1st century A.D.	43
14. Scabbard from Site B	49
15. Objects of bronze and bone	50
16. Flint scrapers from Site F	51
17. Fragment of quernstone	51
18. Bowl or tray of oak from Site B	52

PART I

INTRODUCTION

IN the parishes of Stanwick St. John and Forcett-with-Carkin, eight miles north of Richmond in the North Riding of Yorkshire, are more than six miles of rampart and ditch, forming a complex of enclosures of a very remarkable kind. Since Leland's day they have been a sufficiently notorious archaeological problem, and both the name of Stanwick and that of the adjacent village of Aldbrough St. John show that long before Leland they had impressed themselves upon the minds of local men.¹ But their size and remoteness have hitherto combined to deter analytical investigation of them.

Perhaps the most sensible notice of them was that of Leland himself. 'Betwixt thes to villages [Aldbrough St. John and Caldwell]', he wrote, 'appere diverse hilletes cast up by hand, and many ditches, whereof sum be fillid with water, and sum of these dikes appere abowte S. John's, that is paroch chirch to both the aforsaid villages. Thes dikes and hilles were a campe of men of warre, except menne might think they were of ruines of sum old towne. The more likelyhood is that it was a campe of men of warre.'² A very reasonable plan, associated with less reasonable interpretations, was produced a century ago by Henry MacLauchlan, the Duke of Northumberland's agent (pl. 11),³ and more recently another local antiquary, E. Wooler of Darlington, has made a number of pertinent guesses without adding materially to the evidence.⁴ As against all this, manifest nonsense has crept into the Victoria County History and into a standard county archaeology, in both of which the earthworks are thought to be medieval park-enclosures, regardless of their emphatically military character.⁵ Nonsense apart, however, in 1951 the chronology, structural sequence, and context of the whole complex remained unsolved. All that could be said with certainty was that this stupendous fortification, with ramparts still rising to a height of 20 ft. or more and enclosing an aggregate area of some 850 acres, represented a major episode in the history or prehistory of northern Britain.

When, therefore, in 1951 the Ministry of Works invited me to select and excavate a site in Britain under the provisions of the Ancient Monuments Act, my response was not in doubt. In practice, this invitation was a new departure; previous excavations under the Ministry had been confined to salvage-work on threatened or damaged sites, but on

¹ Stanwick is derived from the Old Norse *steinvegges*, 'stone walls', and occurs in Domesday Book; Aldbrough is of similar antiquity and means 'old fort'.—E. Ekwall, *Oxford Dict. of English Place-names* (1936).

² J. Leland, *The Itinerary*, ed. L. T. Smith (London, 1909), iv, 27.

³ *Arch. Journ.* vi (1849), 335; *Arch. Tracts*, p. 19.

⁴ E. Wooler, *The Roman Fort at Piercebridge, County Durham* (Frome and London, 1917); and in *Proc. Soc. Ant. of Newcastle upon Tyne*, 4th ser. (1924), pp. 287 ff.

⁵ V.C.H. *York*, ii, 61–62; F. Elgee, *Yorkshire* (County Archaeologies Series, London, 1933), pp. 49, 233–4.

the present occasion choice was unrestricted. And having set its hand to the plough, the Ministry did not turn back. I have pleasure in recording the all-important initiative of Sir Eric de Normann, K.B.E., F.S.A., and the unremitting help received from the Chief Inspector of Ancient Monuments, Mr. B. H. St. J. O'Neil, F.S.A., and his colleagues of the Ancient Monuments Inspectorate, from Mr. J. A. Wright, chief architect, and from the representatives of the Ministry at York and Newcastle, who dealt expeditiously with the whole affair. In the field my principal colleague was Miss K. M. Richardson, F.S.A., who is also my associate in the preparation of the report (particularly Part II); without her collaboration the work would not have been undertaken. Amongst my other assistants were Miss T. M. I. Newbould as the expedition's field-administrator, my old collaborator Mr. W. Wedlake, who was seconded from the Admiralty for the first season's work, Mr. and Mrs. Leslie Alcock, Mr. G. H. Burdon, and Mr. M. B. Cookson, my photographer for twenty years. Student-assistants contributed materially to the work, and only their number compels anonymity. Lastly under this head, the work would have been impossible but for the kindly tolerance of landowners and tenants, notably Mr. H. Brown, Major and Mrs. M. Donovan, Mr. H. Johnson, Mr. H. H. Johnson, and Mr. J. M. Johnson.

The excavation was carried out in the summers of 1951-2, and in the aggregate lasted eleven weeks.

THE CHARIOT-BURIAL(S)

IN belittling our earlier knowledge of Stanwick we may be accused of overlooking the large and notable collection of La Tène objects—over ninety of them—found near by in 1844 and now preserved in the British Museum—where, indeed, as Sir Thomas Kendrick has pointed out, they may be regarded as the original nucleus of the Department of British and Medieval Antiquities.¹ It has long been recognized that the major part of the collection represents a chariot-burial or burials comparable with the famous series from the East Riding but not earlier, it seems, than the first century A.D.² Less certain is the exact find-spot. Of the three accounts, the earliest, dating from shortly after the discovery, states that the objects 'were deposited together in a pit at a depth of about five feet within the entrenchment at Stanwick. Near by large iron hoops were found.'³ Two years later MacLauchlan showed the find-spot on his map (already cited) as a little to the north-east of Lower Langdale, well outside the main Stanwick earthworks, and, in spite of variant accounts,⁴ his evidence may be regarded as authoritative.

The collection has not yet been studied in detail, and whether it constitutes an integral deposit will never be known with certainty. Such, however, it appears to be: a sort of

¹ *Museums Journal*, li, no. 6 (Sept. 1951), 139.

² Stuart Piggott in *Proc. Prehistoric Soc.* xvi (1950), 17; Cyril Fox, 'The Study of Early Celtic Metalwork in Britain', *The Advancement of Science*, no. 30 (Brit. Assoc., 1951); Stuart Piggott and Glyn E. Daniel, *A Picture Book of Ancient*

British Art (Cambridge, 1951), p. 22 and fig. 59.

³ *Proc. Roy. Arch. Inst.*, York volume, 1946, p. 10.

⁴ J. C. Bruce, *A Descriptive Catalogue of Antiquities at Alnwick Castle* (Newcastle upon Tyne, 1880), p. 88.

northern counterpart to the rich content of the Lexden tumulus near Colchester, where also iron tyres were found. It is not beyond possibility that the Lexden mound was the tomb of King Cunobelin, and by the same token the Stanwick hoard may represent a grave of the royal line of Venutius; but identifications such as these must remain in the realm of fantasy.

STRUCTURAL SEQUENCE

PREVIOUS attempts to disentangle the structural sequence of the major earthworks have been frustrated by the uncritical inclusion of later features and a consequent inability to see the wood for the trees. In reality the structural problem is simple enough, and may be reduced to four phases (figs. 1 and 2).

Phase I. The nucleus of the whole system is a fortified enclosure, some 17 acres in extent, situated to the south of Stanwick Church and the Mary Wild beck, on and around a low hill known as 'The Tofts' (pl. xxix). The name 'Tofts' is defined by the *Oxford Dictionary* as 'Site of a homestead' or 'An eminence, knoll or hillock in a flat region; esp. one suitable for the site of a house'. Appropriately the field is described by the farmer as a 'dirty' one; it produces an abundant crop of nettles which have to be cut twice a year and are a common sequel to ancient occupation. The enclosure is, or rather was, roughly triangular on plan, conforming approximately with the mild contours of the hill and to that extent meriting the exaggerated designation of 'hill-fort'. On the west its rampart and ditch are excellently preserved in a stretch of plantation known as 'The Terrace' or 'The Duchess's Walk', where the single bank of unrevetted earthwork rises some 24 ft. above the ditch (pl. v B). The southern corner has been almost completely obliterated, but a part of it can be traced faintly in the walled garden south-east of the Terrace. A stretch of the eastern side still stands up boldly beside the road from Stanwick Church to (the former) Stanwick Hall, but a large part of this side has been demolished for the making of the road, and some dumps of earth immediately east of Church Lodge may be a result of this process. The northern side approached but stopped short of the brook, and is marked by remains of a counterscarp bank (pl. x A). The main rampart was here thrown into the ditch anciently, doubtless when this portion of the work was included in and superseded by the work of Phase II. Near the north-western corner was a stone-flanked entrance, now partially obscured by the northern end-wall of the Terrace plantation. The rampart was of earth, apparently without stone or timber revetment, the ditch was V-shaped save where, on the northern or lowest side, its completion in depth was stopped by water and the counterscarp bank already referred to was added as compensation.

Phase II. Subsequently, at a moment which will be defined in the sequel as not later than A.D. 60, the hill-fort was supplemented by a new enclosure over 130 acres in extent, so designed as to outline the slight ridge north of the brook, to bend inward round the nearer foot of Henah Hill on the east, and farther west to cut off the northern end of

STRUCTURAL SEQUENCE

the hill-fort, obviously in order to enclose the brook and its margins hereabouts. South-east of Stanwick Church the marshy course of the brook for a distance of over 300 yards was regarded as a sufficient obstacle, without rampart and ditch, though whether supplemented by a palisade is not known. As already indicated, that part of the Phase I earthwork which now lay inside the new enclosure was largely obliterated by filling its rampart into its ditch.

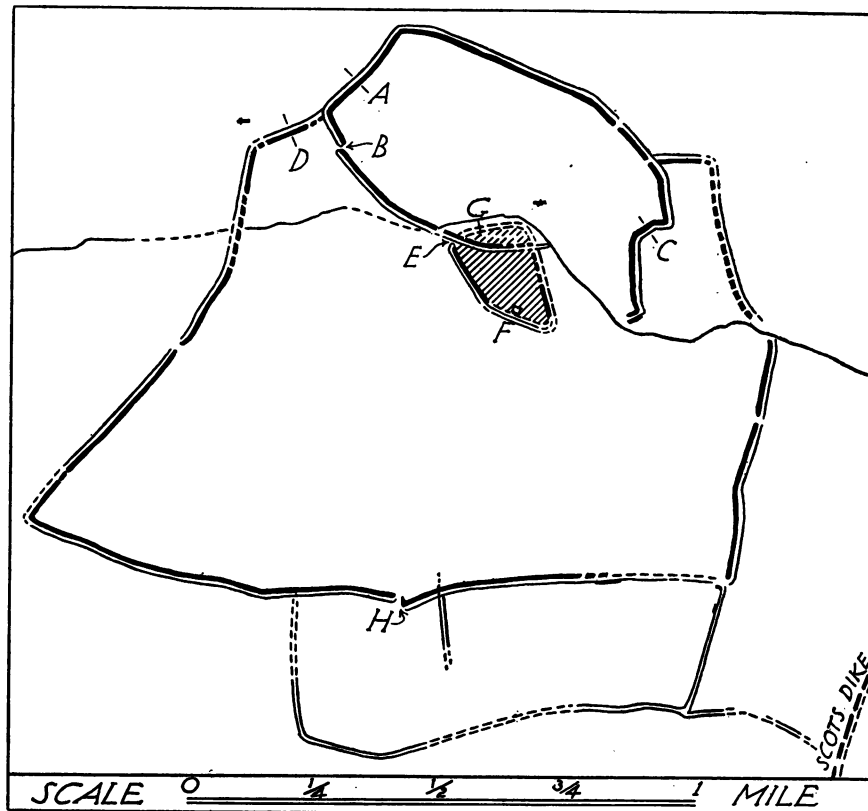


FIG. 1. Schematic general plan, showing excavated sites

The enclosure constituting Phase II had an entrance near its western corner, our Site B, where 50 ft. of the ditch, partially rock-cut, were cleared with notable results (p. 14). There may have been another entrance under the present road-junction immediately east of the Stanwick vicarage, in the middle of the northern side, or, less probably, at an existing gap 150 yards farther to the south-east.

The rampart was of earth, aligned initially at the back on a small marking-out trench and bank; in front it was revetted with a vertical dry-stone wall. The ditch was cut in the boulder-clay and partially in the underlying limestone (pl. xiv). The flat bottom of the ditch may be comparable with the flat-bottomed ditches of certain Belgic earthworks in Normandy and Kent,¹ but was probably the result rather of the natural bedding of the limestone.

¹ *Antiq. Journ.* xxi (1941), 267; *Archaeologia*, xc (1944), 139.

STRUCTURAL SEQUENCE

Phase III. At a date which will be defined as about a dozen years later (*c.* A.D. 72), a similar though longer system, enclosing a further 600 acres, was added to Phase II. It impinges almost at a right angle upon, and implies the pre-existence of, Phase II on the

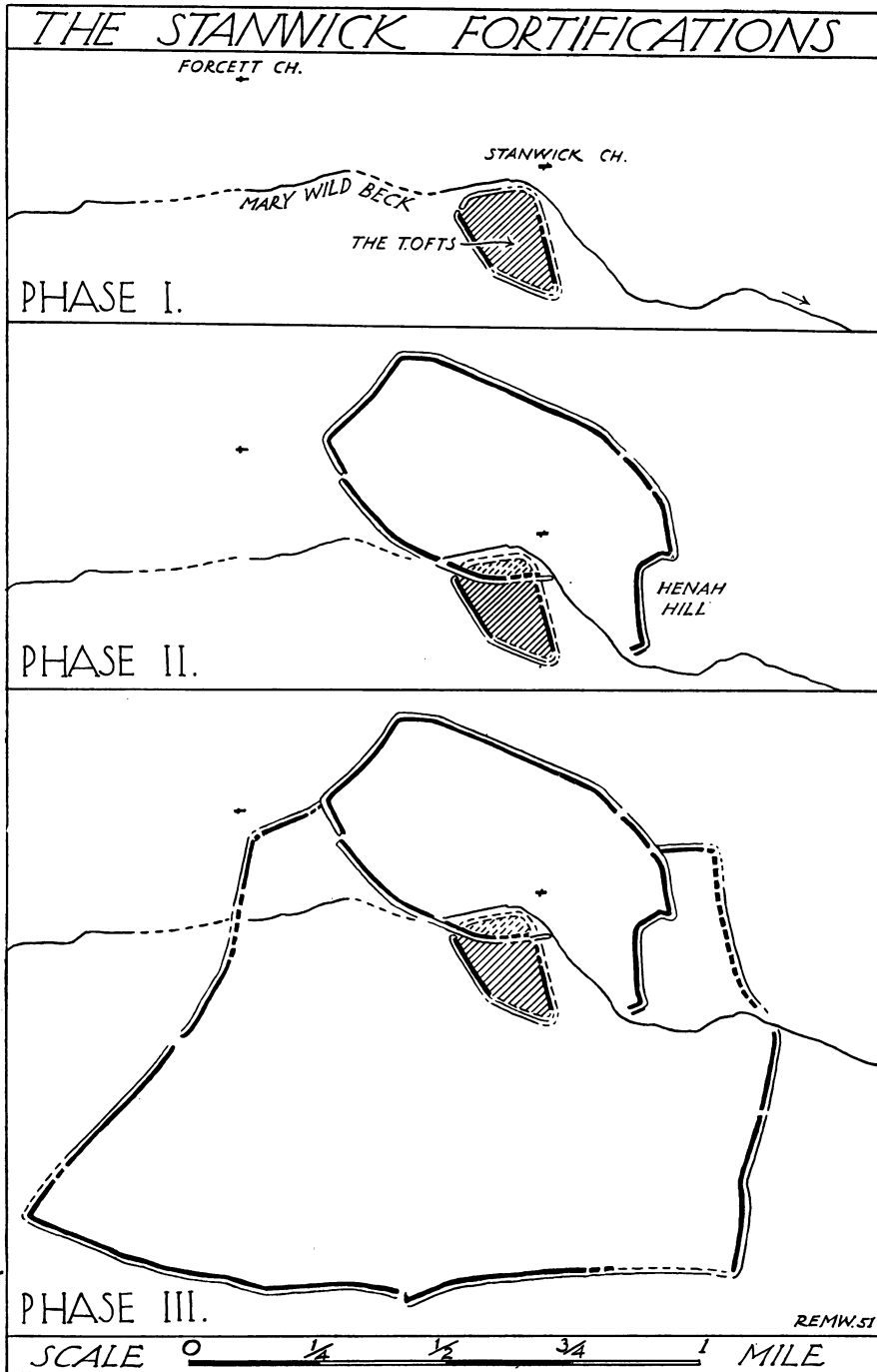


FIG. 2. Analysis of Phases I-III

east, and terminates upon the ditch of Phase II on the west. An entrance can be seen near the middle of the southern side, and less certainly a gap in Forcett Park may represent a second entrance in the western side. Further stretches of the Mary Wild beck were included.

The rampart, like that of Site A, incorporated a marking-out trench and bank at the rear, and was fronted with a vertical stone revetment.

Phase IV. To the southern side of Phase III was added at an unknown period an enclosure of some 100 acres, now subdivided by traces of a double earthwork extending southwards from a point east of the southern entrance of Phase III (fig. 1). This double earthwork, however, is of an entirely different character from those already considered, and appears indeed to overlap the rampart of Phase III at a point where the latter had already been broken through. It is comparable with some of the double banks which constitute or are incorporated in the Scots Dike at Lower Langdale, farther east; and the Phase IV enclosure is in fact linked with the Scots Dike by a semi-obliterated ditch extending eastwards from its south-eastern corner. Phase IV and the Dike suggest different problems from those of Phases I–III and are relegated to future investigation. They may, as has been suspected, relate to the Anglo-Saxon period.¹

SITES EXCAVATED 1951–2

THE primary purpose of the excavations was to determine the character and date of the successive defences of Phases I–III. A secondary purpose was to discover, so far as time permitted, the nature of the occupation within them. The sites chosen for investigation are lettered A–H in the order of actual excavation, but they are here regrouped by phases. Thus Sites E, F, and G are dealt with first, under Phase I; then Sites A, B, and C under Phase II; and finally Sites D and H under Phase III.

Phase I.—Site E (pls. VI A and VII)

This was a cutting through the bank and ditch of the Tofts hill-fort close outside the northern end of the plantation known as ‘The Terrace’ or ‘The Duchess’s Walk’. Just inside the plantation at this point the ditch turns inwards and stops against a causeway which partly underlies the plantation-wall. There is some superficial evidence that the entrance was lined with dry-built stone walling, and a cascade of stones streaming downwards from the direction of the entrance occurred in the filling of the ditch (layer 12). A short distance north of the plantation and the cutting, the hill-fort is cut by the entrenchment of Phase II, beyond which its bank was largely destroyed in ancient times.

The cutting, 5 ft. wide, shows a plain earthen bank, without traces either of stone or of timber revetment. To check this evidence a further cut (shown on pl. VII) was made into

¹ For the course of the Scots Dike from Swaledale to Teesdale, see H. MacLauchlan in *Arch. Journ.* vi (1849), 221 ff.; and V.C.H. *York*, ii, 55.



a. Stanwick Church and Old Hall, from 'The Tofts'



b. The fortifications north-east of Stanwick Old Hall

PLATE IV



a. Interior, looking north-east from the south-west corner of Phase III



b. Interior, looking north from the southern defences of Phase III



a. Rampart of Phase II south-east of Site B



b. Rampart of Phase I south-east of Site E, in 'The Terrace' or 'The Duchess's Walk'

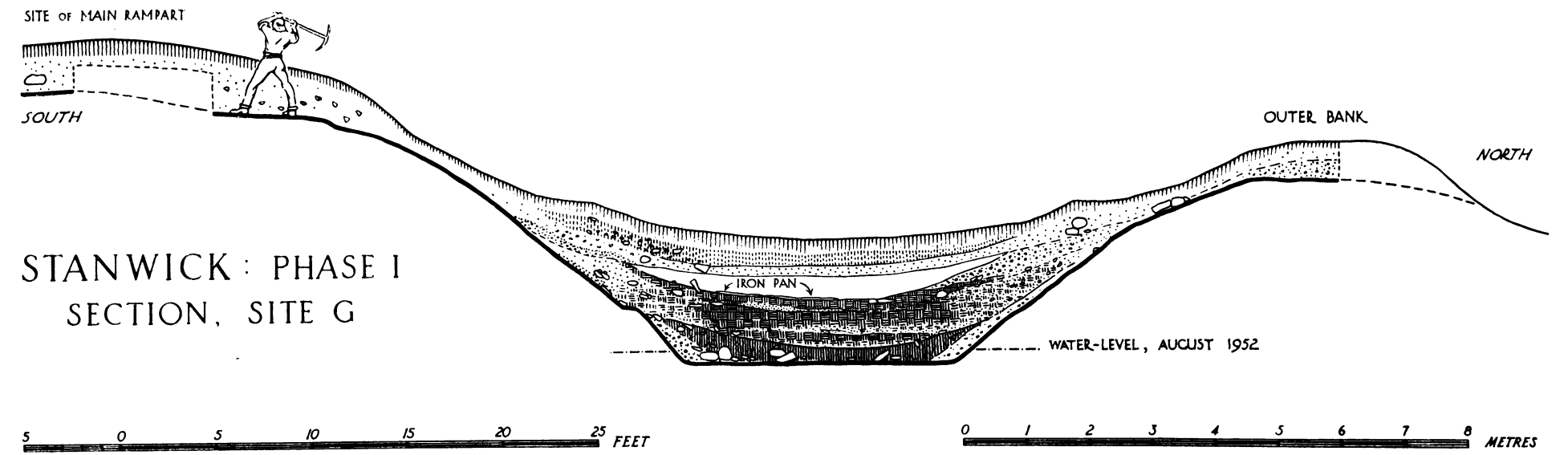
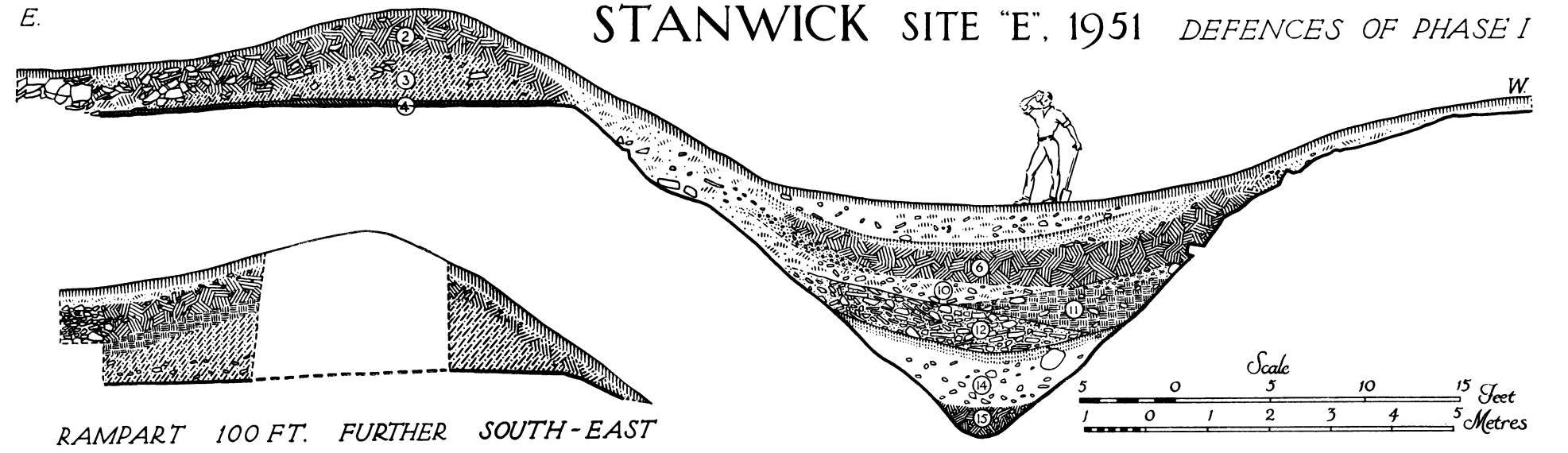
PLATE VI



a. 'The Tofts' earthwork (Phase I) immediately north of 'The Duchess's Walk', cut and flattened in the foreground by Phase II. The bank and ditch were sectioned here (Site E) just outside the wood



b. The flattened northern side of 'The Tofts' earthwork, seen across the valley from the north. The ditch of Phase II is visible in line with the summer-house in the middle distance. Site G is to the right of and beyond the central bush



the bank within the plantation, where it is in a rather better state, but the result was the same. As observed, the bank stands to a height of $7\frac{1}{2}$ ft. above the natural soil.

The ditch is V-shaped and of formidable size; its width at the old ground-level was 42 ft., its vertical depth below that level $16\frac{1}{2}$ ft., and its depth below the present summit of the bank where best preserved, 24 ft. It yielded no pottery, but there was an abundance of animal bones in the lower filling, mostly ox and sheep. Two specks of Samian pottery were recovered from the surface of the bank.

Phase I.—Site G (pls. VII and IX)

Site G is that of a cutting through the defences of the Tofts hill-fort on their northern side, near the Mary Wild beck. At this point the rampart was thrown down anciently, doubtless when the area was included in the defences of Phase II, and is represented mainly by a surviving vestige of the inner scarp of the former ditch and by a counterscarp bank which here separates the defence from the beck beyond it. The cutting showed that the relatively high water-table hereabouts had controlled and modified the intention of the builders in an interesting fashion. On Site E the builders had cut a normal V-shaped ditch without technical difficulty. On the present site, when the design was half-executed, water was reached and further progress downwards rendered impossible. Instead, therefore, the unfinished ditch was left with a broad flat bottom and, to compensate, a bank was added to its outer margin. One of the main functions of an ancient defensive ditch—that of tilting forward and exposing the approaching attacker at a point where he was within point-blank range—was thus retained by building up instead of digging down. The counterscarp-bank along this waterlogged side of the hill-fort is thus incidentally a revealing illustration of tactical function.

The filling of the ditch, representing the former rampart, consisted largely of stiff clay turned almost into peat by long submersion. It produced animal bones but no other objects.

Phase I.—Site F (pl. VIII, and figs. 3 and 8)

This site was an area-excitation, 3,500 square feet in extent, within the Tofts hill-fort of Phase I. It lay close within the line of the southern rampart, which has hereabouts been completely levelled, though a faint trace of the ditch can be detected in a suitable light.

The average depth of the overlying soil was no more than 2 ft. The whole of this appeared to represent the gradual accumulation of humus over a deserted area, without significant stratification. For purposes of record it was subdivided into two arbitrary layers, each a foot in depth, but, apart from sixteenth- or seventeenth-century pantiles and two medieval sherds in the upper layer, the subdivision revealed no cultural change. One or two scraps of Samian ware in fact lay immediately under the turf.

Of the structural evidence little can be said that is not shown by the plan (fig. 3). The area was intersected by drainage ditches, as is the habit of Iron Age occupation-sites, and superposition on plan indicates a measure of structural sequence which is not otherwise

reflected in stratification. The most coherent element is a ditch (Gully 1) enclosing a circular patch about 28 ft. in diameter, with a gap 11½ ft. wide towards the north-east, i.e. away from the south-westerly gales. A timber hut had stood here, presumably round, though the post-holes which, after prolonged search under varying conditions of the soil,

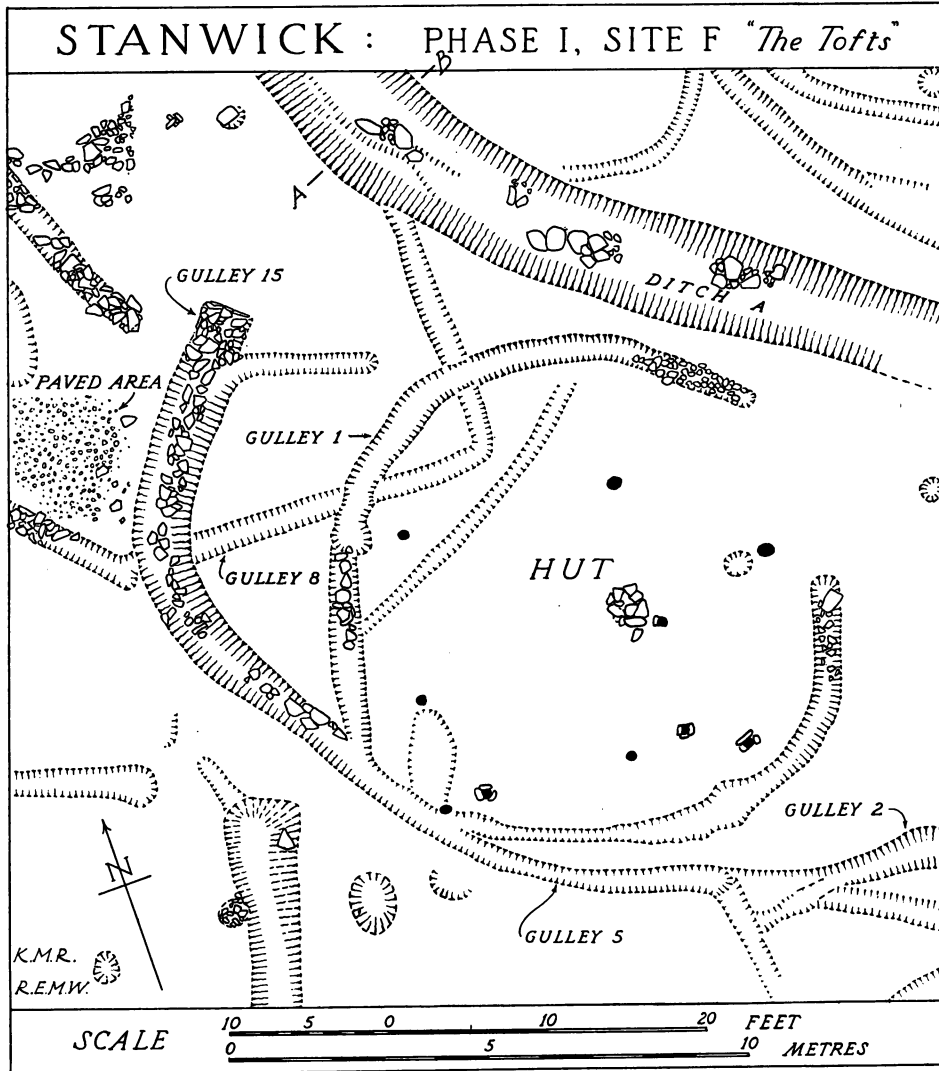


FIG. 3 (Cf. pl. ix B)

could be recorded with complete confidence (see plan) do not produce a unitary scheme. It will be appreciated that light timbering anchored in the mixed surface of boulder-clay is unlikely to leave a clear and complete imprint. A group of stones (unburnt) near the centre (pl. ix) may indeed have held a main post without actual penetration of the soil.

To the west of the hut-enclosure a somewhat larger channel (Gully 15) had been carefully stoned at its square end and had from the outset been filled with stones to serve as a rumble-drain. It seems to have been structurally earlier than the marginal drain of the



a. Phase I, 'The Tofts' earthwork: area-excavation, Site F, in progress



b. The same site completely excavated, showing drainage-ditches, one of them surrounding the circular platform for a hut. The man stands close to the position of the central pole



Phase I, Site G: cutting through the bank, flat-bottomed ditch, and counterscarp-bank of 'The Tofts' earthwork. Beyond and outside the earthwork is the line of the Mary Wild beck



a. Phase I, northern side of "The Tofts" earthwork, showing flattened rampart (right), filled ditch, and counterscarp-bank (left)



b. Phase II, Site A, view of the rock-cut ditch from the summit of the rampart. In the right foreground is the edge of the rebuilt revetment

PLATE XI



a. Phase II, Site A: revetment-wall partially reconstructed; beyond, in the ditch, the stones from the destroyed revetment as found



b. The same site cleared



a. Phase II, Site A: in the foreground, stones from overturned revetment-wall still lying in the ditch as found; beyond, the stones partially replaced



b. Phase II, Site A: the rock-cut ditch, seen from the berm; in the section is the wedge of stones from the destroyed revetment-wall



Site A: rampart and rock-cut ditch of Phase II, showing the stone reverment partially restored from fallen stones

hut, but there was no suggestion of any computable time-interval between the two. To the west of the drain, within the angle of an earlier gully (8), the surface had been roughly paved with gravel—the only hint of flooring throughout the whole area. Towards the northern end of the excavation was the largest gully of the series, 'Ditch A', about 6 ft. wide and 3 ft. deep from the original surface. Stones, some of considerable size, lay along the bottom of it, on the rumble-drain principle. For the rest, description need not be added to the plan. It may be emphasized that there were no storage-pits (see below, p. 27).

A total of 173 potsherds, including 46 'Brigantian', was found within the area, but, as remarked, the absence of hearths and floors, save for the pebbling on the west, and the shallowness of most of the gullies minimize stratigraphical dating. Only in Ditch A was there sufficient accumulation to provide clear evidence, and there a scrap of Samian form 29 and a sherd of butt-beaker (a type discussed below, p. 12) occurred together in the lowest filling (see fig. 8). The butt-beaker in question, fig. 9, 1, is of a type and fabric of which the maximum incidence at Camulodunum (the type-site for these wares in Britain) was *c.* A.D. 49-61, though it is of considerably earlier origin. Here its association with Samian 29 implies a date after A.D. 43, and A.D. 45-65 is a reasonable bracket.

Sixteen other tiny sherds of Samian, all certainly or probably of the first century A.D. and including 3 more fragments identifiable as of form 29, were found on the site, mostly in the overlying layers (2*a-b*). From the same superficial deposits, extending from the natural surface up to the present turf-line, came 18 sherds of butt-beaker and 14 sherds probably of the same category. Other associated sherds from 2*b* include one of the 'Pompeian red' ware which has been found at Verulamium in a layer of *c.* A.D. 55-61 and occurred at Camulodunum down to A.D. 65. There were also 29 minute fragments of Roman brick from the covering layers.

The pottery as a whole from the site is dealt with below, p. 32. Without wholly disproving an occupation here prior to A.D. 43, it clearly points to habitation within the twenty years following the Roman invasion, and the complete absence of 'Belgic plates' is consistent with an initial date little earlier than A.D. 50. There is no hint of continued occupation in or after the Flavian period.

Phase II.—Site A (pls. x B and XI-XIV)

This site is that of a section across the defences of Phase II at a point 400 ft. north of the Forcett-Stanwick road. The section included the clearance of a length of 50 ft. of the ditch, and has been preserved by the Ministry of Works as excavated, save that a 10-ft. length of the wall which revetted the rampart has been reconstructed to a minimum height from the fallen wall-stones (pls. XIII A, XIV).

The rampart was 40 ft. wide and survived to a height of just over 10 ft. above the old ground-level and 22 ft. (vertically) above the bottom of the ditch. It had been defined by its builders along its inner margin by a small preliminary marking-out bank and ditch, and had been heaped up from the local clays and other soils, with a forward crust of stones. The front face had been revetted by a vertical dry-stone wall which had been not

less than 10 ft. high and, assuming a parapet, probably nearer 15 ft. high. At the point of excavation a slight divergence of the lowest course had been corrected, leaving a non-conforming offset, but this feature appears to have been local and exceptional. There was no evidence of bonding-timbers.

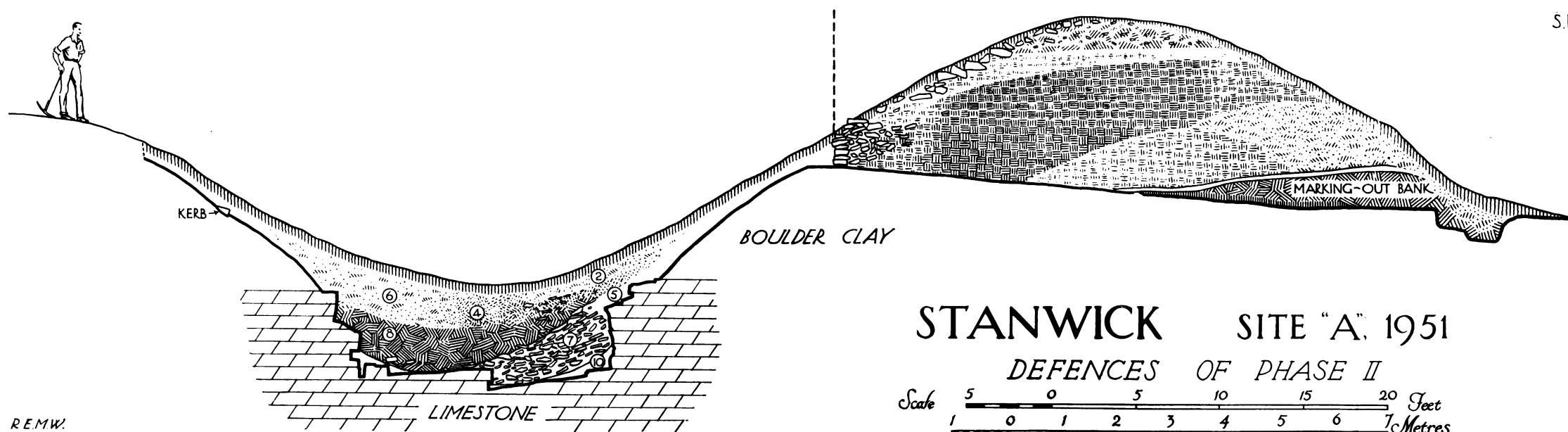
In front of the wall was a ledge or berm about 1 ft. wide. Beyond it the ditch had been cut obliquely through the boulder-clay until the limestone was reached, when it was continued vertically into the rock to a further depth of 5-6 ft. The lower part of the ditch thus constituted a flat canal-like cutting some 15 ft. broad. The work had been facilitated by the natural lamination of the limestone, to such an extent that the quarrying had consisted of little more than the prising away of the jointed blocks. When roughly reduced by hammering, these blocks were ready for use as wall-stones; and, in spite of its monumental aspect, there can be little doubt that the whole structure could have been completed in a relatively short space of time.

The subsequent history of the defences is now tolerably clear. In the outer and inner angles of the rock-cut ditch and here and there in crannies of the stone floor were small wedges of rain-washed clay from the surface and interstices of the rock, constituting the 'rapid silt' which would be expected to follow closely upon the completion of the work. It may be emphasized that this rapid silt consisted wholly of the clean yellow clay from the adjacent rock. But a large part of the ditch-bottom bore no identifiable rapid silt at all. Instead, upon it lay the outer portion of a cascade of wall-stones which swept over the small deposit of rapid silt on the inner side and represented the greater part of the revetment-wall above. On normal showing, the fall or overthrow of the wall would appear to have followed closely on the cutting of the ditch.

An attempt was made in 1951-2 to test the period required for the accumulation of the rapid silt in question. A 19-ft. length of ditch was cleared, the two ends of the cutting were revetted to check lateral infiltration, and the excavation was left open for ten months. At the end of that time it was found that rapid silt had accumulated in the outer and inner angles of the ditch to an average depth of $4\frac{1}{2}$ in., which was about half the depth originally found there. It should, however, be emphasized that the test was not a fair one; for the sides of the ditch, where earth-cut, were tied with roots and had long reached a firm 'angle of rest', whilst the rocky sides of the lower part of the cutting had been washed clean of their more accessible clay interleaving in ancient times. There can be no doubt therefore that the conditions were originally far more favourable to the accumulation of rapid silt than they can be at the present time. The most that our experiment can do is to offer a warning against an over-estimation of the amount of rapid silt to be expected in a broad and partially rock-cut ditch such as that which we are now considering.

The restricted amount of the rapid silt beneath the fallen wall-stones in our ditch, and the extension of these to the central floor of the ditch itself, thus suggests no long interval of time between the building and the destruction of the wall, but does not perhaps compel an absolutely immediate succession of events. Beyond that general conclusion the structural evidence does not permit us to go.

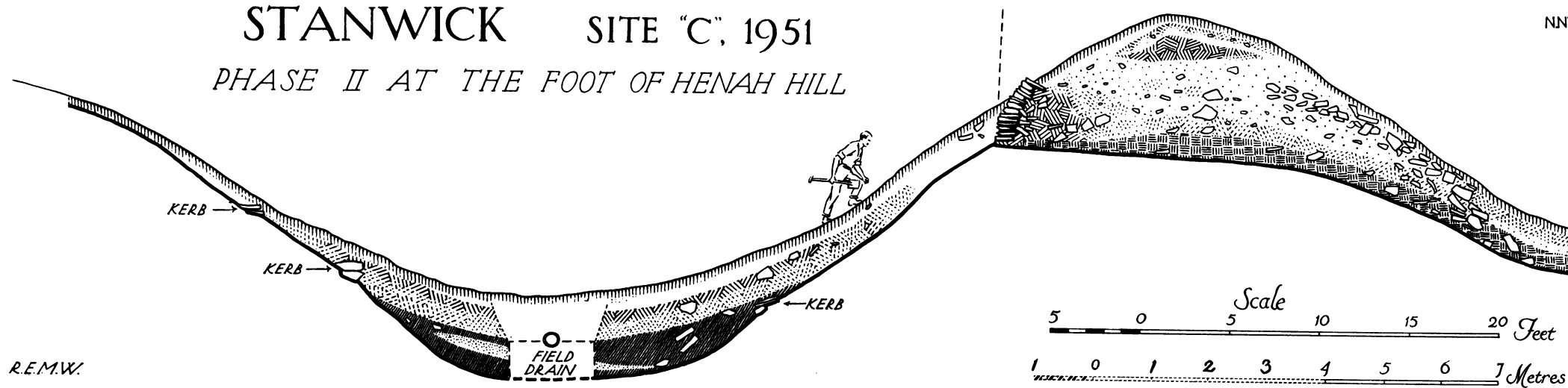
S.E.



R.E.M.W.

STANWICK SITE "C", 1951
PHASE II AT THE FOOT OF HENAH HILL

NNW



R.E.M.W.

That the wall was deliberately thrown into the ditch, and did not merely collapse by decay, cannot be doubted. The solid wedge of wall-stones, to a depth of over 4 ft. and a continuous outward spread of 10 ft., was the result of no gradual process. It may be added that the evidence was continuous and identical throughout the 50-ft. length of the excavation (pls. XII A and XIII A).

Next in the filling above the fallen wall-stones and the rapid silt lay a deep deposit of organic earth (fig. 10, layers 4a-c) containing bones and potsherds. This must have begun to accumulate almost immediately after the cascading of the wall-stones, but the duration of the process is structurally uncertain. Layers 4a-c contained nothing identifiably of a date later than the first or early second century A.D. At the top of these layers the filling reached an unemphatic line of rest, but subsequently continued down to modern times (layers 1 and 2), with an ill-defined central darkening where water has tended to accumulate.

The contents of the filling of the 50-ft. stretch of ditch must now be analysed with some care, since the site is pivotal to the dating, and therefore to the function, of the whole Stanwick complex. The principal material comprises 325 potsherds, 65 scraps of Roman brick, and 2 Roman brooches. Of the potsherds, 128 (or about 40 per cent.) are of local Brigantian ware; the remaining 60 per cent. are imports from the Roman world. Where all this material came from is not at present known; an area of 200 square feet was excavated immediately within the line (i.e. east) of the rampart at this point but revealed no trace of occupation.

From the rapid silt (fig. 10, layer 7) two sherds only were derived: a tiny scrap of Samian form 29 (pl. XXIII, 5), and a fragment of the base of a butt-beaker (fig. 11, 14, below). The evidence of the Samian sherd is crucial, since the comprehensive evidence of Camulodunum in Essex has shown that Gaulish sigillata did not begin to reach Britain until the invasion of A.D. 43.¹ It is unlikely therefore to have penetrated to Stanwick until some years after that date. On the other hand, it was available there very shortly after the construction of Phase II. The inference is that Phase II belongs to the period following the Roman invasion of southern Britain.

That inference is consistent with other evidence from the site. A sherd of South Gaulish Samian form 18 came from the midst of the wall-stone cascade (layer 6), which cannot be many years later than layer 7. And from a subsequent and less clearly isolated filling (layer 5) were obtained a sherd of Samian of Ritterling form 8 and another South Gaulish scrap. Of 7 Samian sherds from the later filling 4a-c, one is of form 29, another of form 15/17, and the remaining small chips are of South Gaulish fabric; there is no Samian pottery in the whole section of a date later than the first century A.D.

Apart from the Samian, the most characteristic sherds from the cutting are of the type known as 'butt-beaker' (cf. fig. 9, 1, and 2). Reference has already been made to a sherd of this type in the rapid silt of the ditch. In addition, from the 50-ft. length of ditch were obtained 47 other sherds definitely of butt-beaker and 35 sherds which probably represent the type. It is hazardous to guess how many individual vessels are indicated by all these

¹ See C. F. C. Hawkes and M. R. Hull, *Camulodunum* (Soc. Ant. Lond. Research Report no. XIV, 1947), p. 179.

fragments; the sherds are mostly very small, and any attempt to group them by fabric would be unsafe. But there is no doubt, of course, that the total number of individual beakers was much less than the figures given above might suggest. I may recall, as a cautionary tale, the discovery of 39 Samian sherds scattered over a considerable area on the Swedish island of Gotland and the temptation that ensued to place 39 spots on the Samian distribution-map of a territory otherwise devoid of sigillata—until it was agreed that all the sherds probably derived from a single vessel! And yet sigillata much more readily lends itself to such grouping than do minute pieces of butt-beaker.

Nevertheless, the fact remains that on Site A butt-beaker is relatively abundant. There is the single sherd from the rapid silt; 13 certain, plus 15 less certain, came from the wall-stone cascade (layer 6), and 29 plus 14 are from layers 4a-c.

Such examples of butt-beaker as can be discussed more narrowly are catalogued below (p. 34). The general type reached Britain from Gaul during the Augustan period, and occurred freely at Camulodunum from c. A.D. 10 until A.D. 65 or even later. Relatively coarse derivatives and survivals lasted sporadically into the Flavian period at Richborough¹ and Leicester² and, though rarely, at York (pl. xxv A).³ In the north the earliest and indeed the only undeveloped examples otherwise recorded are those from North Ferriby, on the northern bank of the Humber, where they have been ascribed to the first half of the first century A.D.⁴ But there they are associated with the so-called 'Belgic plates', a type which declined sharply after the Claudian invasion and scarcely lasted after A.D. 50. It is noteworthy and probably significant that not a vestige of a Belgic plate has been found at Stanwick; a circumstance unlikely to have occurred had the butt-beakers arrived during the lifetime of the Belgic plate, i.e. before the middle of the first century. It is fair to suppose that the Stanwick butt-beakers arrived subsequently to, and came perhaps as a result of, the compact with Ostorius in A.D. 47-48 (below, p. 19).

At Camulodunum the maximum incidence of butt-beakers of relevant types (112, 113, and 119) is the Hawkes-Hull 'Period IV', dated A.D. 49-61, to which no fewer than 853 fragments are ascribed. They have not been found, so far as I can ascertain, on military sites established by Frontinus (A.D. 74-78) and his successor Agricola. With all allowance for important differential factors as between military and civil supplies, this negative evidence must be taken seriously, and it must be supposed that the Stanwick material arrived before the military events of the seventies of the century. The brackets appear therefore to be c. A.D. 50-70, with an emphasis on the earlier of the two decades.

The other sherds from the ditch do not materially help but mostly fit into the same picture. A broad, flat jug-handle from layer 4 is shown by its fabric, width, and straightness to be of early, probably pre-Flavian, date, and to a similar early period must be ascribed a flanged jug-neck from the same layer. A fragment of mortarium rim from this layer is less datable but has analogies extending from the mid-first to the early second century. A rim of gritty ware from the wall-cascade (layer 6) is compared to examples

¹ *Richborough* (Soc. Ant. Lond. Research Report, 1949), iv, nos. 403-4.

² Information from Miss K. M. Kenyon, F.S.A.

³ Illustrated by courtesy of Mr. G. F. Willmot, F.S.A.

⁴ P. Corder and T. Davies Pryce in *Antiq. Journ.* xviii (1938), 262 ff.

from the early fort at Newstead. The only obvious exception to the whole series is the rim of a flanged bowl (fig. 11, 30) found high up near the lip of the ditch and dating from the third or fourth century A.D.

The small scraps of Roman brick do not necessarily represent many complete bricks; indeed, all the fragments together would not make one sizeable brick. They occurred as follows: 26 from the wall-cascade (layer 6) and 23 from layers 4*a-c*. The remainder are from the higher levels. Their presence in layer 6 implies that some Roman brick was already available in the vicinity at the time of the destruction of the wall, i.e. at no great interval after its building.

The two bronze brooches from the ditch-filling are both from layer 4*c*, and are of the latter part of the first or beginning of the second century A.D. (p. 50).

As a whole, the pottery from the significant levels of the ditch on Site A points to, or is consistent with, a pre-Flavian date, centring on A.D. 50-60. Not very long after their construction the defences were systematically slighted, the wall being thrown into the ditch, where its stones overlie the rapid silt and, in part, the bare rock of the ditch-bottom.

Incidentally, the presence of this pre-Flavian material at Stanwick throws an interesting sidelight on Brigantian relations with the romanized south before the tribal territory was absorbed into the province. It illustrates an appreciable culture-spread which is indeed the natural counterpart of the diplomatic liaison indicated by the historical narrative of this transitional period (p. 19). We may suspect the presence of commercial pioneers in unconquered Brigantia, similar to those for example who, half a century earlier, had established themselves far beyond the Roman frontier at the capital of King Maroboduus in Bohemia. The butt-beakers in particular suggest civil rather than military sources of supply.

Alongside alien imports which far exceeded his skill, the Brigantian potter continued to produce his (or her) crude handmade wares in accordance with an east-coast tradition which extended to the Scottish lowlands and still requires further definition. Some analogies can be recognized from sites in the Vale of Pickering in the North Riding, and from Langton and other sites in the East Riding. At Langton it was associated with first-century (Flavian) sherds. At Thornton-le-dale the associations are of A.D. 70 or a little earlier. Farther north, at Traprain Law in the Scottish lowlands, native ware of uncertain date has points of resemblance, and indicates a fairly far-flung distribution of this ceramic complex within range of the east coast. See p. 38.

Phase II.—Site C (pls. xiv and xv A)

Site C was that of a cutting through the defences of Phase II on its eastern side, at the foot of Henah Hill. A reason for the exclusion of this commanding little hill from the new circuit will be suggested below (p. 26). Its natural slope obviated the necessity for a deep artificial cutting, and the round-bottomed ditch (here partially obscured by a modern field-drain down its centre) did not reach down to the rock. As on Site A, the earthen bank was faced externally with a stone revetment. The section produced only a few animal bones.

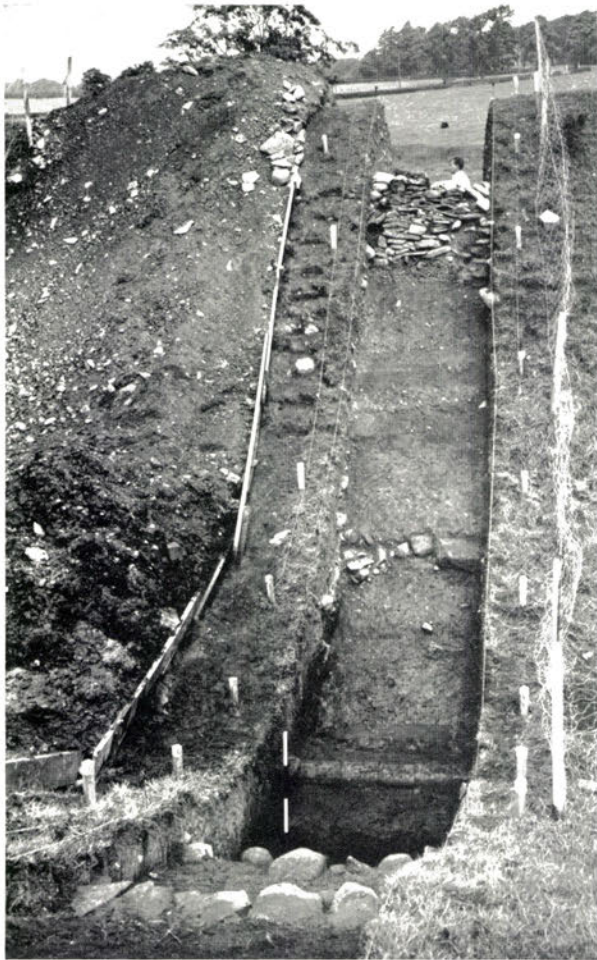
Phase II.—Site B (pls. xv B and xvii)

This was the site of a sufficiently obvious though previously unnoted gateway in the western defences of Phase II. The line of the defences is here side-stepped to provide an access parallel with their general direction; but, though the principle of the gateway can be detected on the surface, the immediately adjacent ramparts have been greatly reduced and in part levelled by farming operations. No attempt was made on the present occasion to recover the structural plan in detail, though trenching showed that on the southern side of the gate the rampart had ended in an oblique dry-stone wall, now broken at both ends. For the rest, excavation was restricted to the arduous task of clearing the terminal 50 ft. of the ditch at and beyond the northern side of the gate, with the express purpose of recovering finds likely to throw a light on the date and culture of its builders; the chances of encountering such finds being necessarily greater at a gate than at intermediate points along the immense circuit. The event justified the endeavour.

At the outer base of the rampart on this northern side a considerable stretch of the lower courses of the revetment-wall was uncovered, though the masonry faded out towards the eastern end. Below it, the slow removal of something like 500 tons of heavy, sodden clay under difficult weather-conditions revealed a steep-sided ditch cut through the boulder-clay and into the limestone as on Site A, with a squarish end at the site of the gate (pl. xv B). A slight downward slope of the flat rocky floor of the ditch towards the gate had ensured from the outset the presence of a muddy pool at the end of it, and normally perishable objects—basket-work, a wooden bowl, a wooden sword-scabbar, even a puff-ball!—which had fallen or been thrown into it had been preserved in a miraculous fashion for nearly nineteen centuries. Of these objects, and of their relationship to the stratification of the ditch-filling, more will be said at a later stage (pp. 44 ff.). Pottery was, however, not abundant, and in this respect the site added nothing material to the ceramic evidence already summarized from Site A. It will suffice to note here that the sword-scabbar was found within a foot of the bottom of the ditch and, though of unusual type, is consistent with a date at or soon after the middle of the first century A.D.

Phase III.—Site D (pls. xvi and xvii)

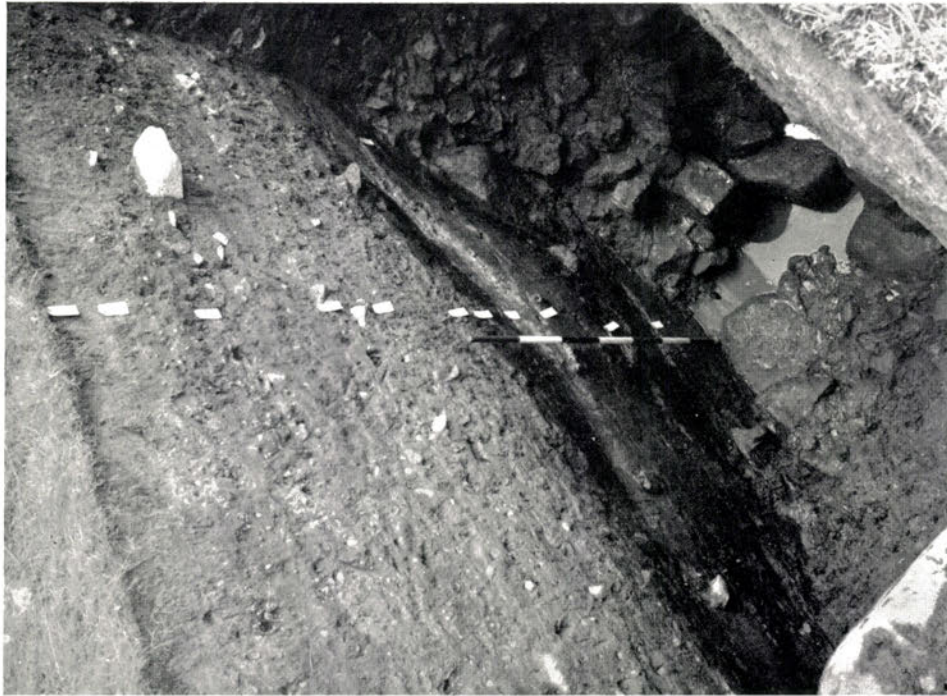
The defences of Phase III were sectioned at a point 100 yards from their abutment on the western corner of Phase II. The section showed a construction essentially identical with that of Phase II, save that the limestone was not reached by the ditch and this ended bluntly in the heavy boulder-clay, which here contained numerous massive boulders. As on Site A, the bank had been aligned on a rearward trench and marking-out bank; and the outer face of the rampart had been revetted by a dry-built stone wall, originally vertical. A slight berm intervened between the wall and the lip of the ditch. The latter was filled with layers of sodden clay which had preserved much of botanical interest (p. 59). It also contained animal bones, but produced only two sherds of pottery, respectively of the second and third centuries A.D.; these were relatively high in the filling and are marked on the section (pl. xvii). They are noted on pp. 32 and 38.



a. Phase II, Site C, at the foot of Henah Hill; remains of the revetment-wall in the background

b. Phase II, Site B, showing a 50-ft. stretch of the ditch cleared. The man stands on the rock-cut bottom of the ditch; the ladder leans against the solid causeway at the end of the ditch. On the left is the base of the stone-revetment. The sword, &c., were found in the pool at the end

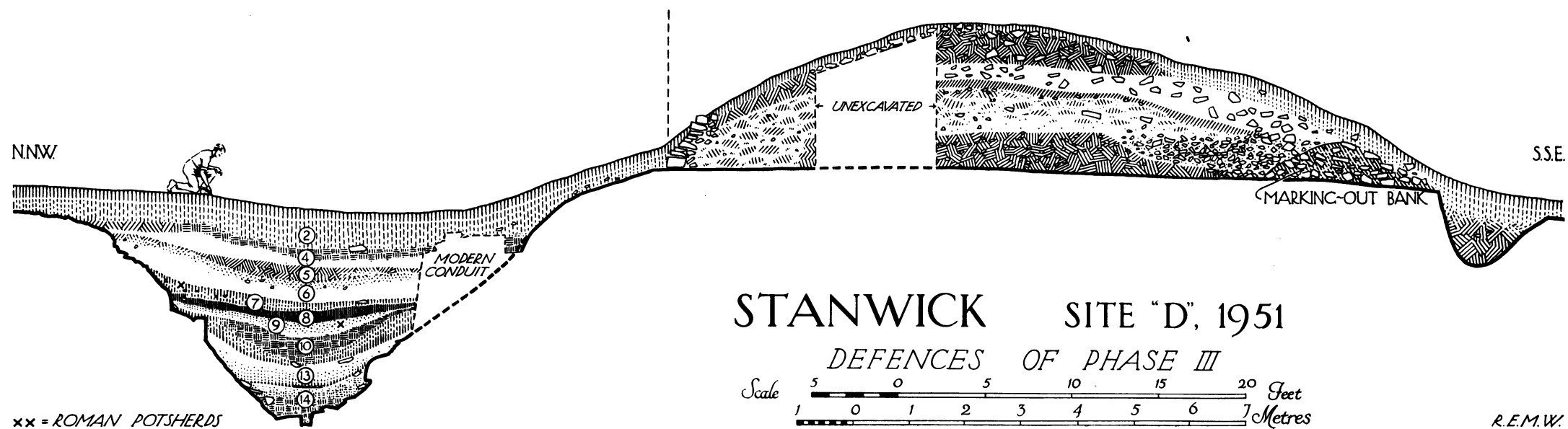
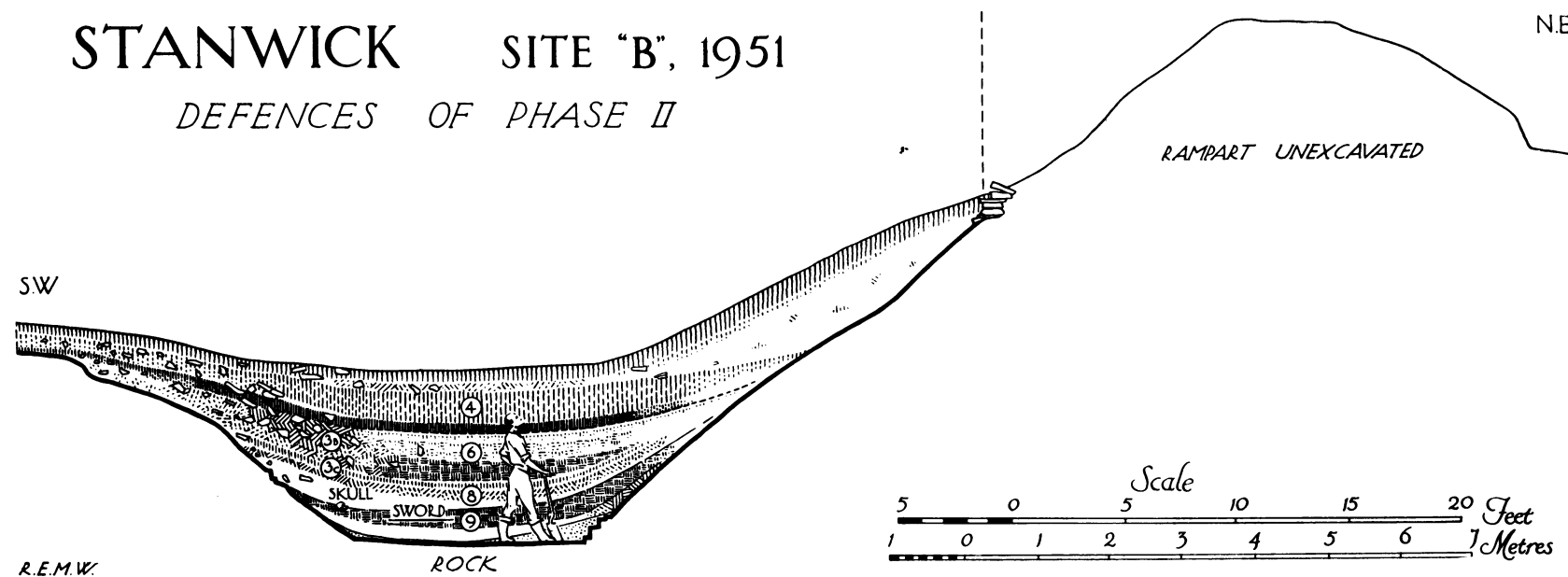




Phase III, Site D: left, revetment-wall and upper slope of ditch; right, section through the peaty filling of the ditch cut into the boulder clay

STANWICK SITE "B", 1951

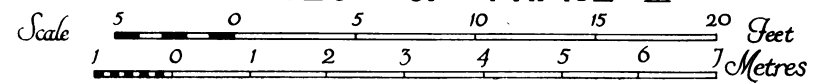
DEFENCES OF PHASE II



STANWICK SITE "D", 1951

DEFENCES OF PHASE III

xx = ROMAN POTSDERDS



R.E.M.W.

Phase III.—Site H (pls. xviii-xxii)

Site H was that of the south gateway of Phase III. It constitutes a local salient in the centre of the southern defences, which here crown a gentle ridge and, but for trees, would line the horizon as seen from the summit of the Tofts. Until its clearance in 1952 the site was completely masked by a thick overgrowth of trees and bushes, but as revealed it was found to consist of an oblique gap commanded by an acute-angled salient constituting a bastion on its eastern side, the whole forming a Z-shaped plan. The entire central portion of the gateway—ditch and inner approach—was subsequently excavated to the natural soil under the direction of Mr. Leslie Alcock, 500 tons of soil being removed in the process. Before excavation an excellent contoured survey was prepared by Mr. D. F. Day of the Land Survey Branch of the Ministry of Works, and constitutes the basis of fig. 4.

The entrance was effectively designed for close-range defence from the elbow of the inturned rampart-end, which rose above the general average of the defences and enfiladed them for long distances in both directions. A slight ledge half-way down the external slope indicated the site of the stone revetment, though that this was ever completed is (as will appear) improbable. Loose stones on the surface of the bank to the west of the entrance suggest, however, that it was in part begun.

The clearance of the ditch at the entrance produced surprising evidence. Instead of ending firmly on each side of a solid causeway, the ditch continued without break and with undiminished width across the line of it. The bridge of natural soil which is invariably left at this point by our Iron Age engineers was here omitted, without any recognizable provision for an artificial substitute. Nor was that all. A clearance of the area immediately within the entrance failed to reveal any trace of a gate-structure, whether of stone or wood: in particular, there was no socket for a gatepost, and it may safely be said that none ever existed. No causeway, no gate: but the explanation emerged as the excavation proceeded. The ditch, particularly on the western side of the entrance, had never been completed. It had been dug down to the rock, and the actual cutting of the rock had been begun; but in the bottom of the unfinished cutting lay the large blocks and boulders which had been levered out in the early stages of the work and had never been reduced to wall-stone size (pls. xx and xxii). The picture of interrupted labour was complete and eloquent.

The inference from all this is scarcely in doubt. During the cutting and building of the principal surviving entrance into the vast enclosure of Phase III, when the cutting of the ditch was still incomplete and the erection of the gate itself had not been begun, a sudden alarm stopped the work. As an emergency measure, the causeway was cut away so that the ends of the unfinished ditches were joined up, thus isolating the intended gateway and turning it into a defensive strong-point. Apart from a few food-bones here and there which doubtless represented the meals of the builders, no debris such as might be expected at an entrance—and such as was, indeed, sufficiently abundant on Site B, at the entrance of Phase II, completed perhaps a decade earlier—found its way here into

the adjacent ditches. Not a single potsherd was recovered from the whole site; no appreciable traffic had ever passed this way to or from the great enclosure. The picture of frustration is complete.

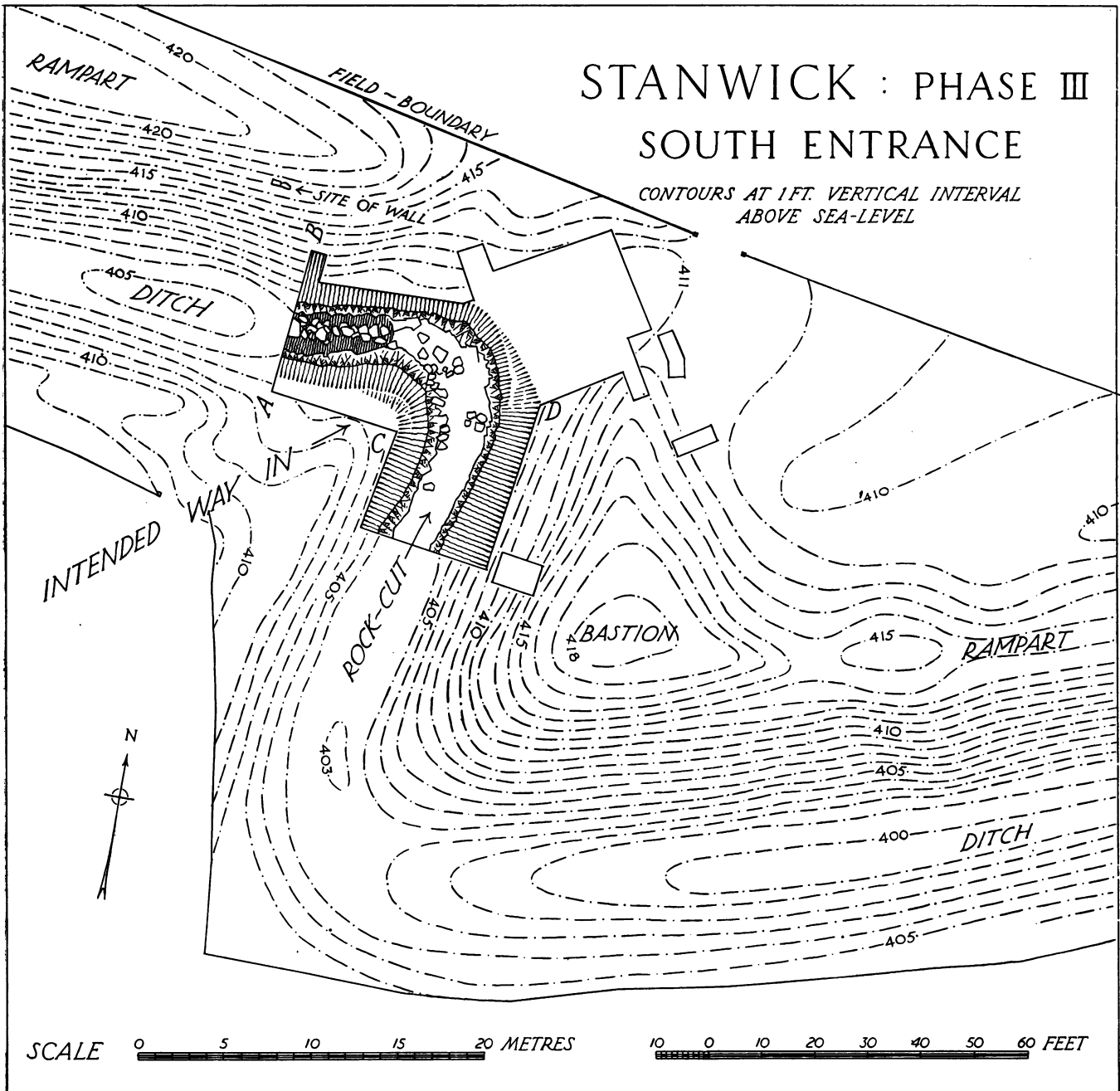
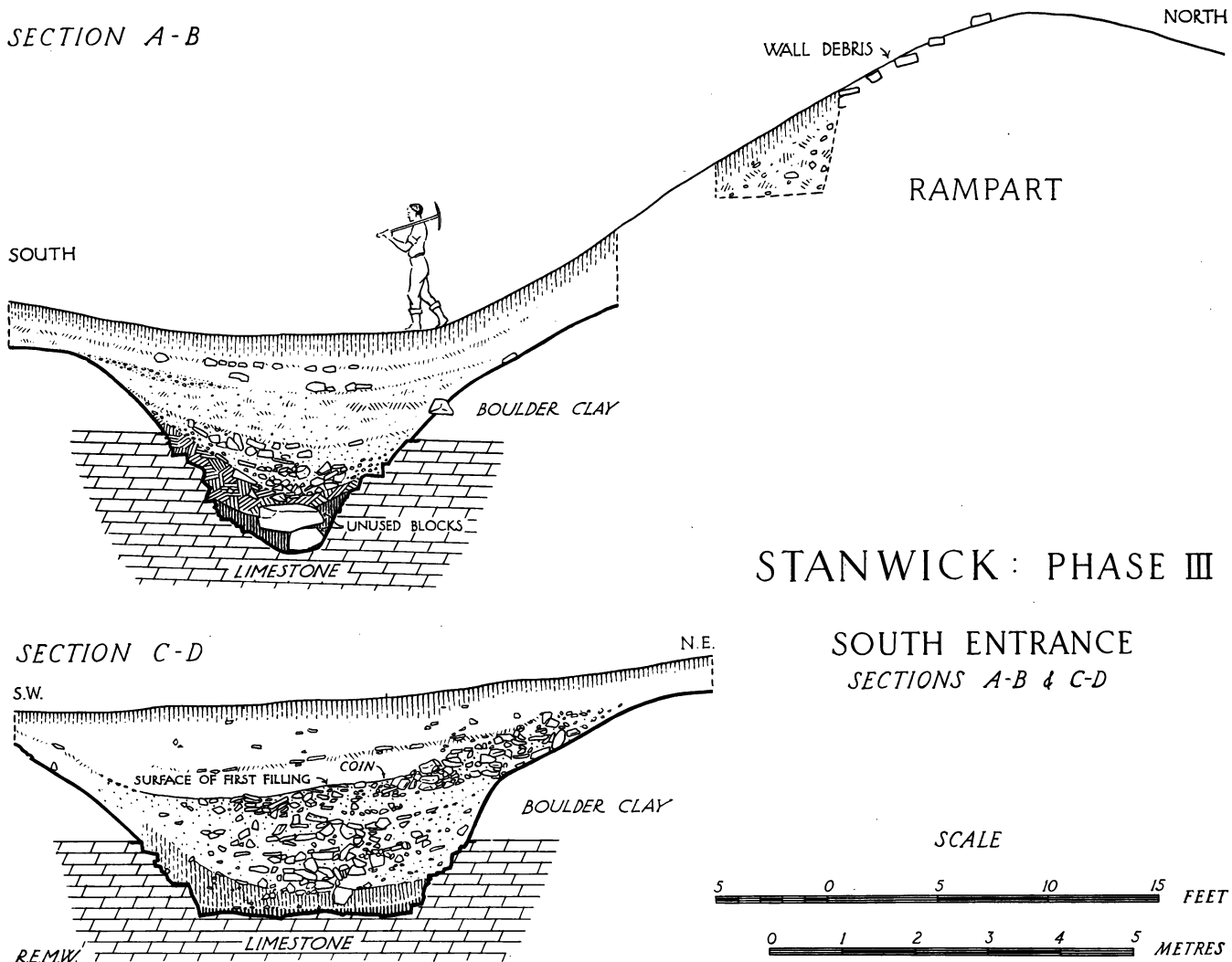


FIG. 4

Many years later, it seems, a rough causeway was built where the intended natural causeway had been thus cut away. A mass of stones and earth was pitched into the

emergency cutting (fig. 5, Section C-D, and pl. XIX B), and at the original summit of this filling was found the defaced flan of a bronze coin, of that oval shape which is particularly characteristic of the latter part of the third century A.D. It may be supposed that



STANWICK: PHASE III

SOUTH ENTRANCE
SECTIONS A-B & C-D

FIG. 5. (See fig. 4 for sites of sections)

farmers of this later period, as others after them, found the old opening through the ramparts a useful passage amidst their fields. Today a field-gate perpetuates this usage.

ARCHAEOLOGY AND HISTORY

FROM the evidence catalogued above, four main points emerge.
i. First (Phase I), we have the Tofts hill-fort, built on slightly rising ground in an unemphatic landscape but strongly embanked and of a kind without rival in this part

of the country.¹ It was occupied by a native population with foreign (south British) contacts within the twenty years following the Roman invasion of A.D. 43; there is at present no proof of any earlier occupation. The ceramic evidence is consistent with an initial date subsequent to the compact with Ostorius in A.D. 47-48 (see below).

ii. Secondly (Phase II), a large work of a structurally different type, with rock-cut defences two miles in length and designed explicitly to include water-supply from the Mary Wild beck, was added at a time when pottery dated approximately to A.D. 50-60 was reaching the vicinity.

iii. Thirdly (Phase III), a further enclosure, precisely similar in character to that of Phase II, was added, with defences no less than $3\frac{1}{2}$ miles in length, enclosing further stretches of the beck. The main gateway of this additional work was never completed; it was thrown hurriedly into a state of defence during construction.

iv. Fourthly, at a time not distant from these events, the defences of Phase II were in part deliberately slighted.

Beside these firm conclusions may now be set the episodic history of Brigantia as preserved in the surviving works of Tacitus. The relevant period, be it recalled, is from the Roman landing in A.D. 43 to the conquest of most of Brigantia by Petillius Cerialis in A.D. 71-74. The general trend of events during that period is sufficiently clear, but in detail much is left uncertain by the loss of relevant books both of the *Histories* and of the *Annals*. Of the fourteen books of the *Histories*, only the first four and a part of the fifth have come down to us, covering A.D. 69 and part of 70 but failing to reach the crucial governorship of Cerialis. From the *Annals* the narrative for the earlier years of Claudius, down to A.D. 47, is missing; so too is that for the important concluding years of Nero's reign, A.D. 66-68, when the situation in Brigantia was coming to a head. We are left with three pertinent references in the *Annals*, one in the *Histories*, and one in the *Agricola*, and must sort them out as best we may.

The first of these (*Ann.* xii, 32) relates to the advance of the Roman governor, Ostorius Scapula, into Flintshire in A.D. 47-48.

And now Ostorius had advanced to within a little distance of the sea, facing the island of Hibernia, when dissension broke out among the Brigantes and compelled the general's return; for it was his fixed purpose only to undertake new enterprises when he had secured the old. The Brigantes indeed, after a few who were beginning hostilities had been slain and the rest pardoned,

¹ There is little to add to MacLauchlan's notes on earthworks and other enclosures between the Tees and the Swale in *Arch. Journ.* vi (1849), 213 ff. and 335 ff. A small double-banked enclosure with annex, of no superficial distinction, can be traced on the high southern bank of the Tees west of Ovington; near Sowhill, a mile NW. of Eppleby, are slight and indeterminate vestiges of a small enclosure; a lightly embanked 'promontory fort' with annex, known as Castlesteads, stands at the junction of the Dalton beck and Gayles Gill, on War Office property on the moor $\frac{3}{4}$ mile SSW. of Dalton in the parish of Kirby Ravensworth; 9 miles SW. of Castlesteads and a mile SW. of Reath, on the southern slopes

of Swaledale, is a small hill-side enclosure, stone-walled and with a remarkable funnel-like walled approach but not of hill-fort type, though known as Maiden Castle; a mile SE. of Catterick, on the west bank of the Swale is recorded a tiny camp called Castle Hills (I have not seen this but suspect it of being medieval); and, outside MacLauchlan's area, $4\frac{1}{2}$ miles NNE. of Piercebridge, are slight remains of a small hill-top camp near Redworth. None of these works is closely comparable with the Tofts hill-fort. Their rarity and modest scale doubtless reflect the indeterminate needs of an essentially pastoral society (see below, p. 27).

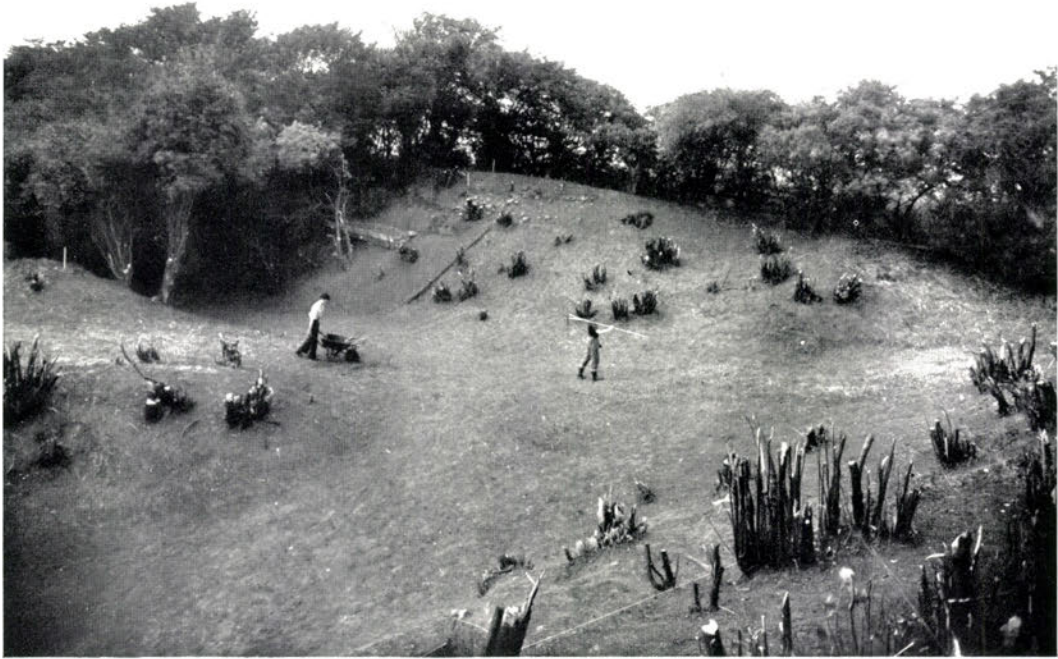


a. Phase III, Site H, South Entrance: as found



b. The same after preliminary clearing. The right-hand figure stands on the salient or bastion; the left-hand figure marks the present level of the ditch; beyond the bastion the sun lights the intended position of the gate

PLATE XIX



a. Phase III, South Entrance seen from the 'bastion' (cf. pl. XVIII *b*); the figures mark the line of the intended causeway



b. Phase III, South Entrance: in foreground, the unfinished rock-cut ditch; behind, section along the edge of the rubble causeway built into the ditch, perhaps in the third century A.D.



Phase III, South Entrance: view of the unfinished ditch from a tower placed for photography on the intended site of the gate. In the centre, the ditch has been cut across the line of the causeway. The floor is still littered with the roughly quarried rocks and boulders left by the builders when their work was interrupted



a. Phase III, South Entrance: unfinished rock-cut ditch



b. Same site, showing another stretch of the unfinished ditch



Phase III, South Entrance: the unfinished ditch. The figures mark the site of the intended causeway, cut away by the builders

settled down quietly; but on the Silures [of south-eastern Wales] neither terror nor mercy had the least effect. . . .

In these words the phrase *apud Brigantes discordiae* may best be taken to imply that some previous compact with the advancing Romans was now broken by an early manifestation of the domestic discord that was to split the tribe openly into a pro-Roman and an anti-Roman party. On general grounds alone, no leader of Ostorius's capacity is likely to have advanced into Wales without some arrangement designed, however optimistically, to safeguard his flank and rear. As for the intransigent Silures on his left front, they were in fact at this time under the active command of Caratacus, son of Cunobelin, and the next incident relates to the final battle and flight of the famous leader in A.D. 51.

There is seldom safety for the unfortunate, and Caratacus, seeking the protection of Cartimandua, queen of the Brigantes, was put in chains and delivered up to the conquerors, nine years after the beginning of the war in Britain. His fame had spread thence, and travelled to the neighbouring islands and provinces, and was actually celebrated in Italy. (*Ann.* xii, 36.)¹

Shortly afterwards Ostorius died, 'worn out by the burden of his anxieties'. He was succeeded, probably in A.D. 52, by Aulus Didius, whose first act was to disperse the Silures. Tacitus then (*Ann.* xii, 40) refers again to the Brigantes, compressing into a single paragraph the events of several years, extending apparently to the end of the governorship of Aulus Didius in A.D. 58.

After the capture of Caratacus, Venutius of the Brigantes, as I have already mentioned, was pre-eminent in military skill. He had long been loyal to Rome and had been protected by our arms while he was united in marriage to the queen Cartimandua. Subsequently a quarrel broke out between them, followed instantly by war, and he then assumed a hostile attitude towards us. At first, however, they simply fought against each other, and Cartimandua by cunning stratagems captured the brothers and kinsfolk of Venutius. This enraged the enemy, who were stung with shame at the prospect of falling under the dominion of a woman. The flower of their youth, picked out for war, invaded her kingdom. This we had foreseen; some cohorts were sent to her aid and a sharp contest followed, which was at first doubtful but had a satisfactory end. A legion under the command of Caesius Nasica fought with a similar result. For Didius, burdened with years and covered with honours, was content with acting through his officers and merely holding back the

¹ I sometimes find myself wondering idly whether Cartimandua was not herself a southerner, a foreigner to her rough northern kingdom. Her singular prestige, alongside her constant and almost contemptuous independence of tribal sentiment ('the flower' of the tribe were against her), suggests the possibility that her masterful personality had been shaped in an alien and more advanced environment. Was she in origin a Belgic princess? In seeking refuge in Brigantia, was Caratacus influenced by the knowledge of some such affinity and hopeful therefore of a sympathetic reception in defeat? True, save for Caratacus, the royalty of the south had collaborated with the Roman invader: in such fashion that two southern kings had actually retained their thrones under Roman overlordship. Was Cartimandua merely following their example—the example, it may be, of actual relatives? Incidentally (see Ptolemy) both the Brigantes and the Trinobantes had their Camulodunum, named from a Belgic war-god; Professor Ian Richmond long ago (*Huddersfield in Roman Times*, 1925,

pp. 83–84) suggested the possibility that the Brigantian Camulodunum may be represented by the hill-fort of Almondbury, near Huddersfield, and the site is well placed for the headquarters of a 'quisling' queen dependent on Roman aid from the midlands. To add that, in the tangled legends incorporated in the Welsh Triads, Arywedd Foeddaw, who represents Cartimandua, is a second cousin of Caradawc or Caratacus (see T. E. Casson, 'Cartimandua in History, Legend and Romance', *Cumb. and Westm. Arch. Soc. Trans.*, n.s., xlv (1944), 68 ff.) is merely to drop another feather into the balance. All this is, of course, fantasy, but the Cartimandua–Venutius impasse is more easily intelligible if Cartimandua be regarded as an exile from the southern lands of cakes and wine, married incompatibly to a skin-clad rancher of the north, and thoroughly tired of unmitigated mutton.

Having written this, I find that Professor W. J. Varley has hinted at a similar notion, referring to Cartimandua as a 'Belgic (?) princess'.—*Arch. Journ.* cv (1950), 62.

enemy. These events, though occurring under two governors and occupying several years, I have closely connected lest, if related separately, they might be less easily remembered. I now return to the chronological sequence.

The general trend of this passage is not in doubt. Prior to the surrender of Caratacus in A.D. 51, the Romans had secured the collaboration of the Brigantian royal house, with a guarantee of military aid in the event of tribal recalcitrance. What other inducements were offered are not recorded, but analogy suggests monetary grants and trading-facilities, the latter of which may be reflected in the relative abundance of imported pottery found at Stanwick (see e.g. p. 11). The words of Tacitus, 'as I have already mentioned', may imply an earlier reference in one of the lost books to this compact; certainly it carries back the first appearance of Venutius into the earlier years of the Occupation. Mr. Eric Birley suggests the further inference, 'this can only mean that within the four years when Plautius was in Britain (43-47) there were Roman troops operating in Brigantian territory, in support of its ruling house'.¹ Tacitus may in fact have been referring back no farther than to the Brigantian incident of A.D. 47-48, which ended, it seems, in a negotiated settlement; but the possibility that Ostorius had already negotiated with the Brigantes before his advance into Flintshire and that the compact had now been violated by Venutius is likely enough (see above, p. 19).

Be that as it may, after A.D. 51 Venutius definitely broke with his queen and succeeded Caratacus as leader of the resistance movement. Roman cohorts intervened on behalf of Cartimandua with hard-won success. In the circumstance, the subsequent reference to similar action by a legion (presumably the Ninth from Lincoln) makes sense only if a later intervention is in question; but Tacitus is here again summary and obscure. The general impression given is that in the fifties of the century Cartimandua was holding on precariously with Roman aid, and presumably therefore within easy reach of it, against a persistent anti-Roman faction led by her formidable husband, who may equally be presumed to have had his headquarters beyond the immediate reach of intervention.

And so we are carried on to the climactic events of the Year of the Four Emperors, A.D. 69. Of the competitors for empire in that year, Vespasian was supported in Britain by the Second Legion which he had led with success in the early days of the invasion. 'This', Tacitus tells us, 'secured the island for him, but only after some resistance on the part of the other legions, in which there were many centurions and soldiers who owed their promotions to Vitellius, and so hesitated to change from an emperor of whom they had already had some experience.' Tacitus continues (*Hist.* iii, 45):

Inspired by these differences between the Roman forces and by the many rumours of civil war that reached them, the Britons plucked up courage under the leadership of Venutius, who, in addition to his natural spirit and hatred of the Roman name, was fired by his personal resentment toward queen Cartimandua. She was ruler over the Brigantes, having the influence that belongs to high birth, and she had later strengthened her power when she was credited with having captured King Caratacus by treachery and so furnished an adornment for the triumph of Claudius Caesar. From this came her wealth and the wanton spirit which success breeds. She grew to despise

¹ *Dumfriesshire & Galloway Nat. Hist. and Ant. Soc. Trans.*, 3rd ser., xxix (1952), 65, reprinted in E. Birley, *Roman Britain and the Roman Army* (Kendal, 1953), p. 47.

her husband Venutius, and took as her consort his squire Vellocatus, whom she admitted to share the throne with her. Her house was at once shaken by this scandalous act. Her husband was favoured by the sentiments of all the citizens; the adulterer was supported by the queen's passion for him and by her savage spirit. So Venutius, calling in aid from outside and at the same time assisted by a revolt of the Brigantes themselves, put Cartimandua into an extremely dangerous position. Then she asked the Romans for protection, and some of our auxiliary troops, cavalry and infantry, after meeting with indifferent success in a number of engagements, finally succeeded in snatching the queen from danger. The throne was left to Venutius, the war to us.

This lucid account of the events of A.D. 69–70 lands us on firm ground. Cartimandua has, as the word (*exemere*) used by Tacitus suggests, been removed bodily from danger. Venutius, his tribesmen, and their allies (*accitis auxiliis*) hold the field defiantly, and the final day of settling can no longer be deferred. Unfortunately the *Histories* fail us at this point, and for the sequel we have to content ourselves with a passing reference in the *Agricola* (17):

But when Vespasian, in the course of his general triumph, recovered Britain, there came a succession of great generals and splendid armies, and the hopes of our enemies dwindled. Petillius Cerialis at once struck terror into their hearts by attacking the state of the Brigantes, which is said to be the most populous in the whole province. After a series of battles, some not uncostly, Petillius had operated, if not actually triumphed, over the major part of their territory.

Thus the main counter-initiative against the Brigantes was undertaken by the able Petillius Cerialis, who had commanded the unhappy Ninth Legion at the time of Boudicca's revolt and now governed the province from A.D. 71 to 74. Mr. Birley has drawn attention to a statement of the poet Statius that Vettius Bolanus, the predecessor of Cerialis in A.D. 69 and 70, dedicated trophies won in battle from a British king, and suggests that the king may have been Venutius.¹ But even if the reputedly inactive Bolanus was responsible for the first skirmishes—and the trophies in question, however exaggerated, may have been the products of the cutting-out raid of A.D. 69—the plain statement of the *Agricola* remains. Whether Venutius lived to lead his motley forces in the final struggle is no longer recorded, but its severity suggests his inspiring presence. The exact date of the culminating battle is equally unknown; it must, however, have been before the end of the governorship of Cerialis in A.D. 74. By A.D. 80 Agricola was campaigning in Scotland.

So much for the historical background. Now something must be said as to the geographical background of these episodes. This can here be done briefly, for the evidence has already been analysed in some detail by Mr. Birley, Miss Kitson Clark (Mrs. Chitty), and others² and, not least, by Professor Ian Richmond, who has very kindly contributed an appendix to this report (p. 61). The general picture is fairly clear. Ptolemy, utilizing

¹ E. Birley, *Roman Britain and the Roman Army*, p. 46.

² E. Birley, 'The Brigantian Problem', *Dumfriesshire and Galloway Nat. Hist. and Ant. Soc. Trans.*, 3rd ser., xxix (1952), 46 ff., reprinted in E. Birley, *Roman Britain and the*

Roman Army, p. 31; Mary Kitson Clark, 'Where were the Brigantes?', *Yorks. Arch. Journ.* xxxiv (1939), 81 ff.; R. Pedley, 'The Brigantes in Britain', *Durham and Northumb. Arch. Soc. Trans.* viii (1937), 27 ff.

material derived largely from first-century sources, is our principal witness. Along the line of the Scottish border he seemingly places three tribes: from east to west, the Otadini or Votadini, the Selgovae, and the Novantae. Of three places mentioned in the territory of the Otadini, Bremenium is High Rochester in Northumberland, and Alauna and Korra or Curia are possibly the Bridge of Alan and Corbridge respectively.¹ Trimontium in the territory of the Selgovae is commonly identified with Newstead, near Melrose. Of the state of the Novantae nothing is known, but it probably extended westwards into Galloway. To the south of these tribes—roughly south of the future line of the Stanegate—lay the state of the Brigantes, ‘the most populous in the whole province’. It has been argued that they extended across the border into Dumfriesshire, but this is less certain.²

The place-names in Brigantia are listed in Ptolemy approximately from north to south. They are Epiacum (unknown), Vinovium or Binchester in County Durham, Caturactonium or Catterick in the North Riding, Calacum (unknown), Isurium or Aldborough near Boroughbridge, Rigodunum (unknown), Olicana, the identity of which with Ilkley has been disputed but is not unlikely, Eboracum or York, and Camulodunum which has been identified with Almondbury (pp. 19 and 23). The names at any rate carry us from County Durham to southern Yorkshire. Ptolemy states explicitly that the Brigantes stretched from sea to sea; but on the west he hints at an otherwise unknown tribe of Setanti or Setantii, and on the east there were coastal enclaves occupied possibly by the Gavrantuices (p. 61), certainly by the Parisi, to whom the geographer ascribes only one town, namely Petuaria, known epigraphically to have been at Brough-on-Humber. Malton may then or later have been Parisian, but more cannot be safely said than that the Parisi occupied (some part of) the East Riding. What relationship subsisted between the Parisi and the Brigantes in the time of which we are speaking is unknown.³

From these historical and geographical considerations we may now return to the archaeological evidence from which we started. It is sufficiently evident that the chronicle of Tacitus fills out the archaeological material into a significant shape. Where the potsherds give us trends and decades, Tacitus gives us motives and dates. In or about A.D. 47 a political (and doubtless commercial) liaison was established between the Roman province and the Brigantian royal house; but by A.D. 51 dissension had arisen both in the tribe and in the royal house itself, whereafter King Venutius became the acknowledged leader of the British resistance. Thus history. Archaeologically, we have seen that both the Tofts hill-fort (our Phase I) and the first of the subsequent compounds (our Phase II)—the former outstanding in northern Britain and the latter unique—are associated with

¹ So A. H. A. Hogg, ‘The Votadini’, *Aspects of Archaeology, Essays presented to O. G. S. Crawford* (London, 1951), p. 201. But I. A. Richmond and O. G. S. Crawford, discussing the evidence of the Ravenna cosmography in *Archaeologia*, xciii (1949), 12 and 30, are doubtful about Coria.

² E. Birley, as cited.

³ Nor are we concerned with those other Brigantes whom Ptolemy places in County Wexford, Ireland. In what sense, if at all, the Irish Brigantes were related to their British name-

sakes is unknown. See T. F. O’Rahilly, *Early Irish History and Mythology* (Dublin, 1946), pp. 25 and 34. But O’Rahilly is wrong in affirming that ‘the British Brigantes belonged beyond question to the Belgic (not to the Pritenic) section of the population of Britain’. There is no indication whatsoever that the British Brigantes were Belgic; indeed it may firmly be asserted that as a tribe they were not, whatever the affinities of their ruling house may have been (see above, p. 19, footnote).

abundant pottery for which the decade A.D. 50–60 is the focus. Historically, the final struggle began in A.D. 69 when Venutius called in his allies for the decisive struggle, and was substantially completed between A.D. 71 and 74 by the rapid and determined action of a new Roman governor. Archaeologically again, we have the addition of the vast enclosure of Phase III to that of Phase II, in the identical and distinctive style of military engineering; and the dramatic interruption of the building of Phase III at its principal gateway crowns the picture. We can almost see the tribesmen toiling vainly at their gate, almost hear the Ninth Legion tramping up from its new fortress at York¹ to one of its rare victories. The systematic dismantling of the defences of Phase II at Site A is a logical corollary, and may even indicate where the main attack took place.

The mutual consistency of historical and archaeological evidence is thus impressive enough. It is emphasized by strategic and tactical factors which merit a separate section.

STRATEGIC AND TACTICAL FACTORS

CONSIDERATION of the geographical background has already indicated something of the strategic framework of the episode. Brigantia stretched from the Yorkshire–Derbyshire borderland in the south to Durham or beyond in the north: roughly perhaps from the Don and the Mersey to the Tyne and the lower Eden. An extension into Dumfriesshire is less certain. Somewhere in the south of that great territory, we may be sure, lay the pro-Roman enclave of Cartimandua; for on two or three occasions (after A.D. 51 and in A.D. 69) the queen was rescued by Roman task-forces which are unlikely to have penetrated very far from the Roman midlands. If a precise location for her headquarters be demanded, choice most readily falls upon the hill-fort of Almondbury, near Huddersfield, where excavation (of which Dr. W. J. Varley's substantive report is awaited) has indicated an elaborate Iron Age succession stretching apparently into this period.² We may equally suppose on the other hand that the inconvenient accessibility of a southern headquarters determined Venutius, after the decisive break with Cartimandua in A.D. 57–58, if not already after her treachery in the matter of Caratacus in A.D. 51, to move northwards out of the immediate reach of Roman punitive raids. It may even be that the building of the Tofts hill-fort was an immediate reaction to the events of A.D. 51—at least the evidence from Site F is consistent with this possibility.

It was, then, in the logical order of events that, in the fifties of the first century, whilst Cartimandua continued to dally with the Romans from the traditional southern capital, King Venutius and his anti-Romans should set up the standard of resistance in the remoter north. But why (hypothetically) the choice of Stanwick? Here the map suggests a reason.

¹ The foundation of York was long ago ascribed on archaeological grounds to Cerialis.—Stuart Miller in *Journ. of Roman Studies*, xv (1925), 182–4, and xviii (1928), 98–99. *Yorks. Arch. Journ.* xxxv (1940), 83; *Journ. Rom. Soc.* xxx (1940), 166; *Arch. Journ.* cv (1948), 46–48 and 60; *Arch. Bulletin for 1947* (Council for British Arch., 1950), p. 39.

² Preliminary notes in *Proc. Prehist. Soc.* v (1939), 255;

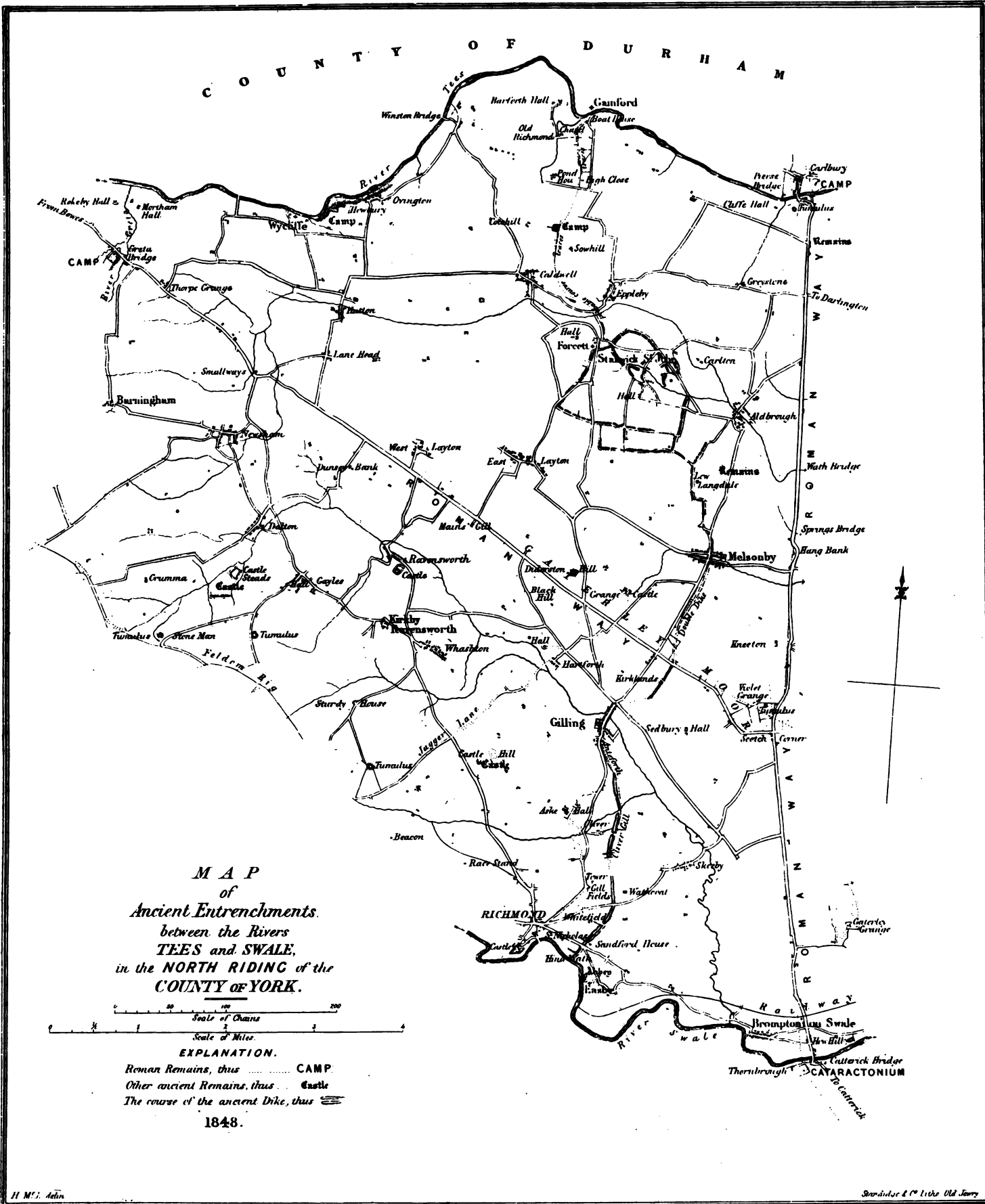


FIG. 6. Map showing relationship of Stanwick to Roman roads. After MacLauchlan

Stanwick lies within the angle of the two Roman arterial roads (fig. 6) which are now represented by the Great North Road and that other highway which branches north-westwards from it and, by a short crossing of the Pennines, reaches the Eden valley and Carlisle. Today as one drives northwards to Scotland by the Great North Road the moment for choice confronts one at Scotch Corner, the close modern equivalent of the old Roman junction. From that point the traveller may either continue northwards, more or less parallel with the east coast, or may veer by the alternative route towards the western lowlands. The choice is one imposed by geography; the road-system merely crystallizes and expresses it. By virtue of it, Stanwick was already a natural focus of communications before the road-builders came that way. Tribes rallying from the north and north-west—from those borderlands whence most of the auxiliary tribesmen of Venutius must have come—would converge readily upon the Stanwick neighbourhood and there join the assembled Brigantians of Yorkshire and Lancashire. And at the same time an armed host assembled there could with reasonable certainty command contact with an enemy groping northwards from the direction of York. If in addition we add the natural productiveness of the boulder-clay hereabouts and the easy water-supply still represented by the reduced and canalized Mary Wild beck,¹ the decision of Venutius, 'pre-eminent in military skill', to rally and await battle here needs no further argument.

So much for the strategic issues. There remain one or two points relating to the tactics of the situation. The immense size of the enclosures of Phases II and III is readily explained in the light of the manifest purpose of the builders to include as much water and pasture as possible within their circuit, first for a large concentration of tribesmen and later also for their allies, together with their mobile economy, under siege conditions. This is a distinctive and significant factor. The normal Iron Age fortification was not designed to withstand systematic siege. Its restricted area usually sacrificed immediate water-supply (save from direct rainfall) to natural inaccessibility, on the assumption that the attackers, equally unprovisioned, would merely cut and run. But Venutius was not now fighting a native enemy. After many years of contact with the invader he was well aware that the disciplined Roman legion was a very different sort of opponent from a fickle Celtic levy. Accordingly, in somewhat primitive fashion he was preparing for a siege, with upstanding walls about him and an ample food-supply at his elbow. By the entrance, Site B, and elsewhere the bones of cattle and sheep in large quantities had been discarded in the ditch of his stronghold (p. 57). And it is likely enough that patches of the vast expanse within the defences were brought under some sort of garden-cultivation, if only on a restricted scale.

At the same time, it is not impossible that a contributory factor in the designing of the Stanwick enclosures was some knowledge, on the part of Venutius, of those vast Belgic settlement-areas of the south, above all Cunobelin's Camulodunum, where a whole section of the landscape was fenced off with bank and ditch and natural obstacle. Only, in

¹ It is tempting to add the presence, only a mile away at Melsonby, of copper ores which were mined until modern times, but this is unlikely to have been an urgent factor. At the most it may have contributed to the siting of the original Tofts earthwork.

the unemphatic terrain where Venutius made his last stand, the tactical use of obstructive river-valleys such as that of the Colne was not in question since (unless for the difficult Teesdale itself) they were not locally available, and artificial defences had therefore to be continuous, or nearly so. Such knowledge of the Belgic habit would again be consistent with dynastic links, suggested above (p. 19) though unbacked by evidence, with the ruling houses of the south.

But if the economic principle of the Stanwick enclosures is easy enough to see, what of their specifically military function? To impound a huge and miscellaneous body of tribesmen with their cattle behind stone walls was one thing; to defend the immense circuit was quite another. Here an interesting tactical point arises. Lengthy defences of this kind (be it recalled that those of Phase II alone are 2 miles in length, those of Phase III an additional 3 miles or more) cannot have been manned continuously and effectively by any native man-power conceivably available. The mobile reinforcement of threatened points is the alternative, and this implies quick reaction to centralized command, not an easy matter in gently rolling country devoid of dominant features. In fact, the Phase II defences provide an interesting illustration of the manner in which this end was achieved, and at the same time emphasize a further point. From the summit of the Tofts hill-fort the lines of Phase II can be seen throughout, but only because, on the east, they behave in a way which has surprised some observers. On that side they exclude a small but locally eminent feature, Henah Hill, and are overlooked from it (pls. II and XXIX). The reason for the exclusion becomes clear at once when it is realized that, had the hill been included, the defences would have been masked for more than a quarter of a mile by it from the hill-fort or any other central spot, and the whole tactical principle thus frustrated. And incidentally the readiness with which an externally commanding feature was thus excluded underlines another tactical aspect of the Stanwick defences of all phases: it is evident that no effective missile-weapon entered into the calculations of the builders. The simple deep ditch and high walled rampart, careless of external command, were imposing barriers in hand-to-hand fighting, but would have been vulnerable to the sling-stone warfare characteristic of the multivallate camps of the south and west. Consistently, no slingstones have been found at Stanwick. The conservative north adhered to the older tradition.

With the last-minute arrival of the horde of auxiliaries represented by the unfinished defences of Phase III, the principle of direct central control must in some measure have broken down, even though a great part of the new lines were likewise visible, however remotely, from the Tofts. The unwieldy complex in its final form still indeed reflects a single controlling intellect, which can scarcely have been other than that of the ageing Venutius himself. But tactically the whole plan had by now monstrously overgrown its strength and must surely, in the ultimate trial, have dissolved into chaos. Its creator, fighting as he doubtless did to the end, was pitting an embattled mob in unwonted conditions against an army engaged upon a normal manœuvre. Stanwick is at the same time a very notable memorial to a heroic episode of the British resistance and a monument to its futility.

ENVIRONMENT AND CULTURE

SUFFICIENT evidence has been preserved (p. 59), largely in the ditch-filling on Sites B and D but also in other cuttings, to indicate the general character of the Stanwick landscape in the first century A.D. With few reservations, it is fair to say that the main features then and now would be closely similar but for the clearance and drainage effected during and since the Middle Ages in the course of intensive agriculture. The boulder-clay, which today produces excellent crops, carried under less artificial conditions a considerable growth of mixed woodland, consisting, so far as we know, of oak, ash, and birch with an undergrowth of elder, hazel, hawthorn, and blackthorn, varied with occasional cherry-trees. In the moister spots, particularly along the broad, shallow course of the now-canalized Mary Wild beck, willow was abundant. Thereabouts grew also rushes and water-plants, mosses, thistle, and puff-balls; and an abundant insect-life, which included a Giant Water Beetle at present unknown (it seems) so far north, flourished in the marsh-pools.

It is to be supposed, therefore, that the layout of the Stanwick enclosures involved a good deal of clearance, alike for military and civil reasons. Fields of observation and channels of intercommunication would be required, however rudimentary the tactics of the builders; and substantial areas of habitation and pasturage for a large population with its food-supplies, however temporary and summary its domestic provision. Hunting does not seem to have entered appreciably into the economy of this great assembly; amongst a large quantity of bones examined from several of the excavated areas, it is calculated that scarcely more than 1 per cent. is represented by red deer, roe deer, or hare. The rest are all or mostly of domesticated species—cattle 40 per cent., sheep or goat 23 per cent., pig (presumably though not certainly domesticated) 16 per cent., horse 13 per cent., with 4 per cent. of dog in attendance. These figures necessarily lack precision but are valid as a general index. Incidentally, a large proportion of the cattle are sufficiently mature to suggest systematic winter-feeding.

Of agriculture, however, the only hint is a single fragment of a beehive quernstone found on the surface and of uncertain date. In the occupation-site (3,500 sq. ft., see p. 7) excavated in the Tofts hill-fort, not a single storage-pit came to light in an area which otherwise showed ample evidence of occupation. True, the area is a relatively small one; but a similar expanse in a south British hill-fort or homestead bearing equivalent evidences of occupation would be expected to include pits for storing grain, and it may fairly be assumed that at Stanwick such provision was not a normal feature. What significance may be attributed to this observation?

Here caution is necessary. The presence or absence of storage-pits is not by itself a sufficient index of the presence or absence of agriculture. Some subsoils do not readily lend themselves to pit-construction, and where such is the case or where for some other reason local custom varied (as amongst some of the Belgae), above-ground storage may have been substituted. But, whilst the amenable chalklands of the south are notably prolific

in Early Iron Age pits, this type of storage is not confined to the chalk; the rock-cut pits of Worlebury Camp in Somerset or the numerous pits cut into the Northamptonshire Sands at Hunsbury are sufficient evidence to the contrary. The general absence of pit-storage on Iron Age sites north of that remarkable natural *limes* across central England, the Jurassic Zone,¹ cannot therefore be written off merely on geological grounds. There is no structural reason why pits should not have been cut into the stiff boulder-clay of Stanwick had subterranean storage been the mode thereabouts. Their absence must be accredited with some other significance.

Before attempting to define this significance more narrowly, two further factors must be considered. First, there is the evidence of quernstones. The distribution of rotary beehive querns of various types has been discussed by more than one writer.² The matter is greatly complicated by the fact that these querns extended well into the Roman period, but the main result is clear: an overwhelming majority of them, whether pre-Roman or Roman in date, occurs on or south of the Jurassic Zone, with a spill-over towards the Trent basin. Their scarcity in Derbyshire, Lancashire, and Yorkshire is outstanding. Of the principal midland class of pre-Roman origin—the 'Hunsbury' type—the great area of Yorkshire has produced something like 13 examples, all without context; Lancashire and Derbyshire perhaps 1 each. The evidence therefore from this source for the cultivation of grain before the Roman settlement, if not quite so resolutely negative as is that from the absence of storage-pits, is inconsiderable if compared with that from the south, where Hunsbury alone, for instance, produced more than 48 upper stones and 55 lower stones, and Maiden Castle in Dorset 56 stones of various types.

Secondly, there is the special historical function of the Stanwick compounds. Phases II and III have been interpreted as reactions to a transitory and exceptional need. It would not be surprising therefore to find in those phases an abnormal economy with little or no provision for systematic storage. On the other hand, the only considerable internal area explored was, not in those large enclosures, but in the nuclear area of Phase I, the Tofts hill-fort. There the occupation was something more than temporary, and was generally comparable with that of the normal run of Iron Age settlements of the kind. Evidences of a normal economic routine were therefore to be expected, and the fact that those evidences exclude querns and pit-storage acquires a substantive significance.

Nor are there in this region compensating evidences of ancient field-systems to which a pre-Roman context can at present be ascribed. True, the Belgic south-east is no less devoid of such vestiges, in spite of its known productiveness. But at all points the evidence from the north is negative. On all grounds it must be inferred on current showing that, north of the Jurassic Zone and the Trent, the cultivation of grain played a relatively small part in the Early Iron Age economy. Caesar's generalizations about

¹ For this well-known feature of the prehistoric landscape of Britain, see C. Fox, *Arch. Camb.* 1927, pp. 96 ff.; and W. F. Grimes in *Aspects of Archaeology, Essays presented to O. G. S. Crawford* (London, 1951), pp. 144 ff. North of this zone, pits do in fact occur on the prehistoric site at Scarborough—*History of Scarborough*, ed. by A. Rowntree (London, 1931), pp. 20 ff.—but these relate to an immigrant

culture probably as early as the fifth century B.C. and lie outside the present picture.

² Notably E. C. Curwen in *Antiquity*, xi (1937), 133 ff., and xv (1941), 15 ff.; and Judith T. Philips in *Leicestershire Arch. Soc. Trans.* xxvi (1950), 75 ff., with useful lists of 'Hunsbury' querns.

Britain have not always stood unscathed against the tests of archaeology, but here he seems to emerge with credit. In his description of Britain he makes the well-known statement that 'of all the Britons the inhabitants of Kent, an entirely maritime district, are by far the most civilized, differing but little from the Gallic manner of life. Of the inlanders, most do not sow corn, but live on milk and flesh and clothe themselves in skins' (*Bell. Gall.* v, 14). To Caesar the Brigantes would be 'inlanders' *par excellence*. With their ample livestock, proved at Stanwick by great quantities of bones,¹ they fit well into his picture of an essentially pastoral hinterland. Admittedly more archaeological evidence is required, and would not be difficult to obtain.

This inference may help to explain another noteworthy feature of the Brigantian culture of the first century A.D., as at present known: namely, the astonishing crudity of the native pottery of the period, and its almost grotesque inferiority to the contemporary work in metal and perhaps wood. That one craft should surpass another is understandable in any phase of society; but that one craft should be so untutored and another at the same time so sophisticated seems to imply an intellectual inequality or perversity of an unusual magnitude. Theoretically a number of alternative explanations might be offered. Imported wares may be thought to have killed native initiative; in fact, no less than 60 per cent. of the Stanwick sherds ascribed to c. A.D. 50-70 represent imported vessels. Yet there is at present no hint of an earlier Brigantian ceramic of higher quality. It seems likely that pottery always occupied an insignificant position in the domestic equipment of the Brigantians; woodwork and basketwork, for both of which some evidence has been recovered, may largely have taken its place. Most of the native pottery found at Stanwick belongs rather to crude and sooty home-made cooking-vessels than to 'table-ware'; it would appear that the Brigantians cooked in their own wretched crockery, used wooden trays or baskets to hold their viands, and drank from imported beakers. Certain it is that between the craft of the metal-worker and that of the potter there was a class-distinction of so emphatic a kind as to suggest something in the nature of a servile status for potters and cooks, as against the privileged position of smiths and warriors. Unfortunately we know almost nothing about the stratification of native society in first-century Britain. Gang-chains and fetters from Belgic sites in south-eastern Britain and from Anglesey² probably indicate prisoners-of-war rather than a slave-stratum, though the two are likely enough to have merged and a serf-element in Celtic society, perhaps with its own standards of craftsmanship, is a reasonable assumption in Britain as it is a certainty in Gaul and Germany.³ But I doubt whether it is along the lines of a differential caste-system that the explanation of the present problem of cultural inequality is to be sought. The outstanding prestige of the metal-craftsman in any 'heroic' society is a normal phenomenon. The metalworker's job is a man's job, if not a god's; in ancient Irish literature the smith,

¹ Incidentally, the iron shears from Site F (p. 50) may well have been used for sheep-shearing.

² References by C. Fox, *A Find of the Early Iron Age from Llyn Cerrig Bach, Anglesey* (Nat. Mus. Wales, 1946), pp. 37 ff. and 84 f.

³ The servile condition of the *plebs* in Gaulish society is

emphasized by Caesar, *B.G.* vi, 13. More specific references to slavery amongst the Gauls are *B.G.* vi, 19, and vii, 42. In *B.G.* v, 45, and viii, 30, it may be questioned whether slaves held by Gauls or (actually or formerly) by Romans are intended. For Germany, see Tacitus, *Germ.* 20, 24, 25, &c.

the wright, and the worker in bronze are liable to be divine or semi-divine beings,¹ and there are familiar parallels elsewhere. The potter's craft was altogether of a lower order; until the introduction of the wheel it was a woman's job. The Brigantian woman cooked, and herself made such elementary pots as she needed for her menial task. She had little enough incentive to ceramic skill. Based upon a meat diet with little in the way of cereals or vegetables, her cooking was of the simplest sort, and her pottery matched her cooking. Only for the mead or country-wine of the menfolk were beakers of quality required, and beakers of quality were now readily obtained from southern or even Gaulish markets, presumably in exchange for metalwork and livestock (animal and human). Thus regarded, the crude local pottery of Brigantia faithfully reflects a crude pastoral, semi-nomadic economy; good pottery requires the stimulus and opportunity of a settled agriculture, and its absence at Stanwick helps to complete a consistent outline of a social system in which agriculture played a subordinate part.²

¹ T. F. O'Rahilly, *Early Irish History and Mythology* (Dublin, 1946), pp. 308 ff.

² When this report was in the press, Professor Piggott and I discovered that, unknown to each other, we had been working at the same problem of Early Iron Age economics, with similar results. He has very kindly shown me the manuscript of an important unpublished paper on the subject, in which, incidentally, he adds the interesting and convincing observa-

tion that the 'Fosse Way' frontier of A.D. 47, approximating to the Jurassic Zone, coincided closely with the limit of locally-accessible corn-supplies. Beyond that line, the commissariat of the Roman army became an aggravated problem, which had to be solved before the advance could be resumed on any considerable scale. Agricola found the solution in part in the use of his fleet.

PART II. FINDS

POTTERY

REFERENCES TO ABBREVIATIONS

- Camulodunum* C. F. C. Hawkes and M. R. Hull, *Camulodunum*, Research Committee Report, Soc. Ants. Lond. xiv (1947).
- Haltern* S. Loeschke, 'Keramische Funde in Haltern', *Mitteilungen der Altertumskommission für Westfalen*, v (1909).
- Hofheim* E. Ritterling, 'Das frühromische Lager bei Hofheim in Taunus', *Annalen des Vereins für nassauische Altertumskunde* (1913).
- Leicester* K. M. Kenyon, *Excavations at the Jewry Wall Site, Leicester*, Research Committee Report, Soc. Ants. Lond. xv (1948).
- Lockleys* J. B. Ward Perkins, in *Antiq. Journ.* xviii (1938), 338 ff.
- Margidunum T.S.* F. Oswald, *The Terra Sigillata of Margidunum* (Nottingham, 1948).
- Margidunum, Claudian Well* F. Oswald, in *Journ. of Roman Studies*, xvi (1923), 114 ff.
- North Ferriby* P. Corder and T. Davies Pryce, in *Antiq. Journ.* xviii (1938), 262 ff.
- O. & P.* F. Oswald and T. Davies Pryce, *Introduction to the Study of Terra Sigillata* (1920).
- Park Street* H. E. O'Neil, in *Arch. Journ.* cii (1945), 21 ff.
- Pompeii* D. Atkinson, in *Journ. of Roman Studies*, iv (1914), 27 ff.
- Richborough II & III* J. P. Bushe-Fox, *Richborough*, Research Committee Report, Soc. Ants. Lond. vii (1928); x (1932).
- Rottweil* R. Knorr, *Südgallische Terra Sigillata-Gefässe von Rottweil* (1912).
- Silchester* M. Aylwin Cotton, in *Archaeologia*, xcii (1947), 121 ff.
- Verulamium* R. E. M. and T. V. Wheeler, *Verulamium*, Research Committee Report, Soc. Ants. Lond. xiii (1936).
- Verulamium Ins. XVII* K. M. Richardson, in *Archaeologia*, xc (1944), 81 ff.

(i) SAMIAN (*Terra Sigillata*)

- (Pl. xxiii A, 1 and fig. 7, 1.) From Site F, 'Ditch A', layer 3a (see fig. 8). Sherd of form 29 with polygonal leaf as used by GERMANVS, see *Rottweil*, Taf. I, 13, II, 6, and VI, 6 and 14, Nero-Vespasian; VITALIS and PATRICIVS, see *Pompeii*, pls. v, 27 and VI, 34, Nero-Vespasian; but see also *Camulodunum*, pl. xxvii, 1, Claudian.
- (Pl. xxiii A, 2 and fig. 7, 2.) From Site F, layer 2a (see fig. 8). Similar to no. 1.
- (Pl. xxiii A, 3 and fig. 7, 3.) From Site F, layer 2a (see fig. 8). Sherd of form 29 showing a bird within a wreath. Cf. F. Oswald, *Index of Figure-types on Terra Sigillata* (1936), bird (O. 2268) as used by ABIATVS and AQUITANVS, dated Claudius-Nero.
- (Pl. xxiii A, 4.) From Site F, layer 2b (see fig. 8). Sherd of form 29.
- (Pl. xxiii A, 5.) From Site A, layer 7 (see fig. 10). Sherd of form 29.
- (Pl. xxiii A, 6.) From Site A, layer 4b (see fig. 10). Fragment of rouletted rim of form 29.
- (Pl. xxiii A, 7 and fig. 7, 5.) From Site A, layer 2 (see fig. 10). Form 15. Cf. *Margidunum T.S.*, pl. III, 2 and 5, Claudian; and *O. & P.*, pl. XLIII, 30 and 32, Claudian and Nero-Vespasian.
- (Pl. xxiii A, 8 and fig. 7, 4.) From Site A, layer 6 (see fig. 10). Form 18. Cf. *Margidunum T.S.*, pl. IV, 5, Claudian; pl. XVI, 11, and pl. XVII, 6, Vespasian.
- (Pl. xxiii A, 9, and fig. 7, 6.) From Site A, layer 5 (see fig. 10). Form Ritterling 8. Cf. *O. & P.*, pl. XLVIII, 7, Claudian.

10. (Pl. xxiiiA, 10.) From Site A, layer 4*a* (see fig. 10). Fragment, possibly base of form 22. Cf. *O. & P.*, pl. L, 8 and 10; third quarter of 1st century A.D.
 11. (Fig. 7, 7.) From Site B, layer 3*b* (see pl. xvii). Part of base of form 31; 2nd century A.D.

Not illustrated

From Site A, three indeterminate scraps from layer 2, one from layer 4*a*, and one from the surface. All probably of 1st-century date.

From Site B, layer 3*b* (see pl. xvii). Part of base of form 18 or 15/17; 1st century A.D.

From Site D, layer 9 (see pl. xvii). Part of a base, probably of form 31; 2nd century A.D.

From Site E. Two tiny scraps close to the surface.

From Site F. Three scraps from layer 2*a*, four from layer 2*b*, three from gullies 1 and 5 and surface of Ditch A. All probably or possibly of 1st-century fabric.

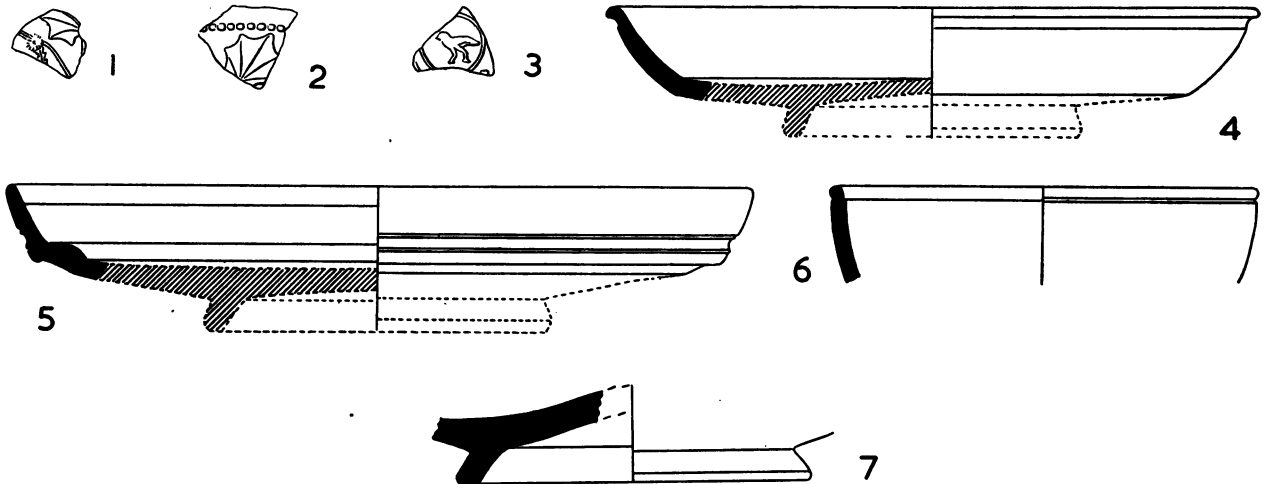


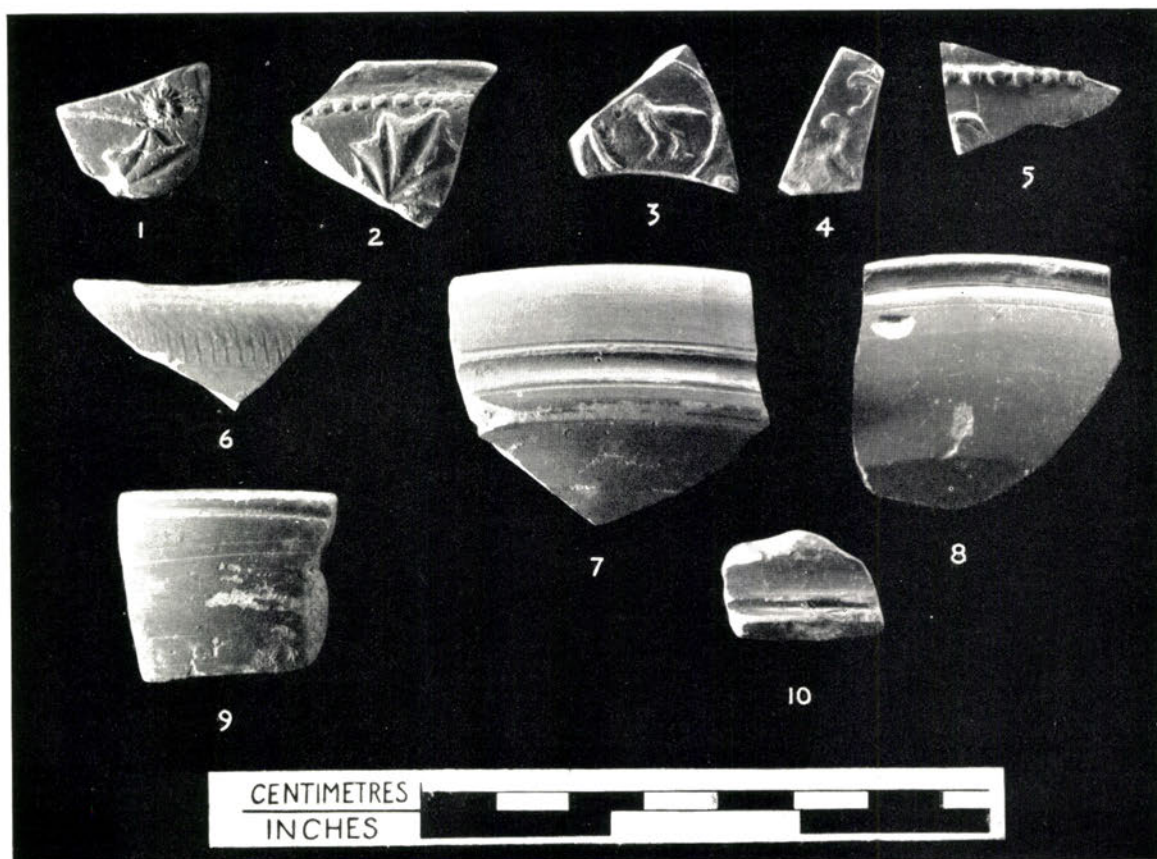
FIG. 7. Samian pottery from Site F (1-3), Site A (4-6), and Site B (7). ($\frac{1}{2}$)

(ii) OTHER NON-NATIVE WARES

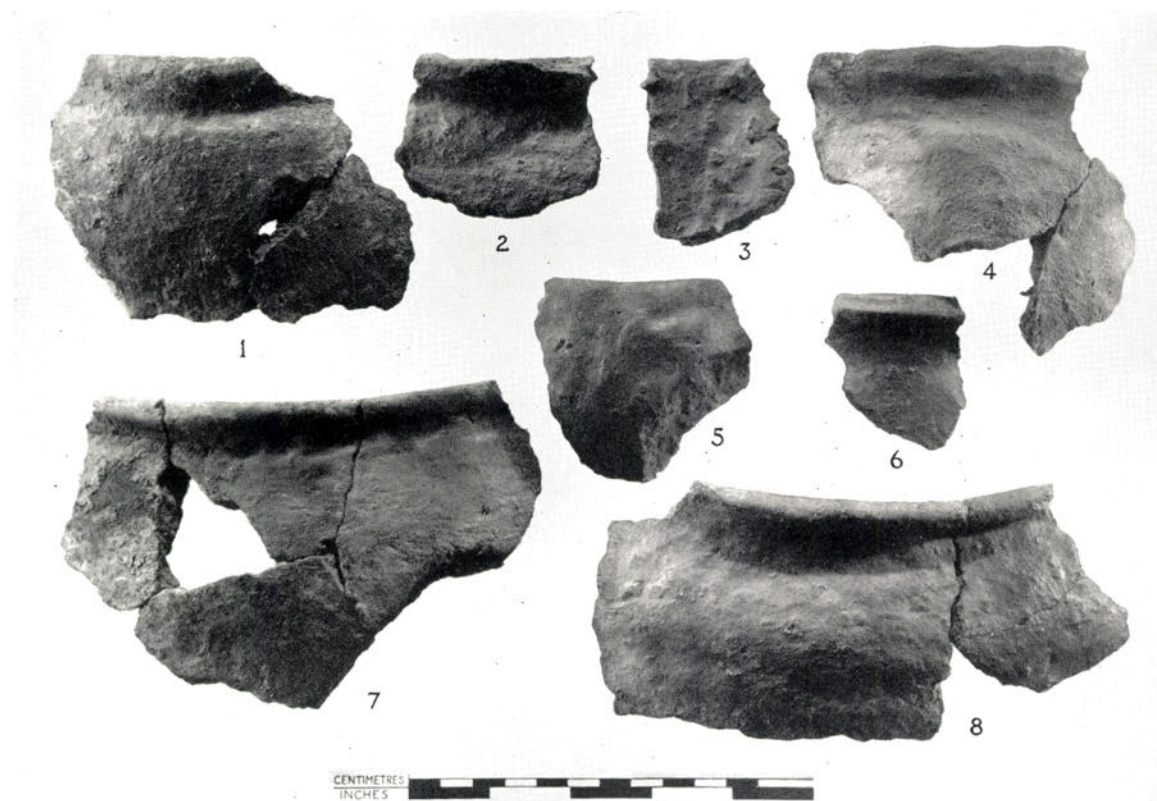
In so far as these wares can be usefully illustrated, they are here classified under the successive phases as follows: Phase I (Site F), Phase II (Sites A and B), Phase III (Site D).

Phase I, Site F (fig. 9)

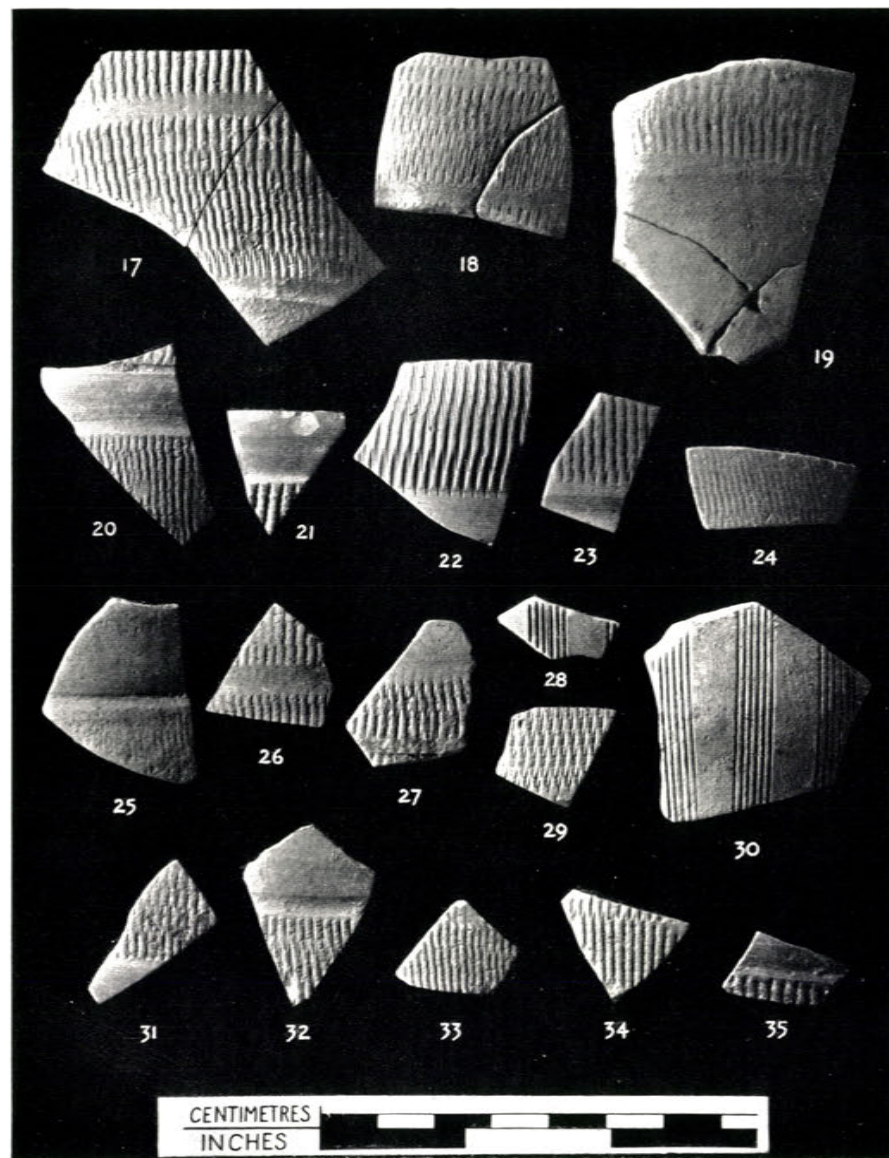
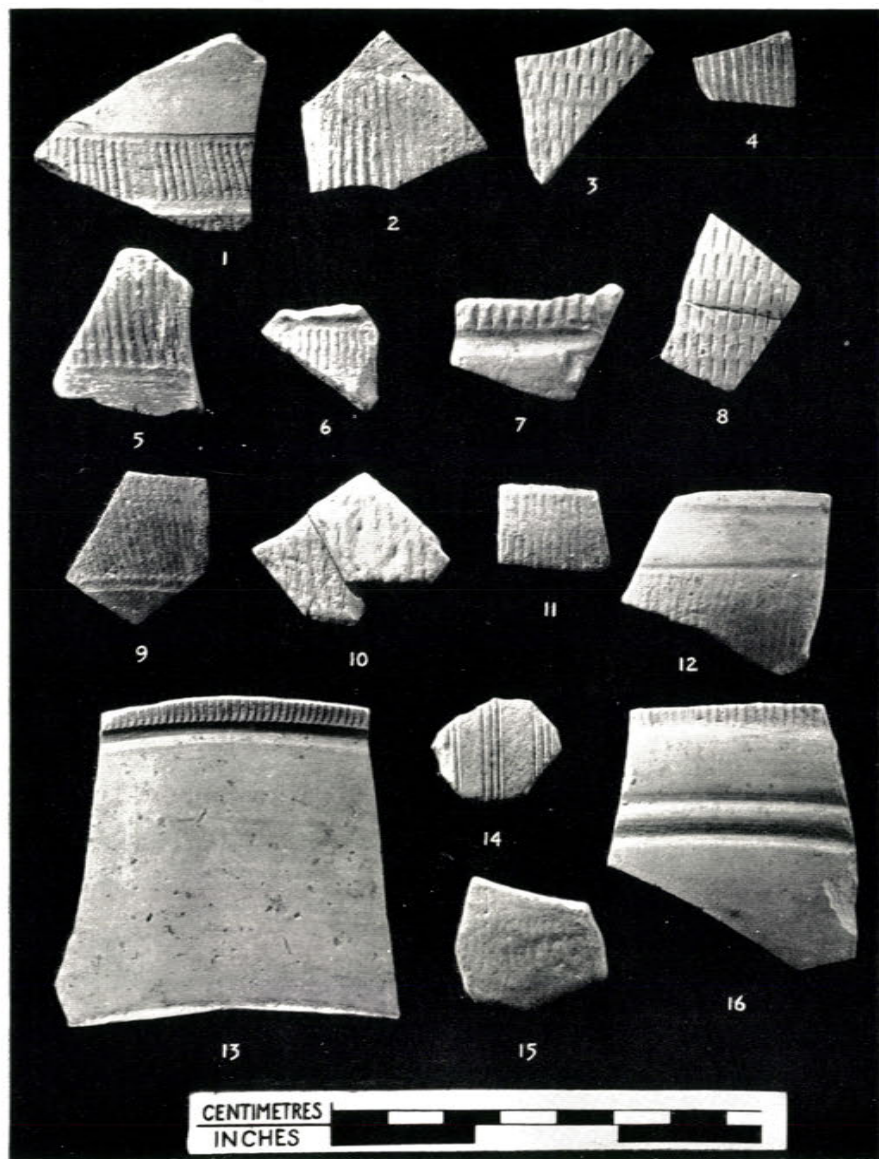
1. From 'Ditch A', layers 3*a* and *b* (lowest filling). Rim and part of wall and base of butt-beaker in hard, drab ware with smooth surface. There is an angle-cordon at the neck and the bevelled inner rim-surface is faintly convex; the lower edge has an internal offset. The ware is not as fine as that of fragments of similar type in white pipeclay ware found at Praewood, *Verulamium*, group B, pl. LV, A (A.D. 10-43), and *Verulamium Ins. XVII*, fig. 12, 42-46 (A.D. 35-50), and is more likely to be of (south) British manufacture, as *Camulodunum* form 113. The range there is from A.D. 10-61, with maximum incidence in Period IV, A.D. 49-61 (648 fragments). Sherds from Periods V and VI are classed as rubbish survivals (only 2 from Period V and 136 from Period VI), and the type is not found in the Colonia, so that manufacture apparently ceased there shortly after *c.* A.D. 55. See also *North Ferriby*, fig. 3, 19-21, A.D. 45-50, and *Silchester*, fig. 11, 2 (but this lacks the angle-cordon), associated with a coin of Cunobelin in a pit dated A.D. 35-60. A rim, possibly of the same type, was found at Leicester in a pit with pottery ranging down to A.D. 80, but also containing 16 fragments of Claudian Samian



a. Samian pottery: 1-4 from Site F, 5-10 from Site A



b. Brigantian pottery



Sherds of butt-beakers or similar wares: *left*, from Site F; *right*, from Site A

Site F: 1, 8, from Gully 1; 2, 4, from Ditch A, layer 3; 5, 6, 9, 12, 13, 16, from layer 2B; 7, 10, 11, 14, 15, from layer 2A; 3, from humus
 Site A: 30, from layer 7 (rapid silt); 22, 27, from layer 6; 17, 19-21, 24, 26, 29, 31, from layer 4C; 18, 28, 33, 34, from layer 4B; 23, 32, 35, from layer 4A; 25, from layer 3

with which the butt-beaker is more likely to be directly associated (see *Leicester*, p. 132, pit 7). The type is then clearly pre-Flavian, with a bias to A.D. 50-60. The complete absence of 'Belgic plates' from Stanwick suggests that the imports did not begin to arrive much before A.D. 50.

2. From Gully 1 and layer 2*b*. Everted rim and part of the body of a butt-beaker broken off where the upper zone of rouletting begins. Twenty-five pieces of this same vessel were recovered. The rim is distorted as in a waster. The ware is fine and hard with a pale grey core and smooth outer surface, slipped pale orange, the inner surface left grey. For the shape cf. *Camulodunum*, form 112*A* and 112*cb* (a

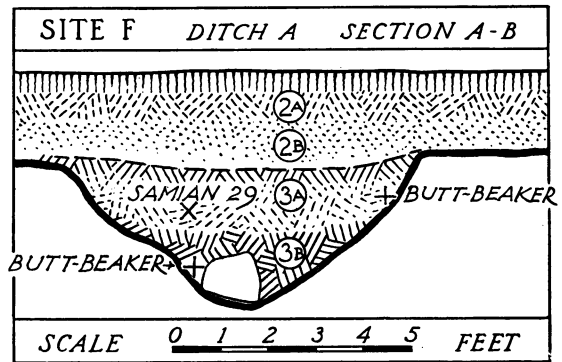


FIG. 8

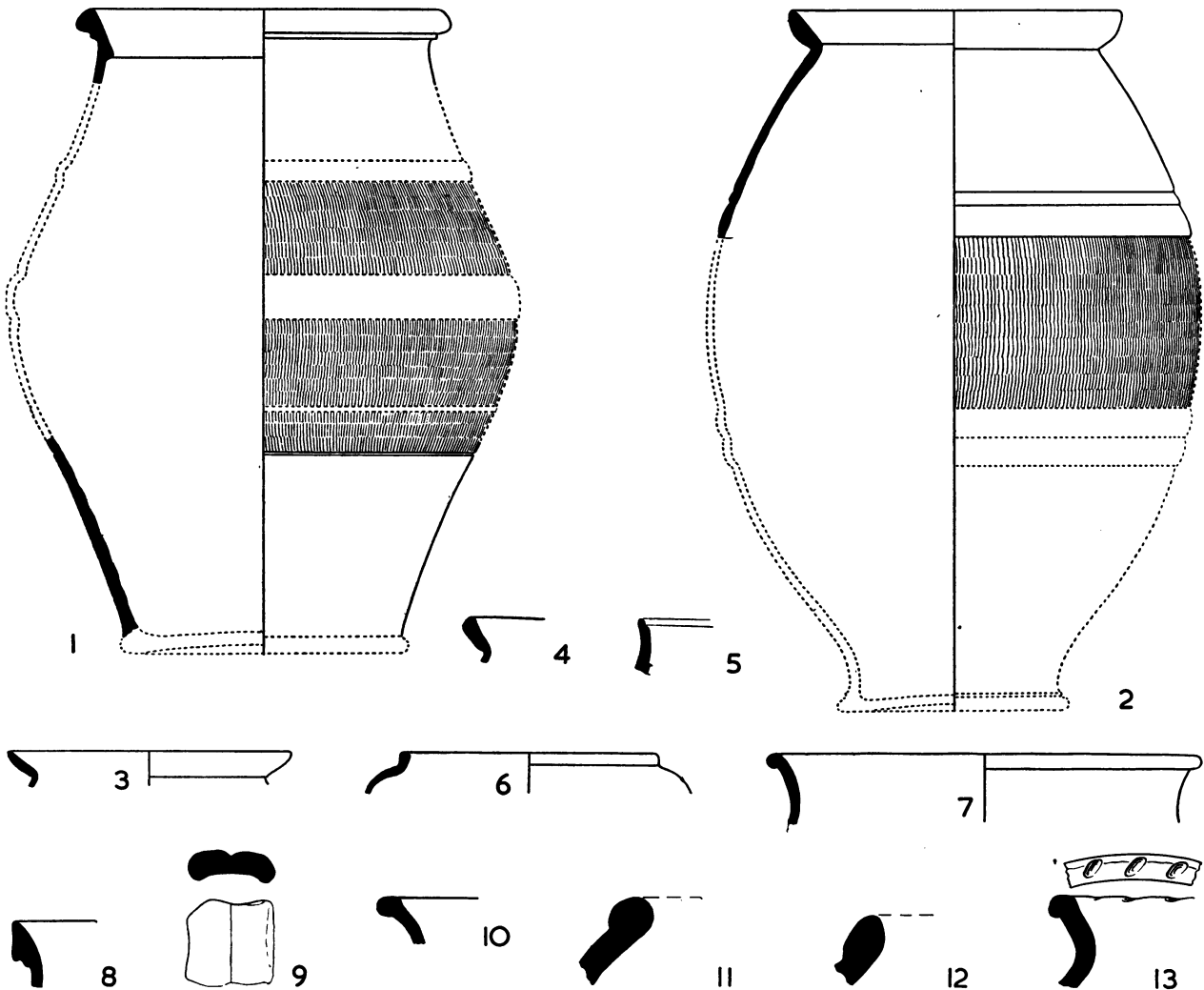


FIG. 9. Pottery from Site F ('The Tofts'). ($\frac{1}{2}$)

modified version of *Haltern*, type 85) in *terra rubra*, with and without the angle-cordon. The range is as for no. 1 above. Cf. also *Lockleys*, fig. 5, 5, a native version in light pink, sandy ware from a level dated A.D. 20-60; *Park Street*, fig. 16, 20 in rather soft pinkish drab ware with light grey core, from a pit containing nothing later than a Samian sherd dated A.D. 70-80, most of the material being apparently pre-Flavian; *Leicester*, fig. 34, 5 in native light brown ware, from a pit dated A.D. 35-50.

Many sherds in this ware were recovered from Sites A and F, with or without rouletting, and, though it is not certain that all were from butt-beakers since similar decoration occurs on girth-beakers, none the less the fragments show no sign of carination and must have come from gently curving vessels like the butt-beaker. (See pl. xxiv, 1-12, 14-16, 18-19, 21-26, 28, 30-35.) A certain number of sherds, also apparently from butt-beakers (but no rims were found), are in very thin, almost metallic ware, pale yellow to buff in colour, and these show very fine rouletting. (See pl. xxiv, 13, 17, 20, 27, 29, from Site F.)

- 3 and 4. From lip of Gully 1 and layer 2*b*. Variations of no. 2. Two comparable rims, not illustrated, came from layer 2*a*.
5. From layer 2*b*. Part of a cup in grey ware with pale orange surface, showing traces of red wash (*terra rubra*); the rim has an internal lip-groove. Cf. *Camulodunum*, form 56A, imitating the Arretine form, *Haltern* types 7 and 8 in *terra rubra*, orange-red with darker surface wash. Its maximum incidence there is Period IV, A.D. 49-61, though it is still found in Period VI, to A.D. 65.
- 5A. (Not illustrated.) From layer 2*b*, sealing Ditch A. Part of the wall and base of a platter in fairly hard, rather coarse buff to pale orange ware. There is a trace of red wash at the top of the fragment on the outer side; the inside is coated in 'Pompeian red' wash. For the type see *Camulodunum*, form 17, derived from *Haltern*, type 75, ranging down to Period VI, A.D. 65; and see also *Verulamium Ins. XVII*, fig. 13, 4, from the Boudiccan level, A.D. 55-61.
6. From layer 2*b*. Rim of small vessel in rather soft creamy ware with dark brown slipped surface; a 1st-century type.
7. From layer 2*b*. Rim of necked jar in rather soft black ware, surface formerly polished. The ware is of 1st-century quality.
8. From layer 2*a*. Jug mouth in dirty cream ware; a pre-Flavian type.
9. From layer 2*b*. Jug-handle in cream ware.
10. From layer 2*a*. Rim of jug in pale orange sandy ware.
11. From layer 2*b*. Roll rim of large storage-jar, grey ware, buff surface.
12. From layer 2*a*. Rim of jar in pale orange sandy ware.
13. From layer 2*a*. Rim in hard grey gritted ware with rough orange surface, decorated along the top with finger-tip imprints.

Phase II, Site A

(Sections, pl. xii and fig. 10)

On p. 36 is a tabular summary of the pottery and Roman tile or brick from this crucial site. It may be emphasized that the tile, although definite, occurred only in tiny fragments. It will be seen that the proportion of imported pottery to native ('Brigantian') is approximately as 60 to 40. Illustrated sherds other than Samian are as follows (fig. 11):

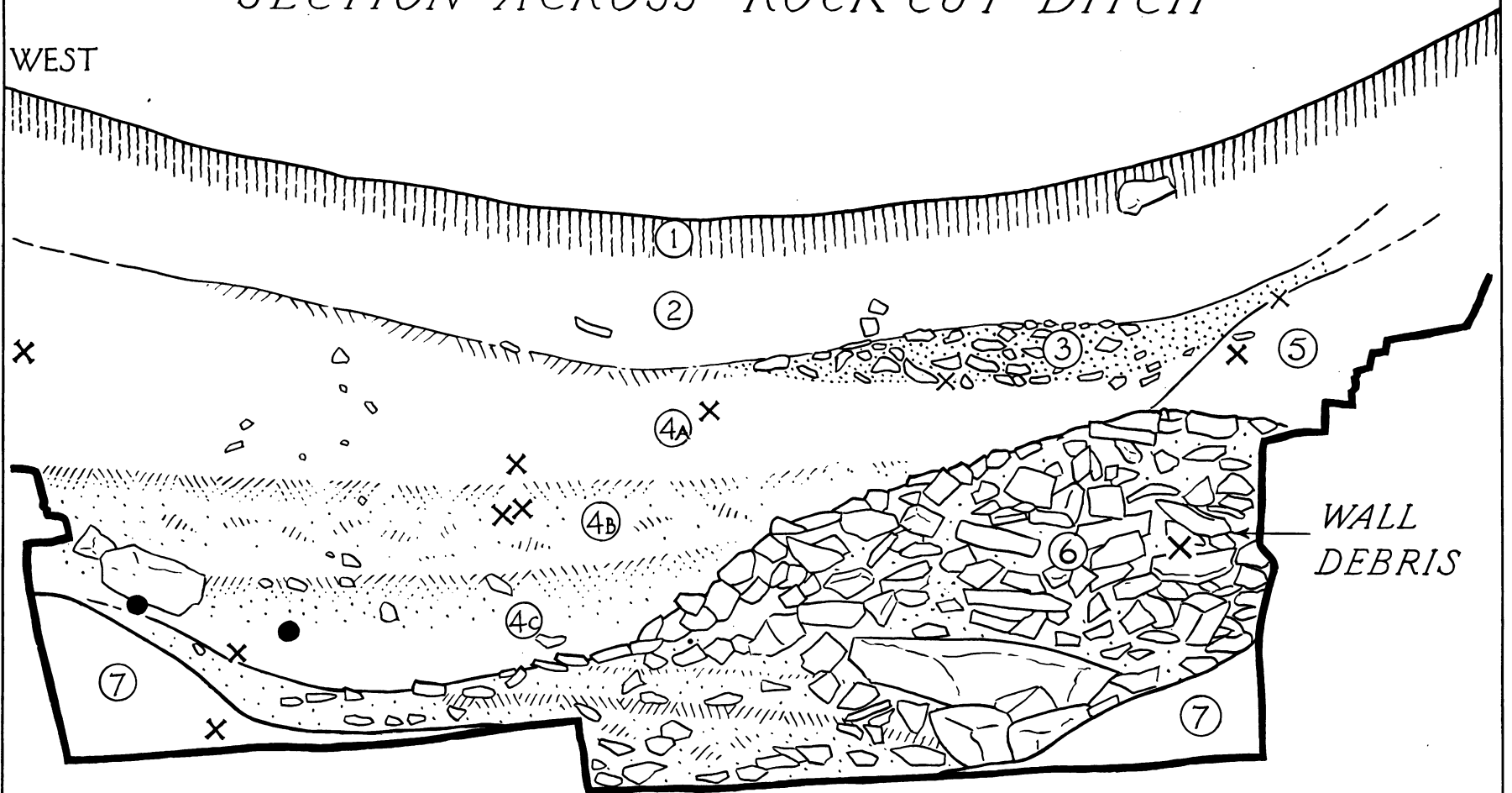
14. From layer 7, rapid silt. Butt-beaker base in ware similar to no. 2 from Site F.
15. From layer 6, cascade of wall-stones. Butt-beaker rim in ware similar to no. 2 from Site F.

STANWICK : PHASE II, SITE 'A'

SECTION ACROSS ROCK-CUT DITCH

EAST

WEST



WALL
DEBRIS

X SAMIAN SHERDS
(1ST CENTURY A.D.)

● BROOCHES

SCALE



FIG. 10. Note: the revetment-wall and rampart are top right, outside the section

The profile is close to *Camulodunum* form 119B, which in date overlaps with form 119C, the earlier in native, the later in romanizing ware; Period II–VI, A.D. 43–65.

16. From layer 4a. Butt-beaker rim, variant of no. 15 in similar ware.
 17. From layer 4b. Butt-beaker rim similar in ware and shape to no. 2 from Site F. Three similar rims are not illustrated.
 18. From layer 1. Butt-beaker rim similar to no. 17.
 19. From layer 4c. Rim of olla in sandy ware, grey core and orange surface. Cf. *Verulamium Ins. XVII*, fig. 2, 30–32; A.D. 45–55.
 20 and 21. From layer 4c. Rim and base of a small vessel in fine, medium hard, smooth ware, with grey core and pale buff surface. There is a groove on the shoulder and the rim is grooved on top. Cf. *Leicester*, fig. 34, 8, pit 5, A.D. 35–50.
 22. From layer 5. Rim in hard pale grey ware; the form is unusual and has not been identified. It may be a variant form of girth-beaker.

Pottery analysis, Site A

Layer	Samian	Butt-beaker ¹	Beaker ware ²	Other non-local wares	Roman tile	Native Brigantian
1	1	1	—	—	—	—
2	3	2	2	12	11	5
3	1	1	—	5	5	1
4 $\left\{ \begin{array}{l} a \\ b \\ c \end{array} \right.$	5	29	14	52	23	36
5	1	1	—	1	—	—
6	1	13	15	23	26	74
7	1	1	4	7	—	12
TOTAL	13	48	35	100	65	128

¹ Identifiable by rim-form or decoration.

² Featureless sherds, probably from butt-beakers.

23. From layer 6, cascade of wall-stones. Jar with bead rim in gritty ware with orange surface, the small grits showing through the surface. Found in Flavian levels at Newstead (information from Prof. I. A. Richmond).
 24. From layer 4b. Mortarium rim in ware with hard grey core, pale orange surface, showing traces of white wash, and with small black grits on the inner surface. Cf. *Margidunum Claudian Well*, fig. 1, 1 and 2; but the type is not closely dated within the latter half of the 1st century A.D.
 25. From layer 4c. Sharply moulded everted rim of a colour-coated rough-cast beaker in soft, cream ware with dark brown slip. Cf. *Camulodunum*, form 94A and B, Claudio-Neronian; *Richborough III*, type 298, Claudio-Neronian, also *Leicester*, p. 138, House SE. II; first found in levels dated A.D. 60–75.
 26. From layer 4c. Rim in hard, pale grey ware, insufficient for identification of the vessel. Possibly Flavian.
 27. From layer 4. Strap-handle in creamy ware. The breadth and straightness are indications of 1st-century date.
 28. From layer 4a. Jug-neck in relatively soft pale orange-surfaced ware with grey core. It is a derivative of *Hofheim*, type 50, and lies between *Camulodunum*, form 140B and 140C (9), both of which occur in Periods IV–VI, A.D. 43–65.
 29. From layers 4c and 6 (fragments of the same pot). Jar in hard gritty grey-buff, wheel-turned ware, surface harsh and pitted. The rim is faintly concave. The rilling suggests Belgic

ancestry; cf. vessels from Wheathamstead and Praewood with horizontal combing, *Verulamium*, pl. L, 15 and figs. 19 and 20, type 61.

30. From layer 5, near inner lip of ditch. Flanged rim in buff ware with grey surface. A late Roman type which occurs rarely as early as the 2nd century but is characteristic of the 4th.

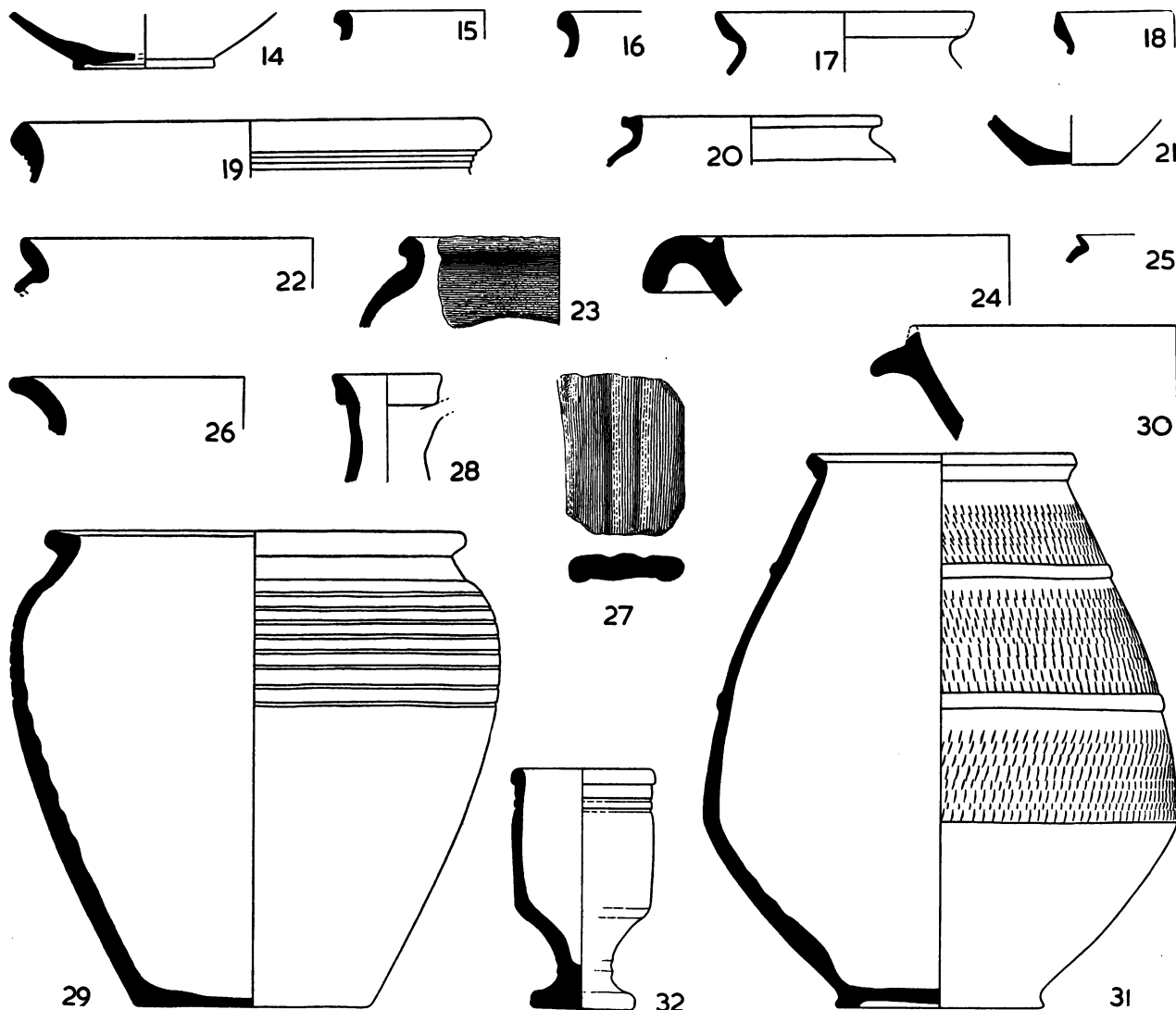


FIG. 11. Pottery from Site A (14-30), Site B (31), and Site D (32). (1/3)

Phase II, Site B

(Section, pl. xvi)

31. From layer 3*b*. Butt-beaker in medium hard, drab white pipeclay. Above the maximum girth the body is divided by two shallow cordons into three zones decorated with rough rouletting which tends to overlap the cordons. The form is unusual and has a degenerate aspect. Similar crude rouletting may be seen on part of a shouldered vessel in white ware found in the Trent-holme Roman cemetery at York, where 'Parisian' black ware, stamped with rosettes and

Flavian in date, also occurred. It is also present on two light buff sherds from vessels comparable with butt-beakers, likewise in the Yorkshire Museum at York (pl. xxv A). These York pots are unlikely to be earlier than the foundation of the fortress there between A.D. 71 and 74. The Stanwick example comes from a layer which spread into the middle filling of the ditch on Site B owing to a local collapse of the side, and its stratigraphical value is therefore uncertain.

Phase III, Site D

(Section, pl. xvii)

32. From layer 7. Goblet in rather soft orange ware with red slip in imitation of Samian. Cf. *Richborough II*, type 181, unstratified. A 3rd- or 4th-century type.

(iii) NATIVE ('BRIGANTIAN') WARE

References as follows:

<i>Atwick</i>	Canon Greenwell, in <i>Man</i> x (1910), no. 48.
<i>Ballinderry Crannog</i>	H. O'N. Hencken, in <i>Proc. Roy. Irish Acad.</i> xlvii (Section C) (1942), 1.
<i>Carrigillihy</i>	M. J. O'Kelly, in <i>Journ. Cork Hist. & Arch. Soc.</i> lvi (1951), 69.
<i>Costa Beck</i>	M. R. Hull, in <i>Yorks. Arch. Journ.</i> xxx (1930-1), 163.
<i>Covesea</i>	S. Benton, in <i>Proc. Soc. Antiq. Scot.</i> lxxv (1930-1), 177.
<i>Ingram Hill</i>	A. H. A. Hogg and I. Richmond, in <i>Arch. Aeliana</i> xx (1942), 100.
<i>Langton</i>	P. Corder, <i>Roman Malton & District</i> , Report no. 4 (1932).
<i>Loanhead of Daviot</i>	H. Kilbride-Jones, in <i>Proc. Soc. Antiq. Scot.</i> lxxix (1934-5), 202.
<i>Old Keig</i>	V. G. Childe, in <i>Proc. Soc. Antiq. Scot.</i> lxxvii (1932-3), 47-51 and fig. 5.
<i>Thornton-le-Dale</i>	See <i>Costa Beck</i> .
<i>Traprain</i>	1. S. Cruden, <i>Proc. Soc. Antiq. Scot.</i> lxxiv (1939-40), 58. 2. A. H. A. Hogg, 'The Votadini', <i>Aspects of Archaeology in Britain and Beyond, Essays presented to O. G. S. Crawford</i> (London, 1951), p. 200.

Figs. 12-13 and pl. xxiii B illustrate the rims and bases in native ware recovered from Phase I (Site F) and Phase II (Sites A and B). The same crude ware was found at all levels on all three sites, mostly in associations which indicate a date within the third quarter of the first century A.D. It is characterized by three features.

First, the standard of potting is remarkably low. The paste is badly prepared, laminated, and heavily backed with grits up to 1 cm. in size, which tend to burst through the surface and give it a lumpy appearance (see pl. xxiii B). The fabric has a brown to black surface, often with sooty material adhering, and, when brushed, takes on a leathery brown burnish. The pots are hand-made, and most of them are so unevenly fashioned that it is impossible to gauge the angle and diameter of the fragmentary rim, and to reconstruct the correct profile. There is no attempt to make a better-finished pot for a drinking-vessel or eating-bowl as distinct from the cooking-pot or storage-jar, and it seems likely that a majority of the vessels was used for cooking.

The second feature is the absence of any marked shoulder or carination in these vessels; the profile, in all cases, shows a weak curve.

Thirdly, the rim-forms show a variety which precludes the selection of any one rim as a 'type-fossil' for the site, though some attempt will be made hereafter to group them.

No. 1 represents the only pot with a complete section, but from the fragments it appears that three kinds of vessels were in use: large storage-vessels or cooking-pots

(nos. 5, 6, 13), small cooking-pots (nos. 7, 8, 12, 14), all with sooty material adhering, and bowls (27-31). Six of the bases kick out at the foot, and three are more or less dished. No. 39 is exceptional in ware and form and may be an intruder from the south. Nos. 10-13 have an upright neck and more or less flat rim-top, suggesting a weak situlate type. Nos. 15-18 have an everted, flat-topped rim. Nos. 1 and 2 show a rim swelling on the inner side, while there is a sharp angle on the inside and a slightly convex bevel to the rims of nos. 5-7. The rims of nos. 8 and 9 are slightly concave on the inside as though to seat a lid. The remaining rims cannot be classified.

There is at present little published Yorkshire material with which the Stanwick pottery can be compared. Some analogies may be found in the native wares from Costa Beck and Thornton-le-Dale, two sites in the Vale of Pickering in the North Riding, and from Langton, a little farther south in the East Riding.

The native pottery found in the ditches of the early Roman fortlet underlying the Langton Villa shows the same weakly rounded profile and splayed-out foot; a few vessels have rims with the internal bevel and many show a characteristic everted, flat-topped rim. The fabric is described as very hard, calcite-gritted, and salmon-pink in colour. A date of A.D. 71-80 is given as the bracket for this group, which is associated with a small number of first-century Roman sherds.

Comparative features in the Costa Beck and Thornton-le-Dale material are again the feebly rounded profile and rims with internal bevel, concave or convex. The Costa Beck ware is of laminated clay with copious hard, white grit; that from Thornton-le-Dale is light grey to black in colour, charged with very large white grits which are apparently calcite. A few Roman sherds and two brooches, of which one is of the pre-Flavian 'Aucissa' type, were found in conjunction with the native ware from Thornton-le-Dale, giving a lower bracket of A.D. 70. There was no associated material with the Costa Beck series. The heavy calcite backing of the pottery from these three sites appears to be peculiar to this east Yorkshire pottery, and the profuse quartz backing of the Stanwick wares is presumably its more westerly equivalent.

Mention should be made of a group of pottery from Atwick, north of Hornsea, East Riding, now in the Yorkshire Museum, York (Morfitt Collection), and published by Canon Greenwell as neolithic (*Atwick*, fig. 2), with a rather dim photograph. This is in a hard, coarse, sandy ware, very heavily gritted. The vessels appear to be large situlate jars and smaller pots with rounded shoulder, and have everted rims with an inner bevel.

Recent excavations near Driffield, also in the East Riding, have produced another group of native pottery, not yet published.¹ Some of this was found in a series of ditches containing native pottery only, but in certain other adjacent ditches it was associated with Roman wares. The ware is coarsely made with heavy grits. The rim-forms include both the flat-topped everted types and some others akin to the Stanwick series.

Farther afield, in Northumberland, certain bowls in coarse gritted ware, described by Professor I. A. Richmond and derived from Iron Age hill-fort and homestead sites (see *Ingram Hill*) possibly within the area once occupied by the tribe of the Votadini, may

¹ Information from Miss J. Phillips.

be compared with Stanwick types, though no great emphasis can be laid on the similarity of such simple and recurrent forms.

Farther north again, and still within the territory of the Votadini, is the township of Traprain Law. Mr. A. H. A. Hogg in his re-examination of the native pottery from that settlement notes that parallels do not occur for all the Traprain forms on any one related site, and this is true also of the Stanwick wares. But there is a general resemblance between the two groups, enhanced by similarity in fabric, the Traprain coarse ware being also, for the most part, heavily gritted and lumpy in appearance. In detail, close analogies are limited to a few forms: to pots with everted bevelled rims, bowls, and situlate vessels with weakly rounded profiles—in fact to the basic features which seem to be common to the Yorkshire sites.

The dating of the upper bracket of the occupation on Traprain Law has not been firmly established. Some of the small finds show a Scottish Late Bronze Age–Early Iron Age facies, and the site was occupied apparently without a break into the reign of Antoninus Pius. The pottery does not appear to vary much in character from one level to another, though better-made ware with sandy texture, which already appears in the lowest levels, is more plentiful in the upper layers.

Apart from Traprain, there do not appear to be other sites in Scotland which have produced pottery analogous to that from Stanwick and allied Yorkshire settlements. At a glance, certain pottery groups found on Scottish and related Irish sites, with Late Bronze Age–Early Iron Age associations, appear to offer analogies, but these, on analysis, are less convincing. Thus one may compare the pottery from *Loanhead of Daviot* (types 3, 4, 5, figs. 12 and 13), *Covesea* (fig. 11, 2 and 7), *Old Keig* (fig. 5), *Ballinderry Crannog 2* (fig. 2), and *Carrigillihy* (fig. 8, 6–9, 11). Here there occur two characteristic types, both more or less barrel-shaped and lacking any constriction at the neck, the one with drawn-up rim and concave or flat internal bevel, the other with a 'flat-topped' rim. The first is found at *Traprain* (figs. 55 and 56, 9–12), the second does not appear to occur there, but neither form is found at Stanwick and allied sites. Vessels with a flat rim-top are found at Stanwick, but these are situliform with upright or slightly everted rim and slight shoulder (see fig. 12, 12–17).

As to the cultural origins of this Yorkshire series, these still remain uncertain. Professor Childe has seen in the Traprain and Yorkshire groups a blending of native Late Bronze Age and intrusive Hallstatt elements.¹ These elements, however, are hardly apparent in the Stanwick wares, which entirely lack the finger-print decoration seen on a very few pots from Traprain, Thornton-le-Dale, and Langton, and where a vaguely Hallstatt element is only manifest in certain situlate profiles already mentioned; nor can its derivation be convincingly traced from any particular Bronze Age group.

With regard to its place in time, the Yorkshire complex, although found with first-century associations, is not more closely datable.

To sum up, the Stanwick pottery bears a family resemblance to that from a number of east Yorkshire sites, none of which lies very far from the sea, and again to that from

¹ *The Prehistory of Scotland* (1935), p. 250.

Traprain Law in the Scottish lowlands, which may be included in the same broad east-coast belt. The evidence of the pottery itself, crude and lacking any characteristic type, points to its makers as a people devoid of any strong ceramic tradition and leading probably a semi-nomadic life. For a further note on their work, see p. 30.

Figs. 12, 13 and pl. xxiii B

1. From Site B, layer 8. This vessel is typical of the group as described above, in ware and form, showing the weak shoulder and out-turned base which in this case gives it a small footstand. For the internal swelling of the rim, cf. *Traprain 2*, fig. 56, 15.
2. From Site B, layer 8. Part of a small jar very similar in rim-form to no. 1, in medium-gritted, pale buff to black ware, with sooty material adhering. The neck shows the pressure-marks of fingers used in moulding it. (See also pl. xxiii B, 4.)
3. From Site A, layer 4c. Rim in finely gritted grey ware with leathery brown surface.
4. From Site F, layer 2b. Rim in grey ware with pale orange surface.
5. From Site A, layer 6. Large jar; the rim is folded over to form a bead and has a flat internal bevel. Cf. *Langton*, fig. 7, 31, and, for the bevel only, 29, 38, and 39; also *Costa Beck*, fig. 1, 7, and *Traprain 2*, fig. 55, 7 and fig. 56, 21, but the last is in fine sandy ware. (See also pl. xxiii B, 8.)
6. From Site A, layer 6. Large jar in grey paste with medium grits, surface buff to grey, sooted. There is finger-pressing round the neck as on no. 2. Cf. no. 5. (See also pl. xxiii B, 7.)
7. From Site A, layer 6. Fairly fine grey ware with few grits, the surface inside is pale buff, outside burnt and sooty.
8. From Site A, layer 6. The rim is concave to seat a lid, the ware as for no. 1, buff inside and sooty outside. Cf. *Costa Beck*, fig. 1, 8; *Langton*, fig. 7, 40; and *Traprain 1*, fig. 7 (a), 7, from primary occupation deposit.
9. From Site A, layer 2. Faintly concave rim in grey paste with large grits and brown leathery surface, very uneven in form.
10. From Site A, layer 6. Small vessel with upright rim, in laminated quartz-gritted ware, very sooty on outer surface. Cf. *Costa Beck*, fig. 1, 9.
11. From Site A, layer 6. Rim as no. 12, in finely gritted sandy ware, surface black and sooty.
12. From Site A, layer 4b. Flat-topped rim of situlate-like vessel, in finely gritted grey ware, with surface burnt and sooty. Cf. *Traprain 2*, fig. 55, 5 and 20.
13. From Site A, layer 6. Large vessel with flat-topped, slightly expanding rim, in coarse gritted ware, with bumpy surface, dark brown leathery in colour. There is thumbing round the neck and vertical brushing on the body. Cf. *Langton*, fig. 7, 20 and 24, and *Thornton-le-Dale*, fig. 2, 13. (See also pl. xxiii B, 1.)
14. From Site A, layer 6. Rim in grey gritty ware with sooty material inside and out.
15. From Site F, Gully 17. Everted flat-topped rim in grey gritty paste, dark buff to black burnt surface. Cf. *Langton*, fig. 7, 19 and 34-37; *Thornton-le-Dale*, fig. 2, 3; *Atwick*, and *Driffield* (unpublished). (See also pl. xxiii B, 6.)
16. From Site A, layer 4c. Rim similar to no. 15.
17. From Site A, layer 6. Rim similar to no. 15, in bumpy ware, very heavily backed with quartz grits which protrude through the surface. (One grit is 9 mm. × 8 mm.) Cf. *Traprain 2*, fig. 56, 19.
18. From Site F, layer 2b, sealing Ditch A. Rim as no. 15, in grey laminated paste backed with grits giving a toad-skin effect. (See also pl. xxiii B, 2.)
19. From Site A, layer 6. Flat-topped rim, gritty cored ware, buff surface, horizontally brushed.
20. From Site A, layer 6. Rim in laminated grey ware with dark brown surface.



FIG. 12. Brigantian pottery, latter half of first century A.D. ($\frac{1}{2}$)

21. From Site A, layer 6. Rim in ware heavily backed with medium small grits, pale orange surface.
22. From Site F, layer 2*b*. Very uneven rim, like a waster with large grits and pale buff surface. The angle of the rim is uncertain and may possibly be like that of *Costa Beck*, fig. 1, 3.
23. From Site A, layer 4*b*. An exceptional rim-form. The ware is gritted but relatively fine, pale buff inside, burnt buff outside.
24. From Site A, layer 6. Vessel in gritty ware, orange-to-buff surface, diagonally brushed; the inside surface has shaled off. The rim is very unevenly moulded. Cf. *Costa Beck*, fig. 1, 1; *Thornton-le-Dale*, fig. 2, 10.
25. From Site A, layer 4*b*. Well-moulded rim in rather finely gritted grey paste; inside pale orange, outside smooth buff surface. Rather better made than usual.
26. From Site A, layer 4*b*. Bead-rim in better ware, sandy with brown leathery surface.

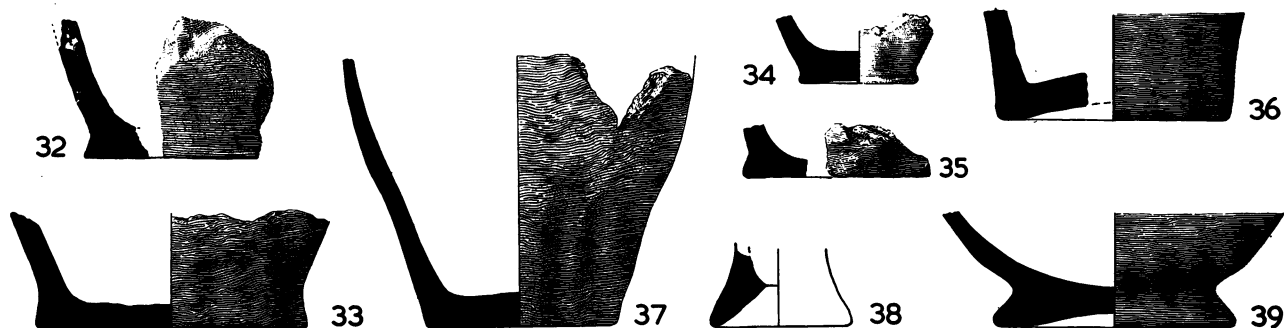


FIG. 13. Brigantian pottery, latter half of first century A.D. ($\frac{1}{3}$)

27. From Site A, layer 6. Bowl in grey to buff ware with very large grits in relation to the thinness of the wall of the pot; surface is dark buff.
28. From Site A, layer 4*c*. Bowl with very irregular rim, in grey paste with very large grits, pale buff surface.
29. From Site A, layer 6. Bowl in relatively fine sandy ware with small grits which project on the inside; pale buff to orange inside surface, dark brown leathery outside surface. Cf. *Traprain 2*, fig. 55, 1, and the bowls from the Northumbrian sites Brough Law, Chesters, and Greaves Ash (see *Ingram Hill*, fig. 5). (See also pl. xxiii B, 5.)
30. From Site A, layer 4*c*. Very roughly made bowl, the grits projecting through the surface, inside and out. (See also pl. xxiii B, 3.)
31. From Site A, layer 6. Bowl in grey paste with small grits, dark buff at rim, black overall. The surface is smoothed horizontally outside and brushed on the inside. There is thumb-pressing round the neck. Cf. two bowls from Driffield (unpublished). The rim is finely moulded.
- 32, 33, and 35. From Site A, layers 4*a* and 6. Three bases in very rough ware with bumpy, buff to black, pitted surface. All three kick out at the foot. Cf. *Langton*, fig. 7, 27; *Thornton-le-Dale*, fig. 2, 2; and *Traprain 2*, fig. 55, 4.
34. From Site A, layer 6. Small base, slightly dished and kicking out slightly at the foot; the ware has very large grits and is buff in colour.
36. From Site A, layer 6. Dished base in coarsely laminated ware, with sooty burnt dark brown surface.
37. From Site B, layer (6). Base and wall of pot in gritted ware, and buff to black pitted and burnt surface.
38. From Site A, layer 6. Small pedestal foot of pot or possibly a lid-handle, very roughly made in sandy grey ware with pale buff to orange surface, showing grits. Cf. *Langton*, fig. 7, 45.

39. From Site A, layer 6. Pedestal base in fine grey ware with pale buff surface. The footstand is well made and altogether the potting is of a somewhat higher order than is normal on the site. Pedestal bases are very rare in the northern counties and Belgic influence may here be presumed.¹ For Belgic influence at Stanwick see also above, p. 36, no. 29.

THE SWORD AND SCABBARD (1951)

(Pls. xxvi and xxvii A and B, and fig. 14)

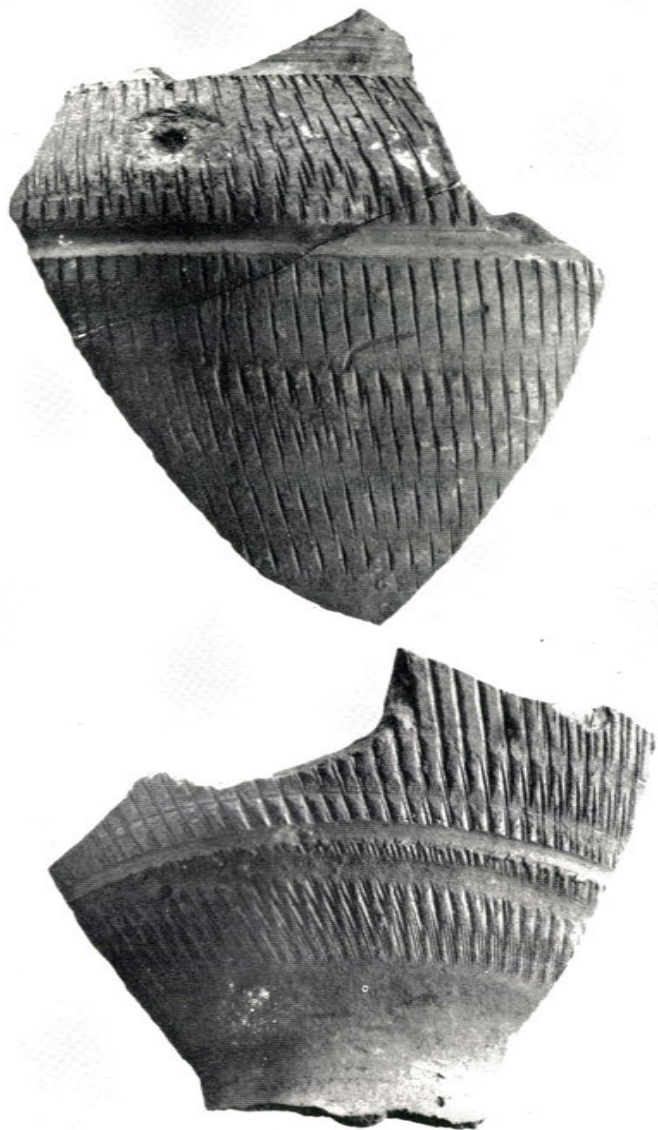
THE decorated bronze scabbard of a sword of a recognized Iron Age type was included in the first-century Stanwick hoard found outside the defences in 1844.² This scabbard belongs to a well-known bronze series which, by reason of its high survival factor, tends to dominate our picture of the Celtic warrior's equipment. Nevertheless, scabbards of this relatively costly kind must always have been exceptional; they represent the equipment of the aristocracy, or even of the upper grades of the aristocracy, and do not fairly indicate the average armoury of lesser folk. It is fortunate therefore that in 1951 an unusual chance presented us with a scabbard of more plebeian quality in a state of preservation which is in this country unique.

The circumstances were as follows. As has been recorded above, one of our first undertakings at Stanwick in 1951 was the complete clearance of a 50-ft. length of the ditch of Phase II immediately adjoining the entrance on Site B, with the explicit purpose of recovering significant finds at a point where the ancient convergence of traffic increased the likelihood of their occurrence. The task was a laborious one since the ditch was filled with heavy, sticky clay of which the lower strata were waterlogged, particularly towards the end of the ditch at the causeway itself. It subsequently became evident that muddy water had in fact been present here from the outset; for the flat rock-cut floor of the ditch sloped gently downwards towards the ditch-end and so collected at this point the moisture which percolated from the sides or drained in from the surface. In this sodden silt, 1 ft. above the basal rock—in layer 9 as shown in section, pl. xvii—lay horizontally the intact bronze-bound wooden scabbard of a sword, containing the iron sword itself (pl. xxvi). The only missing feature was the handle-grip of the sword; this was doubtless of wood or bone, and must have been missing when the sword was discarded, since it would certainly have survived in the conditions which had preserved the more fragile scabbard. The approximate date at which the sword and scabbard fell or were thrown into the ditch is indicated by the fact that (a) they lay in the deposit immediately above the rapid silt, (b) the ditch was cut in the fifties of the first century A.D., and (c) the whole work was overrun by A.D. 74. The weapon was therefore lost well within the time-bracket A.D. 50–74, with a bias towards the middle or latter part of that period. How long it had previously been in use is, as usual, an unknown factor. Professor Piggott points out below (p. 48) that

¹ For a more pronounced Belgic type, thought to date from the years immediately preceding Hadrian's Vallum at Birdoswald, see *Cumb. and West. Arch. Soc. Trans.*, n.s., xxxiv (1934), 122. The most northerly point reached by 'true' Belgic pedestal urns is Dragonby, two miles north of Scunthorpe in Lincolnshire, where several specimens were found

in 1953 with Brigantian coins, a terret, and other objects now in the Scunthorpe Museum. Information kindly supplied by Mr. R. H. B. Arrand.

² See Stuart Piggott in *Proc. Prehist. Soc.* xvi (1950), 1–28.

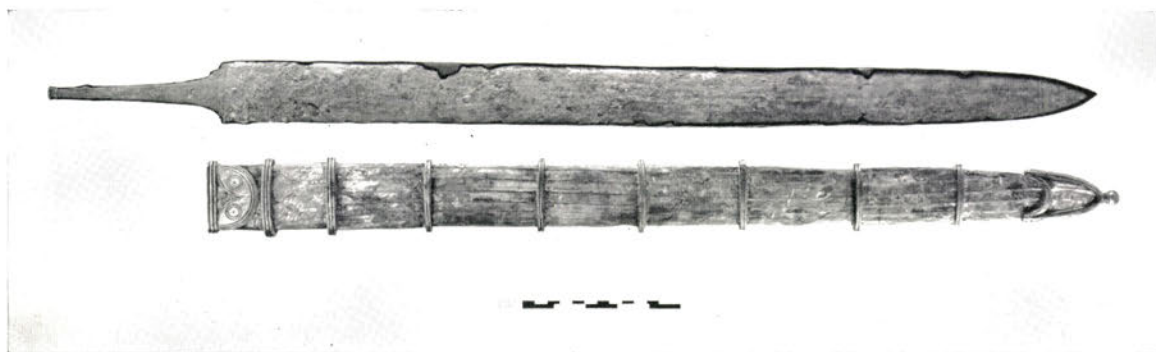


a. Sherds akin to butt-beaker, from York (Yorkshire Museum). (3)

CENTIMETRES
INCHES



b. Fragment of basketwork, from Site B



a. Sword and scabbard from Site B



b. Top of scabbard



c. Chape, three-quarter view (same scale as b)

the scabbard does not conform with the normal 'Brigantian' type; it may have reached Stanwick in the hands of a refugee from the south, or in those of one of the allies rallied by Venutius, as Tacitus tells us, for the final struggle after A.D. 69. It may, on the other hand, have formed part of a trophy on a neighbouring gate-post with the head of the executed prisoner whose skull was found a yard away in the same layer and had fallen (or been thrown) into the ditch while the flesh was still on it (below, p. 53). The fact that the sword had lost its grip and was therefore useless might be regarded as consistent with this supposition.

The preservation of the delicate scabbard of ashwood after excavation is due entirely to the skill and devoted care of Dr. H. J. Plenderleith, F.S.A., Keeper of the Research Laboratory in the British Museum, whose report on the work is here printed. Gratitude to him is beyond adequate expression. Professor Stuart Piggott, whose paper on the La Tène scabbards from the British Isles is the classic study of the subject,¹ has kindly discussed the type in a note also appended. The scabbard itself can be seen in the British Museum, to which it has been presented by Major and Mrs. M. Donovan, the owners of the land.

It may be recorded that the scabbard was found by one of the student-workers, Mr. P. N. Carter, and carefully uncovered so far as conditions permitted by Mr. Wedlake; it was then packed in wet newspaper in a stout wooden box made for it while the uncovering was still in progress, and was taken to the British Museum Laboratory by Miss Richardson on the next train. Before removal from the ground it was both photographed and drawn, but no attempt was made to reveal its details.

THE CONSERVATION OF THE SWORD AND SCABBARD

By H. J. PLENDERLEITH, F.S.A.

Sword before treatment

The sword, in its wooden scabbard, arrived at the laboratory in a damp condition covered with a thick layer of fine blue clay. It was kept damp for a few days during which time preparations were made for treatment.

Features revealed during washing

After the preparation of records by photography and X-ray, 'demudding' was begun by blowing a controlled jet of warm water on the surface. The mud came away very easily (no scraping was necessary), and the scabbard was shown to be substantially complete. It was made of wood and held together by a series of ornamental bronze rings (pl. xxvii A, B) of oval section increasing in size towards the hilt and set fairly regularly along the length. At one end was a decorated chape, and at the other a bronze hilt-mounting which proved eventually to be decorated also (pl. xxvi B). All of the metal was encrusted with black material, and lumps of this black material were found wherever the wood was

¹ *Proc. Prehist. Soc.*, as cited.

cracked. The sword was thus cemented into the scabbard so that it was quite impossible to withdraw it. X-ray examination revealed the blade to be in an advanced state of corrosion and very weak in those parts where little metal remained.

Plans for conservation

In planning a scheme of conservation, the first thing was to discover the nature of the black material. Chemical tests showed it to be composed largely of iron sulphide; it dissolved readily in acids with evolution of sulphuretted hydrogen. The original intention had been to endeavour to preserve the scabbard *in situ* on the sword possibly by hardening the waterlogged wood by alum treatment, but, as alum is an acidic substance, this would have caused disintegration beyond control, and the project was abandoned as too dangerous. At this stage it was discovered that the bronze rings were loose (possibly through the decay of a binding material) and could be withdrawn successively from the narrow end of the scabbard. With the rings withdrawn, the wood was very carefully examined for traces of fabric or leather binding, but no organic material was present except wood. The residual structure seemed to consist of two thin slats of curved wood which had been joined at the edges and could be easily separated from the sword to which they were adhering by inserting the thin blade of a palette knife. The maximum thickness of the wood was $\frac{1}{8}$ in. It was decided at this stage to make a dissection. This would release the sword which could be dealt with electrolytically, and the scabbard could then be re-assembled after cleaning, drying, and hardening.

Treatment

The dissection was done under water. Two plates of glass were cut to the size of the scabbard and, with the aid of scalpels, the wood was removed from one side of the sword and floated on to the glass plate. The sword was then reversed and the remaining wood floated on to the second glass plate. Boxes were made from tinned iron of such a size that the glass plates fitted easily into them, and these were designed to allow the specimens to be treated by a series of alcohols of increasing strength in order to eliminate water without danger of the wood's warping. The scheme was to dry the wood and impregnate it as thoroughly as possible with a plastic substance. There was a reasonable hope that this would be successful having regard to the thinness and porosity of the wood. This process, which took about a fortnight, seemed to work very well. Latterly, the alcohol was replaced by amyl acetate and the final soaking was in a solution of nitrocellulose dissolved in equal volumes of amyl acetate and acetone.

Meantime, the sword which had preserved its contours, thanks to the protection of the soft wood of the scabbard, was placed in an electrolytic bath of caustic soda (5 per cent.) and subjected to cathodic reduction. There was little change in appearance save that surface irregularities were removed. After thirty-six hours, it seemed unnecessary to proceed further, and the weapon was thoroughly washed, dried, and lacquered. It is unusual to find an iron sword of such extreme frailty, particularly along the cutting-edges, retaining its original contour so completely, and, indeed, this had to be taken into

account in finally mounting the specimen by nesting the sword into a shaped channel in order to protect the edges (pl. xxvi A).

For the reassembly of the scabbard it was necessary to prepare a shape of such dimensions that, with the old wood in position, the bronze rings would slip on from the point, i.e. that the reconstructed scabbard would conform to its original dimensions. A difficulty here arose from minor irregularities in the shape of the metal fittings. Some form of strong core was desirable, and it was eventually made as follows: A piece of wood was cut slightly thinner and narrower than the sword, and to this was affixed along its length a piece of thin steel cut from a flexible steel rule by using a bandage soaked in shellac. The core was then impregnated with a dilute solution of 'Durofix', to which the wood of the scabbard was attached on both sides by using clips and weights, the contact being made as intimately as possible. The rings could now be slipped on from the point, there being some slight 'give' in consequence of the action of the spring in the interior. With the hardening of the 'Durofix', the entire core became rigid. The only difficulty in carrying out this operation concerned the rivets which are seen in pl. xxvii B. Those attached to the hilt ornament and to the belt-carrier gave some trouble owing to the disintegrated condition of the wood. These parts were, therefore, removed from the hilt end of the scabbard and eventually pieced together with the aid of plastic wood. Some repair of the same nature was also necessary along each edge of the scabbard extending down towards the chape.

The identification of the wood proved to be rather a difficult matter owing to the smallness of the sample that could be sacrificed, but this was successfully accomplished by the Director of the Forest Products Research Laboratories, who reports as follows:

It is clear that the wood is ash: presumably there can be little doubt that it is the common English and European species, *Fraxinus excelsior*.

The prominent grain visible on the surface of the scabbard is produced by the porous spring-wood zone in each annual growth-ring contrasting with the more solid summerwood zone.

For technical reasons, ash is a very good choice for a scabbard, since it possesses outstanding toughness and strength combined with moderate weight, and unlike some species (e.g. oak) does not corrode iron. Ash is not resistant to fungal decay and only under favourable circumstances would we expect it to survive for such a long period as in the present instance.

Thus, it would appear that the Stanwick sword and scabbard are unique in the following respects: Wood, normally subject to fungoid decay, has survived, and the thin iron of the blade, much of which has been converted to oxide and sulphide (with accompanying loss of strength), has, nevertheless, retained its shape. These manifestations may very likely be associated with the presence of sulphate-reducing bacteria in a clay containing sulphates which, under anaerobic conditions, would account for the unusual quantity of iron sulphide found on the metal and encrusting all the cracks in the wood. It was possible to do justice to the conservation of this specimen because it came to the laboratory straight from excavation, covered by its original protective coating of clay which had not been allowed to dry, so that, from start to finish, the process of drying and conservation was never out of control.

THE SCABBARD

By PROFESSOR STUART PIGGOTT, F.B.A., F.S.A.

As a whole, this sword, or at least its scabbard, is unique, but we must remember that only the fortunate circumstances of discovery have enabled the original combination of metal fittings to survive as a group: more often, such items as mouthpieces or chapes from wooden scabbards have survived only in accidental isolation.

It is immediately apparent, however, that it is not of the type hitherto known in some numbers from northern England and with claims to be regarded as Brigantian, and this contrast is brought home by the nineteenth-century find of such a sword-scabbard in the great metalwork hoard from near the Stanwick complex of earthworks. These scabbards are wholly of bronze and have features linking them with the earlier English series which are themselves insular variants of well-known La Tène II types on the Continent.¹

The *mouthpiece*, with a reeded moulding round the opening and a semicircular plate beneath on the outer side, has a simple undecorated parallel in the Llyn Cerrig Bach hoard (no. 10),² and the semicircular form of the plate is still preserved in the elaborate open-work mount from a burial on Lambay Island,³ where two further binding-strips (one decorated) were also recovered, all presumably from a single wooden scabbard. In a third mount, that from Brough Castle, Westmorland,⁴ the original semicircular outline is barely recognizable in the free open-work treatment, but in fact the decorative design is contained within an oval space. To a lesser degree this also applies to the other known mount of this group, that from St. Albans.⁵

The decoration on the Stanwick mount is compass-drawn and uninspired, consisting of two vesica-shaped elements each containing a double-ring and dot, the whole contained within a triple-lined oval border. The two ring-and-dot elements are presumably a reminiscence of the studs on earlier British and La Tène II swords, and the whole design is in fact related to that of the Brough mount, though here the vesica-patterns are implicit rather than expressed, and the circle elements are in twin pairs (as on the St. Albans piece).

The comparative width of the Stanwick mouthpiece (2.2 in. over all, as at St. Albans, Battersea, Llyn Cerrig, and Brough), providing for a sword just under 2 in. broad, contrasts with the Brigantian series, only 1.5 to 1.75 in. over all, with a proportionately narrow sword.

The *belt-loop* is a wide strip of metal carried between the first and second reeded body-mounts of the scabbard, and is at the back (see fig. 14). Here again is a contrast from the centrally placed Brigantian belt-loops, made into a decorative feature on the outer face of the scabbard, but it is in agreement with the Battersea, Boxmoor, and Lincoln scabbards, which, with the mounts mentioned above, can be classed as Group V.

¹ For a survey of the swords and scabbards of the British Early Iron Age, see Piggott, *Proc. Prehist. Soc.* xvi (1950), 1-28. The Brigantian series in question is Group IV of the classification there proposed.

² C. Fox, *Llyn Cerrig Bach* (1946), p. 73, pl. xvi, 10.

³ *Proc. Roy. Irish Acad.* xxviii (Section C), pl. xxx.

⁴ *British Museum Guide to Antiq. of Early Iron Age* (1925), fig. 118.

⁵ *Proc. Prehist. Soc.* xvi (1950), pl. 11.

The characteristics of the Stanwick scabbard up to this point have been those of the Group V series which appear to be the British equivalents of the continental La Tène III group, and which may be tentatively connected with the Belgic invasions of the first century B.C., with a likely survival until the Roman Conquest. But the chape presents a puzzle, for no parallels to it as a whole are known. The narrowed U-form, and the quatrefoil ornament on the upper ends in low relief, continued at its lower edges into a sheath-like motif, are of La Tène affiliation: the motif occurs incised on a dagger-chape from Cambridge,¹ itself allied to swords and daggers of Group II, and the 'sheath' convention is implicit in the chapes from Glencotho and Hounslow,² of Group III. But the upper bar to the chape, with a shallow U-shape fitting into the deeper curve of the main outline, is without parallel, while the terminal knob above a reel moulding is a feature proper to Roman, and not to native, scabbards. A chape from Richborough, unstratified but assigned to the second half of the first century A.D.,³ has such a knob, and the V-shaped frame has a horizontal cross-bar with triangular enamel insets in a position equivalent to the shallow U-shaped cross-piece of the Stanwick chape. Knobbed chapes of a simpler and less massive form, presumably inspired by Roman models or actually of Roman manufacture, are known from a number of southern English sites in a first-century A.D. horizon.⁴

In summary, then, the Stanwick scabbard, with its wide sword, is of a type known from south-east England, and sporadically in the west and north, which is likely to be a product of Belgic armourers in the first half of the first century A.D. The terminal knob or button to the chape reflects contact with Roman ideas, either from imports before A.D. 43 or from more immediate acquaintance after that date. As the chape is narrow and pointed in the British manner, rather than broad and spatulate in the La Tène III mode of Gaul, it is on the whole likely to be a piece of British manufacture and not an import. Whatever

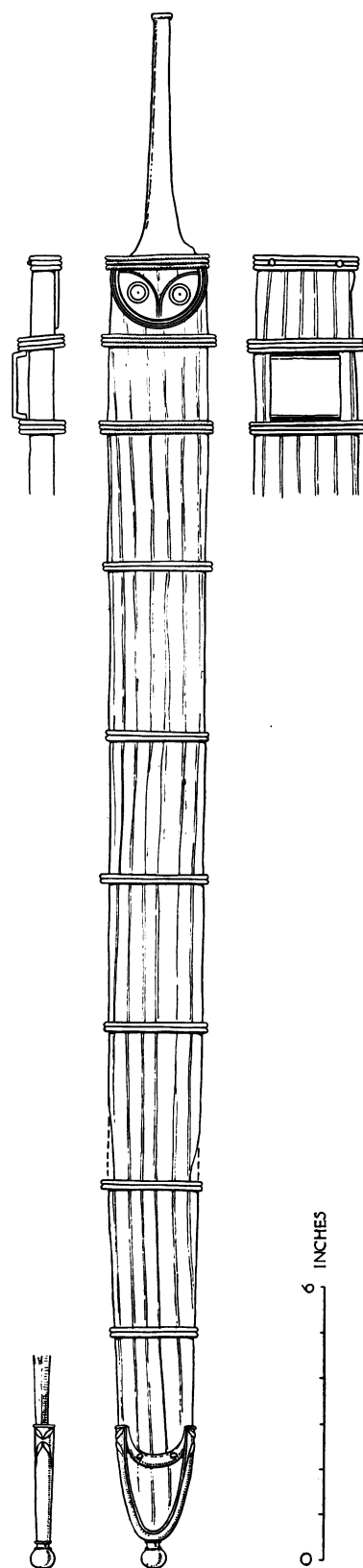
¹ V.C.H. *Cambridge*, i, 292.

² *Proc. Prehist. Soc.*, loc. cit., fig. 7.

³ J. P. Bushe-Fox, *Fourth Report on Excavations at Richborough* (1949), pl. xxxvii, 131.

⁴ *Proc. Prehist. Soc.*, loc. cit., 22 (Group VI).

FIG. 14. Scabbard from Site B



its significance in the history of the site, it cannot be regarded as a product of any local school of craftsmen in Brigantia, but must rank as an acquisition from the south-east, finding its way to Yorkshire some time in the early or mid first century A.D.

METAL AND BONE

(Pl. xxvii c and fig. 15)

1. Much-decayed bronze brooch from Site A, layer 4c (see fig. 10). Plain bow, spiral spring continuous with the bow, base of bow expanding into wings, the original form of which is uncertain. 1st century A.D.

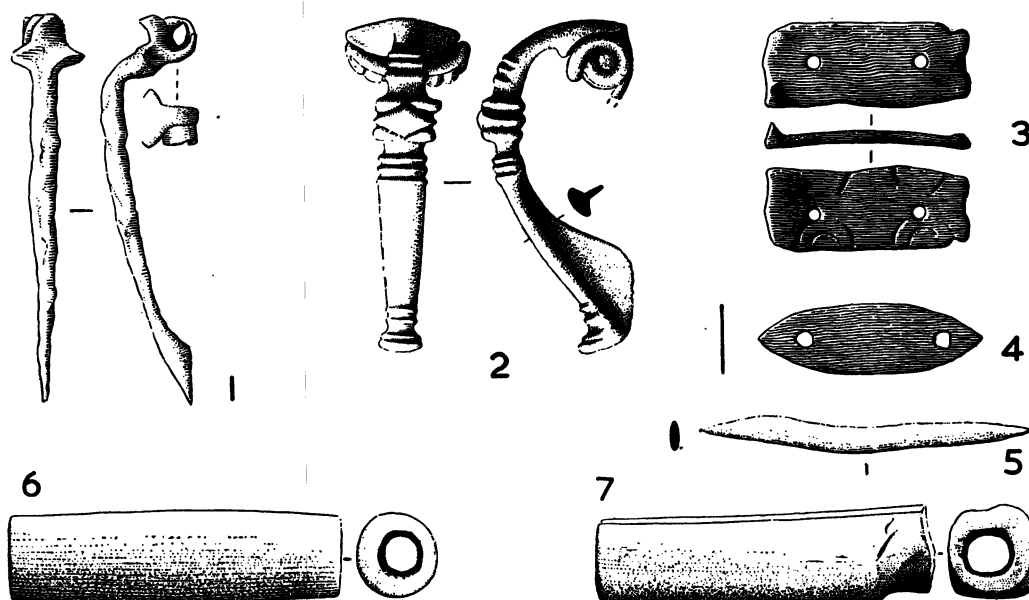
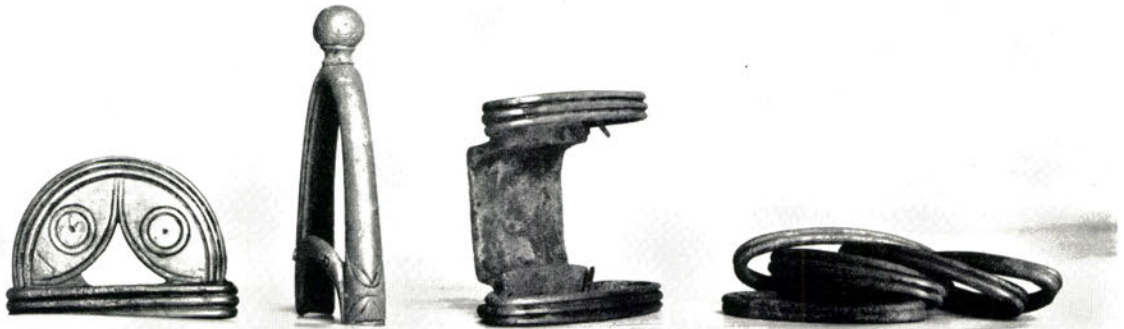


FIG. 15. Objects of bronze (1-4) and bone (5-7). 1-4 ($\frac{1}{2}$), 5-7 ($\frac{1}{2}$)

2. Bronze trumpet-headed brooch of 'northern' type from the same layer. The head-loop, if there was one, is missing. The central moulding completely encircles the bow and is of simple type, Collingwood's Ri, and the brooch is comparable with one found at Newstead in the filling of the ditch of the Early Fort which included an early Vespasianic coin lost in mint condition and other coins dating from A.D. 86. The type lasted on into the 2nd century.
3. Bronze plate with two holes for attachment, from the same layer.
4. Bronze plate perforated with two holes for attachment, from Site A, layer 4b.
5. Roughly trimmed bone pin from Site A, layer 6.
- 6 and 7. Bone knife-handle, pierced longitudinally for a tang, from Site A, layer 4c.
8. (Pl. xxvii c.) Iron shears from Site F, in the shallow Gully 1. As a basic implement, shears of this type are found in almost identical form from the Early Iron Age onwards (e.g. from Fifield Bavant, *Wilts. Arch. Mag.* xlii, 1922, p. 482 and pl. xi, 3). The present example, a foot long overall with blade and spring-handle of about equal length, would be suitable for sheep-shearing.



a.



b.

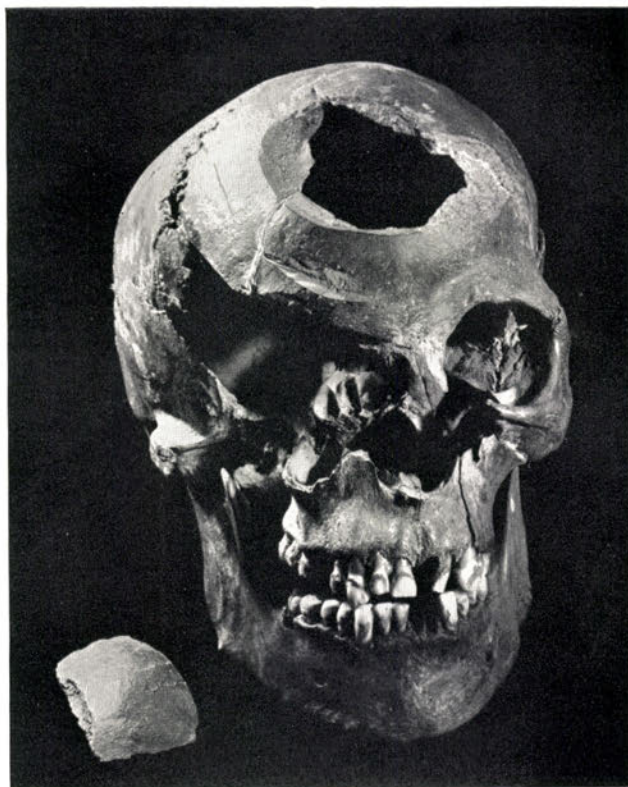
Bronze fittings from the scabbard, Site B, as dismantled during conservation



c. Iron shears on Site F



a. Puff-ball, from Site B. ($\frac{1}{4}$)



b. Skull showing wounds, from Site B



c. Oak bowl *in situ*, Site B

FLINT AND STONE

(Fig. 16)

FOUR flint scrapers were found on Site F in the same layers as Roman and Brigantian pottery. For stratification, see fig. 8.

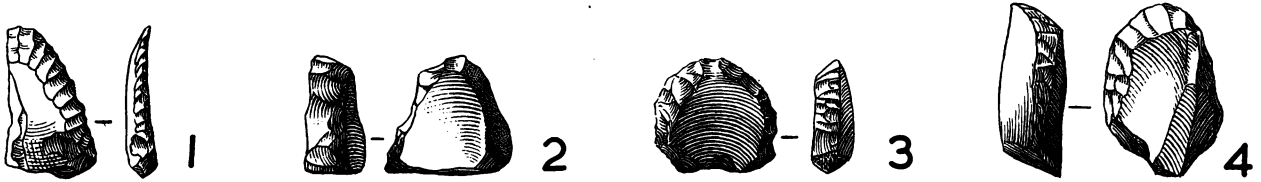
FIG. 16. Flint scrapers from Site F. ($\frac{2}{3}$)

Fig. 1. Flake of honey-coloured flint, trimmed for use as a side-scraper, from layer 2*b*.

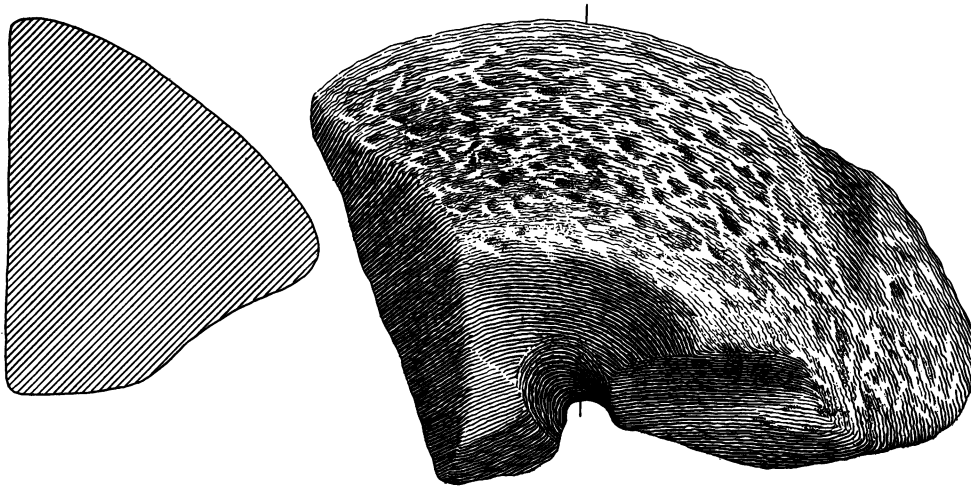
Fig. 2. Roughly flaked thumb-scraper of black flint, from the same layer.

Fig. 3. Similar scraper, from the same layer.

Fig. 4. Scraper of buff-coloured flint, from layer 2*a*.

(Fig. 17)

Only one quernstone was found, a fragment of an upper stone of beehive form, from the present surface of Site H. It seems to have been reused for some other purpose.

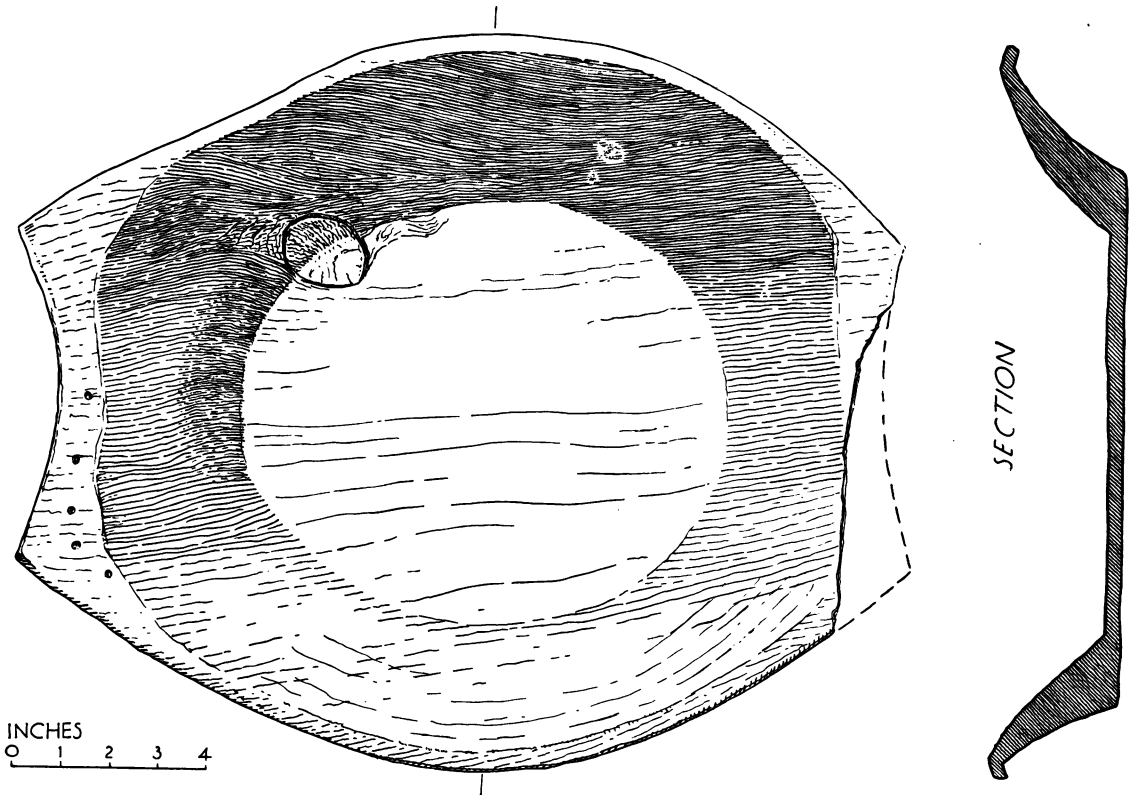
FIG. 17. Fragment of quernstone. ($\frac{1}{3}$)

Mrs. J. E. Morey of the Geological Survey and Museum has kindly examined the stone and reports that it is made from a rather coarse-grained gritstone resembling several specimens from the Millstone Grit Series of Yorkshire and Lancashire. For a general note on quernstones, see above, p. 28.

WOODWORK AND BASKETWORK

(Pls. xxv B and xxviii c, and fig. 18)

IN the waterlogged end of the ditch on Site B, in the same low layer 9 which produced the sword and scabbard, lay an oak dish or tray beneath a large boulder which had long ago split and flattened it. The wood had been reduced to the consistency of putty,

FIG. 18. Bowl or tray of oak from Site B. ($\frac{1}{4}$)

but the original shape was recoverable. At one end some object (a cloth or leather cover?) had been nailed on anciently, but only the five nail-holes survived.

Wooden troughs or dishes with projecting ends and hollowed out of a log appear to be a basic type in early days, but vary greatly in size.¹ A large example from the river Esk, Cumberland, is 5 ft. 4 in. long and 1 ft. 1 in. deep. This had a plugged hole in the bottom and was probably a water-trough. A similar trough, apparently derived from the Loch Treig crannog, Inverness-shire, was 5 ft. 5 in. long and 9 $\frac{3}{4}$ in. deep.² The Stanwick example, 17 in. long and 2 $\frac{1}{2}$ in. deep, conforms with a smaller series used doubtless for domestic purposes. Of comparable size is one from the Lochlee crannog, Ayrshire, about

¹ R. U. Sayce, 'Canoes, Coffins and Cooking-troughs', *Proc. Soc. Ant. Scot.* lxxix (1944-5), 106.

² *Proc. Soc. Ant. Scot.* lxxvi (1941-2), 57, pls. xvi and xvii.

2 ft. long and 4 in. deep;¹ a second, of like size, with plugged hole, was found at Midton, on Loch Ewe, Ross-shire, and contained the remains of butter,² while a third was discovered in the Glastonbury Lake village, 1 ft. 5 $\frac{3}{4}$ in. long and 3 $\frac{1}{2}$ in. deep.³

The majority of these troughs or dishes cannot be dated; some are chance finds from bogs, others, such as that from the Lochlee crannog, have been found with unstratified occupation material ranging down from the Scottish Iron Age through Roman to Dark Age and Viking. The Glastonbury dish shows that the type is of pre-Roman origin, and though one example (now in the National Museum of Wales) was found with pottery of A.D. 75-100 in the Roman fort at Caersws, Montgomeryshire; this too might well be of native manufacture.

In the vicinity of the trough were found the ends of two pointed stakes or boards, one of oak 15 × 2 in., the other of birch 13 × 3 in. Other scraps of roughly shaped timbering, mostly of oak but too small for further identification, came from the same layer.

The layer also produced pieces of basketwork, too fragmentary for reconstruction. The best example is illustrated (pl. xxv B); it is of hazel interwoven with willow. Fragments of a thong made of twisted willow-withies was preserved near by. Compare *The Glastonbury Lake Village*, i, fig. 115, nos. LX and LXI.

HUMAN SKULL SHOWING WOUNDS

ON Site B, in the same early layer as the scabbard and about a yard from it, was found a human skull bearing three wounds of which one at least must have been fatal (pl. xxviii B). The head had also been detached from the neck below the fourth vertebra. No other human bones were recovered from the site.

The general inference is clear. The skull is that of an enemy or prisoner who had been violently attacked with sword or axe and had subsequently been beheaded. The head had probably been placed on a pole at the gate, or on the gate-structure itself, perhaps as part of a trophy of which the sword and scabbard may have formed a part. That the skin was still on the skull when it was finally projected into the ditch is proved by the fact that the plate from the frontal bone, though completely detached from the skull, lay beside it at the time of discovery and had therefore been held to it until after deposition. The chances are that the deposition occurred when the defences hereabouts were dismantled after the capture of Stanwick by the Romans in A.D. 71-74, and the slaying of the victim cannot long have preceded that event. Evidence for the display of prisoners' heads at the gate of an Iron Age fortress is not lacking; on Bredon Hill in Gloucestershire a number had been thus exhibited.⁴ Whether in the present instance the victim was a native or an unlucky patrol from a Roman unit is beyond the power of unromantic modern science to determine.

¹ R. Munro, *Ancient Scottish Lake-Dwellings* (1882), p. 93 and fig. 44.

² *Proc. Soc. Ant. Scot.* xxviii (1893-4), 18 (not illustrated).

³ A. Bulleid and H. St. George Gray, *The Glastonbury Lake Village* (1911), i, 345 and fig. 125.

⁴ T. Hencken in *Arch. Journ.* xcv (1938), 54-57.

Dr. W. C. Osman Hill has very kindly examined the skull, and his report is as follows:

The remains consist of the cranium with mandible and first four cervical vertebrae. The head had evidently been severed at the level of the intervertebral disk between the fourth and fifth vertebra, quite cleanly, as no injury to the bones has occurred.

All the bones are well preserved. On receipt the skull was still embedded in a mass of dark grey mud which also filled the cranial cavity and the space between the jaws. On cleaning up, much of the face came away and individual cranial bones became disarticulated, but it was possible to reassemble the major part of both cranium and face with the exception of (*a*) a flattish slice from the right half of the frontal bone which was received separately and does not accurately fit the discontinuity in the vault (this is discussed further below), and (*b*) a number of small fragments, the majority of which are chippings from facial bones of the left side but whose absence is of little significance in determining the proportions of the head as a whole, since the corresponding parts are reasonably complete on the right side. All the bones are stained a dark olive-brown, with an additional ochre-coloured patina over the floor of the middle cranial fossa.

INJURIES

Evidence of no less than three incised wounds are detectable on the surface of the skull. These give the impression of three successive attempts to inflict a mortal injury, as all the wounds are parallel to each other as if directed from the same source with the same instrument wielded. The first cuts across the bridge of the nose on the right side, chipping the bone and extending in a straight line laterally as far as the cranial suture. Parts of the face, including the orbit, were evidently so fractured by this wound that they are too small to reassemble with accuracy. Above this is a shorter wound confined to the frontal bone just above the supraorbital ridge, but involving the loss of the outer table down to the diploë. It is exactly parallel with the more inferior injury. Finally we find what was probably the fatal wound. This is also parallel to the other two, but has sliced off an oval plate of the frontal bone 3 in. in its major diameter by 2 in. across. Part of this is represented by a loose fragment recovered with, but separate from, the remainder, but the fragment measures only $2\frac{1}{4}$ in. by $1\frac{1}{2}$ in. and therefore does not completely close the aperture, the rest being presumably in the form of unrecognizable fragments or splinters.

ANTHROPOLOGICAL CHARACTERS

1. *Craniometry*

On p. 55 are the principal measurements of the skull (Table I) and the indices derived therefrom (Table II).

2. *Conclusions regarding the skull*

The skull is that of a well-developed adult man of early middle age. All the permanent teeth have been erupted except the lower wisdoms, and the erupted teeth all show some considerable wear, with the sole exception of the upper wisdoms. These facts, however, are insufficient to tie down the age to a particular decade in view of the known variability

in regard to third molar eruption. The second lower molar on the left side had been lost some time before death, for its alveolus has been absorbed. The same tooth on the other side is highly carious, the loss of its fellow being therefore, in all likelihood, due to the same cause, no doubt aided by surgical interference. All the cranial sutures are still visible externally, but to a lesser degree internally, especially in the case of the lambdoid and sagittal sutures.

TABLE I

Maximum cranial length:		Orbito-maxillary height	46
Glabella—maximum occipital point	182	Incisive height	23.2
Glabella—inion length	181.7	Palatal length	48.5
Maximum cranial breadth	138.8	Palatal breadth	34.6
Auricular height	128.8	Upper molar length	30
Basion bregma height	142.5	Maxillo-alveolar width	63.6
Least frontal breadth	88.5	Prosthion-alveolon	54
Maximum frontal breadth	117.5	Sagittal curve	382
Bimastoid breadth	128.2	Frontal arc	130
Bizygomatic breadth	127	Parietal arc	125
Vertex-prosthion	156.5	Occipital arc	127
Vertex-gnathion	196.4	Circumference	510
Nasion-gnathion	112	Mandibular length	105
Nasion-prosthion	68	Condylar height	64
Nasion-basion	102.8	Coronoid height	70
Nasion-acanthion	48.2	Bicondylar breadth	121.7
Nasal breadth	24.8	Bigonial breadth	109.3
Orbital height	31.7	Symphyseal height	36
Orbital breadth	36	Height of body opposite M ₁	32.2
Interorbital breadth	22	Breadth of ramus	34.6

TABLE II

	<i>Indices</i>	<i>Remarks</i>
Length-breadth (cranial)	76.2	Mesocranial (just)
Breadth-height (Basion-bregma)	102.51	Acrocranial
Length-height (Basion-bregma)	79	Hypsicranial
Length-aur. height	70.8	Hypsicranial
Total facial	88	Mesoprosopic
Superior facial	53.5	Mesene
Orbital	88	Hypsiconch
Nasal	51.3	Chamaerrhine (just)
Maxillo-alveolar	117.5	Brachyuranic
Palatal	71.4	Leptostaphyline
Mandibular	86.5	

The cranial bones are heavy and thicker than in modern skulls.

As regards racial features, the skull has the general aspect, as usual in specimens of similar provenance, of the Nordic type. The cranium falls just outside the dolichocephalic category, being at the highest limit of mesocephaly, but it is high-vaulted, robustly built, with strong supraorbital ridges and marked progenia. The characteristic prominence of the occiput and scowling orbits met with in Mediterranean skulls are lacking, whilst the general form of the brain-case rules out the Alpine type and its variants.

On geographical considerations, the skull falls into the area occupied by the Brigantes.

Compared with members of this tribe reported on by Buxton¹ the cranial indices are similar as regards the length-breadth ratio (76.2 as against 75.7) but the vaulting is greater (79.0 as against 71.4 as compared with the length and 102.5 as against 104.4 as compared with the breadth). The basal length is very nearly identical with the average of the Brigantes.

In the face the differences are more marked, for though the orbits are similar in both, the face of the present skull is relatively much broader, the total index falling into the mesoprosopic category and the upper face mesene. The nose too is relatively broad, due to the heavy character of the maxillae, which also determine the brachyuranic feature denoted by the maxillo-alveolar index. The last index is in curious contrast with the leptostaphyline palatal index, the disharmony being explained by the robustness of the alveolar arcades, and also their vertical extent; these encroaching on the territory of the hard palate, which is high and relatively narrow.

In conclusion a few striking non-metrical characters demand some notice. Firstly, there is an asymmetry of the face that seems to be due to the post-mortem deformation, possibly preceded by damages caused at the time of the fatal blow. This involves a rightward swing of the lower face in relation to the nasal bones and orbits, and is associated also with a vertical fracture of the left maxilla. Nasal bones are long, narrow, and prominent, and retain their individuality. The external nose in life was evidently prominent. Below there is a well-developed nasal spine and a sharp sill to the floor of the nasal fossa (oxycraspedoty). Incisor and canine fossae are lacking from the huge maxillae. The teeth have already been mentioned as regards wear, but it may be added that the usual edge-to-edge occlusion of the period is present. Upper premolars are two-rooted and the lower single. The mandible shows a prominent bilobed mental protuberance. It articulates in a deep glenoid fossa, posterior to which is, on each side, a very long and robust styloid process. Mastoid processes are of moderate dimensions. The occiput is heavily constricted, with a strongly developed but low-placed external median protuberance.

OTHER FRAGMENTS OF HUMAN SKULLS

Small fragments of human skulls were recovered from the ditches on Site A (layers 4b and 6, three pieces), and Site H (one piece from the lowest silt).

BIOLOGY

THE biological material was submitted to the British Museum (Natural History) for analysis, and gratitude is due in particular to Dr. F. C. Fraser, Mr. A. G. Davis, Mr. E. B. Britton, Mr. J. P. Harding, and Mr. D. E. Kimmins for much time and trouble expended upon the task. The report is subdivided into Animal bones, Coleoptera, Mollusca, and Ostracods.

¹ L. H. D. Buxton, 'The Racial Affinities of the Romano-Britons', *Journ. Roman Studies*, xxv (1935), 35-50.

(a) ANIMAL BONES

The bones submitted for report were all from layers contemporary with or shortly subsequent to the construction of the defences. In other words, they may be ascribed to the second half of the first century A.D. The following notes have been supplied by Dr. Fraser.

A very large quantity of animal bones was recovered from the earthworks at Stanwick; the animals represented in the collection are: ox, horse, goat, sheep, pig, red deer, roe deer, hare, and dog.

Most of the bones are very fragmentary and it has not been possible to take a large number of measurements for comparative purposes.

Ox bones are by far the most numerous on every site. Horse, sheep or goat, pig, and dog bones are very much less abundant, while bones from deer and hare are very scarce. Ox, horse, sheep or goat, and pig bones are fairly evenly distributed through all layers of each site.

All the ox bones are about the size of those of a Chillingham ox or smaller and, with the small curved horn cores in the collection, are similar to those of *Bos longifrons*.

A horse skull from Site D is from a small animal, very slightly larger than a New Forest Pony. A second skull from Site B is more complete and considerably longer than that of the New Forest Pony. It is not very much shorter than the skull of the thoroughbred stallion 'St. Simon'. The various limb bones that could be measured came from animals about the same size as, or slightly larger than, a New Forest Pony.

Goat is represented by a single horn core and sheep by a frontlet bearing both the horn cores. It is not possible to identify the remaining bones as either sheep or goat. These bones are not very numerous and are all from animals smaller than the Scotch Ram with which they were compared.

Pig bones are also few in number and from small animals.

Red deer is represented by very few specimens: three phalanges from Site D and two fragments of antler and part of an upper jaw from Site A.

A single metatarsal from a Roe deer was found on Site B. This bone was from an animal slightly larger than any of the specimens in the British Museum collection with which it was compared.

Two limb bones from a Hare are from Site D.

Two Dog limb bones from Site D are slightly larger than those of a Cocker Spaniel with which they were compared; limb bones from Site B are from a slenderly built animal approximately the size of a greyhound.

Two worked bones were found in the collection. An Ox metapodial from Site A shows signs of having been cut at the proximal end, and a fragment of bone, probably Ox and also from Site A, has an artificially smoothed edge with a groove cut across one end.

No table of percentages can claim any sort of precision, but the following may serve to indicate vaguely the proportionate occurrences of the animals represented:

Ox	.	.	.	.	.	.	.	40 per cent.
Sheep	.	.	.	.	.	.	.	23 „

Pig	16 per cent.
Horse	13 "
Dog	4 "
Roe deer	1 "
Red deer	1 "
Hare	1 "

(b) COLEOPTERA

Mr. D. E. Kimmins reported as follows:

From Site D ditch (pl. xvii), layer 11: leg of *Geotrupes* sp. (Scarabaeidae), dung-beetle which digs tunnels $1\frac{1}{2}$ –2 ft. deep.

From Site D ditch, layer 10: elytron (wing-sheath) of *Hydrophilus piccus* (Hydrophilidae), the Giant Water Beetle which no longer occurs north of Lincolnshire; sternum of *Geotrupes* sp.

From Site D ditch, layer 9: elytron of *Harpalus aeneus* F. (Carabidae); thorax of *Agriotes* sp. (Elatridae); elytron of a weevil (Curculionidae); elytron of *Donacia vulgaris* Tsch. (Chrysomelidae); elytron of *Donacia sericeal*.

Note: *Donacia* spp. occur on aquatic plants, rushes, sedges, &c.

Little other evidence was forthcoming as to insect life, but a number of small caddis cases (Trichoptera) occurred in the ditches on Site B, layer 8, and Site D, layers 8 and 13. The form of the cases was not sufficient to determine the family.

(c) MOLLUSCA

Mr. A. G. Davis reports that the aquatic mollusca submitted to him, mostly from Sites B and D, are all forms which inhabit ditches, ponds, and marshy places and are chiefly of species which can live in good or poor habitats, clear water or foul. All the species no doubt exist at the present time in the neighbourhood. The land mollusca may have lived in the vegetation associated with the ditch when it was dry and covered with herbage. Some could have been carried in with sediments during the process of silting, but they are all of damp-loving species.

(i) Site B (pl. xvi)

Layer 10 (rapid silt): *Sphaerium* sp. indet.

Layer 9 (the layer which produced the scabbard): *Lymnaea peregra*, *Planorbis albus*, *Sphaerium corneum*, *Pisidium casertanum*, *Pisidium* sp. indet., *Carychium minimum*.

Layer 8: *Lymnaea peregra*, *Planorbis albus*, *Sphaerium corneum*, *Pisidium casertanum*, *Vallonia costata*.

Layer 6: *Cepaea hortensis*, *Arianta arbustorum*, *Lymnaea peregra*, *Planorbis albus*, *Segmentina complanata*, *Pisidium amnicum*, *Pisidium casertanum*, *Pisidium* sp. indet., *Vallonia costata*, *Trichia hispida*.

(ii) Site D (pl. xvi)

Layer 13 (low silt): *Arianta arbustorum*, *Cepaea nemoralis*, *Lymnaea peregra*, *Sphaerium corneum*, *Pisidium casertanum*, *Planorbis albus*, *Valvata cristata*, *Retinella nitidula*.

Layer 12: *Sphaerium corneum*, *Lymnaea peregra*, *Cepaea hortensis*, *Trichia hispida*, *Arianta arbustorum*.

Layer 11: *Sphaerium corneum*, *Bithynia tentaculata*, *Cepaea hortensis*, *Lymnaea peregra*, *Succinea* cf. *putris*.

Layer 10: *Bithynia tentaculata* and *opercula*, *Lymnaea peregra*, *Planorbis* sp. indet., *Succinea* sp. indet., *Chara*.

(d) OSTRACODS

Ostracods, a sub-class of Crustacea of minute size found in fresh and salt water, have been identified by Mr. J. P. Harding in the ditches on Sites B and D, as follows.

(i) Site B

Layer 9: *Eucypris zenkeri* (Chyzer), *Herpetocypris reptans* (Baird), *Ilyocypris gibba* (Ramdohr).
 Layer 8: *Candona candida* (O. F. Müller), *Cypria ophthalmica* (Jurine), *Eucypris zenkeri* (Chyzer), *Ilyocypris bradyi* Sars.

(ii) Site D

Layer 12: *Candona candida* (O. F. Müller).
 Layer 8: the same, with *Cypria ophthalmica* (Jurine), *Eucypris zenkeri* (Chyzer), *Herpetocypris reptans* (Baird), and *Ilyocypris bradyi* Sars.

BOTANY

WE are very greatly indebted to Sir Edward Salisbury, C.B.E., F.R.S., and his staff—in particular, Mr. C. R. Metcalfe—at the Royal Botanic Gardens, Kew, for reports on the botanical material submitted to them. The material was derived from the ditches on Sites B and D (Phases II and III), in which the sodden clay had preserved it to a remarkable degree, including actual leaves at low levels. Similar identifications from charcoal on Sites F and H are reported by Mrs. F. L. Balfour-Browne, of the British Museum (Natural History).

The abundance of willow, pond-weed, and, to a less extent, birch suggests, at any rate in part, a damp environment; and oak, ash, hazel, elder, and hawthorn fill out the picture of mixed woodland. An example of cherry, found in a deep layer (12) on Site D, is noteworthy. For a general note on these and other factors see above, p. 27.

The most astonishing survival is that of a puff-ball, from the low layer (9) on Site B which produced the sword and scabbard. The report states that 'the capillitium and spores were perfectly preserved, and our mycologist was able to identify the specimen as *Bovista nigrescens* Pers.'. See pl. xxviii A. A recognizable puff-ball nineteen centuries old is an unusual phenomenon, and the specimen in question has been deposited by request in the British Museum (Natural History).

Selected examples are here listed in relation to the sites and layers from which they are derived. For the stratigraphical significance of the layers, see pl. xvi (Sites B and D).

(i) Site B

Layer 9: willow, *Salix* sp.; hawthorn, *Crataegus oxyacantha*; elder, *Sambucus nigra*.
 Layer 8: willow, *Salix* sp.
 Layer 7: birch, *Betula* sp.

Layer 6: oak, *Quercus* sp.; hazel, *Corylus avellana*.

Layer 5: oak and willow, as above.

(ii) *Site D*

(a) WOOD SAMPLES

Layer 13: willow, *Salix* sp.

Layers 11–12: willow; ash, *Fraxinus excelsior* L.; cherry, probably *Prunus avium* L. or *Prunus padus* L.¹

Layer 10: willow; ash; hazel, *Corylus avellana* L.; elder, *Sambucus nigra* L.

Layer 9: willow.

Layer 8: willow; probably blackthorn, *Prunus spinosa* L.

(b) LEAVES, &c.

Layer 13: willow, *Salix* sp.; a pond-weed indistinguishable from *Potamogeton natans*; the fruiting head of a member of the Compositae, identified at the herbarium as that of the Spear Thistle, *Cirsium vulgare* (Savi) Ten; three mosses identified at the herbarium as (i) the Common Hair Moss, *Polytrichum commune*; (ii) *Hypnum cupressiforme* Hedw., var. *Ericetorum* B. and S.; (iii) *Hylocomium splendens* (Hedw.) B. and S.

Layers 11–12: willow, probably willow, *Salix caprea* L.; a pond-weed indistinguishable from *Potamogeton natans*.

Layer 10: willow, *Salix* sp., possibly *Salix atrocinerea* Brot.; willow, possibly willow, *Salix caprea* L.; a pond-weed as above; bark of willow, *Salix* sp.

Layer 8: willow, possibly *Salix atrocinerea* Brot.

(c) POLLEN

Layer 6: tentatively identified as that of *Pinus* sp. and birch, *Betula* sp.

¹ [Pliny, *Nat. Hist.* xv, 25, declares that cherries were first introduced into Britain after the middle of the first century A.D. But if he was in any sense correct he was probably referring to the sweet cherry, *Prunus avium*; it cannot be assumed that types of sour cherry were not here before. The

Stanwick examples lack clear specific definition but at least indicate that a cherry had reached northern England before the Roman conquest. See generally A. H. Hoare, *The English Grass Orchard* (London, 1928), pp. 18–20.—R. E. M. W.]

APPENDIX

THE GEOGRAPHY OF BRIGANTIA

By PROFESSOR I. A. RICHMOND, F.B.A., F.S.A.

THE geographer Ptolemy (*Geogr.* ii, 3, 10) describes the Brigantes as 'below the *Selgovae* and *Otadini*, extending to both seas', and enumerates nine places within their territory, a number larger by three than he accords to any other British tribe. This supports the description by Tacitus (*Agr.* 17) of the tribe as 'largest in numbers of the whole province'. The places given by Ptolemy include *Vinovium* (Binchester), *Caturactonium* (Catterick), *Isurium* (Aldborough) and *Eburacum*, *Leg. VI Victrix* (York). These are well known; they occur in the Antonine Itinerary (465-6) and, excepting *Isurium*, in the Ravenna Cosmography (*Archaeologia*, xciii, 18, 133-7). In addition there are given *Epeiacum*, for which no satisfactory etymology or identification has yet been proposed; *Calagum*, which is presumably *Calacum* (for the form see Jackson, *Journ. of Roman Studies*, xxxviii, 55) of the Antonine Itinerary (481, 4), identified with Burrow in Lonsdale; *Rigodunum*, the name of a native place in the Lancaster area, and *Olicana*, of which the position suggests Ilkley, though the resemblance of the two names seems to be accidental (W. H. Stevenson, *E.H.R.* xxvii, 17, note 115). Finally, there is *Camulodunum*, situated in south-west Yorkshire and identified with Almondbury, the name being transferred to Slack in the Ravenna Cosmography (*Archaeologia*, xciii, 27, s.v.).

None of these names includes the north-western area of Cumbria commonly reckoned to the tribe (cf. Haverfield and Macdonald, *The Roman Occupation of Britain*, 120, or Birley, *Dumfriesshire and Galloway Trans.* xxix, 52). The basis for this is the association with the area of two dedications to Brigantia, who is plainly the guardian deity of the territory, though her name is not known to have been used also as a geographical term. One of these, from Birrens, north of Hadrian's Wall (*C.I.L.* vii, 1062: for its date see *Journ. of Roman Studies*, xxvii, 208), takes the form of a relief of the goddess as a territorial deity; the other (*C.I.L.* vii, 875, cf. *E.E.* ix, p. 604), from near Castlesteads, is a dedication. An equally significant dedication comes from South Shields (*E.E.* ix, 1138). The others (*C.I.L.* vii, 200; *E.E.* ix, 1120) come from the Calder basin, one (*E.E.* vii, 920) preserving the masculine form *Bregans* (Steph. Byz., *de Urb. et Pop.*, s.v. *Briges*), which occurs as *Brigans* on the Mumrills stone (*C.I.L.* vii, 1091, cf. *E.E.* ix, p. 623) of a Brigantian serving in the Second Cohort of Thracians.

Two natural features seem to preserve the names of subdivisions of the tribe. The *Portus Setantiorum* (Ptol. *Geogr.* ii, 3, 2) in Lancashire would seem to include the name of the people of the Fylde. The *sinus portuosus Gavrantuicum* (Ptol. *Geogr.* ii, 3, 4), Bridlington Bay (for name and meaning see *Journ. of Roman Studies*, xxxviii, 57). The name of a third bay, *Dunum Sinus*, the Tees estuary, presumably perpetuates the native hill-fort (*dunum*) on Eston Nab, which forms the outstanding local land-mark. Finally an altar from Beltingham, in the South Tyne valley, mentions the *Textoverdi* (*C.I.L.* vii, 712, cf. C. E. Stevens, *Arch. Ael.* 4, xi, 138-45) as another local unit.

Returning to the place-names, it may be remarked that six out of the nine denote places which are well known as Roman foundations of the Flavian age, *Eburacum* being brought up to date by mention of the Sixth Legion, which arrived in A.D. 122. *Camulodunum* and *Rigodunum*, which mean the fortress of *Camulos* and 'the royal fortress' respectively, are plainly derived from native hill-forts. Large hill-forts are so rare in the area of the Brigantes that Almondbury near Huddersfield becomes a reasonable identification for *Camulodunum*, while *Rigodunum*, which lies somewhere

in the Lancaster area, might attractively be assigned to Ingleborough. *Camulodunum* commemorates *Camulos*, the war-god worshipped among the *Remi* of northern Gaul (Lambrechts, *Contributions à l'étude des divinités celtiques*, 129), and presumably brought to Britain by the *Catuvellauni*, who belong to the same tribal group. This would seem to take him far afield, but a still wider distribution of this worship is indicated by *Camulosessa* (*Archaeologia*, xciii, 27, *s.v.*), 'the seat of *Camulos*', in the Ravenna list, which is derived from one of the hill-tops of southern Scotland. That Belgic adventurers brought the names thither is not proved archaeologically, but is not in itself improbable. As for the sources of the work, it would not be unreasonable here to recognize road-lists as supplying details from the main north road, and from a north-westward branch (for this road, see *Cumberland and Westmorland Trans.* 2, xlvi, 146) through Ilkley (*Olicana*) to Burrow (*Calacum*). *Camulodunum* and *Rigodunum* seem to stand by themselves as native centres. If they had already given their names to Roman forts within sight of them, it would seem odd that no other important Roman forts in the vicinity are mentioned, as, for example, Manchester (*Mamucium*), one of the most important road-junctions in the north. This state of affairs may be compared with that among the *Selgovae* (*Geogr.* ii, 3, 6), where *Uxellum*, 'the Lofty', and *Corda*, 'the hosting-place' plainly refer to native sites. The suggestion may therefore be that Ptolemy based his work upon sources that were derived partly from road-books and partly from a list of important native sites, using the latter only when the road-books with their distances failed him.

The distribution of the Bronze Age inhabitants of the area, as mapped by Sir Cyril Fox (*Personality of Britain*, 4th edn., map C), gives a clear indication of the divisions of the territory into units concentrated upon the lighter soils. The York area, Airedale, the Calder basin, Upper Wharfedale, the Aldborough area, Cleveland, middle Teesdale, Weardale, Lower Tynedale, the Eden valley, the Cumberland plain, Furness, the lower Lune and Ribble valleys, and Rossendale, form between them fifteen sharply defined districts where regionalism might flourish and where the basic population of the tribal septs, however these were governed, must have been grouped even in the Iron Age. The available Roman geographical sources are too general in scope and too divorced from tribal administration to reflect such detail. But it is of fundamental value for understanding the growth of the Brigantes as a coalition of isolated groups in an uneasy balance, united by the marriage connexions of the great families and explaining both the ever-changing face of Brigantian politics and the basic reliance of Cartimandua, *pollens nobilitate* (*Tac. Hist.* iii, 45), upon her family connexions.

INDEX

- Agricola, 21.
 Agriculture, absence of evidence for, 27 et seqq.
 Alcock, Leslie, 2, 15.
 Almondbury hill-fort, Huddersfield, v, 19, 22.
 Animal bones, 57.
 Aulus Didius, 19.

 Basketwork, 53.
 Belgic plates, absence of, at Stanwick, 12.
 Birley, Eric, 20, 21, 22.
 Botany, 59.
 Bricks, Roman, from Stanwick, 11, 13.
 'Brigantian' ware, 9, 13, 34, 38 et seqq.
 Britton, E. B., 56.
 Brooches, 50.
 Brown, H., 2.
 Bruce, J. C., 2.
 Burdon, G. H., 2.
 Butt-beakers, 9, 11-13, 31 et seqq.

 Caratacus, 19, 20.
 Carter, P. N., 45.
 Cartimandua, Queen of the Brigantes, v, 19-21, 23.
 Casson, T. E., 19.
 Chariot-burial(s) at Stanwick, 2.
 Chitty, Mrs. A. M. H., 21.
 Chronology, v, 17 et seqq.
 Coleoptera, 58.
 Cookson, M. B., 2.
 Corder, Dr. Philip, 12.
 Cunobelin, 3, 25.
 Curwen, Dr. E. C., 28.

 Daniel, Dr. Glyn E., 2.
 Davis, A. G., 56.
 Day, D. F., 15.
 De Normann, Sir Eric, 2.
 Donovan, Mr. and Mrs. M., 2, 45.

 Flint scrapers, 51.

 Fox, Sir Cyril, 2, 28, 29, 48.
 Fraser, Dr. F. C., 56.

 Gavrantuices, The, 22.
 Geography of Brigantia, 23, 61.
 Grimes, W. F., 28.

 Harding, J. P., 56.
 Henah Hill, 13, 26.
 Hencken, Mrs. T., 53.
 Hill, Dr. W. C. Osman, 54.
 Hogg, A. H. A., 22.

 Kendrick, Sir Thomas, 2.
 Kenyon, Miss K. M., 12.
 Kimmins, D. E., 56.

 Johnson, H., 2.
 Johnson, H. H., 2.
 Johnson, J. M., 2.
 Jurassic Zone, 28, 30.

 Leland, I.

 MacLauchlan, Henry, 1, 2, 18.
 Miller, Stuart, 23.
 Mollusca, 58.

 Newbould, Miss T. M. I., 2.
 North Ferriby, 12.

 O'Neil, B. H. St. J., 2.
 O'Rahilly, T. F., 22, 30.
 Ostorius Scapula, 18.
 Ostracods, 59.

 Parisi, The, 22.
 Petillius Cerialis, v, 18, 21.
 Phillips, Miss Judith T., 28.
 Piggott, Professor Stuart, 2, 30, 44, 45, 48 et seqq.
 Plenderleith, Dr. H. J., 45.
 Pottery, 7, 9, 11-13, 23, 29, 30, 31 et seqq.
 Pryce, T. Davies, 12.

 Ptolemy the Geographer, 21-22, 61.

 Quernstones, 27-28, 51.

 Richardson, Miss K. M., 2, 45.
 Richmond, Professor I. A., 19, 21, 61.

 Samian ware (*Terra Sigillata*), 7, 9, 11, 31-32.
 Shears, 29.
 Site A, 9.
 Site B, 14.
 Site C, 13.
 Site D, 14.
 Site E, 6.
 Site F, 7.
 Site G, 7.
 Site H, 15.
 Skull, human, showing wounds, 53.
 'Slighting' of the rampart, v, 11, 18, 23.
 Strategic factors at Stanwick, 23 et seqq.
 Structural sequence of the Stanwick earthworks, 3.
 Sword and scabbard, 44 et seqq.

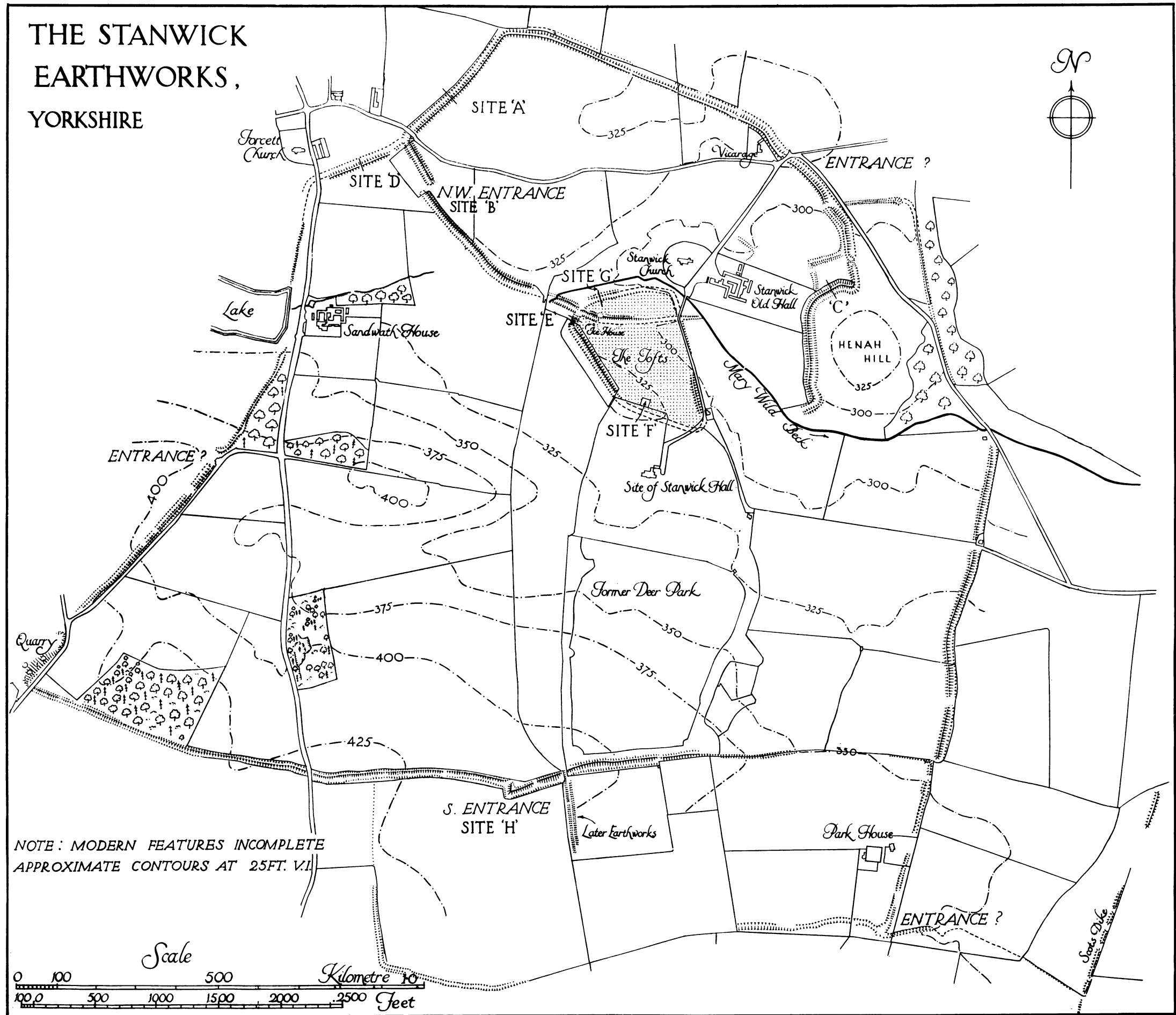
 Tacitus, 18 et seqq.
 Tactical factors at Stanwick, 25 et seqq.
 Tofts, The, 3, 6-9, 15, 17, 26.

 Varley, Professor W. J., 19, 23.
 Venutius, King of the Brigantes, v, vi, 19-23, 25.
 Vettius Bolanus, 21.

 Wedlake, W., 2, 45.
 Willmot, G. F., 12.
 Wooden bowl, 52.
 Wooler, E., 1.
 Wright, J. A., 2.

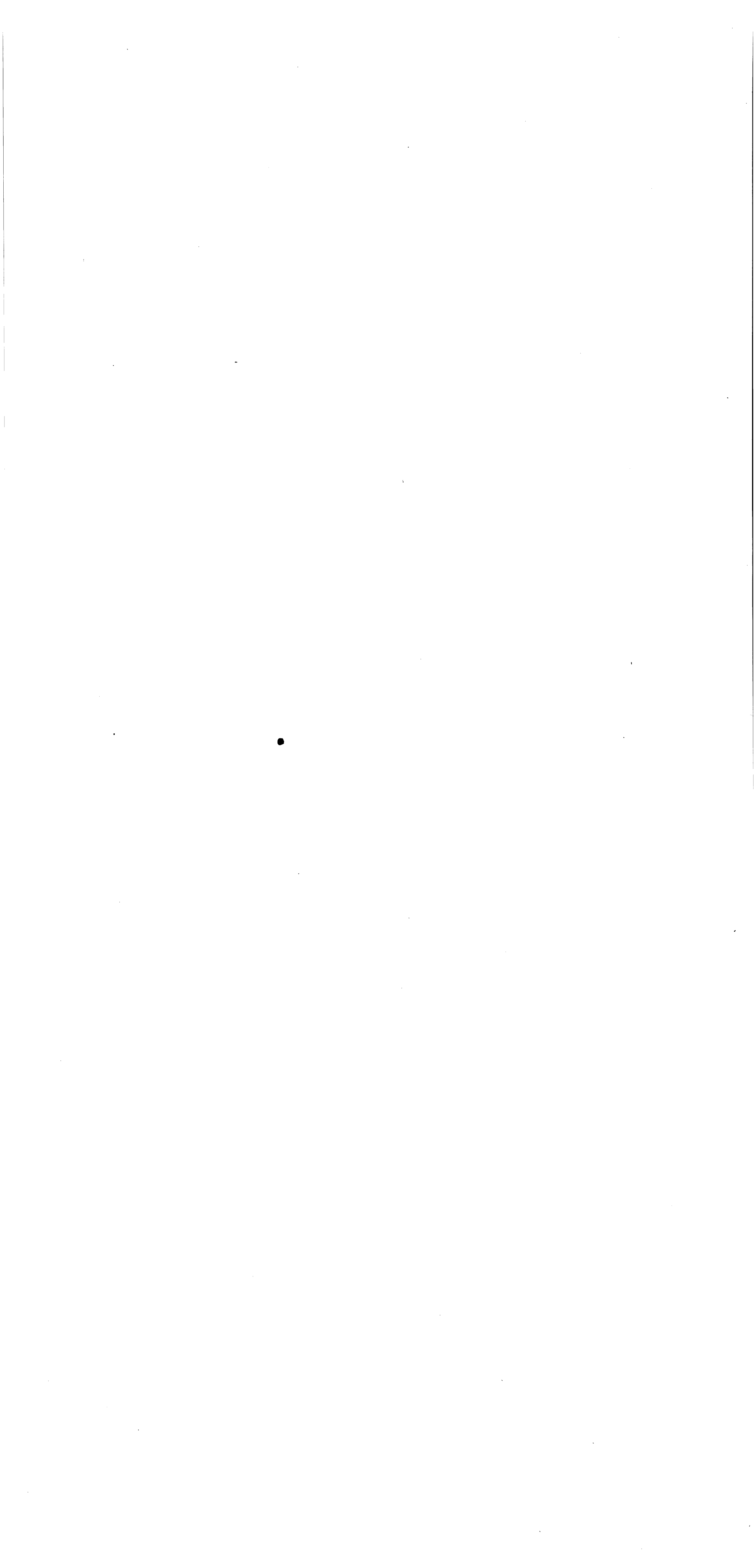
 York, 23.

THE STANWICK EARTHWORKS, YORKSHIRE



NOTE: MODERN FEATURES INCOMPLETE
APPROXIMATE CONTOURS AT 25FT. V.I.

(Based upon the Ordnance Survey 25-inch maps, Yorkshire XIV 13, and XXV 1, 2, and 5, by permission of H.M. Stationery Office.)





The fortifications north-east of Stanwick Old Hall