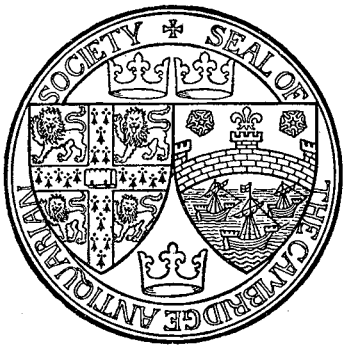
PROCEEDINGS
OF THE
CAMBRIDGE ANTIQUARIAN SOCIETY

(INCORPORATING THE CAMBS & HUNTS ARCHAEOLOGICAL SOCIETY)



VOLUME LXII

JANUARY 1969 TO DECEMBER 1969

IMRAY LAURIE NORIE AND WILSON
1969

RECENT PUBLICATIONS OF THE CAMBRIDGE ANTIQUARIAN SOCIETY

PROCEEDINGS VOLUME LIX, 1966

Price 40s. net.

PATRICIA HUTCHINSON: The Anglo-Saxon Cemetery at Little Eriswell, Suffolk.
C. F. TEBBUTT, F.S.A.: St Neots Priory.
M. D. CRA'STER, F.S.A.: Waterbeach Abbey.
S. V. PEARCE: A Medieval Windmill, Honey Hill, Dogsthorpe.
CYRIL HART: The Church of St Mary, Huntingdon.
EDWARD MILLAR: Some Twelfth-century Documents Concerning St Peter's Church, Babraham.
SIR JOHN GRAY: Notes on the Early Career of Thomas Thirlby, Tudor Bishop of Ely.
MARGAERT SPUFFORD: The Street and Ditch Ways in South-East Cambridgeshire.
M. D. CRA'STER. Review Note: *A Cambridgeshire Community: Chippenham from Settlement to Enclosure* by Margaret Spufford.
A. R. EDWARDS, W. LILLER, C. F. TEBBUTT *and* G. RUDD: Archaeological Notes.

PROCEEDINGS VOLUME LX 1967

Price 40s. net for members, 60s. for non-members

JOHN M. COLES *and* BRIDGET A. V. TRUMP: A Rapier and its Scabbard from West Row, Suffolk.
D. A. WHITE: Excavations on a Romano-British Settlement on the Fenland Edge.
CHRISTOPHER A. PEAL: Romano-British Pewter Plates and Dishes.
PETER SALWAY: Excavations at Hockwold-cum-Wilton, Norfolk, 1961–1962.
GRACE BRISCOE *and* G. C. DUNNING: Medieval Pottery Roof-fittings and a Water-pipe found at Ely.
SIR JOHN GRAY: Thomas Alcock, Master of Jesus College, Cambridge in 1516.
SIR JOHN GRAY: Jesus College Grammar School.
TREVOR A. BEVIS, JAMES HITCHCOCK, C. B. DENSTON *and* M. D. CRA'STER: Archaeological Notes.

PROCEEDINGS VOLUME LXI, 1968

Price 40s. net for members, 60s. for non-members

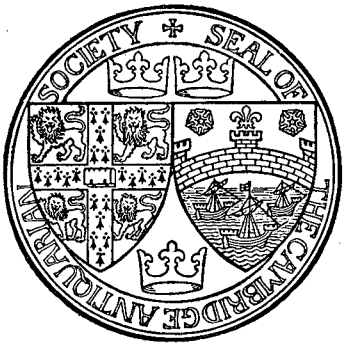
HAMON LE STRANGE: *A Collection of Flint Implements from the Hunstanton District.*
GRANVILLE T. RUDD: *A Neolithic Hut and Features at Little Paxton, Hunts.*
GRANVILLE T. RUDD *and* COLIN DAINES: *A Romano-British Settlement at Brickhills Estate, Eynesbury, Hunts.*
W. H. C. FREND: *A Roman Farm Settlement at Godmanchester.*
TERESA BRISCOE: The *Anglo-Saxon S-Shaped Brooch in England, with Special Reference to one from Lakenheath, Suffolk.*
CYRIL HART: *The Hidation of Huntingdonshire.*
MARGARET SPUFFORD: *The Dissenting Churches in Cambridgeshire from 1600 to 1700.*
M. D. CRA'STER: *Review Note: West Cambridgeshire* (*R.C.H.M.*).

PROCEEDINGS OF THE CAMBRIDGE ANTIQUARIAN SOCIETY

(INCORPORATING THE CAMBS & HUNTS ARCHAEOLOGICAL SOCIETY)

PROCEEDINGS
OF THE
CAMBRIDGE ANTIQUARIAN SOCIETY

(INCORPORATING THE CAMBS & HUNTS ARCHAEOLOGICAL SOCIETY)



VOLUME LXII

JANUARY 1969 TO DECEMBER 1969

IMRAY LAURIE NORIE AND WILSON
1969

Published for the Cambridge Antiquarian Society (incorporating the Cambs and Hunts Archaeological Society) by Imray Laurie Norie and Wilson Ltd, Wych House, Saint Ives, Huntingdon

Printed in Great Britain at the University Printing House, Cambridge

CONTENTS

OFFICERS AND COUNCIL OF THE SOCIETY, 1968–1969

President

J. P. FOSTER, M.A., A.R.I.B.A.

Vice-Presidents

G. O. VINTER, M.A., J.P.
PHILIP G. M. DICKINSON, F.S.A., F.R.HIST.S.
G. DAKIN, C.B.E., M.C., M.A.

Disney Professor of Archaeology

PROF. J. G. D. CLARK, SC.D., F.B.A.

Curator of University Museum of Archaeology and Ethnology

G. H. S. BUSHNELL, M.A., PH.D., F.S.A.

Ordinary Members of the Council

CAPT. T. J. N. HILKEN, R.N., M.A.
C. PARISH, M.A., F.R.C.S.
J. M. WALSHE, M.A., M.B., F.R.C.P.
MRS S. YEALLAND, M.B., B.S.
J. F. H. PETERS
S. D. T. SPITTLE, M.A., A.R.I.B.A., F.S.A.
J. C. WILKERSON, F.S.A.
C. J. Q. HART, M.A., M.B., B.SC., F.R.HIST.S.
B. R. HOPE TAYLOR, PH.D., F.S.A.

Treasurer

C. J. E. STEFF, F.I.B.

Secretary

MISS J. LIVERSIDGE, M.LITT., F.S.A.

Editor

MISS M. CRA'STER, M.A., F.S.A.

Director of Excavations

Hon. Librarian

J. G. POLLARD, M.A.

Hon. Auditors

F. PURYER WHITE, M.A.
T. A. BIRD, B.SC., F.I.M.T.A.

Excursion Secretary

G. RIDSDILL SMITH, M.A.

Advisory Committee for Huntingdonshire

J. P. FOSTER, M.A., A.R.I.B.A.
J. M. WALSHE, M.A., M.B., F.R.C.P.
PHILIP G. M. DICKINSON, F.S.A., F.R.HIST.S.

THE CAMBRIDGE ANTIQUARIAN SOCIETY'S ROOM

The Society's books, MSS., photographs, etc., are kept in a room on the first floor of the Museum of Archaeology and Ethnology. This is locked, but the key can be obtained from the Secretary's room which is also on the first floor, or from any of the Museum staff. Members are reminded that the Society's room is available to them whenever the Museum of Archaeology and Ethnology is open, and that books, including a run of the Society's *Proceedings*, may be borrowed. Members also retain their right to read in the Haddon Library, which will be found on the first floor of the adjacent building. The Hon. Librarian reminds members of the usefulness of these resources. The books include all the principal publications dealing with shire history and topography for Cambridgeshire, some material for Huntingdonshire and for neighbouring counties. Prime sources like the collections of early topographical drawings and manuscript histories are included.

THE PHOTOGRAPHIC RECORD

The photographic record has an excellent series of prints of parish churches, and of villages. The Hon. Librarian would like to appeal to members to photograph changes which they may observe in villages in the area, and to be kind enough to give prints and negatives to the collection. Modest additions are made by the Hon. Librarian as the product of his own travels in the shire, but much wider coverage is desirable. Colour transparencies would also be welcome.

BACK NUMBERS OF THE 'PROCEEDINGS'

Members might like to know that a considerable stock of back numbers of the *Proceedings* and other C.A.S. publications can be obtained from the publishers, Imray Laurie Norie and Wilson.

Proc. Camb. Ant. Soc. Vol. LXII (1969), pp. 1–20.

EXCAVATIONS AT BRAMPTON, HUNTINGDONSHIRE, 1966

D. A. WHITE

INTRODUCTION

THE excavations described in this paper were undertaken by the writer on behalf of the Ancient Monuments Inspectorate, Ministry of Public Building and Works for four weeks during September and October 1966. The site had been bought by the Huntingdon R.D.C. who were planning to develop it for housing. In giving their consent for excavation to take place the council stipulated that trenches should not exceed 18 inches in depth anywhere on the site in case this disturbed house foundations when the area was developed, probably in 1968. This stipulation was rigidly enforced for the last fortnight of the excavations and restricted most of the work to stripping topsoil and plotting features cut into the bed rock deposits.

Figure 1 shows the geographical location of the site at Brampton and its association with other Bronze and Iron Age sites in the Ouse Valley. The sites are situated close to the River Ouse mostly below the 50′ O.D. contour. This area was presumably relatively free of dense forest in the prehistoric period, enabling relatively easy movement of population and flocks and affording opportunities for primitive agriculture and for building settlements and funerary monuments. Bronze Age activity in the Ouse Valley appears restricted to the area upstream of Huntingdon, although the Alconbury Brook possibly afforded a route northwards to the Fenland Edge. Iron Age settlers, however, penetrated east of the Godmanchester water meadows up to St Ives and Earith. The proximity of the Fens here indicates that the present area lies on the borders of the inhabited area. The general pattern of distribution is similar to the one found by extensive aerial survey in the Warwickshire Avon.[1]

The site at Brampton (G.R. 204713)[2] lies at an approximate height of 43 ft above sea level. The bedrock consists of drift deposits which vary over the site. In the northwest corner of the field (Fig. 2, no. 1) one encounters soft sand alternating with small patches of more clayey deposits of alluvium. In the centre of the field the subsoil was more amenable to locating archaeological features, consisting of a regular gravel layer. The topsoil humus was 12–15 in. deep and represented the regular action of the plough. Below this there lay 6 in. of a brownish and featureless soil, part of the topsoil complex. The whole area was crossed by a series of mole drains down to 18 in. which had caused further damage to archaeological features. Generally it was necessary to clear down to 16 in. before the clearest archaeological features

[1] *Arch. Jour.* CXXI, 1 (1965).
[2] Ref. 1″ O.S. Tourist map, Cambridge.

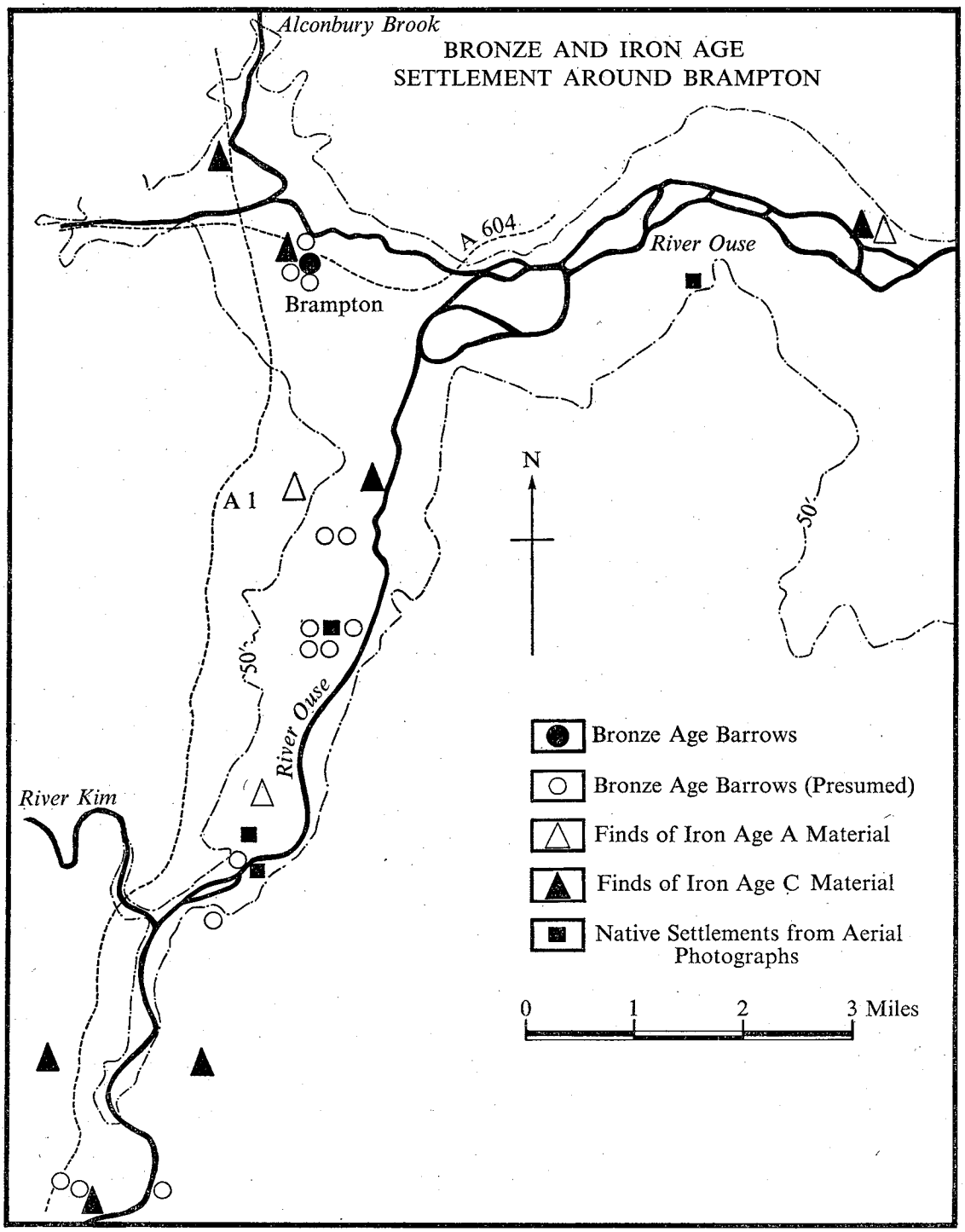

Alconbury Brook
BRONZE AND IRON AGE
SETTLEMENT AROUND BRAMPTON
A 604
River Ouse
Brampton
N
A 1
50'
50'
River Ouse
River Kim
Bronze Age Barrows
Bronze Age Barrows (Presumed)
Finds of Iron Age A Material
Finds of Iron Age C Material
Native Settlements from Aerial Photographs
0 1 2 3 Miles

Fig. 1

began to show and at least down to 18 in. before a general feature plan emerged. Most of this topsoil was removed with the back-acter bucket of a mechanical digger from which the teeth had been removed. A skilled operator could dig a flat-bottomed trench which could be easily cleaned but this required considerable scraping before

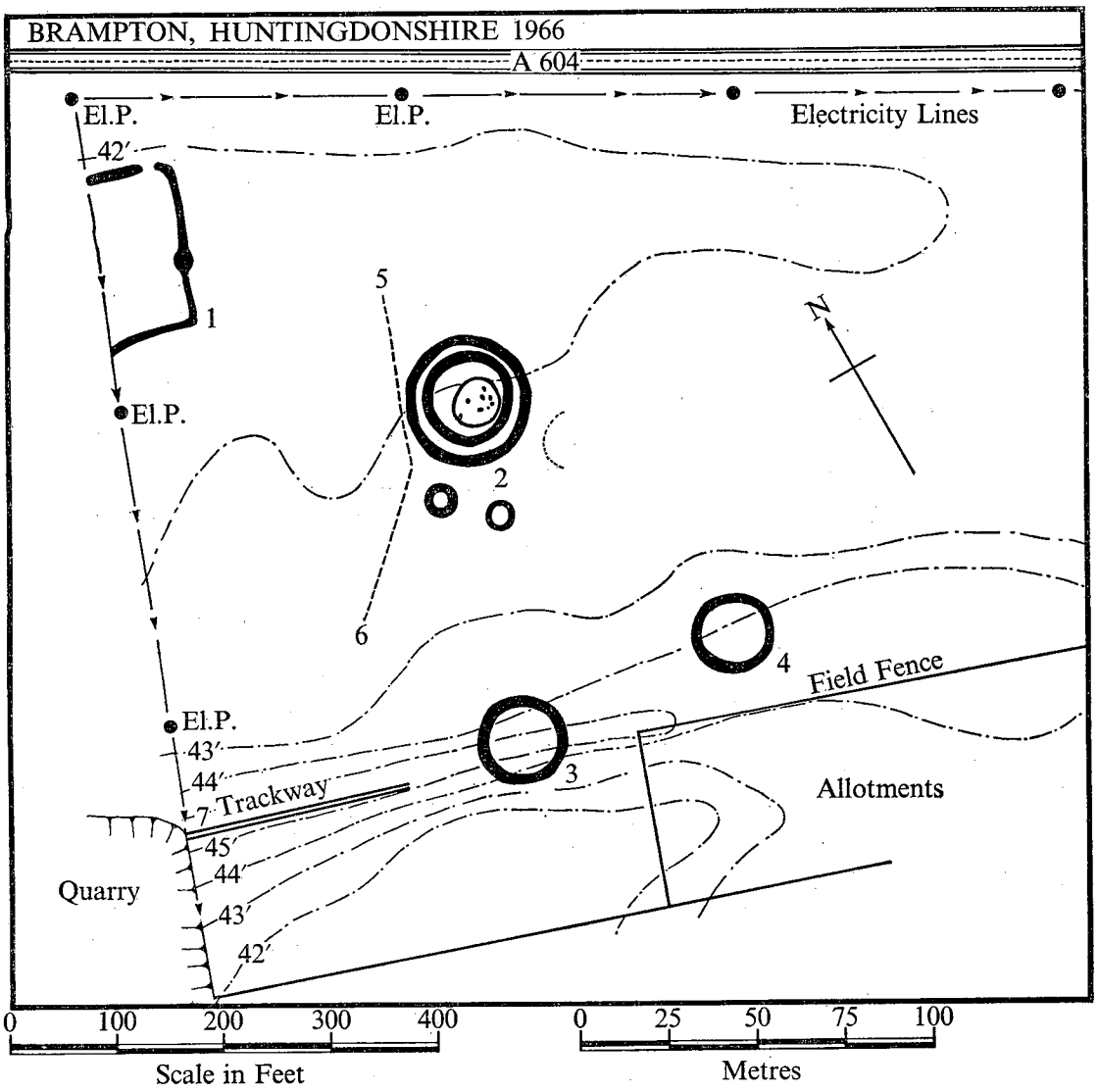


Fig. 2

archaeological features could be seen in the trenches. In more tractable subsoils such as chalk, a similar machine can dig a clean trench in which most of the features become immediately apparent.

The soil pH was low, around 5·8; it was generally free draining and this, combined with its acidity, meant that finds were not well preserved. Generally bone had

been completely dissolved away; all that was left was the enamel of teeth, although cremation fragments remained. Most potsherds were found in a very soft condition and there was no trace of any metal or even stains.

A general plan of the site is given in Fig. 2 and an aerial view is shown in Plate I. The two most important features of the site are a complex of ring ditches (Fig. 2, nos. 2, 3 and 4) and an enclosure with an entrance (Fig. 2, no. 1). This enclosure and two of the ring ditches were examined during the present excavations, as being possibly the most noteworthy earthworks in the field. Two other features are visible on the photographs. One is a pit alignment[1] (Fig. 2, nos. 5 to 6) which butts on to the north-western side of the double ring ditch complex and has a 45° corner. It is indistinct in Plate I but shows up clearer in other photographs in the Cambridge University Collection.[2] The other feature is a track (Fig. 2, no. 7) which runs from the corner of the allotments over to a derelict quarry. This was sectioned and shown to have a hard gravel surface 2 in. thick and 10 ft broad. No evidence was found in this section to date this track.

THE RING DITCH COMPLEX

Five ring ditches without entrances can be seen in Plate I, and their positions are plotted on Fig. 2. In the centre of the field there is a large double ring ditch whose outer ditch is 110 ft in diameter. To the south are two smaller rings 20 ft across, and there are two other rings (Fig. 2, nos. 3 and 4) which are about 100 ft and 75 ft in diameter respectively. Other aerial photographs show at least two similar earthworks within half a mile of the site. The balance of available evidence[3] shows that these features mark the position of round barrow ditches and none of the results of the present excavation disputed this conclusion. The ring ditches suggest the presence of a barrow cemetery in this area. Barrow cemeteries have been found elsewhere on gravel soil, for instance at Radley in Berkshire.[4] The cemetery at Radley is of the linear variety such as the well-known groups at Winterbourne Stoke and Normanton; the barrow group at Brampton is dispersed.[5]

A general plan of the area stripped over the ring ditches in the centre of the site is shown in Fig. 3. A preliminary trench 10 ft in width (Fig. 3, no. 4) was cleared by machine and hand to section the large double ring (Fig. 3, no. 1) and the westerly of the two smaller rings immediately to the south (Fig. 3, no. 2). On clearing the top-soil above this smaller ring a patch of charcoal 1 ft in diameter was found (Fig. 3, no. 5), which on clearing revealed the base of a small urn containing cremation fragments. The upper part of the urn had clearly been removed by the plough, leaving only the bottom 2 in. of the pot with a plain base 5 in. in diameter. The fabric of the pot was black inside and buff on the outside and the cremated remains were

[1] R.C.H.M., *A Matter of Time* (H.M.S.O. 1960).
[2] For example photograph no. YD 73.
[3] *A Matter of Time.*
[4] *Oxoniensia*, XIII, 1 (1948).
[5] P. Ashbee, 'The Bronze Age Round Barrows in Britain' (Phoenix House, London, 1960), p. 34.

those of an adult individual (see Appendix A). Nothing more of significance could be gained from the surviving sherds. The burial was placed just inside the ring ditch and is presumably a secondary interment. When cleared, the ring ditch was shown to be

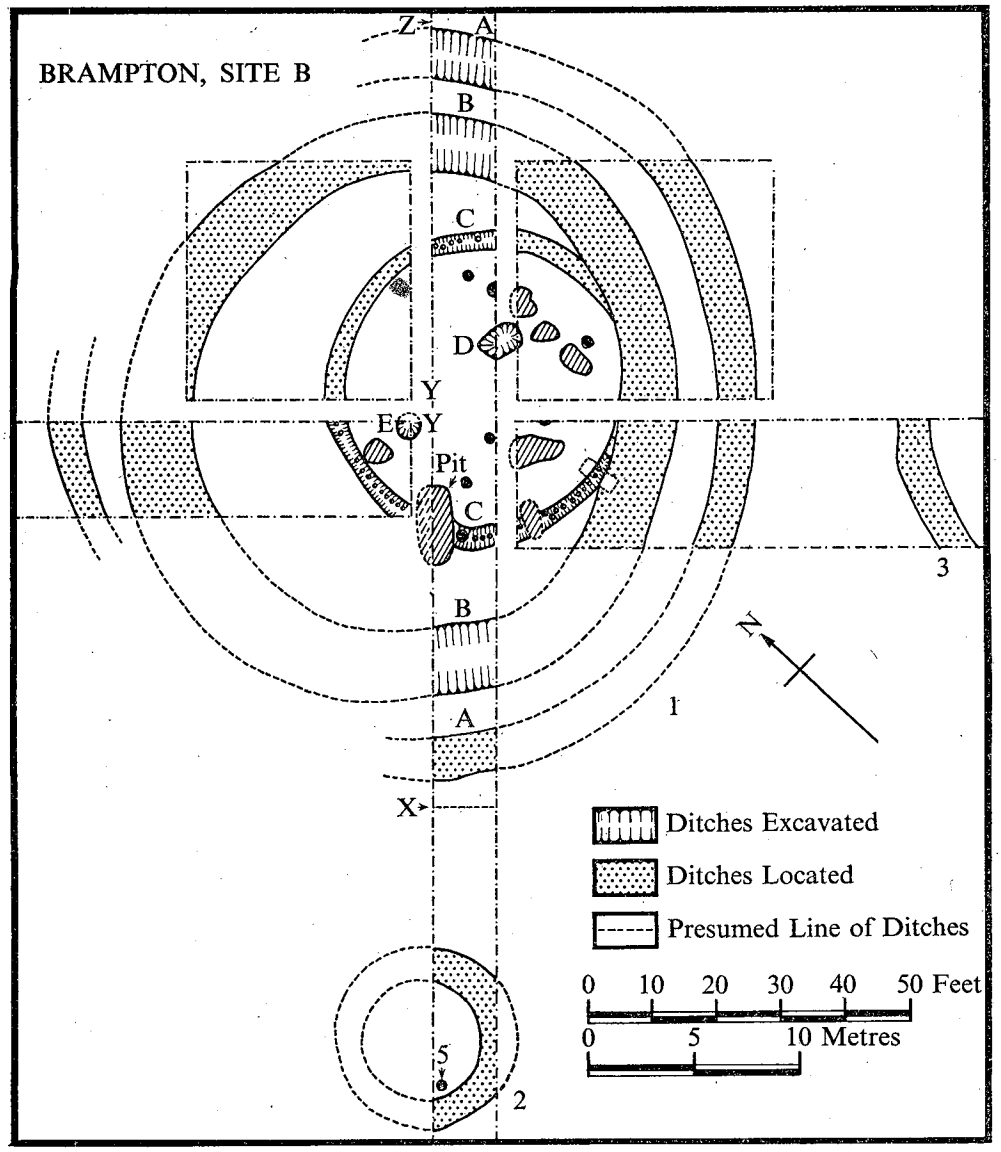


Fig. 3

about 5 ft wide, but due to the '18-inch' stipulation the ditch could not be sectioned. However, probing suggested that the ditch was U-shaped in profile and that its bottom was about 3ft 6 in. below the topsoil surface. Since there was a good gravel subsoil the probe traverse is likely to have roughly indicated the profile of the ring ditch.

Four other trenches were opened up over the centre of the large double ring and the south-easterly of these contained the segment of another circular ditch about 3 ft 0 in. deep (probe), Fig. 3, no. 3. This may be traces of another barrow just to the east of the large one. No sign of it appears on any aerial photograph of the area.

The Double Ring Ditch

This is a very prominent feature on the aerial photograph (Plate 1). There are two large, concentric, almost circular ditches, with the inner one appearing the larger on the aerial photograph. There is a small circular ditch inside the inner ring which touches the latter on its eastern sector. Inside the large rings there is evidence of several pits. Double ring ditches have been reported from a number of other locations[1,2,3], and a triple ring is known from an aerial photograph taken in the valley of the Warwickshire Avon.[2] A general view of the site from the south-east is given in Plate II*a* and a plan in Fig. 4.

Section across the Ring Ditches

It was planned to examine a complete section of the ring ditches. This was impossible due to the conditions laid down by the Huntingdon R.D.C. which affected work towards the end of the excavation. Before the ban on deep excavation became effective a complete box section was cut in the northern segment of both ring ditches. This involved cutting a trench by machine about 5 ft deep and removing the natural gravel between the two ditches. This enabled rapid examination of the two ditches and would have been followed by hand clearing of sections of the southern segments of the rings.

The box section is shown in Fig. 5 (A to B). The outer ditch is slightly smaller than the inner one though not as small as one might be led to suppose from the aerial photograph. The reason is due to the difference in the fills of both ditches. The inner ditch appears to have been filled in naturally over the years whereas the outer has a gravel fill in its upper levels below which there is a distinct stabilization line. Below the turf line in the outer ditch there are a series of gravel tip lines and one of these (Fig. 5, I) is cut into by the northern side of the inner ditch. One is led to conclude that the inner ditch is the most recent and marks a phase in reconstruction of the barrow, probably for secondary use. A start was made in sectioning the inner ring ditch in a southern sector (Fig. 5, G); a few fragments of cinerary urn type ware were found in this trench, in the gravel tip line on the bottom of the ditch.

Small Inner Ring and Palisade (Fig. 5, C)

This small ring was about 2 ft 6 in. wide and cut a foot into the natural gravel. It is clearly far too small in cross-section to be the ditch of a barrow and its regularity in size throughout its length is evidence that it was completed. When its eastern

[1] *A Matter of Time.* [2] *Arch. Journ.* CXXI, 1 (1965). [3] *Oxoniensia*, XI and XII, 5.

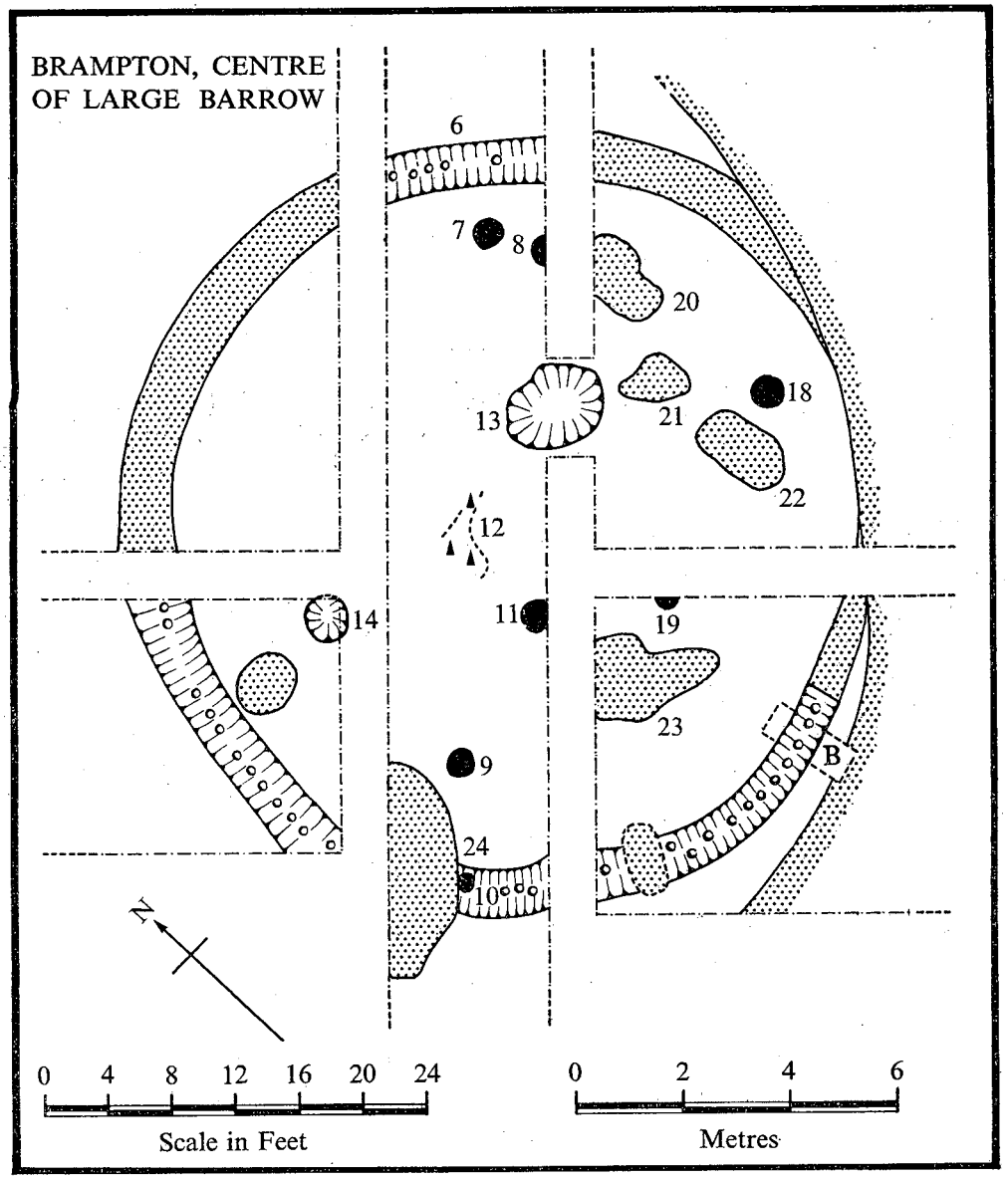


Fig. 4

section was cleared (Fig. 4) the bottom was found to have regular soft patches which were particularly noticeable after rain. When cleared out they revealed a pattern of stake holes (Plate II *b*); the diameters of the holes varied from 3 to 5 in., and they were from 7 in. in depth. They appeared to be placed 10 in. to 1 ft apart and were found in the other segments of the ditch that were excavated. No datable finds were made in the filling of the ditch. Cows' teeth were found in the northern segment (Fig. 4, no. 6).

The eastern segment of this feature was obliterated in the plan view by the inner of the large ring ditches (Fig. 3, B). This is strong evidence that the palisade trench was built before the second ring ditch. To establish the relationship by sectioning proved impossible due to the 18-inch stipulation. However a small box section (Fig. 4, B) was cut, revealing a tip line of the main inner ring falling down over the palisade. This further strengthens the assumption that the inner ring ditch is a secondary feature on the site.

'Palisade' trenches similar to the one found at Brampton are reported from

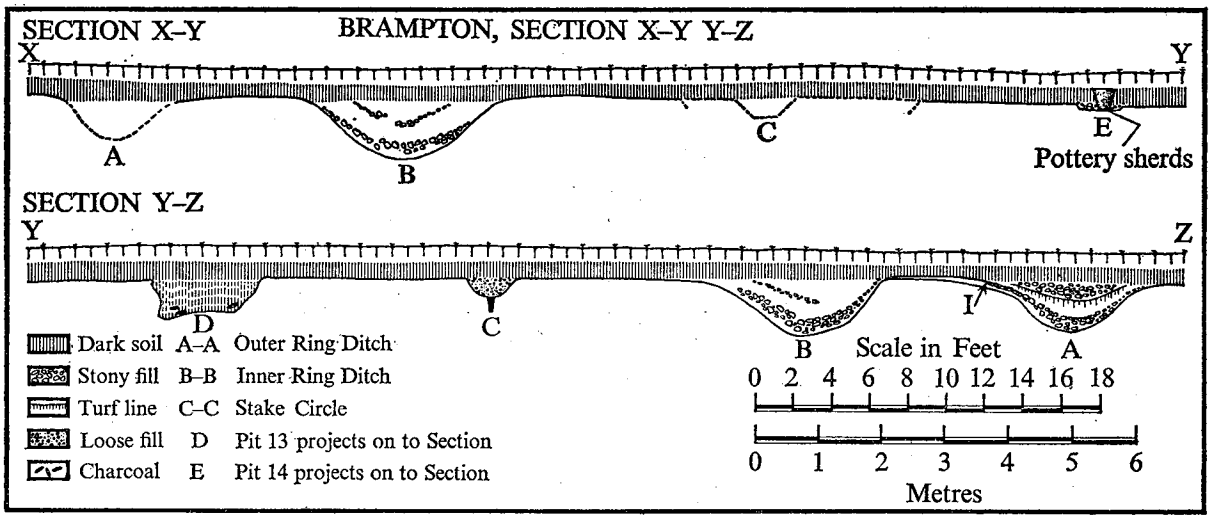


Fig. 5

Letterston, Pembrokeshire.[1] These examples fall into Ashbee's category B 2,[2] that is narrow-spaced stake holes set into a footing trench. Other barrows in this part of East Anglia have been found to contain stake circles. These are situated at Snailwell[3] and at Chippenham[4] in Cambridgeshire. Neither of these examples parallels the palisade ring at Brampton.

Post holes within the Barrow

During fine weather in the early part of the excavation, the gravel in the trenches dried out and revealed the ditches and pits clearly as damper patches. Two post holes (Fig. 4, nos. 7 and 8) appeared in this manner near the north sector of the palisade. They were situated about 6 ft apart. Four other definite post holes were found during the course of the excavation (Fig. 4, nos. 9, 10, 11 and 18). The sections of these features are shown in Fig. 6 and the numbers correspond to those of Fig. 4. Four of these post holes (nos. 7, 8, 9 and 11) appeared to be similar in size and about 20 in.

[1] H. N. Savory, *Arch. Camb.* C (1949), p. 67.
[2] P. Ashbee, *op. cit.* p. 65.
[3] *Proc. C.A.S.* XLII, 30.
[4] *Ibid.* XXXVI, 134.

across with well-pronounced ghost holes for the posts which would have been approximately 10 in. in diameter. Post hole 10 was set into the 'palisade'; it was also probably 10 in. in diameter, but its ghost is a stony fill which suggests that it was removed rather than rotted *in situ*. Post hole 18 differed from 7, 8, 9 and 11 by having considerable quantities of charcoal in its ghost hole which indicates that it may have been burned *in situ*. The charcoal showed that the original post was oak. Post hole 19 was a small, rather nebulous feature about 15 in. in diameter and 3 in. deep. It is probably the remains of the base of a post hole.

BRAMPTON, POST HOLE SECTIONS

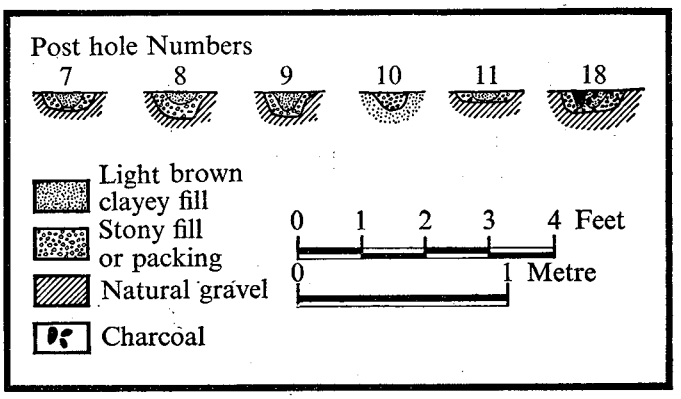


Fig. 6

After the discovery of post holes 7 and 8, it was hoped to link them up with others in the immediate neighbourhood, but this was not the case; the six post holes do not apparently form any coherent structure. A similar sort of post-hole assemblage appears to have been found in Barrow A at Chippenham, Cambs.,[1] though the report is not too clear on their actual nature. Isolated post holes are also known from other barrows. One at Stanton Harcourt, Oxfordshire[2] is set near a cremation and is possibly a marker, another in a similar location is set into a dry stone sarsen retaining bank in a barrow in Wiltshire.[3] In the present barrow there are two, possibly seven burials, so that the hypothesis that each post is related to a burial cannot be entirely ruled out. On the other hand only no. 18 is a probable centre post for a cremation pyre since such a post would in all likelihood have charred down to the bottom.

Pits within the 'Palisade'

Seven pits were located within the 'palisade' (Fig. 4, numbers 13, 14, 20, 21, 22, 23 and 24). One of the pits, no. 24, is in fact cut into the 'palisade'. Only pits 13 and 14, excavated in the first half of the dig, were properly examined. The others were

[1] *Proc. C.A.S.* XXXVI, p. 138.
[2] *Oxoniensia*, X, p. 16.
[3] *P.P.S.* XXXII, p. 122.

simply cleaned over the surface and planned and a few specks of charcoal were noted in the top layer of the pit (Fig. 4, no. 22). There are seven pits and possibly seven post holes within the 'palisade', yet no post hole seems definitely connected with a pit or is placed contiguous to one.

Pits 14 and 13 produced positive evidence of burials and presumably the other five pits would have yielded the same evidence. Pit 14 (section shown in a projected view in Fig. 5), was a circular and rather shallow feature $2\frac{1}{2}$ ft in diameter and cut 6 in. into the bedrock gravel. In it was placed a large cinerary urn of the primary series (Fig. 7, no. 1). The rim of the urn had been removed by the plough. The urn contained a quantity of charcoal, cremated bones of an adult? female (see Appendix A) and the tip of an arrowhead (Fig. 7, no. 2).

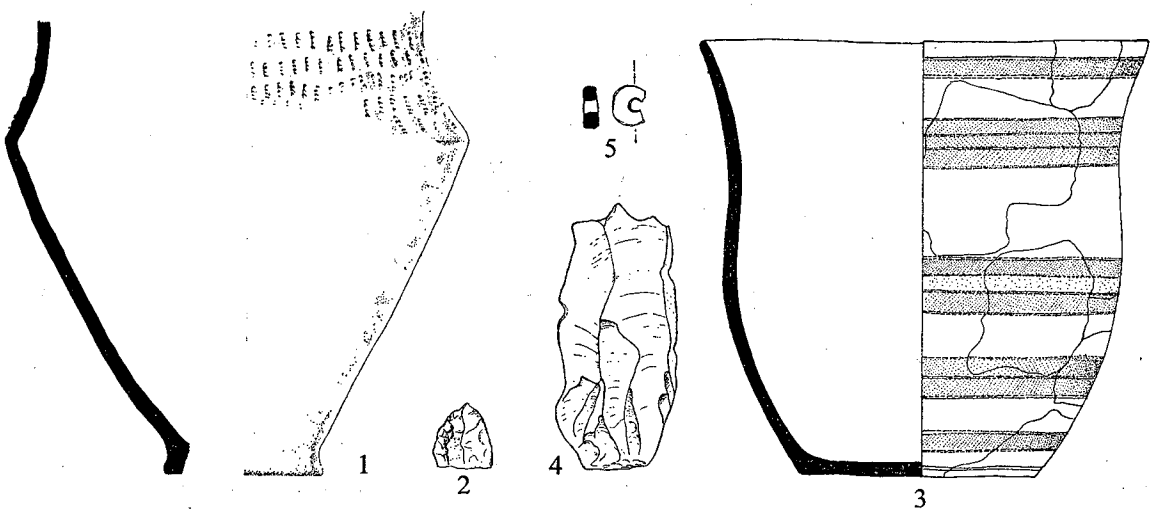


Fig. 7. Brampton barrow: 1. Bronze Age urn (scale 1/6); 2. Flint arrow; 3. Beaker; 4. Flint blade; 5. Amber bead (all scale 1/3).

Pit 13, also shown as a projection on Fig. 5, was cut 2 ft. into the natural gravel and had large quantities of charcoal in the bottom 6 in. of fill. The charcoal was entirely oak. The pit was oval, about 5 ft across, and its bottom was flat though the southern part was cut into the side of the pit. Hard against the northern wall a mass of light red clay was found. This was the remains of a beaker (Fig. 7, no. 3). Ground consolidation and acid soil had combined to squash the vessel flat. A bead (Fig. 7, no. 5) made of amber was found in the vicinity of the pot, and a flint blade (Fig. 7, no. 4) lay in the centre of the mass of clay. The whole of the vessel and associated remains were removed in one piece by cutting a large lump of the bedrock gravel below the red clay as reinforcement and lifting the pot and gravel on a tray. Dr D. L. Clarke kindly examined the reconstruction of the beaker and made the following report:

The sherds of the beaker clearly indicate a fine example of the 'maritime' variant of the European beaker group (E). The decorative zones are defined by cord but filled in by very fine oblique

comb (dentated blade?) impressions; the trend towards zone contraction is apparent and emphasized by grouping the decorated zones in twos and threes to form broad zones. Although zone contraction does provide a rough chronological seriation for Bell beakers one must balance this 'prototypical' feature against the 'archaic' use of cord zoning and the 'modal' low, broad silhouette exhibited in the reconstruction—bearing in mind that contemporary assemblages of such vessels variously integrate archaic, modal and prototypical attributes. The Brampton vessel would therefore appear to be an ordinary member of the 'maritime' assemblage, a regional variant of the over-all European Bell beaker group (E). The very extensive series of carbon dates at Vlaardingen, Oldesloe, and Oostwoud give a narrow horizon for the Dutch/German 'maritime' assemblage *c.* 1950–1900 B.C. and one would expect the Brampton burial to fit into this chronological band.[1]

The closest geographical and morphological parallel to the Brampton vessel is the superb 'maritime' beaker, 'maritime' bowl and undecorated beaker found together with the primary burial in a barrow at Mol, Lommel, on the Dutch/Belgian border; only a little more distant taxonomically are the Vlaardingen 'maritime' beakers themselves.[1,2] The Mol assemblage partially illustrates the range of the domestic ware of this group which often includes decorated and undecorated beakers, bowls, and dish-lamps as well as large fingernailed and impressed giant storage beakers. The beakers from Mol are themselves of great importance since they are the most 'Breton' of all the Low Countries' European Bell beakers and actually appear to represent the initial extension of the 'maritime' beaker assemblage from Brittany to Belgium, the Rhine Delta, and thence to the Middle Rhine.

The amber bead associated with the Brampton 'maritime' vessel is the earliest beaker association of its kind in this country. Similar amber beads have been found with beakers of this same type in the Netherlands (2.I*b*) where this association is significantly shared with Dutch and German All-Over-Cord beakers (2.II*b*); AOC.[3] Apparently, the early beaker penetration of the Low Countries stimulated and tapped the coastal supply of amber brought south along the Frisian littoral from Jutland. The amber bead, the barrow burial and the cord-defined, paired-zone 'maritime' beaker from Brampton therefore point firmly to the Mol context lying only *c.* 150 miles away across the Channel. The siting of the Brampton beaker burial on the Huntingdon hills overlooking the shore of the Fens reminds one of the many beakers of this early group which must now lie under many feet of silt around the Fen margins, like their deeply buried cousins from the creek at Vlaardingen. It is therefore likely that the primary beaker settlement in the Fen/Wash area was originally even more significant than it already appears to be, and one is reminded of the related cord-zone European Bell beaker sherds from West Keal, Lincolnshire, across the Fens. Marine oscillations and the drowning of the coastline from Lincolnshire to Kent have clearly robbed us of the important primary band of littoral beaker settlements—both All-Over-Cord and European Bell beaker—which are so well represented in the shell midden contexts of the stable coastline of the North and Scotland. The same lacuna is also apparent, for the same reasons, in the drowned coastal zone of the Low Countries.

The over-all importance of the Brampton 'maritime' beaker is the way in which this burial on the open water margins of the ancient Wash closely approaches the Mol burial just across the Channel. In this way the 'maritime' penetration of the Fens is directly linked with the arrival of Breton beakers in the Low Countries and the parallel infiltration of the creeks and lagoons of the Rhine Delta and Frisian Islands.

[1] *Helinium*, II (1962), pp. 3–243, III (1963), pp. 39–120.
[2] *Helinium*, II (1962), pp. 255–9.
[3] *Palaeohistoria*, IV (1955), p. 32.

CONCLUSIONS

The barrow cemetery at Brampton, the first such site examined and recorded in Huntingdonshire, has shown that the area was important to Bronze Age settlement in Britain. The primary phase of the large barrow with its stake circle,[1] maritime beaker, and amber bead burial is more closely paralleled in the Low Countries than from other sites in Britain. This is startling proof that Huntingdonshire and the Ouse valley is no mere Bronze Age backwater, but may well be closely connected with the first waves of Beaker settlement in Britain. The Ouse is a very natural and direct route to the Wessex highlands from the Wash.

The significance of the Brampton Barrow is that of a sepulchral monument placed near an important line of communication and showing a continuity and significance from early to early middle Bronze Age. There is a primary phase marked by the existence of a Bell Beaker, with its associated finds, surrounded by a 'palisade' protecting the 'temenos' and the outer of the larger ditches. A secondary phase is represented by the cinerary urn buried in the geometrical centre of the area surrounded by the inner ring ditch. There are other presumed burial pits and the post holes in the mound, making the monument a very interesting complex.

Multiple-period barrows have recently been considered in detail by Christie.[2] On account of their rarity, reconstruction of burial mounds cannot have been an established or common Bronze Age practice. In several instances it may have been a natural thing to build a barrow and carry out the attendant ritual on an apparently natural hillock, although it is clear that the upper part of the outer ring ditch of the Brampton Barrow was purposely backfilled with gravel. In conclusion it is disappointing that restriction by the owners of the land prevented a complete investigation of this interesting barrow complex. Complete excavation of all pits and posts, and large sectors of the ditches would have been needed to do a thorough job on this barrow. The time-honoured quadrant method would have missed so much on this site.

THE RECTANGULAR ENCLOSURE

This is very clearly shown on the left-hand side of the aerial photograph (Plate I), and its position is shown in the general plan (Fig. 2, no. 1). The field boundary cut the enclosure from north-east to south-west so that only about one-half was available for examination; the other part lies under the field to the west. The surrounding ditch measures about 150 ft from north to south and the eastern part of this ditch is 75 ft east of the field boundary. It shows a clear entrance in the northern stretch of the ditch, lying close to the north-eastern corner. The northern half of the enclosure is studded with a large number of features but the southern half appears completely barren. The disposition of cropmarks suggested that the site would be best tackled by cutting a long 10-ft-wide trench (Fig. 8, A), near to and parallel with

[1] Van Giffen, *P.P.S.* IV (1938), p. 258.
[2] *P.P.S.* XXXIII, p. 336.

the west field boundary to obtain a complete section across the enclosure. The northern half of the area would then be stripped in two large trenches (Fig. 8, B and C) so that a full examination of the complex of cropmarks could be made. To complete a

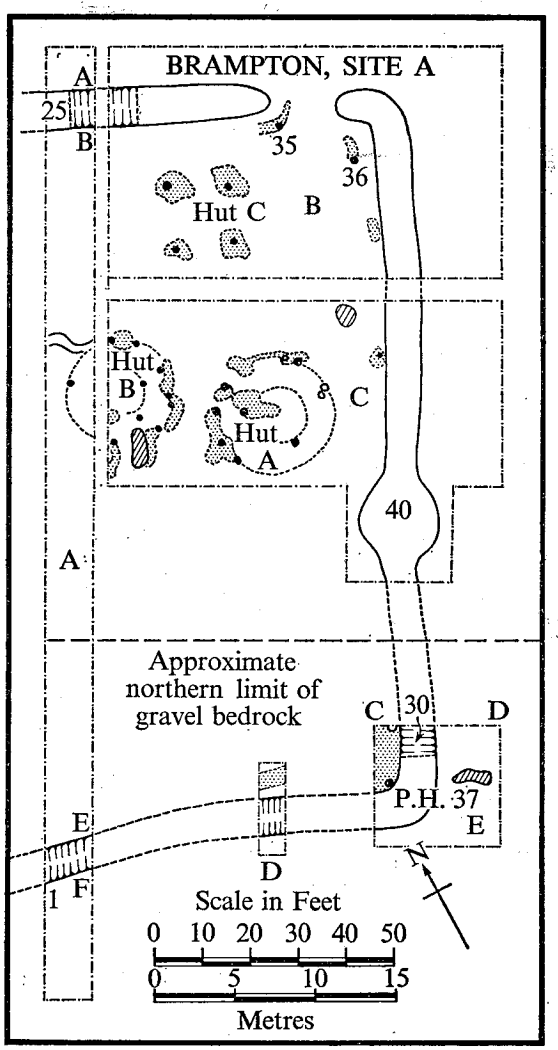


Fig. 8

comprehensive excavation a further section was cut across the southern part of the boundary ditch (Fig. 8, D) and an area stripped over the south-east corner (Fig. 8, E). The stipulation about deep trenches very much limited the scope of the work and was a more serious drawback in excavating here than in the examination of the barrows.

THE BOUNDARY DITCH AND ENTRANCE

Stripping the topsoil from trench A revealed that the bedrock varied over the area of the enclosure. To the south there is a firm gravel, but this gives way to a soft dark sand and patches of clay about forty feet from the southern enclosure ditch (Fig. 8). The dotted line on the figure gives the approximate position for the change. There is no indication of the change in the aerial photograph. However, the Geological Survey reports that 'the northern boundary of the area coincides with the outcrop of alluvium laid down by Alconbury Brook'.[1] This is the probable cause of the change in bedrock.

In order to speed up the examination of this area of the boundary ditch, its line was easily traced using a probe, and three trenches were cut across it (Fig. 8, A, no.1, D and E). The section of cutting (Fig. 8, no. 1) is shown in Fig. 10, no. 1, and it is clear that the soft upper fill could readily be detected against the gravel edges of the ditch. The point marked P in the hard primary fill marks the position of the pot (Fig. 11, no. 1) which gives a good dating evidence for the construction of the ditch. The section cut across the ditch (Fig. 8, D) showed that the ditch had similar dimensions, 7 ft wide and 4 ft deep, though there were slight traces of a low bank about 4 ft wide just inside the enclosure. This gravel bank is seen much more clearly in Fig. 10, no. 2, which is a section of the ditch near the corner (Fig. 8, E). The ditch is slightly shallower at this point, being only 3 ft deep, and its fill contained a few sherds of pottery, some sheep's teeth and charcoal specks.

The gravel bank continued round the inside of the ditch and at the corner remains of a post were found (Fig. 8, no. 37). This was 12 in. in diameter and 8 in. deep. There was trace of a ghost hole (Fig. 10, no. 37). It is one of a series of posts found in the gravel bank and may be part of a support framework for a 'palisade', traces of which have since been destroyed by ploughing. Just across the ditch a small oval pit 8 ft × 3 ft and 2 ft deep was cleared out. It contained soft brown earth but nothing of any archaeological significance. One could hypothesize that it contained an inhumation burial and that the bones and any metal or organic object buried in it have since been dissolved away by the acidity of the soil. In the northern half of the enclosure only one section was cut across the boundary ditch (Fig. 8, no. 25 section, Fig. 10, no. 3). The topsoil here was very deep, almost 20 in., and the bedrock was a dark soft sand. The fill of the ditch was cut 2 ft into the sand and was only slightly darker even a little harder than the sand bedrock, with a few tip lines. Some animal teeth, charcoal and potsherds were found in the lower part of the fill.

Halfway down the eastern sector of the enclosure ditch, there is a large pit (Fig. 8, no. 40). This feature is plainly visible in the aerial photograph. When the topsoil was cleaned down the pit was shown to be approximately 20 ft in diameter and a few specks of charcoal and one small sherd were found in the top scrapings. The limitation on depth precluded any further work on this feature. Apart from two small features (Fig. 9, nos. 33 and 41) this was the only pit found in the area of the enclosure.

[1] Letter from Geological Survey, 21 July 1966.

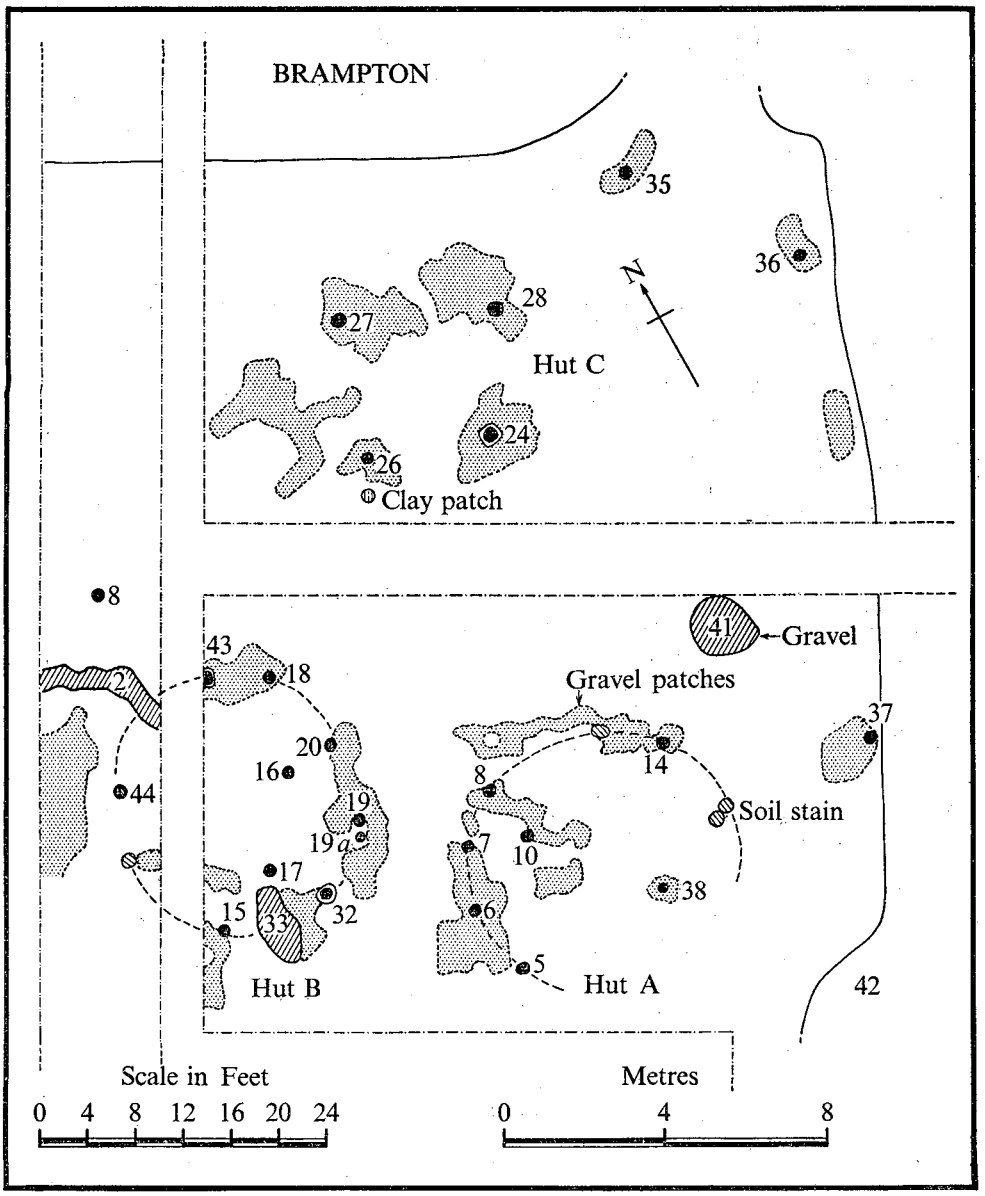


Fig. 9

The entrance in the north-eastern corner is shown in Figs. 8 and 9. The eastern enclosure ditch curves round slightly to protect the corner of the area, whilst the northern ditch ends in a simple curve. Two post holes, Figs. 8, 9, nos. 35 and 36 were found close to the ditches and their sections are shown in Fig. 10, nos. 35 and 36. No. 35 was a very large substantial post and set in a patch of gravel. Both post holes had a few pieces of charcoal in their filling and the position suggests that they are gateposts. A general view of the gateway area can be seen in Plate II*c*.

Structures inside the Enclosure (Plate II *c*, *d*)

The northern half of the enclosure contains the partial remains of several structures and the area corresponds with a high density of cropmarks in Plate I. There appear to be three complexes of post holes which will be referred to as structure A, B or C (Fig. 9). The post holes are mainly set into the gravel patches and are similar to the post holes around the entrance (Fig. 9, nos. 35 and 36). Several of the post-hole

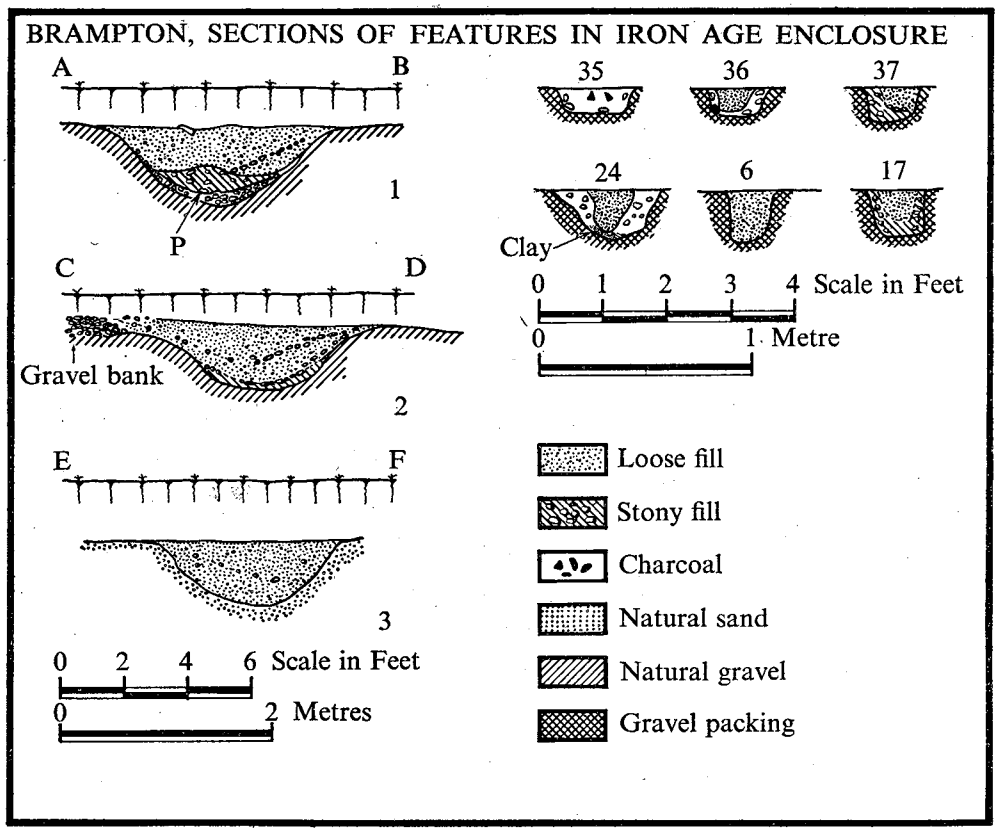


Fig. 10

sections are shown in Fig. 10. The post-hole numbers correspond to the numbers given in Fig. 9. Two small pits (Fig. 9, nos. 33 and 41) and a small trench (Fig. 9, no. 2) were also found in this area, but not cleared.

Structure A: This consists of six post holes (nos. 5, 6, 7, 8, 14 and 38), and two probable ones which form an outside circle 23 ft in diameter. The south-easterly segment of this ring is not well represented but this may be caused by the proximity of the large pit (Fig. 9, no. 42). Inside this ring there are two other posts set into gravel, nos. 10 and 38. The posts were 6–10 in. in diameter and 7–12 in. in depth,

but none had evidence of ghost holes, suggesting that the structure had been dismantled, a view which is further strengthened by the disturbance caused by pit 42 (Fig. 9 and Plate II*d*).

Structure B: This is similar to structure A. There are eight, possibly nine, post holes in an approximate circle, 22 ft in diameter (Fig. 9, nos. 15, 32, 19, 20, 18, 43 and 44). There are two internal posts, nos. 17 and 16, and other internal ones could be under the baulk. Most of the post holes of this structure contained evidence of ghost holes.

Structure C: This is represented by four posts, nos. 24, 26, 27 and 28 in an approximate square of side 11 ft. The posts are slightly larger than those of the other two structures, approximately 12 in. in diameter. It is not clear what these represent; tethering posts, or hay drying racks are two suggestions.

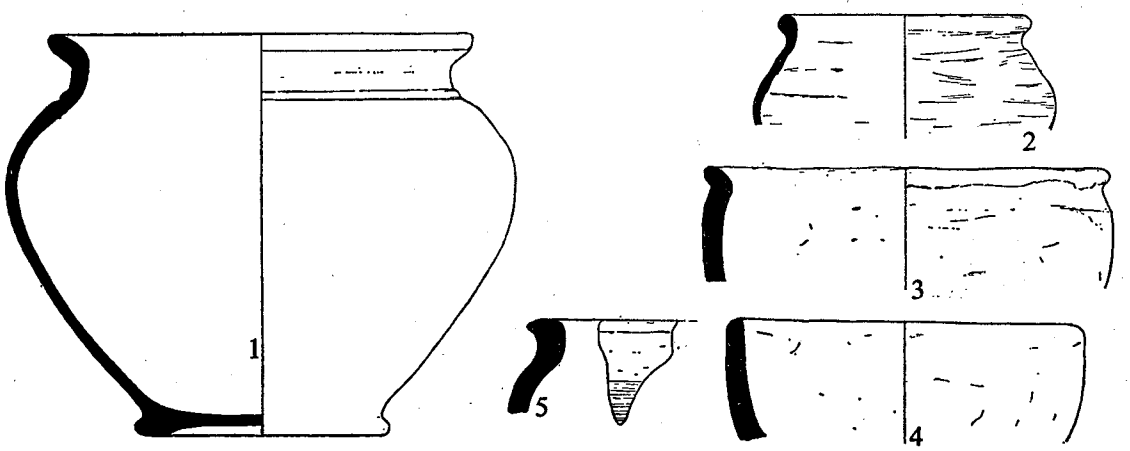


Fig. 11. Brampton: Iron Age pottery (scale 1/3).

Pottery from Iron Age Enclosure (Fig. 11)

1. Wheel-turned jar with bead and roll rim in brown fabric with flint grits and ring base (from the south-west corner of the enclosure ditch). This is a typical Belgic form found generally in southern England, for instance at Maiden Castle,[1] Bagendon[2] and Langford Downs.[3] Fragments of two other ring bases were found at other parts of the site.

2. Hand-made jar from the south-eastern corner in dark grey fabric with small grit and slightly burnished on the outside. This form seems derived from earlier in the Iron Age but apparently occurs in a Belgic context at Bagendon.[4]

3. Handmade cooking pot from northern sector of enclosure ditch. In reddish gritted ware. This form occurs at Wheathampstead.[5] Locally a similar type of vessel was found at Wyboston.[6]

[1] R. E. M. Wheeler, *Res. Comm. Soc. Antiq.* XII (1943), p. 236, no. 213.
[2] E. M. Clifford, *Bagendon* (1961), fig. 65, no. 116.
[3] *Oxoniensia*, XI and XII, p. 56.
[4] E. M. Clifford, *op. cit.* fig. 55, no. 9.
[5] R. E. M. Wheeler, *Res. Comm. Soc. Antiq.* XI (1936), p. 150, no. 22.
[6] C. F. Tebbutt, *Proc. C.A.S.* L (1957), p. 81, no. 5.

4. Hand-made bowl in Black fabric from south-eastern corner of ditch. Like form 2 this form has a pre-Belgic ancestry, but a similar vessel occurs at Colchester.[1]

5. Fragments of rim from northern sector of Enclosure ditch in grey fabric with horizontal rilling, which is a typically Belgic pattern. Jars with similar ornamentation come from many Belgic sites, for instance Verulamium.[2]

A Belgic date for this small group seems fairly certain, though more datable sherds would have given more definite evidence. The absence of foreign imports such as butt-beakers may be due to the fact that a reasonable sample of pottery could not be obtained. It is also evidence that the enclosure at Brampton may date from the early part of the Belgic period as is advanced for dating of the Wheathampstead Oppidum.[3] Imported wares are found at Wyboston[4] so that their occurrence at Brampton in an early Belgic site is not expected. Wyboston continued as an occupied site into the Roman period whereas there is no Roman occupation at Brampton. On balance it appears that Brampton with a large proportion of hand-made wares may be a primary settlement dating from the early part of the Belgic period. Evidence though is not conclusive.

CONCLUSIONS

The enclosure and internal structure form part of a late Iron Age settlement. Rectangular or kite-shaped Iron Age enclosures are known in Wiltshire, for instance at Tollard Royal.[5] There are several other sites of similar age in the Ouse valley at Wyboston,[6] near St Ives[7] and near Buckden.[8] The settlement at Brampton does not continue into the Roman period as does that at Wyboston; the only Roman pottery here is a small sherd of colour-coat ware found in the topsoil close to the large barrow. No field system seems to be immediately attached to the settlement, although cropmarks of a field system appear in the field immediately to the north, and these could have been cultivated by people who lived behind the protective bank of the enclosure. Little more can be said about their economy, since the acidity of the soil has removed most traces of animal bones.

There is evidence of two huts in the enclosure; these, however, are small compared with the considerable structure found on earlier Iron Age sites such as the Little Woodbury house[9] and West Harling.[10] The structures at Brampton are much simpler, having large wall uprights every 6 ft and a roof supported on two or three central uprights. There is a close parallel to these huts from another Belgic site at Standlake Downs,[11] where three huts about 24 ft in diameter were found; there again, as at Brampton, there were no centre posts.

Such evidence as there is suggests that Structure A may have been dismantled.

[1] C. F. C. Hawkes and M. R. Hull, *Res. Comm. Soc. Antiq.* XIV (1947), type 255A.
[2] R. E. M. Wheeler, *Res. Comm. Soc. Antiq.* XI, p. 166, type 60.
[3] *Ibid.*
[4] C. F. Tebbutt, *op. cit.*
[5] Information given by Dr G. J. Wainwright.
[6] *Proc. C.A.S.* L, p. 75.
[7] O.S. Map of Southern Britain in the Iron Age.
[8] Information given by Mr B. Richards.
[9] *P.P.S.* VI, p. 30.
[10] Clark, *P.P.S.* XIX, p. 1.
[11] *Oxoniensia*, XI and XII, p. 27 (1946).

The huts may not have been inhabited at the same time and others may lie under the field to the west of the enclosure. In the absence of any other evidence it is probable that the enclosure represents the settlement of one family or family group; neither of the huts could have provided shelter for more than ten people.

Acknowledgements

I am grateful to the Huntingdon R.D.C. for permission to excavate, to Miss R. Powers of the British Museum for the report on the cremated remains; to Miss D. Reeves, Mr G. C. Morgan, Mr D. Neale and illustrators, all of the M.P.B.W. staff, respectively, for pottery restoration, charcoal identification, and for redrawing the *plans and* sections. I am indebted to Dr D. L. Clarke for his note on the beaker and to the Norris Museum at St Ives for storing the site notes and finds. Finally I acknowledge the debt owed to those engaged in the field work; Dr J. K. St. Joseph for his work in discovering and recording the site from the air; to my assistant Mr W. N. Watterson; and to the volunteers and workmen for their patience and hard work in excavating on the difficult subsoil.

APPENDIX A

REPORTS ON CREMATED HUMAN BONE

MISS R. POWERS

British Museum (N.H.), Sub-Department of Anthropology

A. *Brampton 1966. Cremation 06.17.1412. 40.67.0.0. Fe 14 Level 3 B.B.66.50. MOW AM 660343*

(Cremation found in urn—Fig. 4, no. 14)

The cremation was washed, and some flint gravel and sand separated out. It was of an adult in the prime of life, most probably a female (age 33 ± 5 years). All the bone was thoroughly burned, grey with an outer layer of white. Thermal distortion was considerable and prevented reconstruction of some lengths of femur and tibia shaft which showed contact. The recognizable fragments were as follows:

Skull

Mandibular condyle and glenoid fossa, with fragments of the temporal including zygoma and one petrous part. Part of the mandible with sockets for 3 molars and a premolar; the roots of one molar are in place and 3 loose roots probably come from the other sockets. A fragment of orbital margin, the area of bregma, and several occipital and parietal fragments are present, and show that the coronal sagittal sutures are fused while the lambdoid suture remains open at least around asterion. The mandibular joint and the alveolar margins are healthy.

Skeleton

Tibia, femur and other long bones are represented by their densest portions. Some of the left ilium survives including part of the sacral articulation but unfortunately lacking the sciatic

notch (which would help determine the sex). Fragments of vertebrae include a cervical body, showing no osteoarthritic changes. The bones are comparatively smooth (if the heat distortion is disregarded) with no noticeable ridges for muscle attachment.

B. *A.M. 660261. Brampton 1966. Cremated bone separated from burial urn*

(From secondary burial in small ring ditch—Fig. 3, no. 5)

The material was embedded in a sandy-coloured matrix, so hard that it was necessary to wash it. What bone remained was white and porcellaneous, with many fine cracks but only a little distortion. It was identified as follows:

Skull

Twelve fragments of the skull vault remain. In most of them the inner and outer tables have split apart. Although both petrous areas are usually preserved in cremated material, only one small fragment of one remains. Part of the frontal bone including glabella and most of the right supra-orbital ridge is represented by the outer table only. The metopic suture is obliterated. The extent of the frontal sinus is unknown. A small area from near asterion retains both tables and shows open sutures. The remaining fragments are unidentifiable.

Post-cranial bones

These are mostly portions of long-bone shaft, probably including femur, tibia and forearm fragments. Two pieces of cancellar bone appear to represent parts of the knee joint. There are also three pieces of vertebral body, two of which contact to form the body of the first sacral segment. No obvious osteoarthritic changes are present.

Conclusion

The cremation was that of an adult individual, whose age and sex cannot be ascertained from the meagre remaining fragments.

APPENDIX B

Charcoal Samples from Excavations

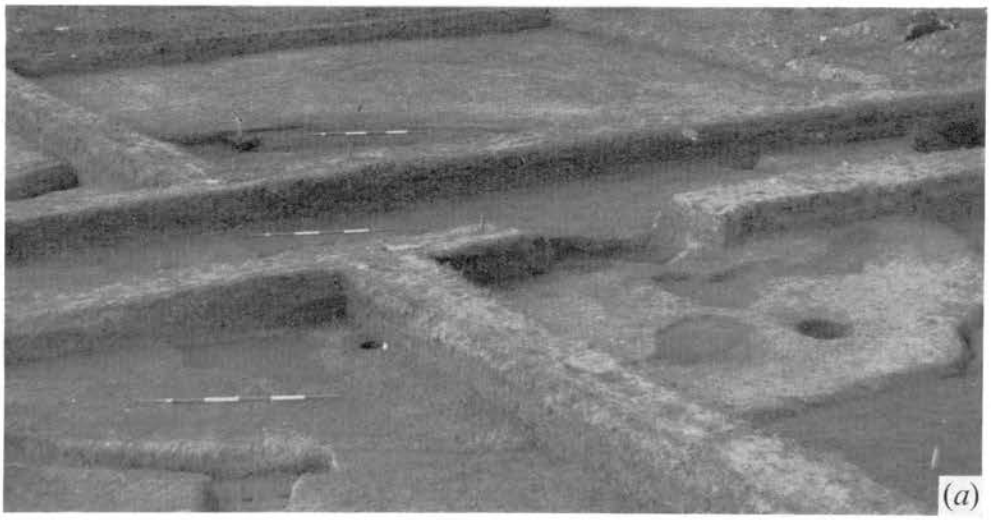
(All are from small fragments unless otherwise stated)

Site B. Barrow

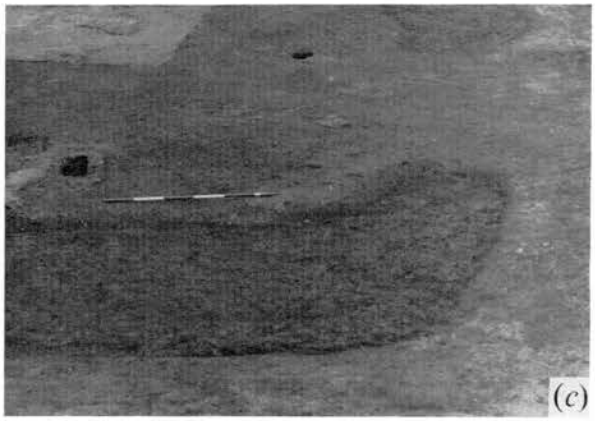
Location	*Charcoal Present*
Fig. 4, no. 18 (post hole)	*Quercus robur* (Oak) at least 2 in. diameter
Fig. 4, no. 14 (with urn burial)	*Quercus robur*
Fig. 3 A (rubble above turf line of outer ring ditch)	*Crataegus* spp. (probably Hawthorn)
Site A. Iron Age Enclosure	
Fig. 8, no. 1 (S.W. sector of enclosure ditch)	*Crataegus* spp.
Fig. 9, no. 33 (small pit)	*Betula* spp. (Birch)
Fig. 8, no. 30 (from fill of S.W. corner of enclosure ditch)	*Populus* spp.
Fig. 8, no. 29 (N. sector of enclosure ditch)	*Acer campestre* (Field Maple)

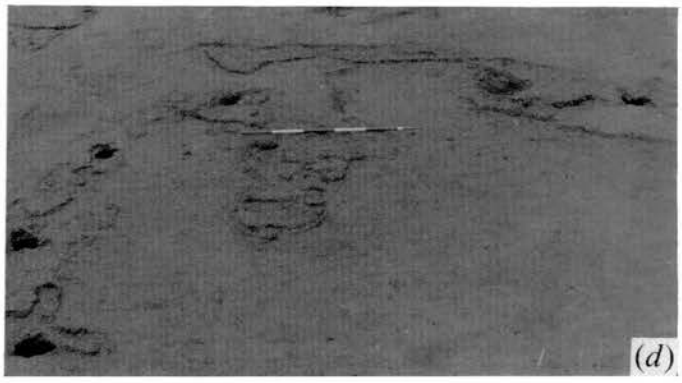
Brampton, Hunts.: the site from the air.

Photo by J. K. St Joseph, Cambridge University collections: copyright reserved.


(a)


(b)


(c)


(d)

Brampton:

(*a*) View of barrow from SE.
(*b*) Detail of stake ring in barrow.
(*c*) Entrance of Iron Age enclosure from East.
(*d*) Iron Age Hut A from South.

Proc. Camb. Ant. Soc. Vol. LXII (1969), pp. 21–28.

NEW ADDENBROOKE'S IRON AGE SITE, LONG ROAD, CAMBRIDGE

M. D. CRA'STER

IN the summer of 1967, during the preliminary work on the site of Stage 2 of New Addenbrooke's Hospital, off Long Road, Mr John Holloway noticed sections of several ditches in the edges of John Mowlem & Co.'s excavations for the Services tunnel (see Fig. 2), and also found some pieces of Iron Age pottery.

Thanks to the co-operation of the Governors of the Cambridge United Hospitals and the Contractors, I was able during the next few months to rescue quite a lot of information about the Iron Age settlement thus discovered, despite the fact that it was already much too late in the proceedings to be able to conduct anything like a proper excavation. Were it not for the interest shown, the site would have been entirely lost; for this, and for much practical help, I am deeply grateful.

At a later stage, the work of rescue and observation was taken over by the Cambridge University Archaeological Field Club and to them, and particularly Kate Pretty and Tony Parkinson, I am indebted for further pieces of knowledge. The observations of John Holloway were invaluable throughout, and he also is responsible for mapping the site, using the architects' plans.

It must be realized that only fragmentary remains of what was evidently an extensive site could be recovered. The main area of settlement appears to have coincided with that of Stage 2 of the hospital—possibly because it was at the top of a slight rise in the ground (Fig. 1). Since the entire ground level was at one stage or another removed to a depth of about 20 ft in the course of building operations, it will be appreciated that the present appearance of the site bears no relation to its natural contours. It was during the course of these massive earth-moving operations that the site was found and such information as is here set forth was gathered. Fig. 2 shows the Iron Age features found, in relation to the new hospital buildings.

The main feature was a large rectangular enclosure ditch surrounding an area approximately 350 ft across. Two corners of this ditch were excavated, and the north-western one was seen by the drivers of the earth-scrapers. The fourth corner disappeared without trace, but it seems not unreasonable to assume its existence.

No definite entrance was found, unless the kink in the line of the southern ditch can be taken as a sign of one. Within the enclosure, the remains of one or two pits were noticed and probably a good many more were destroyed unobserved. The earth-scraper drivers reported others in the north-western area of the enclosure. Sections of the ditch, marked by hatched rectangles on the main plan (Fig. 2), were obtained on the west, north and east; it was remarkably uniform in all these cases—a

V-shaped ditch about 7 ft broad and 4 ft deep (Fig. 3). The bulk of the debris in it consisted of domestic animal bones, and lay on or near the bottom of the ditch, the upper fill being comparatively featureless. The pottery was of rough 'Iron Age A'

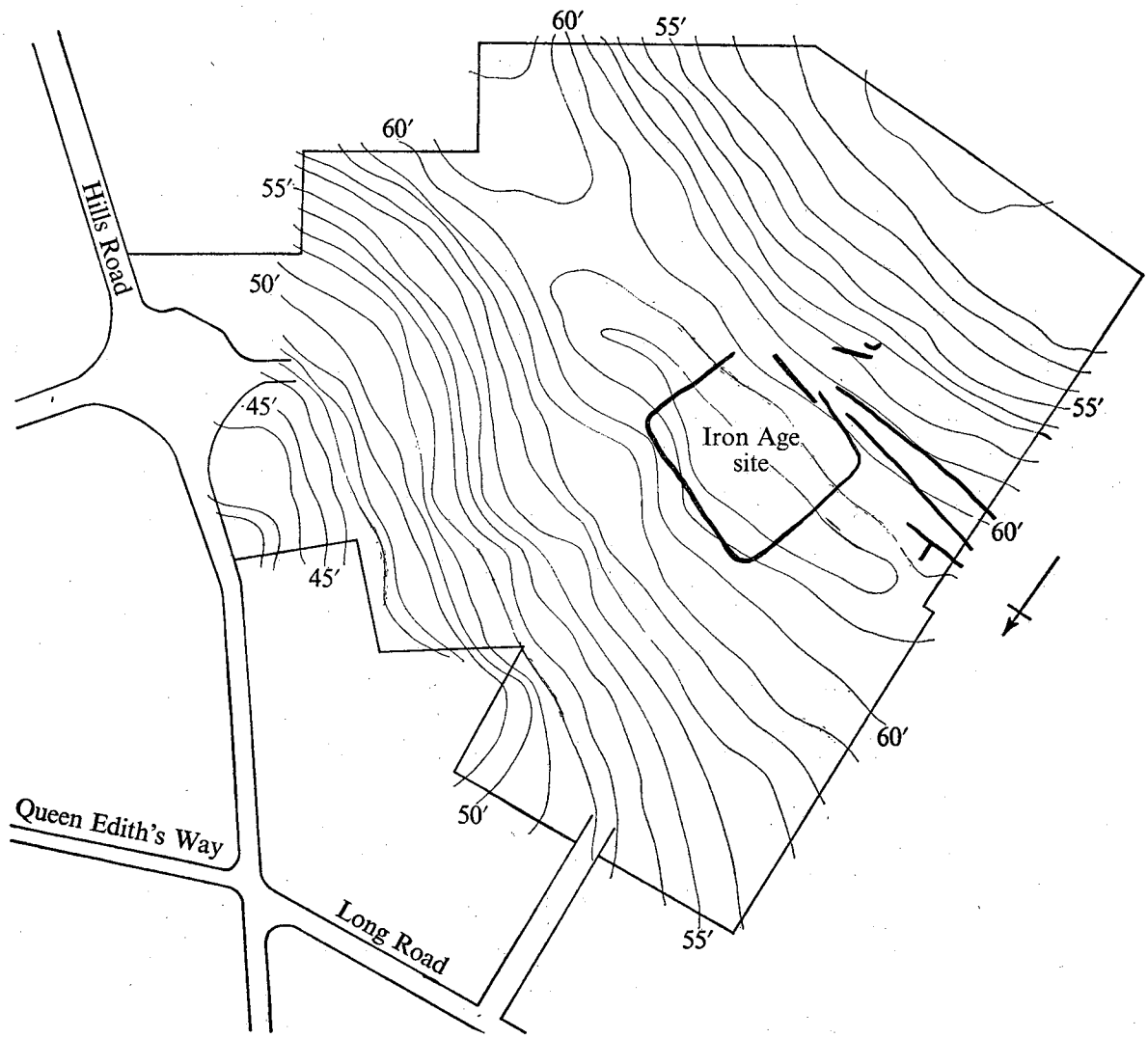


Fig. 1. New Addenbrooke's site, with original contours.

type, almost identical with that found at Barley,[1] to which it bears a closer resemblance than to the pottery from the Wandlebury hill-fort,[2] although this lies barely two miles away (Fig. 8).

In addition to the main enclosure ditch, various roughly parallel ditches ran east–west along the southern edge of the site. No very satisfactory dating evidence

[1] M. D. Cra'ster, 'The Aldwick Iron Age Settlement, Barley, Herts.', *Proc. C.A.S.* LIV (1961), pp. 22–46.
[2] B. R. Hartley, 'The Wandlebury Iron Age Hill-fort', *Proc. C.A.S.* LI (1957), pp. 1–27.

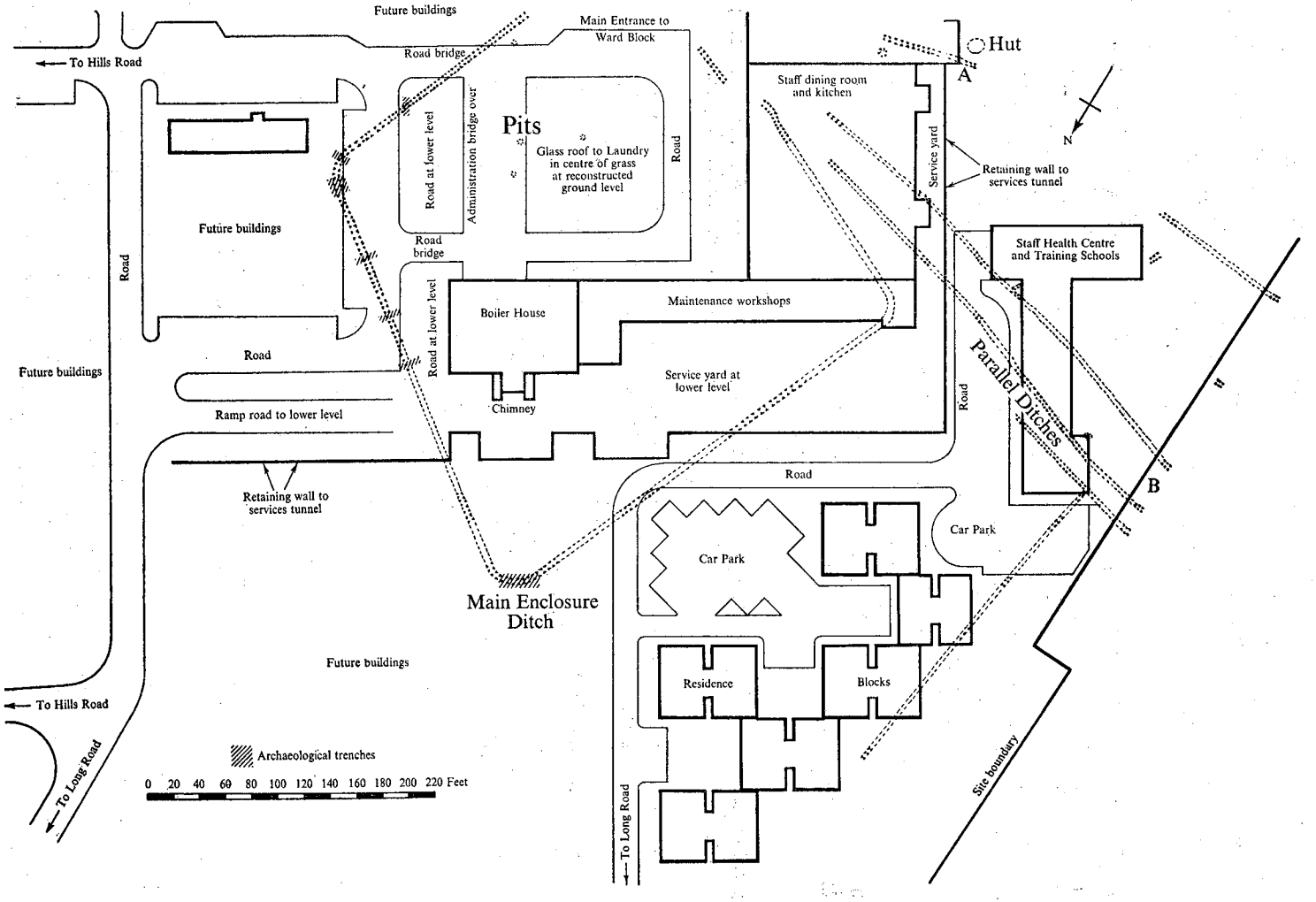


Fig. 2. New Addenbrooke's: the Iron Age site in relation to the new hospital buildings.

was found for these ditches, as they could only be noted briefly in the edges for the contractors' excavations. The exception was the southernmost of these subsidiary ditches, which the Field Club was able to section (at A on Fig. 2, and Fig. 4), and which yielded pottery similar to that from the main enclosure ditch. In addition, a

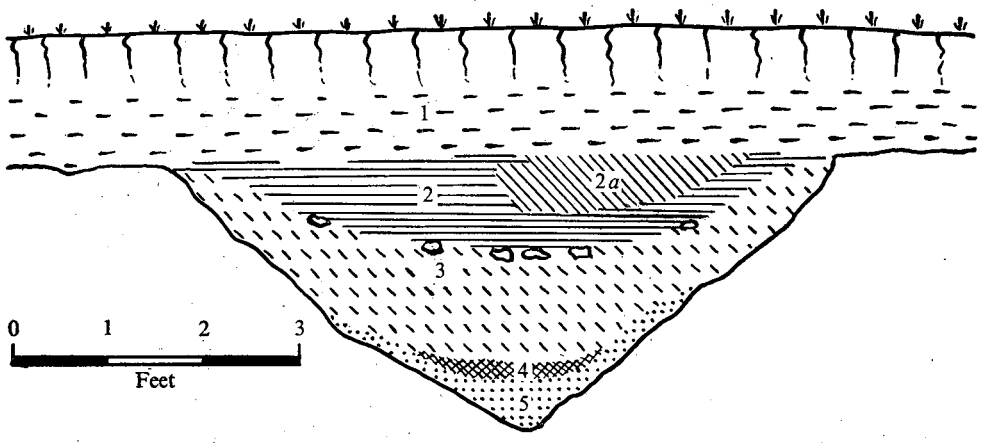


Fig. 3. Section across main enclosure ditch on east side. 1, Clayey below plough; 2, Brown earth; 2*a*, Darker patches, with potsherds; 3, Sticky marl; 4, Dark silt; 5, Chalky clay/silt.

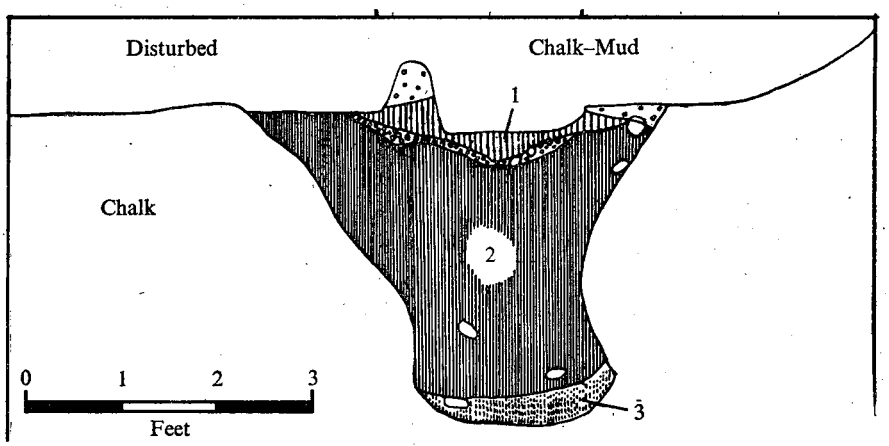


Fig. 4. Section of ditch at A on main plan.
1, Black silt with flints; 2, Black silt; 3, Grey chalky.

small hand-made pot of smooth blackish ware with a rough bead-rim and curvilinear decoration was found (Fig. 9). The pattern can only be described as 'after Hunsbury'; although crudely done, it closely resembles such vessels as those in Fig. 6 (p. 75) of the Hunsbury report.[1] This also gives a clue to the probable type of decoration of those sherds found at Barley,[2] so fragmentary that it was not possible

[1] C. I. Fell, 'The Hunsbury Hill-fort, Northants.', *Arch. Jour.* XCIII (1937), pp. 57–100.
[2] Barley, *loc. cit.* p. 39, fig. 8, nos. 88–97.

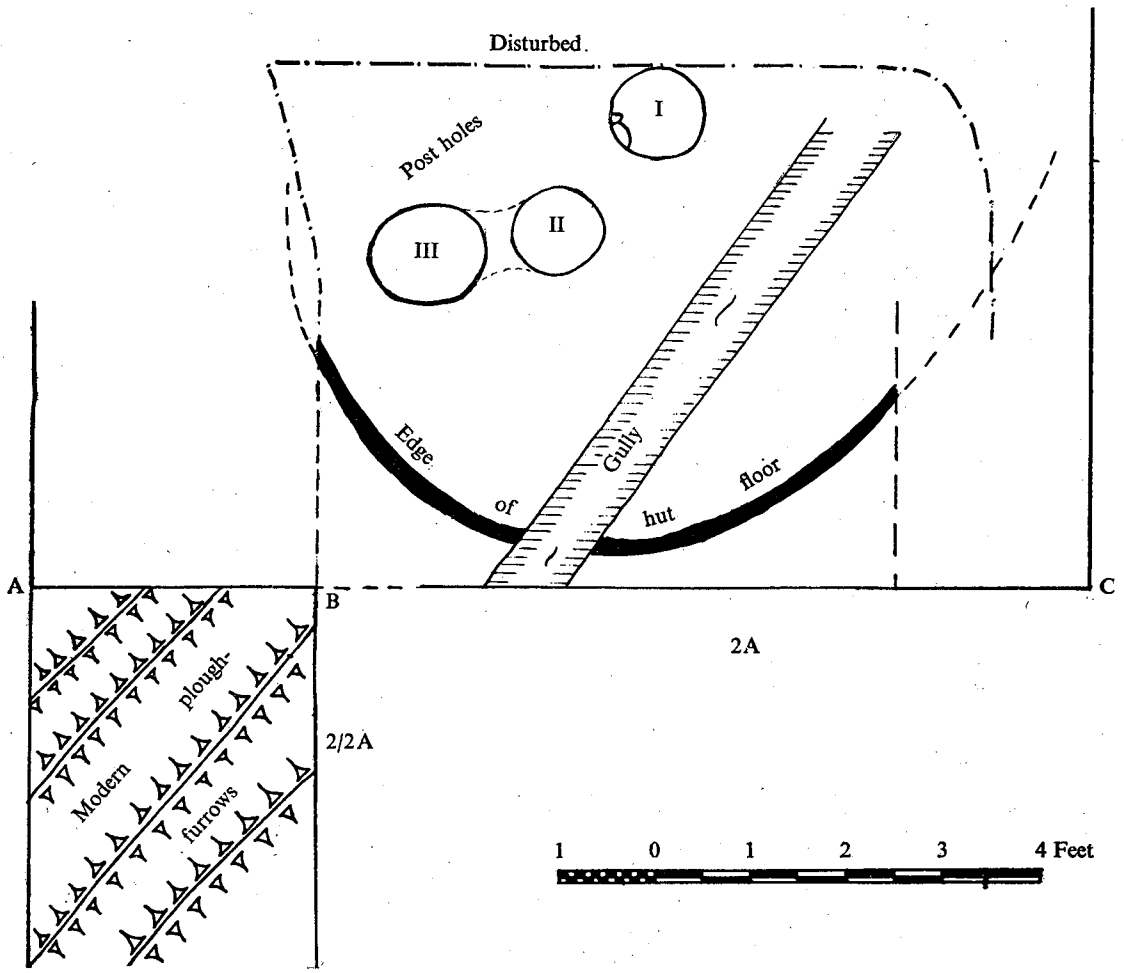
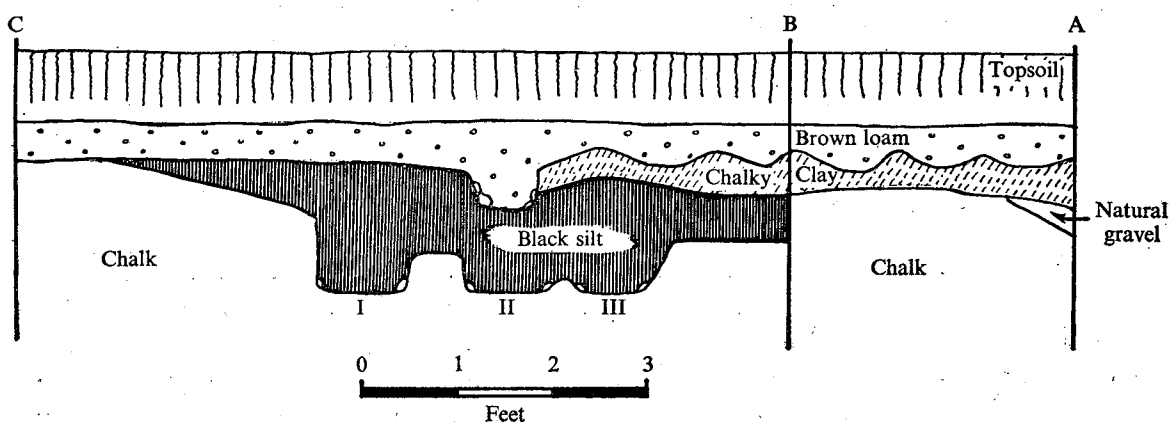


Fig. 5. Plan of fragmentary hut, with post holes.



Section A–C; furrows and gully—hut and post holes projected

Fig. 6. Section of hut post holes, and later plough-furrows.

to reconstruct the form or pattern.[1] The New Addenbrooke's pot, however, has a flat base and more of an incipient foot-ring than either the Hunsbury or the Barley vessels.

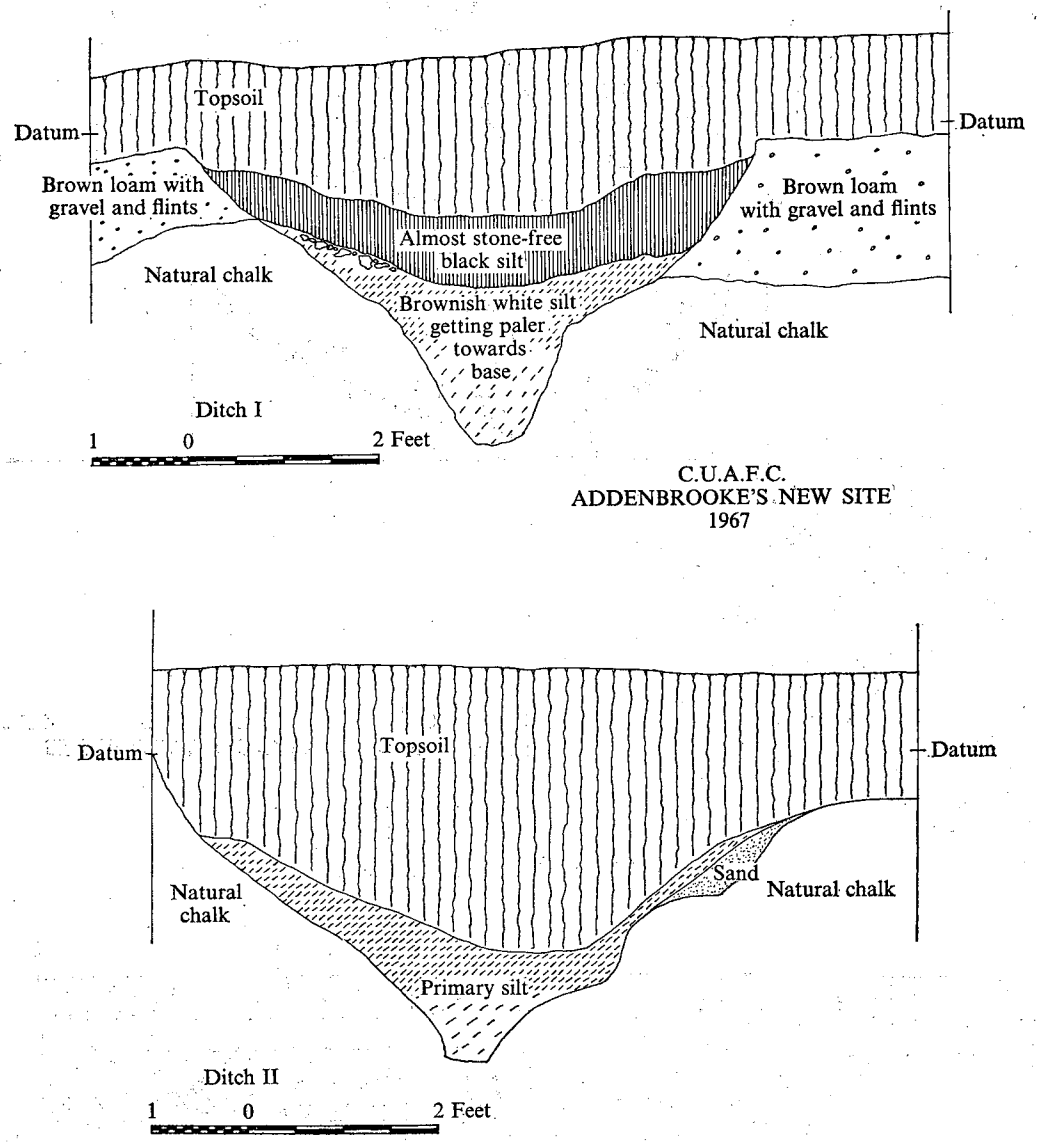


Fig. 7. Sections across parallel ditches at B on main plan.

Immediately to the south of this ditch, a tiny area remained undisturbed, which proved to contain what was probably the site of a house. Three post holes were found, two of which appeared to be replacements of each other (Fig. 5); the floor

[1] See also a similar sherd from the Iron Age levels of the ditch at Arminghall, Norfolk (*P.P.S.* II (1936), fig. 7, no. 16 and p. 18).

level and the fill of one of the post holes produced a few crumbs of pottery similar to that from the rest of the site.

The only other evidence available was a few scraps of abraded Roman pottery in the upper fill of the parallel ditches, where they were cut by the line of the fence

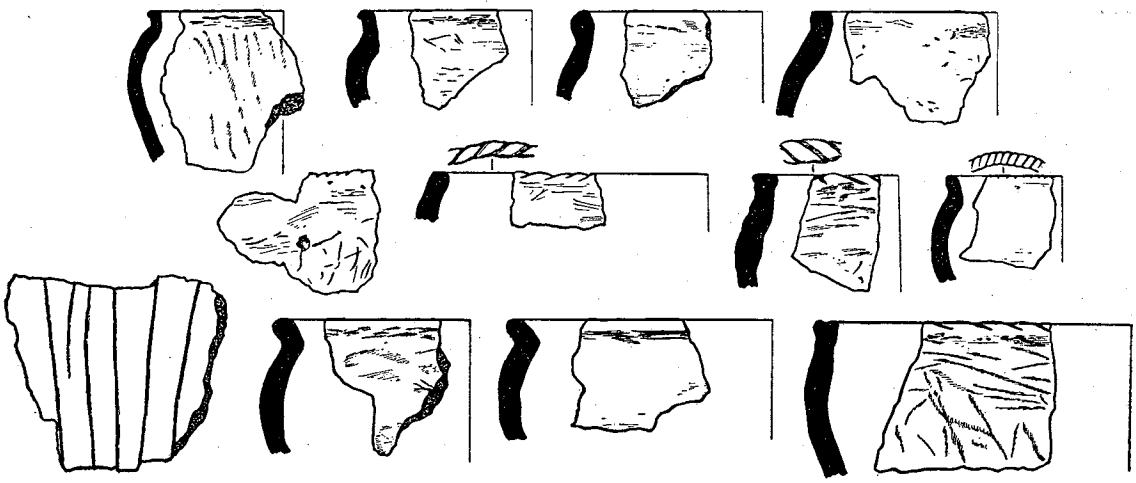


Fig. 8. Pottery from the main enclosure ditch. Scale 1/4.

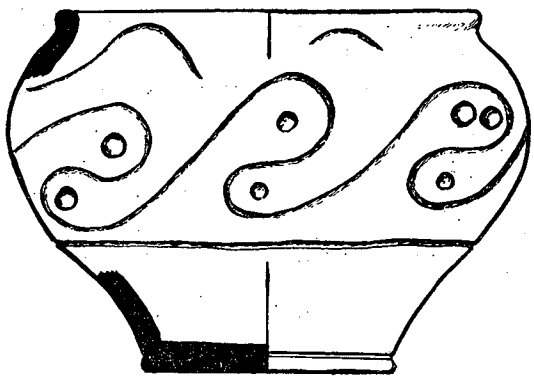


Fig. 9. Pot from ditch at A (see Fig. 4). Scale 1/2.

along the western edge of the hospital site (Fig. 7). Cropmarks of what looks like a possible Romano-British agricultural settlement can be seen on air-photographs of the Downing College playing field and the adjacent field, both adjoining the hospital site in this direction.

One other feature deserves mention. Over the remains of the house, the adjacent ditch, and other parts of this bit of the site, lay a series of well-marked plough-furrows. These were clearly post-Iron Age, but had nothing to do with the recent

ploughing of the site, being below the modern topsoil (Fig. 6). Their most surprising feature was their size and depth.

The nearest parallel to the type of site in the area seems to me to be C. F. Tebbutt's at Wyboston, Beds.[1] Here the original rectangular enclosure was Belgic, but appeared to have had additional enclosures attached in Roman times. See also D. A. White's article in this volume (p. 12), where a rectangular enclosure of very similar proportions was found at Brampton, Hunts. The pottery there was likewise of Iron Age A type, but included one Belgic sherd.

Other rectilinear enclosures are those of the Berkshire, Thames valley area, described by Mrs Cotton.[2] These again are Belgic in so far as they have been dated; there is a strong suggestion that they may have been enclosures for stock, rather than human habitation. For what it is worth, the only evidence of a house at New Addenbrooke's lies outside the main enclosure.

One is left with scrappy and inadequate evidence, which cannot be pieced together into a satisfactory whole. But a definite impression remains, as at Barley, of a site late in the Iron Age, possibly even verging on Roman: certainly contemporary with Belgic pottery styles, and yet without a trace of wheel-thrown wares.

APPENDIX

THE ANIMAL BONES

Only a small sample was recovered, so that there is little to be said about them: a total of 61 cattle bones, 41 sheep/goat, 3 horse and 2 pig. Since nearly all were fragmented, measurements were unobtainable; but visually the bone sizes compared closely to those from the Barley site. One cattle tibia had been cut at both ends with a saw,[3] and another was bevelled at one end, as if by use as a scraper.

The sample was too unsatisfactory to be able to base a great deal on the evidence for ages at death, but such as it was points to both cattle and sheep being killed at about 24 to 30 months.

[1] C. F. Tebbutt, 'A Belgic and Roman Farm at Wyboston, Beds.' *Proc. C.A.S.* L (1956), pp. 75–84.

[2] M. Aylwin Cotton, 'Robin Hood's Arbour, and Rectilinear Enclosures in Berkshire', *Berks. Arch. Jour.* vol. LIX (1961), pp. 1–35.

[3] Compare the saw-cut horn-cores from Barley, *loc. cit.* p. 33.

Proc. Camb. Ant. Soc. Vol. LXII (1969), pp. 29–34.

ARCHAEOLOGICAL RESULTS FROM THE NORTH SEA GAS PIPELINE IN CAMBRIDGESHIRE 1968

C. C. TAYLOR

IN the second half of 1968, the Gas Council cut a large trench across South Cambridgeshire to take the No. 3 Feeder Main for North Sea Gas. In view of the fact that the trench was to cross all four of the Cambridgeshire Dykes and the possibility of other archaeological finds being made, the Cambridge Antiquarian Society and the Royal Commission on Historical Monuments (England) agreed to co-operate on watching the work.[1] The greatest help was received from the Inspectorate of Ancient Monuments, the Gas Council and the contractors.

The trench, for a 36-in. pipe, was cut to an average depth of 7 ft and was 4–5 ft wide. Its line extended from near Royston in the W. to Chippenham in the E., a distance of almost 30 miles. The following finds and sites were recorded.

THE CAMBRIDGESHIRE DYKES

Devil's Dyke and Fleam Dyke

The pipeline was originally intended to cut all four of the Cambridgeshire Dykes, but following representations by the Inspectorate of Ancient Monuments and the Cambridge Naturalists' Trust both the Devil's Dyke and the Fleam Dyke were untouched and the pipe was inserted in boreholes some 18 ft deep under both ditches, at TL 54385463 (Fleam Dyke) and 58786414 (Devil's Dyke). Spoil from both boreholes was examined but proved to be entirely natural chalk.

Heydon or Bran Ditch (Fig. 1)

The trench was cut through the line of this dyke 230 yards N.W. of Heydon Grange (TL 41744262) almost exactly at right angles to it. The ditch was thus completely sectioned, but no trace of a bank was seen, presumably here being entirely ploughed away. The bottom of the ditch was not exposed as it was at this point some distance below the bottom of the pipe trench. The ditch was some 21 ft wide at the top and 8 ft wide at the bottom of the trench. It was completely filled with a light brown chalky loam, containing small chalk lumps and tiny fragments of flint. There was no

[1] This note is published by kind consent of the Commissioners. The views expressed are those of the author who carried out the work for the Commission.

stratification whatsoever, except near the bottom where chalk rubble, perhaps the result of initial weathering, was exposed. No finds were made.

This section adds little to what is already known of the Heydon Ditch following the excavations on it by Fox, Palmer and others.[1] The homogeneous fill noted in 1968 confirms the evidence of the other ten sections made, though there was no evidence here of any earlier ditches on the E. side of the main ditch which the previous excavators noted.

Brent Ditch (Fig. 1)

The pipe trench was cut through the line of this dyke near its centre, in the S.E. corner of Pampisford Park 400 yards S.S.E. of Pampisford Hall (TL 51104803), almost at right angles to it. The section was of some interest in that it was the first

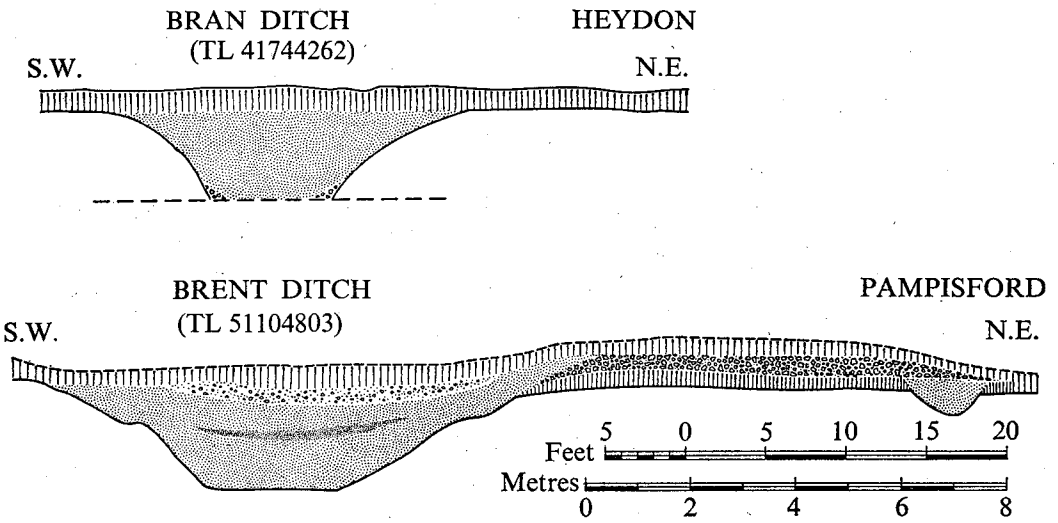


Fig. 1

time any cut through the dyke has been recorded. Fox said that no definite bank existed but that it seemed possible that there had been one once on the S. side.[2] Recent fieldwork had suggested that the bank did indeed exist in a few places and was on the N. side. The trench section proved this.

The ditch was some 30 ft wide at the top of the trench, 8 ft wide across its flat bottom and just over 7 ft deep below the ground surface. There were well-marked ledges or berms on both sides of it. It was largely filled by a dark brown loam containing small lumps of chalk except for a narrow lens of sandy loam in the centre, and a small amount of gravel and sand at the top. There was no evidence of chalk rubble weathering on the sides.

Immediately to the N. of the ditch a slight rise in the ground 30 ft wide and 1 ft

[1] *Proc. C.A.S.* XXVII (1926), pp. 16–33; XXX (1929), pp. 78–93; XXXII (1932), pp. 54–6.
[2] *Archaeology of the Cambridge Region* (1923), pp. 126, 130.

high proved to be the remains of the bank. A narrow layer of light brown loam, presumably the old ground surface, lay directly on weathered natural chalk and was covered by a band of chalk rubble on which was the modern soil. At its N. end the tail of this bank overran and sealed a small ditch 2 ft deep and 5 ft wide with homogeneous dark brown loam fill. This clearly pre-dated the bank and may represent an earlier ditch on the line of the dyke or a marking-out ditch for the dyke itself. No finds were made.

Linear Ditch Systems

The Chalk land between Newmarket and the River Cam on both sides of the A 11 is characterized by having a number of complex linear ditch systems over parts of it, completely unrelated to the main Cambridgeshire dykes. They are all ploughed out and are only known from air-photographs. None has been noted in print up to now. These ditches are generally straight but turn in sharp angles and sometimes run for hundreds of yards across the countryside. They often intersect with other ditches but form no coherent pattern, vary greatly in width and are completely undated.

A particularly complex area of these exists S. and S.W. of Allington Hall in Bottisham parish which is outside our concern here.[1] Another less complex but extensive area of these ditches lies on either side of the A 11, N.E. of Worsted Lodge in Balsham and Fulbourn parishes in an area containing a number of barrows and ring ditches (Fig. 2). The pipe trench passed through part of this complex and cut two of these ditches. The first, which appeared to be very narrow on air-photographs,[2] runs N. and N.E. from just N. of Worsted Lodge (TL 52985224) for a distance of 300 yards before it ends (at TL 53055251). The pipe trench cut it very obliquely near its S.W. end immediately N.W. of the old railway (*a* on plan) (TL 62995229). The section showed this ditch to be extremely small, only 2 ft 6 in. deep and 6 ft wide across the top with an asymmetrical profile and rounded bottom. It was completely filled with dark soil flecked with small pieces of chalk. There were no finds. The second ditch which was sectioned by the pipe trench was S. of Heath Plantation (TL 53205273) (*b* on plan) and also appeared to be extremely narrow on air-photographs. It runs in a northerly direction from a point N. of Worsted Lodge (TL 52915229) for a distance of some 530 yards (to TL 52885282) and then turns sharply due E.S.E. and runs for a further 600 yards. The section revealed a ditch almost identical in fill and shape to the previous one except that it was 3 ft deep. The pipe trench also cut another ditch to the N.W., but for technical reasons it was not possible to record this.

Other apparent ditches, perhaps a part of another complex but not visible on air-photographs, were noted in Great Wilbraham parish. One lay immediately N.E. of the road joining Wilbraham to the A 11 (TL 55365655) and appeared to be running in an E.–W. direction. It was V-shaped, 5 ft deep, 12 ft wide across the top and, apart from some chalk rubble in the bottom, 9 in. was filled with light brown earth with small chalk lumps in it. A small flint-scraper and a single sherd of unidentifiable,

[1] *See* R.C.H.M., *Cambridgeshire*, vol. II, forthcoming.

[2] R.A.F. Vertical Air Photographs 1065/UK 1365:5356–9; and photographs taken by Dr St Joseph.

but probably prehistoric pottery was found in it. 1,000 yards to the N.E. near the parish boundary with Little Wilbraham (TL 55905736) the pipe trench cuts three more ditches, all apparently aligned N.W.–S.E. within 30 yards of each other. They were all V-shaped, 8 ft wide across the top and 4–5 ft deep and all filled with a light grey clay and small pieces of broken flint. Fragments of long bones of sheep or goats came from the fill of the north-easternmost ditch. These three ditches are close to the large Pagan–Saxon cemetry in Little Wilbraham 300 yards to the N.E. and may be connected with it.[1]

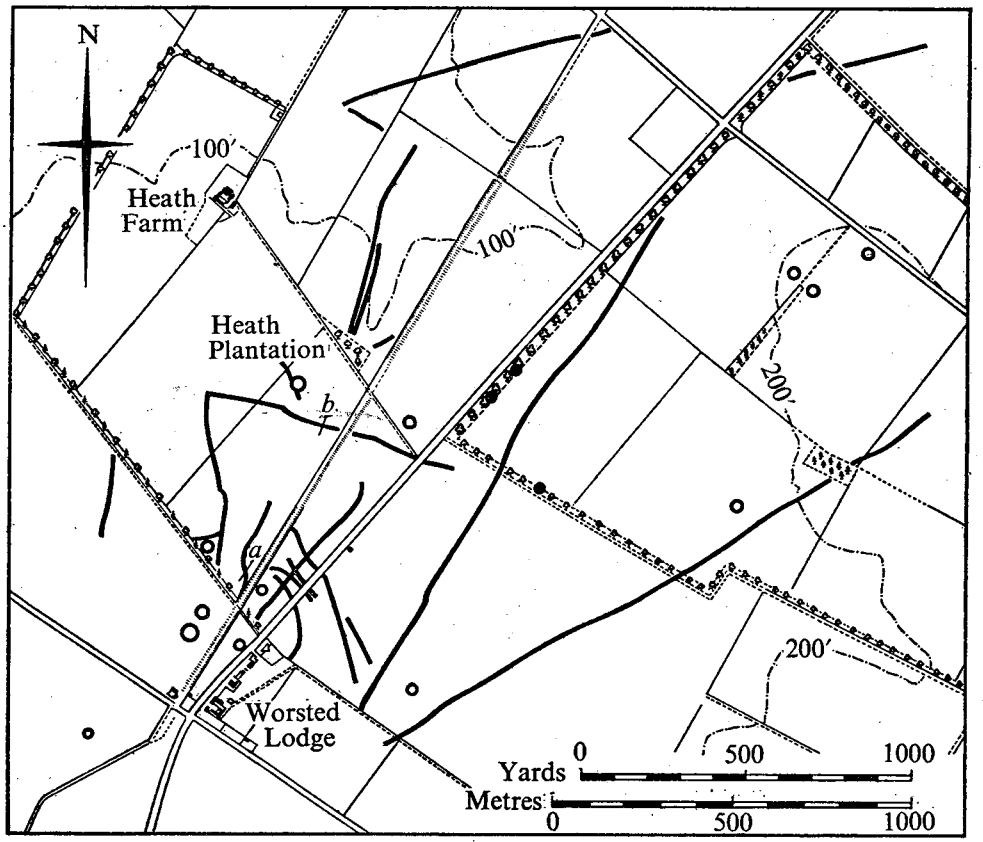


Fig. 2

Roman Settlement, Exning

The pipe trench passed within 100 yards of the Roman Building, in the N.W. of Exning Parish, close to the county boundary (TL 61206760), and it was anticipated that some finds might be made there. In the event nothing at all was found in the immediate vicinity of the building.

However, S.E. of the site for a distance of nearly a mile (TL 61206750–60376628) the trench was cut through a large Roman settlement area. Some 70 features were

[1] *V.C.H. Cambs.* I (1938), p. 317.

exposed, most of them (over 40) apparently being pits. These were usually U-shaped, 3–5 ft deep and between 3 and 4 ft wide, all cut in the natural chalk. All were filled with a homogeneous dark grey chalky soil containing small flints, lumps of chalk, pottery, animal bones, charcoal and wood ash.

In addition there were a number of what appear to have been sleeper-beam trenches. These were exposed as long rectangular slots, 3–8 ft long, 1 ft wide and up to 1½ ft deep with vertical sides, filled with black earth sealed by a layer of yellow calcareous clay, perhaps mortar up to 6 in. deep. Due to the narrow width of the pipe trench it was impossible to obtain any plan, but at least four appeared to be at right angles to each other and may represent the footings of a rectangular structure.

Other features included three large basins or depressions, up to 30 ft across and 3 ft deep. They were completely filled with grey clay, lying on a narrow band of burnt earth containing charcoal and fire-crackled flints, 2 or 3 in. deep, which covered the bottom. In addition a number of 'post holes' 1½ ft deep and 9 in. wide were noted, as well as what appeared to be a series of V-shaped ditches running in a generally N.W.–S.W. direction. The latter were 3–4 ft deep filled with dark soil and containing pottery and animal bones. Other similar ditches were noted beyond the limits of the main settlement area to the N.E. (TL 61596796).

Large quantities of Roman pottery were found in the pits and ditches, in the spoil heaps from the pipe trench and in the surrounding fields. It was mainly second century to fourth century in date and included some forms closely resembling those made at the Horningsea Kilns near Cambridge[1] as well as other types found in the well excavated in 1956 at Exning.[2] A few sherds of colour-coated ware of Nene Valley type were also recovered. An almost complete pot was found in the fill of one of the pits. This was a jar in black calcite-gritted fabric, whose exterior was coloured black to orange, and decorated with horizontal rilling. It is almost identical to one found at Wangford, Suffolk in 1955.[3] No Samian ware was found. In addition there were small quantities of hand-made black burnished wares perhaps of late Iron Age date, as well as some sherds of semi-carinated jars based on Belgic forms which are probably first century or early second century in date.

Fragments of bricks, roofing tiles, and box tiles were found, and large quantities of animal bones, all of cattle and sheep. The upper part of a rotary quern was found in the filling of one ditch and still had the remains of an iron haft in its central hole round which it was turned on its base.

There can be little doubt that this site is part of an extensive Roman settlement in the area lying along the S.E. side of a small N.E.-flowing brook. From surface finds from the adjacent fields it appears that the pipe trench cut longitudinally across the settlement which is thus almost a mile long and up to 200 yards wide. It must cover at least 50 acres, and dates from perhaps the later Iron Age to the fourth century A.D.

[1] *Proc. C.A.S.* XI (1913), pp. 14–69.
[2] *Proc. C.A.S.* LII (1959), 11–20.
[3] *Proc. C.A.S.* LI (1958), p. 25, fig. 4, no. 8.

Roman Settlement? (Pampisford)

Immediately S. of Pampisford Park (TL 50504764) the plough soil removed from above the pipe trench contained a quantity of Romano-British coarse-ware and one sherd of unidentifiable Samian ware. No structures, pits or ditches were visible in the pipe trench, but it is possible that a settlement area exists nearby.

Human Skeleton

A pit filled with dark earth was cut by the pipeline near Duxford (TL 479450). It had no visible stratification in the filling; at the bottom a human skeleton was found lying in a jumbled position. The pit was about 3 ft wide, except for a flaring near the top, and 9 ft deep. It could possibly have been a well, but remains unexplained and undated.

Earthen Ridges

Much of the lower slopes of the Chalklands of S.E. Cambridgeshire are characterized by having long low sinuous earthen ridges on them. These slight features are now being rapidly destroyed by modern ploughing. They are usually only 1–2 ft high, up to 30 yards wide and as much as 700 yards long. They are usually curved in plan, often in the form of a reversed-S. Similar ridges have been recognized elsewhere, notably in the Welland Valley of Lincolnshire,[1] where they were interpreted as being boundaries between furlongs in medieval and later open fields. Fieldwork in Cambridgeshire has confirmed this, and there is no doubt that such ridges are former headlands between furlongs.

The pipe trench was cut through a number of these ridges, e.g. in Pampisford parish, S. of Pampisford Hall (TL 50244741), Swaffham Bulbeck parish E.N.E. of Chalk Farm (TL 57706080) and Swaffham Prior parish, W. of Partridge Hall Farm (TL 58296229). All the cuts showed that these ridges were entirely made up of brown loamy soil with flecks of chalk in it, and with no indication of stratification or structure.

Old Road, Pampisford

In Pampisford parish (TL 50384754) the pipe trench exposed a large flat-bottomed depression some 50 ft across and 4 ft deep cut in natural chalk, apparently orientated N.W.–S.E. It was filled completely with brown plough soil, resting on a 6 in.-deep layer of dark soil containing small lumps of chalk and pieces of flint. Examination of air-photographs[2] revealed a dark mark running for a distance of 1,000 yards from the end of the road S.E. of Pampisford village (TL 49904792) to Hinxton Belt Plantation almost parallel to a modern farm track, and it was this that the pipe trench had exposed. Its connection with the modern road makes it clear that it is nothing more than an old road, though as it is not shown on the Enclosure Map of Pampisford of 1779[3] it is likely that it is of medieval or later date through the former open fields of the parish.

[1] R.C.H.M., *A Matter of Time* (H.M.S.O. 1960), p. 32.
[2] R.A.F. Vertical Air Photograph 1064/UK 1635:4394.
[3] Cambridge County Record Office.

Proc. Camb. Ant. Soc. Vol. LXII (1969), pp. 35–57.

THE ROMANO-BRITISH SETTLEMENT AT LITTLE PAXTON, HUNTINGDONSHIRE

ERNEST GREENFIELD

With a note on other finds in the area by C. F. Tebbutt.

SUMMARY

THE excavation revealed superimposed and involved drainage-ditch systems dating from the second to the fourth century, and two small habitations of humble type of the third-fourth century A.D., probably representing a small farmstead.

INTRODUCTION (Fig. 1)

The site was at Grid Ref. TL 194627, 1-in. O.S. Map 134 in what remained of Field 148 (O.S. 25-in. Map: Hunts. Sheet XXV 7), in the parish of Little Paxton, Hunts. It lay on the north bank of the River Ouse on Low Terrace gravels being worked commercially by Messrs Inns Ltd. Its O.D. was between 50 ft and 55 ft.

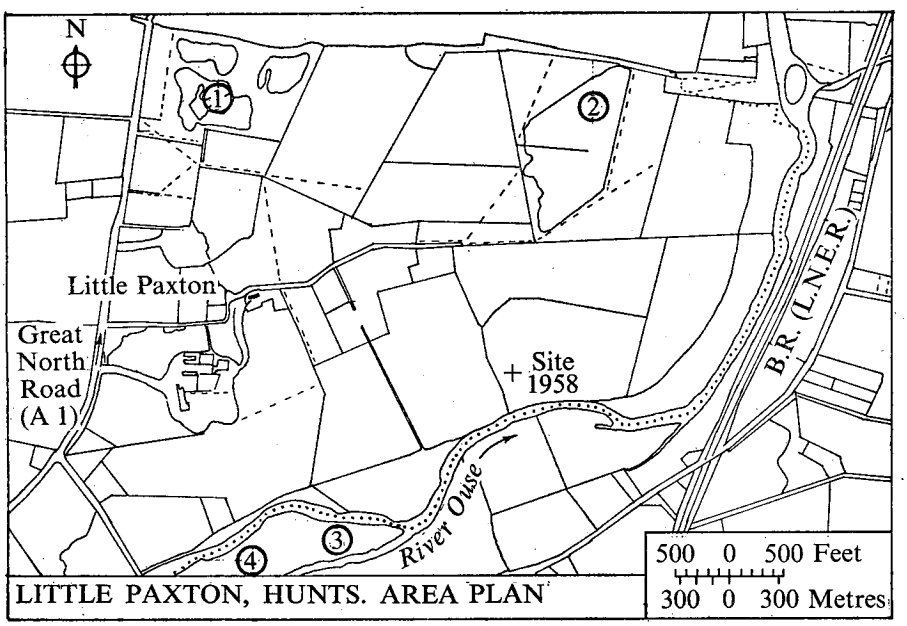


Fig. 1. Little Paxton.

(*Based on the Ordnance Survey 6 in. map by permission of the Directors General.*)

The site was first discovered from the air by Dr J. K. St Joseph in 1953, and was confirmed on the ground by Mr C. F. Tebbutt, who found Romano-British pottery fragments scattered on the surface. Dr St Joseph's air-photograph[1] (Pl. I) shows a widespread network of dark lines over an area of three fields (78, 148 and 151) totalling 50 acres. During the past five years most of this area has been quarried away and in April 1958 only the south-western fringe of field 148 remained. This contained a complex of the clearest markings, and a rectangular-shaped mark, suggesting a stone building centred in what was thought to represent a ditched field system, was interpreted as the site of a small farmstead. Subsequent excavations proved ditched field systems but a compact farmstead of the type suggested did not exist.

The excavation was carried out for the Inspectorate of Ancient Monuments of the Ministry of Works, with five labourers, between 14 April and 16 May 1958, by kind permission of the owners, Messrs Inns. The site was a scheduled Ancient Monument.

GEOLOGY

By Dr F. W. Anderson (Geological Survey and Museum)

The site lies on the north bank of the River Ouse on the glacial gravels of a river terrace whose general level is about 50 ft O.D. These gravels, mainly composed of flint pebbles, are 5–6 ft in thickness at this point and rest on Oxford Clay (Jurassic), which however is not exposed in the immediate area of the excavation. The valley bottom consists of alluvium (dark clays and loam) whilst to the east the ground on the opposite bank rises quickly to 100 ft and is formed of Oxford Clay overlain by Boulder Clay.

Palaeolithic implements have been found in the gravels and have been recorded by Mr C. F. Tebbutt.[2]

ACKNOWLEDGEMENTS

I am grateful to C. F. Tebbutt for all the help he has given me; to Miss S. A. Butcher for arranging the excavation and for help in the preparation of this report; to D. S. Neale for drawing the copper alloy, iron and pottery and to L. Monro for drawing the stones for publication; to Mr and Mrs B. R. Hartley, G. C. Boon, Dr F. W. Anderson, Miss J. E. King, Dr D. Cutler for their reports and to L. Biek for his advice and help in arranging specialist reports.

THE SITE BEFORE EXCAVATION

The excavation was confined on the east side by the gravel pit working face and on the west side by a growing crop. The surface was abandoned stubble field, much mutilated by machine tracks and dumps of tar. Since the air-photographs were taken, the appearance of the site has altered almost beyond recognition; the old hedgeline

[1] Herewith reproduced by kind permission of Dr St Joseph.
[2] See Appendix A.

between fields 148 and 151 has been bulldozed and is now under the growing crop, and only the oak tree shown on the right of the photograph remained. It was due mainly to the survival of this tree, the old hedgeline, and the river bank, that the site could be located.

THE EXCAVATION (Fig. 2)

This was based on a 100 ft grid on a north to south, east to west alignment and contained parallel lines of trenches (lettered A–Z), and grid squares (1–9) where necessary. Features are numbered 1–54 and the habitations as Area 'A' and 'B'. 1,900 ft of 2-ft trench was dug to cover as much of the air-photograph markings as possible. The majority of the markings were proved and the excavation also revealed many features which did not show on the air-photograph.

The Stratification (Fig. 5. Sections)

The stratification of the site, except where features occurred, was of a simple nature and consisted of three main levels: Layer 1 was the plough soil which completely covered the site. This was of dark brownish grey sandy soil containing a great deal of small flint gravel. A few Roman sherds, together with modern artifacts, occurred in this. Layer 2 was a sandy loam of buff-brown colour containing gravel. This varied in depth and was deeper where natural hollows occurred in the surface of the underlying gravel. It was lightly charcoal-flecked and in some places contained Roman sherds. Layer 3 was the subsoil, a glacial gravel. Above Areas 'A' and 'B' and some of the ditch sections, Layer 2 did not show as described above. Layer 1 joined the fillings and in most cases it was difficult to separate the two, except where the ditch or feature filling was distinctive in colour and composition. The sandy soil accumulations above and on the floor levels of Areas 'A' and 'B' were distinctive because of their grey colour and the large quantities of occupational rubbish which they contained.

Area 'A' (Fig. 3, Plan; Fig. 5, Section A–A. Pl. II*a*)

This was located in grid square 4 by the cutting of Trench V. The evidence of an occupied area was shown by the thick level (Layer 4) of grey silt containing quantities of pottery, and the area being within the limits of the suspected farmstead site. A grid of 4 squares was laid out on the east and west sides of the trench to examine the area in detail. The clearance of the grid revealed a flat area of gravel of roughly rectangular shape, long axis north-east to south-west, contained by D 36 on the south-west, D 41 and D 54 on the north-west, D 9 on the north-east and D 28 and D 31 on the south-east. The gravel surface had the appearance of having been used as a floor level; the surface was compact and contained a great deal of flint grit between the larger flints. Coarse pottery (Figs. 7–8, nos. 14, 25, 36, pp. 51–2); Samian (nos. 10, 11, 12, 13, p. 49); Mortaria (nos. 8 and 9, p. 49); Iron (Fig. 6, nos. 4, 5 and 8, p. 48); a whetstone (Fig. 9, no. 2. p. 52) and part of a millstone (no. 14, p. 53); animal bones (p. 54) and pieces of red clay roofing tiles, were found in the silt, spread mainly over the south-west side of the area, on the gravel surface. Along the south-west side of

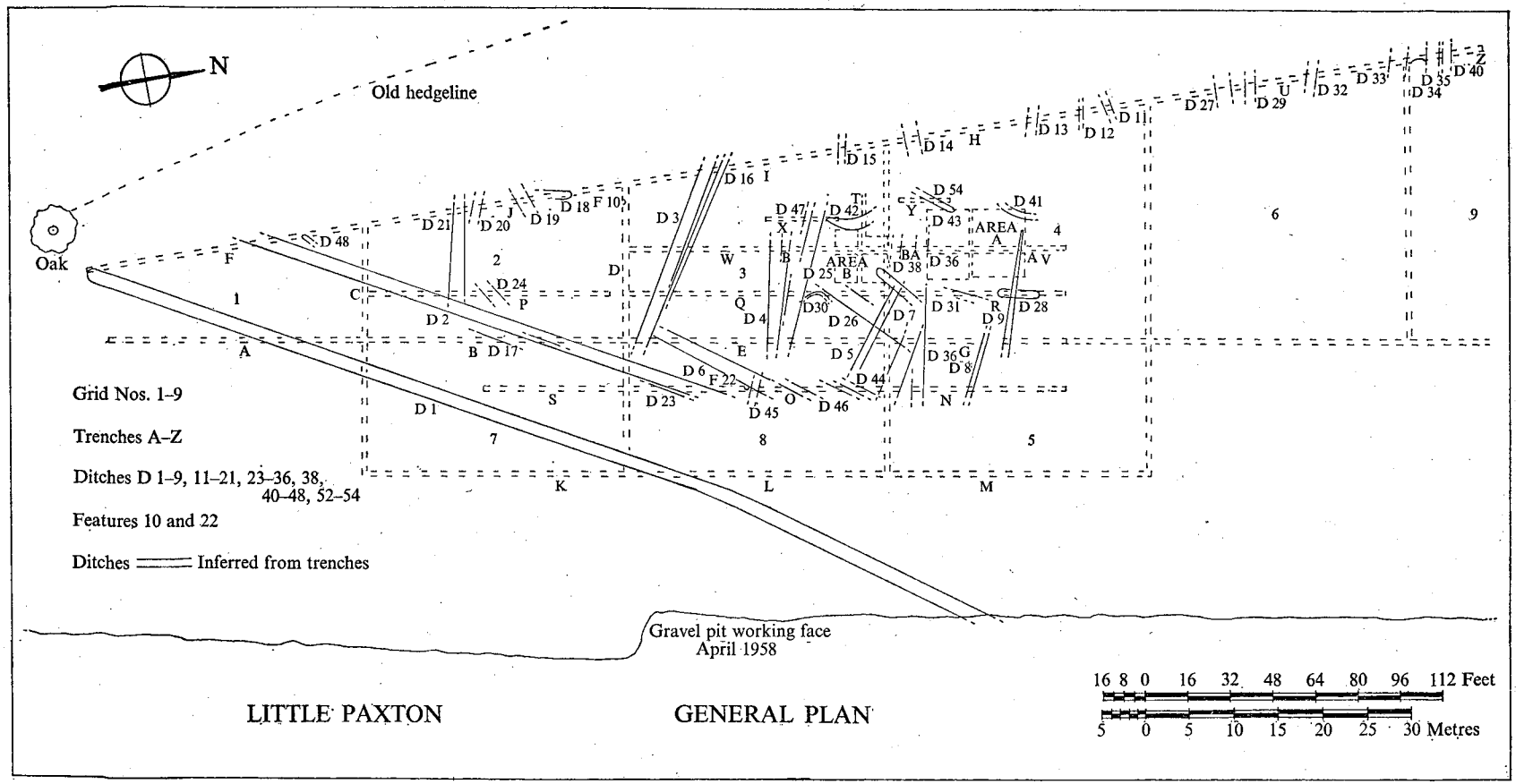


Fig. 2. General plan.

the area, on the north-east side of D 36, resting on the gravel surface, was a scattered mass of medium- to large-sized, brown glacial stones,[1] some of which were burnt red. Among these were pieces of chalk and flint. The stones were also found along the north-west side of the area, roughly at right angles to the main mass. On the south-east and north-east sides of the area the stones were not found, but two distinct post holes (PH 1 and 2), 9 ft apart, occurred on the south-east side. PH 1: This was a hole of oval shape 1 ft $10\frac{1}{4}$ in. north-west to south-east by 1 ft 3 in., with sides sloping to a rounded base; its depth from gravel floor was $9\frac{1}{2}$ in. The filling was of

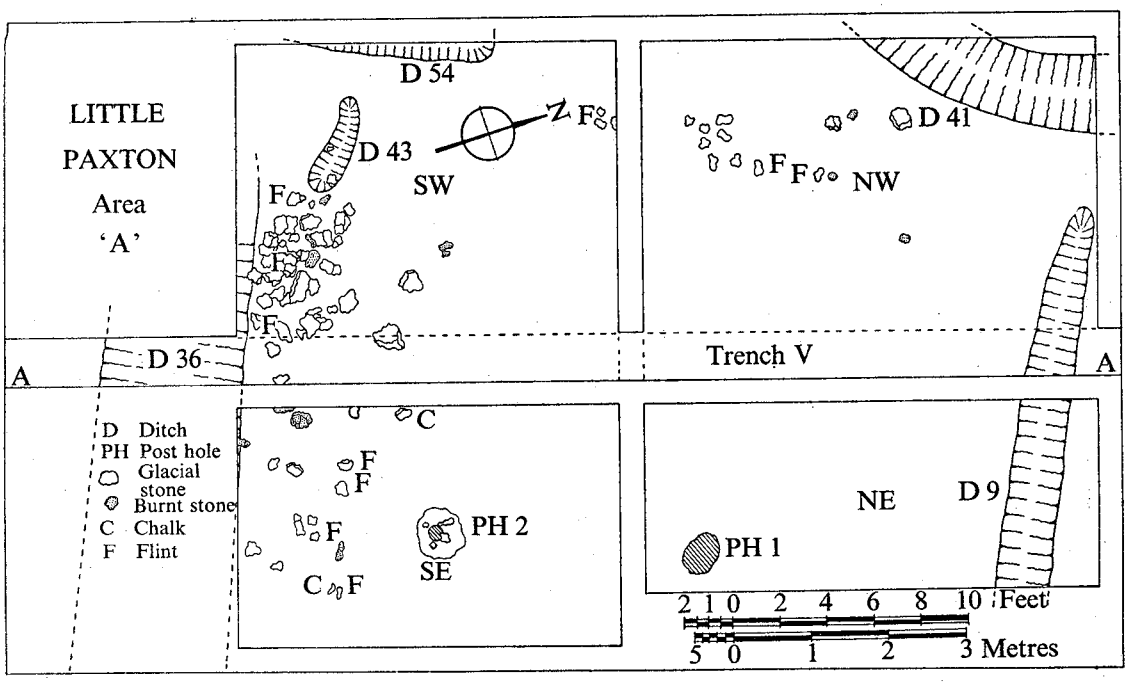


Fig. 3. Area 'A'.

dark grey, clayey, lightly charcoal-flecked soil containing small gravel. PH 2: This showed as a roughly oval patch of clayey soil with embedded medium-sized flints around a central core. The core was circular, 7 in. in diameter with vertical sides and flat base. The depth from the gravel floor was 6 in. The packing around the core was contained in a hole of roughly circular shape 2 ft 3 in. in width by 1 ft 3 in. in depth. The packing was of blackish, sandy, lightly charcoal-flecked soil containing 2 indeterminate grey ware sherds and 8 angular flints of medium size in the upper part. D 43 is a feature of second-century date and is in no way connected with the gravel floor.

[1] Glacial stones (many of which were found during the excavation in Romano-British contexts), are found stratigraphically at the junction of the implementiferous gravel stratum and the Oxford Clay.

Area 'B' (Fig. 4, Plan; Fig. 5, Sections B–B, C–C. Pl. III*b*).

This was located in grid square 3 at the north-east end of Trench W, and was identified in the same way and by similar indications as Area 'A'. Although the shape of the area and structure differ from 'A', the site was covered by a thick level of grey silt containing artifacts of the same date. Grid-square extensions were made on

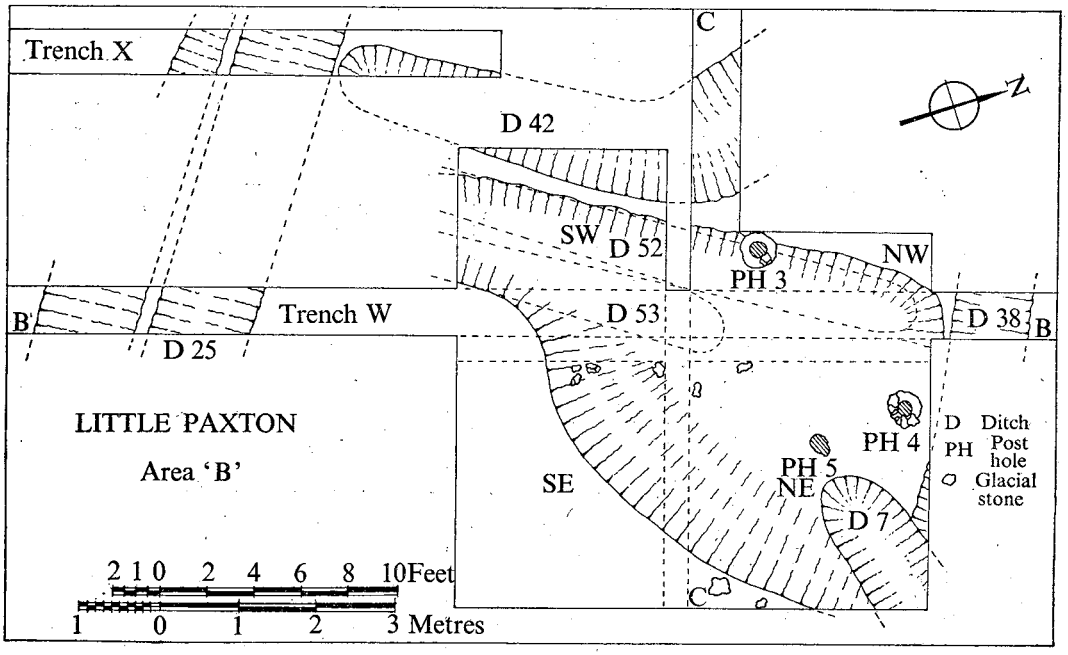


Fig. 4. Area 'B'.

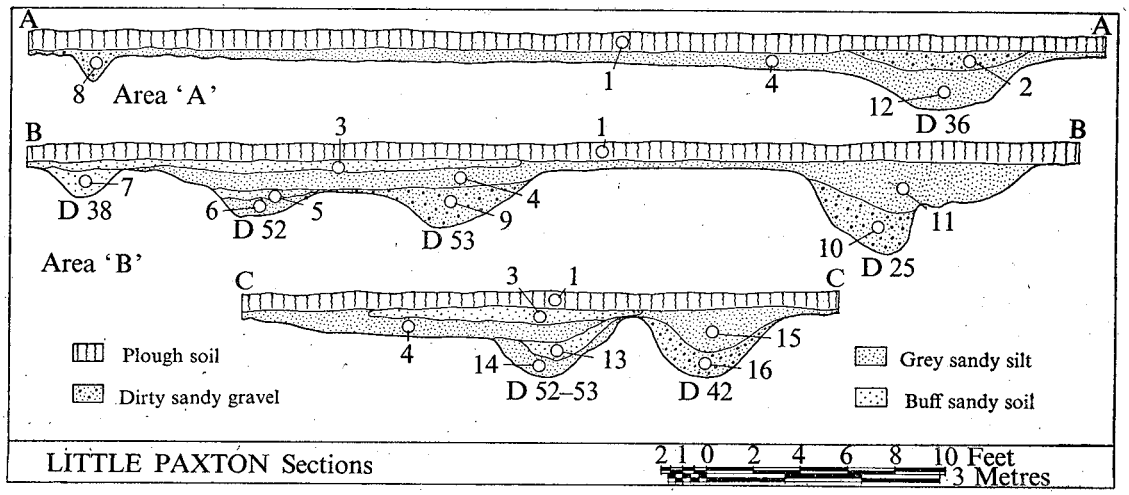


Fig. 5. Sections.

each side of the trench, to locate the habitation and to examine the area in detail. Whereas in 'A' the gravel floor was flat, in 'B' it was found to be concave and roughly oval in shape. The long axis was north-west to south-west. The north-east end was roughly straight but the south-west end extended in that direction from the main oval shape, in the form of a wide shallow hollow. The appearance of the gravel surface was the same as in 'A' and on its surface, mainly at the north-east end, was a fairly large quantity of pottery (Fig. 7, nos. 7, 10 and 17; Fig. 8, nos. 21, 22, 27, 38 and 41, pp. 50–2); Samian (no. 14, p. 49); mortaria (nos. 11, 12 and 13, p. 50); iron spike

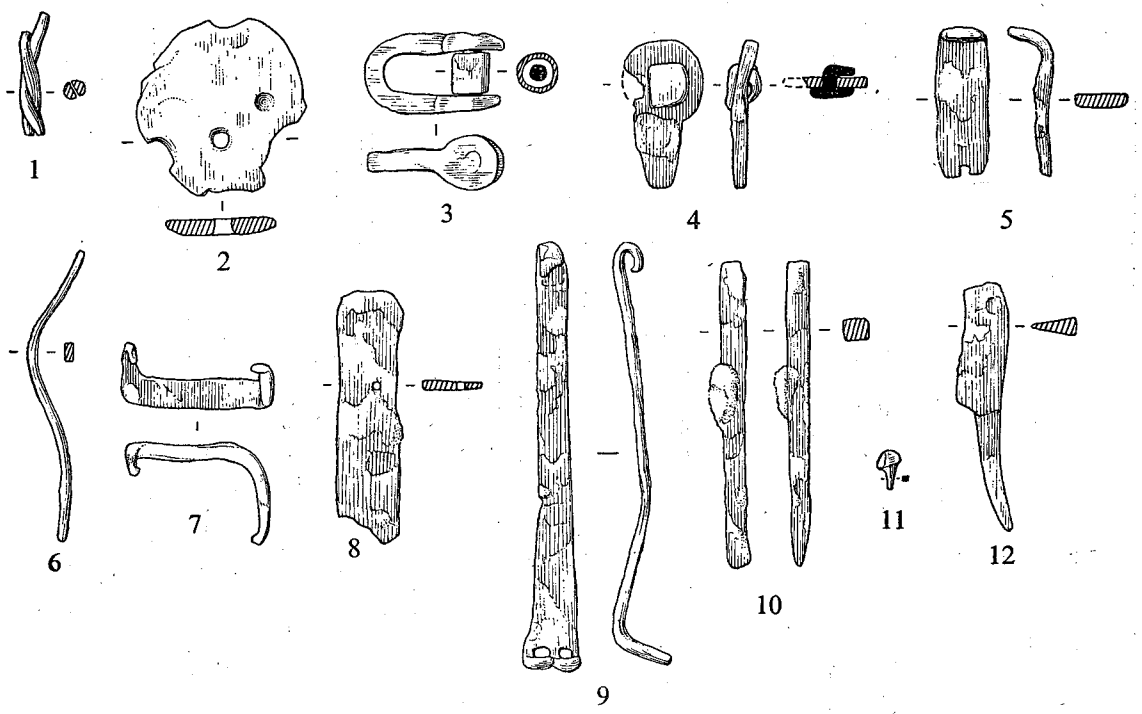


Fig. 6. Copper Alloy and Iron Objects. 1 and 2, $\frac{2}{3}$, rest $\frac{1}{3}$.

(Fig. 6, no. 10) and nails; a whetstone (Fig. 9, no. 3, p. 52), part of an upper millstone (Fig. 9, no. 4) and parts of five others (nos. 15–19, p. 53); a piece of a stone roofing tile (no. 23, p. 53); a large burnt pebble (no. 22, p. 53); a rough rubbing stone (no. 21, p. 53); animal bones (p. 54) and several pieces of broken red clay roofing tiles. Glacial stones were found on the gravel surface but in much smaller quantity than in 'A'. Although their positions were plotted they do not indicate any structural use. A pair of post holes (PH 4 and 5) were found on the east side, 3 ft apart, and another hole (PH 3) on the west side.

PH 3: This showed as a circular core, 8 in. in diameter at the top with sides tapering to a roughly flat base 5 in. in width; the depth from the gravel floor was 10 in. The core was centrally placed in a large hole of roughly circular shape 1 ft 6 in. in diameter,

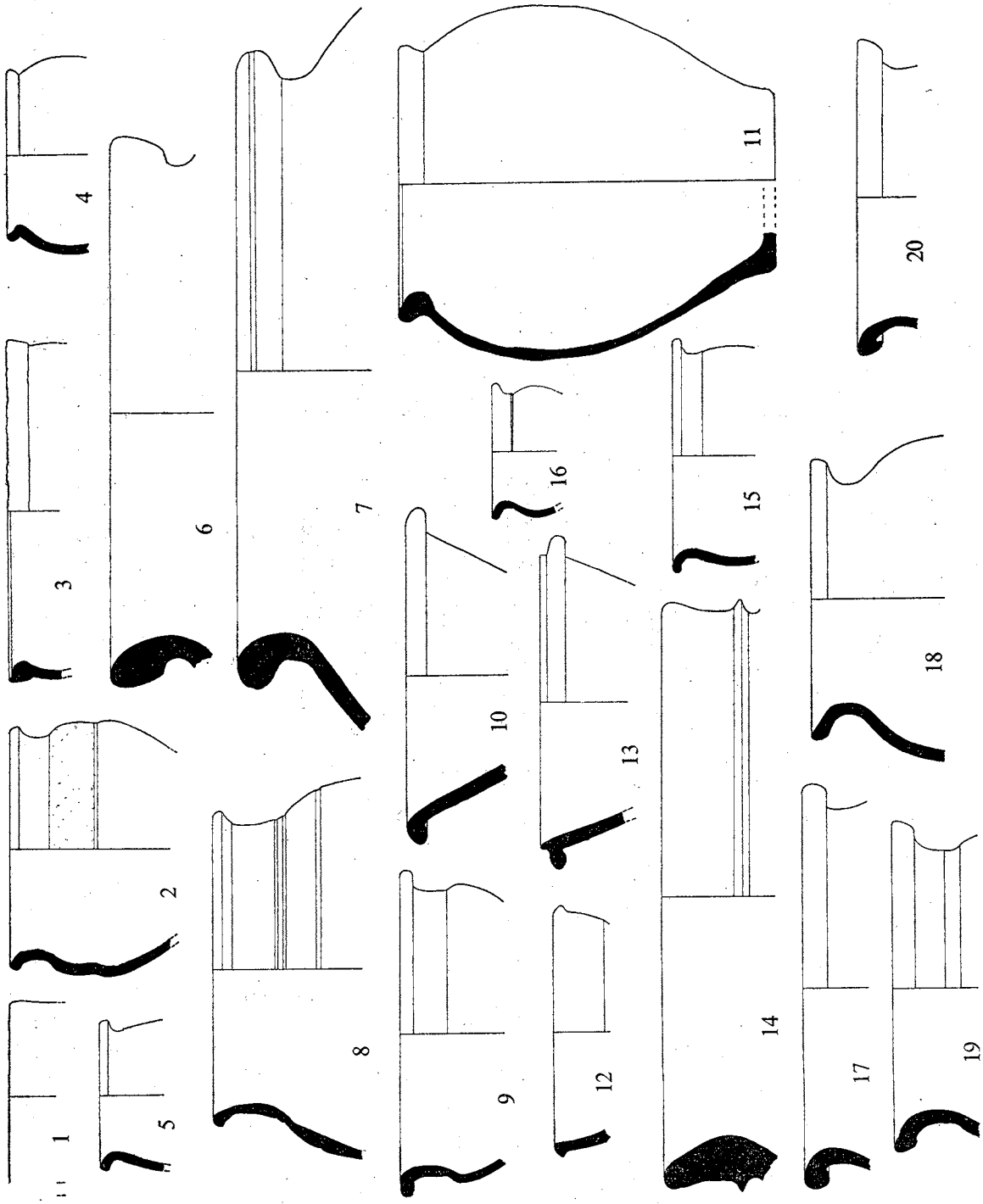


Fig. 7. Iron Age and Roman Pottery. ¼.

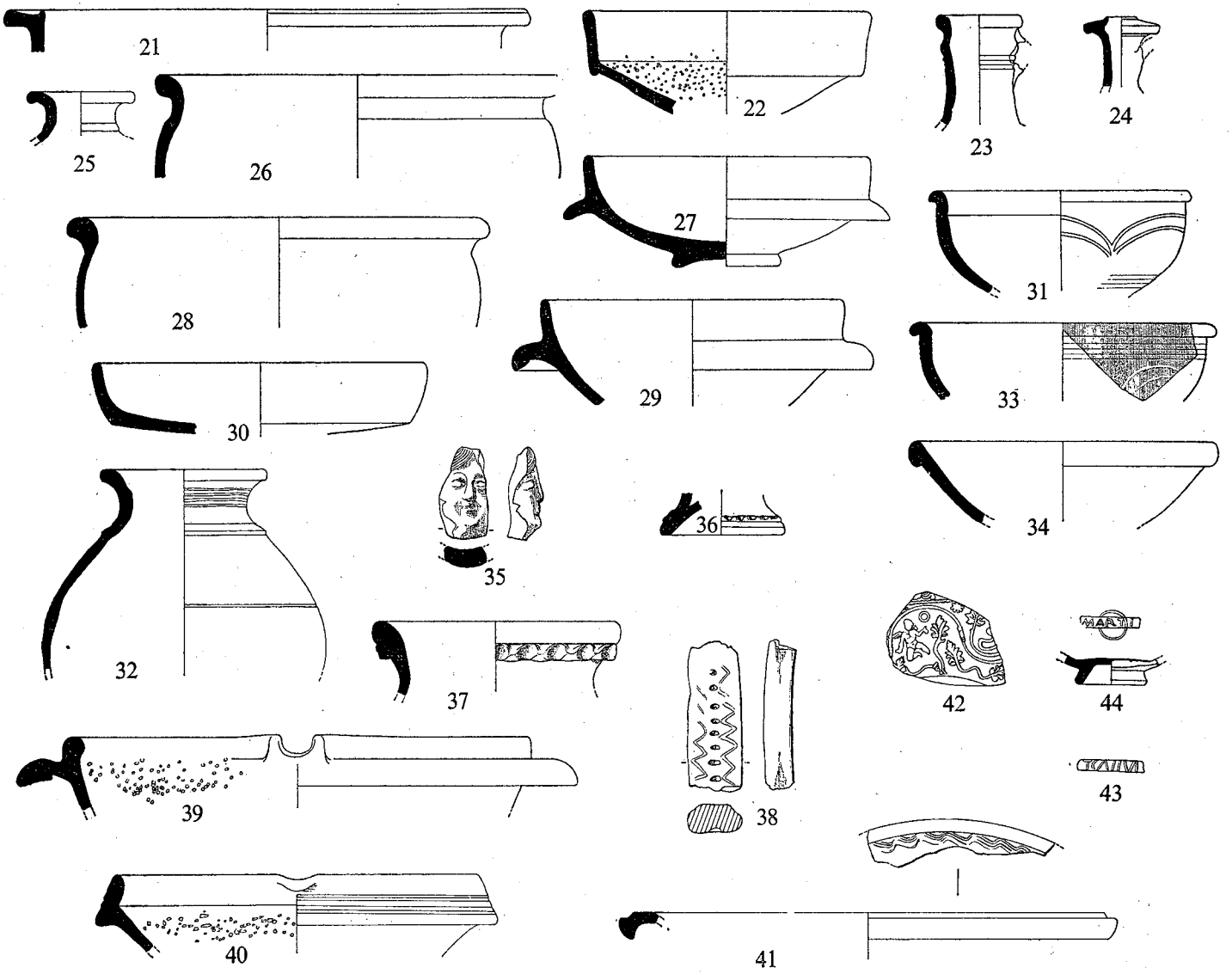


Fig. 8. Roman Pottery. $\frac{1}{4}$. Stamps, $\frac{1}{2}$.

depth 1 ft 9 in. The filling of the core was of dark greyish, clayey, gravelly soil with an unburnt glacial stone in its top on the east side. The packing was of dark grey, gravelly soil containing 9 small glacial stones (3 burnt red) and 7 angular flints. PH 4: The core was circular, 8 in. in width at the top with sides tapering to a roughly flat base, 6 in. wide, depth from floor 9 in. The core was centrally placed within a larger hole of circular shape 1 ft 8 in. in width with vertical sides and rounded base, depth 1 ft $10\frac{1}{4}$ in. The core filling was of soft, dark greyish, clayey soil. The packing was dark clayey soil with 8 glacial stones and 6 large angular flints. PH 5: This showed as a group of glacial stones of medium size embedded in a roughly oval-shaped patch of dark silty soil. The core was circular with vertical sides and rounded base, 1 ft in length north to south by $7\frac{1}{2}$ in.; the depth from floor was 11 in., the filling was of dark greyish, silty soil throughout. D 42, flanking the area on the west side, appears

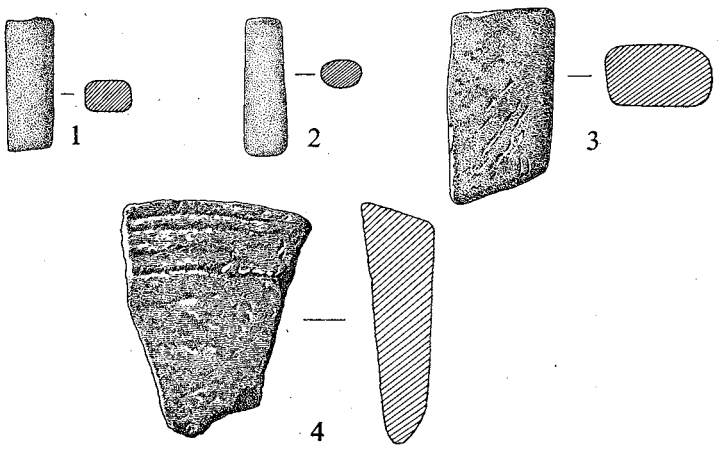


Fig. 9. Stone. Whetstones and millstones. $\frac{1}{4}$.

to be of contemporary date and D 7 in the west corner of the area to be later as it cuts the gravel floor. D 52 and D 53 were both sealed by the floor so must be considered to be of earlier date; both contained pottery of the second century A.D. (see p. 50). D 38 is also of this date.

Miscellaneous features (Fig. 2)

F 10. Trench D. This was a small roughly pear-shaped depression, long axis north to south, 1 ft 6 in. by 1 ft 3 in. The sides were vertical to a rounded base. Depth in centre from plough level 1 ft 5 in. The filling was of tough, blackened (by charcoal) clayey soil with a speck of burnt clay on the base.

F 22. Trench O. A roughly circular hole, tapering to a pointed base. Width at top 1 ft 11 in., depth from surface of subsoil 1 ft 9 in. The filling was of brown, sandy, clayey soil containing small gravel.

The ditch systems (Fig. 2)

The ditches were mainly of V-section though two (D 27 and D 40) were of U-section. They varied in width from 7 ft (D 33) to 1 ft (D 47) and in depth from 4 ft 9 in. (D 6) to 1 ft 1 in. (D 8). Depth measurements were taken from the surface of the plough soil. The fillings were all charcoal-flecked and all contained gravel and sand. They were mainly brown but varied from this colour to grey-brown, ginger-brown, buff-brown and yellow-brown. The filling of D 8 was grey-green-yellow sticky, sandy clay and the base of D 32 was very heavily charcoal-flecked and contained deposits of white ash. All the ditches with the exception of D 32 appeared to have been filled up naturally. Most fillings contained deposits of pottery and animal bones but D 17, 27, 30, 40, 44, 47 and 48 were distinctive by being barren of any dating evidence.

From the general plan (Fig. 2), it will be seen that the main concentration of ditches is centred around Areas 'A' and 'B', though there may have been others, had more of the site been examined, especially towards the north and west. It was this concentration of ditches seen on the air-photograph which led to the site being interpreted as a small corridor building. The main alignment of the ditches, at least those of late date, seems to have been north-east to south-west and north-west to south-east. Parallel ditches D 1 and D 2 flank the area on the south-east side and seem to be main ditches, probably laid out to form a road or droveway[1] from the site to the river, and probably to facilitate access to fields. Several fields can be suggested by areas contained by ditches 21, 2 and 3; 3 and 6 or 2 and 7. These indicate fields of rectangular shape similar to those at Herriotts Bridge.

Analysis of Ditches

Feature number	Trench letter	Provenance	Dating
D 1	F	Ditch end, lower half	None
	A	Top half	?3–4
	L	Top 10 in.	3–4
	—	Quarry face, lower half	A.D. 150–80
D 2	F	Lower half	Mixed Iron Age B to 4
	B	Top 9 in.	3–4
		Lower half	3–4
	P	Top 6 in.	Ind.
	O	Top half	3–4
D 3	E	Top 10 in.	?2
	Q	Top half	3–4
		Lower half	Mixed 2–4
	W	Lower half	3–4
	I	Whole of filling	2

[1] *Chew Valley Lake* (H.M.S.O.), *Herriotts Bridge* (forthcoming); *Holbeach, Lincs.* (report in preparation); R.C.H.M., *A Matter of Time* (H.M.S.O. 1960).

Analysis of Ditches (cont.)

Feature number	Trench letter	Provenance	Dating
D 4	E	Whole of filling	3–4
	Q	Whole of filling	3–4
	W	Lower half	3–4
D 5	E	Top	3–4
	R	Lower half	Ind.
D 6	E	On base	1–2
	O	Lower half	1–2
D 7	G	Whole of filling	3–4
	R	Top half	3–4
		Lower half	?3–4
		At top of south side	Ind.
	O	Lower half	Ind.
	Area 'B'	Top half	3–4
		Lower half	?3–4
D 8	G	Top 3 in.	Ind.
D 9	G	Whole of filling	Ind.
	R	On base	3–4
	Area 'A'	Whole of filling (Layer 8)	3–4
		Whole of filling	Ind.
F 10	D	Depressions	None
D 11	H	Middle of filling	Iron Age B
D 12	H	Top half	?3–4
D 13	H	Whole of filling	3–4
D 14	H	Whole of filling	Ind.
D 15	I	Whole of filling	?2–3
D 16	I	Whole of filling	Ind.
D 17	B	Whole of filling	None
D 18	J	Whole of filling	2–3
D 19	J	Whole of filling	3–4
D 20	J	Whole of filling	2–3
D 21	P	Top half	?2
F 22	O	Whole ditch	None
D 23	O	Whole of filling	Ind.
D 24	P	Lower half	2–3
D 25	Q	Lower half	Ind.
	W	Top half (Layer 11)	3–4
		Lower half (Layer 10)	3–4
		On lip on south side	Coin 2. Gallienus
	X	Top half	Ind.
D 26	Q	Top half	3–4
D 27	U	Whole of filling	None
D 28	R	Whole of filling	?3
D 29	U	Top	3–4
D 30	Q	Whole of filling	None

Analysis of Ditches (cont.)

Feature Number	Trench letter	Provenance	Dating
D 31	R	Whole of filling	3
D 32	U	Whole of filling	?3
D 33	U	Lower half	?2–3
D 34	Z	Top half	Ind.
D 35	Z	Middle to base	3–4
D 36	V	Top half (Layer 12)	?3
		Lower half (Layer 12)	3
	N	Top half	?3
D 37	Area 'A'	Occupation silt (Layer 4)	3–4
D 38	V	Whole of filling (Layer 7)	3
D 39	Area 'B'	Occupation silt (Layer 4)	3–4
D 40	Z	Whole of filling	None
D 41	Area 'A' NW Quad.	Lower half	Ind.
D 42	Area 'B' SW Quad.	Top half (Layer 15)	3–4
	T	Top half on west side	?3–4
D 43	Area 'A' SW Quad.	Centre of filling	1-2
D 44	O	Whole of filling	None
D 45	O	Lower half	3–4
D 46	O	Top half	3–4
D 47	X	Whole of filling	None
D 48	F	Whole of filling	None
D 52	Area 'B' SW Quad.	Lower half (Layer 6)	?1–2
D 53	Area 'B' SW Quad.	Top half (Layer 9)	2–3
D 54	Y	Whole of filling	3–4

NOTE. Abbreviations used above: 1–2, first to second century A.D.; 2–3, second to third century A.D.; 3–4, third to fourth century A.D.; Ind. Indeterminate.

DATING

From an analysis of the evidence from each feature the following chronological sequence can be suggested:

Iron Age B. D 11.

Late first to early second century A.D. D 6, D 43 and D 52.

Second century A.D. D 21.

Second to third century A.D. D 15, D 18, D 20, D 24, D 33 and D 53.

? *Third and third century* A.D. D 28, D 31, D 32 and D 38.

Third to fourth century A.D. D4, D5, D7, D9, D13, D19, D25, D26, D35, D36, D45, D54 and Areas A and B.

Indeterminate but with third to fourth century pottery in the top fillings. D1, D2, D3, D12, D29, D42 and D46.

Indeterminate. D8, D14, D16, D23, D34, D41, F10 and F22.

CONCLUSIONS

From the evidence, it would appear that the site was established in Iron Age times and that there was a desertion phase until re-occupation late in the first century A.D. From then on until the middle of the fourth century at least, the occupation seems to have been continuous, with the greatest expansion taking place during the third to fourth century. Area 'A' most probably represents the site of a small dwelling of cottage type: a stone foundation of rectangular shape with timber doorposts and superstructure. Area 'B' may be a structure for animal or storage use. Structures of this type with only three post holes are not unusual, examples being found at Little Woodbury and at Herriotts Bridge.[1] The two buildings together with the concentration of ditches and fields in this part of the site probably represent part of a small farmstead or smallholding of fairly humble type.

COINS

By G. C. Boon

1. Indecipherable; probably fourth century. From Trench A, base of plough soil.
2. GALLIENUS (sole reign, A.D. 260–8). *Antoninianus*, Rome mint. R VICTORIA AET *Z* | *R.I.C.* 297. From D 25, on lip on south side. Trench W.

METAL OBJECTS

Copper Alloy (Fig. 6)

1. Small part of a bracelet or bangle of two wires twisted together. From D2, lower half of filling. Trench B.
2. A flattened globule. From D1, top half of filling. Trench A.

Iron (Fig. 6.)

3. Swivel loop. From D9, Area 'A', NW quadrant.
4. Piece of shaped plate with clenched-over rivet. From Layer 4, Area 'A', NW quadrant.
5. Piece of bent plate with square perforation. From Layer 4, Area 'A', SW quadrant.
6. Piece of thin bent strip. From D47 in top of filling. Trench O.
7. Clamp. From D25 in top half of filling. Trench W.
8. Piece of strip. From Layer 4, Area 'A', SE quadrant.
9. Barrel padlock-key. From D25, in top half of filling. Trench X.
10. Spike. From Layer 4, Area 'B', NW quadrant.
11. Boot nail. From D9 filling, Area 'A', NE quadrant.
12. Part knife blade. From D23 in top half of filling. Trench O.

[1] *Chew Valley Lake*, H.M.S.O., forthcoming.

POTTERY

Samian

Report by B. R. HARTLEY

1. Form 31 (Sa.). C.G.[1] *c.* A.D. 130–70. From D 3, lower half.
2 and 3. Fig. 8, no. 43. Form 18. S.G. Flavian. Stamp. From D 6, lower half.
4. Form 31. C.G. Antonine. From D 18 filling.
5. Fig. 8, no. 44. Form 33. C.G. Stamp MARTI. Hadrianic-Antonine. From D 20 filling.
6. Form 31. C.G. Antonine. From D 20 filling.
7. ? ? ? From D 28 filling.
8. Form 26. ? Antonine (burnt). From D 33, lower half.
9. Form 31. E.G. (?). Antonine (?) (cut down for use as a counter). From D 43, centre of filling.
10. Form 31 (?). Probably Antonine. From Area 'A', Layer 3.
11. ? C.G. (?) (burnt). From Area 'A', Layer 3.
12. Form 45. E.G. Late second century or early third century. From Area 'A', Layer 3.
13. Form 33. C.G. Antonine. From Area 'A', Layer 3.
14. Form 31 (?). C.G. Antonine. From Area 'B', Layer 3.
15. Form 18/31 or 31. C.G. Probably Antonine. From D 53 top half.
16. Fig. 8, no. 42. Form 37. C.G. *c.* A.D. 150–80. From D 1. In quarry face in lower half of filling.

Mortaria

Report by MRS K. F. HARTLEY

1. Heavily burnt and discoloured fragment. Not strictly datable but probably third century. From D 4 filling.
2. Body fragment in Midland fabric. Not datable. From D 7 filling.
3. Fig. 8, no. 39. Ortho-flanged mortarium (closely similar to *Archaeologia*, LXXXIV, p. 256, fig. 10, no. 10). The translucent grit and the shape, especially the sharply upcurved end of the flange, are characteristic of a large group of mortaria most commonly found south of a line from the Colchester to Worcester areas, some of which, at least, were made in the Thames valley. The parallel cited, from the Verulamium theatre, was in a deposit dated to the late second century, but this form almost certainly had a very long life, possibly continuing throughout the third century. From D 15 filling.
4. Fragment from a reeded-flanged mortarium of Nene Valley type, in pink fabric with a pale buff core. Not closely datable but must belong to the third or fourth centuries. From D 35 lower filling.
5. Fig. 8, no. 40. Soft, white fabric with black grit, typical of the majority of mortaria produced in the East Midlands. I can find no dated close parallels but this reeded, almost wall-sided form is unlikely to have been in use before the mid-fourth century, especially if it derived, as seems probable, from the hammer-headed type. From D 35 lower filling.
6 and 7. Wall fragments. Not datable. From D 9 filling and D 7 top half of filling.
8. Flange fragment of a reeded-flanged mortarium of Nene Valley type. Probably early fourth century. From Area 'A', Layer 3.
9. Two fragments, possibly from same vessel, in East Midlands fabric. Not datable. From Area 'A', Layer 3.

[1] C.G. = Central Gaulish, S.G. = South Gaulish, E.G. = East Gaulish.

10. Body fragment showing heavy burning on one side. Not datable. From Area 'B', Layer 3.

11. Base fragment. Not datable. From Area 'B', Layer 3.

12. Base fragment. The abundant translucent grit indicates an origin somewhere in the Thames valley. Not datable. From Area 'B', Layer 3.

13. Two wall fragments, probably from the same vessel. Not datable. From D 53, in top half of filling.

There are no pieces which could belong to first-century mortaria. One or two fragments could be late second century but are more probably third or fourth century.

Coarse pottery

The pottery from the site was recovered from the ditch fillings and from the occupation silt on the gravel floors of the two habitations (Areas 'A' and 'B'). A selection of 41 pieces has been made to represent a type series and these are illustrated and described and where possible dated. The pottery is representative of that common on most Romano-British sites, with the possible exception of the handle, no. 38.

Fig. 7

1. Cooking jar. Hard, dark grey, sandy, handmade fabric, with buff-brown exterior. Iron Age B. From D 2, base of filling. Trench F.

2. Carinated bowl. Zone of scored lattice on shoulder. Hard red-brown ware with dark grey core. Surfaces dark grey. A Romanized version of a Swarling type, similar to an example from Godmanchester (*Proc. C.A.S.* LIII (1959), fig. 3, no. 12, p. 16). Flavian. From D 6, lower half of filling. Trench O.

3. Cooking jar. Fairly hard brown shell grit fabric. Similar to a series from Stanton Low and other Ouse-side sites (*Records of Bucks*, XVI, part 3 (1957/58), fig. 5, p. 207). Probably early second century A.D. From D 3, lower half of filling. Trench W.

4. Small jar. Hard, sandy greyish-buff ware. Rim recessed as though for lid. Similar to no. 3 and probably of same date. From D 52, lower half of filling. Trench W.

5. Small jar. Hard red-brown ware with dark grey surfaces (*Jewry Wall* (*Excavations at the Jewry Wall Site, Leicester*, Society of Antiquaries, Research Committee Report, XV, 1948), fig. 27, no. 51, p. 108). Late first to early second century A.D. From D 21, top half of filling. Trench P.

6. Storage jar. Hard shell grit ware with buff surfaces. For shape see *Jewry Wall*, fig. 29, nos. 2–3, p. 112. Late first to early second century A.D. From surface of gravel between D 5 and D 26 in Trench Q.

7. Storage jar. Hard gritty, light grey ware with bright orange surfaces. Same ref. as no. 6. Second century A.D. From Area 'B', Layer 3.

8. Large bowl. Hard, sandy red-brown ware with light grey core. Horizontal grooves at base of neck and on shoulder. The form is in between (*Jewry Wall*, fig. 24, nos. 12 and 16, pp. 94–5). At Godmanchester (*Proc. C.A.S.* vol. LIII (1959), fig. 4, no. 13*a*, p. 16), it is Flavian. From D 3, top half of filling, Trench E.

9. Wide-mouthed bowl. Hard, sandy grey ware. Same ref. as no. 8. A.D. 100–50. From D 50, top half. Trench O.

10. Bead rim dish or bowl. Hard, light grey ware (*Jewry Wall*, fig. 19, nos. 18–19, p. 83 for shape only). Likely to be Antonine. From Area 'B', Layer 3.

11. Cooking jar. Fairly hard shell grit, dark grey to buff fabric with horizontal rilling on exterior. Cf. nos. 3 and 4. From D 17, filling. Trench I.

12. Bead rim shallow dish. Hard, sandy dark grey ware (*Jewry Wall*, fig. 20, no. 8, p. 86 for shape). Likely to be second to third century A.D. From D20 filling. Trench J.

13. Flanged dish. Hard, sandy light grey ware (*Jewry Wall*, fig. 19, nos. 21–3, p. 83). Third to fourth century A.D. From D 23, top half of filling. Trench O.

14. Large storage jar. Hard well-fired shell grit, buff to reddish brown fabric (*Exning* (forthcoming), where it is dated third century A.D). From Area 'A', Layer 3.

15. Small wide-mouthed bowl. Hard white ware with dark grey metallic surface (*Notes on the Roman Pottery Industry in the Nene Valley*, Peterborough Museum (1960), fig. 3, no. 4). Third to fourth century A.D. From D36, lower half of filling. Trench V.

16. Small bowl. Hard white ware with dark grey metallic surface. Cf. no. 15. From D23, top half of filling. Trench O.

17. Large bowl. Hard dark grey ware (*Jewry Wall*, fig. 24, no. 19, p. 95). Third to fourth century A.D. From Area 'B', Layer 3.

18. Cooking jar. Fairly hard, brown shell grit fabric (*Great Staughton* (forthcoming) for dated series of these vessels). Fourth century A.D. From D25, lower half of filling. Trench W.

19. Cooking jar. Fairly hard, brown shell grit fabric. Cf. no. 18. From D2, top 9 in. of filling. Trench B.

20. Cooking jar. Hard brown shell grit fabric. Cf. no. 18. From D7, top half of filling. Trench R.

Fig. 8

21. Flanged bowl. Hard, sandy red ware with buff-grey surface. Third to fourth century A.D. From Area 'B', Layer 3.

22. Imitation Samian Form 45. Red colour-coat. Fine, hard light red ware with grey core. Micaceous. Traces of dark red colour-coat on all surfaces. Studded with small quartz grit (*Jewry Wall*, fig. 56, no. 22, p. 209). Fourth century A.D. From Area 'B', Layer 3.

23. Jug. Hard, white ware with orange-brown colour-coat (*Jewry Wall*, fig. 32, no. 33, p. 123). Fourth century A.D. From D29, top half of filling. Trench U.

24. Flagon or bottle. Hard, cream ware with dark grey-brown colour-coat. Top probably broken off, similar to *Lydney* (Society of Antiquaries, Research Committee Report VIII (1932), fig. 27, no. 47, p. 99). Fourth century A.D. From D2, top 9 in. of filling. Trench B.

25. Jug or narrow-necked jar. Hard white ware with metallic grey colour-coat (*Jewry Wall*, fig. 32, no. 30, p. 123). Fourth century A.D. From Area 'A', Layer 3.

26. Wide-mouthed bowl. Hard, thick white ware with mauve-brown colour-coat (*The Roman Town and Villa at Great Casterton, Rutland.* Nottingham University (1951), fig. 9, no. 26, p. 32). Fourth century A.D. From D7, top half of filling. Trench R.

27. Imitation Samian Form 38. Hard, thick white ware with worn red-brown colour-coat (*Great Casterton*, fig. 9, nos. 30 and 31, p. 34). Fourth century A.D. From Area 'B', Layer 3.

28. Large wide-mouthed bowl. Hard grey ware with dark grey colour-coat (*Great Staughton* (forthcoming) for dated series). Fourth century A.D. From D3, lower half of filling. Trench Q.

29. Imitation Samian Form 38. Hard light red ware with bright red surface. Cf. no. 27. Fourth century A.D. From D31, top of filling.

30. Shallow dish. Hard, thick white ware with dark grey metallic surfaces (*Lydney*, fig. 27, no. 46, p. 99). Fourth century A.D. From D23, top half of filling. Trench O.

31. Bowl. Hard, thick white ware with red-brown metallic colour-coat. Linked double 'eyebrow' white paint decoration (*Roman Pottery Industry in the Nene Valley*, fig. 3, no. 6, p. 11). Fourth century A.D. From D7, top 10 in. of filling. Area 'B'.

32. Jar. Hard light grey ware. Scored horizontal grooves on neck and girth. *Jewry Wall*, fig. 55, no. 13, p. 206. Fourth century A.D. From D4, base of filling. Trench E.

33. Bowl. Hard, white-grey ware with light red-brown metallic colour-coat. Linked double 'eyebrow' white paint decoration. Cf. no. 31. Fourth century A.D. From D25, lower half of filling. Trench W.

34. Bowl. Hard cream ware with red-brown metallic colour-coat. Derived from Samian Form 31 (*Lydney*, fig. 27, nos. 48–51, p. 99). Fourth century A.D. From D2, top 10 in. of filling. Trench L.

35. Jug. Face spout. Hard light red ware. Third to fourth century A.D. From D28, filling. Trench R.

36. Base of small tazza(?). Buff-orange ware with frilled rib. Third to fourth century A.D. From Area 'A', Layer 3.

37. Jar. Buff-red shell grit fabric with dark grey core. Frilled zone below rim (*Great Staughton* (forthcoming)). Fourth century A.D. From D42, top half of filling. Trench X.

38. Handle. Buff-grey shell grit fabric. Decorated on flat (upper) surface with single line of punctures with scored zig-zag line on each side. This example seems to belong to a group of pottery vessels being produced during the fourth century A.D. Cf. *Proceedings of the Suffolk Institute of Archaeology*, XXVI, part 2 (1953), fig. 18, *c* and 1; *Exning* (forthcoming). From Area 'B', Layer 3.

41. Flanged bowl. Fine, hard red ware. Flat-topped rim with scored wavy combing. For form (derived ultimately from Samian Form 36) see *Roman Pottery in the Nene Valley*, fig. 3, no. 7, p. 25. Third to fourth century A.D. From Area 'B', Layer 3.

STONE

Identified by Dr F. W. Anderson (Geological Survey and Museum, South Kensington)

Fig. 9, nos. 1–4[1]

1. Part of whetstone. All surfaces worn smooth. From D7. Area 'B'. Lower half of filling.

2. Part of whetstone. All surfaces worn smooth. From Area 'A', silt on floor.

3. Part of whetstone. All surfaces smooth, hollow ground in places. Oblique scoring on one side. From Area 'B', silt on floor.

4. Part of upper millstone. Edge slopes steeply from flat top. Ground surface worn concave with concentric grooves on outer edge. From Area 'B', silt on floor.

Not illustrated:

5. Part of upper millstone. From spoil heaps of gravel workings.

6. Part of upper millstone. Interior fragment. Ground surface concave and smooth. $3 \times 4 \times 2$ (all dimensions of stones are in inches). Very coarse pebbly grit with quartzite pebbles. From D2, Trench B. Top 9 in. of filling.

7. Part of lower millstone. Edge vertical. Ground surface flat, tool pocked with radiation grooves on edge 1 in. in length, $\frac{1}{2}$ in. apart. $3\frac{1}{2} \times 4 \times 2$. Coarse brown grit, burnt. From D3, Trench Q. In top of filling.

8. Part of lower millstone. Interior fragment. Ground surface concave $2\frac{1}{4} \times 2 \times 2\frac{1}{2}$. Very coarse pebbly grit, burnt. From D7, Trench G. Filling.

9. Part of lower millstone. Edge vertical. Base tooled roughly flat. Ground surface flat and

[1] Nos. 1–5 were not available for geological identification and no. 5 could not be drawn in time for publication.

smooth. $4 \times 3\frac{1}{2} \times 2\frac{1}{4}$. Very coarse, pebbly grit, almost a conglomerate. From D26, Trench Q. In top half of filling.

10. Part of upper millstone. Thin, worn. Edge slopes steeply from top to ground surface. Top and edge tooled roughly smooth. Ground surface worn smooth. $4\frac{1}{2} \times 2 \times 1\frac{1}{4}$ at edge. Coarse, hard grey grit. From D31, Trench R. Filling.

11. Part of millstone. Interior fragment. One flat surface tool pocked but not worn. Other surface uncertain. $3\frac{3}{4} \times 2\frac{3}{4} \times 2\frac{1}{2}$. Coarse pebbly grit, probably burnt. From same source as no. 10.

12. Part of upper millstone. Interior fragment. Top surface tool-pocked and flat. Ground surface concave and smooth. $3\frac{1}{4} \times 2\frac{1}{4} \times 1\frac{1}{2}$. Pebbly grit. From Area 'B', NE. In top 10 in. of filling.

13. Part of upper millstone. Interior fragment. Top flat surface tool-pocked. Ground surface flat and smooth. $3\frac{1}{2} \times 3\frac{1}{4} \times 1\frac{1}{2}$ tapering to $1\frac{1}{4}$. Coarse pebbly grit. From D9, Area 'A', NE. Filling.

14. Part of millstone. Edge vertical. One surface roughly smooth. Other rough and burnt. $2\frac{1}{2} \times 2\frac{1}{4} \times 1\frac{3}{4}$. Very coarse pebbly grit. From Area 'A', SW. Occupation silt (Layer 4) on floor.

15. Part of upper millstone. Edge vertical. Top tooled roughly smooth. Ground surface flat and smooth. $4\frac{1}{2} \times 3\frac{1}{2} \times 2\frac{1}{2}$. Coarse pebbly grit. From Area 'B', NE. Occupation silt (Layer 4) on floor.

16. Part of lower millstone. Interior fragment. Ground surface concentrically grooved $\frac{3}{4}$ apart. Roughly smooth. Base surface rough. $5\frac{1}{2} \times 4\frac{1}{2} \times 2$. Coarse grit. From same source as no. 15.

17. Part of upper millstone. Edge slopes steeply from top to ground surface. Top is tooled roughly smooth. Ground surface concave and roughly smooth. $2 \times 3 \times 2$. Very coarse pebbly grit. From Area 'B', NW. Occupation silt (Layer 4) on floor.

18. Part of millstone. Interior fragment. Ground surface worn roughly smooth. $4 \times 2\frac{1}{4} \times 2$. Coarse pebbly grit. From same source as no. 17.

19. Part of upper millstone. Edge broken but enough remains to show it was vertical. Top roughly flat. Ground surface worn concave and smooth. $5\frac{1}{2} \times 3\frac{1}{2} \times 2$. Coarse brown grit. From same source as no. 17.

20. Piece of slab with both sides worn hollow by use as probable hone or rubber. All edges broken. $4\frac{1}{2} \times 3\frac{3}{4} \times 1\frac{1}{4}$–$\frac{3}{4}$. Brown sandstone. From Area 'B', baulk between SW and SE areas. Occupation silt (Layer 4) on floor.

21. Part of a probable rubber. Three flat sides worn smooth, one more so than others. $4 \times 2\frac{1}{2} \times 3\frac{1}{4}$. Very hard fine-grained grit, slightly micaceous. Is part of a pebble, possibly a 'driekanter' (i.e. a wind-worn pebble) from either the gravels or the boulder clay. From same source as no. 17.

22. Probable rubber. One side smoother than the other, burnt red. $4\frac{3}{4} \times 3\frac{1}{2} \times 1\frac{3}{4}$. An ovoid pebble of hard, pale brown sandstone. From same source as no. 17.

23. Probably part of a roof slate. Interior fragment. No nail hole. $2\frac{1}{4} \times 2 \times \frac{1}{2}$. Fine-grained white sandstone, calcareous, in beds about 0·04 in. thick. Could be a Jurassic sandstone. From same source as no. 17.

Most of these are coarse sandstones and pebbly grits, probably Millstone Grit (Carboniferous). There is no near by source for these. They have either been imported from further north or have been found as erratics in the Drift.

CHARCOAL

Identified by DR DAVID CUTLER (Royal Botanic Gardens, Kew)

1. 2 pieces, both *Corylus avellana* (hazel). From D4, Trench E. Top half of filling.

2. 1 piece *Corylus avellana*. From D36, Trench O. Top of filling.

3. 3 pieces: (*a*) *Salix* (willow) or *Populus* (poplar); (*b*) *Corylus avellana;* (*c*) *Prunus* sp. probably *spinosa* (blackthorn). From D36, Trench O. Top half of filling.

MOLLUSCA

Oyster shells were found in the fillings of D4, D36 and D42 and in the occupation silt of Area 'B'.

BUILDING MATERIALS

Pieces of fired red-clay flanged roofing tiles and imbrices were found in the fillings of D18, D21, D45 and with three fragments of scored box flue tiles, in the occupation silt of Areas 'A' and 'B'. Another piece of a box flue tile was found in the filling of D28.

Four fragments of flanged roofing tiles made of shell grit material[1] were found in the occupation silt of Area 'B'. Two pieces of a thick (1¼ in.) slab of the same material were found in the filling of D7. None of the fragments bore a maker's stamp as at Stanton Low.[2]

ANIMAL BONES

Identified by MISS JUDITH E. KING (Dept. of Zoology, British Museum (N.H.)

1. *Dog*. Lower jaw fragments. Incomplete limb bones. Metapodials/fragments. From D1, Trench A. Top half of filling.

2. *Red Deer*. Shed antler base (has been cut with implements). From D26, Trench Q. Top half of filling.

3. *Ox* (small). Horn core and part of cranium. From D31. Trench R. From whole of filling.

4. *Ox*. Horn core and fragment of cranium. From D31. Trench R. From whole of filling.

5. *Dog*. Tibia (size and shape of Basset Hound or Spaniel). Femur fragment, distal end. From D31. Trench R. From whole of filling.

6. *Dog*. Right ramus lower jaw. From D35. Trench Z. Lower half of filling.

7. *Dog*. Left ramus lower jaw. From D25, Trench W. Lower half of filling.

8. *Dog*. One side of pelvis (size and shape of King Charles Spaniel). From D25, Trench W. Lower half of filling.

9. *Bird*. Limb bone. From D2, Trench O. Top half of filling.

10. *Pig*. Anterior end lower jaw. From D6. Trench O. Lower half of filling.

11. *Bird*. Limb bones. From D6, Trench O. Lower half of filling.

[1] Shell gritted roofing tiles are found in association with pottery box flue tiles, pilae and cigar-shaped kiln or oven bars of the same material on sites in the Upper Ouse and Nene valleys in North Bucks. and South Northants. Kilns producing the shell gritted pottery have been found at Hardingstone and Weston Favell near Northampton and at Harrold in Bedfordshire; near the latter are several sites with an unusually large amount of tiles on the surface suggesting that the centre of manufacture may be in this area. (D. C. Mynard.)

[2] *Records of Bucks*, XVI, part 3 (1957–8).

12. *Dog.* Humerus, tibia, femur. From Area 'A'. Layer 4, silt on floor.
13. *Ox.* Horn core. From Area 'B'. Layer 4, silt on floor.
14. *Fox.* Metatarsal. From Area 'B'. Layer 4, silt on floor.
15. *Sheep.* Part of cranium. From Area 'B'. Layer 4, silt on floor.
16. *Red Deer.* Antler tine. From D 2, Trench F. Lower half of filling.
17. *Sheep or goat.* Radius, very young. From D 54, Trench Y. In filling.

APPENDIX A

GRAVEL PIT FINDS IN THE NEIGHBOURHOOD OF ST NEOTS, HUNTINGDONSHIRE

C. F. TEBBUTT, F.S.A.

(See fig. 1, sites 1 to 4.)

The valley of the Great Ouse in Huntingdonshire is rich in commercial gravel beds, large areas of which are being rapidly destroyed. I have therefore thought it opportune to refer to the prehistoric finds that have been made in the course of gravel digging in the St Neots area of the valley during the last 30 years.

Finds of Palaeolithic implements and their contemporary mammals from gravel pits at St Neots and Little Paxton have already been described by me in *Proc. East Anglian Prehist. Soc.* V, pt. 2, *Man* (June 1932), and *Proc. Prehist. Soc.* (1947).

1. Both the pits referred to above were closed by 1939, and a new pit opened at Little Paxton, near the Great North Road, in 1938 (G.R. 52/188634). Here mechanical methods of gravel digging were used and it was thus not possible to examine the excavated material closely. However, extensive search was made on the heaps without finding a single human artifact and I am convinced that there was little or nothing to find. The only archaeological material found in this pit was a small amount of Romano-British pottery in a shallow pond-like depression filled with peaty soil containing brushwood.

2. In 1942 this pit was closed and another opened nearer the river on Wray House Farm, Little Paxton (G.R. 52/198632). Here again search over 10 years has failed to find any evidence of Palaeolithic man, although mammalian bones do occasionally occur, among which those of mammoth and *Bos primigenius* have been identified.

Later finds have however been numerous, and in the first five years of working (from W. to E.) ditches and pits of prehistoric date were continually being found. Mechanical gravel digging by dragline bucket does not make careful excavation or observation easy and the wartime demand for gravel was such as to preclude any stoppage of work. In spite of this the owners, Gravel Products Ltd., and their workmen gave me every facility to do both, whenever it was possible, as well as informing me of finds and collecting pottery when I was unable to get over.

In July 1944 I was told that a human skull and other bones had been found on Gt Gransden airfield, in topsoil carted from this pit. Mr Sugars, the dragline driver, informed me at once, and until I arrived gave up digging at the place from where he thought it came. The site was approximately 140 yards from the west side of the field, and 200 yards from the south side. Here I found a grave 4 ft 6 in. square and 5 ft from the surface, being dug 1 ft into the unmixed gravel. I found the toe bones still in position at the west side but the rest of the skeleton, which must have been buried in a contracted position, had been scooped out by the bucket. The skull was of an adult and has been placed in the Society's Museum.

The area round the grave had been cleared of topsoil to a depth of 4 ft but two concentric

circular ditches could be seen. The grave occupied a central position inside them at a distance of 27 ft and 36 ft respectively. These ditches (or the lower part of them) had a V-shaped section and were 2 ft deep and 2 ft across, but only about half of the two complete circles remained undestroyed. I was able to excavate what was left of the two ditches and the area enclosed within them. In the filling of the outer ditch, almost due east of the central grave was a small round mass consisting of chips of cremated bone and wood ash that had apparently been buried in a bag of perishable material. The above facts seem to suggest a primary burial of the Bronze Age in either a disc barrow (a type uncommon in eastern England) or a barrow at some time enlarged with a secondary cremation in the outer ditch. It may be noted that on the field surface flint flakes, scrapers and cores, probably of the Bronze Age, are common.

The pits and ditches found close to, and east of, the barrow were of a pattern well known to those who are familiar with Romano-British sites in this part of the country. It was only possible to excavate a few and they were either unproductive or contained the usual collection of broken sherds and bones of domestic animals. Several were noteworthy in proving continuity of occupation of the site from Iron Age times.

A pit found in 1946 was found to be oval in shape and measured 3 ft 6 in. × 4 ft 6 in. at the base. The bottom was lined with yellow clay in which, at intervals, round cobblestones had been set. It was full of wood ash which contained much pottery, but most of this was too rotten to extract. This again was covered by yellow clay on the top. All the clay was burned red on the inside and seemed to form some sort of oven or kiln. As the dragline bucket had already destroyed the upper part of the pit it was impossible to say if there was a flue, or if the top layer of clay had fallen in from walls higher up. The pottery is handmade and coarse. Pieces from small bowls have a black smoothed finish sparkling with mica. Those from larger vessels are red-brown, contain white shell and are full of holes where vegetable matter has been used in the clay. They would appear to be of Iron Age A date.

Another pit was round and 4 ft in diameter at the bottom. It was clay-lined and contained sherds of Iron Age C date.

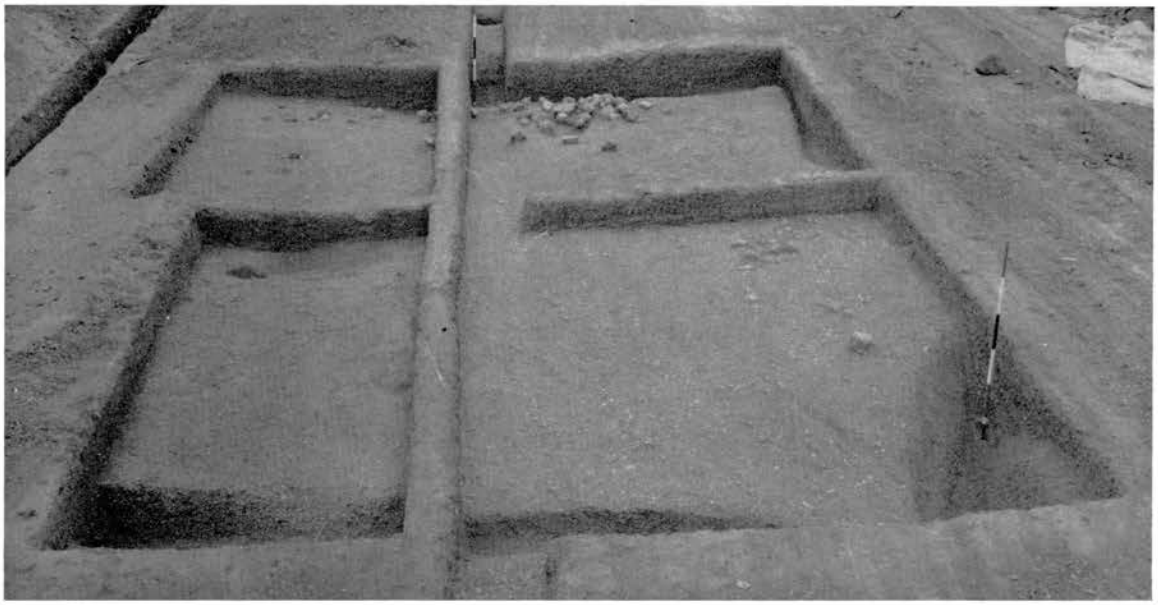
Most of the pits with Romano-British pottery contained much wood ash and large hearth stones, and a late one had painted biscuit-coloured ware.

Several pits were deeper than the others, going down to below the present average water table, and would seem to have been wells. They all contained much well-preserved vegetable material, mostly wood in the form of small twigs and branches. Two were of special note. The first was found in 1948 and contained a plank of oak 3 ft 6 in. long, $9\frac{3}{4}$ in. wide and $3\frac{1}{2}$ in. thick on one edge tapering to 2 in. at the other, the taper being slightly dished. There was a square slot cut in one end and two mortices in the thickness of the 2 in. edge, with dowel holes to secure the tenons. The plank was remarkably square and true to size and was either finely sawn or perfectly adzed. It could possibly have been part of a seat and the deep pit a latrine. Also from this pit came a piece of a broken beehive quern and part of a Roman-type leather shoe or sandal, with the toe and leather binding thongs missing. There appears to be a maker's or owner's mark on one side of the heel consisting of a square grid with four upright and three horizontal scratches. The heel is made of double-thickness leather with the rough sides sewn together.

A slice from the oak plank was sent to A. W. G. Lowther, F.S.A. who found that the ring plot overlapped those from dated timbers from Alfoldean and Sedlescombe in Sussex and Little Waltham in Essex, and gave a felling date for the Little Paxton specimen of *c.* A.D. 230.

In 1949 a further deep pit, dug to below water level, was found, containing two pieces of well-finished oak plank. One was complete with squared ends 25 in. long × $3\frac{1}{2}$ in. × $16\frac{1}{2}$ in., the other, with one broken end, was 35 in. long × 3 in. × 16 in. With them were two pieces of oak trunk of 12 in. diameter split down the middle. Slices from the two planks were sent to Mr Lowther who

The site from the air.



(*a*) Area 'A' looking south.

(*b*) Area 'B' looking north.

found that the planks were cut from different parts of two equally large oaks (about 200-year-old trees), with their ring plots overlapping. Also the first 76 rings of one overlapped with the slice of the plank from the previous well or latrine. Their plot thus gave a much later date for felling *c.* A.D. 335. These plots, Mr Lowther informs me, are the first obtained in this country for timbers whose growth took place over the third and fourth centuries A.D.

The pit has now (1965) extended eastwards nearly to reach the private road leading to Wray House Farm and northwards towards Boughton, but no finds have been noted during the last twelve years, and it would appear that the habitation area has been passed. It is unfortunate that no aerial photographs were taken of the site before its destruction, but Mr D. N. Riley did tell me that extensive cropmarks could be seen there from the air in 1944.

3. During 1952 Roman pottery, together with animal bones and much wood, including pointed stakes, was dredged from the river bank. The evidence would suggest a boat quay.

4. A small whole Roman pottery vessel was found in a disused gravel pit in the river bank. It was probably part of a burial group. The vessel is now in St Ives Museum.

In 1953 Messrs Inns & Co. Ltd. started to dig gravel on Grove Farm in the adjoining field to the south of the Wray House Farm pit, and Dr St Joseph kindly arranged for this area to be photographed. In the west side of this field cropmarks indicating a number of small square or oblong enclosures of the type of Celtic fields appear, together with what might be a house of two rooms with a corridor running along the length of the north side.

Note by E.G. This is the site excavated for the Ministry of Works in 1958 and is the subject of this report. In 1961 pagan Saxon cremations were found here (*Proc. Camb. Ant. Soc.* LV (1962), p. 8), and the site of a Late Saxon village; see P. Addyman, 'Late Saxon Settlements in the St Neots Area, I', *Proc. C.A.S.* LVIII (1965), pp. 38–73; and article II in vol. LXII (1969), pp. 59–93.

Proc. Camb. Ant. Soc. Vol. LXII (1969), pp. 59–93.

LATE SAXON SETTLEMENTS IN THE ST NEOTS AREA

P. V. ADDYMAN

II. THE LITTLE PAXTON SETTLEMENT AND ENCLOSURES

Commercial developments on the Ouse terrace gravels in the St Neots area in recent years have revealed a number of Late Saxon settlements. The present paper is the second of three[1] which present information recovered in excavation prior to their destruction. Specialist reports for all the sites will be given in a fourth paper together with an assessment of the contemporary environment, economy and material culture.

SUMMARY

Rapid topsoil stripping for gravel extraction south of Little Paxton in 1961 and 1962 revealed several thousand archaeological features over more than 20 acres. Records were made of a grave, a ring ditch, pits, wells, hearths, ovens, post holes and ditches of various periods, although very few could be excavated before destruction. Part of the area was examined in detail in 1962, revealing at least two phases of Late Saxon occupation, perhaps representing an agricultural settlement within the berewick of Little Paxton. At one time the area was occupied by a ditched sub-rectangular enclosure, with an entrance having post holes for a double gate. The enclosure contained pits and wells, and perhaps also houses in the unexplored part. A system of ditches aligned on the enclosure probably represented a droveway and field boundaries. At another time in the Late Saxon period part of the area was occupied by a circular palisaded and ditched enclosure. Controlled excavation could not take place before destruction, but much tenth- and eleventh-century pottery, almost exclusively St Neots ware, was recovered, together with a normal range of stone, metal and bone-work and several wooden objects.

INTRODUCTION

Exploitation of the First–Second Terrace gravels[2] of the Ouse, valued commercially for their high quality, has continued on a small scale for many years in Little Paxton parish.

[1] The Eaton Socon settlement was described in *Proc. C.A.S.* LVIII (1965), pp. 38–73, where references to previous excavations are given (n. 1). An account of the St Neots site, and specialist reports will appear in subsequent *Proceedings*.

[2] E. Greenfield, 'The Romano-British settlement at Little Paxton, Hunts,', pp. 35–57 above.

The gravels, well drained, but with a dependable water supply at a depth of a few feet, bear light fertile soils. On similar gravels in the Welland and Avon valleys archaeological traces of human occupation from Neolithic times to the present have recently been demonstrated,[1] and such occupation has long been known on the gravels of the Nene near Peterborough, and of the Middle Thames. The Ouse valley gravels are no less rich in traces of early settlement; but they are less well known to archaeologists

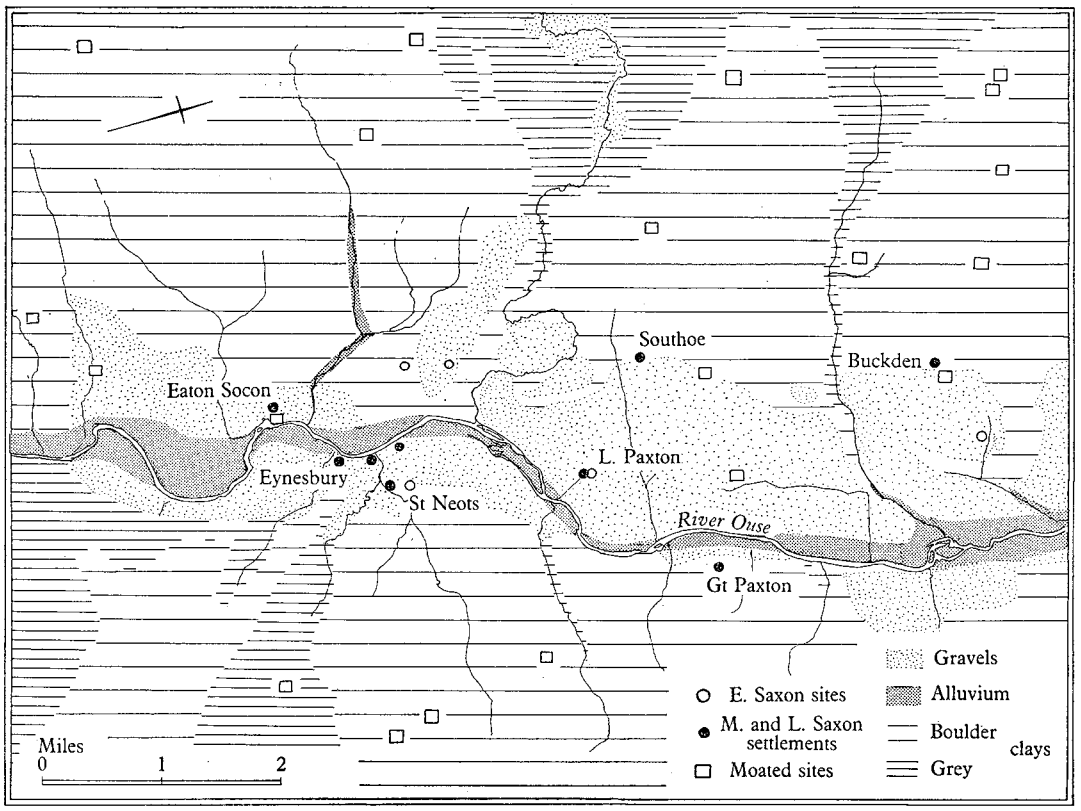


Fig. 1. The St Neots area: geological map showing the distribution of early, middle, late Saxon, and moated sites in relation to the clay and gravel. (Based on the Ordnance Survey 2½ in. map and the 1 in. geological survey (N.S.) by permission of the Directors General.)

in the absence of a survey to collate the evidence of aerial photography and, happily, in the absence until recently of large-scale gravel extraction. Such extraction is now revealing the richness of the area in the very moment of destruction. Modern quarrying technique involves successive removal of topsoil, the secondary soil, known locally as 'hogging', and finally the gravel. Archaeological features are visible between the removal of topsoil and the removal of 'hogging'. Aerial photography has sometimes provided foreknowledge of the presence of an archaeological site, as with the Roman farm and its attendant enclosures excavated some 500 yards from the

[1] R.C.H.M., *A Matter of Time* (H.M.S.O., 1960); and *Archaeol. J.* CXXI (1964 [1965]), pp. 1–22.

present sites in 1958.[1] Other photographs[2] show enclosures a few hundred yards west, presumably connected with the hamlet still extant here in the eighteenth century. Yet for the area which is the subject of this report there are no aerial photographs showing archaeological features. Perhaps the several thousand features present were too slight to produce cropmarks; or perhaps no photographs were taken under optimum crop conditions. Whatever the reason, it is clear that no threatened area at Little Paxton, and presumably elsewhere on the gravels, can archaeologically be written off merely on the absence of cropmarks on air-photographs.

Attention was drawn to the present site in the spring of 1961 when Early Anglo-Saxon burial urns were discovered in topsoil dumps from Area A (Fig. 2).[3] During unsuccessful attempts to locate the Early Saxon cemetery Mr C. F. Tebbutt found many archaeological features, including an isolated grave, a ring ditch, and numerous Late Saxon ditches, pits and a hearth. The main features were planned, and some were partly excavated. As quarrying continued in the south part of Area A five or six deep wells were discovered, some timber-lined, all apparently Late Saxon in date. Only one of these could be investigated in detail. The Late Saxon features, it seemed, probably belonged to a settlement.

When quarrying began in Areas B and C in autumn 1961 more of the supposed settlement was uncovered, and the Ancient Monuments Inspectorate of the Ministry of Public Building and Works undertook a partial survey (Area B). In the 75,000 sq. ft recorded there were some 560 features of which at least half were probably prehistoric. The prehistoric features could be distinguished either by Late Neolithic pottery and flints in their fills, or failing this by the character of their fills. Every feature shown to be Late Saxon had a more or less even dark soily fill. The prehistoric features had dark centres, black, blue-grey or brown, which merged at the edges to a fine clay, orange, yellow, or grey. The fine clay was taken to be an immature vertical B horizon formed since abandonment[4] and the assumption was that for some reason, perhaps the shorter time lapse, perhaps through continual ploughing since the settlement's desertion, this had not developed in the Late Saxon features. The prehistoric aspects of the site were further investigated for the Ministry by Miss A. Best, and will be described separately.

The plan of Area B confirmed impressions that the Late Saxon site was a settlement, with gated enclosure containing wells, rubbish pits, post holes, and presumably dwellings in Area D to the south. The Ministry therefore proposed the controlled excavation of Area D in the summer of 1962, and meanwhile Mr Tebbutt and local helpers excavated the features in the more immediately threatened Area B. Area C, also immediately threatened, contained few features if any of Anglo-Saxon date, and was not examined in detail. Quarrying plans changed in the spring of 1962, and Area E was opened, again revealing Late Saxon features. Some, apparently

[1] Pp. 35–57 above; to Mr Tebbutt's list should be added the sites described in *Proc. C.A.S.* LXI (1968), pp. 9–14.

[2] University of Cambridge Collection of Air Photographs XK 93–7. Several sets of parallel ditches make for a single area of the river bank, perhaps suggesting a former river crossing west of the excavated site.

[3] *Proc. C.A.S.* LV (1962), pp. 8–12.

[4] *Med. Archaeol.* VIII (1964), pp. 64–8.

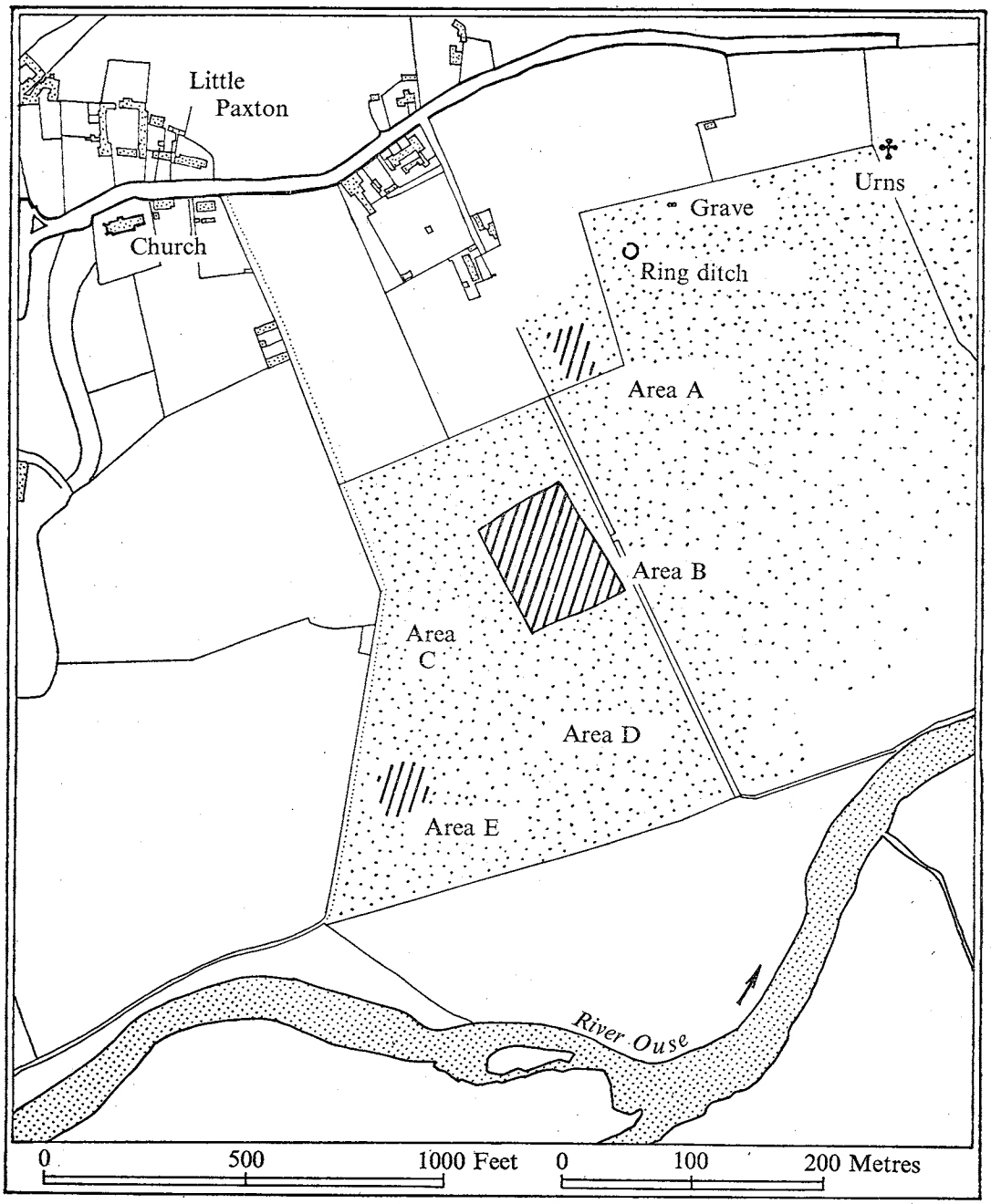


Fig. 2. Sites examined at Little Paxton in 1961 and 1962. Areas destroyed by gravel extraction are stippled. (Based on the Ordnance Survey 1:2,500 map, by permission.)

representing the wall trenches, post holes and other features of a wooden building, were recorded by Mr Tebbutt.

The work in 1961 and early 1962 was carried out with the full co-operation of the quarry owners, Messrs Inns and Co., to whom all concerned are grateful indeed. It is only sad to record that exigencies of gravel demand caused them to destroy the whole of areas D and E within four days of the start of the Ministry's excavation. The only opportunity in recent years to recover the plan of a Late Saxon rural settlement was thus tantalizingly lost.

Various evidence suggests[1] that Little Paxton was one of three unnamed berewicks of Great Paxton in the Domesday survey. Great Paxton, an unusually large manor of 25 hides with 41 plough teams, was held in 1086 by the Countess Judith, widow of Earl Waltheof; and it had formerly been held by the King. There is no mention of a church at Little Paxton in Domesday but the architectural evidence, not least the remarkable tympanum of the reset south door,[2] indicates that it was standing by the mid-twelfth century. The later manorial history of Little Paxton, one of fragmentation of estates, hardly hints at possible tenth- to twelfth-century local topography, nor can much more be made from surviving patterns. Contacts with Great Paxton must always have been important, and the direct route must have been, then as now, by Wray House, formerly a ferry, over a mile downstream from the site. If nothing in the history or topography of the parish suggests an interpretation for the Late Saxon settlement, equally there is nothing, except perhaps inherent unlikelihood, to prevent the settlement actually having *been* the Little Paxton of the mid-eleventh century.

The circumstances of excavation and observation have led to a certain unevenness in the quality of the record. The exact location of some of the sites in the wasteland of quarry was particularly difficult to establish. The deposited records[3] will demonstrate where errors may lie.

THE INVESTIGATION

Area A

Area A includes the whole of the former large field O.S. 145. Mr Tebbutt's systematic observations began when the field was half destroyed, and when work on the remainder was proceeding. At this stage it was thought that most of what must have been thousands of features in the area were of natural origin. In the dry summer conditions they appeared as grey clayey patches. Only those clearly artificial were recorded. In the light of investigations in Area B in the wet conditions of January 1962 it must be assumed that in fact most of the features were artificial. The account here is confined to descriptions of an isolated inhumation grave, a ring ditch, and a sample 50-ft square recorded in detail.

[1] *V.C.H. Huntingdonshire*, I, p. 352 n., and H.C. Darby, *The Domesday Geography of Eastern England* (Cambridge, 1952), p. 318.

[2] *V.C.H. Huntingdonshire*, II, p. 335 and plate.

[3] The excavation records and finds are deposited in the Cambridge University Museum of Archaeology and Ethnology, with the exception of a selection of pottery, in the Teaching Collection of Southampton University Archaeology Department.

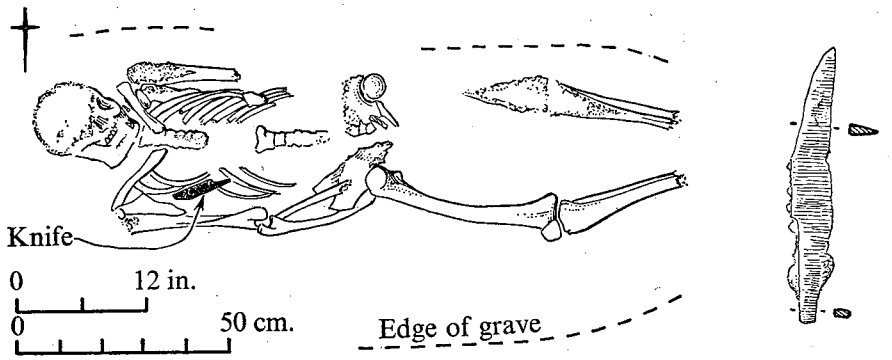


Fig. 3. Inhumation grave in Area A; and knife (scale $\frac{1}{3}$) from the grave.

The grave (Fig. 3)

An isolated grave, located during mechanical topsoil scraping, proved on investigation to contain an extended male inhumation orientated accurately and laid out with arms by the sides and hands on the pelvis. There was a small iron knife on the right shoulder. The grave, originally about 2 ft 6 in. deep, had largely been destroyed by the scraping, which also damaged the skull. The only dating evidence was the knife, a common type with angled back which could belong to any part of the Anglo-Saxon period, and indeed possibly even later. If the orientation can be given significance perhaps a date in the Middle Saxon period is the most likely. There was no evidence of associated burials, but the grave cannot have been far from the burial site of the cremation urns found earlier on spoil heaps from Area A.

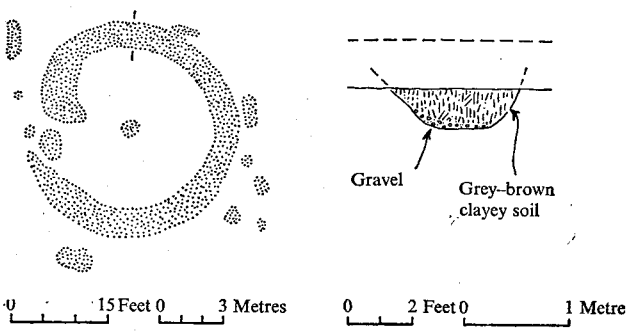


Fig. 4. Ring ditch and associated features in Area A.

The ring ditch (Fig. 4 and Plate I)

A discontinuous ring ditch and associated oval and circular pits located after scraping were planned and sectioned. The ditch was about 33 ft in external diameter, 4 ft wide, and about 1 ft 3 in. deep. There was one gap in the ditch, around which were several hollows. Other hollows were found at intervals round the edge, though it is not certain these were part of the monument. A shallow pit was found at the centre. Both ditch and hollows were filled with a fine sandy clay of grey-brown colour,

similar in character to the fills of various prehistoric features in Area B. There were no finds apart from charcoal.

Empty ring ditches are a common feature of the archaeology of south English valley gravels, and their interpretation is not easy. They usually occur in groups associated with barrows and are thus thought of as religious monuments.[1] This example, isolated, with a very shallow ditch, and with an entrance, may tempt an interpretation as the drip-trench of a small circular hut, of which the post holes did not penetrate the 'hogging'. Such huts are also a well-known feature of the gravels, in the Iron Age at least.[2]

Sample area (Fig. 5)

Four of the fourteen features within the carefully cleaned 50 ft square were narrow trenches, apparently related to each other and part of a system of enclosures. One, 1090, extended 110 ft south-east of the sample area where it turned and was joined by two other trenches. Within the area 1090 turned again, apparently to meet the three other trenches which ran parallel towards it from the south-west. The pits and post holes in the corner may represent an entrance structure at this point or, if the trenches are bedding trenches for palisades (p. 70 below), as strutting for the corner. Other features in the sample area were similar to many encountered in Area B, but their significance is not clear.

Near by were found the ditch 1080, and pit 1081. The pit, some 3 ft 6 in. deep, had quantities of St Neots ware and much charcoal in its fill of even gravelly soil. Several other pits of this nature were found in the southern two-thirds of Area A. They were apparently rubbish pits, as they did not reach the water table. Several wells were located in the south part of Area A, and are described below (p. 72). South of the sample area was found 1091 (Fig. 11), an oval pit some 2 ft deep containing alternate layers of burnt red clay and grey ashy soil with a partly burnt lining, and some relining, of yellow-brown clay. It is interpreted as a much-used hearth. The sample area demonstrated that all the Late Saxon

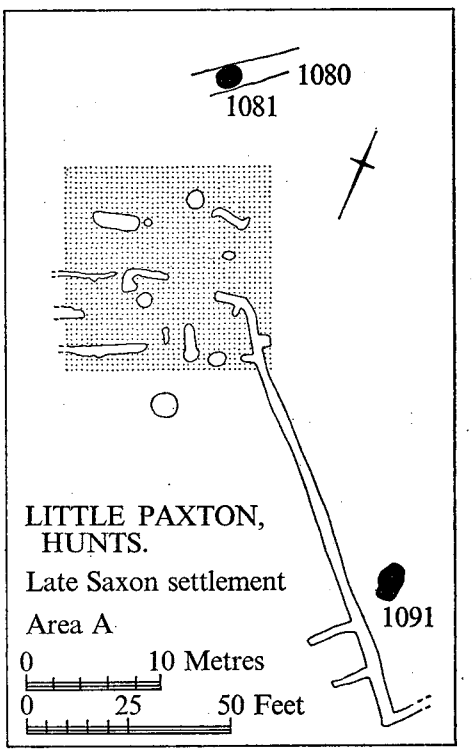


Fig. 5. Little Paxton Late Saxon settlement: part of Area A. Only the stippled area was examined in detail and similar features undoubtedly existed everywhere around. Features in black were certainly Anglo-Saxon, and most of the rest probably.

[1] *Oxoniensia*, XXVIII (1963), p. 18, where other references are given.

[2] Drip trenches are usually narrower, cf. Draughton, Colsterworth and Heathrow (S. S. Frere (ed.), *Problems of the Iron Age in Southern Britain* (London, Inst. of Archaeol., undated), pp. 17–28).

Fig. 6. Area B of the Late Saxon settlement. Features shown in black were certainly Late Saxon; many of those shown in outline produced direct evidence of prehistoric date.

features of Area B, ditches, trenches, pits, wells and post holes, extended into Area A, and it is tantalizing that more of them were not recorded.

Area B (Figs. 6, 7 and 8)

Over 560 features were found in the 75,000 sq. ft of Area B, and of these more than half were probably prehistoric. All are shown in Fig. 6, those for which there was direct evidence of Late Saxon date being shown in black. In addition to those for which there was direct evidence, many straight short trenches and a number of the post holes must also have been Late Saxon, as will be argued below.

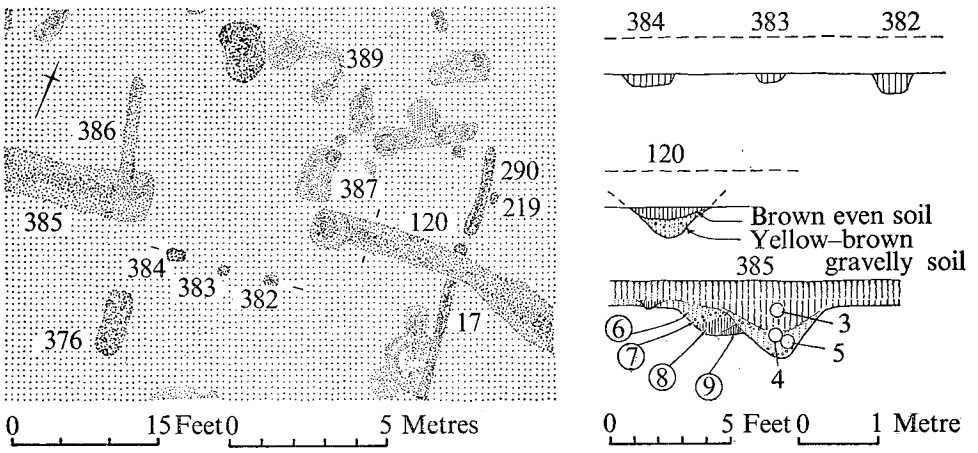


Fig. 7. Gateway into the enclosure in the south part of Area B. The section across ditch 385 is taken outside the area of the plan, at a point where the ditch ran out of the excavation.

The main feature of the area in Late Saxon times must have been the enclosure represented by ditches 385 and 120, apparently with a gate between them within which were pits (1, 2, 7, 33, 34), wells (339, 458) and some trenches and post holes. Outside the enclosure, and apparently aligned on the gateway, were various narrow trenches, sometimes in pairs running more or less parallel, and sometimes associated with post holes either along their length, at their ends, or near by. One well (582) and four pits of varying character were also found in this area. On the eastern side of Area B several ditches, post holes and trenches seemed less clearly related to the general layout, and some, 91, 125 and 132, seemed to form part of an oval or circular enclosure, perhaps of another period. Most of this must have lain in the destroyed Area A, and it may even have contained the wells noted above.

The ditched enclosure

The enclosure was bounded by the ditches 385 and 120, and possibly the trench 24. 385 was more or less uniformly 5 ft wide, while 120 varied somewhat in width. Both wherever sectioned had a round-bottomed V profile (Fig. 7, sections). Normally the fill had an upper layer of even, more or less stone-free mid-brown soil; and a lower,

yellower, more gravelly layer. Where 385 ran out of the excavation it was possible to record a full cross-section including the modern topsoil. At this point it was clear that 385 (layers 3–5) cut into the fill of an earlier linear feature on the same line (layers 6–9). The earlier feature, shallower and flat bottomed, had been almost completely destroyed in the main area by the scraping process. Also cut into the fill of the earlier feature was a small post hole, on the inner lip of 385. There was no indication in the lie of the fill layers of 385 or 120 of a preferred direction of silting, and thus no suggestion of an unreveted bank near the lip. The earlier feature, however, had silted almost completely from outside the enclosure, the lower layers being of fine soil, presumably derived from the weathering of surrounding topsoil; and thus again there is no suggestion of an unreveted bank on the inner lip.

385 cut through a small Late Saxon pit 481 (Fig. 6), and it was joined by the short narrow trench 386 just west of the entrance. The line of this was traceable for a short distance in the filling of 385. East of the gateway, 120 was joined by the similar trenches, 17 and 290, but here the ditch appeared to cut the trench 17. 17, 290 and 386 were quite similar, all being about 12 to 18 in. wide, shallow and flat bottomed. There were darker patches, presumed to represent post positions in 290, and doubtless all represented bedding trenches dug for posts set 18 in. or so apart. 17 seems to have been dug in two parts, for it kinks abruptly some way south of its intersection with 120 (Fig. 6). If the interpretation as post-bedding trenches is correct, the features presumably represent palisades.[1] It is quite conceivable that palisade 386 was standing while ditch 385 was silting, thus accounting for its partial appearance in the fill of that feature. And equally it is conceivable that ditch 120 existed contemporarily with 17 through which, on a straight reading, it appeared to cut. Such an interpretation is desirable for it is difficult to disregard the apparent relationship of the complex of trenches outside the ditched enclosure, of which 17 is clearly an integral part, to the gateway of the enclosure. It seems possible that the trench or ditch 24 (Fig. 6) represents the east side of the ditched enclosure. If this is so, there would seem to have been a gap in the ditching at the north-east corner.

The entrance to the ditched enclosure seems to have been in the gap between 385 and 120. At this point there are three post holes set some 4 ft inside the ditches. The two outer posts were oval in plan and more substantial in depth, suggesting that they were the hanging posts for double gates. The centre hole would have held a catch post for them. Mr Tebbutt has remarked that the distance between outer posts is 10 ft, which was, until the advent of the combine harvester, the norm for farm gates in the area. The position of the gate, not in the gap between the ditches but behind it, argues cogently for the former presence of a fence within the ditches. Both the shallow post hole seen in section on the inner lip of 385 (Fig. 7, sections) and the row of posts within ditch 132 of the oval or circular enclosure described below hint that such a fence would have been constructed of posts.

The ditches, some of the trenches, and the pits and wells (discussed separately)

[1] Such palisades occur on many Dark Age settlements on the Continent, e.g. W. A. Van Es, *Wijster*, (Groningen, 1967), and at Federseen Wierde, *Germania* (1957, 1961, 1963).

produced considerable amounts of St Neots ware, lava, burnt daub and other finds of a domestic character, and the very presence of wells and rubbish pits strongly suggests that the ditch and supposed fence enclosed a settlement. No trace of buildings was found in the area excavated, but the shallow wall-trenches and sill-beam slots which might be expected in the area at this period[1] might well not have penetrated the topsoil far enough to have appeared in the mechanically cleared 'hogging'; such slots as were found on the site were often very shallow. It was clearly desirable to excavate some of the enclosure by hand to test this hypothesis, and to record the layout of the remainder, but circumstances unhappily denied the opportunity.

The oval or circular enclosure (Fig. 8)

Just within the excavation on the eastern edge of Area B part of a second enclosure was found. It was represented by two narrow trenches, 91 and 125, and a line of post holes, 129 to 136. The ditch 132, of similar character to ditches 385 and 120, lay outside the line of post holes and was undoubtedly connected with it. Post hole 129 may well have represented a gatepost for a gate closing the gap to trench 91; and the post hole at the south end of 91 may have had a similar function in the gap to trench 125. The small trench 61 cut away part of the filling of 125, and clearly belonged to a later phase of the site. Within the enclosure the post holes 54 to 56 and 61, 65, 66 etc., perhaps represent a timber building and, though no direct evidence was obtained of their date, they could well belong to the Late Saxon period.

The small trench joining the southern end of 132 resembled in character those connected with 120 in the ditched enclosure; it is presumably contemporary with the oval enclosure. This evidence, by no means conclusive, suggests that the oval enclosure is later than the ditched enclosure. Finds from the oval enclosure were closely comparable to those from the ditched enclosure.

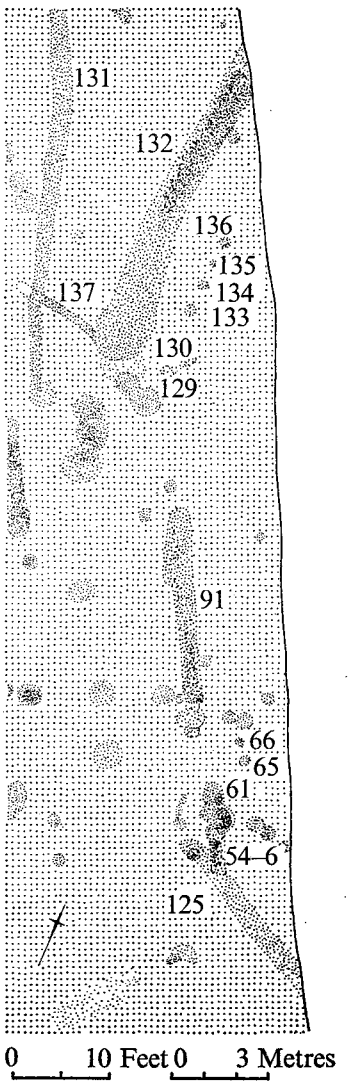


Fig. 8. Enclosure with ditches, gateways and possible fences, on the east side of Area B.

[1] Maxey, Northants., *Med. Archaeol.* VIII (1964), pp. 42–3: Buckden, Hunts., *Proc. C.A.S.* LV (1962), pp. 13–22: St Neots, Hunts., *Proc. C.A.S.* forthcoming; and further afield, Dorchester, Oxon., *Archaeol. J.* CXIX (1962), pp. 125–8, and Thetford, Norfolk, *Med. Archaeol.* XI (1967), pp. 191–2, where the wider linear features are clearly ditches.

Trenches and slots (Fig. 6)

Most of the numerous trenches and slots in Area B seemed to be part of a system related to the gateway of the ditched enclosure. Trenches 209, 584, 436, and the southern part of 21 ran more or less north–south, and apparently bounded a droveway some 40 ft broad leading towards the gate. Trench 207 may have been added inside 209 at a later date to narrow the northern part of the 'droveway' to 29 ft. Running more or less at right angles to the 'droveway' were the parallel features 443 and 440, to the west, and the northern part of 21, to the east. These features may have bounded fields ranging from 100 ft to 150 ft wide outside the enclosure. Where 443 and 440 met 209 and 207, an additional trench had been cut within the droveway, with stake holes along its edge, and with a deep pit, perhaps a very large post hole, perhaps a well, at the junction.

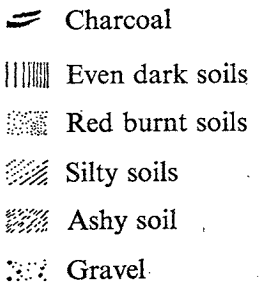


Fig. 9. Conventions for the sections.

The trenches which make up the 'droveway' and 'field boundaries', though they seem to form part of a unitary system, vary greatly in character. 21, for instance, is made up of individual lengths of short trench of slightly varying width and depth (Fig. 11). The lengths sometimes do not join precisely, and there are occasional widenings, presumably marking the positions of posts. 584 by contrast is of even width throughout. The more or less parallel trenches 440 and 443, with the similarly more or less parallel 209 and 207, seem to represent yet another variation, similar perhaps to the stockade recently found at Water Newton[1] apparently defending a holding of some importance. There seems to be no reason to suggest the two elements in these pairs were of different dates. The outer in each case (Fig. 11, section) seems to have been the deeper. No indication could be obtained from the limited excavation of what stood in either trench, though there were no indications of individual post positions and the implication is an horizontal beam. If so this implies a method of fence building which seems oddly wasteful of timber. It is perhaps noteworthy that features 440 and 443 contained little occupation material. By contrast, 435, 209 and 21 contained many finds and the latter much burnt material. It is possible that this part of the system was destroyed by fire.

In addition to the supposed droveway and field boundaries there was a number of other trenches, or trenches and posts, the function of which is by no means clear. The slot 292, apparently terminating in post holes, with three post holes adjacent, clearly represents a structure. Less deeply set elements have probably not survived, and its interpretation must await the discovery of similar arrangements on a better-preserved site. The slots 19 and 252, to the north, may represent an inturned entrance arrangement for the supposed eastern field; alternatively it may be connected with the long slot 131, some 28 ft to the east, to which 19 is parallel. Various short oblong trenches (407, 405, 406, 487, 494–6) and two post holes 413 and 414 in the

[1] *Proc. C.A.S.* LVI–LVII (1964), pp. 70–2. The Water Newton site is similar in many ways to Little Paxton.

southern part of the 'droveway' and in the western 'field' seem to share this alignment, though direct evidence of Saxon date was obtained for only one of them. The short trenches are best interpreted as having contained one or more posts; they are perhaps the heavier elements of a linear structure running across the central part of Area B or even of a building. Until comparable structures are discovered where the lighter elements are preserved it is also impossible to interpret this series of features.

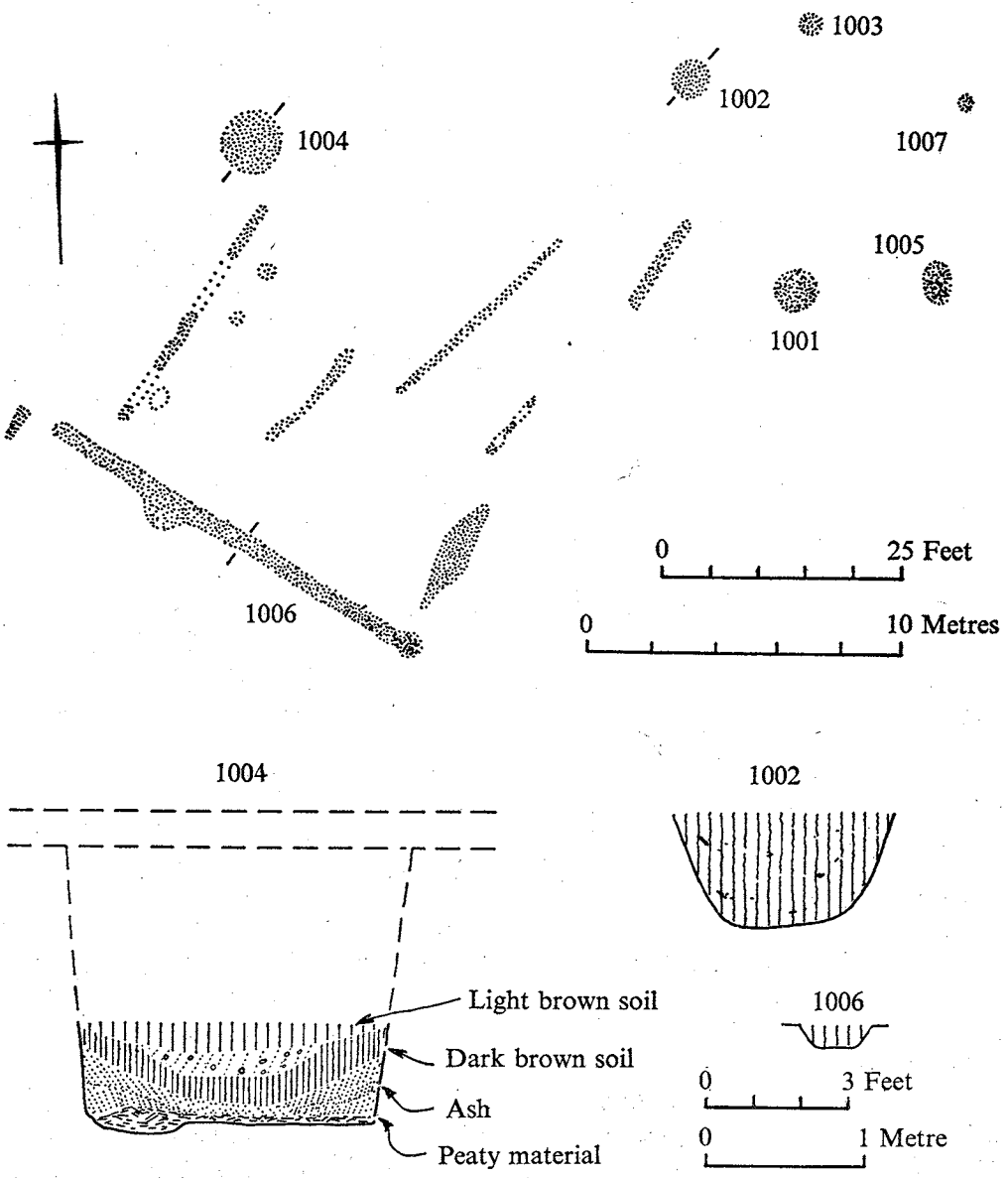


Fig. 10. Possible structures in Area E.

Pits and wells (Fig. 11)

The pits and wells from Areas A and B are discussed here together. Six pits were found within the ditched enclosure, together with one, possibly two, wells. In addition two possible wells were found in Area B outside the enclosure, and four, possibly five, were located and cursorily examined by Mr Tebbutt during gravel digging in Area A. Most of the pits in Area B were rapidly sectioned by Mr Tebbutt. Their profiles are included in the deposited records. The pits fall into four main types. *Type 1* had a rounded profile with a depth of between 2 and 4 ft below the top of the 'hogging' and a fill of alternate layers of even brown soil and darker, often more gravelly soil containing occupation material, bones and pottery. They are interpreted as rubbish pits. The section of 33 is given as an example; 1, 2, 33 and 34 fall into this category, together with 1081 and two unnumbered pits in Area A. *Type 2*, of which only one example was found, 7, has a stepped profile with a depth of 1 ft 6 in. below the surface of the 'hogging'. The fill was of alternate layers of yellow sandy material and black charcoal-rich soil and there were stake holes in the upper part of the side. The charcoal layers seemed to dip into a hollow in the centre of the hole filling, and the hole may best be interpreted as a post hole, though the stakes are difficult to explain. They were too close to have been supports, and may have been part of a structure connected with the supposed post. *Type 3* presented, in its final weathered state, a stepped profile reaching depths of from 3 to 5 ft below the top of the 'hogging'. They did not reach the present water table, and there was no indication in their fill, for instance by the formation of iron pans,[1] that the water table was ever high enough for them to have done so. They contain a major element of weathered gravel and soil, derived from the upper edges of what were presumably much more steep-sided pits originally. There are often layers of more dirty, soily material. In many respects these pits resemble those in the Middle Saxon settlement at Maxey, Northants.,[2] where such pits also did not reach the water table, or were waterlogged only occasionally. There seems to be no way of deciding their function, but uses as storage pits, for industrial purposes, and as latrines have suggested themselves. *Type 4* was represented by one pit only, 481, partly cut away by the ditch 385. It was oblong, 6 ft 6 in. long, 2 ft 9 in. wide, and 1 ft deep, with a hard flat gravel bottom and almost vertical parallel sides. A great amount of burnt clay had been deposited in the pit shortly after it began to fill, though there was no sign of *in situ* burning. The threadpicker (Fig. 16, no. 10) came from this pit, together with much St Neots ware. Presumably the pit had a domestic function of some sort.

The wells, eight or nine in number, all reached the water table, now at a depth of just over 5 ft below the surface of 'hogging', but formerly, before the extensive gravel working in the area, perhaps a little higher. It was not possible to undertake controlled excavations of any examples, but 582 (Fig. 11) and 458 were sectioned by Mr Tebbutt, and others observed. The upper part of 458 was filled with layers of stoneless brown loam, dirty brown loam with occupation material, St Neots ware,

[1] Maxey, *op. cit.* p. 33 n. 14.

[2] Maxey, *op. cit.* pp. 32–6 and fig. 8.

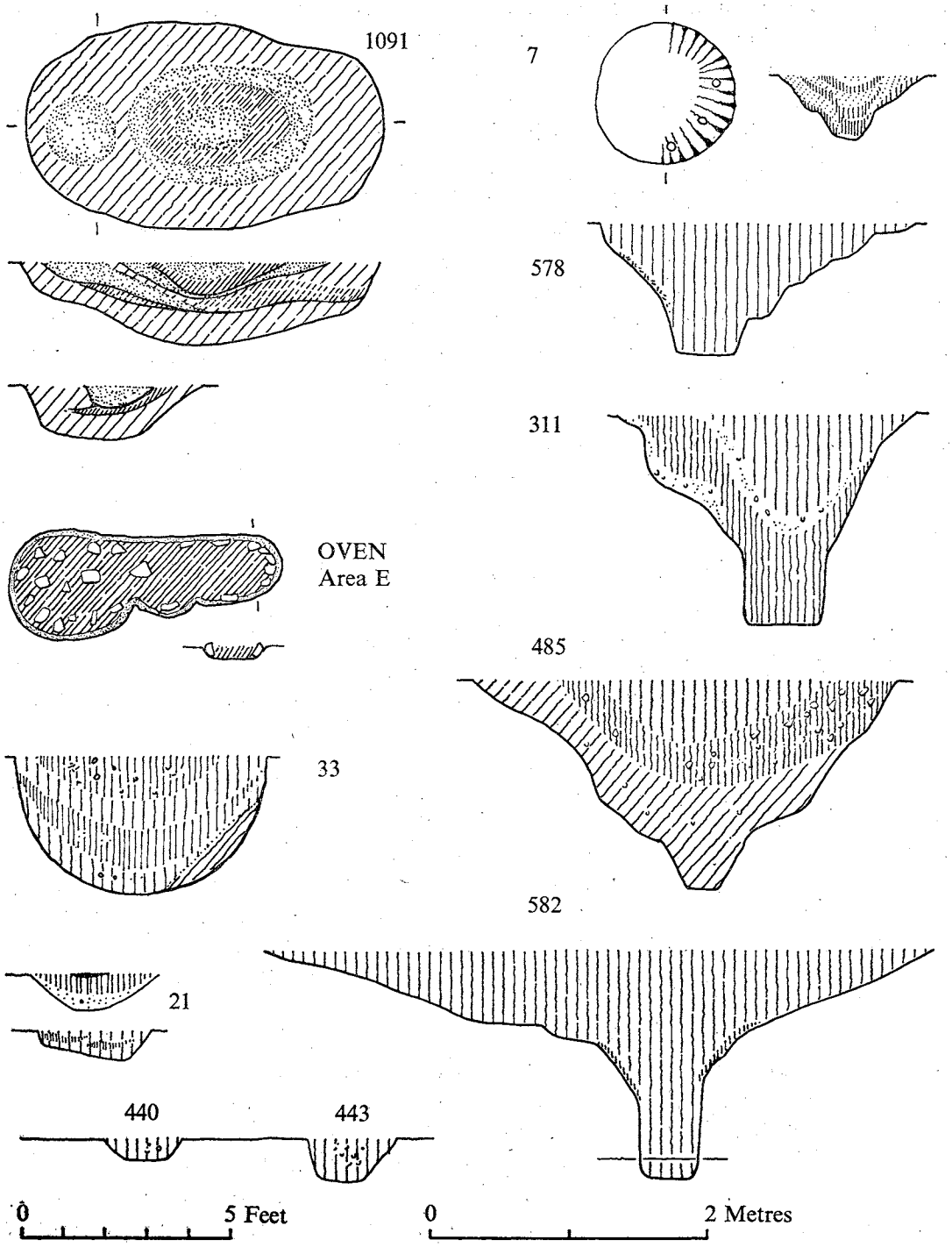


Fig. 11. Sections of hearth 1091, oven, various pits and wells, and ditches 21, 440, and 443.

etc., gravelly loam, and yellow silty material. This material derived presumably from natural weathering and from rubbish dumping. Below these layers the well had a narrower shaft, some 3 ft wide, filled with dark blackish soil, backed by about 9 in. of dirty gravel. The well had clearly been lined with wood, of which one piece was preserved near the bottom, and the digging shaft behind filled with gravel. Various pieces of wood were found jammed against one side of the well, in a position which led Mr Tebbutt to suppose that 'the well had become dilapidated and wood was jammed against one side to make rough steps or a foothold to dip out water' (Plate II). Several pieces of the wood had been worked, and are described below (Fig. 17, pp. 87–89). Well 582 was in many respects similar, though the only trace of a lining was a layer of dark soil on the lower part of the pit's weathered shoulders. 339, seemingly on the surface a well, was not traced to any depth. 311 and perhaps 485, though not reaching the modern water table, may also have been wells. The four or five wells noted in Area A were located in the final phase of gravel extraction, when the shafts were cut into during the course of quarrying by dragline excavator. At least two seem to have been wood-lined, perhaps having been square, with interlocking timbers.

Area C

A cursory examination of Area C showed that there were few, if any, Late Saxon features, though many of the general type shown to be prehistoric could be seen, and there was a broad curving ditch, also probably prehistoric. Resources and time were not available before its destruction for detailed examination or a plan to be made. Very few features of any sort were noted at the western end of the area.

Area D

On the assumption that the ditched enclosure in Area B with its rubbish-filled pits and wells surrounded a Late Saxon settlement, an area excavation was undertaken in Area D. Though work was brought to an abortive halt after four days by the summary destruction of the area, it was clear that removal of the topsoil had again destroyed the lighter elements of any formerly existing buildings, and only a few pits and slots were located. The ditch 385, however, extended at least a further 27 ft south into Area D. The settlement clearly petered out in the north part of the area.

Area E (Fig. 10)

Topsoil removal in Area E, followed rapidly by gravel extraction, located what was apparently either an extension of the settlement in Area B, or perhaps a separate group of structures of similar date. Part of the area was rapidly surveyed and excavated by Mr Tebbutt to reveal a complex of post holes, slots and pits. The linear features were flat-bottomed shallow straight-sided slots, presumably emplacements for sill beams, and occasional post holes were found at the terminations and along the length. Mr Tebbutt interprets the slots as representing a rectangular house, and suggests that the post holes 1001 to 1005 represent a circular structure near by, perhaps some sort of tower. The pit 1004 near the north-west wall of the rectangular

structure had more or less straight sides and a flat bottom on which lay a deposit of detritus-rich mud containing numerous plant remains (pp. 89–91 below). Above this were layers of ash, dark brown soil with charcoal, pottery and other occupation material, and in the top the light brown soil, presumably derived from natural weathering, normally found in such pits. The character of the fill does not directly help an interpretation of the function of 1004, though the pit may well have been some sort of store, or open soakaway. That it was a latrine, as first thought, seems unlikely. The plant remains give a useful indication of the contemporary environment, apparently one of arable and open grassland. Weeds of cultivation confirm the agricultural activities of the Little Paxton villagers, otherwise inferred from their use of lava querns (p. 86).

No doubt many other Late Saxon features lay in and around Area E, but detailed examination was not possible. For instance a small oven (Fig. 11) some 70 ft from the rectangular hut was noted, with burnt clay lining and stone base, having an over-all length of 6 ft, a width of 2 ft 6 in. at one end, and of 1 ft 3 in. at the other. Presumably further structures lie in the field adjacent to the west, for which outline planning permission has been given for gravel extraction, and where air-photographs show a complex of cropmarks.

INTERPRETATION

The finds from Little Paxton leave no doubt of the date of occupation of the site. They must belong to the late ninth, tenth and early eleventh centuries. The nature of the structures, however, is by no means so clear. They seem to cover an area extending almost a third of a mile, and include at least two formal enclosures in the central part of the area, defined either by ditches, palisades, fences or by a combination of all three. The two enclosures are not necessarily contemporary. What appears to be a droveway and further palisade- or fence-defined areas have been set out in relation to the gateway of one of the enclosures. Rubbish pits and wells occur within the enclosures, and sometimes also outside, and there are various settings of post holes and slots which suggest buildings of some sort, perhaps of several periods, again both within and without. Most of the features produced considerable amounts of Late Saxon pottery, bones representing food refuse, fragments of lava querns, and other objects of metal and bone. All these finds are domestic in character, and suggest the close proximity of an occupied settlement. Indeed it seems perverse, in view of the character of the finds, and of the presence of wells, to interpret the enclosures as anything other than delimiting a settlement. Yet no recognizable houses were found within them, and indeed the only acceptable buildings, themselves somewhat enigmatic, lay 500 ft to the west. Perhaps traces of buildings might have been found if hand excavation from topsoil level had been possible; or conceivably timber building techniques were employed which did not necessitate the digging of deep post holes or bedding trenches, as was the case in some later periods.[1] The assumption

[1] *Oxoniensia*, XXVI/XXVII (1961/2), pp. 100–1.

is made here as a working hypothesis, at least until comparable settlements have been excavated to make a fuller understanding possible.

Doubtless the parallel features leading up to the gate of the main enclosure represent the limits of some sort of access way, perhaps best thought of as a wide droveway. It leads, possibly significantly, in the direction of the present village of Little Paxton. The areas defined by slots and trenches on either side of the droveway are most logically explained as fields, though even here occupation material is abundant. Furthermore there are hints of structures, albeit not clearly of houses, within them, and more particularly at their entrances. They may equally therefore represent the limits of holdings within the settlement. Alternatively they may be something in the nature of home fields for the settlement within the enclosure, where agricultural buildings might be expected.

Any of the hypotheses which seem necessary to explain the Little Paxton structures raise considerable theoretical problems. If the site is a settlement, it would imply either that the site of the village of Little Paxton shifted to its present locale about the time of the Conquest; or that there were detached units of settlement within Little Paxton, quite extensive ones, if the hints of settlement in each of Areas A, B and E are taken into account. No good reason for the first possibility suggests itself. The second possibility conflicts with what is known, little enough in truth, of the character of pre-Conquest settlements in this area. It would suggest individual farm units with their own ancillary buildings and homefields, perhaps even with their own droveways leading to the village centre, in an area for which the open-field system is thought to have been the norm. The most convincing explanation would be to see the settlement as an example of those estates within a parish to which references are so often made in ninth-, tenth- and eleventh-century documents,[1] and the character of which is so difficult to visualize. Such estates may be represented elsewhere in the area by the now destroyed Southoe site,[2] albeit a site which continued in occupation. A similar, or perhaps grander, estate may well be represented by the structures elucidated by Mr Charles Green at Water Newton.[3] Support for the idea of fragmentation perhaps lies in the later history of the manor, subdivided and with many free tenants.[4] Until such an estate is isolated and examined, and until we know the morphology of a local Late Saxon village and its fields, it will be impossible to interpret the Little Paxton site with assurance.

THE FINDS

Pottery and animal bones were found in most of the Late Saxon features excavated at Little Paxton, and a number also contained fragments, unhappily usually small, of lava of Niedermendig type. A few contained burnt daub, objects of stone, metal and

[1] A. J. Robertson, *Anglo-Saxon Charters* (Cambridge, 1939), for example pp. 74–83; 226–31; and many similar estates.

[2] *Proc. C.A.S.* XXXVIII (1936–7), pp. 158–63.

[3] *Proc. C.A.S.* LVI/LVII (1962/3), pp. 68–88.

[4] *V.C.H. Huntingdonshire*, II, pp. 332–3.

bone, and organic materials. These objects are described below to provide evidence for the date and character of the site, and their associations are given in Table 1. In addition, slags and other special materials were recovered, and a number of soil samples were taken to provide general environmental information. An over-all assessment of this material and the animal bones will be undertaken in the final report on the St Neots area Late Saxon settlements, together with an analysis of all elements of the contemporary economy and environment. An exception is made below with the important deposit of botanical specimens from pit 1004, which has immediate relevance to the interpretation of the pit and the site.

THE POTTERY

Relatively few of the 1,050 or so features located on sites A and B were excavated, but 46 contexts between them provided a total of some 950 sherds of Late Saxon pottery, predominantly in St Neots ware. The contexts included ditches, trenches, wells, pits and post holes, which clearly varied considerably in the length of time they were open to receive rubbish. Boundary ditches for instance may have been sporadic dumping grounds for many years, while rubbish pits may only have been open for a few weeks, and even wells, after they had gone sour, were probably filled relatively rapidly. Whatever their relative value, the many discrete contexts do provide useful associated pottery groups, a much-felt need in Late Saxon pottery studies. Three groups contain over a hundred sherds, two over fifty, and five over twenty-five. The pottery is described below according to variations in form, but the main associations are summarized on p. 92.

The pottery was remarkably homogeneous. Very few groups contained anything other than St Neots ware. Only one sherd of a Thetford ware storage jar was found (Fig. 12, 29), and there were but a few body sherds of cooking pots. Other local groups[1] containing St Neots ware of various dates have shown a similar lack of Thetford ware, and the Middle Ouse was clearly on the very edge of the marketing area. There was also a dearth of Stamford ware, more surprising since most of the local groups[2] have contained it in small quantities at least. At Little Paxton there was a solitary cooking pot sherd (Fig. 12, 25). Another solitary sherd was the sole representative of Torksey ware on the site; the form could not be established, but the grey–red–grey–red–grey cross-section seemed typical enough. The occurrence of Torksey ware on the site at all is perhaps surprising, for Huntingdonshire is outside the normal area of distribution. In addition to these meagre representatives of the Late Saxon wares of Eastern England three sherds were found of a thin-walled roulette-decorated pot in sandy brown fabric (Fig. 12, 26). It is almost certainly a

[1] Cf. assemblages from St Neots settlement. There was little Thetford ware at Eaton Socon (*Proc. C.A.S.* LVIII (1965), p. 55) or in the 1929–30 excavations at St Neots (*Proc. C.A.S.* XXXIII (1931–2), pp. 146–8); only a few sherds were found at the Great Paxton lime kilns (*Proc. C.A.S.* XXXV (1934), p. 101).

[2] Stamford ware was very rare at Eaton Socon, *op. cit.* p. 55, and at St Neots; it was apparently absent in the Great Paxton assemblage.

Thetford ware pot, though curiously reminiscent of the recently defined Mercian wares of the ninth and tenth centuries.[1]

The conspicuous dearth of imported pottery emphasizes that Little Paxton's sources, for ceramics at least, were very much with its own locality, the heartland of St Neots ware.[2] If, as has been suggested, pots were being transported from afar by river, the boats did not stop at Little Paxton, nor did the villagers purchase such pots at the local market in St Neots or Eaton Socon. Only the lava quern, an essential item for grain producers in this stoneless locality, attracted the thrifty householder (p. 86 below).

The St Neots ware from Little Paxton, characteristically pinkish, but always with shades of grey and even black, contained the usual considerable quantities of included pounded shell in the fabric and, apart from a generally harsher feel than some of the soapier Oxford or Bedford region variants,[3] was quite typical. The fabric of the sherds was, indeed, so nearly identical that it is only described below when it varies from the norm.

All the common St Neots ware types are represented in the Little Paxton assemblage, cooking pots, dishes and shallow bowls. As usual cooking pots (Fig. 12) predominate; about half have a rim diameter of 5 in. or less, while only two, 7 and 22, the latter of exceptional form, have a diameter of more than 8 in. Rim forms vary from the slightly everted and unthickened (1–5) through the slightly everted and slightly thickened (6 and 8–10); the everted with pronounced thickening (11–13); and those with a sharp eversion, but no internal hollow moulding in the rim (7 and 14–18); to those with a similarly sharp eversion, but with a slight internal hollow moulding (19–24). Bases are almost always sagging (30–37). A large number of profiles are published here in the belief that a study of size, and of the subtle variations in rim form are the only ways of differentiating between St Neots ware cooking pottery of varying dates. All major sherds from large associated groups are drawn.

The small size of the cooking pots, together with their uniform fabric and relatively simple rim form, suggest they are all pre-Conquest in date. The twelfth century versions reach rim diameters of up to 14 in. The absence of 'Early Medieval' wares presumably indicates further that they antedate the mid-eleventh century. Noticeably absent from the assemblage, however, are the hand-made versions of St Neots ware cooking pots such as were found at Eaton Socon, and which are putatively early in the series;[4] to these a ninth-century date has tentatively been assigned, and the Little Paxton cooking pots would thus presumably all derive from the tenth century, with a possible start in the ninth, and continuation into the eleventh. Some indication of a survival into the eleventh is provided by the frequency of cooking pots with slight internal hollow mouldings on the rim. These do not occur in the early deposits of

[1] So-called Chester ware now coming from many Mercian sites, e.g. Hereford: *Current Archaeology*, IX, pp. 242–4.

[2] *Proc. C.A.S.* XLIX (1956), p. 52 and fig. 1; *Oxoniensia*, XVII–XVIII (1952–3), pp. 106–9.

[3] The harsher feel of Huntingdon area fabrics has several times been noted: *Proc. C.A.S.* XLIX (1956), p. 52 and LVIII (1965), p. 57. Little Paxton sherds were included in a fabric study on material from Maxey: *Med. Archaeol.* VIII (1964), pp. 50–1 and Table II, nos. 620219–20.

[4] *Ibid.* pp. 53–6.

Eaton Socon, but are frequent in the context immediately antedating the castle. Similarly at Therfield, Herts.,[1] evidence has been adduced to assign the pre-castle assemblage, which contains them almost to the exclusion of others, to the eleventh century.

Bowls (Fig. 13) form a high proportion ot the vessels in the Little Paxton assemblage. They include some more or less upright-sided examples with slightly thickened or slightly flanged rims (Fig. 13, 1–4). In form and treatment these are reminiscent of the handmade upright-sided pots from Maxey, Northants.,[2] representing apparently the Middle Saxon pottery of Lincolnshire/north Northants.,[3] which may provide an ancestry for the type. The type is also perhaps represented in the so-called 'ginger-jars' in Thetford ware.[4] In function they are perhaps related to the normal form of deep St Neots ware bowl with inturned rim (Fig. 13, 5–14 and 20–7), which at Little Paxton makes up 80 per cent of the total number of bowls. The 'socketed' bowl, a rare St Neots ware form, makes its appearance twice in the assemblage: Fig. 13, 15–16 represents one at least, and possibly a second, neatly and precisely made small example; and 17, from a larger but apparently similar vessel, is distinguished by stamped decoration on the rim. 18 and 19 come from equally rare barrel-shaped vessels with upright perforated lugs.

Rather less well represented in the Little Paxton assemblage is the familiar open shallow dish with inturned rim. Only one was found in the large group from the well 458, and no example at all was found in Area E, or in the ditch 385. In contrast, however, sherds from several examples were found in the trench 21. None has quite the hammer-head rim of the type examples from St Neots.

The Little Paxton assemblage has little to add to knowledge of technique of production of St Neots ware. A few examples show structure in the fracture which seems to indicate a practice both of outturning or perhaps of thickening the rim in the final stage of throwing; and in some cases of inturning. Several cooking pots have a scratched internal finish (Fig. 12, 3, 7, 11 and 24) which is almost certainly intentional. The bowl Fig. 13, 23 has been overfired, producing a harder, harsher fabric, lighter in weight than the normal, but the fabric has fissured, and the surface is on the point of spalling and flaking. It illustrates how critical the firing temperature must have been in the production of the ware.

POTTERY CATALOGUE

All the pottery illustrated except Fig. 12, Nos. 25, 26 and 29 is in wheel-thrown St Neots ware. The fabrics are typically grey- or black-cored, with pink, grey or purplish black surfaces, and they contain abundant shelly inclusions. Such range of variation as they exhibit is not great, and extremes can often be found in a single pot. It has not seemed worth while, therefore, to describe either the colour or fabric of any sherd, except when it is not in St Neots ware, or when it greatly varies from the norm.

[1] *J. Brit. Archaeol. Assoc.* XXVII (1964), p. 71.
[2] *Med. Archaeol.* VIII (1964), pp. 56–8.
[3] *Ant. J.* (1969), forthcoming.
[4] *Norfolk Archaeol.* XXXIII, pt. 2 (1963), p. 154, no. 54.

Cooking pots (Fig. 12, 1–28 and 30–7).

1. Small cooking pot with slightly thickened rim. B, well 458.

2. Similar; apparently the clay was folded inwards to produce the thickening. B, well 458.

3. Small cooking pot with pronounced horizontal scratches internally produced during throwing (cf. nos. 7, 11 and 24). E, 1001.

4. Small cooking pot with slightly everted stubby rim reminiscent of hand-made Middle Saxon pots. B, well 358.

5. Small cooking pot, everted thickened rim. E, 1002.

6. Small/medium cooking pot with sharply everted almost flat-topped rim. Several examples of this type were found in Area A, but none elsewhere. A, unnumbered pit.

7. Small to medium cooking pot with sharply everted rim with a slight external ridge. A, pit 1.

8. Small cooking pot with thickened everted rim. E, 1007.

9. Similar, with external neck groove. B, 7.

10. Smallish cooking pot with pronounced thickening to rim apparently achieved by folding clay outwards. Black surfaces, E, 1007.

11. Similar to 10, but more sharply everted. E, 1007.

12. Small cooking pot with thinnish more or less sharply everted thickened rim, folded out. E, 1005.

13. Small cooking pot with short everted rim; similar to Eaton Socon Fig. 8, 12, typologically the first of the wheel-thrown St Neots cooking pots from the site. B, ditch 385.

14. Very small cooking pot, with everted thickened rim. B, slot 21.

15. Very small thin-walled cooking pot, with everted rolled-over rim. B, pit 7.

16. Similar to 15, though clearly not the same pot; thinner, even more finely thrown, with ridge on outside of rim. B, pit 7.

17. Small cooking pot with sharply everted thickened rim with slight internal hollow moulding. B, 2.

18. Similar; more pronounced hollow moulding. B, well 458.

19. Small cooking pot with everted rim, pronounced internal hollow moulding; very similar to Eaton Socon (Fig. 8, 20) which came from an apparently late deposit at the base of the castle bank. B, 19.

20. Small cooking pot, upright thickened rim. B, slot 21.

21. Very small cooking pot with flaring mouth. B, well 458.

22. Medium cooking pot in pink fabric, softer and soapier than the site norm, with very sharp eversion to rim, internal hollow moulding, and pronounced external throwing grooves. The pot is unlike anything else from the site, or from adjacent assemblages, and may perhaps be an import to Little Paxton from another part of the St Neots ware province, perhaps Bedford[1] or Oxford.[2] B, 33.

23. Very small cooking pot with thickened everted rim. Some internal horizontal scratching. E, 1007.

24. Small cooking pot with abruptly thickened slightly everted rim. B, well 458.

25. Very small cooking pot in very hard fine fabric, salmon inside, creamy grey outside, with pink–cream–grey–cream–pink core. Probably Stamford ware. B, well 485.

26. Very small thin-walled cooking pot in fine hard sandy fabric with micaceous inclusions and a slightly pimply surface. The rim has a slight groove internally just above the angle,

[1] Bedford Museum collections.

[2] The pronounced rilling is often seen on Oxford examples, though Professor Jope thought of these as possible imports to the area, *Oxoniensia*, XVII/XVIII (1952–3), pp. 85–7; XXIII (1958), p. 42, fig. 13, B2.1.

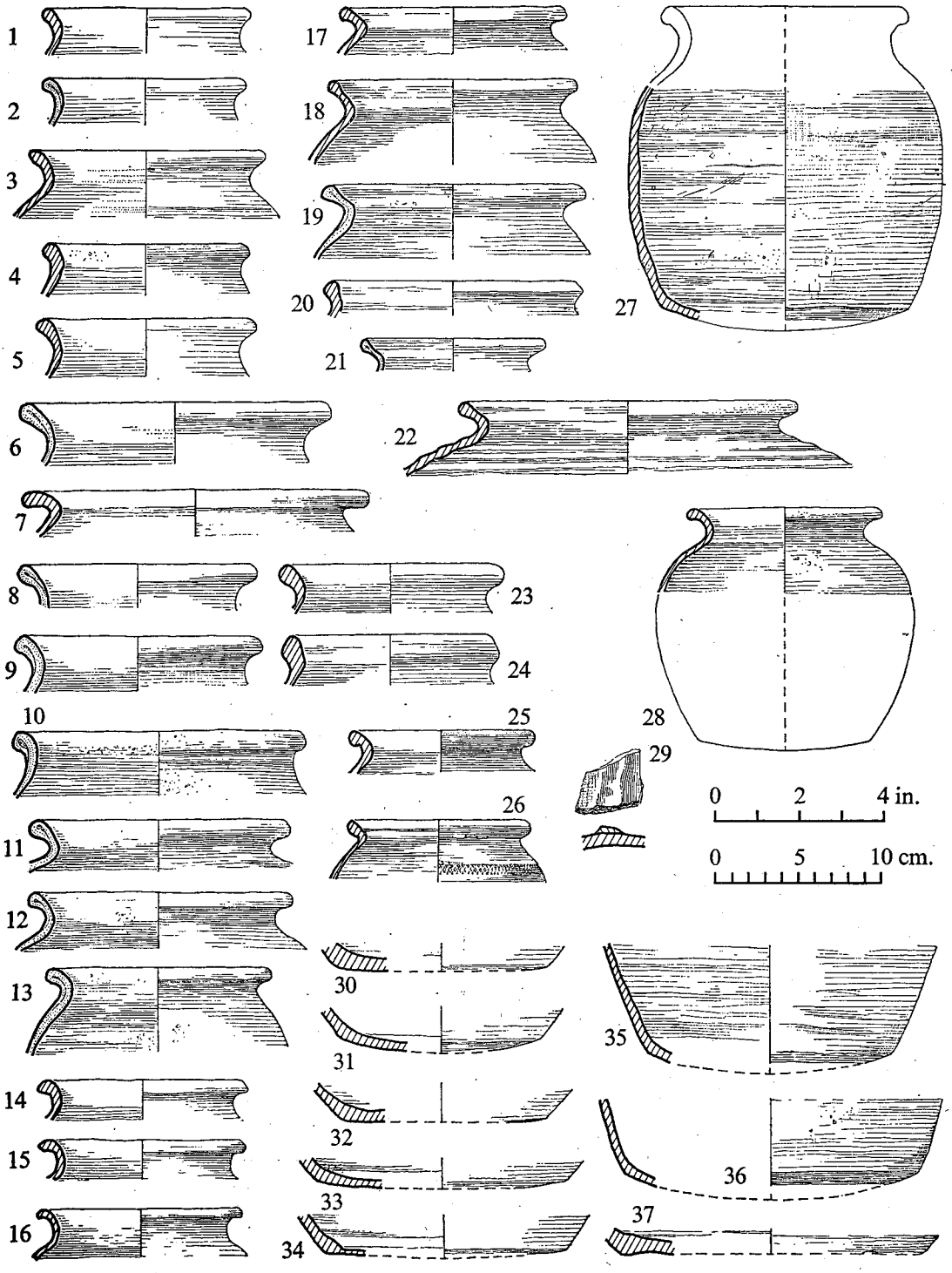


Fig. 12. Cooking pots; all in St Neots ware except 26 and 29, in hard sandy ware. Scale $\frac{1}{4}$.

perhaps a lid seating, and there is a narrow band of diamond rouletting on the shoulder. Joining sherds contrast in colour, presumably through partial accidental refiring of one; but it is probable that the original colour was a greyish brown. A Thetford ware, or possibly Mercian, import to the area.

27. Lower part of a small cooking pot, probably typical of the bodies and bases of most of the pots described above, with marked internal irregularities from throwing and finishing. B, 438.

28. Very small cooking pot with everted and rolled-over thickened rim. B, 458.

29. Body sherd of large vessel in mid-grey hard fine sandy fabric, with vertical applied thumbed strip. Thetford ware storage jar. Unstratified surface find.

30–37 exhibit the range of thickness and angle of cooking-pot bases. 30, B, 439; 31, B, 458; 32, E, 1007; 33, B, 132; 34, B, ditch 385; 35, B, 132; 36, B, 7; and 37, B, 2.

Bowls (Fig. 13, 1–27)

1. Upright-sided apparently barrel-shaped vessel with thickened folded-out rim of triangular cross-section. The sitting angle is difficult to establish in each of sherds 1–4. 1–3 at any rate resemble the typical barrel-shaped pots of the Group III assemblages at Maxey, Northants., now shown to be the Middle Saxon pottery of Lincolnshire. The Little Paxton pots may have some relationship with these, though apparently wheel-thrown. B, 1.

2. Slightly inturned (?) barrel-shaped vessel rim of triangular section and pronounced internal hollow moulding just below flat top. B, 6.

3. Barrel-shaped vessel similar to 2, though apparently, from the small sherd, rather larger. The sitting angle is again doubtful. B, 1. The three sherds come from closely adjacent features, though they do not seem to represent the same vessel.

4. Flat-topped rim, apparently of a bowl or dish of slightly flaring shape, but resembling 1–3 in its flat top. B, ditch 385.

5. Bowl or dish with upright sides and flat-topped 'inturned' rim of triangular cross-section. Salmon pink internally. B, well 458.

6. Bowl, presumably deep, with flaring sides, cf. the Great Paxton series.[1] B, 6.

7. Similar bowl, with slightly more 'inturned' rim. B, 440.

8. Bowl, more flaring sides than 5–7, and perhaps a dish. Sharp internal ridge. B, ditch 385.

The bowls 4–8 are apparently related to 1–3 in rim form, and may well explain, between them, the processes whereby the characteristic form of St Neots ware 'hammer-headed' bowl came about. When a manufacturing site for St Neots ware is located the suggestion can easily be tested.

9. Deep bowl, flat-topped rim, with marked internal and external bevel. B, well 458, found behind the wooden lining of the well.

10. Bowl, with triangular-headed flat-topped rim. B, well 458.

11. Bowl with triangular sectioned rim, undercut externally, slightly 'inturned' with throwing groove, on rim top. B, 458.

12. Bowl with heavy triangular sectioned rim, slightly 'inturned', with marked external bevel. B, slot 21.

13, 15 and 16. Details of a small socketed bowl,[2] one of the rarer St Neots ware types. The tubular socket was added to the triangular-sectioned rim to which it was luted externally. The bowl rim was then pushed through the hole in the socket and roughly luted to it, and the internal ridge of the bowl rim smoothed across the bridge. The economy and practicality of the method of attachment, together with the elegance and precision of the bowl itself, make the vessel an outstanding individual piece in the St Neots ware series. E, 1007.

14. Small bowl with flaring rim and open shape. Larger bowls of this form are known. B, 20.

[1] *Proc. C.A.S.* XLIX (1956), p. 66, fig. 7, 5.

[2] *Beds. Archaeol. J.* III (1966), pp. 19–21.

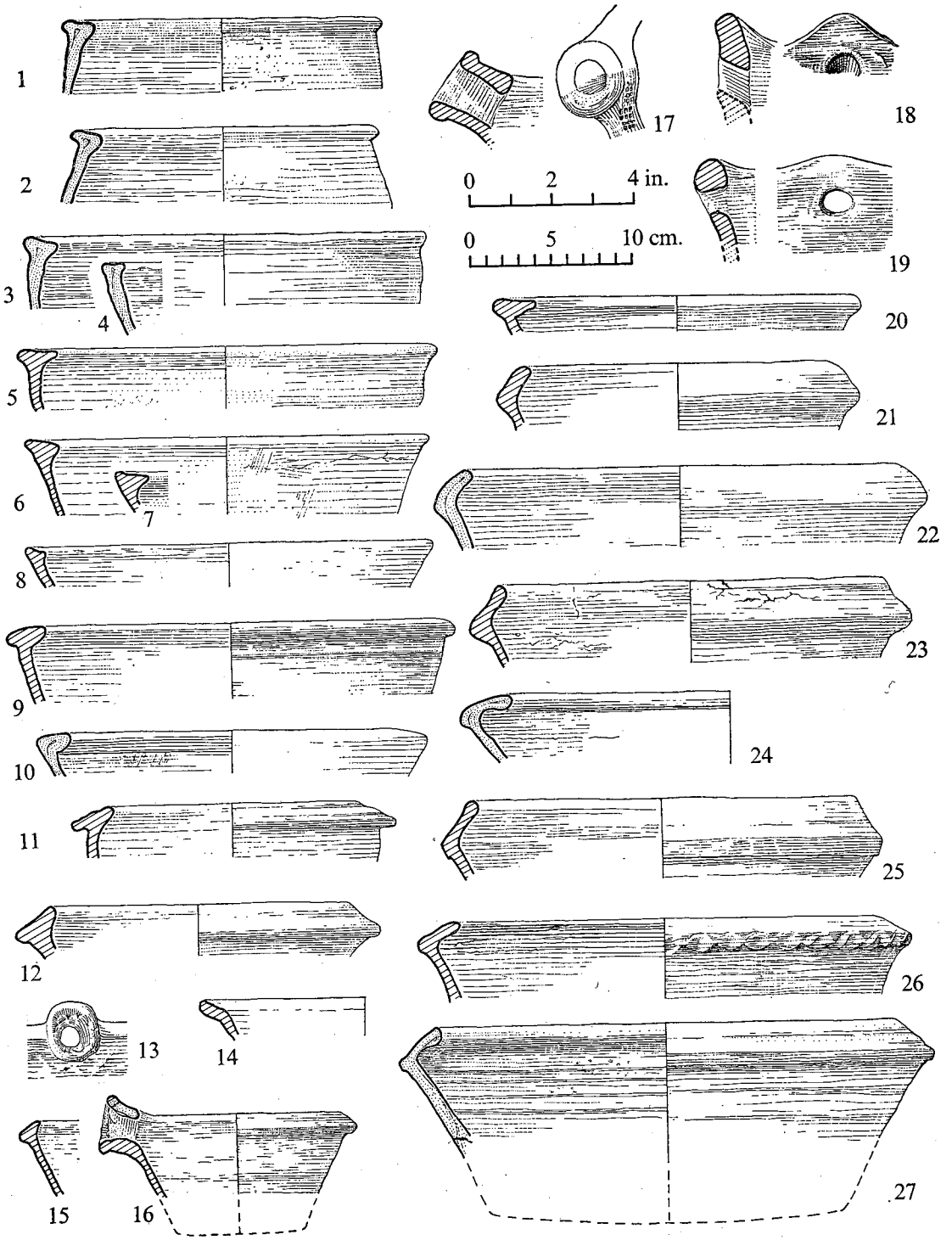


Fig. 13. St Neots ware bowls. Scale $\frac{1}{4}$.

17. Tubular socket, perhaps of another 'socketed bowl', of greater size, and more closely similar to the Abington Pigotts example. The rectangular grid stamps on the rim of this example are unusual for St Neots ware though the use of stamps on socketed bowls has been noted.[1] B, 376.

18. Lug, presumably from a deep barrel-shaped bowl of the type known from Abington Pigotts and Cambridge.[2] The perforation in this example is markedly oblique. B, ditch 385.

19. Thickened rim and lug, presumably of a bowl akin to the type suggested for 18. The rim has been markedly thickened above the perforation, partly by spreading the displaced clay from the hole, and partly through the addition of an extra pad. B, ditch 385.

20. Bowl with triangular-sectioned rim. B, 436.

21. Bowl with 'inturned' rim of simple form. B, 458.

22. Bowl with thickened 'inturned' rim, apparently folded outwards. B, 21.

23. Bowl with inturned rim; light pink, harsh and fairly hard; many cracks and incipient spalling presumably through overfiring. B, 458.

24. Large bowl with very pronounced inturned rim and moulding on external angle. B, unstratified.

25. Bowl with weakly inturned rim, but pronounced moulding on external angle.

26. Bowl with inturned rim and neat small finger mouldings on external angle. B, 12.

27. Bowl with thickened inturned rim. B, 21.

Dishes (Fig. 14, 1–7)

1–6. Shallow dishes with inturned rims, all of more or less similar size, differing mainly in the character of moulding on the shoulder. The type is a common one in St Neots ware assemblages. 1 from B, 436; 2 from B, 21; 3 from B, 453; 4 from B, 132; 5 from B, 458; 6 from B, 21.

7. Open shallow dish with thickened flattened rim. The light pink surface of the exterior has almost completely peeled off, suggesting the outside was finished off by wiping surplus clay over the surface. The form is unusual in St Neots ware. A, 3.

Other forms (not illustrated)

Among the great number of sherds not published here there are a handful in fabrics other than St Neots ware. There is also a small St Neots ware sherd perhaps from the lip of a cresset lamp.

STONE OBJECTS

Querns (Fig. 15)

Part of the lower stone of a limestone quern (underside shown) with extensive wear and slight lipping round the apparently somewhat off-centre central hole. In type the quern closely resembles the more commonly found imported lava examples, though it is almost certainly of local stone. Manufacture of querns, even perhaps the finishing of lava ones,[3] may well have taken place locally in the Late Saxon period. Estimated diameter *c.* 1 ft 8 in. (*c.* 51 cm.). B, 458.

[1] *Oxoniensia*, XXIII (1958), p. 71 and fig. 13, Z.1. [2] *Proc. C.A.S.* XLIX (1956), p. 55, fig. 2, 6.

[3] The stones mentioned as an item of trade in a letter from Charles the Great to Offa, *E.H.D.* I, p. 781, A.D. 796, were almost certainly lava blocks for millstones. Since Dunning's discussion of the trade in D. B. Harden (ed.), *Dark Age Britain* (London, 1956), p. 232, many lava fragments have turned up on Early and Middle Saxon settlements, and there can hardly have been a break in the trade from late Roman times to the end of the Middle Ages.

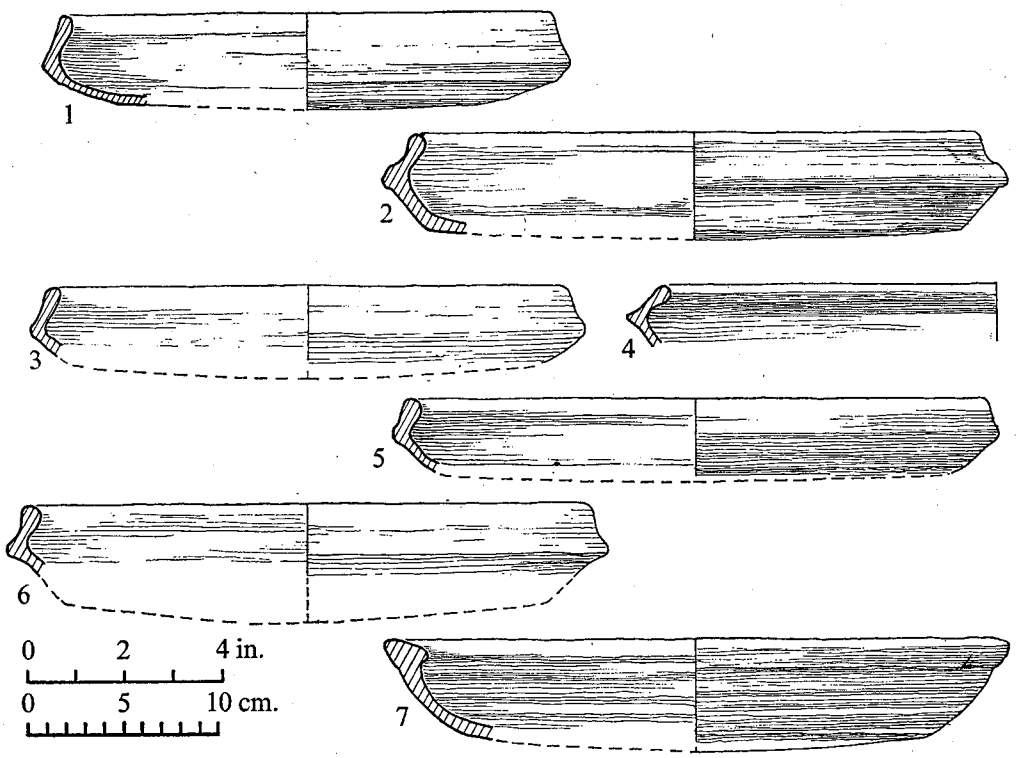


Fig. 14. St Neots ware dishes. Scale $\frac{1}{4}$.

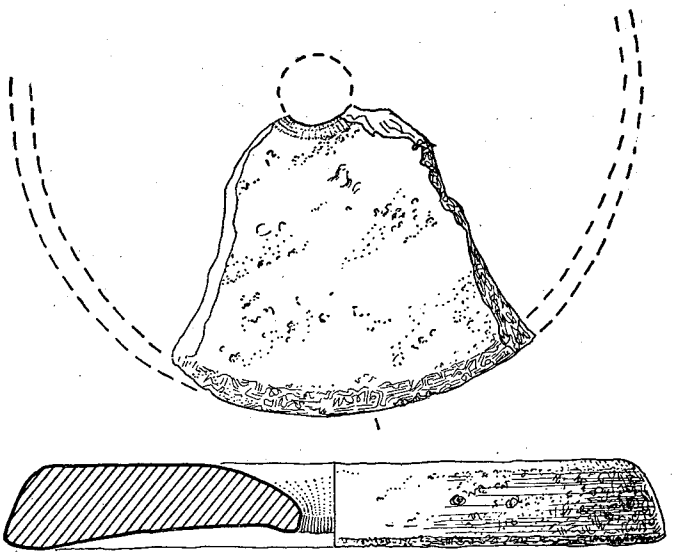


Fig. 15. Limestone quern. Scale $\frac{1}{6}$.

Small fragments of lava, of Neidermendig type, found in eight contexts presumably also come from querns.

Flints (not illustrated)

Two flint blades found in B, 21 may have been used in Late Saxon times. One has a heavy bluish white general patina, but extensive secondary trimming, giving denticulated edges, with no patination. The re-use may well have taken place in Saxon times. The second is a blade which, in contrast to demonstrably Neolithic flints from the site, has no patination. It may also be Saxon. The function of the blades is not clear, but the use of flint in Saxon times has been inferred.[1]

METAL OBJECTS

Iron objects (Fig. 16, 1–7)

1–3 are knives of a simple form commonly found on Saxon domestic sites of all periods,[2] having a straight back angling towards the tip, a blade of triangular cross-

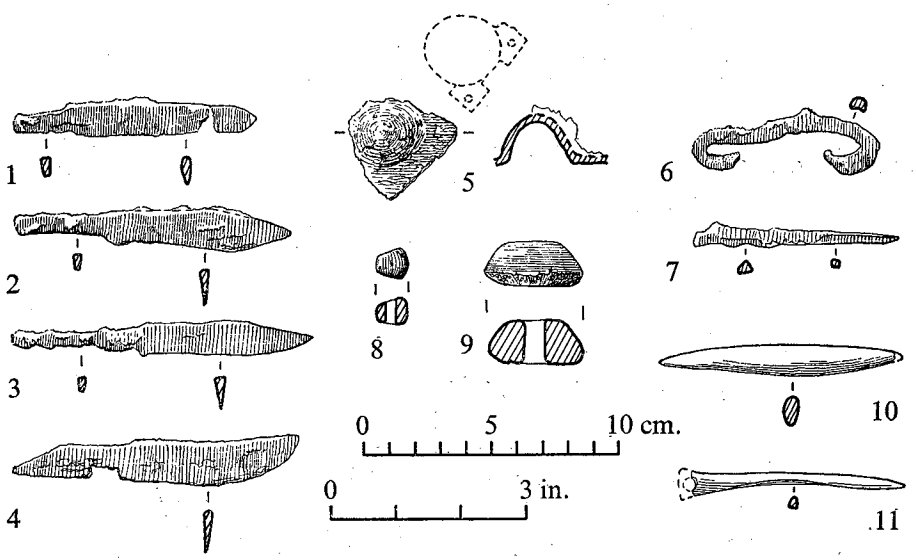


Fig. 16. Objects of bone (9, 10, 11), glass (8), and iron (1–7). Some of the iron objects are drawn with the aid of X-ray photographs. Scale ⅓.

section, and a short tang of rectangular cross-section. The knife from the burial in Area A (Fig. 3) is of this type. By contrast 4 has an upturned tip, though it is otherwise similar. 5, badly corroded, is a flat plate with two perforations, presumably for attachment, and a pronounced dome. It may be incomplete, the plate perhaps having been square. Its function is obscure, but it could have been the foot of a box or piece of furniture. The double-hooked object, 6, is apparently complete and the

[1] From the occurrence of iron strike-a-lights in Early Saxon graves.

[2] *Med. Archaeol.* VIII (1964), p. 60.

ends show some attempt at moulding and finishing. 7 is a pin of a common simple Saxon type,[1] though its triangular section is unusual. The findspots of the iron objects were 1: B, 132; 2: B, 21; 3: B, 458; 4: B, 458; 5: B, 376; 6: B, 458.

OBJECTS OF GLASS

Glass bead (Fig. 16, 8)

The asymmetrical bead, apparently bluish or greenish in colour, comes from B, 21, and is apparently one of the central elements from a composite necklace.

BONE OBJECTS

The spindle whorl (Fig. 16, 9) is crudely made from a femoral head. Fig. 16, 10 and 11 are two objects whose occurrence is almost the hallmark of Anglo-Saxon settlement sites of all periods. The threadpicker is of the type discussed by Miss Crowfoot,[2] and the perforated pin is best paralleled in the York series.[3] 9: B, 7; 10: B, 481; 11: A, pit 1.

WOODEN OBJECTS

The lower levels of the various wells in Areas A and B produced numerous pieces of wood, often broken, discarded, or re-used. They included posts, planks, slabs and shaped fragments, a number of branches showing axe and saw marks, a split sapling trunk bored with a circular hole, and many twigs. Fig. 17 shows six objects which show some degree of shaping. None is identifiable, but they are illustrated on the grounds that few enough examples of Late Saxon carpentry of any sort are known.

1. One of two similar spars, perhaps the split portions of a single object. The original object would have had a short cylindrical end, rebated twice to a narrower oval-sectioned shaft which broadened towards the tip and became more rectangular. Both fragments showed signs of considerable wear after splitting, accounting for the faceted end. The object had perhaps been re-used, perhaps in winding gear for the well. Area A, well. Wood unknown.

2. Part of wedge-shaped thin plank, both ends broken; width 4·5 in. Another plank from the same context, not illustrated, was 5·5 in. wide, and 0·75 in. thick. B, 458. 'Oak, *Quercus robur* type, cut from timber at least 12 in. diameter.'

3. Triangular-sectioned beam, bottom end broken, with broad smooth notch on one side; made from a quartered trunk. B, 458. 'Oak *Quercus robur* type, a quartered branch.'

4. T-shaped object made from a thin block tapering towards each end. There is a pronounced notch on the underside of the cross-piece on one side. Well 458. 'Oak, *Quercus robur* type, at least 6 in. diameter.'

5. Thickish block of dressed wood with notch on one side. B, 458. 'Oak, *Quercus robur* type, from timber at least 12 in. diameter.'

[1] *Proc. C.A.S.* LVIII (1965), p. 65 and fig. 11, 3–4.
[2] *Trans. Leics. Archaeol. Soc.* XXVIII (1953), p. 50.
[3] *Archaeologia*, XCVII (1959), p. 85 and fig. 14.

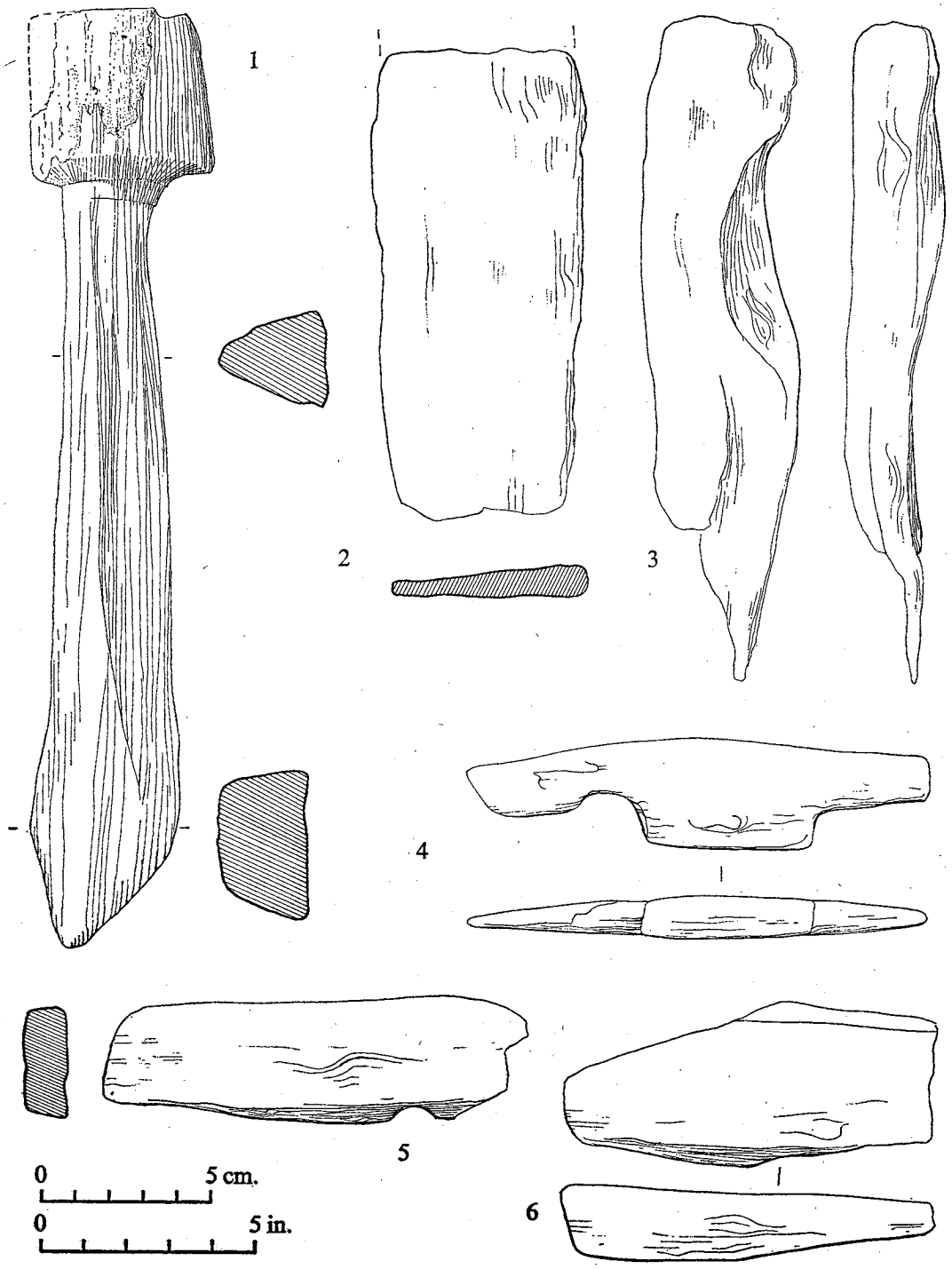


Fig. 17. Objects of wood. Scale $\frac{1}{4}$.

6. Slab with carefully chamfered end. B, 458. 'Oak, *Quercus robur* type, from timber at least 12 in. diameter.'

G. C. Morgan, who kindly identified the above objects, notes that the following species occurred amongst the twigs and fragments not illustrated: *Corylus avellana*, hazel; poplar, *Populus* sp.; *Acer campestre*, maple; *Crataegus* sp., hawthorn (?).

MACROSCOPIC PLANT REMAINS

Samples of the detritus-rich mud from the flat-bottomed pit 1004 in Area E were submitted by Mr Tebbutt to the Department of Botany in the University of Cambridge. Professor Godwin, through Miss M. J. Burroughs, has kindly provided the following report:

Two samples of a detritus-rich mud were submitted. Both had been labelled 1007, but we distinguished between them, arbitrarily labelling them A and B. The samples were taken from a layer of plant material which overlay clean bedded gravel; on top of it was a layer of wood ash, which was overlain by dark brown loam with charcoal, Late Saxon pottery, bones, etc.

Sample A consisted of a dark brown, detritus-rich mud with a little clay, a few stones, wood and plant fragments. Sample B was very similar to A except that it contained silt and no clay.

MACROSCOPIC PLANT REMAINS

	Organ	Numbers found in A	Numbers found in B
Wet ground—river banks			
Carex otrubae Podp./*C. vulpina* L.	Nutlet	8	1
C. vesicaria L.	Utricle	2	—
Drosera intermedia Hayne	Seed	1	—
Eleocharis palustris L.	Nutlet	17	5
Filipendula ulmaria L.	Fruit	6	10+
Ranunculus flammula L.	Achene	—	1
R. repens L.	Achene	—	2
Cultivated land			
Aethusa cynapium L.	Fruit	3	2
Agrostemma githago L.	Seed	—	4
Anagallis arvensis L.	Seed	3	5
Anthemis cotula L.	Fruit	1	10+
Atriplex patula L.	Seed	—	5
Chenopodium album agg.	Seed	—	1
Legousia hybrida L.	Seed	—	2
Mentha arvensis/M. aquatica L.	Nutlet	4	9
Odontites verna (Bell) Dum.	Seeds and embryos	4	4
Papaver argemone L.	Seed	1	3
Plantago major L.	Seed	1	6
Polygonum aviculare L.	Fruit	—	1
Scandix peten-veneris L.	Fruit	3	4
Solanum nigrum L.	Seed	—	1
Sonchus asper Hill.	Fruit	15	6
S. oleraceus L.	Fruit	1	—

	Organ	Numbers found in A	Numbers found in B
Cultivated land			
Urtica dioica L.	Fruit	1	6
U. urens L.	Fruit	—	3
Valerianella dentata Poll.	Fruit	1	—
Grassland and ruderal			
Achillea millefolium L./ *A. ptarmica* L.	Fruit	6	5
Carduus crispus L./ *C. nutans* L.	Fruit	—	10+
Centaurea nigra L.	Fruit	1	—
Cerastium holosteoides Fr.	Seed	1	—
Daucus carota L.	Fruit	2	9
Galium aparine L.	Fruit	1	—
Heracleum sphondylium L.	Fruit	1	—
Knautia arvensis L.	Fruit	1	4
Lapsana communis L.	Fruit	—	3
Leontodon autumnalis L.	Fruit	—	3
Linum catharticum L.	Seed	1	7
Melandrium album Mill.	Seed	—	1
Pastinaca sativa L.	Fruit	—	3
Petroselinum segetum L. (Koch)	Fruit	—	2
Picris hieracioides L.	Fruit	1	—
Polygonum convolvulus L.	Fruit	—	2
Prunell vulgaris L.	Nutlet	—	3
Ranunculus acris L.	Achene	4	1
Rumex acetosella agg.	Nutlet and perianth	2	15
Sambucus nigra L.	Seed	1	—
Silene cucubalus Wiebel	Seed	1	—
Stellaria graminea Retz.	Seed	4	2
Torilis japonica (Houtt.) D.C.	Fruit	6	10
Cf. *Trifolium pratense* L.	Calyx	—	1
Miscellaneous			
Carduus sp.	Fruit	—	1
Carex spp.	Nutlet	4	12+
Cirsium sp.	Fruit	—	1
Potentilla sp.	Achene	5	1
Rhinanthus sp.	Seed	1	1
Gramineae	Caryopsis	1	5
Mosses			
Antitrichia curtipendula (Hedw.) Brid.	Leafy shoots	—	+
Camptothecium sericeum (Hedw.) Br. eur.	Leafy shoots	—	+
Neckera complanata (Hedw.) Hüb.	Leafy shoots	—	+
Cf. *Rhytidiadelphus squarrosus* (Hedw.) Warnst.	Leafy shoots	—	+
Sphagnum sp.		+	—

The lists of plant remains from the two samples are very similar and can therefore be considered as one flora.

The majority of plants identified are those common to open land, grassland and waste places. Plants such as *Sambucus nigra*, *Picris hieracioides* and *Linum catharticum* are at the present day found mainly on calcareous soils. Apart from these there are plants characteristic of cultivated

land; two of these in particular, *Agrostemma githago* and *Valerianella dentata*, are cornfield weeds. *Ranunculus flammula*, *Filipendula ulmaria* and the *carices* are examples of plants which grow on wet ground.

The mosses (all identified by Mr J. H. Dickson, Sub-department of Quaternary Research, Cambridge) include *Antitrichia curtipendula*, *Camptothecium sericeum* and *Neckera complanata* which all commonly grow on trees, walls or stones, while *Rhytidiadelphus squarrosus* grows in meadows. The presence of *Sphagnum* is interesting as some species of *Sphagnum* grow in close association with *Drosera intermedia*.

The samples represent an infilling by remains of plants growing on the ditch banks, together with plants of grassland and cultivated land growing near by.

A very similar assemblage of plant remains was found in a tenth- to eleventh-century Saxon ditch at Winchester, Hants.

Special notes on plants not previously found fossil

Drosera intermedia is normally a plant of acid bogs, which formerly occurred in Huntingdonshire (Dony, *The Flora of Bedfordshire*) but has long been extinct there. *Scandix pecten-veneris*, an arable weed, although widely distributed, is now less common on account of the use of selective weedkillers. *Knautia arvensis* is a common plant of roadsides, field borders and grassland modified by human activity.

M. J. BURROUGHS

LEATHER

A few small fragments of thonged welting attached mainly to the remains of soles came from 485. J. H. Thornton of Northampton College of Technology kindly provides the following report:

It is difficult to be certain what they were but they do appear to me to be pieces of the upper/sole junction of turnshoes.

The turnshoe method of construction was the standard method in this country from the departure of the Romans in the fifth century up to the beginning of the sixteenth century. The majority of the medieval turnshoe soles, uppers and complete shoes which I have examined, however, all have the stitch-holes made from the edge to the flesh side of the sole. The thread is used for the seam and the stitch-holes are usually something in the order of five or six to the inch. There is not usually a rand (or welt) enclosed by the seam between upper and sole. I have come across such rands from time to time and, of course, once the thread seam has rotted away the rand can easily be lost or not identified as part of the shoe.

The Little Paxton specimens, however, not only have a rand included but the seam itself is set in from the edge. Thonging is used, and not thread, these thongs forming a single serpentine seam as distinct from the typical hand-sewn thread seam which came later and in which the thread entered the holes from both sides. I think there are at least two knots visible at the ends of thongs.

In my analysis of the shoes found by I. M. Stead at the south corner tower in York,[1] I described the turnshoe seam and its development from the crude thonging form into the more sophisticated stitched form and I pointed out that both types occurred in the York specimens. Also several specimens had the seam passing in and out of the same side of the sole and not through the edge, thus leaving the edge itself projecting beyond the upper as it does in the Little Paxton samples.

I suggested that the earlier thonged specimens at York could be as early as the tenth century and it would seem to me, therefore, that the Little Paxton ones could be of a similar date or earlier.

[1] *Yorks. Archaeol. J.* XXXIX, pts. 155 and 156 (1958), pp. 515–30.

HUMAN BONES

Skeleton from Area A, Isolated Grave

The following is a list of the skeletal material which was left after mechanical digging; from these remains, age, sex and height have been estimated.

Skull:	two canines and one premolar.
Axial skeleton:	R Clavicle (part), R scapula (part), rib fragments, fragments of four lumbar vertebrae, sacrum (part), pelvis: parts of R ilium and ischium, parts of L ilium and ischium, plus other pelvic fragments.
Long bones:	R humerus (head missing), R radius and ulna (proximal ends only)
	R 1st metacarpal.
	R femur, L femur (fragments of head and distal end)
	R and L tibia (proximal ends), R and L fibula (shafts only).
Age: 25 ± 5,	estimated from the maturity of the skeleton and the wear on the teeth.
Sex: male,	determined from shape of pelvis and angle of sciatic notch.
Height: 174 cm, (5ft $8\frac{1}{2}$ ins)	calculated from Trotter and Gleser's equations for estimation of living sature from long bones for American whites (male) and checked against Dupertuis and Hadden's general formulae for reconstruction of stature from long bone lengths.

S. G. REES-JONES

ACKNOWLEDGEMENTS

Mr C. F. Tebbutt's archaeological vigilance led to the discovery of the site, and much of the information was retrieved by him. He has with the utmost generosity placed this material at my disposal for the purposes of the report, and I am delighted to acknowledge indebtedness to him throughout. For permission for the work to take place thanks are due to Inns and Co., the gravel pit owners. Welcome help with the digging came from N. W. Alcock, R. G. W. Prescott, and other members of the Cambridge Archaeological Field Club, and locally from C. Daines and G. Rudd. Miss M. D. Cra'ster helped in various ways with equipment and organization. Mr J. G. Hurst's advice and help have been unfailing throughout, and the report owes far more to him than is apparent. Professor E. M. Jope has helped in a similar way. Mr L. Biek of the Ministry's Ancient Monuments Laboratory has advised throughout on specialist problems. I am also grateful to Professor Godwin and Miss M. J. Burroughs for their botanical report.

Little Paxton: ring ditch visible after mechanical removal of topsoil in Area A. *Photo, Addyman.*

Well 458 in Area B, showing wood, mostly re-used, which seems to have functioned as a lining or as a standing platform (p. 74). *Photo, G. Rudd.*

TABLE 1. *Associations*

Feature	Stone	Lava	Burnt clay	Slag	Iron	Bone	Other materials
1	.	×	×	.	.	.	.
2	.	.	.	.	×	.	.
7	.	.	×	.	.	×	.
15	.	.	×	.	.	.	.
21	×	.	.	.	×	.	Glass bead
22	.	×	.	.	.	.	.
34	.	.	×	.	.	.	.
332	.	×	.	.	×	.	.
376	.	×	.	.	×	.	.
385	.	×	×	.	.	.	.
438	×	.	.	.	.	.	.
439	.	.	×	.	.	.	.
458	×	.	×	×	×	.	.
481	.	.	×	.	.	×	.
485	×	×	×	.	.	.	.
1008	.	.	×	.	.	.	.
1009	.	.	×	.	.	.	.
1050	×	×	.	.	.	.	.
1051	.	×	.	.	.	.	.
Total of contexts	5	8	11	1	5	2	1

NOTE: All the above features contained pottery except 481. The following features produced pottery but no other finds: 6, 13, 19, 20, 24, 25, 33, 120, 121, 195, 210, 311, 336, 391, 403, 435, 436, 440, 523, 578, 1001, 1002, 1005, 1006, 1007, and two unnumbered pits, total 46 contexts.

Proc. Camb. Ant. Soc. Vol. LXII (1969), pp. 95–104.

THE CHURCH OF THE CAMBRIDGE DOMINICANS

F. H. STUBBINGS

THE Dominican Priory in Cambridge was founded in 1238, or not long before (Hinnebusch, p. 89; cf. Palmer, p. 137). Between its dissolution and the foundation of Emmanuel College in 1584 it is known that the site and buildings, lying in the angle of Preachers Street (now St Andrew's Street) and Preachers Lane (now Emmanuel Street), passed through the possession of various private owners; but we have no record of the uses to which they were put. There may have been some demolition for the sake of the materials; but when Ralph Symons was appointed as architect for the new foundation at least parts of the conventual buildings were still standing, and it is well known that the Dominican church was by him converted into the buttery, hall, and fellows' parlour of the College. This change of function is perhaps the only basis for the statement often made that, *per contra*, the original chapel of the College (now known as the Old Library) was an adaptation of the Dominican refectory. The clunch core of the Old Library walls, it is true, may be medieval, but beyond this we cannot go; and those who seek in this alleged transposition of uses an index of the Puritan founder's scorn for past traditions might well notice instead the perhaps significant coincidence that his new college was designed to produce, from the site of the learned Friars Preachers, an educated preaching clergy. Some of the red brick buildings to be seen along the St Andrew's Street side of the site in Loggan's engraving of 1688 (and in an oil painting of similar date in the College) may also be Dominican in origin: there are medieval-looking buttresses (one is visible at the right-hand side of Fig. 1), and a Gothic doorway or two; but these ranges have been long since replaced, and we cannot be sure. Richard Lyne's engraved map of 1574 (reprinted by Clark and Gray) is of no assistance in showing what survived the interregnum between priory and college, for the buildings he depicts on the site (duly labelled *Blacke Friers*) are but crudely drawn.

Superficially the hall range nowadays shows few marks of its medieval origin: the stone facing to Front Court and New Court was carried out by James Essex around 1760, when the interior also was remodelled, with the present fine plaster ceiling and presumably the present panelling to the walls and screens. The roof trusses now hidden by the ceiling are Elizabethan in style, doubtless the work of Ralph Symons.[1] Their moulded beams are matched in the framework behind the screens panelling. Beneath the skin, however, a good deal remains to tell us what the

[1] R.C.H.M. *Cambridge*, I, p. 67, with figure. The statement in *Emmanuel College Magazine*, XXXV, p. 21 is erroneous.

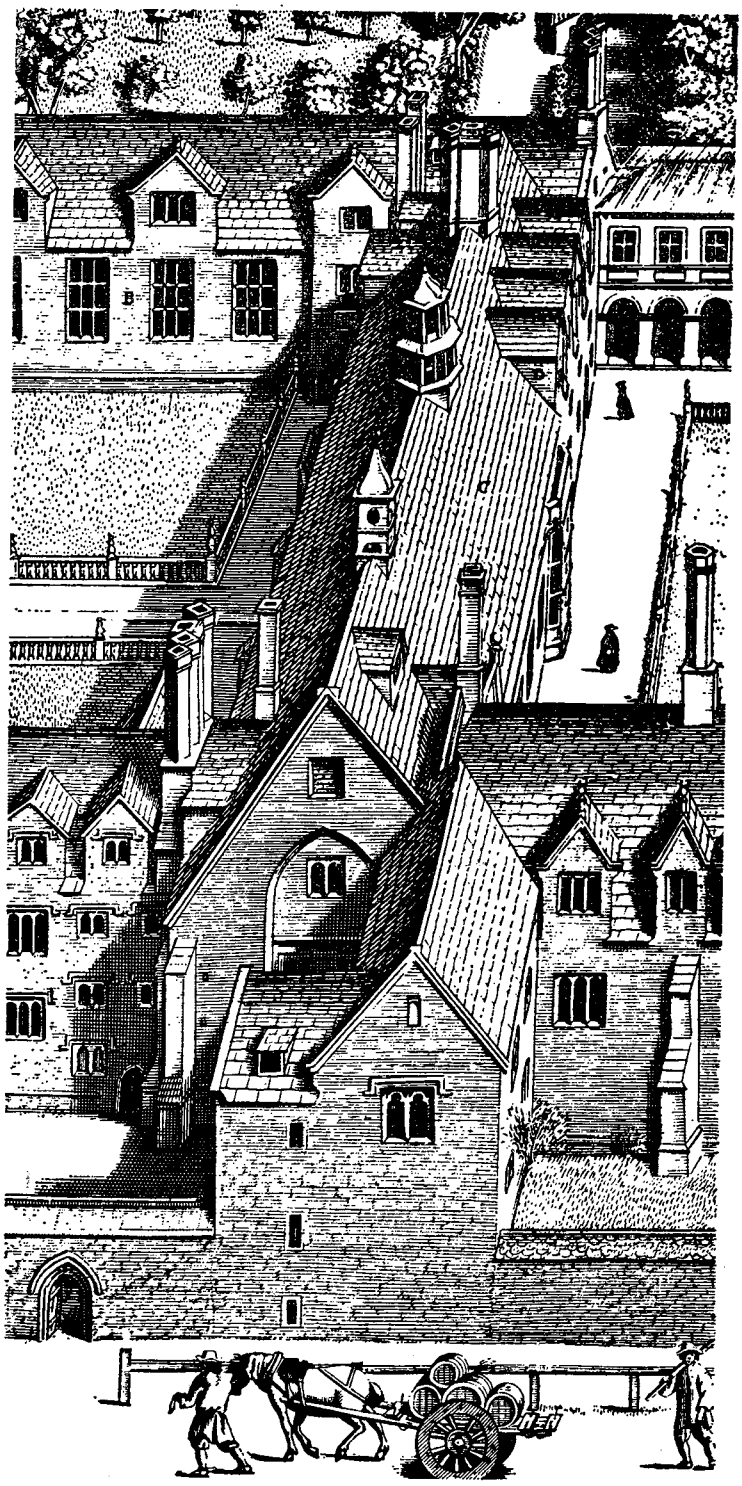


Fig. 1. Detail from Loggan's engraving of Emmanuel College, 1688.

original church was like, and repairs undertaken in recent years have given opportunities to record some of this hidden evidence.

The west wall of the church, clearly identifiable in Loggan's engraving (Fig. 1) by the outline of the blocked west window, was taken down to make way for the north pavilion of Essex's present entrance façade in 1769. Its position has been marked on the plan (Fig. 2) from the evidence of the survey made by Essex in 1746, before he began his improvements. (This survey is still preserved in the College, and was reproduced, from a copy, by Willis and Clark (IV, plan 25).) The east wall is fairly certainly identifiable as the east wall of the Parlour: it is of the thickness (approximately 3 ft) for an external wall; and the eighteenth-century College historian William Bennet records in his manuscript notes (I, p. 166) that during repairs in the Parlour in 1762 'traces of the High Altar were very apparent near the present fireplace'; in another note, later crossed out (*ibid.* p. 77) he refers to 'Pictures of the Saints' there.

In Loggan's general view of the College (Fig. 1) there are two buttresses at the N.W. corner of the church (lettered *a*, *b*, on the plan, Fig. 2) which of course disappeared in Essex's alterations. On the north side, west of the Hall oriel, can be seen two more (*e*, *f*, of which *e* still survives and *f* was removed only a few years ago), and another (*j*) to the east of the oriel. Buttresses *e*, *f*, and *j* are shown in Essex's 1746 plan also, as is *k* at the east end of the north wall. Buttress *j* disappeared when the present Parlour oriel was added in the nineteenth century; *k* still survives, though partly hidden by a further addition. All are indicated on the plan (Fig. 2), and it will be seen that *e* and *f* are approximately centred between the present Hall windows, suggesting that these occupy the same places as the original nave windows of the church.

This last assumption was confirmed when the panelling of the north wall of the Hall was partly removed for repairs in December 1966. Beneath all three of the present windows the outline of the medieval ones is clear, and the history of the later alterations can be readily traced. Window A (Fig. 3 and Pl. I *a*) is typical: above the original sill-level (1) the opening was filled with brick and rubble to a height of about 18 in. to form a new sill-level (2), presumably when Ralph Symons first adapted the buildings in 1584. The wainscoting would have reached to this sill-level, and the dressed clunch facing of the wall was therefore left unaltered, and nothing was done to disguise the junction of face and filling. Above the sill-level (2), however, the arris alongside the hollow moulding which outlines the splay was roughly rounded off. Excavation of a portion of the in-filling revealed the angle of the splay; and among the rubble extracted was a short piece of Purbeck marble shafting of 4 in. diameter, which prompts (but cannot satisfy) speculation about the decorative treatment. A second raising of the sills, to the present level (3), most probably dates from Essex's improvements about 1760. This second stage of in-filling is faced with two courses of clunch slabs, much larger than those of the medieval wall-facing, and very obviously distinguishable from the earlier filling (see Fig. 3 and Pl. I *a*). Careful study of Loggan's engraving of the Front Court shows that the window sills were in his time a little over 2 ft lower than today—which agrees with the evidence now presented.

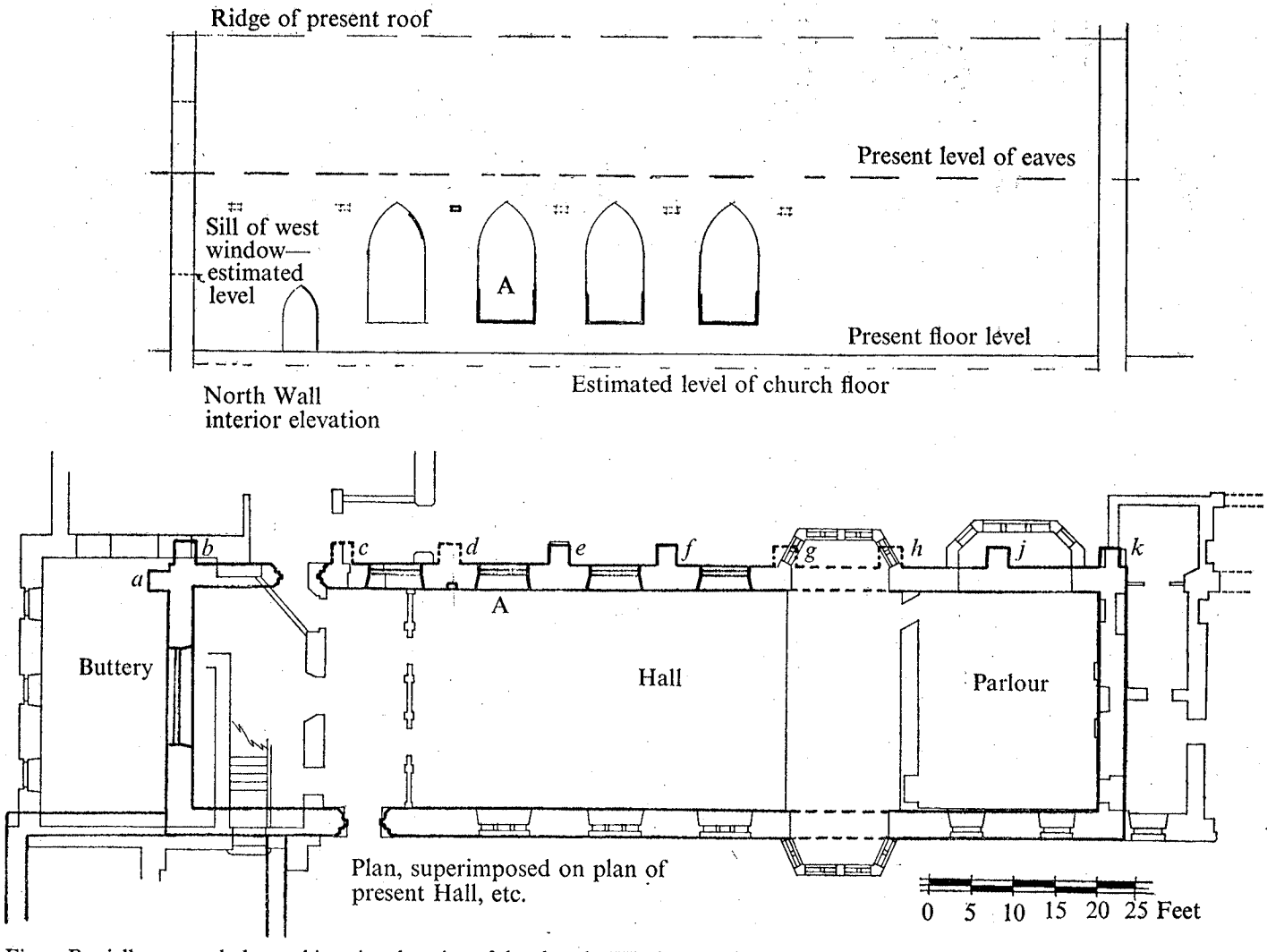


Fig. 2. Partially restored plan and interior elevation of the church. Windows and doors are shown only where positively attested; there probably were others also, in the south and east walls. Bold outlines in the plan denote features for which there is fairly certain evidence in actual remains or in Essex's survey or Loggan's views. Broken outlines denote features inferred or doubtful.

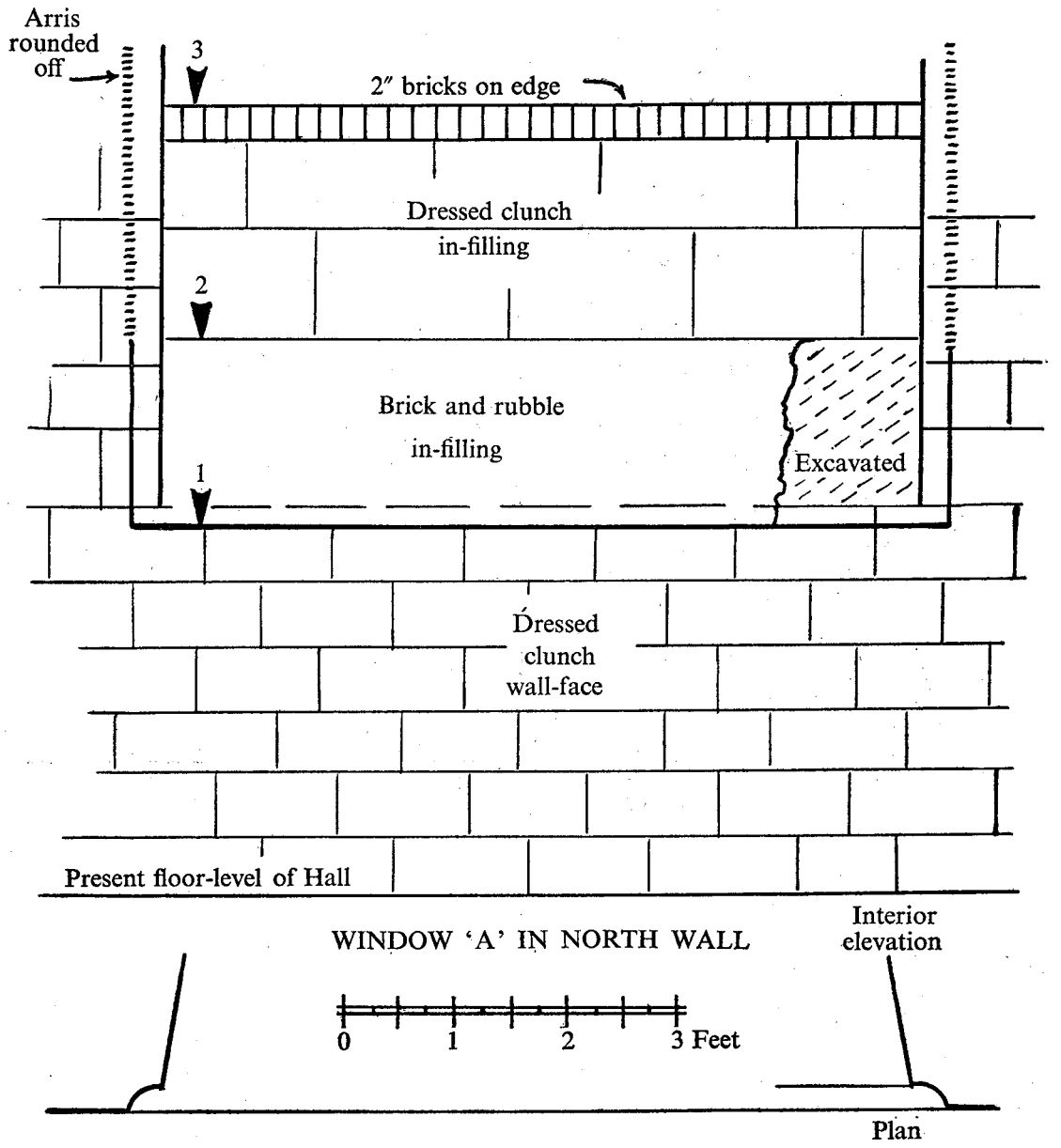


Fig. 3. Window A, showing alterations of sill-level.

Behind the panelling on the *south* side of the Hall the facing of dressed clunch (similar to that on the north wall) seems to be continuous and uninterrupted. Any windows on that side may therefore be assumed to have been at a higher level, which would be compatible with the existence of a cloister along the outside, though this is conjectural.

To return to the north side, the medieval window sills are only about 3 ft 4 in. above the present floor level; but the former Ketton stone floor of the Hall, laid in

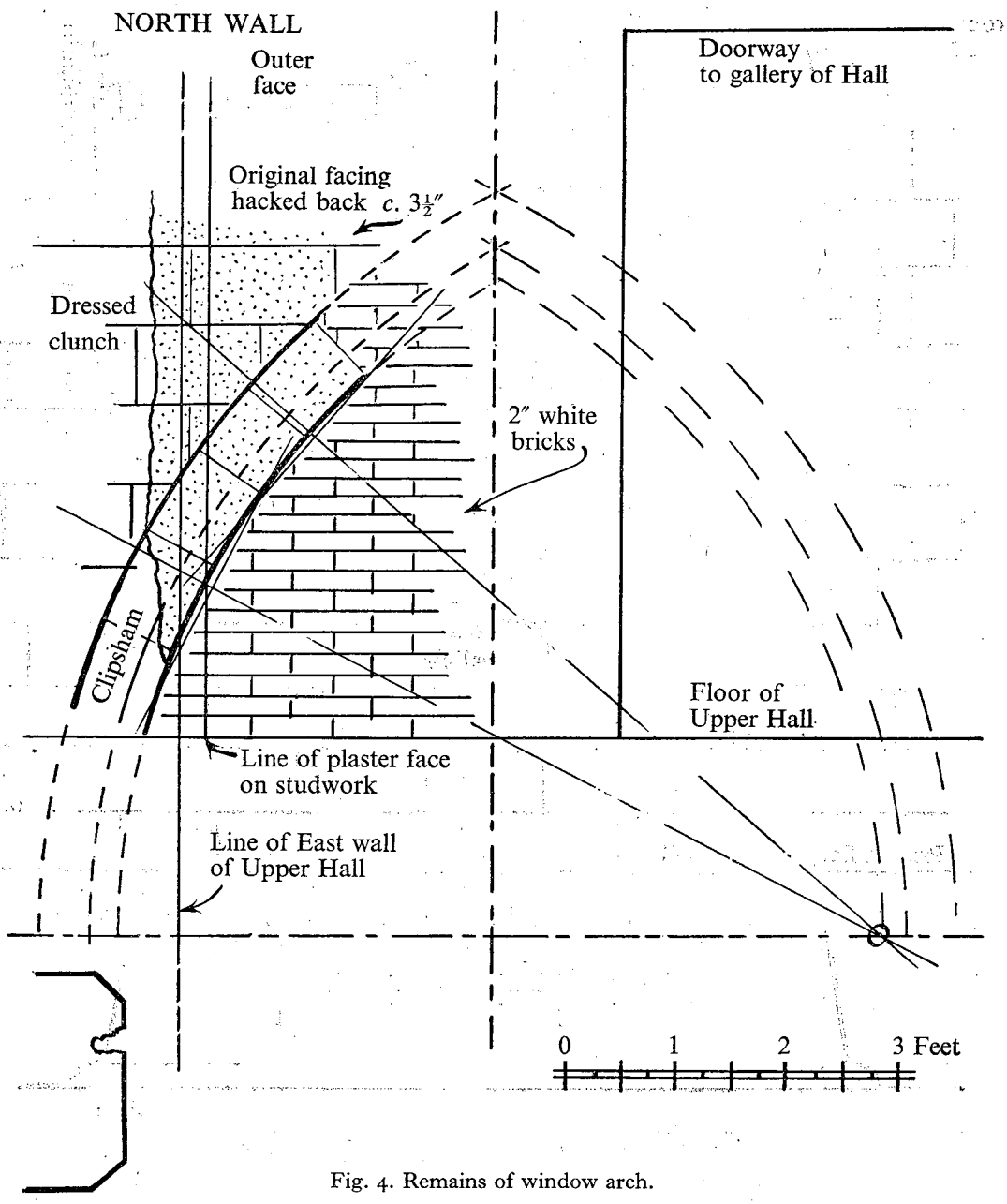


Fig. 4. Remains of window arch.

1763, was perhaps a good deal lower, and we may reasonably estimate that the original church floor was 18 to 20 in. below the present wooden one. Precise investigation has not so far been practicable: though the Ketton stone floor was removed in 1866, nothing can at present be said as to the material of its predecessors. Digging below the Front Court lawn in November 1949 accidentally turned up some frag-

mentary fourteenth-century floor-tiles (not *in situ*), the patterns on which show that they were made at the known factory of Bawsey near King's Lynn, where wasters with the same designs have been found. (Compare Pl. II with Eames, pl. XXIV, no. viii and pl. XXVIII, no. lvii.) It is mere speculation to suggest that they came from the church, but further examples will obviously be something to look out for in any future work under the Hall floor.

The formation of the square-headed Hall windows has of course destroyed or obliterated the upper parts of the church windows they replace; but at the west end of the Hall, above the gallery, where there is now solid wall, the stripping of plaster in January 1968 to eradicate dry rot in the studwork revealed part of a large blocked arch, illustrated in Pl. I*b* and Fig. 4. As the photograph shows, both the Clipsham stone voussoirs and the dressed clunch outer face of the wall have been hacked back for about $3\frac{1}{2}$ in., but some of the original surface of both could be observed by excavating the vertical joint between this wall and the east wall of the kitchen range at right angles to it. There are no mouldings beyond a simple chamfer. (In restoring the wall plaster these remains have been left accessible.) From the surviving curve the centre could be approximately deduced and (assuming it was 'equilateral') the rest of the arch extrapolated. The centre line so inferred is in phase with those of the other windows, and the width of the arch also corresponds (see the elevation, Fig. 2).

East of this window arch, and a little lower than its apex, there was on the inner side of the wall a roughly filled cavity (see Fig. 5) which very probably housed a corbel to support the wall-post of one of the medieval roof-trusses. Its position halfway between two windows supports this assumption; and in the elevation in Fig. 2 similar corbels have been tentatively indicated between the other windows. The present roof trusses are, as mentioned above, Elizabethan, and the character and height of the church roof remain unknown.

West of the partially surviving window arch, there is sufficient width of wall for a further window, though one of the same height is precluded by the north door of the church (Fig. 2). One jamb and part of the arch of this doorway (Fig. 6) were discovered in 1957 when the old College kitchen was being pulled down for rebuilding; they have been left visible in making the present doorway from the kitchen to the buttery (cf. *Emmanuel College Magazine* XLI (1958–9), p. 42 and pl. V). The small *south* door shown on the plan is somewhat hypothetical, but is based on the fact that in Loggan's view of the Front Court the door at this point has a pointed arch of medieval appearance. That it is not axial with the north door could be due to the position of the adjoining N–S range.

How far east the series of nave windows continued is uncertain. It is possible that there were only the four so far attested, and that the part of the church to the east of them, occupying roughly the area which is now the Parlour, had a different scheme of fenestration. But if so, any possible traces of it are pretty certainly destroyed on the north side through the construction of the nineteenth-century Parlour oriel. Whether anything survives on the south side it is impossible to say without removing more of the panelling.

The division between nave and choir must be equally conjectural. It was not uncommon in English Dominican churches for them to be completely disjunct areas, separated by two walls with a passage or 'walkway' between. Over the centre of this passage there would commonly be a small bell-turret (Hinnebusch, pp. 140 f.). If such were the arrangements here they must have been wholly effaced when Ralph Symons built the two oriels and the new roof for the College Hall. Against such a

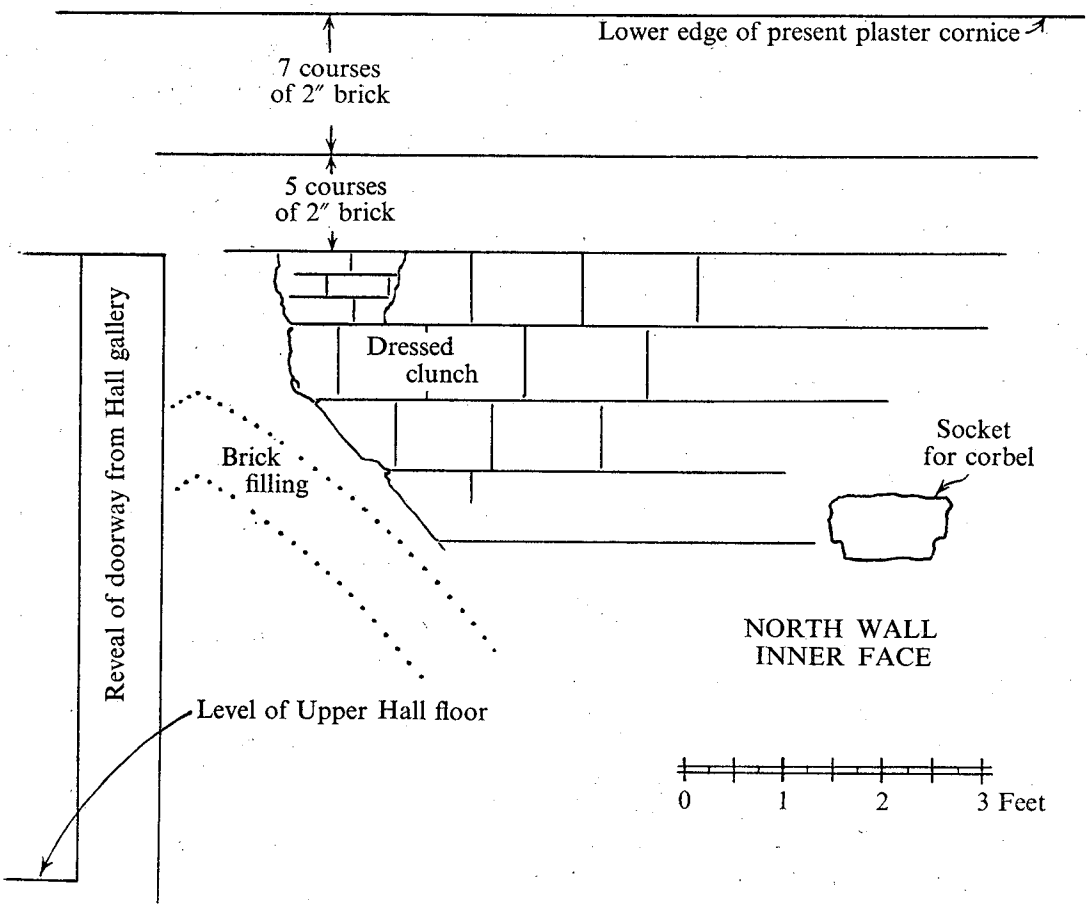


Fig. 5. Interior wall face, showing position of corbel in relation to window arch.

scheme is the fact that it would have made a very short, squarish choir, probably too small to hold stalls for all the brethren, who by the end of the thirteenth century already numbered about seventy (Palmer, p. 139; cf. Hinnebusch, pp. 273, 274). Alternatively, the traceable series of windows could have continued eastwards for another three bays.

What is the date of the surviving features of the church? The Priory was founded, as mentioned above, in the first half of the thirteenth century, and a church was doubtless among the first buildings. The simple rectangular form attested by the

remains, without aisles or structural chapels, has its parallels in other early Dominican churches in England and Wales, as at Brecon, Bangor, Canterbury, Gloucester, and Ipswich; and the size of the Cambridge church (approximately 112×26 ft inside) well bears comparison with some of these: Brecon (nave only) $95\frac{1}{2} \times 26$ ft; Bangor 120×26 ft; Gloucester 80 to $100 \times 26\frac{1}{4}$ ft (Hinnebusch, p. 136). The windows

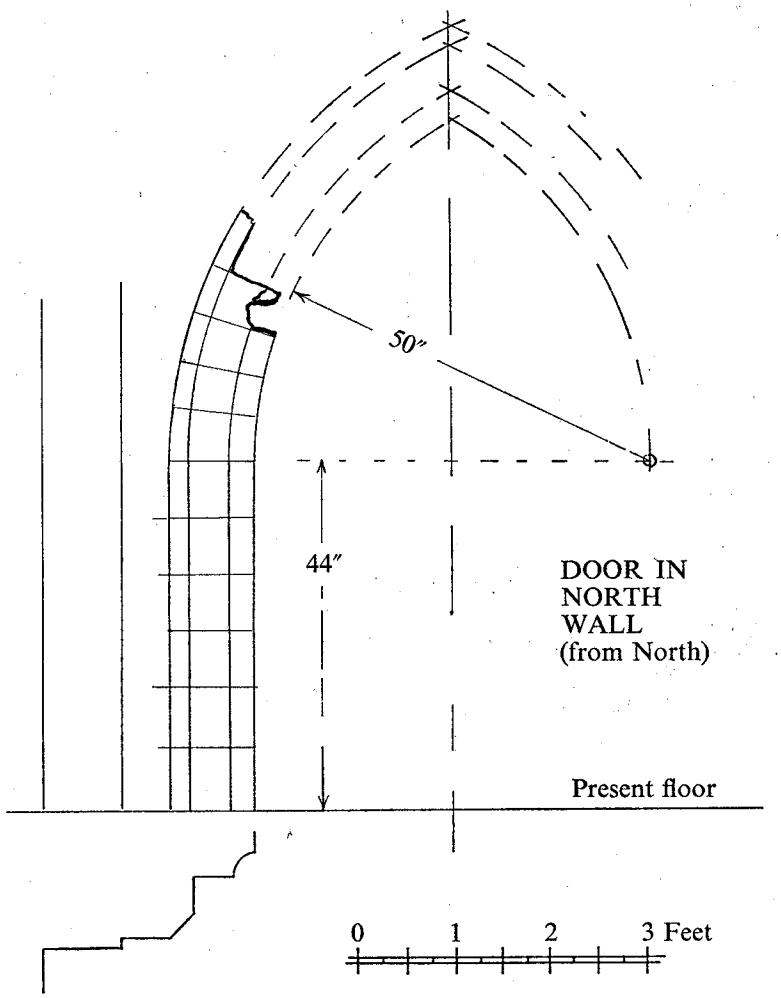


Fig. 6. Remains of north door: elevation and plan.

and north door discussed above are at least compatible with a thirteenth-century date; and though we have a very incomplete story our evidence includes nothing to imply alteration of the building while it was still used as the Dominicans' church.

Further investigation may one day chance to tell us more; but the College Hall and Parlour have recently been fully redecorated, and curiosity must rest awhile.

I should like to record my thanks to those Fellows and officers of the College who have encouraged or promoted this study, and notably to Dr J. R. Garrood, who as Bursar for Buildings has readily found practical reasons for moving this or that stone or panel that might have impeded our joint archaeological enquiries; to the masons and joiners engaged in repair work on the buildings for their knowledgeable and helpful interest; to Mr R. Fuerni of the College Bursary and Mr E. E. Jones of the Museum of Classical Archaeology who took the photographs; and to Mr Denys Spittle, F.S.A., of the Royal Commission on Historical Monuments, for his expert advice and criticism.

BIBLIOGRAPHY

BENNET, WILLIAM. Emmanuel College Register (2 vols. MS, 1773. Emmanuel College Archives COL.9.1).

CLARK, JOHN WILLIS, and GRAY, ARTHUR. *Old Plans of Cambridge 1574 to 1798* (Cambridge 1921).

EAMES, ELIZABETH. The products of a medieval tile kiln at Bawsey, King's Lynn. *Antiquaries Journal*, XXXV (1955), pp. 162–81.

GARDNER, R. and STUBBINGS, F. H. The College Hall. *Emmanuel College Magazine*, XXXV (1952–3), pp. 21–6.

HINNEBUSCH, W. A. *The Early English Friars Preachers* (Rome, 1951. Inst. Hist. FF. Praedic. Romae; Diss. Hist., Fasc. XIV).

LOGGAN, DAVID. *Cantabrigia Illustrata* (1688).

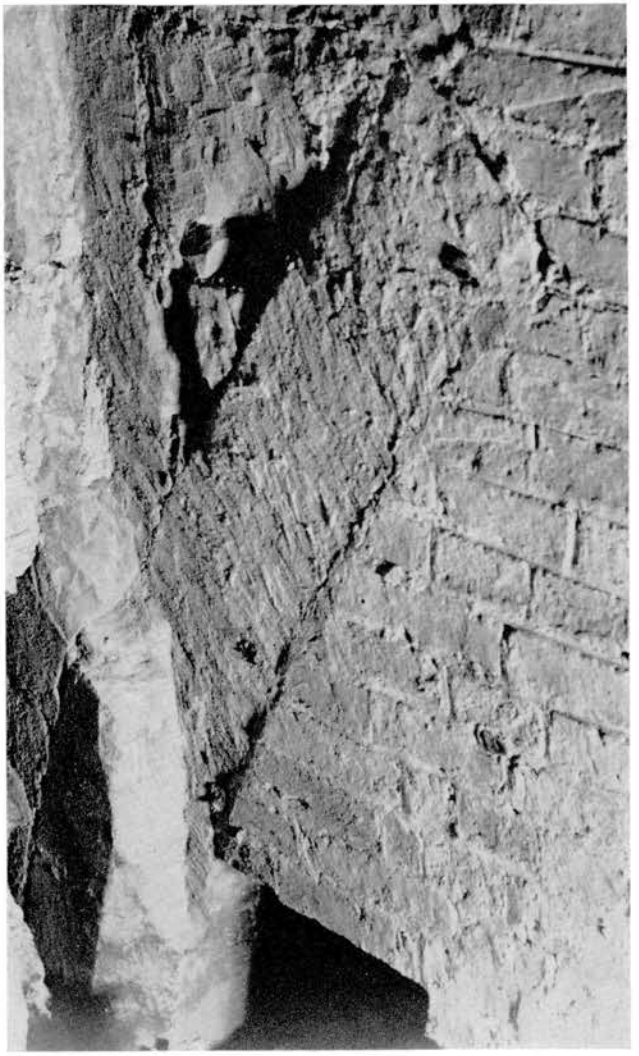
PALMER, C. F. R. The Friar-Preachers, or Blackfriars of Cambridge. *The Reliquary*, XXV, pp. 137–42, 206–12.

Royal Commission on Historical Monuments. *Inventory of Historical Monuments in the City of Cambridge* (1959).

STUBBINGS, F. H. Discoveries in the Old Kitchen. *Emmanuel College Magazine*, XLI (1958–9), pp. 40–3.

WILLIS, R. and CLARK, J. W. *Architectural History of the University of Cambridge* (1886).

(*a*) Window A: bottom right-hand corner, showing medieval sill and splay, and later in-filling.



(*b*) Remains of window arch.

Fragmentary floor-tiles: (*a*) with pattern of diagonal cross with trefoil ends; (*b*) with shield showing a tree (?) in the first quarter.

Proc. Camb. Ant. Soc. Vol. LXII (1969), pp. 105–106

FRAGMENTS OF OLD TRINITY BRIDGE

JOHN SALTMARSH

THE west end of King's College Chapel was paved with Portland stone in 1774.[1] In 1968 this paving was taken up, and afterwards relaid. Beneath it were large fragments of broken masonry. One of them, measuring about 20 in. × 14 in. wide × 15 in. high, showed three vertical dressed faces set at angles of about 150° and 125°. Incised across the left-hand and middle faces, 1½ in. from the foot of the stone, was a dated scoremark:

26 Oct ——— 1762

and six inches above it, across the middle face, another:

——— 1696.

1696, 27 October 1762 and 10 February 1795 were long remembered as the dates of the three great floods of the Cam.[2] The stone would therefore seem to have formed part of a pier of a bridge, probably over the Cam and probably in Cambridge, on which the heights of the first two of these floods were recorded; and this bridge must have been demolished or rebuilt between 1762 and 1774.

Other fragments have concave dressed faces, as if forming part of the underside of an arch. An octagonal stone with bevelled top and bottom, about 19 in. high and 17 in. in diameter, may have been a cap on a balustrade. Rudely carved on it are the initials L H and the date 1727.

So far as I can discover, the only stone bridge over the river in Cambridge which was demolished or rebuilt between 1762 and 1774 was the bridge at Trinity College built in 1651–2. According to Willis and Clark,[3] this was found to be ruinous in 1763 (almost certainly, Dr R. Robson tells me, because of damage done by the flood of 1762), and after attempts to repair it had failed, it was replaced, between 1763 and 1765, by the present Trinity Bridge. Willis and Clark state that the old materials were used for the piers and abutments of the new bridge, but it may be that some stones, not re-used because of damage or for some other reason, eventually found their way into the foundations of the new paving in King's Chapel. It is perhaps

[1] R. Willis and J. W. Clark, *Architectural History of the University of Cambridge* (1886), I, p. 530.

[2] C. H. Cooper, *Annals of Cambridge*, IV (1852), p. 323; flood-marks in the cloisters of the Third Court of St John's College; Henry Gunning, *Reminiscences of Cambridge* (1854), II, p. 1, where the flood of 1762 is wrongly dated 10 October. The difference between 26 and 27 October, however, seems unimportant; such a flood would have lasted more than one day. The lowest of these three floods, that of 1762, rose several feet higher than those of 3 August 1879 and 14 March 1947, which in turn rose two feet or more above the level of the flood of 17–18 September 1968 (subsiding as I write).

[3] *Op. cit.* II, p. 638.

significant that James Essex, architect of the new bridge at Trinity between 1763 and 1765, was also the architect in charge of the works at King's between 1770 and 1776.[1] The level of the flood of 1696 does not seem to be otherwise recorded. It can now be determined by correlating the flood-marks described above with that for 1762 in the Third Court of St John's.

In 1969 the fragment bearing the flood-level marks and that bearing the date 1727 were returned to Trinity College, where they have been placed beside the Bowling Green.

[1] Willis and Clark, *op. cit.* I, pp. 526–7, 529–30, II, p. 638.

INDEX

DIRECTIONS TO CONTRIBUTORS

General. Drawings and photographs should only be included to illustrate objects which cannot easily be described in the text. Normally two half-tone plates may be included in each paper, without charge. Authors should consult recent issues of the *Proceedings* (Vols. XLIX ff.) to familiarize themselves with its typographical conventions. Papers should be headed with the title and the author's name and style, with the text in double-spaced typescript with a $1\frac{1}{2}$ in. left-hand margin on paper suitable for ink correction. Typescripts should bear the name and address of the person to whom proofs are to be sent, and a short version of the paper's title (less than forty-five letters and spaces in length) suitable to be printed at the top of the published pages. Twenty-five off-prints will be given free: extra copies may be obtained at the printer's current price, but must be ordered when the galley-proofs are returned. The Editor is not responsible for loss of or damage to manuscripts and illustrations.

Appendices. If they wish to avoid delay in publication authors are urged not to invite other scholars to write appendices to their papers. If this cannot be avoided, authors should not submit their paper until they have received all the appendices (and illustrations), reduced them to manageable proportions and checked all cross-references between them and the main text.

Illustrations. Illustrations, except pottery profiles which may be drawn full size, should be drawn approximately twice printed size (which must not exceed $5\frac{1}{2} \times 7$ in.). They should be on separate sheets, each bearing the author's name, short title of the paper, and plate or figure numbers on the back. Diagrams should be drawn in indian ink on plain white paper, with letters, numbers, etc., written lightly in pencil. Caption and legend should be typed on a sheet separate from the illustration and numbered to correspond. Drawings and photographs should include a scale and a statement of magnification. Photographs should be well-contrasted prints on glossy paper, and should be chosen bearing in mind the layout on the finished plate, where from one to four photographs can be arranged; preferred layout must be indicated and each figure on the plate must be designated by *a*, *b*, *c*, etc., with appropriate cross-references in the text.

References. Names of authors should not be underlined; titles of books, periodicals or other collective publications should be underlined for italics; the title of an article appearing in a periodical should not be underlined but should appear between single inverted commas; volume numbers should be given in Roman small capitals (twice underlined in the typescript); if required the place and date of publication should follow the title (if a book) or the volume number (if a periodical)—they should be placed in round brackets and should precede the page or plate reference. For example: J. Bromwich, *Thirty Years Umbrella-poking in the Fens* (Dublin, 1965), pp. 142–55, or O. U. T. Cobleigh *et al.* 'Excavations at the Fair-ground, near Widdecombe', *West Country Classical Quarterly*, vol. XII (1803), p. 155. When references are repeated at short intervals *op. cit.*, *loc. cit.*, *ibid.* may be used, but in cases of ambiguity the expanded forms Brewer, *op. cit.*, Stewer (1805), *op. cit.* pl. XIX, or Gurney, *loc. cit.* are recommended.

Abbreviations. Vol. XV, App. XV, no. 15, pl. XV, p. 15, l. 15, n. 15—for volume, appendix, number, plate, page, line and note respectively. Abbreviated titles of Journals can be found in the *World List of Scientific Publications*, 3rd ed. (1952), but any self-explanatory abbreviation may be adopted: *Ant.*, *Ant. J.*, *Arch.*, *Arch. J.*, *B.M.C.*, *J.R.S.*, *P.P.S.*, *Proc. C.A.S.* are frequently recurring examples.

Cost of corrections. The Society has found it necessary to place a limit on the margin allowed for the cost of authors' corrections and *alterations* to proofs. The maximum allowance will be 20% of the cost of typesetting, and any charge in excess of this will be carried out at the contributor's expense. Alterations to page proof are very costly.

PROCEEDINGS OF THE CAMBRIDGE ANTIQUARIAN SOCIETY

VOLUME LXII
JANUARY 1969 TO DECEMBER 1969
40s. net.

CONTENTS