

# EXCAVATIONS IN BIERTON, 1979

## A LATE IRON AGE 'BELGIC' SETTLEMENT AND EVIDENCE FOR A ROMAN VILLA AND A TWELFTH TO EIGHTEENTH CENTURY MANORIAL COMPLEX

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*Excavations in the Vicarage Garden at Bierton, near Aylesbury, Buckinghamshire in 1975 and 1979 explored a 1,200 sq. m area of a multi-period site. With some earlier prehistoric activity, there was evidence of intensive Late Iron Age 'Belgic' occupation and, succeeding that, a Roman site, interpreted as a villa. Evidence suggested a strong degree of continuity, particularly in the agricultural system. The site was peripheral to an area of Early Saxon occupation, and from the twelfth to the eighteenth century it included buildings which formed part of a manorial complex.*

### INTRODUCTION

'The village lies on the road to Leighton Buzzard 1½ miles north east of Aylesbury. It extends about a mile along the road on elevated ground, most of the houses are of brick and tile, and in many cases they stand in small gardens, and the general aspect of the place is pleasing.' (Sheahan 1862, 92)

Bierton is a linear village on a low ridge some two kilometres north-east of Aylesbury (Fig. 1). At the time of writing it retains much of the rural charm noted by Sheahan, despite the inevitable increase of housing schemes in the area. The locality has produced numerous casual finds of prehistoric, Roman and medieval date over the years, and many of these have centred on the area of the Church and former Vicarage Garden (Fig. 1, c). In 1975 a plan was put forward to develop the latter for housing and the Buckinghamshire County Museum undertook a trial excavation which

proved the existence of intensive Iron Age occupation on the site, and recovered finds representing all subsequent periods of activity. The summer of 1979 was the final opportunity to examine more of the threatened area before development took place, and with Department of the Environment assistance the County Museum organised a fourteen-week excavation to investigate some 1,200 sq. m. More than 600 archaeological features were identified and examined, and more than 40,000 finds recovered.

This report describes the results of the excavation under six different period headings: Prehistoric, Late Iron Age ('Belgic'), Roman, Saxon, Medieval and Post-medieval. It also presents the results in synoptic form, for although the excavation demonstrated the intensive nature of the occupation over the past two millennia, it cannot be regarded as much

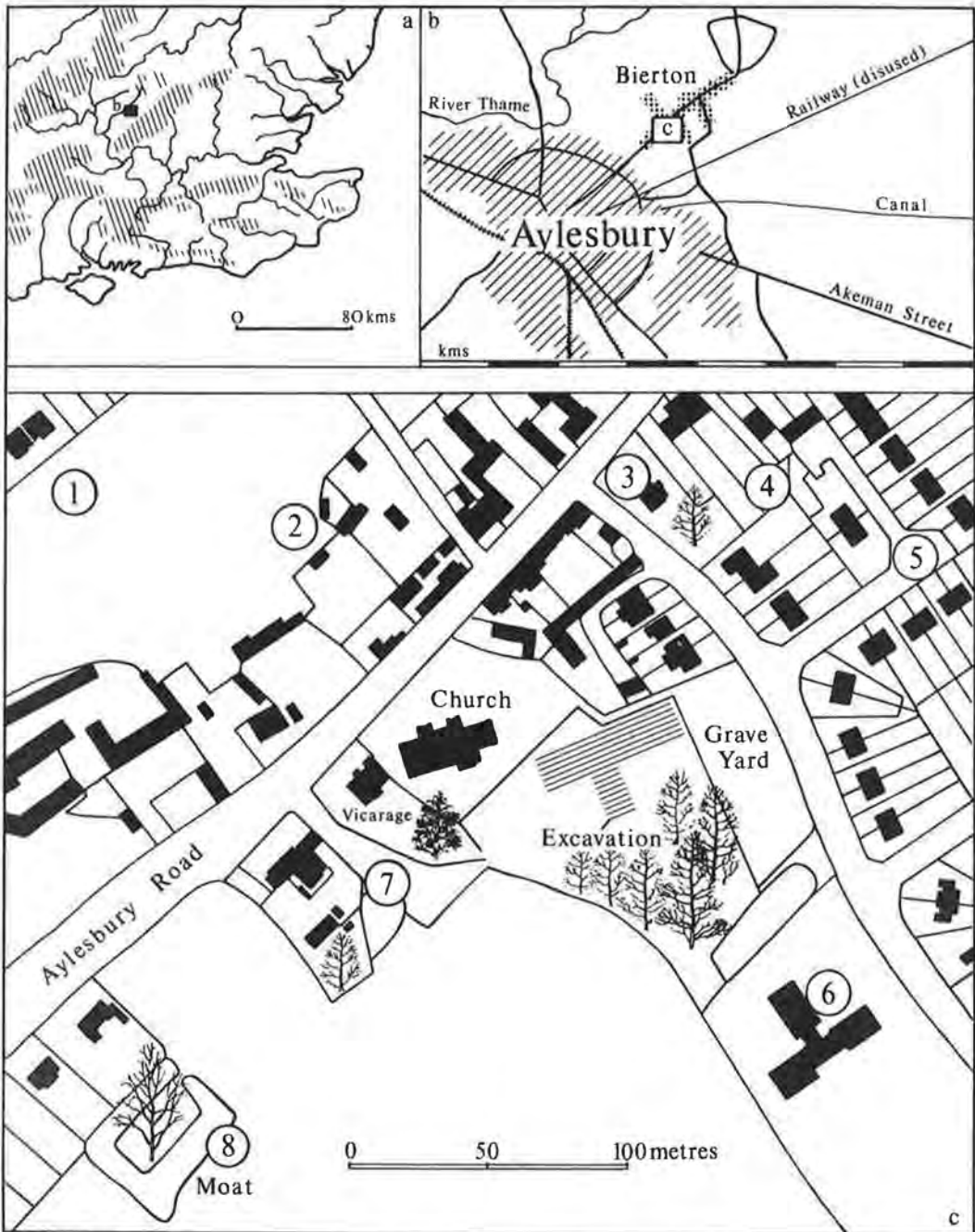


Fig. 1. Location maps. 1c:1-8, previous finds and sites of interest.



more than a sample. At all periods represented, the activity clearly spread well beyond the bounds of the Vicarage Garden. In addition, considerable disturbance took place during each period of occupation, which severely limited the inferences that could be drawn about the preceding phases. Thus, although a detailed Level III archive has been compiled for all features and classes of finds (AMB 1975), such detail only rarely finds its way into these pages. In particular, the writer has

omitted from the Level IV text all feature dimensions, and descriptions of fill, except where they have relevance to a certain point of argument. It is admitted that this is a subjective approach but one which is felt to be justified in the circumstances. The Level III archive, which contains all the missing detail, is housed at the Buckinghamshire County Museum (Aylesbury) as *pro forma* A4 sheets and can be consulted on application there (CAS 1044, finds accession no. BCM 606.1979).

### *Topography*

The Vale of Aylesbury is an area of generally subdued relief, floored mainly by Gault and Kimmeridge clay, drained by the headwaters of the River Thames. In the vicinity of Bierton, however, this monotony is broken by a low ridge, discontinuously capped by Portlandian limestone which is part of an extensive, if irregular feature crossing the county in a south-west–north-east direction. This ridge, while not so important a thoroughfare as the Icknield Way, which runs at the foot of the Chiltern scarp, is the largest outcrop of Portland Beds

in England (Arkell 1947, 125) and has probably always been a natural routeway. It has produced evidence to suggest that it was an area favoured by early settlers, an attraction no doubt founded in its medium-textured soils, which are more suitable for arable farming than the adjacent claylands (Avery 1964, 188). In addition the limestone provided a source of building material (Sherlock 1922, 7) and this is evidenced at Bierton in the Roman period (see below), and in medieval and post-medieval times.

### *Historical Background*

#### *Finds*

'I would also remark that the absence of nearly every object of archaeological interest in this parish is to be accounted for by the fact that, during the time of the Rev. Thomas Smith [1807–32] his son begged or bought up all he could find, and on removing after his father's death, carried all away.' (Lamborn 1859, 165)

Whether or not the collecting of Mr Smith's son removed important finds from Bierton is unknown, for nearly all discoveries made prior to his departure are unrecorded. The only exceptions are the 'many Roman and later coins . . . found in the Vicarage Garden and other places in the parish' (Sheahan 1862, 93) and a find made c.1830 in a field called Old Orchard Piece (Fig. 1c:1). This consisted of human skeletons (some clothed), horse skeletons, three halberds, a breastplate and coins. The find

apparently represents the remains of a Civil War burial pit and the bones were reinterred within a few days of their discovery. Some of the objects survived to be described in detail and exhibited to the Buckinghamshire Archaeological Society (Lamborn 1859, 162) but have since disappeared.

The second half of the nineteenth century saw two important discoveries in the area. In 1861 eight skeletons were found in 'Mr. Bonham's pightle', a plot of land c.100 m northeast of the Church (Fig. 1c:3; CAS 1042). Horse bones were again present, and a rowel spur, but the inhumations were not readily datable. In the same locality, however, were 'the undoubted remains of a Romano-British interment' (Lamborn 1861, 290). This consisted of a circular feature, containing a large vessel of lead, c.0.50 m in diameter, which was surrounded at a distance of 1.0 m by a number

of 'mortuary urns'. The lead vessel disintegrated upon excavation, but the fragments of at least nine pots were carefully collected. The three most complete examples were illustrated in the contemporary description of the discovery (Lamborn 1861, 288) and still survive in the Museum collection. They are of third-century date. Lamborn suggested that the site was that of a tumulus containing a Roman cremation burial, which later attracted inhumation burials of varying dates. However, his simple description and plan, although of admirable quality for that era, do not allow detailed reconstruction, and the date of the skeletons must remain a matter of conjecture.

The second discovery was made in March 1866, when pits were being dug in a field on Church Farm (Fig. 1c:2) to dispose of twenty cows and calves which had succumbed to the cattle plague. At a depth of c.1.0 m the workmen found an inverted urn which was filled with 'black earth, fragments of burnt bone and wood' (Lamborn *in litt.*, CAS 1047). The vessel was broken by the workmen, but parts of the rim were preserved and presented to the Museum. These identify it as a Middle Bronze Age 'bucket urn' in the Deverel-Rimbury tradition, with a date of pre-1000 B.C.

Following this flurry of finds in the mid nineteenth century, few were made until the village began to expand almost a hundred years later, the only intermediate record being that of a 'portion of Roman quern', unearthed in 1912 and donated to the Museum (Cocks 1913, 213; CAS 1051).

The first of the modern finds was made in 1952, as the result of housing development in the area of Parsons Lane (Fig. 1c:5) and consisted of a small amount of Roman pottery and tile (CAS 1046). Four years later several more sherds were recovered 'from the area of the 1861 find' (CAS 1042). A far more substantial quantity of Roman material was collected in 1964 from spoil thrown up during the construction of the new village school (Fig. 1c:6). This contained fragments of roof and flue tiles. Medieval pottery was also present in some abundance (CAS 1039). Finally, in 1975 a con-

siderable quantity of pottery ranging in date from late Iron Age to medieval was unearthed by Mr Matthew Cort in the garden of 125 Aylesbury Road (Fig. 1c:4; CAS 2296).

Most of the pottery discovered in the circumstances described above is now stored at the Museum. Although the great majority is best described as unstratified, the opportunity has been taken to include some of it in the report of the recent excavations.

#### *Documentary Sources*

'In Bierton Roger also holds 1 hide and 3 virgates from the Bishop. Land for 1½ ploughs: they are there, with 3 smallholders. The value is and was 20s: before 1066, 50s. Two Free-men held this land: one was Alwin Varus' man, the other Earl Leofwin's man: they could sell.'

The Domesday entry for Bierton is probably an incomplete description of the settlement, some of it being recorded under the manor of Aylesbury (*VCH Bucks* II, 320). It does, however, provide us with the first name for the village—*Bortone*. The origins of this name are to be found in the simple *burh-tun*, descriptive of a fortified farm, or of a farm near Aylesbury *burh* (Mawer and Stenton 1925, 146) and the excavation, with its discovery of an extensive late Iron Age farmstead and a Roman villa, suggests that the former is probably the case. In the medieval period, however, there was apparently a definite move to modify the name, possibly because of the danger of confusion with Bourton by Buckingham. This fostered an interesting alternative explanation for its origins—namely *Byrhfunt* or Boarhunt (*ibid.*, 147) but one which is unnecessary in the circumstances.

At the time of Domesday Bierton may well have contained a 'Chapel of Ease' to a minster church at Aylesbury, but the inadequate records of this period leave this a matter for conjecture. Some two hundred years later, however, proof of a well-established chapel is evident from entries in the Lincoln Diocesan Records. Perhaps the most informative of these accounts is an entry in Bishop Sutton's Registers (Hill 1958, 22). This records a



Bierton Church.

ceremony held on November 25th, 1294, at Stowe Park to ordain a vicarage 'in the Chapels of Burton, Querendon, Bokeland and Stokes, nigh Aylesbury' (Bierton, Quarrendon, Buckland and Stoke Mandeville) and the construction of the 'manse of the vicar' in 'the Vill of Burton'. Furthermore, the document states that the vicarage should be built '. . . on the ground of the chapel, on the west side', a juxtaposition that the buildings, though much altered, still show today.

The Church of St James is principally a fourteenth-century structure, heavily restored in the nineteenth century, although evidence of a need for refurbishing at an earlier date is clear from a report which states that the steeple collapsed in 1636 (*VCH Bucks* III, 326). The font, however, is of twelfth-century date (*ibid.*, 327) and is presumed to have belonged to the above-mentioned chapel (Sheahan 1862, 99). The former vicarage has been much rebuilt but details of its former appearance can be gleaned from seven Glebe Terriers, dating from 1680 onwards, in the Lincoln Diocesan Records. Only in the last of these (June 1822) has the vicarage garden expanded to include the area of the excavations. This document describes a 'stable, chaise house and wood house all under one tiled roof', which may well be represented by features discovered in the 1979 investigations (pp. 96, 98).

The Glebe Terriers do not provide a date for the expansion of the vicarage garden, but this is to be found in another document, namely the Enclosure Award map of 1780 (CRO IA/IAR). This detailed survey reveals that at the time of the enclosure an exchange of land took place between the Revd T. Shaw and the Earl Temple. By this means Mr Shaw took possession of the five acres of land to the south-east of the churchyard, and it was part of this area which then saw use as an extended vicarage garden and orchard until recent years.

The real importance of the enclosure map, however, lies in the detailed survey which it provides of village and parish. This is not the place to discuss the full potential of the map, but the area surrounding the church (Fig. 61)

contains several points of immediate interest. Foremost among these is the location of the contemporary buildings. The map shows two cottages with outbuildings to the south of the vicarage garden which today can only be traced as house platforms, and another similarly vanished building just within, against the churchyard wall. There is no indication, however, of the substantial cellared building revealed by excavation some 30 m east of this point (p. 96). Finds from this building suggest that it was demolished in the mid eighteenth century and this is corroborated by its non-appearance in the 1780 survey.

The map also shows how the road from Broughton and the south-east has become deflected from the west to the east side of the Church. The original route is, however, perpetuated as a footpath and leads directly to 'Uptown' well and its associated pond located immediately to the south of the vicarage (Fig. 1c, 7). This 'remarkable old well . . . was formerly walled round' (Sheahan 1862, 94) and was apparently a most valuable spring in a village badly supplied by water. It must have served as the focus of village life for many centuries (Pl. I) and presumably had a considerable influence on the original siting of the settlement (see p. 47).

The manorial history of the village is far from simple, land being held under the manors of Aylesbury, Bierton-Stonors, and Weynfords Manor (*VCH Bucks* III, 320-22), but it is not now possible to identify the areas which they comprised. In addition, surviving medieval earthworks, with the exception of ridge and furrow, are few and the only moated site (Fig. 1c:8) is remarkably small. Indeed, the description on a bill of sale of 1800 of the field within which this site is located as 'Dove House Piece' suggests that the moat may simply have protected a building of this kind. However, it is probable that this structure was part of a manorial complex. The same may well be true of some of the features revealed by the excavation and this possibility is examined more fully below (pp. 94, 95).



## Excavation Procedure

As a preliminary to excavation a grid was laid out in the northern part of the Vicarage Garden (Fig. 2) based on units of  $10 \times 15$  m. The decision as to which area to excavate was determined by a number of factors. Firstly, the dictates of finance meant that the excavation would run for about three months only. Secondly, the information revealed by the two

trenches dug in 1975 would be more meaningful if it could be accommodated in the 1979 work, and thirdly, the garden contained a number of mature trees which had to be preserved. Space had to be found amongst these not only for the excavated area, but also spoil tips, a camp site and an administrative area.

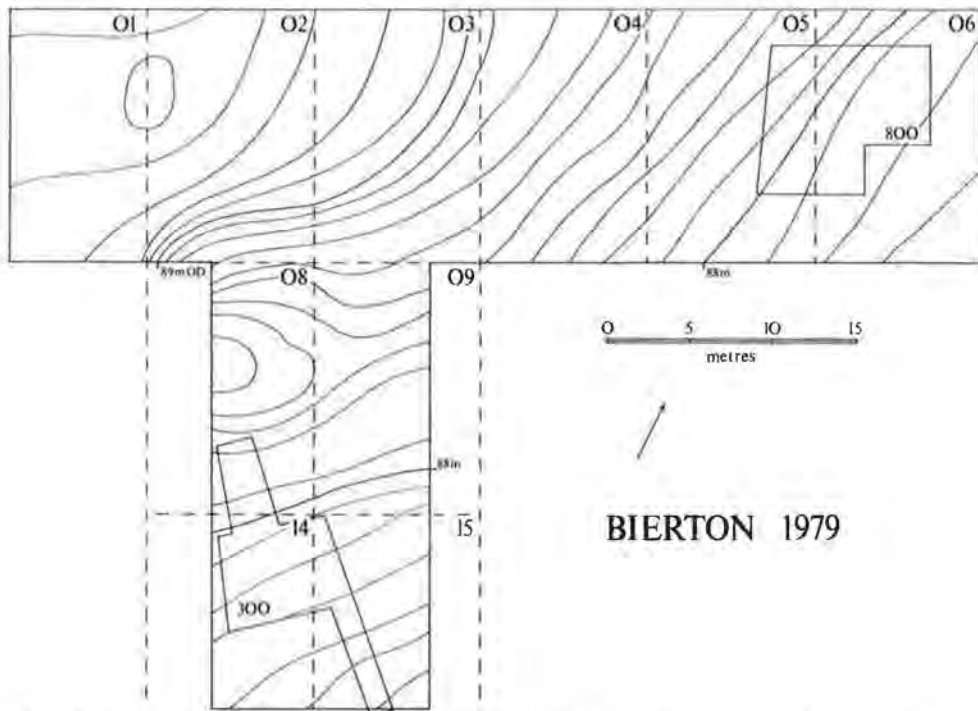


Fig. 2. General plan, showing the excavation grid, subsoil surface contours at 0.10 m intervals, and the location of the 1975 trial trenches (300 and 800).

The result of all these considerations was a site the shape of an asymmetrical T, and once this area had been laid out, surface clearance and topsoil stripping began. This work was carried out by a Priestman 360° machine, skilfully operated by Mr John Wiggins, working in conjunction with a two-ton dumper. The depth of topsoil was already known in the vicinity of the 1975 work, and here an average depth of 0.35 m was removed. Elsewhere the topsoil was stripped by a process of 'trial and error' and was found to be of variable depth. In Area O1, for example, a mere 0.10 m was

encountered, whilst in Area O6 the depth was 0.45 m. The machine work took five days. Hand excavation then commenced in Areas O1 to O6, the southern arm of the T (O8, O9, O14, O15) being held in abeyance should the first area prove too complex to complete in the allotted time. In the event the whole site was covered, but excavation was by no means total, the larger features in particular being half-sectioned or sampled, as reference to the large-scale plans will show. The 1975 trial trenches were completely enveloped by the 1979 work, and therefore for simplicity and convenience



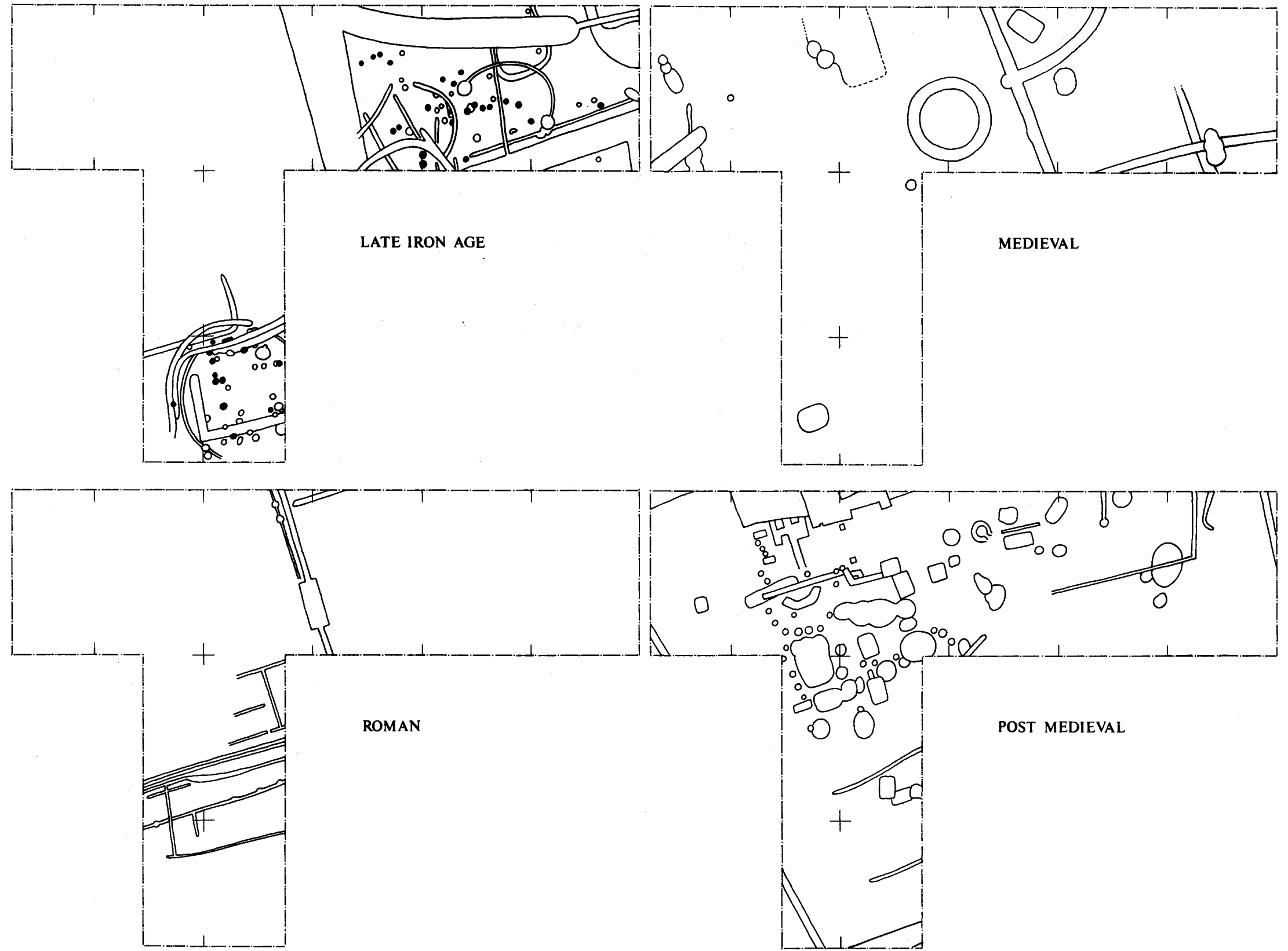
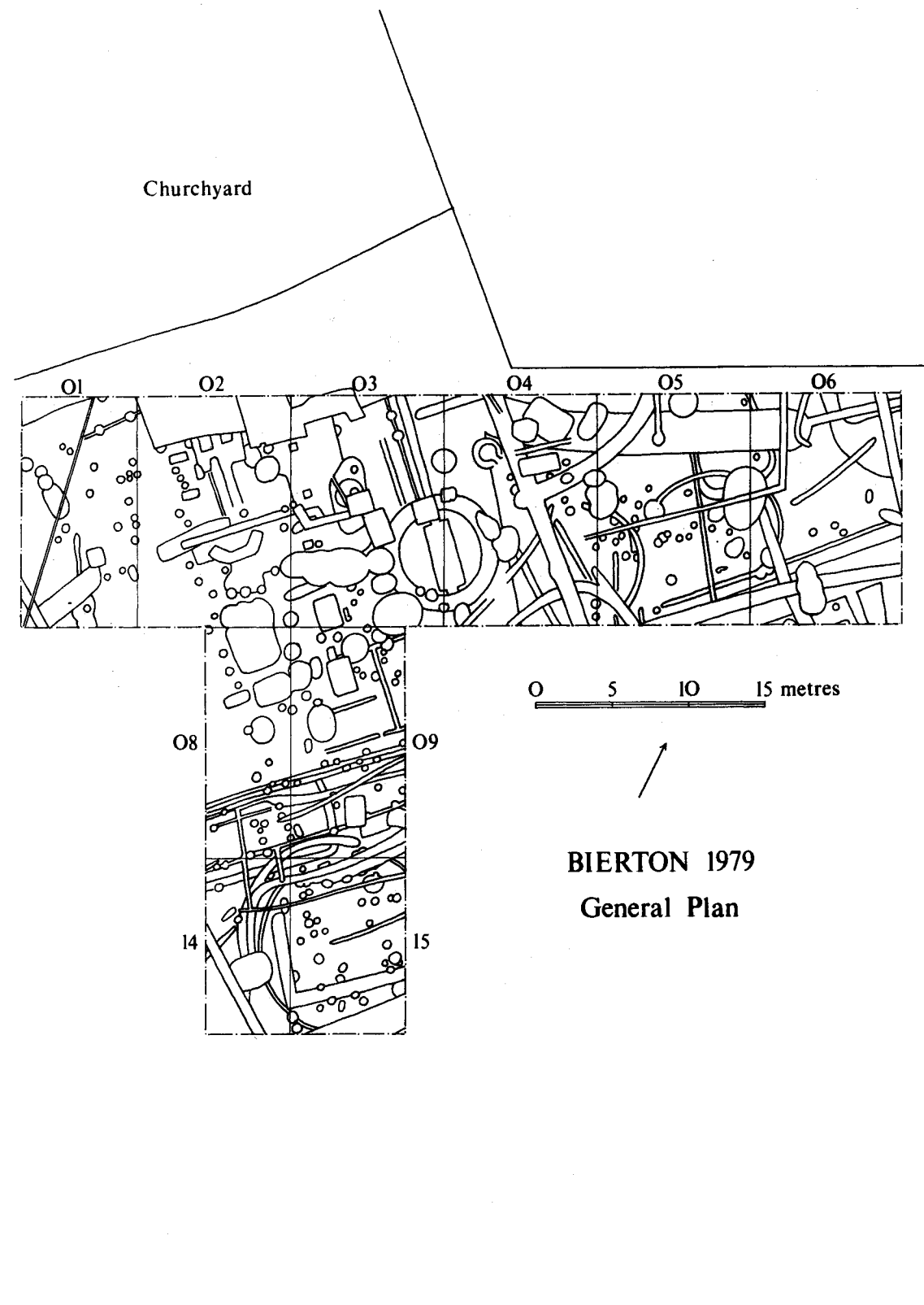




Plate II. Eastern arm of excavation, looking north-east.



Plate III. Southern arm of excavation, looking north.

the features and finds from them have been totally assimilated into the later excavation report. A separate identity has been maintained, however, at the Level III stage of recording.

#### *Numbering Systems*

The site code for Bierton is BIE. Each 10 × 15 m grid Area was individually numbered (BIE 01–06, 08, 09, 14, 15) as depicted on Fig. 2. Within these units, layers and features were given a two-digit context number and title as they were identified and this was added to the grid number and site code, e.g.:

BIE 0118 oval pit

BIE 0320 wall-footing

No attempt was made to give a linear feature, or extensive layer, the same context number in

adjacent Areas but if an isolated feature lay astride a grid line it received a single number from the unit in which the major part of it was located. If a feature contained a number of layers, these were lettered alphabetically.

For the purposes of this report the grid Areas are shown on the large-scale plans, and consequently the features are there identified by their two-digit context number, whereas in the text the four-digit grid/context number is, of necessity, employed. Also for the purpose of the report, the finds have been given simply the number of the feature from which they came, although in the excavation archive they carry a suffix-number which facilitates their individual identification.

### THE EARLIER PREHISTORIC PERIOD

No structural features of definite pre-'Belgic' date were found, but a number of worked flints, a quantity of flint waste and an hour-

glass perforated pebble of probable prehistoric type were present as survivals in later contexts, or in unstratified deposits.

#### *The Earlier Prehistoric Finds*

##### *Flint Artefacts*

There were 158 complete flint flakes from the site; their dimensions and breadth:length ratios are shown on a histogram (Fig. 4). The breadth:length histogram has two peaks, the first conforming to the general pattern for Early to Middle Neolithic sites—e.g. Bury Hill, West Sussex (Bedwin *et al.* 1981, 80)—and it is to this period that the leaf-shaped arrowhead, fabricator and possibly other flint tools (Fig. 3) are likely to belong. It is notable that the overall dimensions of the flakes are generally small, suggesting that there was no recourse to the plentiful flint available a few kilometres to the south. The second peak probably results from the later prehistoric activity on the site, but since all the flint came from residual contexts it may also include debris from building work that utilised raw flint, e.g. the Roman wall-footing (p. 49).

##### *The Pebble Hammer*

The hammer is one of a class of pebbles,

unadapted save for the centrally placed shaft-hole, which have been studied by Roe (1979, 36). She refers to over 700 such implements, but very few of these were stratified finds. Those that are come not only from Neolithic and Bronze Age contexts, but also from Iron Age and Roman sites, although it is possible that these represent the re-use of earlier implements.

##### *Catalogue of Flint and Stone Artefacts (Fig. 3)*

1. Core, single platform conical, blue/black flint with white patina. (0247)
2. Blade with retouch on one side and at one end, white patina. (0805)
3. Scraper, round ended, blue/grey mottled flint, unpatinated. (0302)
4. Scraper, round ended, brown/grey flint, unpatinated. (0302)
5. Scraper, retouch on one side, mottled grey flint with inclusions. (0468)
6. Arrowhead, leaf-shaped, broken. Bifacially flaked, mottled blue/grey flint, unpatinated. (0143)
7. Fabricator. Heavily abraded on both sides and at one end, brown/grey mottled flint, unpatinated. (0421)
8. Pebble hammer. Red/brown quartzite pebble with central hour-glass perforation, battered ends. (0501)

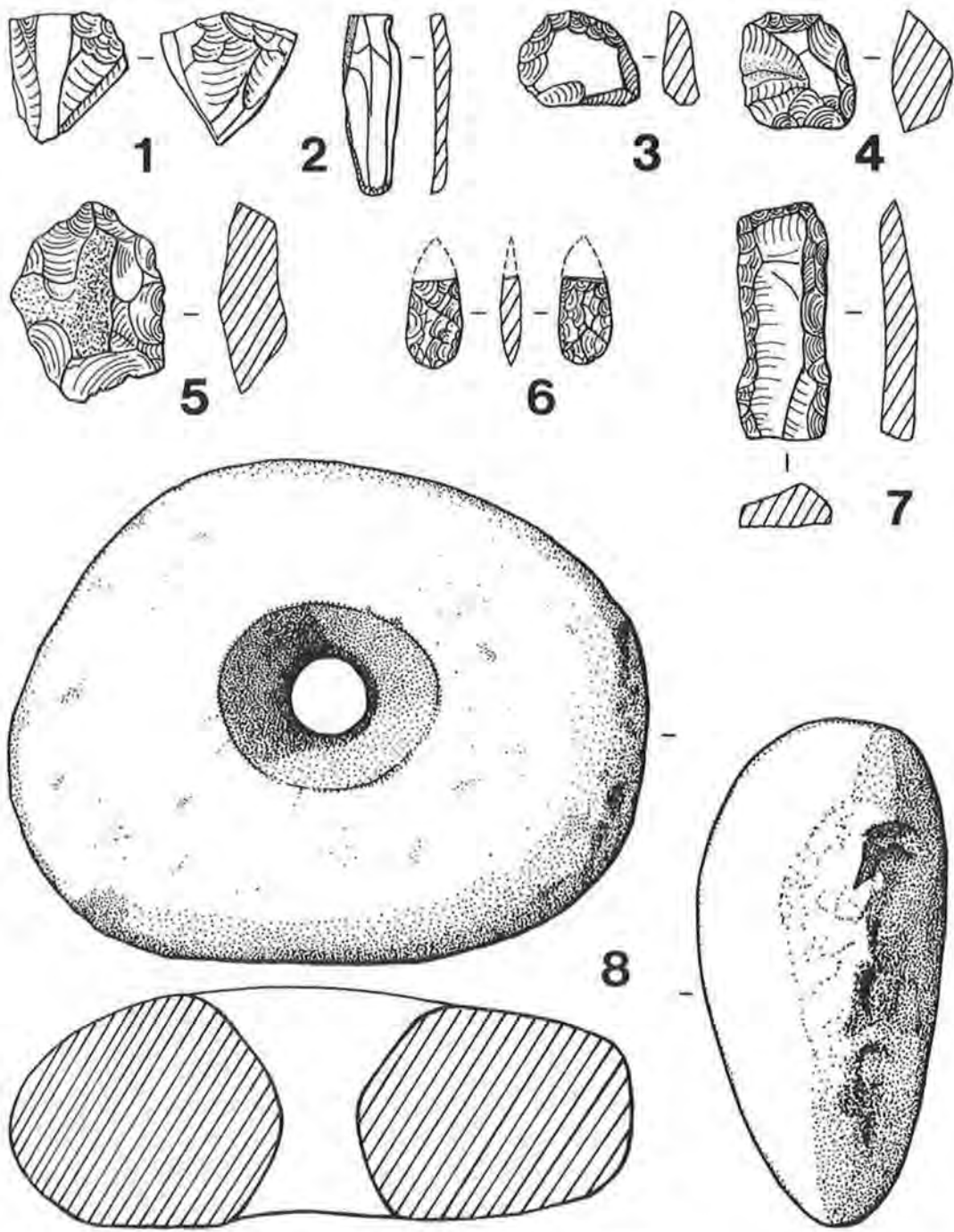


Fig. 3. Earlier Prehistoric finds: 1-7, flint; 8, pebble hammer. (Scale 2:3)



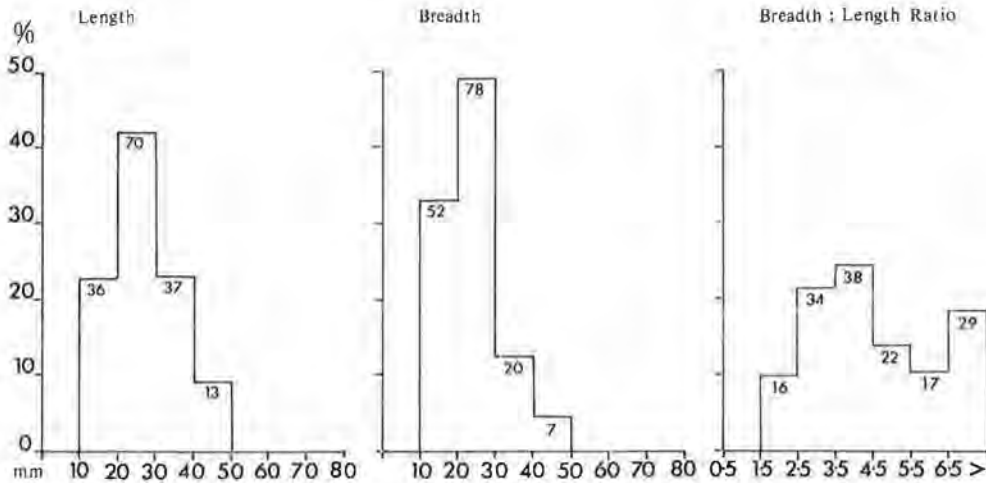


Fig. 4. Flint flakes: histograms of length, breadth and breadth:length ratio.

### Discussion

Evidence for Neolithic to Early Bronze Age occupation in the area is slight, but the increasing number of worked flints found during field-walking suggests that the limestone ridge upon which Berton lies was particularly attractive to early settlers. In the later prehistoric period a Middle Bronze Age presence in the area is attested by the cremation burial in a bucket

urn, dated pre-1000 B.C., but no evidence for contemporary settlement is yet known. Finds of Early and Middle Iron Age character are again sparse, but utilisation of the limestone ridge is evident from other finds in the locality, notably at Aylesbury, where recent excavations have revealed the presence of a hillfort (Allen and Dalwood 1983; Farley forthcoming).

## THE LATE IRON AGE 'BELGIC' PERIOD

### Structural Evidence

The evidence for Late Iron Age occupation consists of large enclosure ditches, smaller gullies, and numerous pits and postholes, all cut into the limestone subsoil. Nowhere did any layers exist which can be attributed to this period. This, and the shallowness of many of the postholes and gullies, indicate that an appreciable depth of soil (perhaps as much as 0.10 m) was removed by some agency, before or during the Roman occupation of the site. This destruction of the Iron Age 'ground surface' effectively erased all evidence of floor levels and hearths, and all traces of the banks which presumably accompanied the larger ditches, thereby severely limiting the inferences that can be drawn from the surviving features. Never-

theless, an attempt has been made to phase the Late Iron Age period of occupation, if only as a means of presenting a complex array of features in comprehensible form. It must be admitted, however, that the evidence is open to a number of interpretations, and it is only the excavator's preferred view which is presented here.

The Iron Age features were clustered in the eastern and southern arms of the excavated area (Fig. 62, Pls. II-IV) but it was not clear how far this distribution had been created by later activity. Certainly features of the magnitude of the enclosure ditches would have survived in the area apparently void of Iron Age occupation,

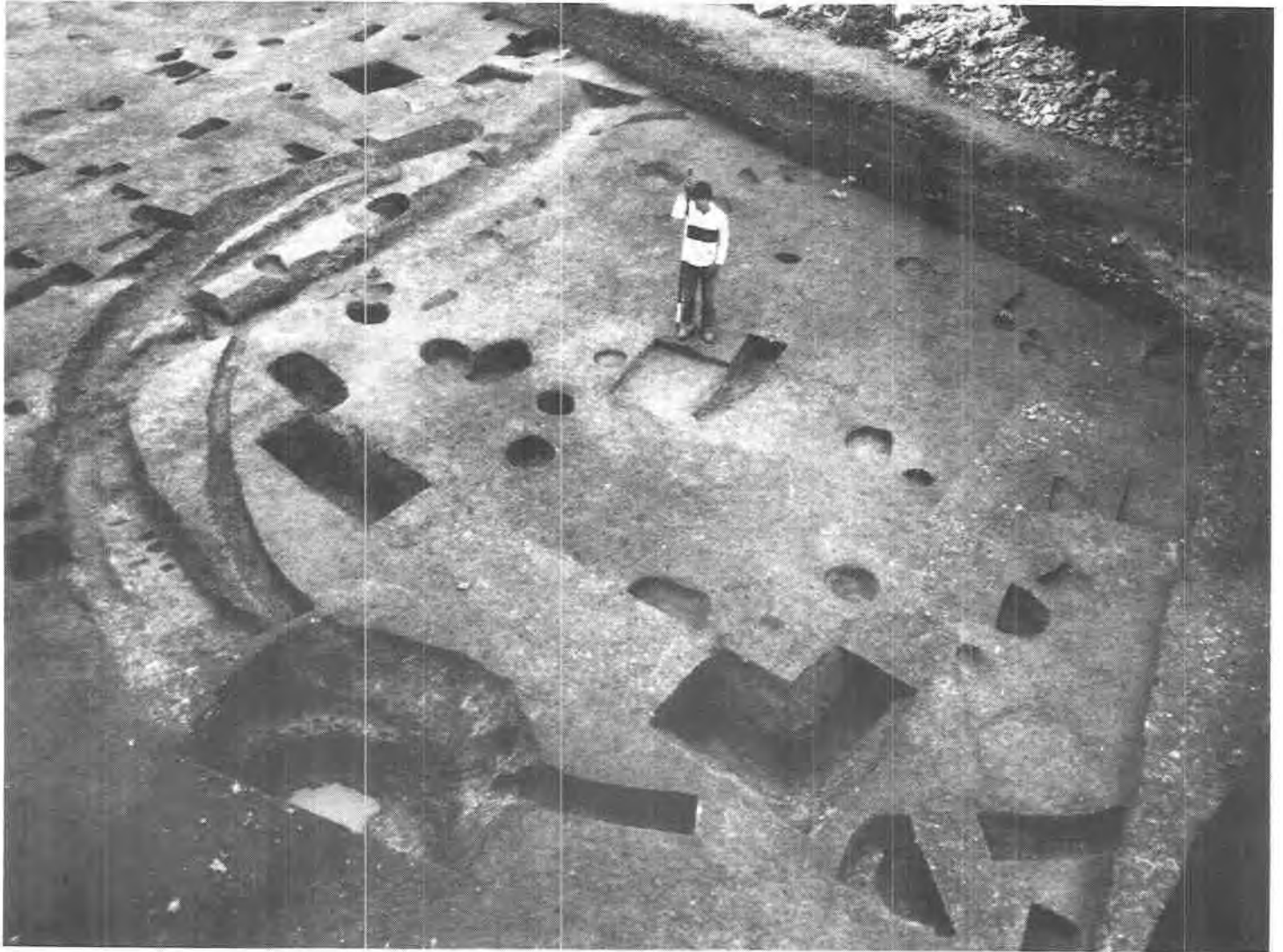


Plate IV. Iron Age round house in southern arm of excavation.



Plate V. Iron Age ditch (0406/0510/0610).

but smaller gullies, pits and postholes would not have fared so well. Indeed, later disturbance in the form of post-medieval terracing appears to be responsible for the unconvincing limits to the Iron Age activity in the southern arm of the excavation (see pp. 14, 46) and was particularly pronounced in Areas 01 and 02. Smaller Iron Age features may well have existed here originally.

Pottery of the period was widely spread across the site but away from the obvious centres of activity quantities were small, and the contexts residual.

#### *Iron Age Features in the Eastern Arm of the Excavation (Fig. 5)*

At the eastern end of the site there was a complex pattern of ditches, gullies, pits and postholes (Pl. II). These can be simplified into four phases of activity.

##### *Phase 1*

See Phase 2 below.

##### *Phase 2*

Of the two ditches which pursue an east-west course (0610 and 0621), that to the south (0621) is apparently the earlier. Gully 0506 cuts gully 0521/0623, which can be interpreted as a palisade trench revetting the bank associated with ditch 0621, but is itself cut by ditch 0510. Ditch 0621 and gully 0521/0623 are not, however, the earliest features on this part of the site, as pits 0633 and 0634 testify (?Phase 1).

Gully 0521 terminates within the excavated area, beside a posthole (0522) apparently belonging to this phase of activity, which suggests that ditch 0621 may terminate also, but this could not be demonstrated. Whether or not ditch 0621 ends immediately beyond the limit of excavation, it was presumably originally intended to form part of a major enclosure with ditch 0459 or 0478. These two parallel ditches contained contrasting fill, the larger (0478) having several lenses of rich organic material present in it (Fig. 6) suggesting a considerable amount of deliberate infilling, but their chronological relationship could not, however, be determined.

The nature of the evidence also makes it hard to determine other contemporary features, but a possible candidate is the wide, shallow gully (0509/0606) which apparently forms the southern end of a minor, sub-rectangular enclosure. Much of this gully had been destroyed by the digging of ditch 0510/0610, but the eastern side re-emerges to the north as 0638. The only features within this enclosure which may be contemporary are the two shallow hollows, 0651/0607, which provide no clue to its function. The extensive flat-bottomed hollow (0615) and accompanying ditch (0617) may also belong to this early phase of activity, although the proximity of 0615 to the supposed line of enclosure bank (0623) makes this unlikely.

##### *Phase 3*

Excavation of ditch 0621 showed that, following a period of natural silting, a large quantity of limestone entered the feature from its northern side (Fig. 6). This presumably represents the deliberate slighting of the bank, in advance of a remodelling of this corner of the settlement. One feature apparently belonging to this replanning is gully 0506, and the fact that it is parallel with ditches 0459/78 suggests that this barrier continued in existence. Assigning any other features to this phase of activity, however, is again difficult. The flat-based hollow 0615 is a probable candidate, but none of the smaller pits or postholes can be attributed to it with any certainty.

##### *Phase 4*

The next major identifiable act seems to have been the digging of ditch 0460/0510/0610 (Pl. VI). The eastern sections of this feature (Fig. 6, 0610) show that most of the fill entered from the northern side, suggesting that this is where the bank stood. The western section, however, shows that here an equal, if not greater, quantity of limestone entered from the south (Fig. 6, 0460). This may have resulted from the proximity of a bank accompanying 0459.

The line of ditch 0460/0510/0610 was continued to the east by the much smaller feature 0618. The fill of this ditch was indistinguishable from that of 0610, but excavation showed that

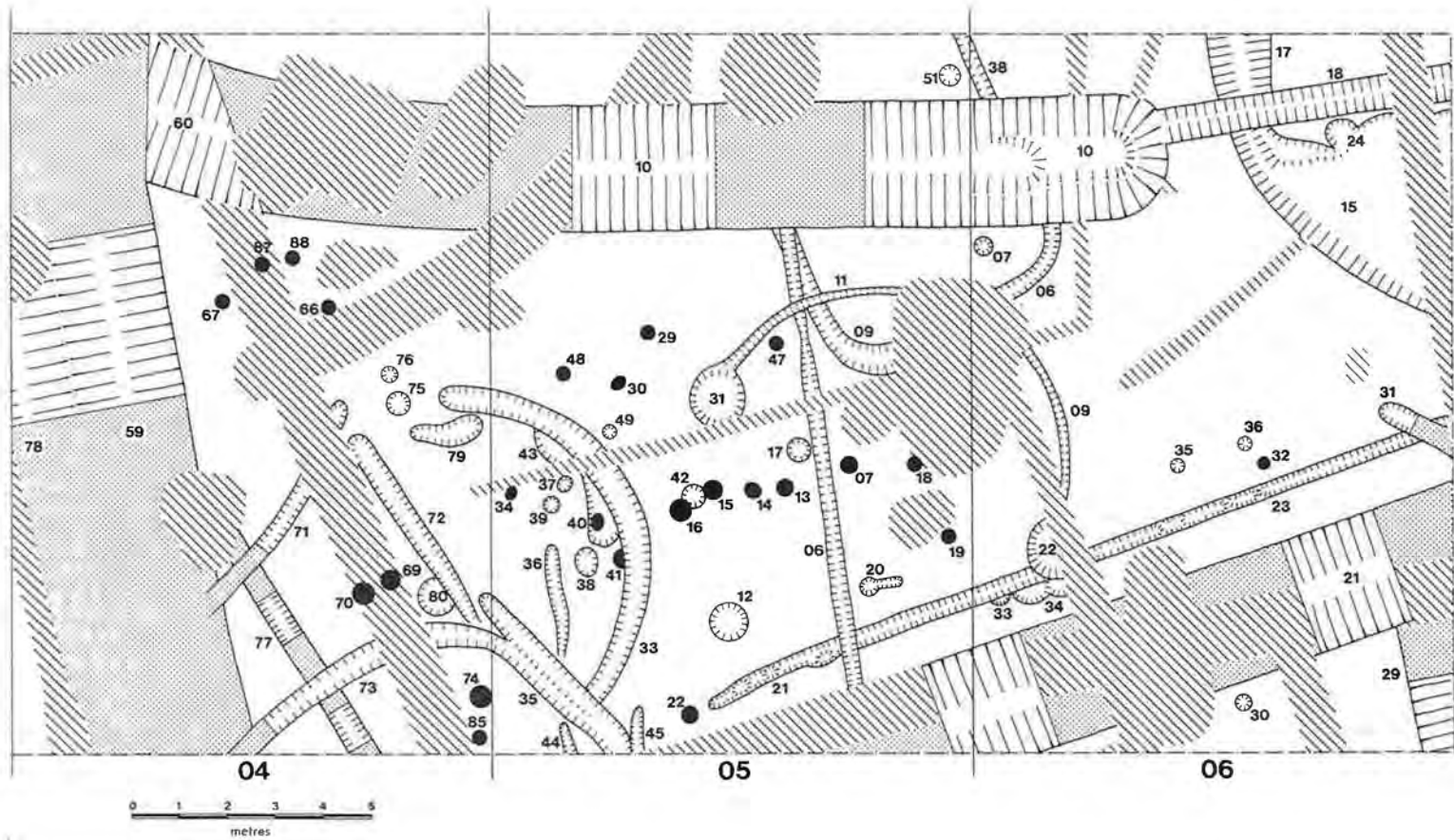


Fig. 5. Late Iron Age features in Areas 04, 05 and 06. Postholes shown in black, unexcavated deposit stippled, later disturbances hatched.



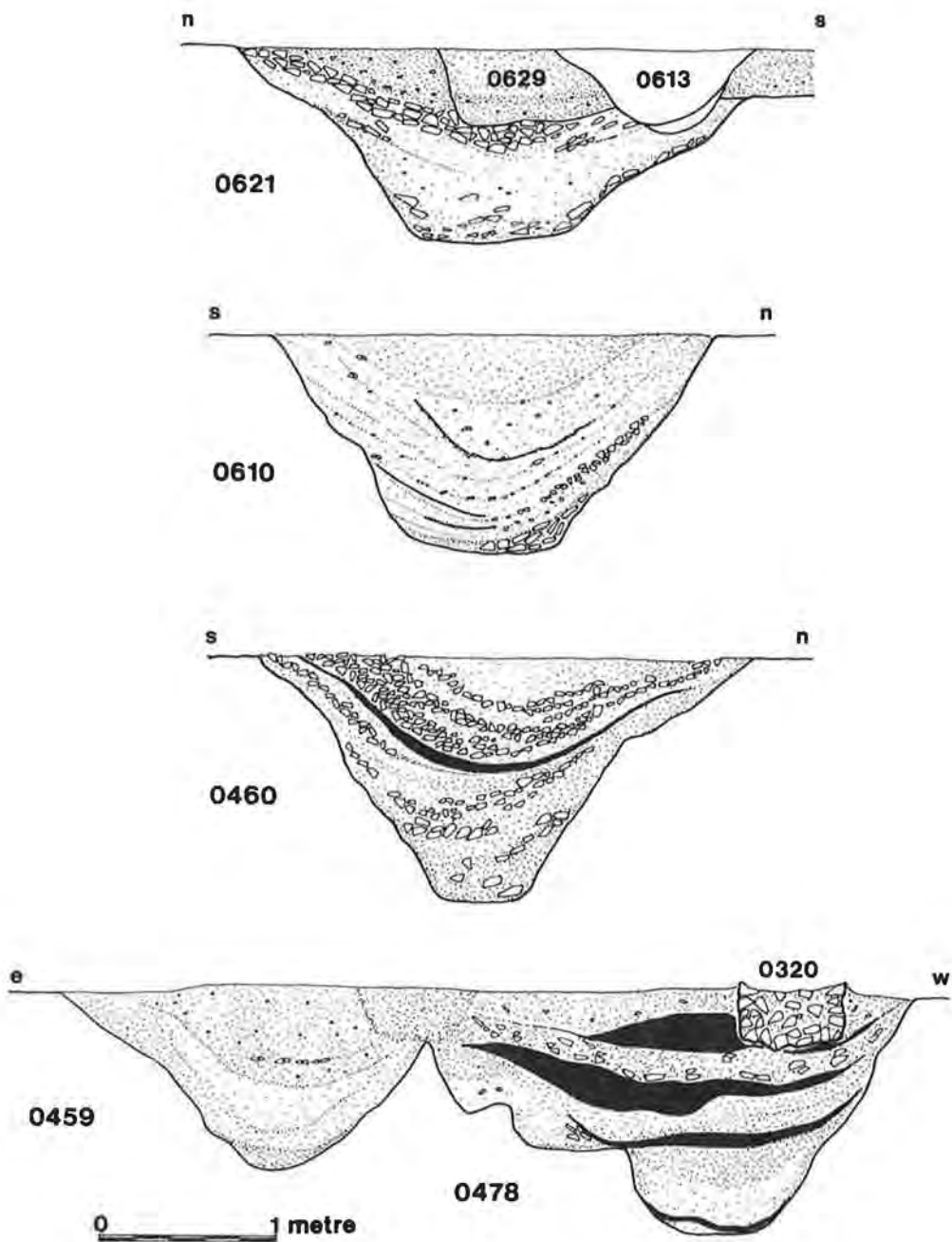


Fig. 6. Late Iron Age ditch sections.

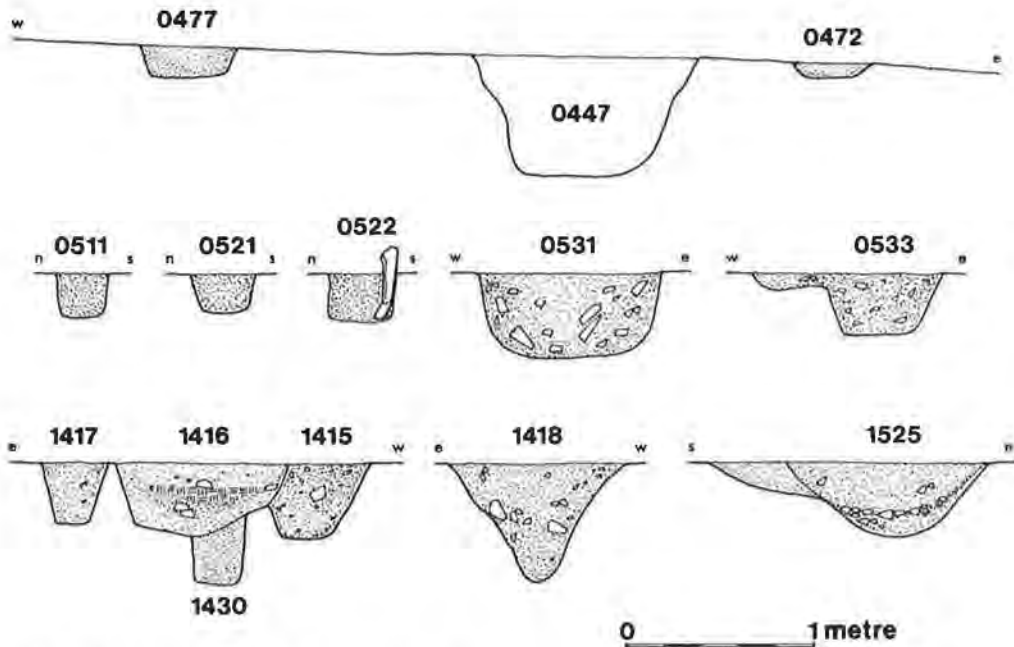


Fig. 7. Late Iron Age gully, pit and posthole sections.

the terminal of the larger feature had been recut and that 0618 may have been added during its lifetime rather than being an original part of the layout. Ditch 0460 presumably superseded ditches 0459 and 0478, although this could not be demonstrated with certainty. Equally uncertain is the question of which features accompanied this rearrangement of the major enclosure boundaries. The most likely candidates, however, are the two curving gullies, 0533 and 0511/0609.

The narrow, shallow gully (0511/0609) described a semicircle terminating at either end in circular pits, 0531 and 0622. Much of the latter had been removed by a medieval ditch, but 0531 was substantially intact. Structural evidence, however, was sparse. Despite the steep sides and flat base, pit 0531 showed no signs of having contained a post (or posts), nor were any post- or stakeholes visible in the lines of the gully itself. Furthermore, the varied collections of postholes and hollows which occupy the area immediately to the south (0507/12–20/42) provide no convincing pattern to continue the circle, or to close it effectively.

Gully 0533 was a far more substantial feature than its neighbour, but of the same diameter. It covered just over one-third of a full circle and ended, to the north at least, as a simple, rounded terminal—the southern end having been removed by a later feature. There was some evidence that a shorter arc existed originally, on a tighter curve, terminating as 0540, but in general the surrounding features (0534/36–39) added little to the understanding of this gully, and there was nothing to continue the line of the curve. To the west, however, were other features which may belong to this phase. Principal among these were two parallel gullies (0472/77). That to the east (0472) was shallower than its western counterpart (Fig. 7) and although it had a pronounced northern terminal, it became undetectable to the south. That to the west terminated in the same plane as its neighbour—although this area was partly obscured by a post-medieval pit, but continued strongly beyond the southern limits of excavation. Slender though this evidence is, it does, perhaps, provide the best structural evidence from this part of the site. If the two gullies are considered as beam-slots, supporting

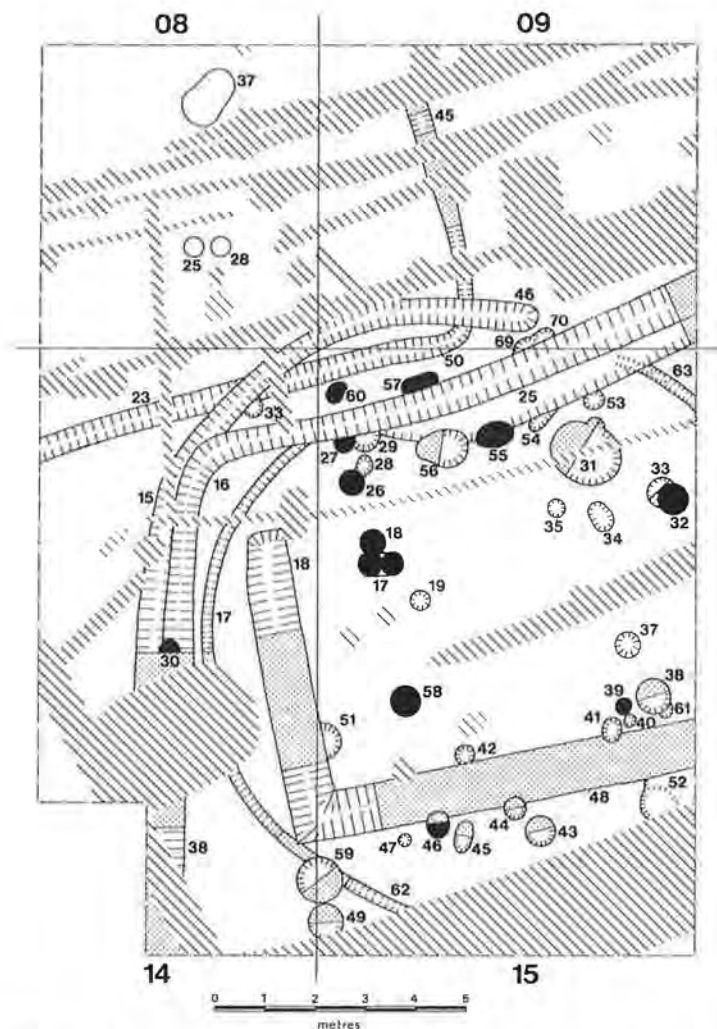


Fig. 8. Late Iron Age features in Areas 08, 09, 14 and 15. Postholes shown in black, unexcavated deposit stippled, later disturbances hatched.

a rectilinear building, this would explain their differing depths relative to the slope of the ground (Fig. 7), and although none of the neighbouring features (0469/70/74/85 etc.) can be used to supplement this rather basic ground plan, such a building would fit neatly into the area demarcated by the curvilinear gully 0533.

The area also contained a number of post-holes, pits and hollows (shown on the plan) which may be of Iron Age date. However, as no

structural patterns can be defined in this varied array of features, their individual description is confined to the archive.

*Iron Age Features in the Southern Area of the Excavation (Fig. 8)*

Evidence for Iron Age activity at the southern end of the excavated area was no less dense than at the east, although certain elements, e.g. the large enclosure ditches, were absent (Pls. III-IV).

### *Phase 1*

The earliest identifiable feature is gully 1423, which enters the excavated area from the west, and runs in a north-easterly direction (1550), before turning at right-angles to become 0945. The latter was cut by many features, and failed to re-emerge from one of them. However, it is unclear whether or not it terminated at this point, or had been erased by the post-medieval scarping which was at its most pronounced in this area. It may well have continued, and returned westwards to form a rectilinear enclosure. The scarping had also destroyed, however, the evidence for any definite Iron Age features in this vicinity. Three shallow scoops were noted (0825/28/37) which stood apart in not containing clear evidence of a later date, but neither do they provide any real clue to the nature of the activity in this phase.

### *Phase 2*

Feature 1423 was cut by a curvilinear gully (1415) which continued eastwards to end in a simple rounded terminal (0946). This gully probably entered the excavated area from the south as 1438, although its interruption by later features made this uncertain. Concentric with gully 1415 and of the same phase was a narrow, steep-sided slot (1417/1562/63). It seems probable that this feature represents the wall-line trench of a circular building, for which the larger gully (1415) acted as an eavesdrip or drainage channel (Pl. V). However, the evidence for this structure is far from complete. It could not be excavated in full and large parts of the area which was examined had been cut away by subsequent Iron Age features, and a post-medieval ditch. Also no trace of floor levels, nor interior features such as a hearth survived. Nevertheless, one feature worthy of note did survive: a probable 'rear entrance' located to the north of the circuit. Despite the later

imposition of gully 1525, it is clear that the wall-line slot is broken here, and that posthole 1557 (and possibly 0969/70) occupies this gap.

A circular building of this size (12.0 m in diameter) with a wall founded in a slot such as that discovered, may have required an internal setting of posts to help support the roof. Some of these may be present on the plan, but there is no obvious pattern which allows them to be recognised.

### *Phase 3*

Following the disappearance of the circular building, a sub-rectangular enclosure occupied much of the site. The southern arm of this feature consisted of a length of V-profile ditch (1548) which turned to the north at right-angles (1418) before ending as a square terminal. The northern arm may originally have existed as a single length of ditch (1525), thus creating an entrance at the north-west corner of the enclosure, but if so it was subsequently recut and extended as ditch/gully (1416), which turned to the south to produce an overlapping entrance. Once again the varied collection of pits and postholes within the area of this enclosure could not be made into any coherent pattern to identify what was being enclosed.

### *Phase 4*

Certain small pits and postholes (1541/44/46) apparently of Iron Age date were clearly dug after the enclosure ditch had gone out of use, indicating yet another phase of Iron Age activity in this area, and to this period may belong the small circular pit (1538) which contained an infant burial. However, this is perhaps more likely to be of Roman date (see p. 40). Also present were a number of features which cannot be formed into any structural patterns; details are confined to the archive.

## *The Late Iron Age 'Belgic' Finds*

The Late Iron Age ditches and gullies provided some of the most secure stratigraphical locations on the site, and produced substantial quantities of pottery, animal bone, and carbonised seeds. In addition they yielded objects of stone, fired clay, bronze, iron,

worked bone and antler. Not surprisingly, however, a quantity of Iron Age pottery and a number of other finds came from later contexts. These have normally been included in this section, but where a problem of allocation arises the finds have been treated as a class of

material in their own right. This is particularly true of the brooches and glass beads, several of which may be of either Late Iron Age or Roman date. As a result the stratified examples are simply listed below and their detailed description deferred (see pp. 69–73).

#### *Utilised Stone*

Three Late Iron Age contexts produced fragments of quernstone (all of Hertfordshire Puddingstone) and the largest example is illustrated here (Fig. 9:1). Also illustrated is a flint pebble pounder from an Iron Age post-hole (Fig. 9:2). Other utilised stones from Iron Age contexts consisted of flint waste (see p. 7) and burnt and fire-cracked pebbles, presumably 'pot-boilers'.

#### *'Belgic Brick'*

Fragments of hand-made clay 'brick' were recovered from twenty-five contexts, over half of which were of pre-Roman date. The enclosure ditches and gullies, in particular, produced several large pieces of this material, although no complete examples were found.

The bricks vary in thickness, the thickest piece being 40 mm and the thinnest 15 mm (although this was exceptional). The edges are either angular, suggesting the use of a mould, or rounded, indicating hand-forming, and the surviving fragments suggest that they were generally rectangular, although one example (Fig. 9:3) has a slightly 'wedge-shaped' appearance. The bricks frequently contain quantities of vegetable matter, both on the surface and in the fabric, and they are generally red/orange in colour, indicating firing in an oxidising environment.

The type of brick represented by the Berton finds (unpierced flat slabs) is one of three types of formed clay brick characteristically associated with Late Iron Age sites (i.e., Farley *et al.* 1981, 72–3). Little has been written about these finds, presumably because they are often fragmentary. However, at Knowl Hill, Berkshire (Over 1973–4) several examples seem to be associated with hearth debris, and it may well be that they were used to contain hearths or provide level surfaces for cooking purposes.

Certainly they never occur in sufficient quantity or in a situation which suggests a major structural function.

#### *Objects of Stone and Fired Clay (Fig. 9)*

1. Fragments of the lower stone of a rotary quern. Hertfordshire Puddingstone. Fragments 140 mm across; original diameter 280 mm (approx.), thickness 118 mm. Derived from the Chilterns ridge (Morley Davis and Baines, 1953). (0537)
2. Pebble pounder or grinder, with facet smoothed by wear. Flint. 60 mm diameter. (0470)
3. 'Belgic' brick. Slightly wedge-shaped appearance; rounded edges and smooth surfaces indicate hand-forming, and a number of very distinct finger and thumb prints are present. One edge has a number of deeply incised, parallel nicks and cuts. Width 122 mm, length exceeded 122 mm originally. Thickness 36 mm. (1416)
4. 'Belgic' brick. Exceptionally thin slab, with red surfaces and grey core. Broken but exceeding 125 × 135 mm originally, thickness 17 mm. (0610)

#### *The Iron Age Pottery*

The main report on the native Iron Age pottery follows: a full description of the fabrics and forms is on microfiche (fiche p. 3–9 A3–B2). In addition, four sherds of Gallo-Belgic imported pottery are described by Valerie Rigby (below, p. 21). The pottery is comprehensively illustrated (Figs. 13–16) and catalogued.

#### *Native Iron Age Pottery*

D. Knight

#### *Introduction*

The ceramic tradition which is here termed 'native' Iron Age is represented at Berton by a total of 9,909 sherds (79 kg), deriving from vessels which divide typologically into two main groups.

*Group I Vessels:* handmade vessels which on the basis of their form and/or decoration invite comparison with pre-'Belgic' ceramic types (cf. Knight 1984 (i) 40–1: Group 1, 2 and 3 vessels).

*Group II Vessels:* mainly wheelmade vessels of so-called 'Belgic' (or 'Aylesford-Swarling') type (cf. Birchall 1965; Rodwell 1976, 215–37; Thompson 1982).

The proportions of Group I and Group II vessels cannot be determined precisely, but it is clear that the great majority of fragments



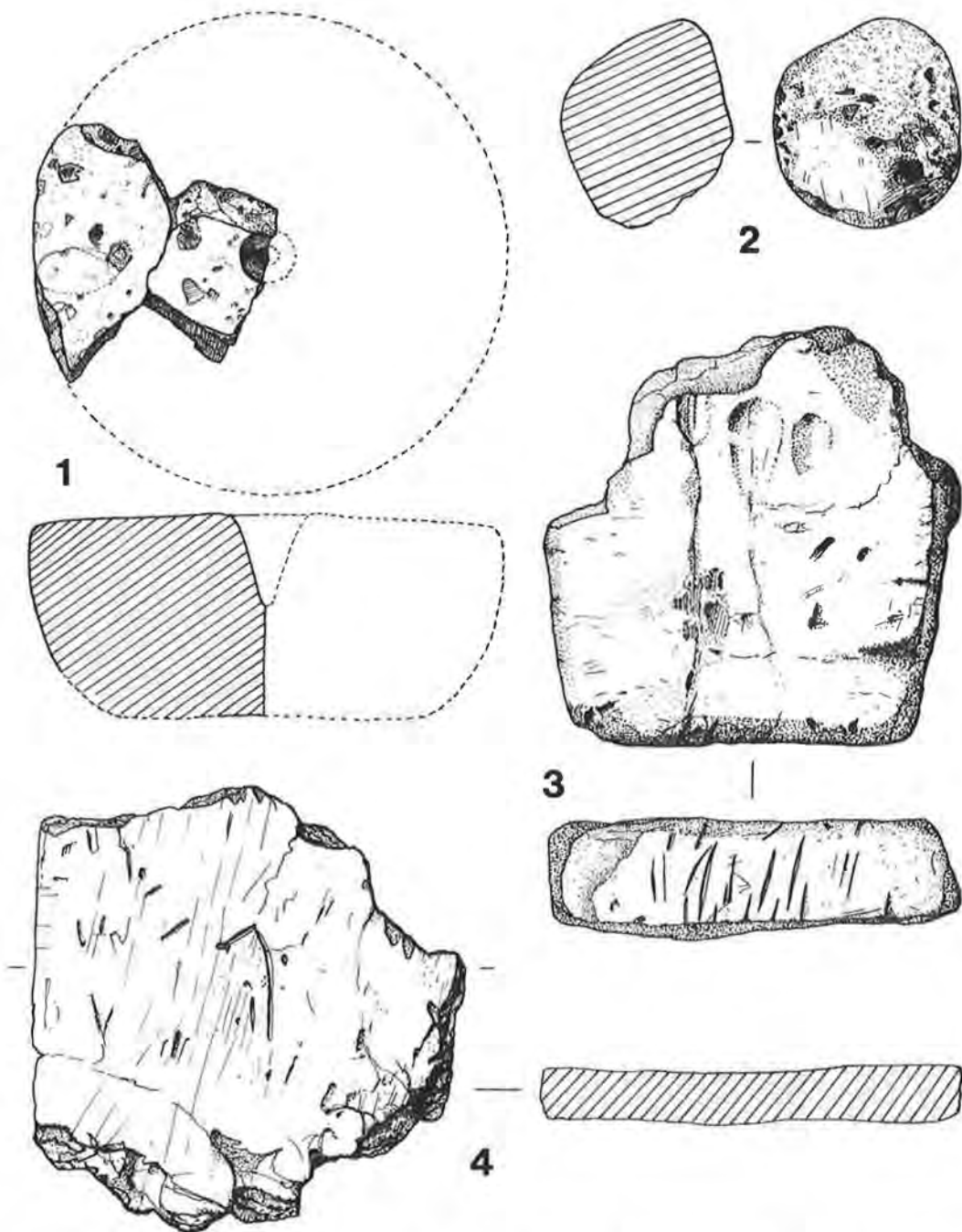


Fig. 9. Late Iron Age finds: utilised stone and 'Belgic brick': 1, quern (scale 1:4); 2, flint poulder; 3-4, 'Belgic brick'. (Scale 1:2)

(c.80–90% by weight) derive from pots of 'Belgic' type.

Vessels of Groups I and II are discussed below under the headings of (1) fabrics, (2) forms, (3) decoration, and (4) typological affinities and dating. Detailed descriptions of vessel fabrics, forms and styles of decoration are provided on fiche p. 3–9 (A3–B2). Pottery obtained from contexts yielding large quantities of sherds (over 1 kg) and/or datable items of metalwork is listed on fiche p. 10–11 (B3–6) (see also Figs. 10–12 below).

### Fabrics

#### Fabric Classification:

Four main fabric groups have been distinguished on the basis of variations in the kinds of inclusion visible in each sherd.

Fabric 1: grog-tempered

Fabric 2: sandy

Fabric 3: shelly

Fabric 4: flint-gritted.

The characteristics of each fabric group are listed on fiche p. 3–6 (A3–6), under the headings of (1) types of inclusion, (2) sorting, (3) hardness (as defined in Peacock 1977, 30), (4) feel, (5) surface treatment, and (6) colour.

#### Relative Frequency of Fabrics (Fig. 10):

*Group I Vessels.* Flint-gritted sherds predominate, with small and roughly equal proportions of shelly and sandy wares. Grog-tempering is almost entirely absent.

*Group II Vessels.* 'Belgic' vessels are mainly grog-tempered (hence the dominance of Fabric 1 in Fig. 10), but a significant minority was manufactured from a shelly or sandy fabric. Flint is rarely evident, and invariably occurs in only small quantities.

### Forms

#### Group I Vessels:

Sufficient has survived of a minority of vessels to permit recognition of a range of ovoid, round-shouldered, carinated and open forms, termed Forms 1–4 and described on fiche p. 5 (A7–8; cf. Knight 1984,

(i) 19–21, Figs. 3, 6–7). Carinated and round-shouldered vessels may be identified from small body sherds (*ibid.*, (i) Table 2, Fig. 3), and it seems likely, therefore, that if either of these forms had been produced on a large scale, considerably more examples would have survived. Ovoid and open forms, by contrast, are difficult to identify on the basis of only small fragments (*ibid.*), and hence their apparent rarity could be merely a function of surviving sherd size (cf., for example, globular, ellipsoid and cylindrical forms, *ibid.*).

Several complete or fragmentary strap handles, some with a wide and shallow groove on their outer face, have also been recorded, but in no instance can the profile of the vessel to which they were attached be established. The few bases which have survived are invariably flat.

#### Group II Vessels:

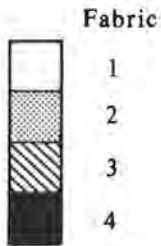
The forms of Group II vessels are both more varied and more standardised than those of Group I vessels, but although 'Belgic' forms are more easily identified, the sample of recognisable forms remains extremely small (cf. Fig. 12; they are described here on fiche pp. 6–8: A9–14). It seems possible, however, that ovoid necked vessels with flat or footring bases and, to a lesser extent, carinated bowls had predominated, with smaller and possibly broadly similar proportions of the following (cf. Fig. 12): neckless ovoid bowls and jars; 'S-sided' bowls and jars; neckless bead-rimmed ellipsoid jars (with flat or footring bases); pedestal urns; platters; butt beakers; convex, domed and conical lids. Less common types may be represented by fragments of a girth beaker, a version of a Gallo-Belgic cup, and a high pedestal base (Fig. 16:89).

### Decoration

#### Group I Vessels:

Decoration of any kind is rare, and with the following exceptions is limited to a line of fingernail or fingertip impressions along the lip or around the outer edge of the rim (e.g. Fig. 13:3, Fig. 16:68–78):

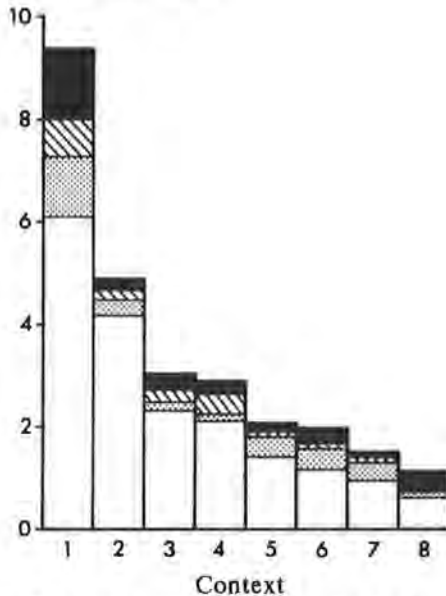
Fig. 16:67. Fragment of an ovoid (?) vessel decorated with a shallow burnished lateral groove immediately below the rim.



Contexts

1. 0460-0510-0610	5. 1416-1427
2. 0621	6. 0511-0531-0609 0632
3. 0615	7. 0946-1416
4. 0478	8. 0459

Total sherds (kg)



% of total sherd weight

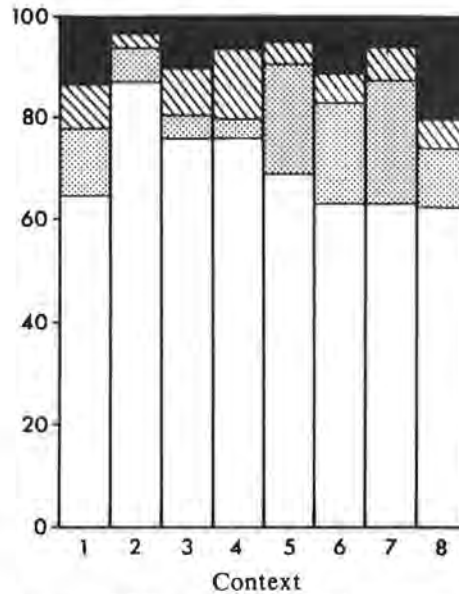


Fig. 10. Frequency of fabrics 1-4 in Iron Age features yielding more than 1.0 kg of pottery.

Fig. 16:72. Fragment of a carinated vessel, decorated with a row of fingertip impressions along its girth.

#### Group II Vessels:

Vessels of Forms 5-8 and Forms 12-15 (plus a large number of sherds deriving from vessels of uncertain form) preserve evidence of a wide range of decorative features. These are listed on fiche pp. 6-8 (A9-14), where they are correlated with form and fabric.

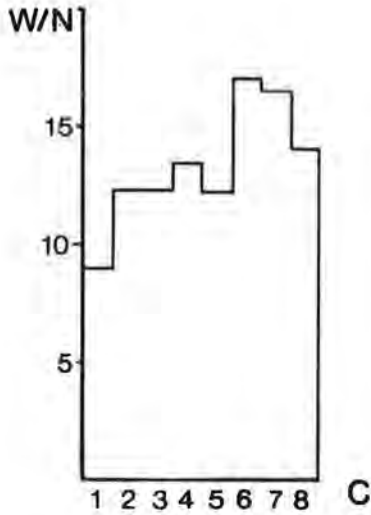
#### Typological Affinities and Dating

##### Group I Vessels:

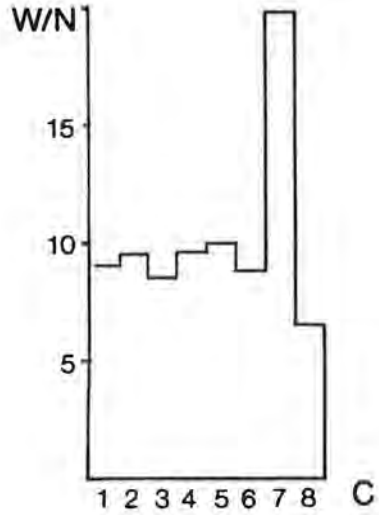
Carinated vessels of the type recovered from Feature 02.45 (Fig. 16:71) are characteristic

components of later Late Bronze Age (Ewart Park) and earlier Iron Age (HaC-La Tène I) ceramic assemblages from southern England (Knight 1984, (i) 97-9), and hence the presence of an example here might imply activity dating from as early perhaps as the later ninth century B.C. (for chronology of metalwork phases see *ibid.*, (i) 12). Further evidence for an early phase of activity may be provided by the discovery in Feature 04.52 of part of a carinated vessel with a row of fingertip impressions along its girth. This style of ornament was common during the earlier part of the first millennium B.C. but apparently declined dramatically in popularity from La Tène I (*ibid.*, (i) 97-9; Fig. 25).

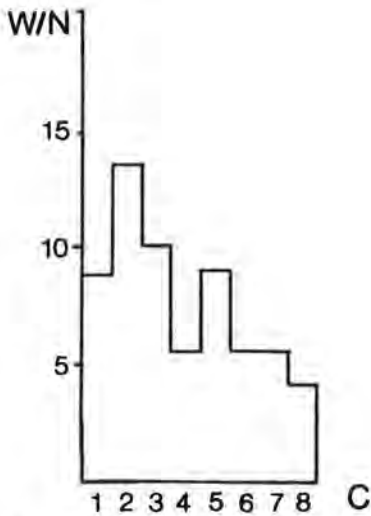
Fabric 1  
(Mainly Group II vessels)



Fabric 2  
(Group I & II vessels)



Fabric 3  
(Group I & II vessels)



Fabric 4  
(Mainly Group I vessels)

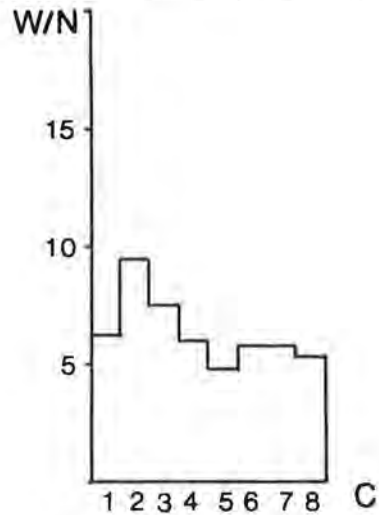


Fig. 11. Iron Age pottery. Variations in mean sherd weight. W/N: Weight of sherds (g)/number of sherds. C: Late Iron Age contexts yielding more than 1.0 kg of pottery.

With these exceptions, the typological evidence suggests a date of deposition probably no earlier than La Tène I and perhaps as late as La Tène III, and thus raises the possibility that Group I and Group II vessels may have been partly or even wholly contemporary. The significant features in this respect are the apparent emphasis upon forms lacking a clearly defined girth, and the restriction of finger ornament mainly to the rim, for, as has been shown elsewhere, these are characteristic of ceramic assemblages that are currently dated from La Tène I to La Tène III (*ibid.*, (i) 40: 'Group 2' assemblages).

Attention ought to be drawn finally to the consistent association of Group I with Group II vessels, and of both categories of vessel with items of La Tène III metalwork (see fiche pp. 10–12, B3–6). The chronological implications of these associations are unclear, for the fragments of Group I vessels that have been obtained from these (and other) contexts are generally smaller and more abraded than 'Belgic' sherds (cf. Fig. 11), and hence might provide evidence of significant rubbish survival. But they obviously raise the possibility that Group I vessels were at least partially contemporary with the 'Belgic' pottery from the site (cf., for example, De Roche 1978, 73; Harding 1972, 121–3; Knight 1984, (i) 69–71).

#### Group II Vessels:

The typological affinities of Group II vessels lie with a series of La Tène III ceramic types which appear first in Aylesford–Swarling contexts attributable to Stead's (1967; 1976b) 'Welwyn' or 'Lexden' phases (cf. Birchall 1965). The date of the earliest Welwyn phase assemblages is still open to question, but none of the novel ceramic types that characterise assemblages of this kind seem likely on present evidence to predate the second half of the first century B.C. (*ibid.*, 411–12; at Bierton, notably pedestal urns, ovoid necked vessels with flat or footring bases, S-sided bowls and jars, and carinated bowls: fiche pp. 5–7, A9–12). Lexden phase assemblages are distinguished by Gallo-Belgic imports and/or native versions of these, and hence may be assigned a date after c.10 B.C. (cf. Stead 1967,

47; at Bierton, notably butt beakers, platters, and other types modelled upon Gallo-Belgic prototypes, see fiche p. 7–8 (A11–14)).

The presence at Bierton of a range of characteristic Welwyn phase ceramic types might provide evidence for the manufacture of Group II vessels from as early as the mid first century B.C., but as these were retrieved consistently from features producing Gallo-Belgic types, it is debatable whether a significant proportion (if any) genuinely predates the period of currency of Gallo-Belgic wares. Support for this view may be provided by a number of important pottery–metalwork associations, which, as shown on fiche pp. 10–12 (B3–6), are consistent with an earlier first-century A.D. date.

#### Acknowledgement

Thanks are due to Professor B. W. Cunliffe and Mr D. Britton for reading and commenting upon a draft version of this report.

#### The Gallo-Belgic Imports

V. Rigby

In addition to the native Iron Age pottery, there was also a small group of Gallo-Belgic imports comprising sherds from at least three vessels of Tiberio-Claudian date:

1. Platter, Cam. form 7B in TR 1(C): Fig. 14:34. (0510A)
  2. Pedestal cup, Cam. form 74 in TR 1 (A): Fig. 16:90. (1418)
  3. Pedestal cup, Cam. form 74 in TR 1 (A): not ill. (0478A)
  4. Pedestal cup, Cam. form 76 in TR 1 (A): not ill. (0432)
  5. Pedestal cup, Cam. form 76 in TR 1 (A): not ill. (0459)
  6. *Tazza*, Cam. form 52 in TN: not ill. (0432)
- (Note: Cam. forms and TR fabrics are those of Hawkes and Hull 1947, 202–86.)

It is an unusual assemblage. Pedestalled cups are generally rare compared to cups and platters; for them to account for three-quarters of a group of Gallo-Belgic wares is unique.

There are sherds from one or two cups of Cam. form 76, the most common and widely found cup-form in Britain. Its superabundance at Camulodunum, with a marked scarcity on continental sites, resulted in its being put forward as a candidate for manufacture at Camulodunum. However, since the same applies to many other forms known to have



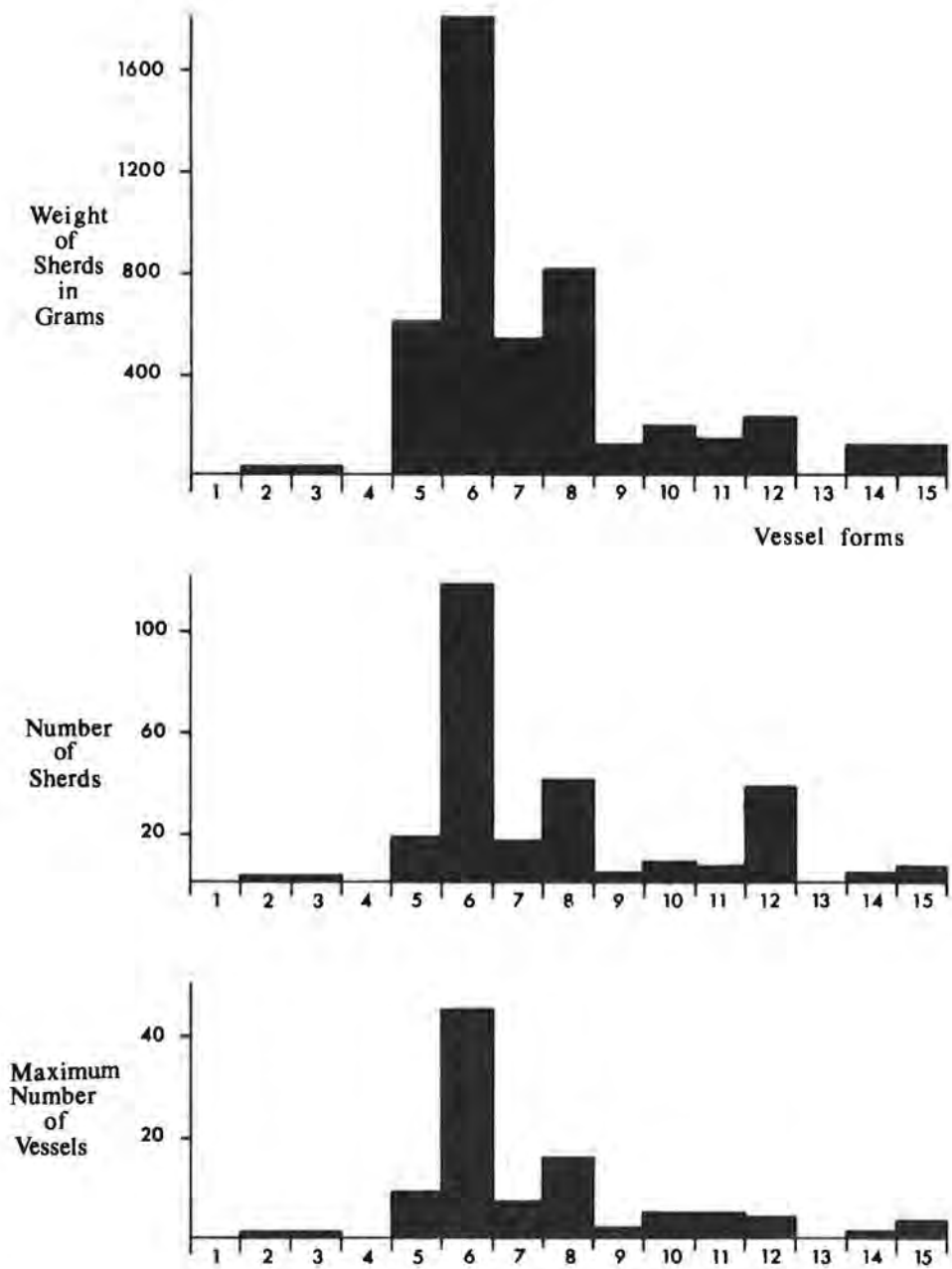


Fig. 12. Frequency of vessel forms 1-15 in Iron Age features yielding more than 1.0 kg of pottery.

been made in northern Gaul, while the range of fabrics and finishes in no way differs from imported examples, this interpretation seems unlikely. The remaining sherds are from the carinated form, Cam. form 74, whose distribution characteristics are the reverse of those of Cam. form 76, hence it is always considered as an import. The scarcity of pedestalled cups of any form at Skeleton Green, compared with their numbers in later contexts at Camulodunum and in the King Harry Lane Cemetery, St Albans, suggests a date after A.D. 15 for the large-scale manufacture of pedestalled cups (Rigby 1981, 195, table IV).

The platter is one of the later versions of Cam. form 7B which was apparently standardised after A.D. 25 and was still in production in the Claudian period. Its distribution is comparatively thin, with examples, all in TR 1 (C), at Old Winteringham (South Humberside), Camulodunum, the King Harry Lane Cemetery (St Albans), Skeleton Green, Baldock (Hertfordshire), Silchester and Chichester.

Central Gaulish production centres are represented by a *tazza*, Cam. form 52, in micaceous terra nigra (0432). At present, the distribution of this type is limited in extent to southern Britain, and to wealthy pre-Roman settlements with comparatively easy access to Camulodunum. Examples of the *tazza*-form are particularly scarce, being restricted to King Harry Lane Cemetery, Skeleton Green, Camulodunum and Canterbury. The repeated association of micaceous terra nigra wares with early Gallo-Belgic wares, on important Late Iron Age sites, and their absence from early Roman military establishments suggests that their dating lies entirely in the pre-Conquest period.

### Conclusion

These sherds are best interpreted as part of a large group of Gallo-Belgic and Central Gaulish wares imported via Camulodunum in the Tiberio-Claudian period. The terra rubra suggests a pre-Conquest rather than a post-Conquest date for the import of these vessels.

## Catalogue of Iron Age Pottery

D. Knight

The sequence of description is as follows: 1. form type, 2. fabric type, 3. types and sorting of inclusions, 4. hardness, 5. feel and surface treatment, 6. colour of exterior (ext.) break (brk.) and interior (int.), 7. miscellaneous points of interest, and 8. context. All vessels contain frequent sand minerals up to 1.0 mm in diameter, and for the sake of brevity reference is made to such inclusions only when they exceed this size range. Fingernail is abbreviated FN and fingertip FT.

### Ditch 0478 (Fig. 13:1-10)

1. ?Globular, ovoid or ellipsoid vessel, with short upright neck (handmade). Fabric 4. Frequent flint <2 mm. Very hard. Harsh. Dark and light grey; dark grey; light grey. (0478G)
2. ?Neckless globular, ovoid or ellipsoid vessel (handmade). Fabric 3. Frequent shell <2 mm. Hard. Rough. Dark grey; light grey; dark grey. (0478B)
3. As vessel 2. Fabric 1. Frequent grog <2 mm. Hard. Rough. Dark grey throughout. FT impression on lip. (0478B)
4. Form 5? Fabric 3. Frequent shell <6 mm. Hard. Rough. Orange-brown; dark grey; orange-brown. FN incisions along rim. (0478E)
5. Form 5. Fabric 3. Frequent shell <6 mm. Hard. Rough (int. worn). Orange-brown and light grey; dark grey; as ext. FN incisions along rim. (0478E)
6. Form 6. Fabric 1. Frequent grog <4 mm; occasional quartz and quartzite lumps up to 5 mm. Hard. Smooth soapy ext.; and burnished below girth; int. worn. Dark grey (unburnished) and black (burnished); light grey; light grey and orange-brown. (0478E)
7. Form 6. Fabric 1. Frequent grog <2 mm; occasional quartzite <2 mm and shell <3 mm. Hard. Ext. and int. of rim soapy and burnished; otherwise rough. Dark grey and orange-brown; dark grey and light grey; as ext. (0478E)
8. Form 8. Fabric 1. Frequent grog <1 mm. Hard. Ext. soapy and burnished above girth, and smooth below girth; int. smooth. Orange-brown, dark and light grey, buff, dark brown; dark and light grey, and dark brown; orange-brown and buff. (0478E)
9. Form 11. Fabric 1. Frequent grog <1 mm; occasional shell <1 mm. Hard. Int. and ext. soapy and burnished. Black and light brown; dark grey and orange-brown; as ext. (0478A)
10. Form 15. Fabric 1. Frequent grog <2 mm; occasional shell <1 mm; occasional quartz and quartzite <3 mm. Hard. Soapy, burnished ext.; rough int. Black and dark brown; dark grey and black; black. (0478E)

### Pit 0516 (Fig. 13:11)

11. Form 1. Fabric 4. Frequent flint <5 mm; scattered quartz <2 mm. Very hard. Harsh. Buff and orange-brown; dark grey and black; dark grey and buff.

*Ditch 0460, 0510 and 0610.* (Fig. 13:12-22; Fig. 14:23-34)

12. ?Neckless globular, ovoid, or ellipsoid vessel (hand-made). Fabric 4. Frequent flint<3 mm; occasional quartz and quartzite<2 mm. Very hard. Harsh. Dark grey; light grey; as brk. (0610G)
13. As vessel 12. Fabric 4. Frequent flint<2 mm; occasional flint lumps up to 4 mm. Very hard. Harsh. Dark grey; light and dark grey; buff and orange. (0610)
14. As vessel 12. Fabric 4. Frequent flint<4 mm. Very hard. Harsh. Dark grey; light grey and orange-brown; orange-brown. (0610H)
15. As vessel 12, but with short upright neck. Fabric 4. Frequent flint<2 mm. Very hard. Harsh. Buff; dark grey; buff and light grey. (0610)
16. Form 5. Fabric 2. Scattered grog<1 mm and occasional quartz<3 mm. Hard. Rough. Orange and dark grey; dark grey; orange. FN incisions along ext. of rim. (0510A)
17. Form 5. Fabric 3. Frequent shell<6 mm; occasional shell<2 mm. Hard. Rough (worn int.). Dark grey; as ext.; dark and light grey, and orange-brown. FN incisions along rim. (0510A)
18. Form 6. Fabric 1. Frequent grog<1 mm; occasional shell<1 mm. Hard. Smooth, with traces of burnishing on ext. Dark grey; dark and light grey; as ext. (0610D)
19. Form 6. Fabric 1. Frequent grog<3 mm. Hard. Ext. smooth, and burnished on neck; int. rough. Buff; dark grey; light grey and buff. (0510A)
20. Form 6. Fabric 3. Frequent shell<2 mm. Hard. Soapy, burnished ext., above zone of mainly horizontal brush marks; int. rough. (0610G)
21. Form 6? Fabric 1. Frequent grog<3 mm; occasional quartz and quartzite grits<2 mm. Hard. Soapy, burnished ext.; rough int. Black and dark brown; black, and dark and light grey; black. (0610G)
22. Form 7. Fabric 1. Frequent grog<2 mm. Hard. Smooth. Light grey throughout. (0510C)
23. Form 6? Fabric 1. Frequent grog<1 mm and occasional grog up to 6 mm; occasional flint<1 mm. Hard. Smooth, with traces of burnishing on ext. Orange-brown and light brown; dark grey; light grey. (0610)
24. Form 7. Fabric 1. Frequent grog<1 mm; occasional shell<2 mm. Hard. Smooth, burnished ext.; smooth int. Dark brown and orange-brown; orange-brown; dark brown. (0610)
25. Form 7. Fabric 1. Frequent grog<2 mm, and occasional grog<3 mm. Hard. Soapy, burnished ext.; rough int. (0510A)
26. Form 7? Fabric 1. Frequent grog<2 mm. Hard. Smooth, with traces of burnishing on ext. Dark grey; orange-brown; as ext. (0510)
27. Transitional between Forms 7 and 8. Fabric 1. Frequent grog<1 mm, and occasional grog up to 5 mm; occasional quartz and quartzite<2 mm and shell<1 mm. Hard. Smooth, burnished ext.; smooth int. Dark grey; orange-brown; dark grey and orange-brown. (0510C)
28. Form 8? Fabric 1. Frequent grog<2 mm. Hard. Soapy burnished ext.; smooth int. Black; light grey; light brown and black. (0510A)
29. Form 8? Fabric 2. Hard; soapy, burnished ext.; smooth int. Light and dark grey, and orange-brown; light grey; orange and dark grey. (0610)
30. Form 10. Fabric 1. Frequent grog<1 mm; occasional shell<1 mm. Hard. Soapy, burnished ext. and int. Orange-brown; dark grey; orange-brown and dark brown. (0610C)
31. Form 10. Fabric 1. Frequent grog<1 mm. Hard. Smooth upper face and soapy burnished underside. Light and dark grey, and orange-brown upper face; light grey; as upper face. (0510A)
32. Form 10. Fabric 1. Frequent grog<2 mm. Hard. Smooth, with traces of burnishing on upper and lower faces. Dark grey; orange-brown; dark grey. (0510A)
33. Form 9. Fabric 1. Frequent grog<2 mm; occasional quartz and quartzite<2 mm. Hard. Soapy, burnished ext.; rough int., much worn. Black, dark and light grey, orange; light grey and orange-brown; black. (0510A)
34. Rim from a platter of Cam. form 7B, in TR1 (C). Orange, iron rich, fine-grained matrix, with darker red slip on the upper visible surface. Highly polished finish. (0510A)

*Semicircular bedding-trench 0511, 0531, 0609 and 0622.* (Fig. 14:35-43)

35. Form 6. Fabric 1. Frequent grog<3 mm. Hard. Smooth ext., with traces of burnishing; rough int., with smooth, burnished surface on int. of rim. Light grey and orange-brown; light grey; light and dark grey. (0531)
36. Form 6. Fabric 1. Frequent grog<1 mm. Very hard. Smooth, burnished ext.; harsh int. Orange and light grey; as ext. (0622)
37. Form 6? Fabric 1. Frequent grog<1 mm; occasional shell<1 mm. Hard. Soapy, burnished ext.; smooth int., with burnishing on int. of rim. Orange-brown; light grey; as ext.
38. Form 6? Fabric 1. Frequent grog<1 mm. Hard. Soapy, burnished ext.; smooth int. Orange; dark grey; buff. (0531)
39. Form 6. Fabric 1. Frequent grog<3 mm; occasional shell<1 mm. Hard. Soapy, burnished ext.; smooth int. with burnishing on int. of rim. Dark grey and dark brown; light and dark grey; light grey. (0531)
40. Form 6. Fabric 1. Frequent grog<1 mm; occasional shell<2 mm. Hard. Soapy, burnished ext.; smooth int., with burnishing on int. of rim. Orange; light grey; orange. (0622)
41. Form 6. Fabric 1. Frequent grog<1 mm. Hard. Soapy, burnished ext.; smooth int. Orange and dark brown; dark grey; orange. (0622)
42. Form 8. Fabric 1. Frequent grog<3 mm; occasional grog<5 mm and shell<1 mm. Hard. Smooth. Light brown and buff; light grey; as brk. (0531)
43. Form 12. Fabric 1. Frequent grog<1 mm; occasional shell<3 mm. Hard. Soapy, burnished ext.; smooth int. Dark and light grey; light grey; as brk. Two very shallow grooves, separated by a slight cordon. (0622)

*Hollow 0615* (Fig. 15:44-9)

44. Form 5. Fabric 1. Frequent grog<2 mm. Hard. Soapy, burnished ext.; smooth int. Light grey throughout; slightly paler in brk. (0615)
45. Form 6. Fabric 1. Frequent grog<1 mm. Hard. Soapy, burnished ext.; harsh int. Dark grey, black and light

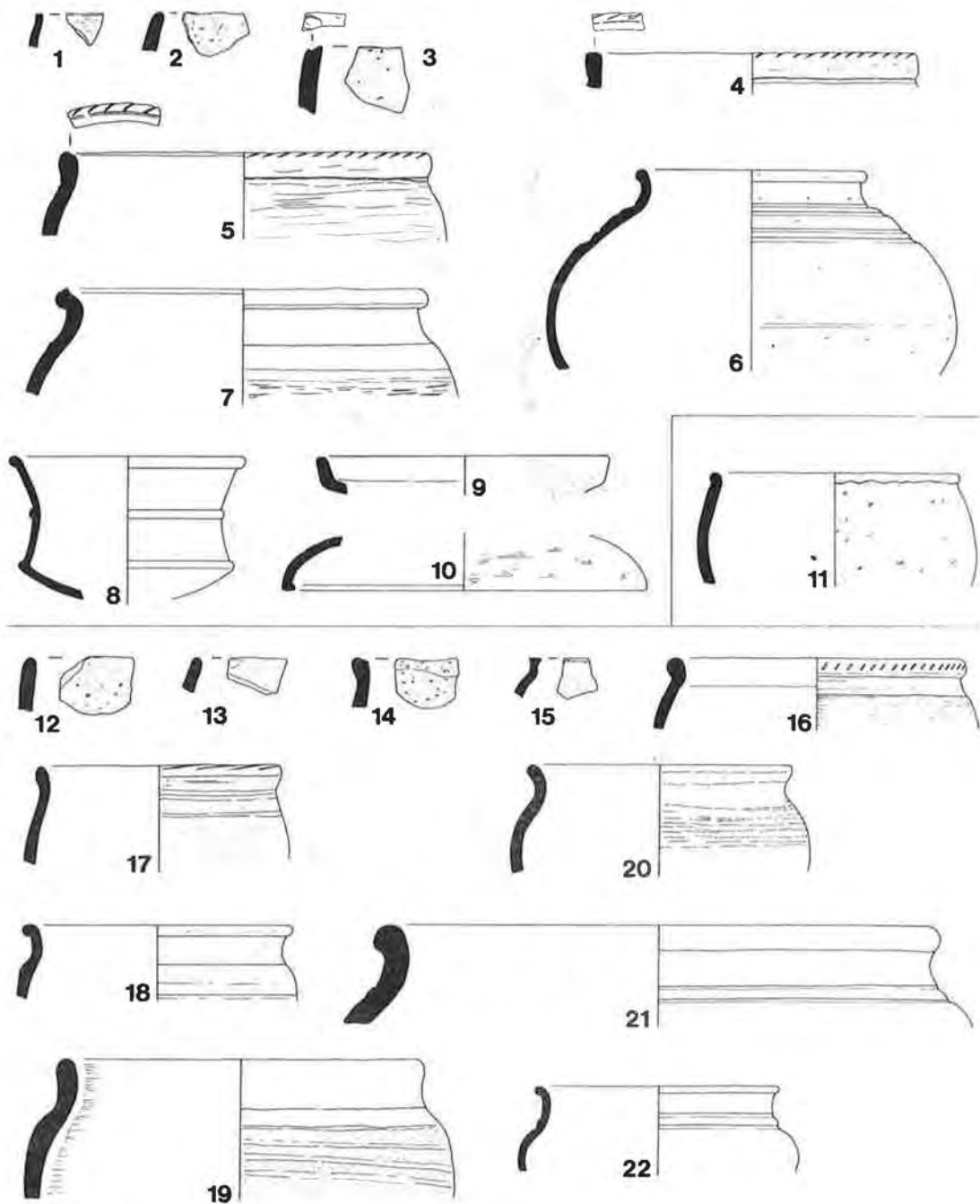


Fig. 13. Late Iron Age pottery. (Scale 1:4)

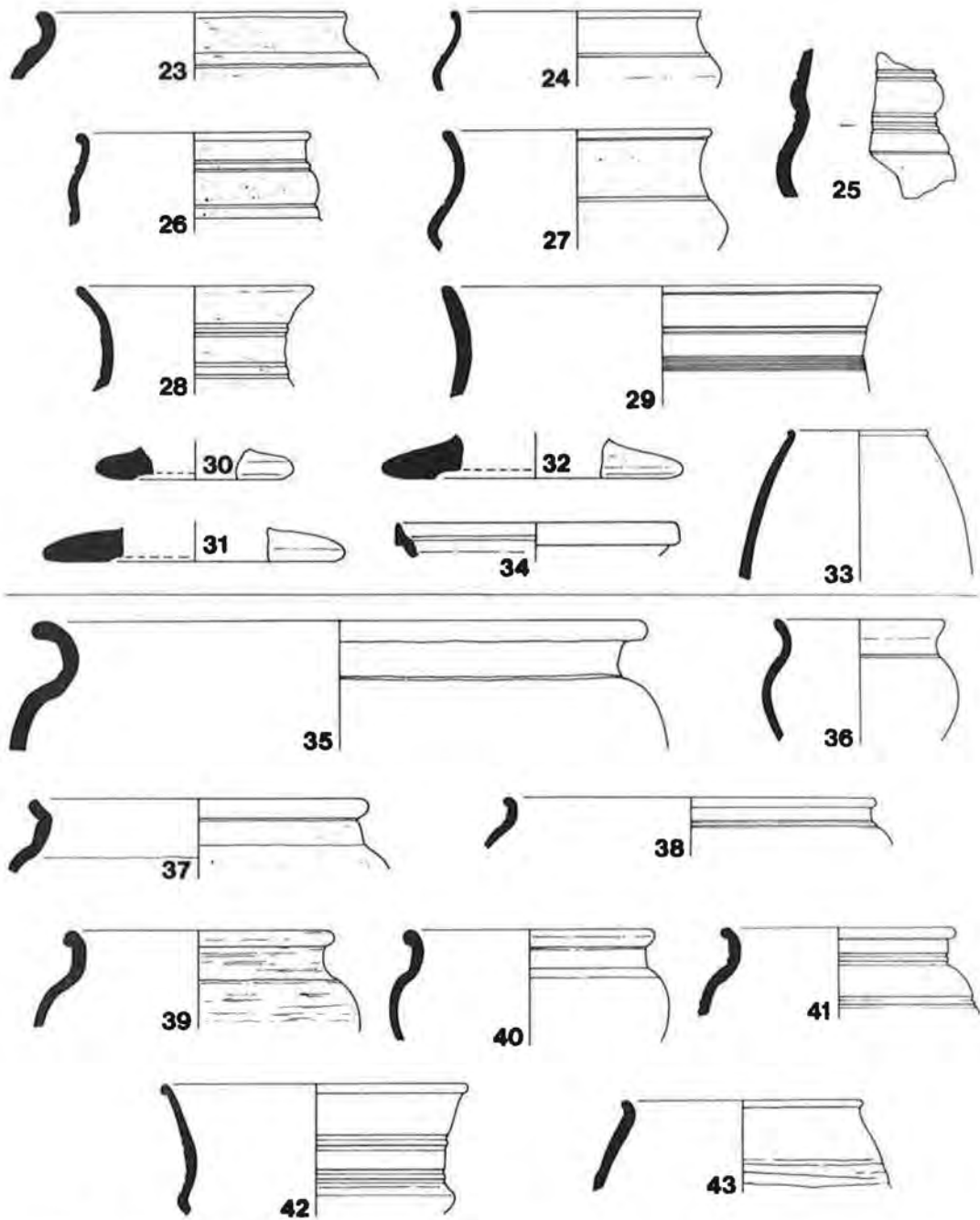


Fig. 14. Late Iron Age pottery. (Scale 1:4).



- brown; light and dark grey; dark grey. (0615)
46. Form 6? Fabric 1. Frequent grog<2 mm. Hard. Smooth, with traces of burnishing on partially worn ext. Orange-brown; dark grey; orange-brown. (0615)
47. Form 8. Fabric 1. Frequent grog<1 mm. Hard. Soapy, burnished ext.; smooth int. Dark brown and orange-brown; dark grey; as ext. (0615)
48. Form 10. Fabric 1. Frequent grog<1 mm. Hard. Smooth. Dark grey; light grey; dark grey. (0615)
49. Form 11. Fabric 1. Frequent grog<2 mm. Hard. Smooth, with traces of burnishing on ext. Orange-brown and dark brown; dark grey; orange-brown and dark grey. (0615)

*Ditch 0621 (Fig. 15:50-5)*

50. Form 5. Fabric 1. Frequent grog<2 mm; occasional shell<2 mm. Hard. Rough. Dark grey and buff; light and dark grey; orange-brown and light brown. (0621C)
51. Form 6. Fabric 1. Frequent grog<2 mm; occasional shell<2 mm; smooth, with traces of burnishing on ext. of neck. Dark grey; black; as ext. (0621C)
52. Form 6. Fabric 1. Frequent grog<2 mm. Very hard. Soapy, burnished ext. Rough int., soapy and burnished on int. of rim. Orange-brown; dark grey; as ext. (0621A)
53. Form 6. Fabric 1. Frequent grog<2 mm. Hard. Smooth. Dark grey, light brown and black; black; orange-brown and dark grey. (0621C)
54. Form 8? Fabric 1. Frequent grog<1 mm. Soapy, burnished ext.; smooth int. Black and buff; black; as ext. (0621A)
55. Form ? Fabric 1. Frequent grog<2 mm and occasional grog up to 6 mm; fairly frequent shell<3 mm. Hard. Smooth and burnished int. and ext. Black throughout. (0621C)

*Circular 'Eavesdrip' (?) Gully 0946 and 1415 (Fig. 15:56-60)*

56. Strap handle. Fabric 3. Frequent shell<1 mm. Hard. Smooth, with traces of burnishing; outer face quite worn. Dark brown. (0946)
57. Form 7. Fabric 1. Frequent grog<1 mm; occasional shell<2 mm. Hard. Smooth ext.; rough int. Dark and light grey throughout. (1415)
58. Form 8. Fabric 2. Occasional grog<1 mm. Hard. Smooth ext., with traces of burnishing; rough int. Dark and light grey; as ext.; dark grey. (0946)
59. Form 8. Fabric 1. Frequent grog<2 mm; occasional shell<2 mm. Smooth ext.; rough int. Hard. Orange-brown, buff, light and dark grey; light grey; as ext. (0946)
60. Form 9. Fabric 1. Frequent grog<1 mm. Hard. Smooth. Dark grey; light grey; dark grey. (1417 (1 sherd) and 1415 (1 sherd) )

*Ditch 1416 (Fig. 15:61-5)*

61. Form 5. Fabric 1. Frequent grog<2 mm; sparse shell<1 mm. Hard. Smooth ext., with traces of burnishing; int. rough. Dark grey and orange-brown; light and dark grey; orange-brown and light brown. (1416)
62. Form 6. Fabric 2. Scattered grog<1 mm and shell<1 mm; occasional shell fragments up to 1 cm. Hard.

- Smooth. Black, dark and light grey, light brown; light and dark grey; light and dark grey, orange-brown, and black. (1416)
63. Form 6. Fabric 2. Sparse grog and shell<1 mm. Hard. Smooth. Black, light brown, dark and light grey; dark grey; black, light grey and light brown. Row of FN incisions along shoulder. (1416)
64. Form 14. Fabric 1. Frequent grog<2 mm. Hard. Smooth. Dark and light grey, and buff; light grey; dark grey. (1416)
65. Form 15. Fabric 1. Frequent grog<1 mm; scattered shell<1 mm. Hard. Soapy, burnished ext.; smooth int., with traces of burnishing. Dark and light grey and orange-brown throughout. (1416)

*Miscellaneous Iron Age Pottery (Fig. 16:66-98)*

66. Form 1 (neckless). Frequent quartz and quartzite up to 3 mm. Very hard. Harsh. Dark and light grey and buff; dark and light grey; light grey. Single pinched-out imperforate handle. (0249)
67. Form 1? Fabric 1. Frequent grog<2 mm. Hard. Smooth, with shallow, burnished groove along base of rim. Dark grey; dark brown; light grey. (0250)
68. Form 1? Fabric 4. Frequent flint<3 mm. Very hard. Harsh. Orange-brown; buff; as ext. FN incision on rim. (0618)
69. Form 1? Fabric 3. Frequent shell<4 mm; fairly frequent grog<2 mm. Hard. Rough. Light grey; black; dark grey and black. FT impressions along rim. (0501)
70. Form 2. Fabric 3. Frequent shell<4 mm; less frequent flint<2 mm. Hard. Smooth, with traces of burnishing on ext. Black; black and dark brown; dark grey. Row of FN incisions along rim. (0943)
71. Form 3. Fabric 1. Frequent grog<3 mm; occasional shell<2 mm. Hard. Smooth, with traces of burnishing. Orange-brown and dark brown; dark grey; as ext. (0245)
72. Form 3. Fabric 4. Frequent flint<3 mm. Very hard. Harsh. Light grey throughout. Row of FT impressions along shoulder. (0452)
73. Form 4. Fabric 3. Frequent shell<3 mm; occasional shell<5 mm. Hard. Rough. Black throughout. (1514)
74. Form 4. Fabric 2. Frequent quartz and quartzite<3 mm. Very hard. Harsh. Buff and light grey; dark grey; buff. (1403)
75. Form? Fabric 4. Frequent flint<1 mm. Very hard. Harsh. Dark grey; as ext.; dark grey and orange-brown. FN incision on rim. (0501)
76. Form ? Fabric 4. Frequent flint<2 mm. Very hard. Harsh. Light grey. Row of FN incisions along lip. (0845)
77. Form 11. Fabric 1. Frequent grog<1 mm. Hard. Smooth, burnished ext.; smooth int. Light brown and dark grey; dark grey; dark grey and light brown. (1403)
78. Form 11. Fabric 2. Hard. Soapy, burnished ext. and int. Orange; light grey; as ext. (0601)
79. Form 11. Fabric 1. Frequent grog<1 mm. Hard. Smooth. Dark grey; light grey; as ext. (0601)
80. Form 11. Fabric 1. Frequent grog<1 mm; occasional quartz<2 mm. Hard. Smooth, burnished ext. and int. Dark and light grey throughout. (0601)
81. Form 12. Fabric 2. Very hard. Harsh, except for a

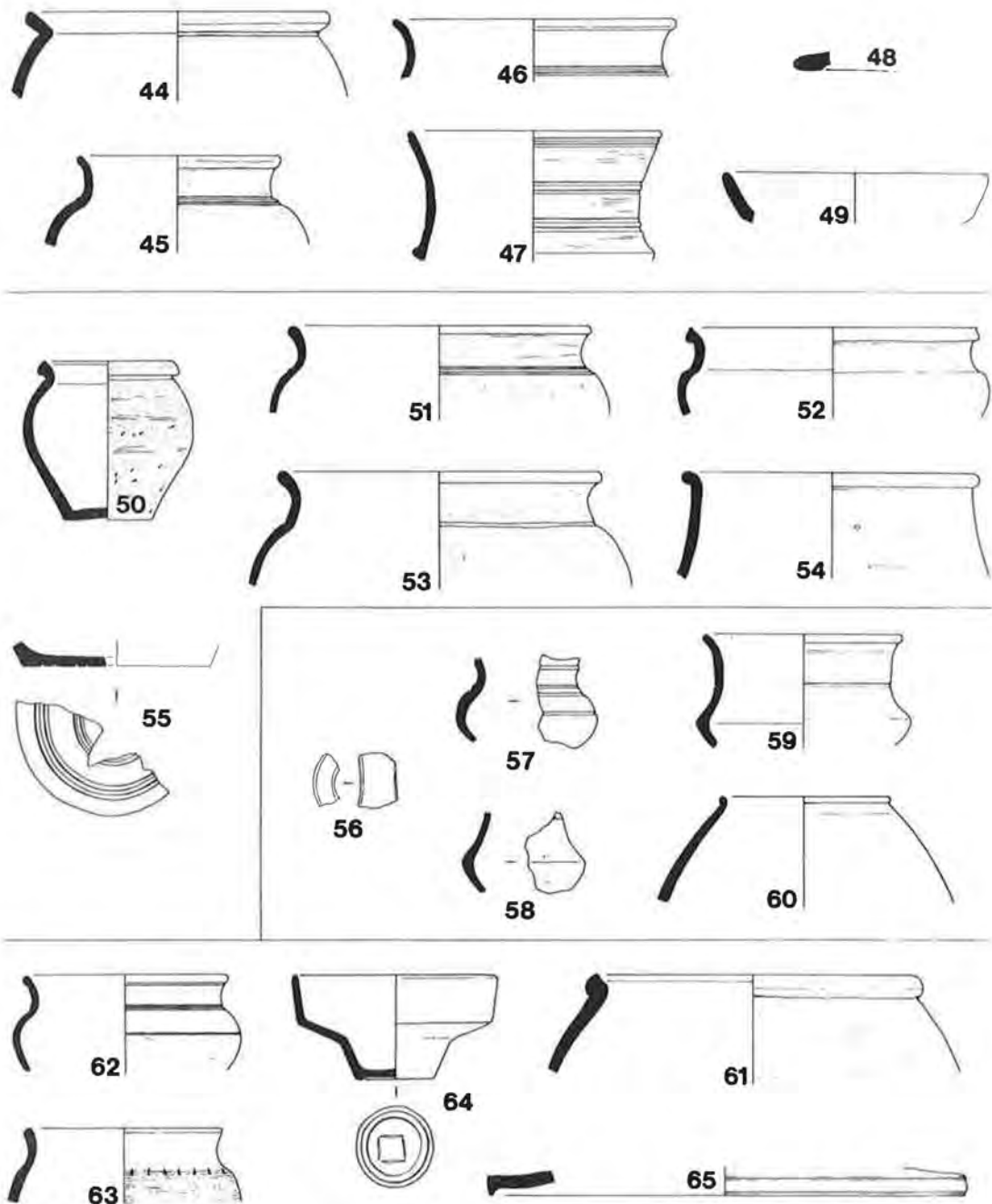


Fig. 15. Late Iron Age pottery. (Scale 1:4)

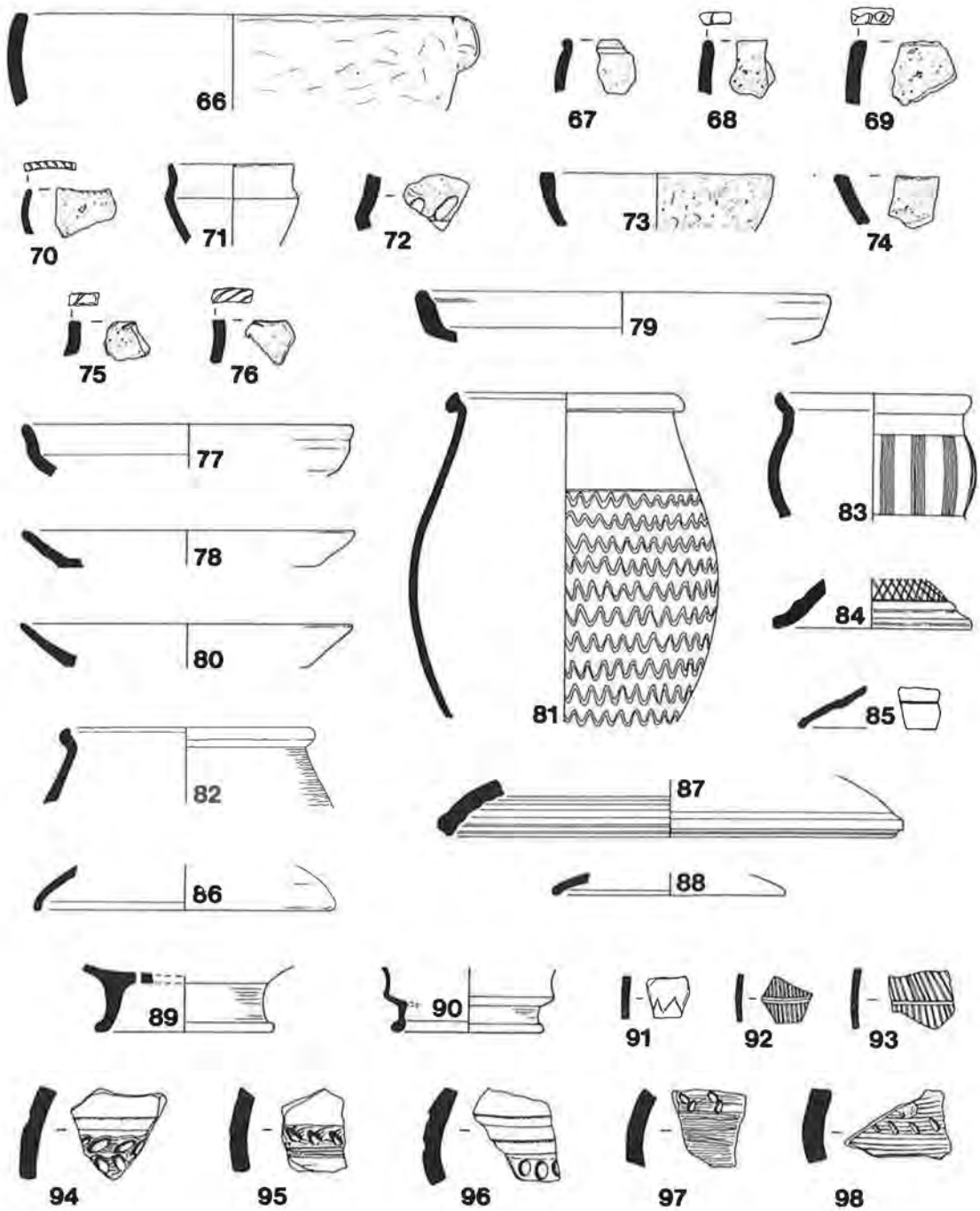


Fig. 16. Late Iron Age pottery. (Scale 1:4)

- smooth area on ext. above zone of grooved decoration; parts of int. worn. Orange-brown; light grey; as ext. (1427)
82. Form 12. Fabric 1. Frequent grog<1 mm. Hard. Smooth, with burnishing on int of rim. Light grey and orange-brown; light grey; orange-brown and dark grey. (1508)
83. Form 13. Fabric 1. Frequent grog<1 mm, and occasional grog<2 mm; occasional quartzite<2 mm. Harsh. Soapy, burnished ext., with some worn patches; int. worn, except for soapy, burnished rim. Orange; dark grey; orange. Groups of vertical combed lines. (0324 (1 sherd) and 0443 (1 sherd) )
84. Form 15. Fabric 1. Frequent grog<1 mm. Hard. Soapy, burnished ext.; smooth int. Black and light grey; light grey; as ext. Burnished lattice pattern. (0533)
85. Form 15. Fabric 1. Frequent grog<2 mm. Hard. Smooth ext. and soapy int.; burnishing on both faces. Dark and light grey; light grey; dark grey. (0901)
86. Form 15. Fabric 1. Frequent grog<1 mm; occasional flint<1 mm. Hard. Smooth, burnished int. and ext. Black; light grey; black. (1514)
87. Form 15. Fabric 1. Frequent grog<1 mm; occasional grog<3 mm. Very hard. Smooth. Orange; light grey; orange. (1514)
88. Form 15. Fabric 1. Frequent grog<1 mm; occasional shell<1 mm. Hard. Ext. worn, but some traces of original smooth, burnished surface; int. smooth with traces of burnishing. Orange; dark grey; orange. (0501)
89. Pedestal base. Fabric 1. Frequent grog<1 mm. Hard. Soapy, burnished ext.; rough int. and underside. Dark brown and orange-brown; orange-brown and dark brown int. and brk.; dark and light grey underside. At least one perforation. (0430)
90. Base sherds from a pedestal cup, Cam. form 74, in TR 1 (A). Pale iron-free matrix. Red slip on visible outer surface, with polished finish. (1418)
91. Form ? Fabric 2. Scattered grog<1 mm. Hard. Smooth, with burnished ext. Orange; light grey; orange. Comb-impressed decoration. (0501)
92. Form ? Fabric 2. Very hard. Harsh. Orange; light grey; as ext. Close-set vertical combed lines. (1403)
93. Form ? Fabric 1. Frequent grog<1 mm; occasional shell<1 mm. Hard. Smooth. Dark grey; as ext.; light brown. Horizontal groove; diagonal and vertical incised lines. (0601)
94. Form ? Fabric 1. Frequent grog<3 mm; occasional shell<2 mm. Soft. Smooth ext. above lightly burnished horizontal groove; otherwise rough. Dark grey; as ext.; orange-brown. Oval tool impressions. (1501)
95. Form ? Fabric 1. Frequent grog<1 mm; occasional quartz<3 mm. Hard. Ext. smooth either side of row of tool impressions; otherwise rough. Orange; orange and light grey; as brk. (0601)
96. Form ? Fabric 1. Occasional shell<2 mm. Very hard. Smooth ext., with row of FT impressions; harsh int. Light brown and dark grey; black; as brk. (1403)
97. Form ? Fabric 1. Frequent grog<1 mm; occasional quartz<2 mm. Hard. Rough. Light grey and orange-brown; light grey; dark grey. Horizontal combing and two rows of oval tool impressions on ext. (0601)
98. Form ? Fabric 1. Frequent grog<3 mm; occasional shell<1 mm. Very hard. Harsh. Orange-brown; light grey; as brk. Horizontal combing and row FN incisions on ext. (0451)

### *Objects of Clay, Iron and Copper Alloy (Fig. 17)*

Three spindle-whorls made from sherds of pottery were recovered, all broken in half. Two came from Late Iron Age contexts, the other from the topsoil. Stratified iron objects were few, but did include a ring-headed pin (Fig. 17:5), of a type common at Skeleton Green (Partridge 1981, 114). Copper alloy objects were also scarce, and apart from the brooches (see below) and *potin* coin, comprised only three fragmentary objects (Fig. 17:7-9).

#### *Pottery-herd Spindle-whorls*

1. Spindle-whorl fashioned from a sherd of pottery, broken. 48 mm diameter, perforation 8 mm diameter (approx.). Burnt. (0946)
2. Spindle-whorl, as above, broken. 42 mm diameter, perforation 5 mm diameter. (1503)
3. Spindle-whorl, as above, broken. 58 mm diameter, with bevelled edge (damaged). Perforation 8 mm diameter at centre, hour-glass shape. (1516)

#### *Objects of Iron*

4. Mushroom-headed pin with square-section shank. (0478E)
5. Ring-headed pin with straight shank. (0610A)
6. Spiral ring. Probably part of an ox goad. (0621C)

#### *Objects of Copper Alloy*

7. Penannular object, ovoid-section rod, 27 mm maximum width. One end flattened, the other broken. (0472)
8. Tweezers (broken, remaining arm bent double), original length 40 mm. (1418)
9. Fragment of hollow bead. (1426)

#### *Brooches*

Four complete or fragmentary brooches were recovered from Iron Age contexts. They are listed here but their full description is to be found in the brooch report included in the Roman finds section below, p. 69.

(Fig. 36)

1. Colchester brooch. (0510C)
5. Nauheim derivative brooch. (0615)
6. Probable Nauheim derivative brooch. (0610)
9. Hod Hill brooch. (0459A)

#### *The 'Potin' Coin*

One Late Iron Age coin was discovered, a British *potin* coin of Class II P. (Allen 1971, 127). (0459A)

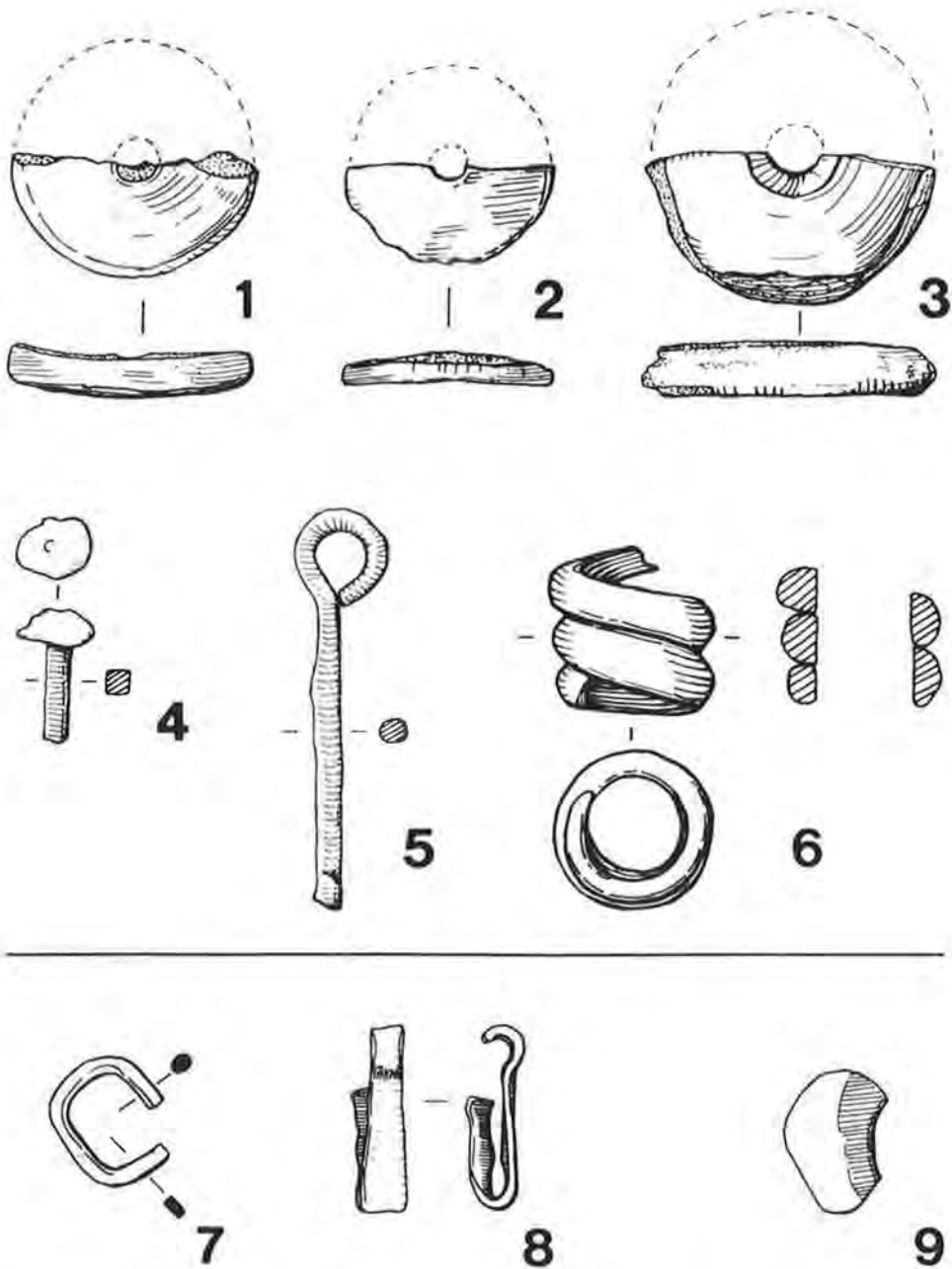


Fig. 17. Late Iron Age ceramic and metal objects: 1-3, pottery spindle-whorls (scale 2:3); 4-6, iron (scale 2:3); 7-9, bronze (scale 1:1).



*Objects of Worked Bone and Antler (Fig. 18)*  
S. Greep

1. Thick round disc c.46 mm diam. probably cut from an antler crown. The edges have been removed and smoothed. A small hole c.5 mm has been centrally drilled. This piece most likely served as a spindle-whorl. (0533)
2. Point manufactured from an ovicaprid metapodial, 75 mm long, complete. These are a common and well known form, although this example is quite short and the working surface has been cut at a much sharper angle than normal. Such points have been variously interpreted but are usually termed 'gouges' (e.g. Wheeler 1943, 303-6) or pin-beaters (Crowfoot 1945) for beating the weft into the warp in weaving. There are, however, many alternative suggestions as to their use (Greep forthcoming) and the wide variety of shapes and sizes probably indicates that they served a number of functions. (0621)
3. Distal end of an ovicaprid tibia, 70 mm long. A single irregular perforation has been made near the surviving epiphysis. This is most likely a point similar to no. 2 above, the working surface now being lost. (0510A)
4. Ovicaprid tibia, 98 mm long, broken. A rough latitudinal perforation has been made at the surviving, distal, end. The proximal end has been lost but would most likely have been made into a point as no. 2 above. These forms first appear in the Bronze Age, lasting well into the Roman period and later, but most are characteristic of the Iron Age. (0471)
5. Shaft of an ovicaprid tibia, 91 mm long. Both epiphyses are lost but the shaft displays a certain degree of artificial polish and might be compared with a small number of similarly 'worn and grooved' ovicaprid bones of Iron Age date from elsewhere (Wheeler 1943, 306, Pl. XXXVA, 4-5). (0623)
6. A sawn tip of red deer antler, 60 mm long. A waste product. (0510A)
7. A large piece of red deer antler, with beam and brow and bez tines all sawn, the saw leaving a 2 mm slot. A waste product. (0945)

*The Iron Age Animal Bones*  
G. G. Jones

A total of c.12,000 bones were collected during the excavation. Some 2,500 were from well-stratified first-century B.C./A.D. pre-Roman features (ditches, gullies and pits). The animal bone report deals chiefly with this material, an interesting group, since few animal bone samples of this date have yet been studied. Animal bones from Roman, medieval and post-medieval features are discussed in the relevant sections of the report. I acknowledge with thanks the help of Dr G. Cowles of the British Museum (Natural History) Ornithology Section and of Mr R. Wilson and Mr I. Hull of Oxford University Museum.

Table 1 summarises the material from the Late Iron Age features.

Table 1. Late Iron Age species present.

	Cattle	Sheep	Pig	Horse	Other sp.
BN	445 31%	607 43%	304 22%	22 2%	33 3%
MN	31 21%	64 44%	29 20%	8 5%	22 14%
Horn core	8	17	-	-	Deer 5
Skull	30	43	39	6	Dog 8
Jaw	70	97	66	-	Cat 1
Tooth	79	62	35	5	Hare 2
Vertebrae	10	23	4	-	
Scapula	40	29	21	2	Fowl 6
Humerus	19	38	14	-	Goose 2
Radius/ulna	44	60	15	-	Duck 5
Pelvis	26	16	9	1	Raven 3
Femur	15	31	10	-	
Tibia (fibula)	14	83	13	1	Frog/ toad 2
Carpal/tars.	32	13	18	-	
Metapodial	33	81	46	4	
Phalanx	25	14	14	3	

Total number of bones = 1411

Note: BN = number of bones; MN = minimum number of individuals.

*Materials and Method*

Bone preservation was fairly good; root marks and small pits were common on the bone, though it was hard and strong.

The minimum number of individuals for each species was obtained from the most commonly occurring skeletal element, for each main feature, with due regard to evidence of age, and then by addition. Small features were grouped together; there were 18 such main and grouped small features.

The Iron Age bone was mostly from ditches. There was sufficient stratification on the site to put some of these into sequence, but only in a tentative fashion. In the three ditch samples with more than 100 bones, sheep account for nearly half the bone numbers (Table 2). The sample from the phase 4 ditch showed a decrease in cattle and increase in pig. The same sample also produced a greater range of other species, plus all the bird bones. It may be that in

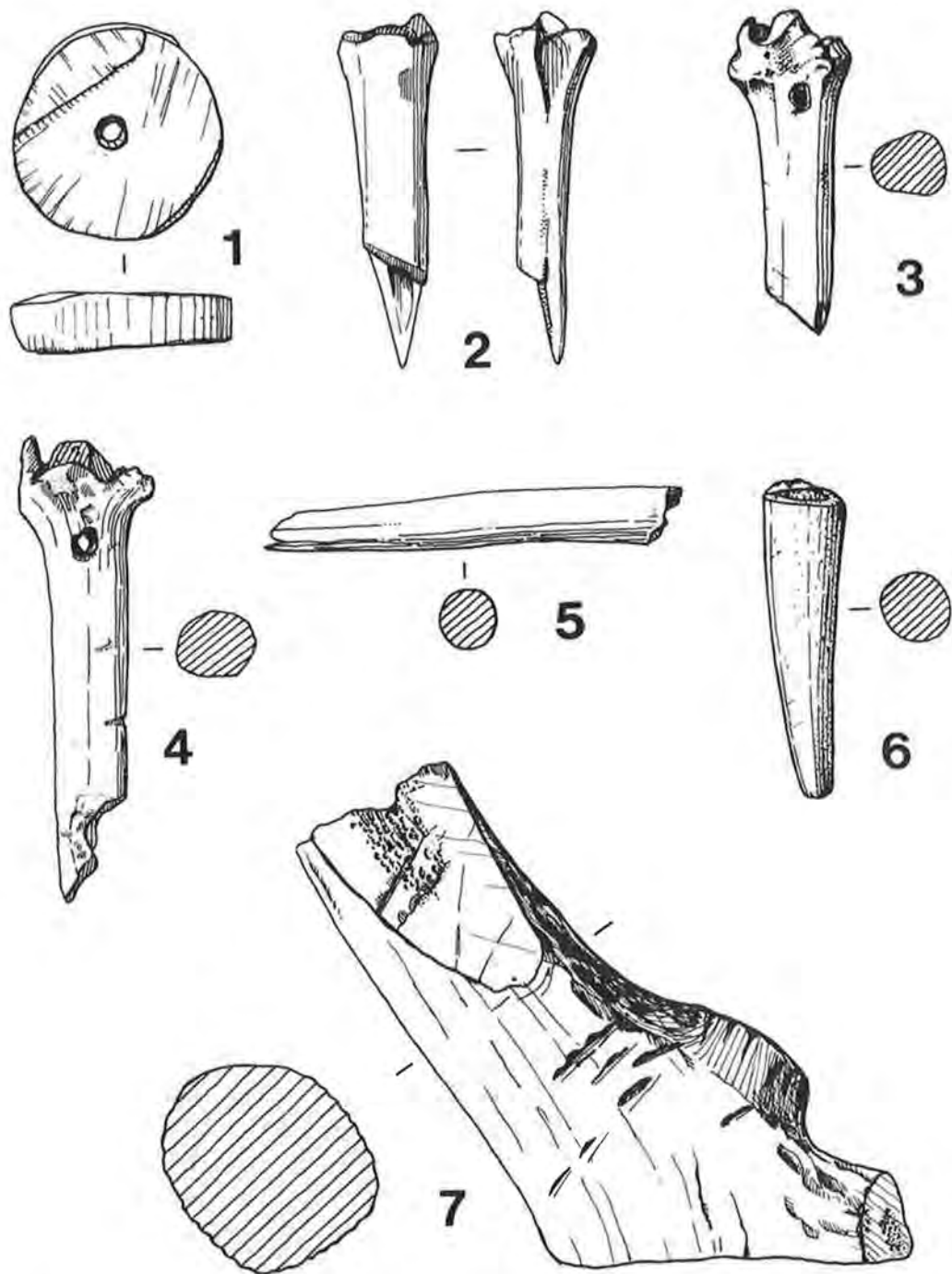


Fig. 18. Late Iron Age worked bone and antler. (Scale 2:3)

Table 2. Analysis of the animal bone content of the main features.

	Phase	N	Percentage			Other Species
			Cattle	Sheep	Pig	
Ditch 0621	2	137	37	43	19	<1 dog
Ditch/pits 0615, 17, 24, 25	2/3	163	34	48	18	<1 horse, hare
Ditches 0459, 78	2-4	142	42	37	13	8 horse, dog, duck
House gully 0511, 31, 0609, 22	4	59	24	55	21	<1 deer
Ditch 0460, 0510, 0610	4	459	24	47	23	6 horse, dog, deer, hare, frog, fowl, goose, duck, raven
Combined pits/postholes		111	45	28	22	5 deer, goose

this particular ditch, conditions for survival of bone were good, and that the decrease in cattle and increase in pig reflects better survival of bone, not a change in numbers of each species buried. Recent work by Maltby (1981, 165) and Wilson (1978) has demonstrated the amount of variation that can occur within a site. The pits, some of which were certainly postholes, contained an untypical bone sample, half the bones being of cattle.

Evidence of bone working was found. The bone objects are described elsewhere (p. 32); unfinished or waste pieces were also recovered from the ditch deposits, and these included bones of sheep and cattle, and red deer antler.

#### Cattle

Bone from all parts of the skeleton was found. The anatomical analysis (Table 1) shows jaw bones and teeth to be the commonest finds. Scapulae were represented, but chiefly by fragments. Tibiae were under-represented considering the density of this bone; three distal tibiae fragments were found against eleven astragali. Variation could be accounted for by the small size of the sample, and by differences in durability and recovery.

#### Skulls:

Parts of the skulls of three cattle were recovered, all from one layer (1416), a shallow

gully forming part of a rectangular enclosure (Fig. 8). The horn cores had been chopped at the base to remove the horn sheath. Measurements of the horn cores are given on microfiche (fiche p. 28, E2). The skulls were adult but not aged. Skull shape has been described and classified by Grigson (1976) on modern cattle, although little work has been published applying the method to archaeological material. Using Grigson's method, on skull 1 the frontal profile from the front showed a 'slight boss' and from above shows a 'low and double curve'; the horn direction was straight out. Skull 2 was almost certainly a cow; the frontal profile from above showed a slight boss and from the front a high single or double arch; the horn curved forward, with some torsion (Armitage and Clutton-Brock 1976). Skull 3 had a frontal profile similar to skull 2, with the horn core curving forward and down. More complete skulls, from Ashville (Wilson 1978), are of similar form. These shapes are found in various modern breeds including the 'old' breeds (e.g. Shetland, Welsh and Chillingham) and excluding the Longhorn.

Cattle jaws were grouped into six age stages (Table 3), defined in Bourdillon and Coy (1980). The figures show the minimum number of individuals at each stage, with data from maxillae and loose lower deciduous third premolars and third molars given in brackets, e.g. in stage 1 no mandibles were present but there

were four maxillae (two of them a pair) with the first molar unerupted. From the total of twenty individuals, 55% died when dentally mature (stages 5 and 6), with the earlier stages about equally represented. One stage 6 mandible was

from a very old beast (numerical value 56, method of Grant, 1975). Long bone data show the sum of elements represented. The two sets of data both show the slaughter or natural death of some cattle in their first or second year.

Table 3. Cattle age data.

Jaws		Long bones	U Y F
1 birth - M <sub>1</sub> in wear	0(+3)	d humerus, p radius, phal 1 and 2	5 3 19
2 birth - M <sub>2</sub> in wear	1(+1)	(which fuse at 1-1½ y, modern figures)	
3 birth - M <sub>3</sub> in wear	2	d metacarpal, d tibia	1 1 4
(2-3 y, modern)		(1-1½ y)	
4 M <sub>3</sub> in partial wear	9(+1)	p femur, calcaneum, p tibia	
5 M <sub>3</sub> in full wear	4(+4)	d radius (3-4 y)	6 1 6
6 M <sub>3</sub> in heavy wear	2(+1)		

M<sub>1</sub> - first molar; d - distal; p - proximal; phal - phalanx; U - unfused; Y - partly fused / fusion line clearly visible; F - fused. In addition there were 5 calf bones (minimum number 3).

The number of measurable bones was small, but some indication of the size of the Iron Age cattle can be suggested. Two metacarpals, a radius and a metatarsal give shoulder heights of 0.98, 1.12, 1.09 and 1.17 m (method of Kiese-walter in von den Driesch and Boessneck 1974); the range of size is as great as that quoted by Wilson (1978) for Iron Age sites in southern England. The usefulness of other measurements is restricted by lack of published data and by differences in the methods used by various workers. The mean measurements on the radius (Bp), astragalus and metatarsal (fiche p. 28, E2) are greater than at Roman Cowbridge and Exeter (Jones, G. forthcoming a; Maltby 1979), both of which were unaffected by the increase in the size of cattle in the Romano-British period. They are comparable with measurements from Roman Billingsgate, London (Armitage 1980).

Evidence for butchery practices was not recorded in great detail. Rather few marks were found, 7 per cent only of cattle bones bearing chopmarks and 3 per cent showing finer marks, probably from a knife. As a general observation, the identified bones and also the cattle-sized ribs were less chopped and in larger pieces (ribs often more than 15 cm long) than at Roman Cowbridge or Saxon Thetford (Jones, G. 1984). This is not thought to be a recovery

bias as, for a hand-dug site, some very small fragments were recovered. The bones were chopped sufficiently to reach the marrow.

The scapulae recovered did not show a general butchery pattern, some having the spine chopped off and some not, some having chop marks on the head and some not, and one bearing a hole in the middle of the blade, probably made when the bone was fresh. One might argue that such variation indicates lack of specialisation in the butchery process.

Three first phalanges had a hole in the distal end. Associated scratches and opposing dents make it most likely that this is the work of dogs.

#### Variation and Pathology:

Two cases of dental variation were observed, both of the lower third molar; in one the fifth cusp was absent and in another it was reduced to a small lip at the occlusal surface (wear stage g, method of Grant, 1975). Nine lower third molars were normal. Absence of the second premolar was not observed (sample size, 8).

Part of a skull was found which had an oval opening, measuring 6.5 × 3.3 mm into the frontal sinus, in the anterior part of the lacrimal bone near the orbit. The bone in the area of

the hole had the rough texture observed by Grigson (1976) on skulls of old animals. The jugal border of the orbit was rough, and pointed in cross-section, which is a characteristic of older bulls (*ibid.*). The opening probably caused no ill effects.

The only cattle bone with signs of disease was a first phalanx affected by osteoarthritis. The proximal lateral joint surface showed eburnation and slight grooving, the result of breakdown of cartilage and the rubbing of bone against bone. There was an extension of the joint surface and swelling of the bone on the proximal/dorsal border and also some extra growth of bone on the distal medial part. It was quite a small bone (GLpe 55, Bp—excluding the swelling—27 mm, measuring points defined on fiche p. 28–29 (E2–3)). Cases of osteoarthritis are mentioned by Baker and Brothwell (1980) from several archaeological sites.

#### Sheep/Goat

Goats were present, though they were probably kept in small numbers. Of eighteen horn cores found, one was from a goat, the others from sheep. No other bones were certainly caprine.

Part of the skull of a polled sheep was found in the phase 4, i.e. very late pre-Roman Iron Age, ditch 0610. The frontal bone was smooth with no horn core or scar. The skull was identified as sheep and not goat with some confidence, from the presence of the crista lacrimalis, the absence of the fontanella nasolacrimalis and the form of the frontal bones and the frontal/lacrimal suture (Boessneck

*et al.* 1964 and comparative material in Oxford University Museum).

The anatomical analysis in Table 1 shows all parts of the skeleton to be present, the most durable parts being the most numerous. The finding of a moderately large sample of lower jaws is of interest and throws some light on the question of change in the observed age patterns from Iron Age to Roman sites.

Table 4. Sheep/goat age data from long bones.

	U	Y	F
Distal humerus, proximal radius	1	6	23
distal tibia, metacarpal	11	3	6
d radius, p femur, calcaneum, p humerus	12	0	6

For legend, see Table 3. In addition, six bones of very young lambs were found.

Fig. 19 and Table 4 show age data from the mandibles and long bones. The former were studied using Grant's method (1975). In two cases where two jaws from the same feature looked to be from one individual, one was excluded. One jaw was from a young lamb; jaws from young, immature, sub-adult and adult sheep were found in fairly even proportions. 71 per cent had died before reaching full maturity.

A summary of bone measurements is given on fiche (fiche p. 28, E2). Maltby's (1981) study of the distal width of sheep tibiae from various sites shows a gradual increase in size through the Iron Age, Roman and Anglo-Saxon periods. The Berton sample has a mean greater

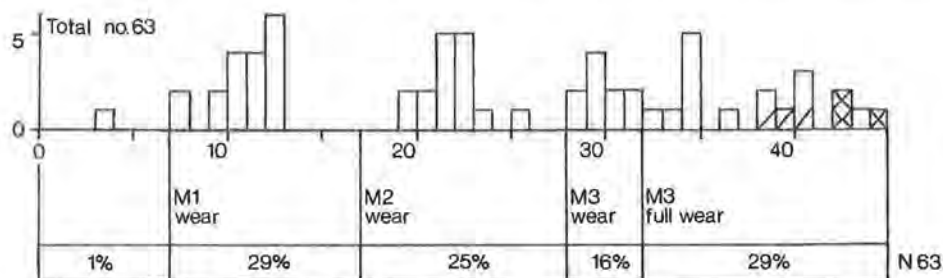


Fig. 19. Sheep/goat age data from mandibles. M<sub>1</sub> – first molar; wr – coming into wear; / – slight periodontal disease (Pl. XIa); x – considerable periodontal disease (Pl. XIb).



than most of the Iron Age sites quoted and smaller than most of the Roman ones. The metapodials are within the range of size found at Ashville (Wilson 1978) and the mean of the distal humerus is greater than that from the third to first-century B.C. phases at Old Down Farm, Winnall Down and Balksbury (BT:N-35; R-23.9-29.9; M 24.7; Maltby personal communication). There is some evidence, then, of a gradual increase in size in the first century A.D. before the Roman conquest.

Marks on the bones were fairly uncommon; 3 per cent bore chopmarks and 3 per cent finer marks. Parts of four skulls were chopped roughly through the midline.

#### Variation and Pathology:

The incidence of periodontal disease, 10 per cent, is shown in Fig. 19. It is clearly age-related. In all cases it has affected the area between the fourth premolar and the first molar. The oral health of the sheep was not as good as at Gussage All Saints, where only one jaw exhibited considerable periodontal disease in a sample of 394 jaws (Harcourt 1979).

In one jaw a small part of the third deciduous premolar was retained above the posterior half of the fourth premolar.

There was variation in the number of teeth present in only one jaw, where the second molar and the fifth cusp of the third molar were absent.

Another example of variation occurred in a jaw with two mental foramina instead of the usual one. Baker and Brothwell (1980, 35) record similar cases in cattle from archaeological sites.

#### Pig

Table 5 shows rather fewer jaws in the two youngest age stages than one might expect. The sample size is small and there may be an influence from poorer survival of young pig jaws, but the recovered sample suggests that pigs were generally allowed to reach an age of two or three years before slaughter. More than

a third of jaws were from pigs that were old enough to have bred, which does not suggest high prolificacy.

Two cases of overcrowding of teeth were observed.

As is usual with pigs, few bones were measurable; these are within the range for Iron Age sites quoted by Wilson (1978; fiche p. 29, E3).

#### Horse

Horse bones formed only 2 per cent of the identified bone sample, which is less than on most Iron Age sites (King 1978, Table 4). One complete metacarpal (lateral length 133 mm) gives a height estimate of twelve hands (1.24 m). No bones definitely from young horses were present and only one bone was marked; it was a metacarpal bearing two knife cuts, which could have been caused by skinning rather than butchery. The bones were less broken than those from cattle, but the twenty-three bones came from eight different features and were found associated with beef, mutton and pork bones. Horse meat was eaten at some Iron Age sites, e.g. Ashville (Wilson 1978).

#### Dog

Two partial skulls were from large dogs, comparable with the larger ones described by Harcourt (1974) for the Iron Age (skull snout width (XII) / nasion to alveolare (III): 39/95; XII:c.45; measuring points defined by Harcourt, *ibid.*).

Gnawmarks on bones of other species are probably attributable to dogs in most cases. They were observed on 4 per cent of the sample.

#### Deer

All four pieces of red deer were antler, three of them having been sawn or decorated (see p. 32). The roe deer bone was a scapula.

#### Bird

Fowl bones were present in small numbers (0.5 per cent of the identified total). Most of the bird bones were found in the large phase 4 ditch 0460/0510/0610, where it may be that conditions for preservation were unusually good.

Table 5. Pig age data.

Jaws		Long bones	N	Y	F
1	birth - M <sub>1</sub> in wear	0	d humerus, p radius (fuse at c.1 y,		
2	- M <sub>2</sub> in wear	3	modern)	3	4 5
3	- M <sub>3</sub> in wear	8(+3)	d tibia, metapodial III/IV, calcaneum		
	(c.2 y, modern)		(1-1½ y)	18	10 9
4	M <sub>3</sub> in partial wear	3(+2)	ulna (olecranon), d femur, p tibia (c.3½ y)	7	0 0
5	M <sub>3</sub> in full wear	4			
6	M <sub>3</sub> in heavy wear	0			

For legend see Table 3. In addition, two bones from very young pigs were found.

Fowl formed 1.4 per cent of the bones from this ditch.

The one complete bone (a femur, GL 69.2 mm) is near the lower end of measurements of Saxon fowl from Hamwih, Southampton (Bourdillon and Coy 1980). It is of similar size to the Wild Jungle Fowl (*Gallus gallus*), ancestor of the domestic bird.

Chopmarks on the distal end of an immature tibiotarsus, mostly posteriorly, suggest that the feet have been removed.

Two goose bones were found, one of *Anser anser*, the greylag/domestic species, the other of *A. anser* or *A. albifrons*, the White-fronted Goose (carpometacarpus GL 78.2 mm).

The duck bones were all of similar size to bones of mallard (*Anas platyrhynchos*) in the collections at the British Museum (Natural History) at Tring. The question of whether they were hunted, trapped or reared domestically remains open.

Three raven bones from the large phase 4 ditch could be from one individual although they were not found together.

#### Other Species

The cat bone was part of a lower jaw, of domestic cat size.

Two hare bones and two bones of frog or toad were found. Also, rodent gnawmarks were observed on three sheep and pig bones.

The find of the centrum of a plesiosaur vertebra, encrusted with the marine worm *Serpula*, found in ditch 0510, is worth noting. It is, however, a fossil which occurs naturally in the area. (Identified by J. Royston, Buckinghamshire County Museum.)

#### Discussion of the Faunal Evidence

The most numerous species at Bierton, if the bone sample accurately reflects the livestock kept, was the sheep (Table 1). This is common to many Iron Age sites. Cattle formed a third of the sample and, given the greater carcass size, would have provided most meat. The number of pig bones found in excavations is more variable than that of either cattle or sheep and the high proportion found here (20 per cent) is exceeded at few Iron Age sites. This may well reflect the use of the surrounding clay land, evidenced by the plant remains, which may have provided ideal pasturage for these animals.

The age at death of the cattle is consistent with a self-sustaining herd, with some deaths of calves, some slaughtered young for meat and hide, etc., and the majority living five years and more. A case of osteoarthritis, a disease which is age and/or work-related, was observed. If one is right in seeing the mature cattle as plough, draught, milk and breeding stock, dying only after a working life, it seems to follow that although beef was the commonest meat, it would not have been available very often.

The age structure is comparable to that

found at Balksbury (Maltby 1981) and Gussage All Saints (Harcourt 1979), but contrasts with the Upper Thames sites at Ashville and Barton Court Farm (Wilson 1978), where only 28 per cent and 50 per cent, respectively, of the jaws had the third molar erupted, compared with 65 per cent at Bierton. There may have been differences in the use of cattle, for example a need for more draught cattle or even movement of cattle between settlements. Roman sites also vary in the ages of cattle found, although adult cattle generally predominate, as at Bierton (Maltby 1981).

The Bierton sample of sheep jaws shows an age structure which is intermediate between the Iron Age and Roman samples quoted by Maltby. In comparison to the Early and Middle Iron Age phases at Balksbury and Winnall Down, there are fewer young lambs ( $M_1$  not in wear), rather fewer in the young group ( $M_2$  not in wear), but far more in the immature (c.2-4 years) group. The Roman sample from Portchester (Grant 1975), which is typical of several Roman sites, has a greater proportion in the last-mentioned group and still fewer sheep slaughtered at an earlier age. Ashville and Barton Court Farm (Wilson 1978) show an age distribution between Balksbury/Winnall Down and Bierton.

The age pattern suggests that while many lambs died before their second winter, a good number were successfully kept another year or two, thus providing more wool and a better carcass. Additionally, it may be that there was a lower mortality of first-year lambs. This does seem to indicate a real change in husbandry. Possibly it was in response to a greater demand for wool and meat. It must have involved providing more winter pasturage than would have been the case had surplus sheep been culled young, as at the Iron Age sites discussed above.

Other evidence that changes in sheep husbandry seen on Roman sites were present to some extent in the very late pre-Roman Iron Age comes from the somewhat greater size of the Bierton sheep and the presence of a hornless sheep. Increase in size can be the result of better

feeding, but the find of the polled skull lends some support to the suggestion that new blood had been introduced. Wild (1970) discusses the possibility that white, fine-woolled sheep were introduced by the Belgae. Polled sheep have not been found on recently-excavated Iron Age Upper Thames Valley sites (Wilson, personal communication) nor were they present in the very large sample from Gussage All Saints (Harcourt 1979). They have been found on Roman sites, e.g. Frocester (Noddle 1979).

Bones from species other than cattle, sheep and pigs were few. Red and roe deer were taken, although the numbers are small and all the red deer specimens were antler. Roe deer was found at Chinnor in Iron Age deposits (Harding 1972) but was absent from the Upper Thames Valley sites studied by Wilson.

Two bones of hare were found, a species only occasionally found on Iron Age sites. The hare was of significance in Celtic tradition; for example Boudicca, Queen of the Iceni, released a hare before setting out on her campaign, while invoking her goddess, Andraste (Ross 1967, 350).

Fowl and geese were kept in small numbers. Chopmarks on a fowl bone are of some interest, suggesting, though by no means proving, that the bird was eaten. Caesar's observation that the Britons abstained from eating chickens (as also from geese and hares), keeping them for pleasure and amusement (Toynbee 1973, 263), perhaps does not apply to the people at Bierton.

Bones of hare, fowl and raven, although present occasionally on earlier sites, are more commonly found on sites of the Roman period, and this and a number of other characteristics outlined here and below (p. 47) suggest that changes which were believed to occur only on Roman sites were beginning to take place before the Conquest. However, information from this one excavation, and not a particularly large one at that, can only suggest new possibilities, which may or may not be confirmed by future work.

### *The Iron Age Human Bone*

C. H. Dalwood

Human bone was recovered in small quantities from Iron Age contexts, and in addition was found in 'Roman' and 'probable Roman' contexts, where it is considered to represent, almost certainly, residual Iron Age material, and is also described here. The details of the human bone, identified by G. G. Jones, are given on microfiche (fiche p. 27, E1).

The material included three adult skull fragments; one cranial fragment from an Iron Age linear gully (0506), and a cranial fragment and a mandible fragment from layers containing residual Iron Age pottery (0443 and 0432). In addition, two tibiae of foetuses or newborn infants were found: one from an Iron Age gully (0609) and one from another layer containing residual Iron Age pottery (0444). One foetal skeleton was found, in a small Iron Age pit (1538, Fig. 8). Only a partial skeleton was retrieved, but it was probably originally complete, the other bones not being recovered because the burial was not recognised as such during excavation. The age of the foetus is estimated at 7–8 months (fiche p. 27 (E1)).

Cranial fragments from Iron Age sites are relatively common (Wilson 1981, 130), and are known from both the George Street and Prebendal sites in Aylesbury (Allen and Dalwood 1983, 17; Farley forthcoming). The individual foetal/newborn bones found may represent disarticulated bones derived from infant burials (Wilson 1981, 131), such as the foetal burial from Iron Age pit 1538. Infant burials are often found in the interior of Iron Age settlements, including Oxfordshire sites (*ibid.*, 141, Fig. 5, Table 6a). The human material from Bierton is consistent with the overall evidence for burial practices found on Iron Age sites and little can be added to the interpretations discussed elsewhere (Wilson 1981; Whimster 1981).

### *The Plant Remains*

M. K. Jones

#### *Introduction*

In relation to the development of agriculture,

the special interest of the site lies in the location of an Iron Age settlement in a landscape dominated by heavy low-lying soils. The increasing importance of these soils to later prehistoric and early historic farming settlements is generally acknowledged (cf. Jones, M. 1981). As with a number of other sites established in the vicinity of heavy soils by the end of the Iron Age in the Weald, Essex and Northamptonshire (Cunliffe 1976) and elsewhere in the Vale of Aylesbury (Farley *et al.* 1983), the establishment and growth of settlement at Bierton may be related to a growing emphasis on the cultivation of clays and clay loams (Jones, M. 1981).

The excavations at Bierton provided an ideal opportunity to examine the agricultural strategy of a late prehistoric site surrounded by heavy soils, and to observe the development of that strategy in the historic period. A major source of evidence for this examination is the carbonised remains of fruits and seeds recovered from the site. A series of assemblages from each of the phases of settlement was therefore collected and analysed in the context of the local geography and soils, and of the evidence of agricultural practice in the historic period.

#### *Method*

The excavator selected seventeen archaeological contexts for examination, chosen on the criterion of richness of occupation debris within them. Of these contexts, ten were Late Iron Age, three Romano-British, and four medieval. Two-bucket samples of the sediment (c.25 lit.) were extracted and floated over tap water, and the float collected in a sieve of 500 microns mesh aperture. The collected material was scanned at  $\times 20$  magnification, and all carbonised fragments other than wood extracted and identified as far as possible. All the samples contained carbonised material, and often in such quantities that examination under the microscope was necessarily restricted to a random subsample of the floated material.

The identifications are tabulated on microfiche (fiche pp. 30–33, F1–10). One of the Romano-British samples, from context 0451, is

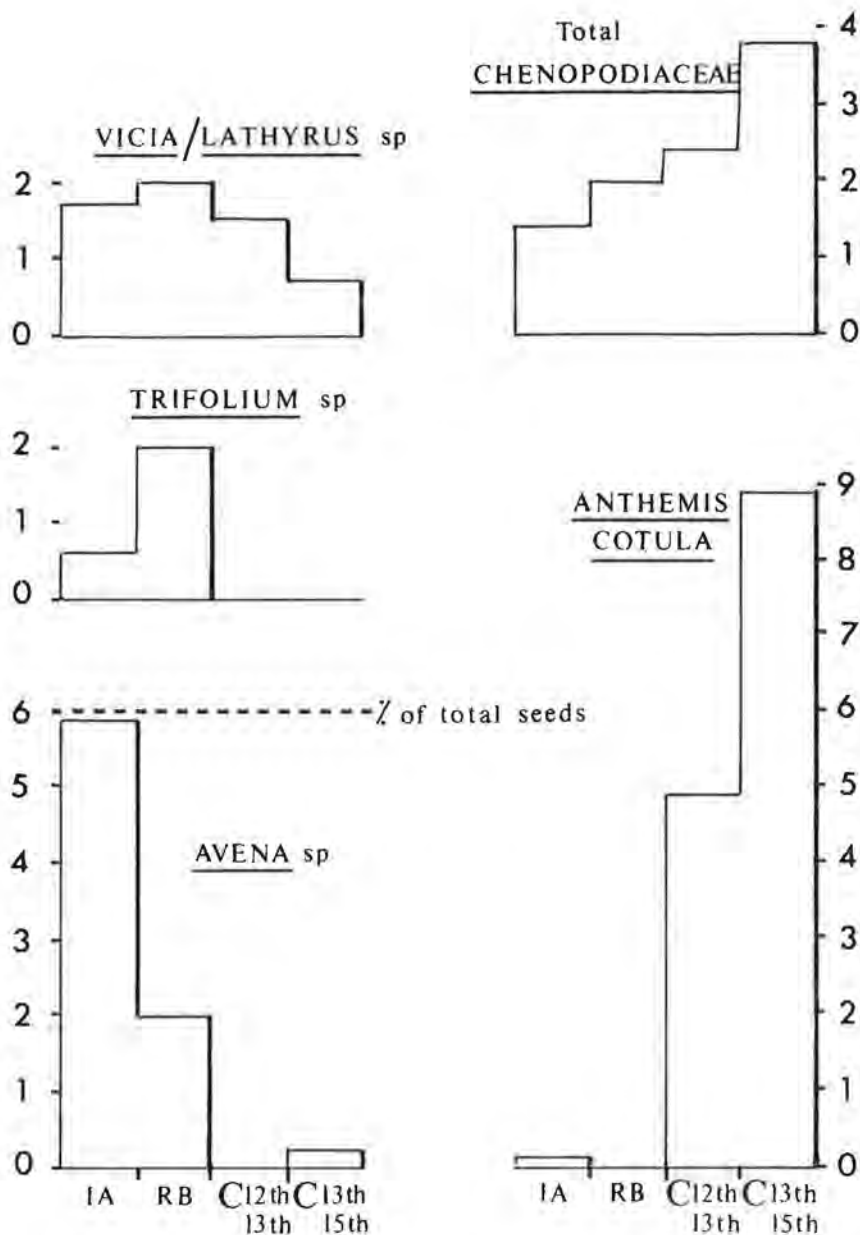


Fig. 20. Plant remains. Selected trends through time.

composed entirely of charred wood and therefore excluded from the tables. At least four taxa of economic plant and thirty-five taxa of weeds were recovered, and these are here dealt with in turn.

#### *The Economic Plants*

A similar range of economic taxa is present throughout the assemblages. In all but two of the contexts (both of Iron Age date) seeds of *Triticum* (wheat) are by far the most frequently



occurring group. The shape of these wheat seeds is clearly indicative of the hexaploid group, and many have the typical rounded shape that allows them to be confidently ascribed to *T. aestivocompactum* (bread wheat s.l.). The glume-bases recovered demonstrate the presence of the other commonly-occurring hexaploid wheat *T. spelta* (spelt wheat) in at least eight of the ten Iron Age assemblages, and in all the later assemblages. The glume/wheat grain ratios are nevertheless low; 0.04 for the Iron Age, 0.2 for the Romano-British period, 0.04 for the medieval period. This suggests that spelt wheat makes up only a small fraction of the wheat grains, and confirms the impression gained from grain shape that bread wheat is both the main wheat and the main cereal present in all periods.

Grains and chaff of *Hordeum* sp. occur in smaller quantities. It is only possible in a few cases to determine whether the grains occurred centrally or laterally on the spike, and whether they are from naked or hulled varieties. Lateral grains, attesting to the existence of six-row barley (*H. polystichum*) were recognised in two of the Iron Age assemblages. The numbers are too small for their absence from later assemblages to be confidently associated with a shift from six-row to two-row barley. There is an apparent shift from hulled barley in the Iron Age to naked barley in the medieval period, though two Iron Age grains appear to be of naked barley.

Rhachis fragments of *Secale cereale* (rye) were recovered from all the medieval assemblages, two of which also contained rye grains. Rye rhachis fragments were not recovered from the earlier assemblages although a single grain from one Iron Age assemblage resembles rye. However, as with most cereal taxa, the most reliable identifications of rye come from the chaff fragments.

The problem of identification in the absence of chaff also applies to the seeds of *Avena* (oat). In the absence of floret bases, it is impossible to be sure whether these seeds are of wild or cultivated oats, although many are certainly large enough to be the latter.

Whatever their status, the frequency of *Avena* seeds clearly diminishes through time (see Fig. 20). They comprise 5.8 per cent of all Iron Age seeds, 2.0 per cent of Romano-British seeds, and only 0.2 per cent (a single seed) of all medieval seeds.

A further taxon that could be either wild or cultivated is *Vicia sativa* (vetch), which occurs in all periods. In modern material, seeds of the cultivated subspecies *sativa* may be separated from seeds of the wild subspecies *angustifolia* on the basis of size (Clapham *et al.* 1962).

The relatively large sizes of the *Vicia sativa* seeds from Berton, in comparison with other carbonised specimens of this species, is suggestive of a cultivated form. However, in view of the general uncertainty associated with changes in seed size during carbonisation, such an inference must remain tentative.

In summary, the major crop taxon in the Iron Age assemblages is bread wheat (*T. aestivocompactum*). Hulled six-row barley (*H. polystichum*) and spelt wheat (*T. spelta*) were also cultivated, and oats (*Avena* sp.) and vetch (*Vicia sativa*) were possibly cultivated. The limited Romano-British evidence exhibits no major deviation from this pattern. In the medieval assemblages, bread wheat remains the principal crop taxon, with spelt wheat and possibly vetch as secondary components. The medieval barley is naked rather than hulled, and rye rather than oats is the fourth cereal. There is tenuous evidence that naked barley and rye were already present at the site in the Iron Age.

#### Weeds

The list of weed taxa is broadly similar to lists from other sites in Southern Britain (e.g. Jones, M. 1978, 1979, 1984 and forthcoming). In addition to a series of taxa, largely from the Chenopodiaceae, Compositae, Graminae and Polygonaceae, that are still common as arable weeds, damp-ground taxa are present that have been recognised elsewhere, particularly in Iron Age and Romano-British carbonised assemblages. These include *Eleocharis palustris*,

*Carex* spp., *Ranunculus* cf. *repens* and *Montia fontana* subsp. *chondrosperma*. Notably absent are a group of dry-ground taxa that are common from the chalkland site of Danebury hillfort (Jones, M. 1984), and present on gravel sites in the Upper Thames Valley (Jones, M. 1978 and 1986). These include *Papaver* spp., *Bromus sterilis*, *Urtica urens*, *Fumaria officinalis* and *Aphanes arvensis*.

The introduction into the British flora of *Agrostemma githago*, recovered from the Iron Age and medieval assemblages, and *Centaurea* cf. *cyanus*, recovered from two Iron Age assemblages, has been associated with rye cultivation (Godwin 1975).

A number of fluctuations through time may be observed within the weed data (see Fig. 20). While some fluctuations may arise artificially as a result of depositional and sampling factors, the complementary behaviour of certain groups of taxa suggests a real trend.

A number of taxa associated with damp ground that are present in the Iron Age assemblages are absent from the medieval assemblages. In addition to *Carex* spp., *Eleocharis palustris* and *Ranunculus* cf. *repens*, the decline in *Polygonum* spp. may be related to this trend. *Montia fontana*, however, continued to occur in the medieval period.

There is a decline in the occurrence of both leguminous weed groups, *Trifolium* sp. and *Vicia/Lathyrus* spp. (excluding the possible cultivar *V. sativa*). This decrease is mirrored by an increase in seeds of the Chenopodiaceae. These changes are consistent with an increase in the nitrogen status of the soil, which would discourage the growth of the leguminous weeds that flourish in soils depleted of nitrogen (Warrington 1924) and encourage nitrogen-demanding members of the Chenopodiaceae.

*Anthemis cotula*, a mayweed that is found on clays and clay loams (Kay 1971) increases dramatically through time. The virtual absence of *Tripleurospermum maritimum* from the assemblages (it occurs as a trace in one Iron Age assemblage) may be significant; both its

archaeological and its modern distribution are sometimes complementary to those of *A. cotula* (Kay 1971; Jones, M. 1986).

The changes noted above would be consistent with a changing depth of ploughing. An increase in this depth in the medieval period would both alleviate problems of surface drainage, and allow a higher nutrient status to be maintained in the soil. The rise in *Anthemis cotula* may be related to such a change (Jones, M. 1981) although the ecological mechanism is at present unclear.

#### *The Assemblages in Relation to Soils and Land Use*

##### The Bierton Environment:

The site is located on an area of raised ground within the Vale of Aylesbury. The raised ground is made up of the limestone, clays and sands of the Portland Beds which overlie the Kimmeridge Clay forming the Vale. There are occasional patches of alluvium and boulder clay in the Vale, and to the south-east the Kimmeridge Beds are overlain by Upper Greensand and Gault Clay formations at the foot of the Chiltern escarpment (*Geological Survey of England and Wales* 1923).

The soils overlying the Portland Beds today are of two types. To the west of the site lie c.80 ha of well-drained alkaline clay-loam rendzinas of the 'Aylesbury Series'. To the north and south lie over 200 ha of the imperfectly-drained stiff loams of the 'Bierton Complex'. In the Vale, beyond the 'island' of Portland Beds, the predominant soil types are the slightly acid, poorly-drained stiff loams of the 'Denchworth Series' and 'Rowsham Complex' (Avery 1964).

While the soils may well have been modified by two million years of human and climatic activity, the general contrast between free-draining soils capping at least part of the Portland Beds, and stiffer loams with impeded drainage elsewhere, is likely to have been a longstanding feature of the Bierton environment.

#### Land Use:

The earliest documentary reference to crop production at Bierton is in the Domesday Book. In the one hide and three virgates cited, there is land for 1½ ploughs (*DB Bucks*, 1446). No mention is made of other forms of land use. The Domesday record in fact gives minimal evidence of woodland or permanent pasture anywhere in the well-populated Vale of Aylesbury, and instead suggests a landscape given over to crop production, in contrast to the more wooded higher ground to the north and south. Most settlements have a small area of riverside meadow for the cutting of hay and seasonal grazing, and the Domesday record also indicates a deficiency of plough teams in the area (Darby and Campbell 1962).

Further evidence of the extent of medieval crop production lies in the widespread traces of ridge and furrow surviving in the landscape. The modern parish of Bierton is almost entirely covered with such traces (Miles, P. 1981).

Priest observed that the effect of enclosure at Bierton in 1779 was that: 'Butter and flesh increased treble, grain decreased on half' (Priest 1810). While no measure is given of the areas involved, it may be suggested by analogy with figures given by Priest for nearby Broughton and Hulcot that this amounted to a decrease in arable from a figure in the order of 50 per cent of the parish to one in the order of 25 per cent.

Following 1870 the decline in grain prices further reduced the extent of arable cultivation, which by the early twentieth century accounted for only 16 per cent of the parish (*VCH Bucks* II, 320-7). The land use map of 1934 shows a similarly restricted distribution of arable agriculture (Stamp 1934).

The evidence from the historic period thus suggests a period of maximal usage for arable production in the medieval period, and a steady decline from some time prior to parliamentary enclosure to a minimal usage in the twentieth century.

These maximal and minimal usages may be

related to the different soils around the site. As outlined above, Bierton is within easy reach of about 80 ha of fertile free-draining loams, but in a landscape dominated by heavy soil. At the end of a period of minimal usage for arable, the land use survey of 1934 shows a restriction of arable land in the immediate vicinity of Bierton to the free-draining soils of the Aylesbury Series. A period of maximal usage by contrast has left traces of ridge and furrow across large areas of the stiffer loams in the Denchworth Series and Rowsham Complex. What needs to be ascertained is when this maximal usage for arable developed. Was Late Iron Age crop production at Bierton confined to the free-draining rendzinas of the Aylesbury Series and the spread of cultivation on to the heavier soils a gradual process? Or does cultivation of these latter soils date from the very earliest settlement? This question may now be tackled in relation to the carbonised assemblages.

#### *The Carbonised Assemblages in their Context*

The most unusual aspect of the Late Iron Age assemblages is that they are dominated by bread wheat (*T. aestivocompactum*). This cereal is indeed a common component of British carbonised assemblages, and found as grain impressions from the Neolithic period onwards (Helbaek 1952; Jones, M. 1978 and 1986). However, it generally occurs in small quantities and as a minor component in a mixture of cereals until at least the late Roman period (Jones, M. 1981; Green 1981). Since its presence in Britain is attested for at least four millennia prior to its emergence as the principal crop of the historic period, its relatively late rise to popularity presumably reflects changing agricultural conditions. It has been argued elsewhere (Jones, M. 1981) that this change is towards an intensification in cultivation of the heavier, low-lying soils. This would fit in well with the situation at Bierton. It would also suggest that Iron Age assemblages dominated by bread wheat might be less unusual if more sites in clay environments were examined for carbonised remains.

Although in its high proportion of bread wheat the Iron Age material is dissimilar from contemporary material from sites surrounded

by lighter soils, it is very similar to the medieval material from the same site, corresponding to a period when the heavier soils were certainly being cultivated. While it would be foolish to suggest a simplistic relationship between crop ratios in carbonised assemblages and in the field, it is interesting to note that 71 per cent of the cereal grains in the assemblages overall may be of bread wheat and 75 per cent of the soils within a 1 km radius are the stiffer loams, here being associated with bread wheat cultivation.

It has also been noted that the Iron Age weed assemblages are broadly similar to contemporary assemblages from elsewhere in Southern Britain. In particular the presence of damp-ground species, and the absence of a recognisable group of dry-ground species further suggests an emphasis on the poorly-drained soils of the Denchworth Series and Rowsham Complex.

Various changes through time may be attributed to deeper ploughing, leading to improved surface drainage and a greater ability to maintain nutrient status. It would have been useful to clarify the timing of these changes, but the data base is unfortunately insufficient.

As it stands, the occurrence of damp-ground species declines in each successive period, but the numbers are small. Two factors linked with nitrogen status, the increase in *Chenopodiaceae* and the decrease in *Trifolium* are apparent in the twelfth to thirteenth-century assemblage from context 0611 while the decline in *Vicia/Lathyrus* is only apparent in the thirteenth to fifteenth century assemblages.

#### *Discussion of the Late Iron Age Settlement*

The small scale of the excavation, relative to the inferred large scale of the settlement as a whole, and the difficulty of establishing which of the surviving features had been in contemporary use, limits discussion. Nevertheless, it is worth considering certain aspects of the Late Iron Age occupation in the light of recent discoveries.

#### *Summary of Floral Evidence*

It has been inferred from the carbonised plant record that, from the beginnings of Late Iron Age settlement, the heavier soils in the Vale were being cultivated and sown with bread wheat. An area of higher soils capping Portland Beds on which the settlement was located could also have supported barley and spelt wheat, and oats and vetch may also have been grown. In its emphasis on the cultivation of bread wheat on heavy soils, the agricultural strategy reflects a departure from the spelt wheat/barley régime more familiar from Iron Age sites on lighter soils in Southern Britain. However, from the evidence of drainage problems and nitrogen depletion it might be inferred that the farmers of Bierton had not entirely escaped the more widespread agricultural problems of the British Iron Age.

By the medieval period the apparent alleviation of these problems has been linked with deeper ploughing, but the data is insufficient to allow late trends in crop production to be specified in any detail.

#### *Acknowledgements*

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#### *Chronology*

Although at least four phases of Late Iron Age activity were detected within the area of the excavations, there was no clear chronological or typological variation in the finds (with the possible exception of the Fabric 1 pottery) to suggest that any of them was particularly long-lived. Indeed, this was further borne out by the



nature of the enclosure ditch fills, which indicated deliberate backfilling with either bank material (e.g. 0621) or organically-rich rubbish (e.g. 0478), rather than natural silting. It is, therefore, quite possible that despite its complexity the Late Iron Age occupation was only in being for a comparatively short period, perhaps the first half of the first century A.D., before being superseded by the Roman Villa.

#### *Settlement Layout*

Two sequences of development can be suggested, from the archaeological evidence available. The first is that, throughout its period of use, the settlement resembled the so-called *complex ditched enclosures* described by, for example, Ritchie (1971, 93) and Cunliffe (1974, 168–75). The second is that occupation began as an *open* or simple *enclosed* layout. The former is typified by Stanton Harcourt, Oxfordshire (Harding 1974, 26) and Weekley Hall Wood, Northamptonshire (Jackson 1976); the latter by Ravenstone, Buckinghamshire (Mynard 1970). The site could then have developed into a *complex ditched settlement*.

On balance, the first possibility seems more likely, principally because of the limited Late Iron Age time-span suggested for the pottery and other datable material at Bierton, but also because of the comparisons that can be drawn with the *complex ditched settlement* excavated by D. S. Neal at Gorhambury, Hertfordshire (Grew 1980, 373). That site was also occupied in the Late Iron Age period and exhibits a number of striking similarities with the evidence from Bierton. It must be admitted that the imposition of a villa on to both sites emphasises the points of comparison, but this occurrence may well reflect the similar nature of the pre-existing settlements.

#### *Semicircular and Circular Structures*

Perhaps the most distinctive of the smaller ditches and gullies are the two semicircular examples 0511/0609 and 0533. Gullies of this nature, although generally lacking the expanded terminals of 0511/0609, have been found on a number of Iron Age sites, including Gun Hill, Essex (Drury and Rodwell 1973, 96). The discovery of three examples at that site led

the excavators to review the previous interpretations, and come to the firm conclusion that such features represent the remains of D-shaped roofed buildings. Furthermore, the presence of a hearth-pit and the nature of the finds within the Gun Hill examples encouraged the authors to suggest an industrial use, such as a smithy, for their structures. No such concentrations of finds were evident at Bierton, nor was there any indication of an internal hearth, but this may have resulted from the intensive disturbance of the Iron Age levels. Further examples from the south-east have been discussed by Drury (1978, 68) and Midlands parallels are to be found at Rainsborough (Avery *et al.* 1967, Fig. 5), Strixton (Hall 1971, Fig. 2) and Great Oakley (Jackson 1982, Fig. 3); all these sites are in Northamptonshire.

The southern arm of the excavation contained a curvilinear bedding trench (1417, 1562/3) and concentric gully (0946, 1415) which have been tentatively interpreted as the remains of a circular structure. The incomplete evidence is far from satisfactory, but does warrant comparison with other Iron Age house plans where the wall-line is enclosed in a slot, and the building surrounded by a drainage gully. However, ground plans of closely parallel form are uncommon in Southern Britain, particularly in 'Belgic' contexts (Rodwell 1978, 26) and the best comparisons are to be found at Cats Water, Fengate (Pryor and Cranstone 1978, 18) and the earlier Iron Age site at Brigstock, Northamptonshire (Jackson 1983).

#### *Rectangular Enclosures and Buildings*

At least three small subrectangular enclosures (0509/0606, 0945/1423, 1418/1525) were revealed by the excavations, but in not one instance is there a clear indication of their function. However, Rodwell (1978, 27) in discussing the incidence of square and rectangular buildings in south-east Britain in the Late Iron Age, points out that timber-framed structures resting on sill bases would leave little or no trace if the site had been subject to heavy denudation, and it is possible that the enclosures originally surrounded buildings of this nature. Indeed, two of the smaller gullies at Bierton (0472, 0477) have been suggested as the



remains of parallel beam slots, although they are not located within a rectangular enclosure. However, the contrast in the quality of the evidence present when the site has been denuded, as at Bierton, and when it survives relatively undisturbed, as at Skeleton Green, Hertfordshire (Partridge 1981) discourages further discussion on this topic.

#### *The Late Iron Age Economy*

The environmental evidence from the site shows that the principal crop in the period was bread wheat (*Triticum aestivocompactum*), along with much smaller quantities of spelt and hulled barley.

As M. Jones shows above (p. 44) a predominance of bread wheat is usually dated to the late Roman period and attributed to an intensified use of heavy clay soils. Clearly the site at Bierton was exploiting the immediately surrounding well-drained soils that cap the Portland Beds, but the use of the lower heavier clay soils of the Vale is attested by damp-ground species in the weed assemblage. Recent work has shown that utilisation of the heavy Vale soils was under way by the Middle Iron Age. The site at Woodham, on the Southern Gas feeder pipeline, consisted of a sealed alluvial deposit containing Middle Iron Age pottery together with animal bone, overlying a cobbled surface. Pollen from the humic alluvial deposit indicated a cleared landscape, although no conclusions could be drawn as to whether it was pastoral or arable (Farley *et al.* 1984, 31, 34).

The Bierton settlement operated a mixed agricultural economy, and the bone assemblage is discussed above, pp. 30–8. The most numerous species was sheep, and it is clear from the age pattern that animals were kept longer than is usually found on Iron Age sites. The sheep were an important resource for meat and wool and the increased significance of sheep implies new techniques in husbandry, including the need for more winter pasturage, and may also have involved the introduction of new varieties of sheep at this period. Cattle were primarily a source of traction, for ploughing and as draught animals, and would

only have been used for meat when they were useless for work. The unusually high proportion of pig bones in the assemblage may reflect the use of the clay lands, bearing out the floral evidence. The archaeological evidence indicates that the food resources in use at Bierton in the Late Iron Age were in contrast to the general model for Late Iron Age agriculture in Southern England, and were very similar to the Roman agricultural pattern. There is little contrast between the crops and animal species that predominate at Late Iron Age Bierton, and at the succeeding Roman villa.

#### *The Status of the Site and its Local and Regional Setting*

The attraction to early settlers of the limestone ridge, upon which Bierton is situated, has already been noted (p. 42) and although by the Late Iron Age an agricultural strategy was emerging which allowed the utilisation of the adjacent clay lands, the importance of the ridge as an overland route and focus for settlement would in no way have diminished. A key factor determining the precise location of this occupation must have been the existence of a suitable water supply, and the spring which later became known as 'Uptown Well' undoubtedly played its part here. However, whilst the topographical considerations governing the choice of site are readily apparent, two questions remain: who were the people involved and how does the Bierton evidence fit into the pattern of Late Iron Age occupation in the region?

The answer to the first question is perhaps to be found in the much discussed migrations, in the first century B.C., of 'Belgic' peoples from Gaul to south-east Britain and the apparent changes in settlement pattern and economic structure which they brought in their wake. It was this period which saw, in this region, the abandonment of hillforts in favour of new enclosures in valley-side locations, and the development of a market economy which included cross-Channel trade (Cunliffe 1974, 337). The Bierton site, both by virtue of its setting and the nature of several of the finds, appears to conform to this pattern. No inferences can be drawn about the ethnic affiliations

of the occupants of the settlement at Bierton, however, in the present state of archaeological research in the area. Although the first glimmer of the historical record provides us with the names of some of the main characters involved, and combined with archaeological evidence indicates the location of certain tribal centres, this remains a 'lamentably obscure' period of prehistory, and one which may never be fully understood (Partridge 1981, 351-6 and references). Nevertheless it is possible to suggest that the Bierton people would have thought of themselves as Catuvellauni, looking to the tribal capital at Verulamium (St Albans), whose influence extended across a wide area (Cunliffe 1974, Fig. 6.1).

With regard to the second question, any attempt to relate the Bierton discoveries to other Late Iron Age sites in the immediate locality is hampered by the fact that this is one of the least well represented periods in Buckinghamshire archaeology. However, finds of pottery from both Aylesbury and Hartwell (Waugh *et al.* 1974, 412) complement the Bierton material and suggest that the limestone ridge was indeed as important to Late Iron Age settlement as the Icknield Belt to the south, and the Ouzel valley to the north (*ibid.*, 374). Limited investigation means that the morphology of the majority of these sites is obscure, but subsequent to the Bierton excavation further excavation has produced more evidence of the Iron Age settlement pattern in the area. The George Street (Aylesbury) excavation revealed Middle Iron Age features (Allen and Dalwood 1983) and in 1985 the presence of an Iron Age hillfort in Aylesbury was confirmed by excavation (Farley forthcoming).

In more general terms the Bierton site would appear to lie on the fringes of what Cunliffe has referred to as the 'urbanised core' of south-east Britain (1974, 339), and so presumably represents a lower stage of development than settlements in the heart of that region. On the other hand this marginal location would have stimulated its market-centre role, perhaps borne out by the *potin* coin, brooches and Gallo-Belgic pottery. In this respect it is unfortunate that, of a site which may cover several hectares, only a small area could be investigated, leaving the status of the site as a matter of conjecture.

The scatter of human bone from the site, including the foetus burial, reflects the burial rite on Oxfordshire Iron Age sites (p. 40), while the site is located on the fringes of the area of La Tène III cremations (Whimster 1977, Fig. 2). The nearest known sites of this nature are at Albury, Hertfordshire (Stead 1976b, 413) and Wards Coombe, Ivinghoe (Dunnett 1972) some 14 km to the east. Whether or not cremation was practised at Bierton in the Late Iron Age we do not know, but it is interesting to note the possible existence of a 'Welwyn' style burial at Aston Clinton, 4 km to the south-east, and the recent discovery of a burial of this type at Dorton, 16 km to the west, where the rite was cremation (Farley 1983). These burials, dated to the closing decades of the first century B.C., presumably reflect the emergence of an aristocratic element in the Late Iron Age society, and are typically found in the marginal zone. Whether or not the Bierton settlement housed members of this 'aristocracy' we cannot tell. Inhumation and cremation may have co-existed in the area in the Late Iron Age, but only further research can shed light on this subject.

## THE ROMAN PERIOD

### *Structural Evidence*

As the Introduction (pp. 1-2) emphasises, evidence for Roman occupation and activity at Bierton was widespread before the excavation. It was, therefore, not surprising to find direct evidence of this occupation in the excavated

area, in the form of wall-foundations, beam-slots, a rubble spread and large quantities of pottery and other finds. It was, however, disappointing to discover that this evidence was effectively limited to a 10.0 m wide swathe

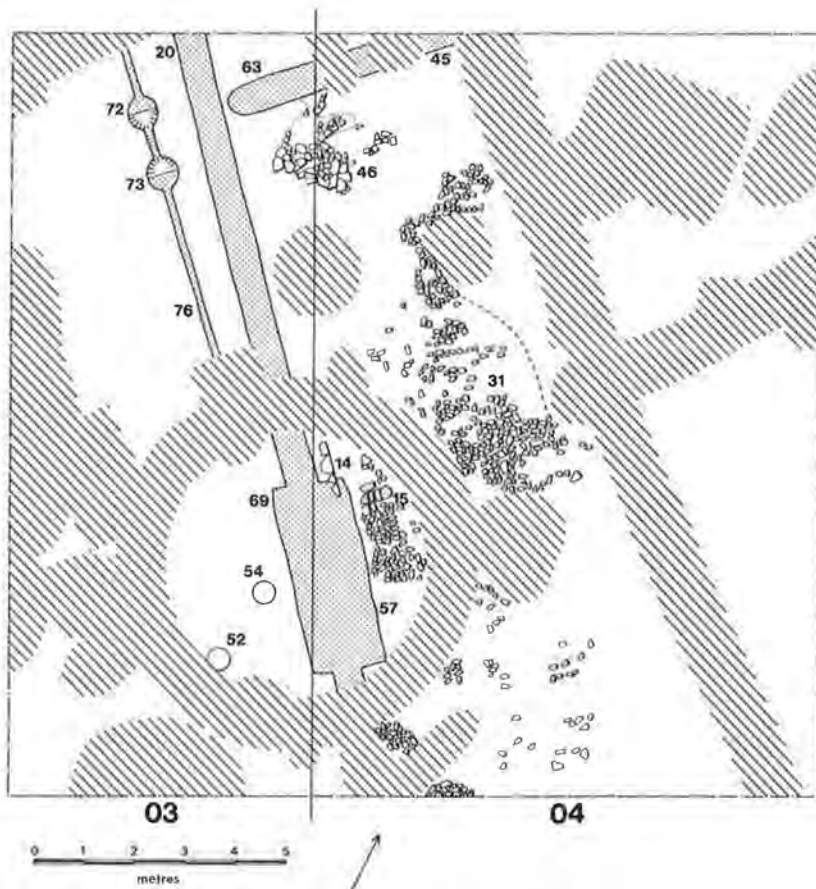


Fig. 21. Roman features in Areas 03 and 04. Unexcavated deposit stippled, later disturbances hatched.

which crossed the site in a north-west to south-direction, and that later activity had greatly disturbed the Roman levels, totally removing them in some places.

#### *Enclosure Wall and Stone Building* (Fig. 21, Pl. VI)

The most prominent Roman feature was a wall-footing composed of mortared limestone rubble (0320). Nowhere did this feature survive sufficiently well to give an indication of its original height, but the nature of its construction suggests that it was a foundation built to carry a timber superstructure. Support for this view comes from the very limited quantity of associated rubble (0431), present to the east of the wall, although stone-robbing may have removed much of this material. In one location footings of flint (0369) and limestone (0457) flanked the wall, forming the foundation of

a rectangular buttress, but again there was no real clue to the above-ground nature of this feature.

For much of the length examined in the excavated area, feature 0320 appears to have functioned solely as a boundary wall. Despite the intense concentration of occupation debris present to either side of the feature (see p. 50) there was no evidence for additional walls or postholes to suggest that it was part of a building, except at the northern limit of excavation. Here a wall of similar character (0363, 0445) lay at right-angles to the main wall. This feature was not founded as deeply as 0320, but larger limestone blocks were employed in its construction. Many of these had been dumped to the south of the feature, as the result of medieval disturbance (0446).



Plate VI. Roman enclosure wall (0320).



Wall 0445 presumably marks the southern limit of a substantial building, but it remains unclear whether or not it was the source of the numerous *tesserae*, fragments of wall-plaster and *opus signinum*, and roofing and flue tiles which were distributed widely across the excavated area (Fig. 24). It must have been responsible, though, for much of the occupation debris present in the more immediate vicinity. The thoroughly disturbed nature of this deposit has already been noted and makes the dating of the adjacent wall and building difficult. The stratigraphically earliest and most intact layer of Roman material (0454) contained pottery of second-century date, for example, and above this material were two layers containing Roman pottery in great abundance (0443, 0432) but clearly in a residual context. Above layer 0432 was the rubble spread 0431, and at the same level two small groups of stone were noted which may have survived from the Roman period. One (0414) was a line of four stones which presented a uniform face to the east, on an axis parallel with 0320. The other was a cluster of six slabs scorched on their upper surfaces (0415) clearly representing part of a damaged hearth. Both features had been cut by a foundation trench of medieval date, but were so fragmentary that they cannot be ascribed to the Roman period with certainty.

Other features of definite or probable Roman date existed to the west of wall 0320. One consisted of a narrow slot (0376) straddled by two postholes (0372/73), which ran parallel with the wall. There were also two small postholes (0352/54) and, further west, two pits. One of these (0367) was linear with a rounded terminal, the other (0368) circular.

#### *Fence Lines and Timber Building* (Fig. 22)

It was not possible to excavate more of the presumed building located at the northern end of wall 0320, because it extended beyond the vicarage garden. Nor was it possible to pursue the wall's projected course to the south, even though it lay within, because of a screen of beech trees. However, features of Roman date revealed in the southern arm of the excavation, principally fence lines and the probable remains

of a timber building, lie at right angles to the line of the wall, and are related to it (Fig. 62). Four north-east to south-west fence lines were concentrated in this area. The northernmost (0821/46, 0952/54) was a straight double line, consisting of two identical steep-sided, flat-bottomed slots. The western limits of the feature had suffered badly from the post-medieval scraping in this area. The adjacent line (0967, 0834/36) pursued a sinuous course across the excavated area. The eastern half of the feature was a single ditch (0967), which to the west apparently divided to become two shallow furrows (0834/36). A similar furrow (0832, 1422) ran south to connect with the identical, southernmost feature (1428, 1564) which lay parallel with the sinuous fence line (0967), creating a rectangular plan. Just what role these furrows with their slight dimensions could play in the system of fences is obscure, but the rectangular enclosure overlapped the remaining fence line, showing it to be earlier. This line consisted of a steep-sided, flat-bottomed slot (0833), punctuated at irregular intervals by large oval postholes. Five of these features (0841, 0956/57/58, 1434) fell within the excavated area. A contemporary length of shallow slot (1432) lay at right angles to the main feature, and to the west a short length of a later slot (1435) protruded from the limits of excavation.

To the north of the fence lines was a group of shallow but straight-sided and flat-bottomed slots (0922/33/65/66) which probably represent the remains of a timber building. Unfortunately this area had been thoroughly disturbed, not only by the many later pits, but also by the scraping, which clearly accounted for the shallow nature of the slots, and their total disappearance to the west. Nevertheless, the surviving evidence suggests that a rectangular building founded on timber sills, housed in the slots, once occupied the site. There were no traces of floors to help determine the nature of the building, nor any finds to date it closely, but its position in the stratigraphical sequence, and the fact that it lay parallel to the fence lines, clearly mark the structure as Roman. Indeed, study of the plan (Fig. 22) shows that the building was exactly parallel with the



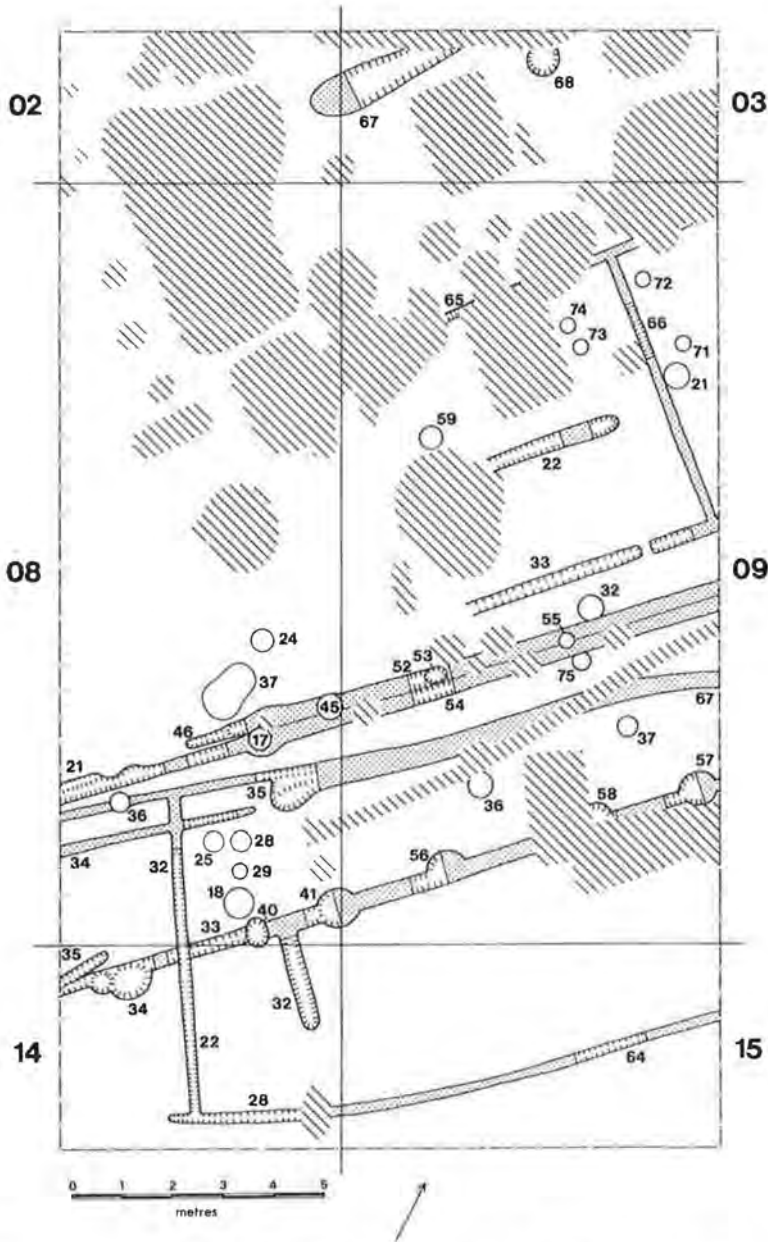


Fig. 22. Roman features in Areas 03, 04, 08, 09, 14 and 15. Unexcavated deposit stippled, later disturbances hatched.

southernmost fence line (0833) and it may well be that it belonged with this feature, rather than the other lines, with which it converges.

The area also contained a number of post-

holes, pits and hollows (shown on the plan) which may be of Roman date. However, as no structural patterns can be defined in this array of varied features, their individual description is confined to the excavation archive.

## The Roman Finds

The brevity of the description of the Roman features belies the number of Roman finds that were recovered from the excavated area.

The bulk of this material consisted of pottery (nearly 9,000 sherds in total), but stone artefacts, architectural fragments (in the form of *tesserae*, tile, *opus signinum* and wall-plaster), and objects of glass, iron, bronze, pipe-clay and worked bone were also recovered. Animal bones were abundant in the areas which produced most of the Roman finds, but the difficulties of separating out this material, in layers which had suffered considerable contamination from above, have resulted in an abbreviated report.

The overriding problem with the Roman finds is that the great majority are effectively unstratified. The absence of any ditches or substantial pits of Roman date and the disturbance suffered by the occupation/destruction layers has resulted in a body of material, the main use of which is to demonstrate, by its variety and date range, the nature and longevity of the settlement.

### Utilised Stone

#### Querns (Fig. 23:1-2)

Seven small fragments of quern were recovered from the Roman and later levels. They were either of lava, presumably *Neidermendig* lava from the Eifel, or Millstone Grit, from the Pennines. This imported stone contrasts with the local Hertfordshire Puddingstone, employed during the Late Iron Age (see p. 15) although the sample is admittedly small. Two of the fragments, from the most secure Roman layers, are included here, the remainder are not illustrated.

#### Whetstones or Rubbing Stones (Fig. 23:3-7)

The excavation produced a total of twenty-one whetstones or rubbing stones, and five of these can be considered as 'probably Roman'. Two are of rod-like form (Fig. 23:3-4), with dished surfaces resulting from whetting, the other three are of square or rectangular form,

with one or more smoothed and polished surfaces.

#### Spindle-whorl and Pendant

See p. 69 below and Fig. 36:7-8.

#### Catalogue of Stone Objects (Fig. 23:1-7)

1. Fragment of upper stone of a rotary quern, Millstone Grit. (0432)
2. Fragment of quern; presumably *Neidermendig* lava from the Eifel. (0443)
3. Whetstone; 52 mm long, fine-grained, compact calcareous sandstone, or sandy limestone, local Portland Beds. (0455)
4. Whetstone; 66 mm long, as no. 3 above. (0468)
5. Rubbing stone; 91 mm long, broken. Medium-grained porous, arkose. ?Millstone Grit. (0455)
6. Rubbing stone; 80 mm long, as no. 3 above. (0468)
7. Rubbing stone; 65 mm long, as no. 3 above. (0468)

### Building Materials

A considerable number of *tesserae*, fragments of wall-plaster and *opus signinum*, and pieces of roof and flue tile came from the excavated area. It was clear that the building or buildings in which these materials were employed were not located in the area investigated, but in all probability immediately to the north, as indicated by the distribution of *tesserae* (Fig. 24).

#### Tesserae

A total of 220 *tesserae* were recovered, 107 of which were fashioned from tile (red) and 113 from limestone (white). All were of a fairly uniform size, measuring 250 × 200 mm. The great majority were single finds, but in one instance three were found mortared together. The finds indicate the presence of a tessellated pavement employing a red and white pattern.

#### Opus Signinum

Some 45 fragments of *opus signinum* came from the excavated area. The largest of these measured 540 × 470 mm, but the presence of this distinctive material in the company of pieces of flue tile (see below) confirms the existence, in the vicinity, of buildings with hypocausts.

#### Tile

Well over 1,000 pieces of tile were retained

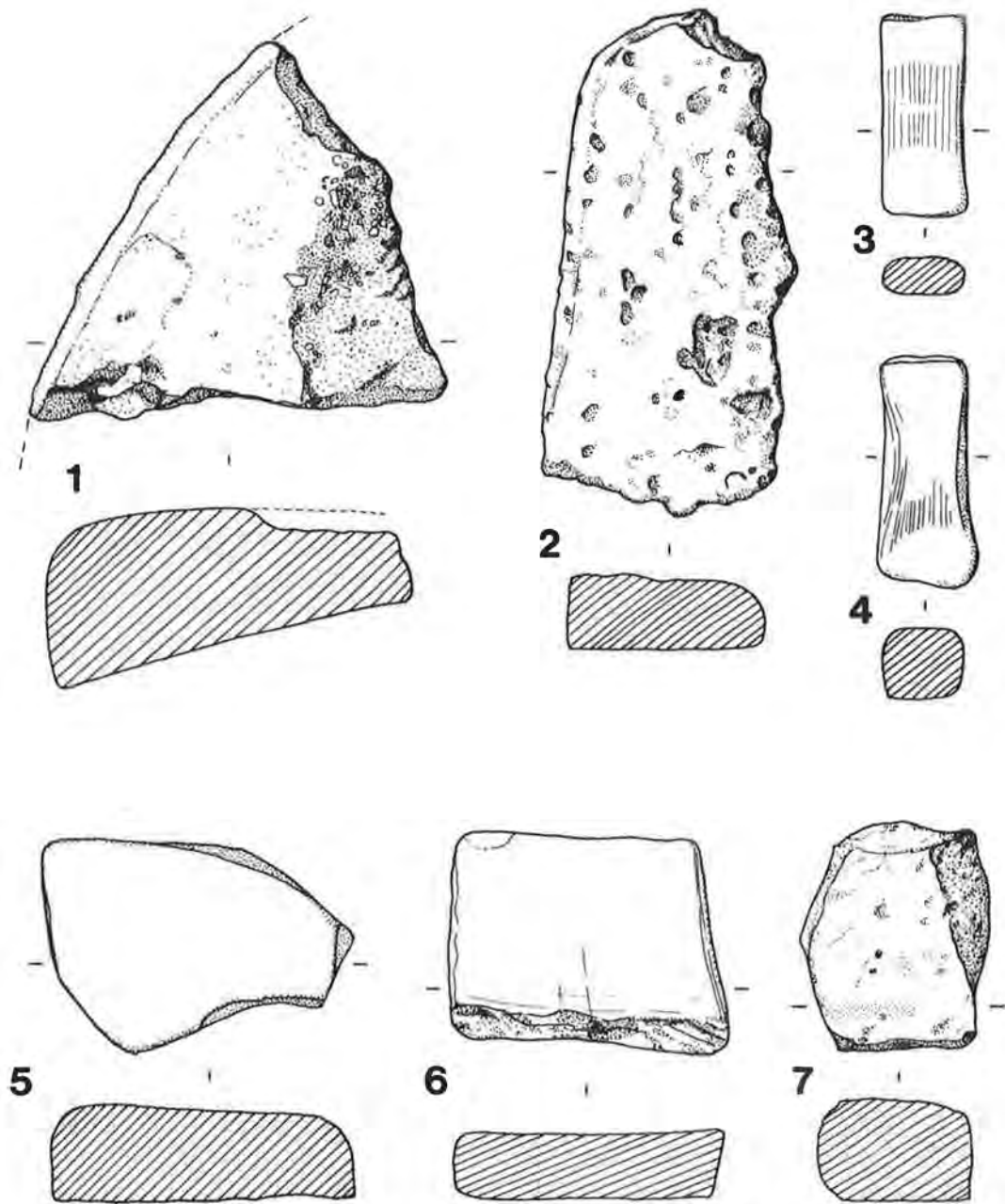


Fig. 23. Roman utilised stone: 1-2, quern fragments; 3-7, whetstones. (Scale 1:2)

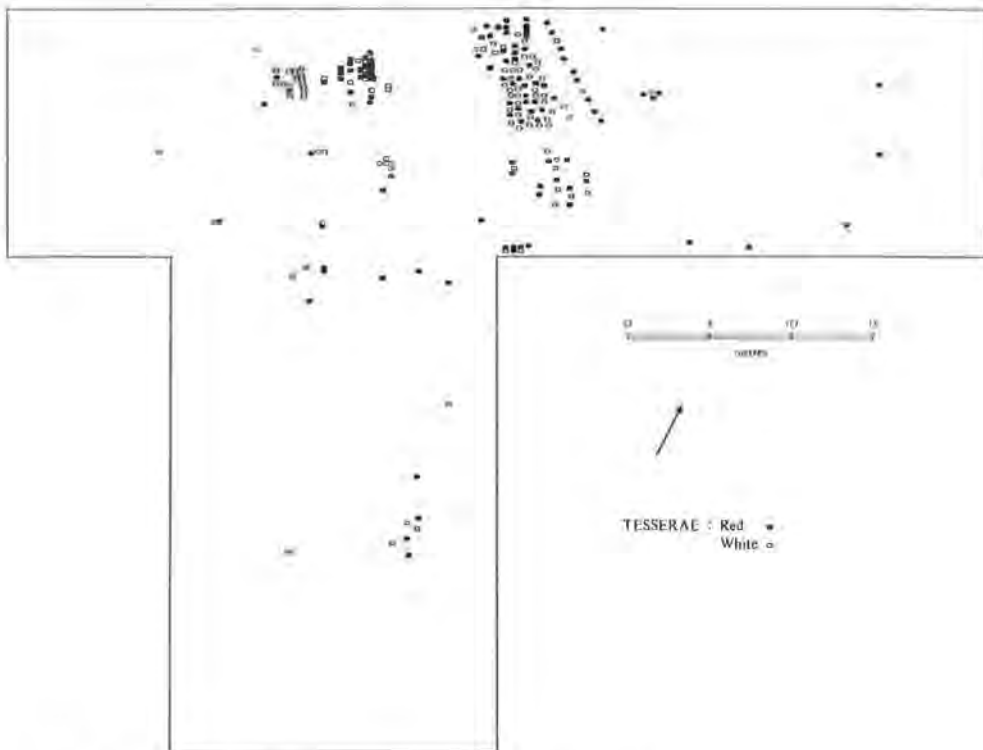


Fig. 24. The distribution of residual red and white *tesserae*.

during the excavation, as being representative of the bulk of this material. Of these some 300 can be classed as Roman, although the identification of *imbrices* on a site containing curved fragments of medieval and post-medieval date was not easy. Over 50 per cent of the Roman fragments were pieces of *tegulae* and some 12 per cent *imbrices*. Flue tile accounted for c.20 per cent of the material, the remaining 18 per cent being indeterminate. The tile came from 87 widespread contexts and, not surprisingly, the distribution matched that of the other building materials and the pottery.

A further point worth noting is that a small proportion of the Roman tile (perhaps 10 per cent) was fashioned from a shell-tempered fabric; this applies to fragments of *tegula*, *imbrex* and flue tile.

#### *Painted Wall-plaster*

M. Dahl

A total of 1,790 fragments of painted plaster were discovered during the excavations. They

were concentrated to the north of the site but no *in situ* finds were made, nor were any large slabs present. Indeed, the total surface area of the material recovered represents less than 1.0 sq. m. However, the variety present in the assemblage suggests that it comes from a number of sources, with a wide date range.

#### Fabric:

The majority of pieces were of a white, sandy fabric with few noticeable grits. Some fragments, however, were composed of a cream-coloured sandy fabric, which contained numerous red, black and opaque grits. The thickness varied generally from 8 to 15 mm, but some of the larger panel pieces were 40 mm thick. The outer surface was invariably smooth and well-finished.

#### Paint:

White undercoat was present on all the pieces examined. The covering power of the upper coat was variable, but there is an insufficient

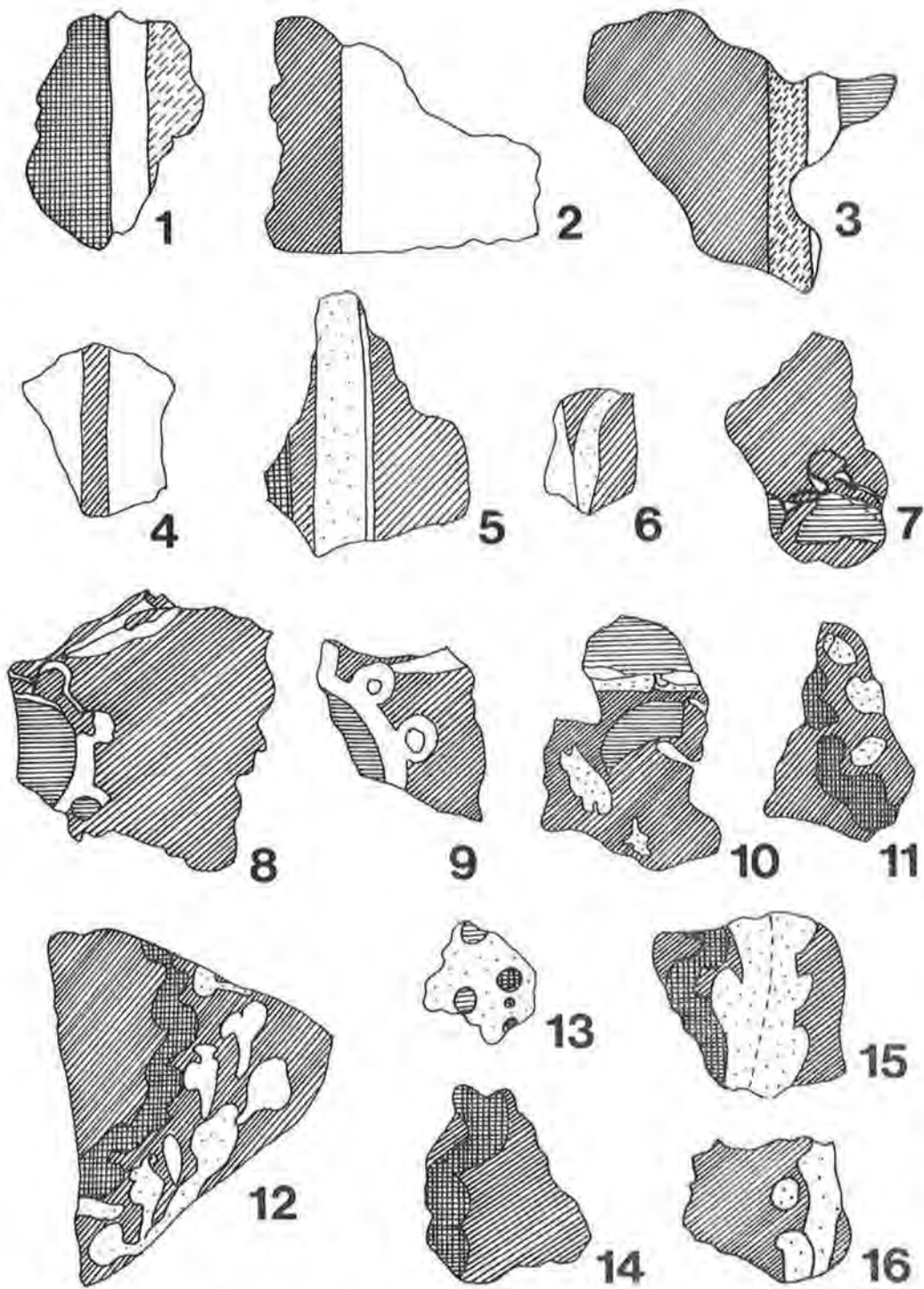


Fig. 25. Painted wall-plaster. (Scale 1:1)



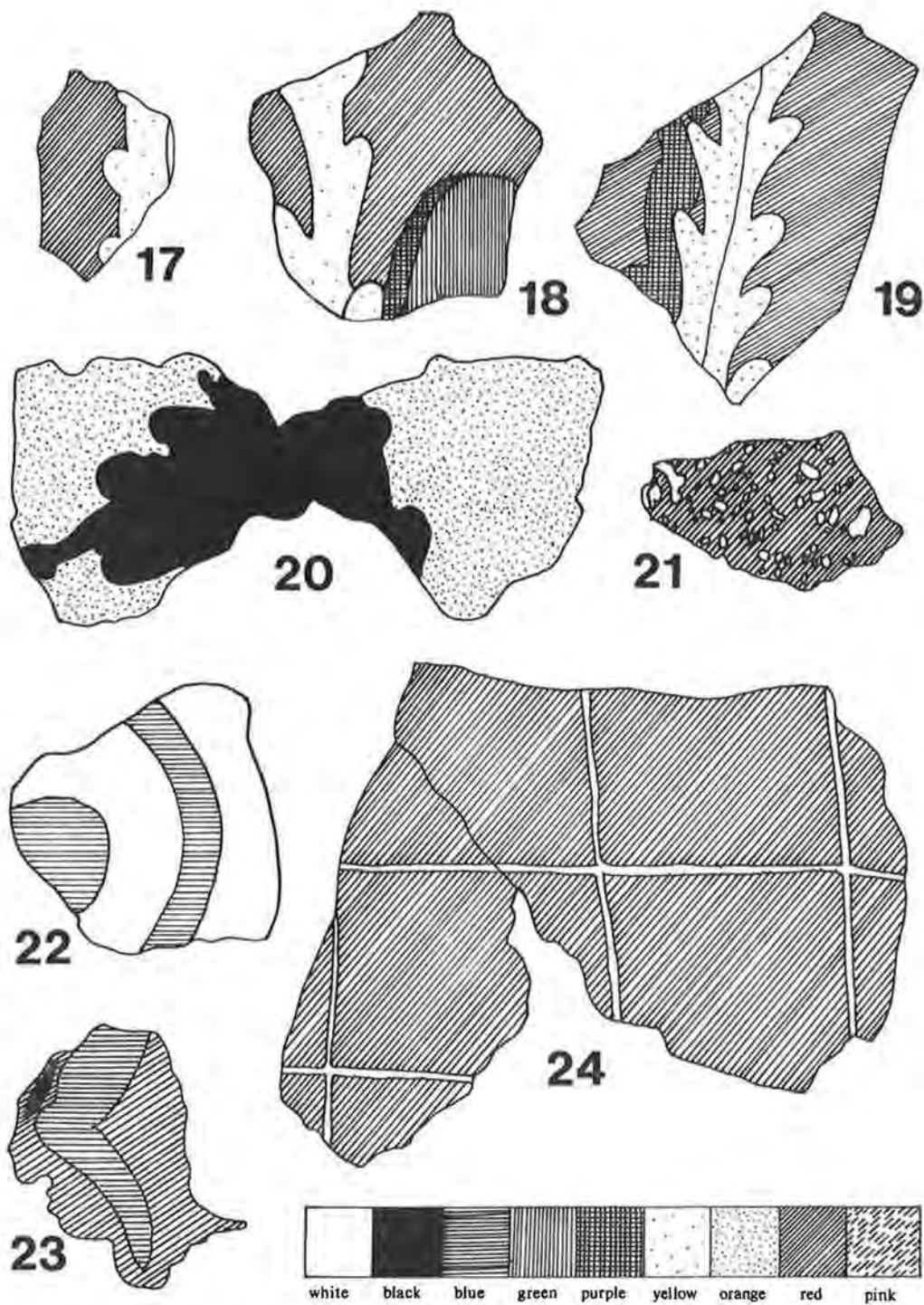


Fig. 26. Painted wall-plaster. (Scale 1:1)

quantity to determine how many varieties of paint were used. Brushmarks suggest the use of medium, fine and very fine bristle brushes.

#### Colours:

Some 78 per cent of the plaster was plain, and of the three colours represented (red, green and white), red was by far the dominant hue. It also formed the background for many of the decorated pieces. Other colours utilised were yellow, orange, blue, purple and black.

#### Designs:

Panel designs are well represented (Fig. 25), as are depictions of foliage and garlands (Figs. 25-6), although all are in a fragmentary state. These designs suggest an early second-century date.

A fourth-century date can be suggested for the black oak leaves in a yellow field (Fig. 26:20) of which three fragments have survived. Of similar date are the curvilinear designs (Fig. 26:22), paralleled at Latimer (Branigan 1971, 145, Figs. 39-40).

Another decorative technique, represented by eight fragments, consists of a red base (incidentally painted over an earlier design employing blue, yellow and orange), which was speckled with white, or white, black and yellow. This can be paralleled at Latimer (*ibid.*) and Boxmoor (Neal 1974-6).

A further technique worthy of note is the scoring of lines on a plain red ground (Fig. 26:24). The lines formed an irregular grid, with the spacing between them averaging 30 mm, but there was some evidence that parallel lines of closer spacing were also employed. The plaster thus treated was in general much thicker than the other material, and may have been employed in a specific location. The technique was possibly used in an attempt to enliven an otherwise monotonous field, although it was crudely done.

#### Mouldings:

One fragment of curved plaster was found, of red colour, which had probable wood impressions on its inner surface, suggesting

a possible association with a door or with a window frame.

#### *The Roman Pottery*

A large quantity of Roman pottery was recovered from the excavated area (c.9,000 sherds) and the material is described here in separate reports: the Samian by G. B. Dannell, with a note on the Samian stamps by B. Dickinson; and Coarse Pottery by the writer and Y. Parminter, with a note on coarse pottery stamps and graffiti by V. Rigby.

The vast majority of the material was residual and so served only as a general indicator of the types of vessel present, the sources of supply, and the overall period of occupation of the site.

#### *The Samian Ware*

G. B. Dannell

275 fragments of plain and decorated samian were recovered from the site. Almost without exception they were residual in the contexts in which they were found, and thus details of the great majority are confined to the Level III archive. Only the decorated ware and the potters' stamps are described here, and of these only two pieces are considered worthy of illustration (Fig. 27:1-2).

The collection as a whole does seem to fit into a recognisable group of southern, rural sites which start to receive their first supplies of samian either just before or just after the Boudiccan revolt. The disposition of the Trajanic imports from Les Martres-de-Veyre, in Central Gaul, with a high proportion of forms 18, 27 and particularly 35, 35/6, and 36, shows that the trade in samian really started in earnest in the later Flavian period. There is a slight paucity of Hadrianic material, reflecting the availability of supplies, and then there is an upsurge in the Antonine period, which is typical. It is noteworthy that imports continued well into the third century.

#### *Decorated Ware*

Note: abbreviations used are D: figure-types in Déchelette 1904; O: figure-types in Oswald 1936-7; S and S: Stanfield and Simpson 1958.



Fig. 27. Samian pottery. (Scale 1:1)

1. Fig. 27:1. Form 74. The form of this vessel is restored on the basis of more complete beakers (cf. Simpson 1957; Johns 1964). The face mask of Pan is similar to D. 109, but the detail differs. Simpson (1957) shows five masks, Johns (1964) one, and one each are known from Winchester and Verulamium (Toynbee 1962, cat. 181 and 187). Clearly survival conditions affect recognition, but it appears that there are a number of variants of the basic type. These are suggested as:
  1. D.109 = Simpson (1957) 20, 28a, 28b; Johns 1964.
  2. Toynbee 181 = Simpson (1957) 21.
  3. Simpson (1957) 29 = Bierton.
  4. Toynbee (1962) 187 seems different again.
 The Bierton example is remarkably clear, the lentoid eyes seem to differentiate the type from no. 1 (D.109) above. The appliqué is c.1.5 mm thick and is in a rather pinker fabric than the body. The slip is highly iridescent. c.A.D. 120–45, Lezoux. (0443, 0454)
2. Form 37. CASVRIVS style; his leaves, cf. Rogers G259 and J56 (Rogers 1974). The bird is O.2239 type. c.A.D. 160–90, Lezoux. (0451)
3. Form 37. The ovolo is Rogers B14 (Rogers 1974), ascribed to SACER of Lezoux, and X-13 (CON-NAVCVS), and the lion is O.1566. The fabric is red/orange and dense; the slip is hard-fired. c.A.D. 125–45, Lezoux. (0412)
4. Form 37. Probably by PATERNVS. His ovolo (cf. S and S, Fig. 30.1), and dolphin, O.2382. c.A.D. 160–90, Lezoux. (130.64)
5. Form 37. Perhaps by LAZTVCISSA. The ovolo is his type (cf. Rogers 1974, B206), and the figure is probably D.454. c.A.D. 160–90, Lezoux. (0815)
6. Form 37. Could be part of the same vessel as preceding. The figure is similar to S and S, Pl. 97.5, but the face here is heavily bearded. c.A.D. 160–90, Lezoux. (0330)
7. Form 30. Similar ovolo on a bowl from Rottweil (cf. Knorr 1919, Taf. 98A). The bud is also known there (*ibid.*, Taf. 52.21). c.A.D. 50–65, La Graufesenque. (1503)
8. Fig. 27:2. Form 37. The ovolo is shared, as far as can be seen, by two workshops: at Rheinzabern it was used by IVLIVS (1), LVPVS and PERPETVS; at Trier it appears on work by DIGNVS, PERPETVS and PRIMANVS (Ricken and Fischer 1963, E 42; Gard 1937). The fabric is orange-red, the slip similar, both are well-fired and the piece appears neatly finished apart from a certain coarseness in the undecorated surface of the mould. On balance probably a piece from Rheinzabern (cf. Karnitsch 1955, Taf. 53–4). This sherd was submitted to Mrs Joanna Bird, who kindly confirmed the attribution and provided the Trier reference (Gard 1937) from plates supplied to her by Dr Huld-Zetsche. Early 3rd century. (0302)

### The Samian Stamps

#### B. Dickinson

1. Form 18/31, stamped IIIIB [INI-M] by Balbinus of Les Martres-de-Veyre, where the die (2a) is known to have been used. The die was recut, or damaged, at an early stage, so that most examples of this stamp appear to have double I instead of the initial B. Similarly, a scratch on the die and the filling up of the tail of the L with clay generally produce . . . I I . . . instead of . AL. The stamp is therefore sometimes attributed to an Enibinus, or Ainibinus. It occurs in the London Second Fire deposits and, once, on form 15/17, which at Les Martres was usually made only in the Trajanic period. c.A.D. 100–25. (15.14)
2. Form 31, stamped [SACER]JOM by Sacero of Central Gaul, presumably Lezoux. The die (1a) was used on plain forms, including 18/31R, 27 and 31R, and also on the rim of a decorated bowl in the style of either Albucius ii or Paternus v. A burnt example of the stamp from the Wroxeter forum is presumably from the destruction deposits. c.A.D. 145–75. (02.50)
3. Form 33, stamped TIT[VRONISCF] or TIT[VRONISCF] by Tituro of Lezoux, where the die (1a) is known to have been used. Stamps from the original version of

the die occur in the Wroxeter Gutter. Examples from the modified die, with added stops in the Os and the letters usually worn, are known from Benwell, Chesters and Wallsend. Both versions appear on form 79. Too little survives of the Berton stamp to be sure which version of the die it came from, although the lettering looks reasonably sharp. A range c.A.D. 160-90 should be allowed, however.

4. Form 31, stamped [TITV]RONIS by Tituro of Lezoux (Die 5b). A stamp recorded several times on forms 79, 80 and Ludowici Tx. There is no site dating for it. c.A.D. 160-90. (0401)
5. Form 27, stamped VICT OI, South Gaulish. We have no previous record of this stamp, and it is not easily assignable to a particular potter. A South Gaulish Victor is known, and perhaps VICTORF was intended here. It would be possible, although unsatisfactory, to read AIC OI retrograde. Alternatively, this may be the stamp of an illiterate or semi-literate potter. The die has been applied off-centre, over an untidy, freehand circle. The form and fabric suggest a Flavian-Trajanic date. (09.03)
6. Form 33, stamped CAI, Central Gaulish. Antonine. (05.01)

### *The Coarse Pottery with Y. Parminter*

The analysis of the coarse pottery was carried out by Y. Parminter using methods developed at the excavations of the Roman town of *Magiovinium* (Fenny Stratford), Buckinghamshire (Neal forthcoming a). Each sherd was inspected microscopically ( $\times 20$ ) to determine its fabric, weighed and, where applicable, details of form, decoration, etc., were entered on to *pro forma* coding sheets (retained in the archive).

This data is suitable for computerisation and a detailed analysis of forms and fabrics, but this facility was not available and financial considerations did not allow a detailed manual analysis.

### *Fabrics*

#### The Fabric Series:

A total of 61 Roman coarse pottery fabrics were identified at Berton and these are fully described by Y. Parminter on microfiche (fiche pp. 13-24, C1-12). The fabric series has been constructed from fabrics found at Berton and at *Magiovinium*, and it is to be hoped that the series will form a basis for future research into Roman pottery in Buckinghamshire. The use of

this running series means that there are gaps in the fabric numbers used here that represent fabrics present at *Magiovinium* but not at Berton. The relative proportions are shown in Fig. 28.

#### Sources of Berton Fabrics:

The fabrics can be placed conveniently into 11 groups related to pottery production areas, as follows:

*Local native types.* Generally with some ceramic tempering. Fabric nos. 22, 26, 44, 46, 73 and (?) 47. Some of these fabrics are very similar to those from the Caldecote Kilns (Kilns One and Two).

*Oxford Wares.* Fabric nos. 12, 16, 35, 41, 48, 49, 65, 74, 77, 93.

*Fulmer/Hedgerley.* Fabric nos. 33, 40.

*Verulamium/Brockley Hill.* Fabric nos. 9, 45, 53, 70.

*Mancetter/Hartshill.* Fabric no. 71.

*Nene Valley.* Fabric nos. 10, 20, 30, 51, 54, 86.

*Black Burnished Ware.* Fabric no. 39.

*Colchester.* Fabric no. 28.

*Harrold.* Fabric no. 18.

*Highgate/London area.* Fabric nos. (?), 3, 4, 24, 69.

*Much Hadham.* Fabric no. 50.

Other groups of fabrics are:

*Shell tempered.* Fabric nos. 6, 8, 19, 25.

*Fine wares.* Local and imported. Fabric nos. 5, 15, 21, 34, 36, 38, 52, 57, 58, 81, 89.

*Amphorae.* Fabric nos. 23, 56, 57.

*Miscellaneous fabrics.* Fabric nos. 1, 13, 31, 32, 43, 47, 72.

The relative importance of the different sources of supply is discussed below (p. 67 and Fig. 33).

The Differences between the Berton and the *Magiovinium* Fabric Assemblages:

The fabric analysis indicated 6 fabrics (nos. 1, 19, 25, 32, 43, 56) found at Berton but not at *Magiovinium*. One (56) is an amphora fabric. The others have some common characteristics which point to a local provenance. They tend to be rather more native in tradition, with temperings ranging from flint to shell and grog or

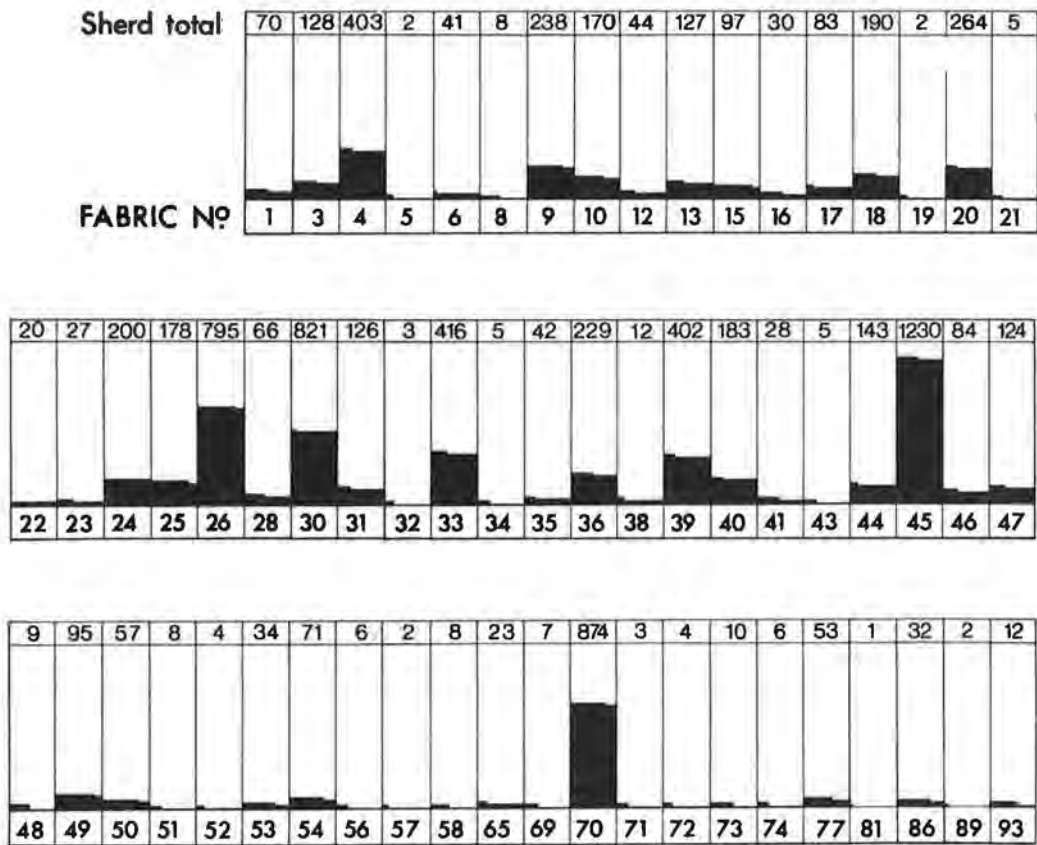


Fig. 28. Histogram showing total frequencies of Roman coarse pottery fabrics.



a combination. Fabrics 1 and 43 contain both shell and flint and the latter appeared to have been used to make storage jars only. Fabric 32 was used for jars which had rustication as decoration and these are considered to fall within a date range of A.D. 50–120. Only a few such vessels were present, probably fewer than five.

#### Forms (Figs. 29–32)

A total of 119 different sub-forms were identified from the excavation; they fall into 11 major groups. The form series, like the fabric series, was devised by B. Hurman and Y. Parmenter from material found at Bierton and at *Magiovinium*, and 'gaps' in the series illustrated here are due either to the non-appearance of the type at Bierton or to gaps in

the overall series. There were 10 major recognisable form groups, as follows:

- Group 2: Platters/Shallow bowls (Fig. 29)
- Group 3: Jars (Figs. 29–30)
- Group 4: Beakers (Fig. 30)
- Group 5: Bowls/Shallow bowls (Fig. 30)
- Group 6: Flagons (Fig. 31)
- Group 7: *Mortaria* (Fig. 31)
- Group 9: Storage jars (Fig. 31)
- Group 11: Cups (Fig. 31)
- Group 12: Beaker jars (Fig. 32)
- Group 18: *Amphorae* (Fig. 32)

Other form numbers used comprise:

- Group 10: Lids (Fig. 31)
- Group 13: Bases (Fig. 32)
- Group 16: Handles (Fig. 32)

### Roman Pottery Catalogue

#### Form Group 2: Platters/Shallow Bowls (Fig. 29)

- 2.1 Fabric 3
- 2.2 Fabric 4
- 2.5 Fabric 26
- 2.6 Fabric 30

#### Form Group 3: Jars (Figs. 29–30)

- 3.1 Fabric 30
- 3.2 Fabric 15
- 3.3 Fabric 2
- 3.4 Fabric 4
- 3.5 Fabric 9
- 3.8 Fabric 70
- 3.9 Fabric 30
- 3.12 Fabric 20
- 3.14 Fabric 18
- 3.15 Fabric 45
- 3.16 Fabric 3
- 3.17 Fabric 45
- 3.18 Fabric 33
- 3.24 Fabric 70
- 3.25 Fabric 18
- 3.26 Fabric 26
- 3.29 Fabric 18
- 3.30 Fabric 30
- 3.32 Fabric 40
- 3.33 Fabric 18
- 3.37 Fabric 26
- 3.45 Fabric 18

#### Form Group 4: Beakers (Fig. 30)

- 4.1 Fabric 10
- 4.2 Fabric 26
- 4.5 Fabric 16
- 4.7 Fabric 30
- 4.13 Fabric 16

- 4.16 Fabric 54
- 4.17 Fabric 45

#### Form Group 5: Bowls/Shallow bowls (Fig. 30)

- 5.1 Fabric 70
- 5.3 Fabric 9
- 5.5 Fabric 17
- 5.6 Fabric 39
- 5.9 Fabric 20
- 5.11 Fabric 70
- 5.12 Fabric 39
- 5.13 Fabric 33
- 5.14 Fabric 45
- 5.18 Fabric 10
- 5.20 Fabric 3
- 5.24 Fabric 17
- 5.27 Fabric 45
- 5.31 Fabric 15
- 5.41 Fabric 4
- 5.54 Fabric 48
- 5.43 Fabric 10

#### Form Group 6: Flagons (Fig. 31)

- 6.3 Fabric 10
- 6.5 Fabric 10
- 6.6 Fabric 45
- 6.7 Fabric 9
- 6.11 Fabric 10
- 6.15 Fabric 45
- 6.16 Fabric 10
- 6.17 Fabric 45
- 6.20 Fabric 45

#### Form Group 7: *Mortaria* (Fig. 31)

- 7.1 Fabric 49
- 7.2 Fabric 45

- 7.4 Fabric 48
- 7.5 Fabric 17
- 7.8 Fabric 45
- 7.14 Fabric 10
- 7.15 Fabric 41
- 7.19 Fabric 17

#### Form Group 9: Storage Jars (Fig. 31)

- 9.1 Fabric 26
- 9.2 Fabric 47
- 9.6 Fabric 26
- 9.8 Fabric 13

#### Form Group 10: Lids (Fig. 31)

- 10.4 Fabric 50
- 10.5 Fabric 3
- 10.6 Fabric 45

#### Form Group 11: Cups (Fig. 31)

- 11.3 Fabric 12
- 11.5 Fabric 69

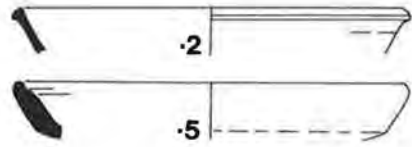
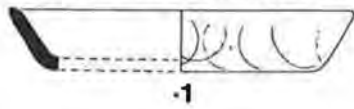
#### Form Group 12: Beaker Jars (Fig. 32)

- 12.1 Fabric 4
- 12.4 Fabric 4
- 12.5 Fabric 20
- 12.9 Fabric 33
- 12.14 Fabric 24

#### Form Group 13: Bases (Fig. 32)

- 13.1 Fabric 45
- 13.2 Fabric 36
- 13.4 Fabric 4
- 13.5 Fabric 69
- 13.6 Fabric 54
- 13.7 Fabric 4
- 13.8 Fabric 4

**FORM GROUP 2: Platters/shallow bowls**



**FORM GROUP 3: Jars**

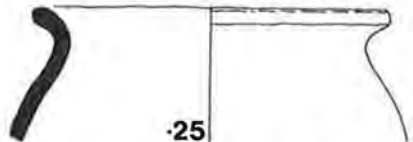
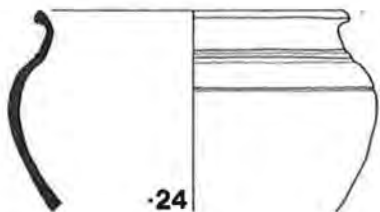
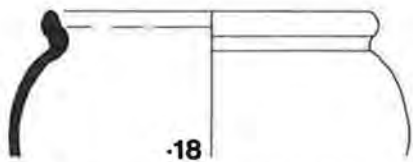
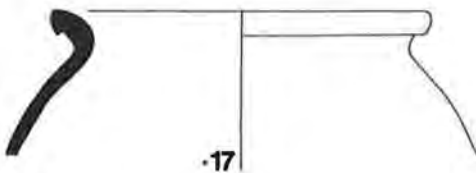
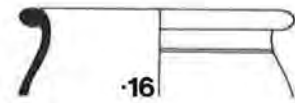
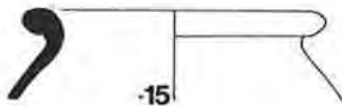
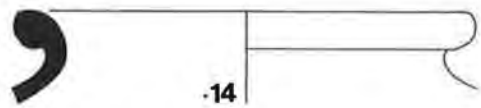
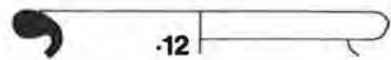
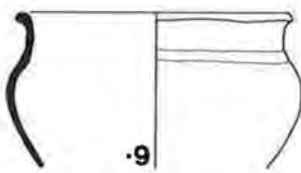
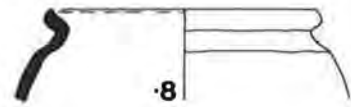
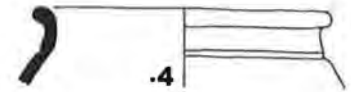
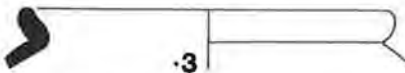
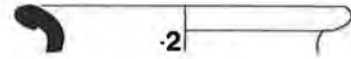
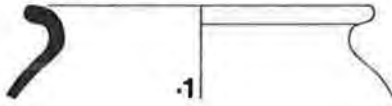
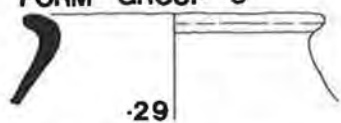
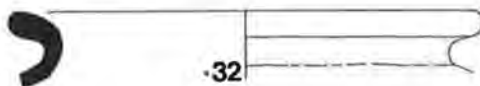


Fig. 29. Roman coarse pottery: Forms 2 and 3. (Scale 1:4)

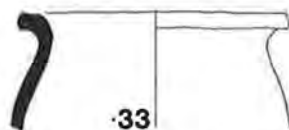
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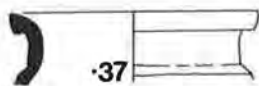
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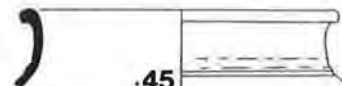
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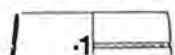


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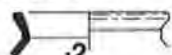


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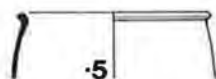
**FORM GROUP 4: Beakers**



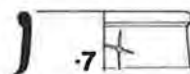
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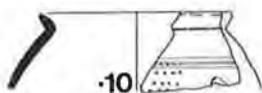
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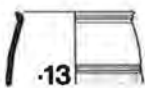
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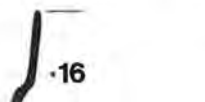
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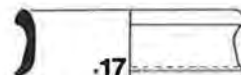
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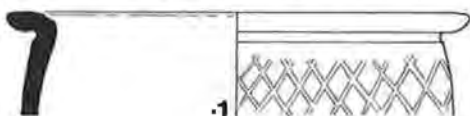


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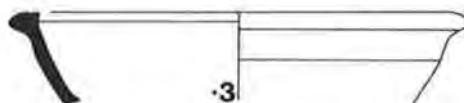


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**FORM GROUP 5: Bowls/shallow bowls**



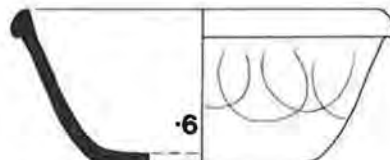
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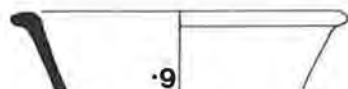
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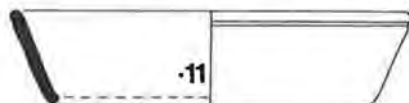
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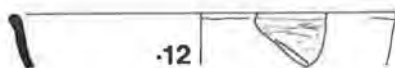
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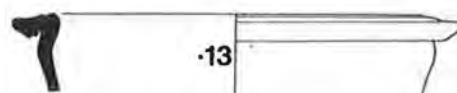
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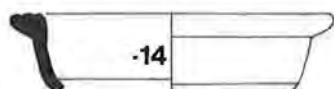
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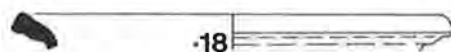
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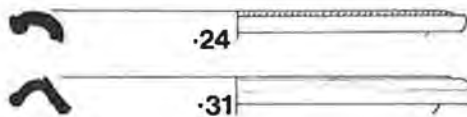
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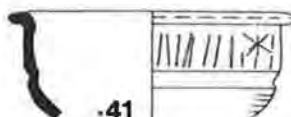
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.18



.24



.41



.43



.54

Fig. 30. Roman coarse pottery: Forms 3 to 5. (Scale 1:4)

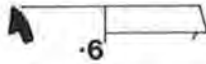
**FORM GROUP 6: Flagons**



.3



.5



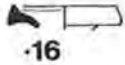
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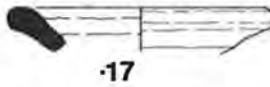
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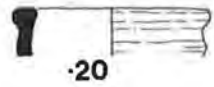
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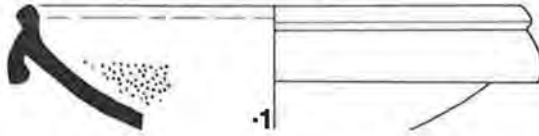


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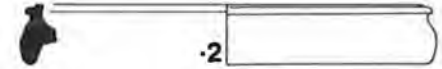


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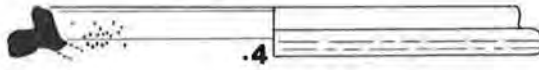
**FORM GROUP 7: Mortaria**



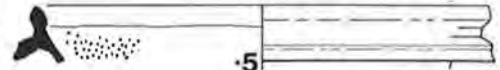
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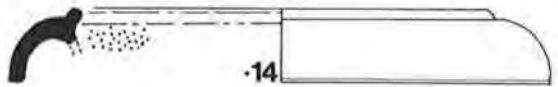
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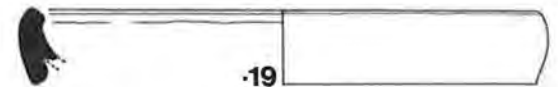
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.14



.15



.19

**FORM GROUP 9: Storage jars**



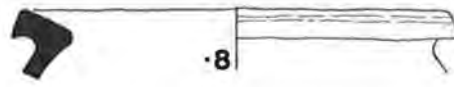
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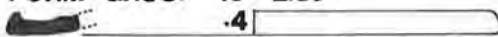


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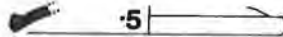


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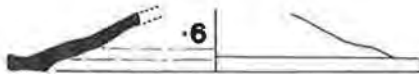
**FORM GROUP 10: Lids**



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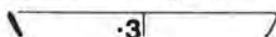


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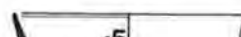


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**FORM GROUP 11: Cups**



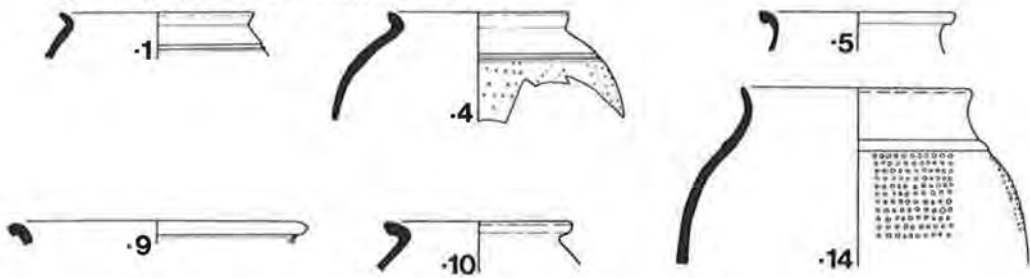
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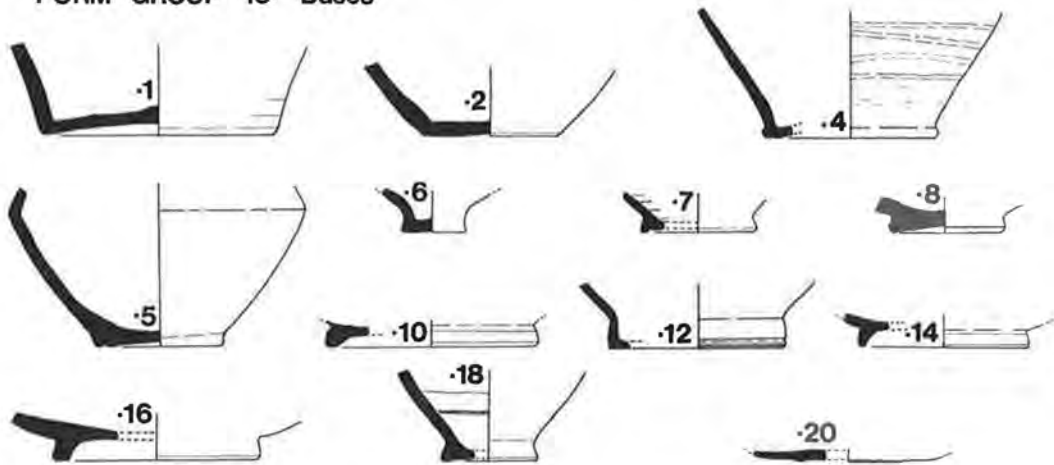
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Fig. 31. Roman coarse pottery: Forms 6 to 10. (Scale 1:4)

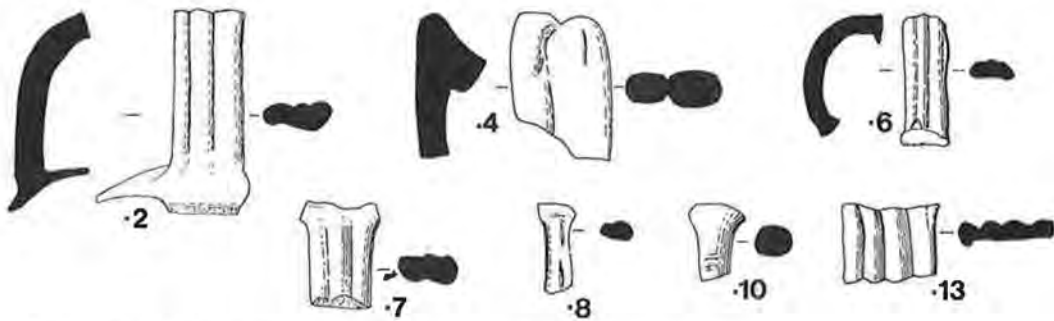
**FORM GROUP 12: Beaker jars**



**FORM GROUP 13: Bases**



**FORM GROUP 16: Handles**



**FORM GROUP 18: Amphorae**

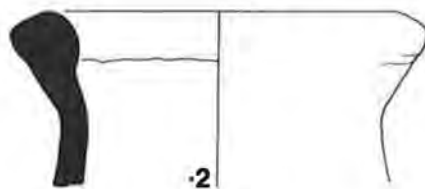


Fig. 32. Roman coarse pottery: Forms 12 to 18. (Scale 1:4)



13.10 Fabric 17  
 13.12 Fabric 4  
 13.14 Fabric 17  
 13.16 Fabric 15  
 13.18 Fabric 15  
 13.20 Fabric 4

*Form Group 16: Handles* (Fig. 32)  
 16.2 Fabric 45  
 16.4 Fabric 57  
 16.6 Fabric 9  
 16.7 Fabric 9  
 16.8 Fabric 45

16.10 Fabric 86  
 16.13 Fabric 51

*Form Group 18: Amphorae* (Fig. 32)  
 18.2 Fabric 23

### *The Stamps and Graffiti on Coarse Pottery* V. Rigby

#### *The Stamps*

The excavation produced two sherds of coarse pottery with stamps.

1. Central mark with repeated X and I motifs; rounded bowl or platter with functional foot-ring. Fine-grained dense ware, with grey burnished surface. (1516)  
 No other stamps from this die have been identified, but there is a closely related stamp on a very similar base from St Albans, Hertfordshire (excavations by I. M. Stead), and a second on a small bowl, similar to Drag. 37, from Winchester, Grave 582 (excavations by the Winchester Unit).
2. Central mark with repeated V-motifs; rounded cup or bowl with moulded base. Fine-grained fabric very similar to no. 1 above, with faceted upper and burnished exterior surfaces. (1412)  
 No other stamps from this die have been identified, but there are two very similar stamps from Winchester and Wanborough, Wiltshire (excavations by the Winchester Unit and J. S. Wacher respectively). The former is clearly from a different source, but the latter is on a rounded bowl with a foot-ring and in a similar fabric, so that it could be from the same origin as nos. 1 and 2 here. A source in the Oxfordshire or Verulamium region potteries seems likely, and the date of manufacture between A.D. 95 and 160.

#### *Graffiti Marks on Pottery*

Six sherds were found with incised graffiti (Fig. 33). By far the most interesting was the name MARINVS, although this is a common Roman name with a wide distribution. The other symbols are probably owners' identification marks, with the possible exception of Fig. 33:5, which may represent the number 'three' (M. Hassall, personal comment).

1. Sherd of grey-ware bearing the name MARINVS. The M and A are deeply incised, but the remaining letters are lightly cut and diminish in size to fit the sherd. This suggests that the inscription was scratched on to the sherd, and not the complete vessel. (0443)
2. Rim and body sherd with a crudely incised six-armed cross located just below the rim. Fabric 33, Form 5. (0402)
3. Rim and body sherd with a deeply incised cross located just below the rim. Fabric 30, Form 4. (0421)

4. Rim sherd with lightly incised cross located just below the rim. (0443)
5. Rim sherd with three short, vertical notches cut into the outer lip of the rim. (Pottery recovered in 1964, CAS 1039, BCM Acc. No. 130.64)
6. Jar base with deeply incised diametrical cross. Fabric 69, Form 13. (1514)

#### *The Roman Pottery: Analysis and Discussion*

The results of this analysis must be regarded as a provisional rather than a definitive statement but they do facilitate the consideration of vessel type, provenance and date in a body of material, the vast majority of which is unstratified.

#### *Types of Vessel*

The total number of vessels (1,075) identified by rim sherds, etc., is clearly not the full number of vessels which have contributed to the c.9,000 sherds from the site, but for the purposes of this report must be regarded as a cross-section of the types present. Similarly the material has to be accepted as a true sample of the various wares at Birtton, although it is appreciated that such factors as a shifting focus of occupation, and the use to which the area involved was put, will have affected the issue.

When this information is amalgamated, the incidence of various forms of vessel can be appreciated (Table 6).

Table 6. Vessel forms as a percentage of total.

Form	2	3	4	5	6	7	9	10	11	12	18
% of total	8	51	6	20	2	3	1	3	1	4	1
(rounded)											

By far the commonest vessels are the jar forms (form 3, 51 per cent) and jar-related forms (form 4, 6 per cent; form 12, 4 per cent) which account for more than 60 per cent of the total. Other utilitarian types, bowls (form 5, 20 per cent) and dishes (form 2, 8 per cent) make up the major part of the remainder, whilst specialised vessels, such as flagons (form 6, 3 per cent) and *mortaria* (form 7, 3 per cent) play a very

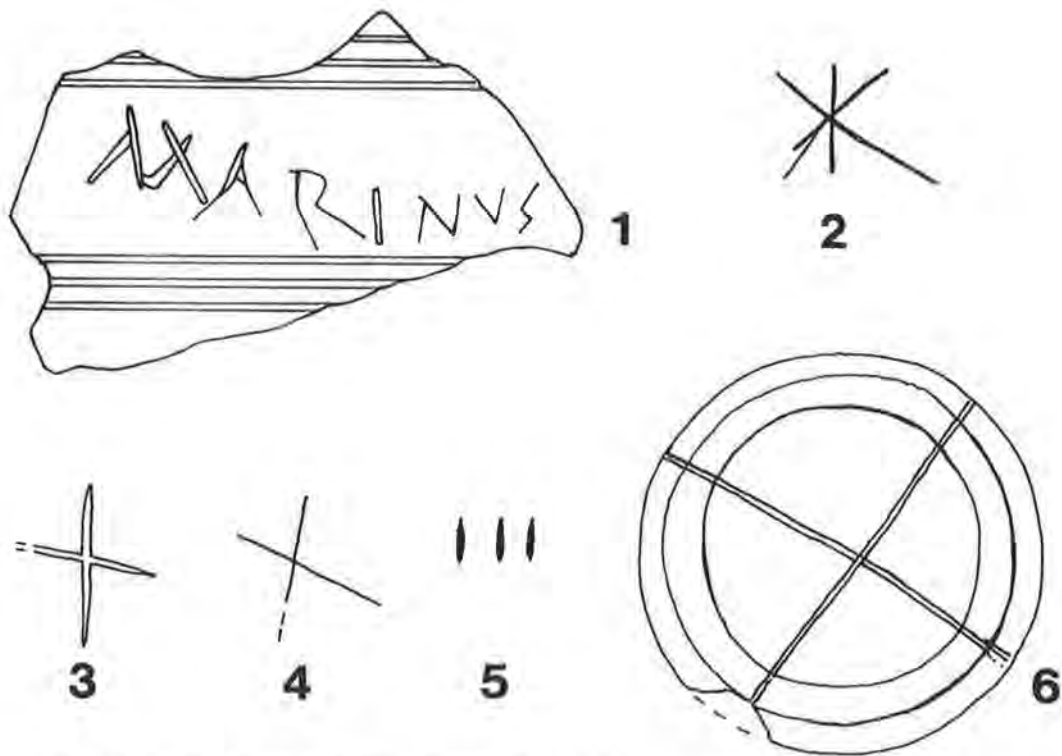


Fig. 33. Graffiti marks on Roman pottery. (Scale 1:1)

minor role. This pattern holds good for the individual centres of production, with most of them contributing a variety of vessels, of which jars are by far the most numerous. Indeed, the only suppliers of any quantity to break this rule are the Oxfordshire kilns (67 vessels, 6 per cent of total), where bowls and *mortaria* account for 60 per cent between them, and jars a mere 18 per cent.

#### *Sources of Supply*

Nearly 85 per cent of the pottery has been provenanced as regards place of manufacture, and Fig. 34 presents this information in map form. It can be seen that the Verulamium kilns produced the greatest proportion (22 per cent) of the wares present at Bierton, and presumably this town also channelled the imports, and Black Burnished, Much Hadham and Colchester wares on their way to the site. The other main sources were the Nene Valley and local 'south-east midlands' (LCW) production centres, whilst the Oxfordshire kilns provided

a not insubstantial quantity. Sources of supply in Buckinghamshire included the Fulmer/Hedgerley kilns in the Chilterns.

#### *Date*

The absence of securely stratified contexts of the Roman period at Bierton means that any discussion of date must be couched in very broad terms, and the samian ware, coins, and other datable finds suggest a long-lived occupation from the mid first to the mid fourth century. The evidence of the coarse pottery is not at variance with this, and the wares present in the assemblage could well have supplied the site throughout this period. If any refinement in terms of dating is possible, then it is to suggest that the Verulamium kilns provided the bulk of the material during the first half of this period, until their decline c.A.D. 200, to be replaced by a variety of sources including the Nene Valley, south-east midlands (LCW) and Oxfordshire kilns.

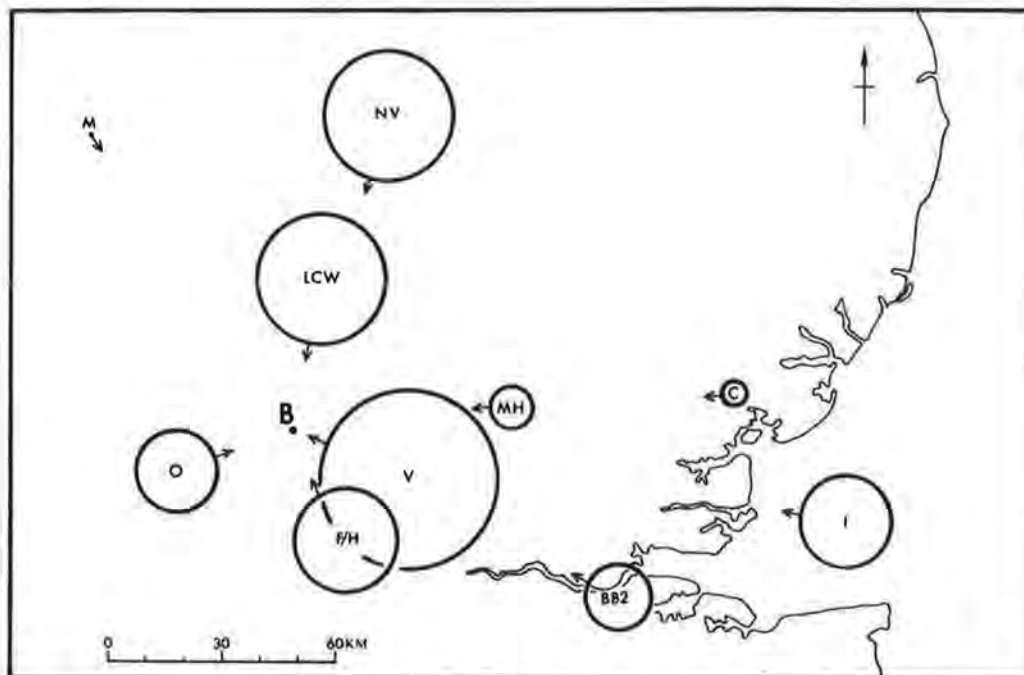


Fig. 34. Sources of supply of Roman pottery. NV, Nene Valley; M, Mancetter/Hartshill; LCW, Local coarse wares; O, Oxford; F/H, Fulmer/Hedgerley; V, Verulamium; MH, Much Hadham; BB2, Black burnished; C, Colchester; I, Imports. B = Birston. The relative proportions of different sources are indicated by circles, where 1 cm<sup>2</sup> = 200 sherds.

### The Roman Glass

D. A. Allen

The excavation produced fifteen pieces of Roman glass, catalogued below. Almost without exception they were in a very fragmentary condition and none is considered worthy of illustration.

#### Cast and Ground

1. Body fragment of pillar-moulded bowl of dark blue glass, with patches of flaking whitish iridescence. Cast in a ribbed mould; rotary polished within; fire polished without. Part of one rib extant. Mid 1st cent. (0917)

#### Blown, Blue-green

2. Two joining base fragments of a vessel of blue-green glass. Pushed-in tubular base ring, pontil mark on base. Diameter of base ring 50 mm. (0432)
3. Rim fragment of flask, bottle or jug of blue-green glass. Rim folded outward, upward and inward. Diameter 22 mm. (0910)
4. Rim fragment of a cup of pale blue-green glass. Patches of flaking whitish iridescence. Rim turned inwards slightly, broken off flat and ground smooth, with a

horizontal wheel-cut groove, and a finer line beneath. Possibly a fragment of a Hoffheim cup, of mid 1st cent. date (Isings 1957, 27-30, Form 12). (0330)

5. Body fragment of prismatic bottle of blue-green glass. 1st-2nd cent. (0332)
6. As no. 5 above. (0443)
7. As no. 5 above. (0142)
8. Indeterminate blue-green fragment. (0362)
9. As no. 8 above. (0351)

#### Blown, Colourless

10. Base fragment of vessel, probably a bowl or cup, of clear, colourless glass. Pushed-in tubular base ring. Diameter 45 mm. Late 1st-early 2nd cent. (0421)
11. Indeterminate fragment of colourless glass with fine, self-coloured trail. (0455)
12. As no. 11 above. (0432)
13. Indeterminate colourless fragment with horizontal wheel-cut line. (0444)
14. Indeterminate colourless fragment. (0454)

#### Window Glass

15. Fragment of matt/glossy blue-green window glass. 1st-2nd cent. (0421)

### Glass Beads

See Beads under 'Other Materials' below and Fig. 35:12-14.

### Objects of Iron

More than 200 pieces of heavily-corroded iron came from the contexts producing the Roman pottery in its least contaminated state. However, all of these can be identified as nails, and although a considerable range is represented it has been decided not to illustrate any here. They vary in length from 80 mm to 20 mm, with a mean of 50 mm. Of particular interest is a group of eleven hob nails (20 mm in length) from layer 0443, which presumably represent the final resting-place of a boot or sandal.

### Objects of Copper Alloy (Fig. 35:1-6)

With the exception of the coins and brooches which are catalogued below, nineteen objects of copper alloy were recovered from the 'Roman layers' and a further four items, clearly of Roman date, from later contexts. Several of these pieces consisted of small fragments of wire or unidentifiable lumps, and only six items are illustrated here.

1. Needle, 142 mm long, complete (bent), with groove above and below eye. Colchester Type 3 needle, 3rd or 4th cent. (Crummy 1983, 67, fig. 70, no. 1991). (0421)
2. Hairpin, 146 mm long, complete, with grooves below a flattened spherical head. Colchester Type 5 metal hairpin, 2nd cent. (*ibid.*, 30, fig. 30). (1514)
3. Tweezers, 49 mm long, complete. Parallel-sided blades with fragments of suspension ring through loop. (0447)
4. Nail, 20 mm long, complete with flat head, 8 mm diameter (cf. *ibid.*, 115, fig. 117). (0443)
5. Nail, 26 mm long, with head 6 mm diameter. (0444)
6. Buckle plate, 24 mm wide and broken at both ends. Decoration of inscribed lines and an inscribed figure with punched triangle ornament. Identified by S. Hawkes as a late Roman buckle of her Type I (Hawkes 1961), the figure representing a quadruped or perhaps a hippocamp, broadly similar to a 'nail-cleaner' from Richborough (Bushe-Fox 1928, 46, no. 34, pl. XIX, 34). Probably mid 4th cent. (1503)  
A very similar buckle plate from Middleton Stoney (Rahtz and Rowley 1984, Fig. 57, 4) was identified as medieval. This object, like the one from Bierton, was residual in a post-medieval context, with quantities of other Roman finds.

### Objects of Stone (Fig. 35:7-8)

7. Spindle-whorl (fragment), 32 mm diameter (estimated). Glauconite calcareous siltstone, from local Portland Beds. (0110)

8. Pendant, 25 mm wide, complete, perforation worked from both sides. Calcite. (0368)

### Other Materials (Fig. 35:9-15)

9. Pipe-clay figurine (fragment) of Venus or *Dea Nutrix*. Type of object produced in Central Gaul and the Cologne region in the 1st and 2nd cent., which were considered to be fertility symbols, designed to bring good luck in childbirth (Green 1978, 16). They occasionally come from domestic shrines or graves, as at Verulamium (Green 1976, 20). (0421)

### Beads of Shale, Amber and Glass

10. Bead, conical, 8 mm long, 14 mm diameter, shale. Belongs to 'short bead' class (Crummy 1983, 32-3). (0212)
  11. Bead, 7 mm long, 10 mm diameter, amber. Late Iron Age context. (1418)
  12. Bead, 5 mm long, 11 mm diameter, green glass. Short oblate type (*ibid.*, 32). (0351)
  13. Bead, 4.5 mm long, 10 mm diameter, blue glass. Short oblate type (*ibid.*). (0351)
  14. Bead, 8 mm long, 10 mm diameter, green glass. Short oblate type (*ibid.*). (0430)
  15. Bead, 5.5 mm long, 11 mm diameter, shale. Short biconical type (*ibid.*). (0351)
- (Not illus.) Bead, fragment, multicoloured. (0444)

### The Brooches

#### A. Olivier (Fig. 36:1-13)

1. Colchester brooch with a long straight flat bow, fairly broad and tapering slightly towards the foot. The bow is sharply angled at the head. The six-coil spring is protected by two short plain side-wings, and the external chord is held in place by a short, broad forward hook. The long triangular catch-plate is crudely fretted. The straight bow is generally regarded as being diagnostic of an early (pre-Conquest) date within the development of the Colchester brooch sequence; however, examples of this form with a flat ribbon bow are unusual in England, and therefore rather more difficult to date with confidence. Fairly close parallels with Bierton brooch no. 1 have been found at Swarling (Bushe-Fox 1925, 40, pl. XII.2; Stead 1976b, 410, Fig. 4.4), Deal (Bushe-Fox 1925, 43, pl. XIII.7), Kirmington (in the possession of Mr A. Harrison, unpublished), and Leicester (from the site of the Great Central Station, Leicester Museum, 369/1951/964, unpublished), and the Swarling and Deal examples do at least indicate a pre-Conquest date. A closely similar variation of this form is characterised by a reverse curve profile to the bow, and one of the two examples found at Camulodunum (Hawkes and Hull 1947, 310, pl. XCI.34 and 35) is assigned to Periods IV-VI (A.D. 49-c.65); two other examples occurred at Richborough (Bushe-Fox 1949, 113, pl. XXVII.1.30; Cunliffe 1968, 78, pl. XXVII.10), where there is no pre-Roman occupation.

It is interesting to note that similar Colchester brooches with a flat ribbon bow and straight profile do occur on the Continent, and several examples are included in the collection of brooches from the Titelberg (Thill 1969, 140 and Fig. 2). Unfortunately, few of these brooches are

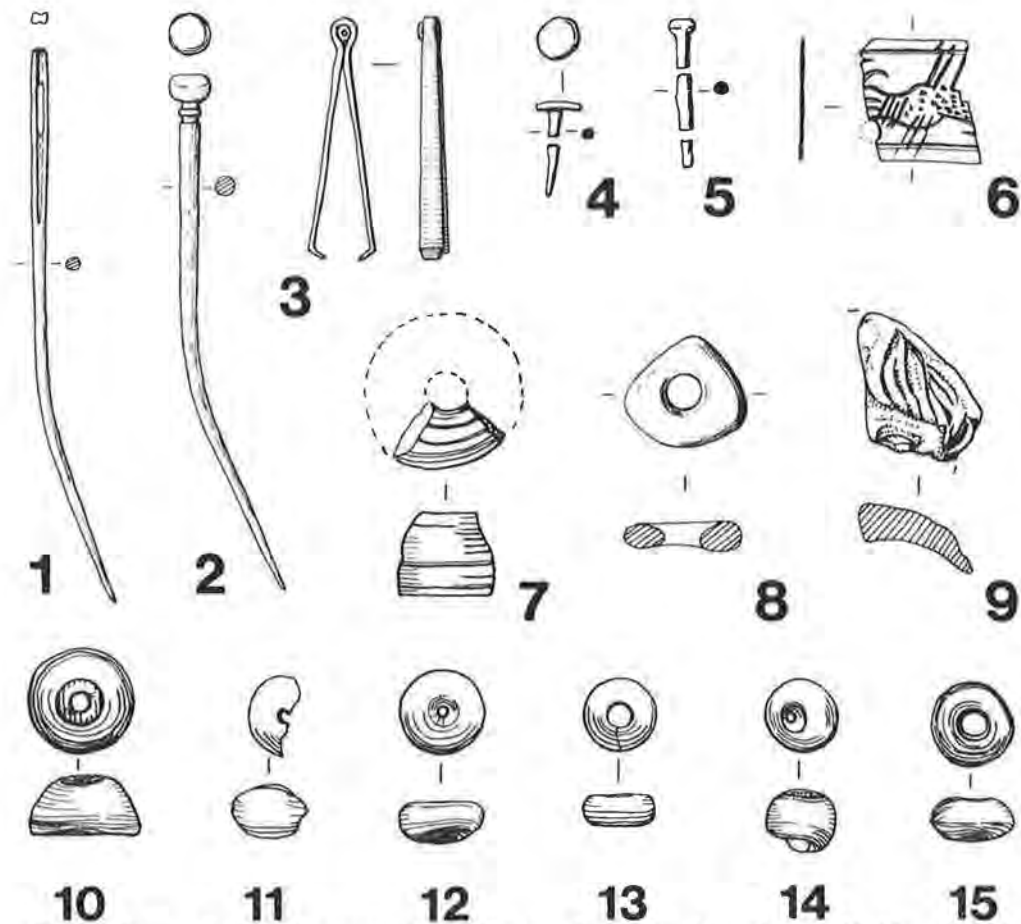


Fig. 35. Roman finds. 1-6, copper alloy; 7-8, stone; 9, pipeclay (all scale 2:3); 10-15, amber, shale and glass beads (scale 1:1).

securely stratified in closely datable groups, although in general their dating seems consistent with the examples from England described above.

2. A second Colchester brooch, representing a more common variant of that form. The fairly long bow is faceted, and plain on its upper surfaces, although the lower surface is apparently notched. The spring is broken and heavily corroded, possibly originally of eight coils. The side-wings are plain, and the external chord is held in place by a long hook. The catchplate is complete and crudely fretted with four openings. The pin is missing. (0230)

Although broadly similar to the standard Colchester form, a smaller number of brooches, including Bierton brooch 2, have a fretted catchplate with four openings. In spite of its small size, the distribution of the group is widespread, ranging from Kent to Yorkshire, and occurring as far west as Cirencester. Nevertheless, the group does tend to concentrate north of the Thames, in the eastern half of England. Few examples belonging to this small sub-group

are securely stratified in datable contexts; however, one close parallel has been found at Skeleton Green, Braughing, in a pre-Conquest layer dated c.A.D. 15-25 (Partridge 1981, 36, no. 23 and Fig. 68.14), whilst a second very similar brooch from Old Winteringham was stratified in the early Neronian/early Flavian features at that site (Stead 1976a, 195, Fig. 98.4).

3. A complete Colchester Derivative, of the 'Dolphin' form, with the bow humped forward over the hinge-cover. The bow has a wide central ridge decorated with incised zig-zag ornament, flanked on either side by a plain concave surface. The foot of the bow is ornamented by three shallow transverse mouldings, presumably a fossil foot-knob. The catchplate has a triangular piercing, with a concave top edge, and the outer face of the return is decorated with incised lines. The hinge-cover is fairly broad and circular in section, with four evenly spaced grooves running down each arm. In general, the form is current from the middle of the first to the middle of the second cent. A.D. (0361)



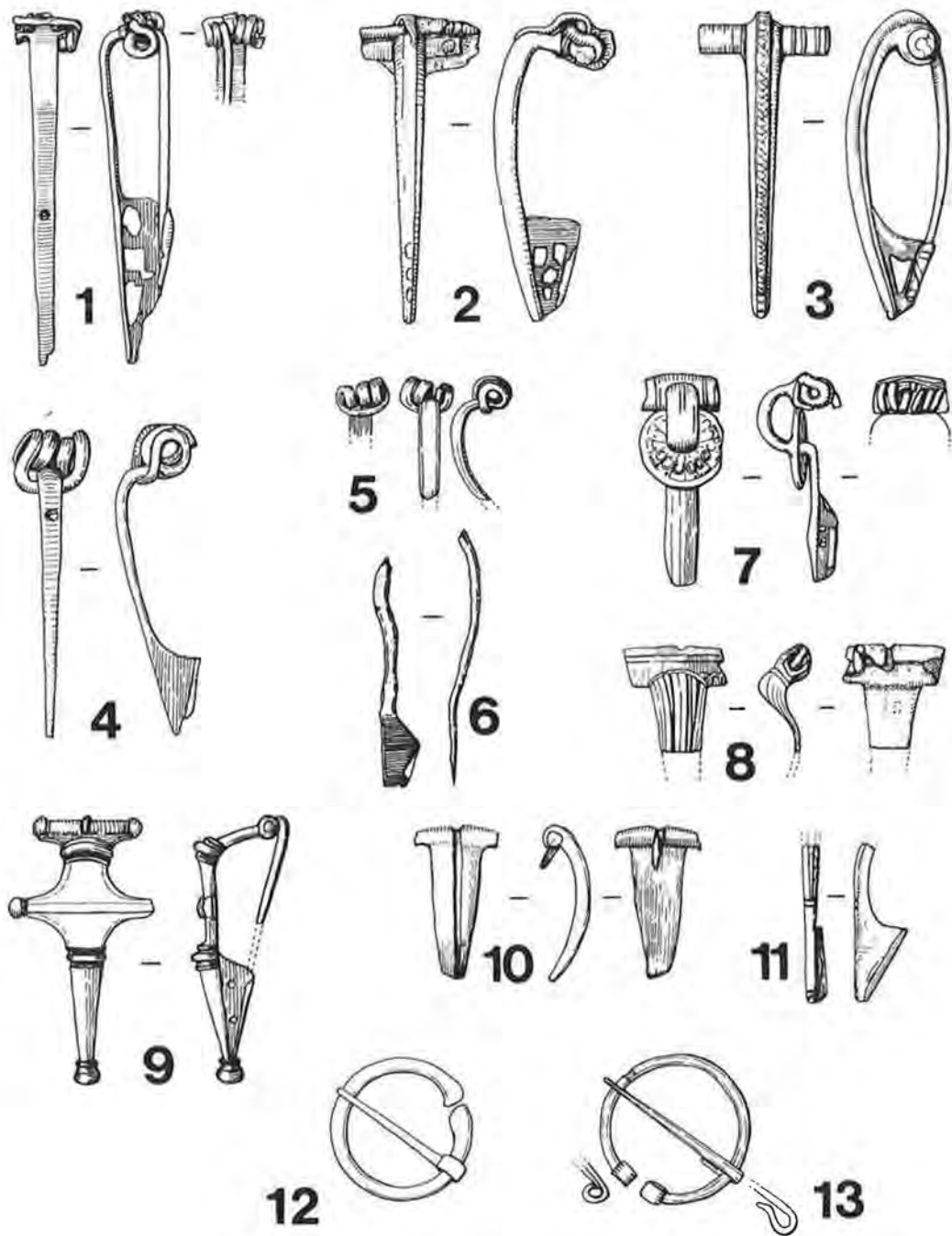


Fig. 36. The brooches. (Scale 2:3)

4. Plain Nauheim Derivative brooch of simple form, with a four-coil spring and internal chord. The bow is undecorated, slightly broader at the head, and flat-sectioned. The profile of the bow is fairly straight, with a sharp angle at the head. The triangular catchplate is solid, and the pin is missing. (0430)

The Nauheim Derivative brooch is very common in England, with a widespread distribution that covers almost the whole of southern, central and eastern England, with relatively few outliers to the north. Although the type is certainly current in pre-Roman contexts, it is now generally accepted that it remained in use until c.A.D. 70 when the Roman army advanced into northern England (Simpson 1979, 332-9). The overall Nauheim Derivative classification includes, however, a large number of variants. Brooch 4, from Berton, with a plain flat-sectioned bow of straight profile, represents one such variant, with a distribution mainly restricted to central and eastern England, north of the Thames, with outliers to the west at Glastonbury and Stockton (Wiltshire). Few examples of this variant are well stratified, although it certainly occurs at Camulodunum in both Period III (A.D. 43/4-8) and Period IV (A.D. 49-61).

5. Spring and upper portion of bow of Nauheim Derivative. The spring has four coils with an internal chord. The bow is flat-sectioned and plain, with the exception of a bordering ridge running down each side, and has a gently curved profile. The foot, pin and catchplate are missing. (0615)

The moulding on the bow is fairly distinctive, and only occurs on a relatively small group of Nauheim Derivatives, several of which also have the lower bow and foot missing. However, some are complete, and examples from Eriswell, Suffolk (Cambridge University Museum of Archaeology and Ethnology, Z23194, unpublished) and Walbrook, London (London Museum, A16978, unpublished), provide fairly close parallels for Berton brooch 5, which would also probably have originally possessed a bow tapering gently to a pointed foot with a solid catchplate. A general indication of the date of this variant is provided by one brooch from Fishbourne (Cunliffe 1971, 100, Fig. 36.4) in a Period I context (A.D. 43-75), and a second from Richborough (Cunliffe 1968, 78, pl. XXVI.4) recovered from an occupation layer dated c.A.D. 65-80.

6. Bow, catchplate and pin only. The bow, of rectangular section, is bent, but originally had a straight profile. The catchplate is solid. The head of the brooch is missing. Probably a simple Nauheim Derivative. (0610)

7. Camulodunum type VIII (Hawkes and Hull 1947, 313); however, some type VIII brooches (*ibid.*, Fig. 59, 10 in particular) are very similar in form to type X class A (i.e. *ibid.*, 314, no. 69, pl. XCIII) and these two groups cannot always be readily distinguished from one another. Nevertheless, regardless of its specific type designation, Berton brooch 7 should be seen as belonging to the early stage of development of the Rosette series (*ibid.*, 315-16, nos. 70-9, pl. XCIII). (0432)

The brooch has a P-shaped profile, with a humped bow.

The disc is solid cast with the bow. A hook secures the external chord of the spring, and the semi-cylindrical spring-cover has grooves running down each side. The bow is corroded; however, traces of two grooves running down the centre, and one bordering the right-hand side, survive. The disc is elaborately decorated by triangles radiating from the centre; each triangle contains a circle defined by double concentric grooves, and the base of the triangle is further emphasised by a short row of punched dots. The long foot is plain and parallel-sided, and the catchplate has two small rectangular piercings. The pin is missing.

The size of the group of brooches of this overall form is fairly small (c.19 examples); it is widely distributed in southern, central and eastern England. Few of these brooches are well stratified, but at Camulodunum one example (*ibid.*, 313, no. 68, pl. XCII) was assigned to 'probably Period IV' (A.D. 49-61), and at Braughing three brooches of similar form (Partridge 1981, 133, nos. 9-11) occurred in pre-Conquest contexts. A fourth brooch from Stone, Kent (Cotton and Richardson 1941, Fig. 5.4) provides a fairly close parallel to Berton brooch 7, with an almost identically pierced catchplate, and although not securely stratified, does have associated finds of Claudian date. On the Continent, brooches of this form are generally assigned an Augustan date. It is also interesting to note that at Pommiers apparently closely related brooches are represented on coins of CRICIV, to which a date of c.60-51 B.C. may be assigned (Allen, D. F. 1972, 122-32).

8. Head of a Langton Down brooch. The bow is reeded and widened at the head by the insertion of two tapering flutes. The head is separated from the spring-cover by a rounded cross-moulding. The spring-cover has two transverse grooves along the top, and is decorated to one side of the head by an arcaded motif. The bow has a markedly recurved profile. The catchplate is missing. The surviving portion of this example conforms to the most common form of Langton Down brooch found in Britain, characterised by a reeded bow, rounded off at the spring-cover (c.88 examined at the time of writing). Within this general class, however, are many minor variations of specific details, and it is difficult to subdivide the group further. In particular, the form of the catchplate piercing may be significant, and there are indications that Langton Down brooches of this class with fretted catchplates may develop later than those with a simple triangular opening. Although Hull considered the recurved profile to be early in the development of Langton Down brooches (Hawkes and Hull 1947, 317), only a very small number actually possess this feature, and these are evenly distributed amongst all other variations on the Langton Down theme; it is therefore difficult to see the recurved profile as indicative of typological significance.

The distribution of the common Langton Down form is fairly widespread over the whole of southern and eastern England, from Dorset to the Humber, with no outliers to the far west or north. Although the group itself is fairly large, the number of brooches from well stratified contexts is small. However, with the exception of a few survivals in second or even third-century contexts, the group appears to have a date range in this country from c.A.D. 10-60.

9. Copper alloy Hod Hill brooch. The centre of the flat upper panel is crossed by a single transverse moulding originally terminating at each end with a large projecting knob (one knob is now missing), resulting in a broad diagonal shape with concave sides. The outer edges of this panel are defined by a faint incised line. Above and below this panel are three closely spaced and fairly substantial cross-mouldings. The lower part of the bow is plain and tapers to a large terminal foot-knob. The triangular catchplate has two small circular perforations. The head of the bow drops fairly sharply from the upper series of transverse mouldings towards the housing for the hinged pin. The axis for the pin, seated in this housing, has knobbed ends. The lower portion of the pin is missing. (0459A)

The use of Hod Hill brooches is mainly restricted to the Claudio-Neronian Period. The variations of design within the general form are extremely diverse, and specific parallels are fairly uncommon. However, it is possible that this example may belong to the earlier stages of development of the winged Hod Hill form.

10. The head and upper bow of a hinged iron brooch. The bow has a fairly flat, rectangular section, with a gently curved profile, and tapers slightly towards the foot; a deep groove runs down the centre of the bow. The head widens to form short side-wings, which are rolled under to house the axis bar of the hinged pin. The foot, catchplate and most of the pin are missing. Probably a Strip brooch. Iron brooches are unlikely to have been current beyond the late first century A.D. (Mackreth 1981, 135). (0348)

11. Part of bow, foot and catchplate only. The upper portion of the bow has a raised central ridge, and is separated from the lower bow by a shallow transverse moulding. The foot is also ornamented by a second similar moulding. The catchplate is solid. In the absence of the upper bow, it is difficult to classify this brooch with confidence. However, it probably belongs to the general group of strip bow brooches, with a simple hinged pin at the head. (1402)

12. Fowler type Aa Penannular brooch (Fowler 1969, 150, Fig. 3). The terminals are plain and blunt, with slightly expanded ends. The ring is oval in cross-section, and the pin is flat. The Aa form marks the earliest stage in the development of penannular brooches and is now thought to have first appeared in Northern France (Aisne) during the fifth century B.C. (Simpson 1979, 327). The total number of Aa penannulars in Britain is fairly small, although the distribution of the group is wide. The associated date range of this group is also rather wide, probably beginning c.400 B.C., and certainly continuing through the first century B.C. Although one example was found in a second century A.D. context at Newstead (Curle 1911, pl. LXXXVIII.7), the Aa penannular is without doubt an Iron Age type. (0916)

13. Fowler Type C Penannular brooch (Fowler 1969, 152). The terminals are rolled at right angles to the plane of

the ring, which is plain and circular in cross-section. A very common form of penannular brooch, with a wide date range, beginning in the first century B.C. and continuing throughout the Roman period, although it is generally considered that the main distribution of the type in Britain is pre-Conquest (Simpson 1979, 329). (0330)

14. (Not illus.) Pin and part of one coil of a spring. (0444)

*Note.* At the time of final revision of this text (1985), the whereabouts of some of these brooches could not be established.

## The Roman Coins

D. Nash

### Hadrian

Sestertius. Apparently LIBERTAS PVBLICA S.C. (RIC II, 414, no. 583). A.D. 119–21. (1516)

### Antoninus Pius

Sestertius. Annona or Abundantia at altar, Reverse illegible. A.D. 138–61. (0362)

### Lucilla

Sestertius. Illegible. A.D. 161–9. (0416)

### Marcus Aurelius

Dupondius. Illegible. A.D. 161–80. (0412)

### Commodus

Sestertius. DIVVS M ANTONINVS PIVS / CONSECRATIO S.C. and eagle (RIC III, 114, 660). c.A.D. 180. (0412)

### Postumus

Antoninianus. PAX AVG. A.D. 259–68. (0430)

### Constantine I

GLORIA EXERCITVS (two standards).  $\frac{1}{3}$  PLG mint of Lugdunum. A.D. 330–5. (0220)

### Local Imitation

Apparently overstruck on something earlier, cf. FEL TEMP REPARATIO, falling horseman type. A.D. 350–3. (1503)

## Objects of Worked Bone

S. Greep (Fig. 37:1–8)

1. Needle with a pointed head and single round eye. Jewry Wall type A.1 (Kenyon 1948, Fig. 91.1). Stained green. 115 mm long, broken. (0421)

2. Hair pin with a simple pointed head and tapering stem. Colchester type 1 (Crummy 1979, Fig. 1, 1), Jewry Wall type A (Kenyon 1948, Fig. 90.1). 120 mm long, complete. (0432)

3. Hair pin, type as no. 2 above. 112 mm long, complete. (0432)

4. Hair pin similar to the preceding examples but with a single collar. Colchester type 2 (Crummy 1979, Fig. 1, 2), Shakenoak type 'A' (Brodrigg *et al.* 1968–73, II, 124) and Jewry Wall type A.2 (Kenyon 1948, Fig. 90.1, 1–3). 35 mm long, broken. (0326)

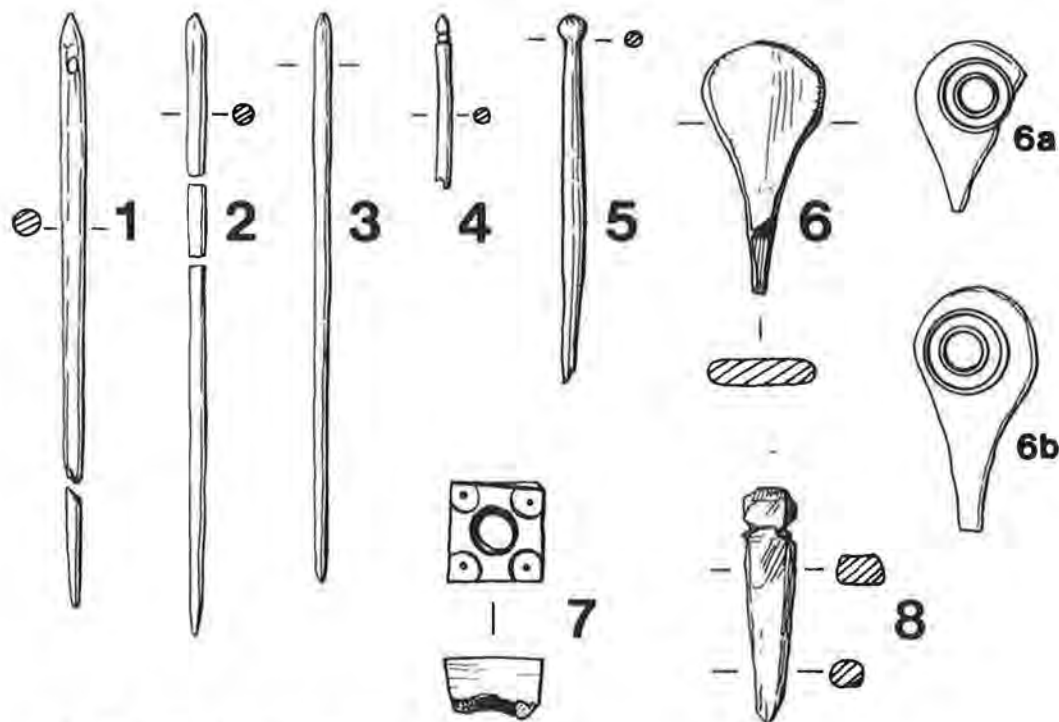


Fig. 37. Roman worked bone. (Scale 2:3).

5. Hair pin with an ovoid head and swelling stem. These forms are the most common type of Roman hair pin, being most numerous in the late Roman period. Colchester type 3 (Crummy 1979, Fig. 1.3), Jewry Wall type C (Kenyon 1948, Fig. 90, 7-8) and Shakenoak type 'B' (Brobrigg *et al.* 1968-73, II, 124). 74 mm long, broken. (0432)
6. Plain, flat bone object with an oval head and tapering stem. 50 mm long, broken. This piece has close affinities with a small number of Roman inlay forms. These related types have large concentric circles inscribed on their upper surface. Such examples are known from Cirencester (unpublished, Corinium Museum Acc. No. A 314 and C 666, illustrated here, Fig. 37:6a, b), Wroxeter (two examples, unpublished, excavations by P. A. Barker) and Xanten (unpublished, Xanten Museum). Two similar unfinished pieces are known from Augst (unpublished, Römermuseum Augst). (0935)
7. Square bone object with sides of c.18.5 mm. The centre has a drilled hole, c.9.5 mm diameter. In each corner a small ring and dot motif has been incised, 6.5 mm diameter. This piece is probably related to a series of square ring and dot ornamented antler and bone forms, of the Roman period. These are typically late Roman, as is the closest parallel from Gadebridge Park (Neal 1974, Fig. 67, 335) with similar ring and dots and central perforation. (0432)
8. Small bone peg with a broken, knife-cut stem 47 mm long. A rudimentary head has been cut. This is possibly a rough out for a hair pin of Roman type. (1513)

### *The Roman Animal Bones* G. G. Jones

Bone from Roman contexts was contaminated from below (Iron Age) and above (Medieval). Therefore, no animal bone can be called Roman with complete certainty. However, the volume of Roman finds means that a large quantity of animal bone must belong to this period, although contexts here termed 'Roman' contained residual and intrusive material. Some indication of this is provided by the ratios of pottery by weight from the 'Roman' contexts which were as follows (sample size 21 kg): Roman 74%, Iron Age 23%, Medieval 3%. A further sample, from contexts designated 'probably Roman' was looked at briefly (sample size 35.5 kg): Roman 67%, Iron Age 9%, Medieval 24%.

Table 7. Roman animal species present, by percentage.

	N	Cattle	Sheep	Pig	Horse	Other
Iron Age	1411	31	43	22	2	2 deer, dog, cat, hare, fowl, goose, duck,
'Roman'	668	40	37	17	2	4 deer, dog, cat, hare, fox, <i>Corvus</i> sp., dove buzzard
'probably Roman'	947	37	39	17	2	6 deer, dog, hare, fowl, <i>Corvus</i> sp., mallard, barn owl

N = Number of identified bones.

How far identified fragments from excavation reflect the actual livestock kept by past farmers is not known, but Table 7 shows that the proportion of the main domestic species found in Roman features appears to be remarkably similar to the Iron Age sample. Cattle bones form a greater proportion of the 'Roman' than the Iron Age sample, and pig bones form about a fifth throughout.

The 'Roman' bone was more fragmented than the Iron Age. Bone was recorded on two lists: 'zones', where more than half of the element (e.g. proximal end, left) was present; and 'fragments'. Although the purpose of the zone list was to assess minimum numbers and long bone maturity, the relative size of the two lists also provides a measure of fragmentation, i.e. the larger the zone count is relative to the fragment count, the less fragmented is the assemblage. The Iron Age zone list contained 73 per cent of the total identified Iron Age bone, whereas the 'Roman' zone list contained 64 per cent. Also, more of the 'Roman' cattle bones bore chopmarks, 11 per cent against 7 per cent. Differences may be just the result of the differences in the types of deposit, but may mean that bone was more intensively used, e.g. for extracting fat and tallow.

The 'Roman' layers included one goat horn core, one probable goat phalanx, and a piece of

skull from a hornless sheep or goat. The deer bones were from red deer (one piece of sawn antler) and roe deer (two metatarsals). Roe was also well represented in the 'probably Roman' sample (five metatarsals), as was hare (six bones). An increase in hunted species in the Roman period has been observed in the Upper Thames Valley sites (Wilson, personal comment). Hare was probably hunted with a spear, with the help of one of more hounds, to judge from pictorial evidence from the Roman world (Toynbee 1973).

From all periods, evidence of red deer comes entirely from pieces of antler, which may have been collected or even traded.

The 'Roman' and 'Medieval' contexts both produced a larger proportion of pathological bones than the Iron Age. Lack of certain dating makes detailed description pointless, but photographs and descriptions are held at the Buckinghamshire County Museum. From the 'Roman' and 'probably Roman' layers the following species were affected: cattle, 6 bones, 3 of them phalanges; sheep, 3; pig, 3, one being an immature metacarpal IV with a splayed end, possibly the result of rickets (Baker and Brothwell 1980, 49) and another an immature metacarpal V with a large, oval swelling, a lesion rather suggestive of tethering; horse, 1, a mandible with a tooth abscess; and dog, 1.



## *Discussion of the Roman Occupation and the Evidence for a Villa*

### *Chronology*

Any assessment of the longevity of the Roman occupation must rely on the evidence of the finds, and these suggest that the settlement became fully Romanised not long after the invasion of A.D. 43, and was continuously occupied until the fourth century. The artefactual evidence (coins and pottery) suggests abandonment in the mid fourth century, but the late Roman/sub-Roman buckle plate may be evidence of continued occupation (Fig. 35:6). There is always a risk that the sample area may prove unrepresentative of the whole, but the finds provide a broad date range which, in the absence of a detailed structural sequence, has to be accepted at face value.

### *The Evidence for a Villa*

Although few structural features of Roman date existed or survived in the area of the excavations, their absence was balanced by the large quantity of finds, which more than anything else provides a strong indication of the nature of the Roman occupation. There seems little doubt that the substantial quantities of pottery, the presence of painted wall-plaster, *tesserae* and other architectural fragments, and the number of 'luxury items', indicate the existence of a villa. This is further evidenced by the widespread distribution of the earlier discoveries (p. 3) and the character of some of them. Indeed, it is even possible to suggest that the main villa buildings are now located beneath the church and churchyard, with ancillary structures running south-east through the excavated area in the direction of the new school (Fig. 1c:6), some of the contemporary burials being situated in the area of the 1861 find (Fig. 1c:3).

### *The Timber Building*

Whilst it is not possible to reconstruct the ground plan of the villa, it is at least possible to find a parallel for one of the structures postulated, namely the timber building. The simple rectangular building, the 'shell for all purposes', is a common occurrence on Roman sites, and has recently been studied with regard to its agricultural usage (Morris, P. 1979, 66).

The Bierton plan possibly has an unusual feature, a central beam-slot, which distinguishes it from most other examples. Two comparable structures have been excavated at the Honeyditches Villa, Seaton, Devon (Miles, H. 1977, 113). A reconstruction drawing (*ibid.*, Fig. 7) suggests that the central beam permitted a split-level floor, necessary because of the sloping ground, and a similar arrangement may have existed at Bierton. Reconsideration of the Honeyditches evidence has led Todd (personal comment) to suggest a military origin for the site and the buildings in question, something that seems unlikely at Bierton. An alternative suggestion is that the central beam slot represents a partition connected with tethering or feeding animals (J. C. Trench, personal comment, cf. Barley 1985). A parallel is also forthcoming for the fence-lines consisting of continuous slots with intermittent postholes (e.g. 0833). Neal's excavations at Gorhambury, Hertfordshire have revealed identical features, which were employed to delineate small fields or paddocks in the vicinity of the villa buildings (D. S. Neal, personal comment).

### *Origin and Development*

Consideration of the distribution of villas in the south Midlands region (Ordnance Survey 1978) shows that the Bierton villa is peripheral to the concentration of villas in the Chiltern valleys to the west of Verulamium. Among these villas, the evidence for pre-Roman occupation is limited to the villas nearest Verulamium: Gorhambury and Park Street (Neal 1978, 37 and references). The other villas of the Chilterns, where excavated, have not produced evidence of 'Belgic' origins.

The usual model for villa origins in Britain (Percival 1978, 149) is that the first villas were built near towns by town-dwelling Romans, the idea being adopted and imitated by the native rural landowners. The model is supported by the evidence for the developed state of Late Iron Age agriculture and its capacity to produce a surplus. This fits the evidence from Bierton rather well; however, the lack of pre-Roman evidence from Chilterns villas such as North-

church, Boxmoor and Latimer must indicate the operation of more complex factors in the region. What these factors were remains a subject for future research, but their elucidation certainly depends upon an understanding of the economic organisation of the Chilterns villas. Excavations at Gorham-bury (Neal forthcoming b) and Mantles Green, Amersham (Yeoman forthcoming) will undoubtedly clarify the picture. The development from a Belgic settlement into a Roman villa may be most closely paralleled locally at Bancroft, Milton Keynes (R. J. Williams, personal comment). In Bedfordshire, a strong measure of continuity in political power has been detected, but although some settlement sites continued to be occupied in the Roman period, villas seem to have been built on previously unoccupied sites (Simco 1984, 24-8).

The lack of structural evidence at Bierton makes the discussion of villa development impossible. There is evidence for occupation until c.A.D. 350, when both the coin and pottery evidence indicate a clear termination. In this respect, Bierton is entirely consistent with Chilterns villas, all of which appear to enter a 'decline' and then cease to be occupied c.A.D. 350 (Neal 1978, 52-3).

#### *Economy and Status*

The relationship of the Bierton villa with Verulamium is clearly shown by the pottery evidence (Fig. 34). The site lies within 2 km of Akeman Street where it passes through Aylesbury (Fig. 1c:6) and only some 30 km from Verulamium. Verulamium functioned as an administrative centre and market, and supplier of a wide range of material goods and specialised facilities, for an extensive area into which the villa certainly fell. In addition, economic relationships must have existed between the villa and other, lower rank sites, such as the small site at Fleet Marston, (Ordnance Survey 1978) and other nearby villas, such as Northchurch (Neal 1974-6). There were also smaller settlements in the immediate area, at Walton Court (Farley *et al.* 1981), and in Aylesbury itself (Allen, D. 1982). These sites imply a fairly dense settlement in the Roman period along the limestone ridge spanning the Vale, which is

followed by Akeman Street; however, the nature of the economic and social relationships between these sites is not at present understood.

The superimposition of the Roman villa on the Late Iron Age settlement suggests a continuity of occupation, which is supported by the pottery evidence. Particularly significant is the environmental evidence, which indicates a continuation of the agricultural system established in the Late Iron Age. The animal bone evidence showed a large measure of similarity between the Iron Age and Roman periods, although the paucity of datable Roman samples makes firm conclusions difficult. Cattle were used in the Iron Age phase as draught animals, and this continued in the Roman phase, with a small increase possibly indicating an increased consumption of meat. Sheep and pig made up a broad, mixed economy.

#### *The Villa Estate*

The study of villa estates in Britain is still very much in its infancy, but pioneering work by Taylor (1975, 66), H. Green (1978) and Rodwell (1978a) indicates what a wealth of information is available to supplement the traditional, limited villa excavation. In addition the work of Drury and Rodwell in Essex (1980, 59) has shown that field systems of Late Iron Age or Roman date can be detected on pre-Enclosure maps. This is of relevance to Bierton where the Enclosure Award map of 1780 shows the eighteenth-century field pattern. Although this was to a great extent the result of episodes of encroachment and expansion in the medieval period, many of the boundaries, with their clear relation to topographical features and early trackways, could date from the Late Iron Age or Roman period. This point has also been made by Taylor and Fowler (1978) who suggest that sections across many medieval headlands would reveal evidence of earlier ditched boundaries.

Any consideration of the Bierton 'villa estate' must be couched in very general terms, as no detailed study has taken place. It would appear, however, by analogy with other areas, that Bierton may be a classic example of the

present-day parish representing a land-holding created in the Roman period, if not before. The key evidence lies in the fact that church, manor, hall and villa all occupy the same central location in the parish (Taylor 1974, 11; Brown and Taylor 1978). In addition, the working of the villa estate would have required the existence of a number of satellite settlements,

and whilst one of these may be inferred from the place-name 'Burcott', 0.5 km to the east of the excavation, another has been discovered by field-walking 1 km to the north-west (Miles, P. 1981; CAS 4694). Unfortunately, the lack of arable land in the parish hampers the recognition of other complementary sites by either field-walking or aerial reconnaissance.

## THE EARLY SAXON PERIOD

No structural features of definite Saxon date were found, but a not insubstantial quantity of Saxon material was recovered during the excavation. Included were fragments of distinctive fired-clay loomweight, sherds of grass-tempered and stamped pottery, and objects of worked bone (Fig. 38). The inference to be

drawn from this liberal scatter of material is that Saxon occupation was taking place at no great distance from the site of the excavations. Indeed, the choice of the villa site for the chapel and later church suggests that this area remained a focus of attention throughout this period.

### *The Early Saxon Finds*

#### *Loomweights and Pot Stamps (Fig. 38, 1-5)*

1. Loom weight fragment, (0118B)
2. Loom weight fragment. (1503)
3. Saxon pot stamp, A4ai (Briscoe 1981, 5, 34). Most common type, but oval rather than round. (0250)
4. Saxon pot stamp, A5c (Briscoe 1981, 19, 34). Rare type, but paralleled at Walton, Pennylands and Northampton Castle. (0452)
5. Saxon pot stamp, D1a (Briscoe 1981, 10, 34). Shallow wood or bone impression. (0118A)

#### *Objects of Worked Bone* S. Greep

6. Cigar-shaped pin-beater, 104 mm long, complete. These originate in Roman times but although Wild quotes an example from Hofheim (Wild 1970, Table K) there are, as yet, none of this early date from Britain. The form is, however, far more characteristic of the Saxon period to which this piece most likely belongs. They lasted until

early medieval times. (0402)

7. Oval-sectioned tapering piece of bone, 57 mm long, broken. The remaining end has a series of well-indented grooves on both sides. Probably a pin-beater, as no. 6 above. Although these are usually more rounded in section, flatter examples are known. (0315)
8. Small fragment of the retaining plate of a double-sided composite bone comb, 41.5 mm long, broken. One iron rivet remains but there are traces of at least one more. The surviving incisions from the cutting of the teeth show that both sides possessed teeth spaced at c.6.5 per cm. Most combs had sides of fine and coarsely spaced teeth so this is an unusual example. Double-sided composite combs first appear in the late Roman period but continue into the early Middle Ages. The lack of any decoration on the retaining plate, as well as its flat section, argues strongly against a Roman period date. (0428)

### *Discussion*

Discoveries of early Saxon occupation sites containing the distinctive *grubenhäuser* and timber halls are rare in Buckinghamshire, although such a site has been excavated at Walton, Aylesbury, 3 km to the west of Berton (Farley 1976).

Evidence of early Saxon occupation has been found in Aylesbury itself (Allen and Dalwood

1983, 17-18) and a model of small dispersed 'hamlets' beneath the area of the modern town is favoured (Farley 1979, 121). The evidence from the present excavation indicates that early Saxon occupation occurred in the immediate area, and field-walking has revealed a possible Early Saxon site at Baldrick's Piece, 1 km to the north of the excavation (CAS 4695, Miles, P. 1981, 51-2).

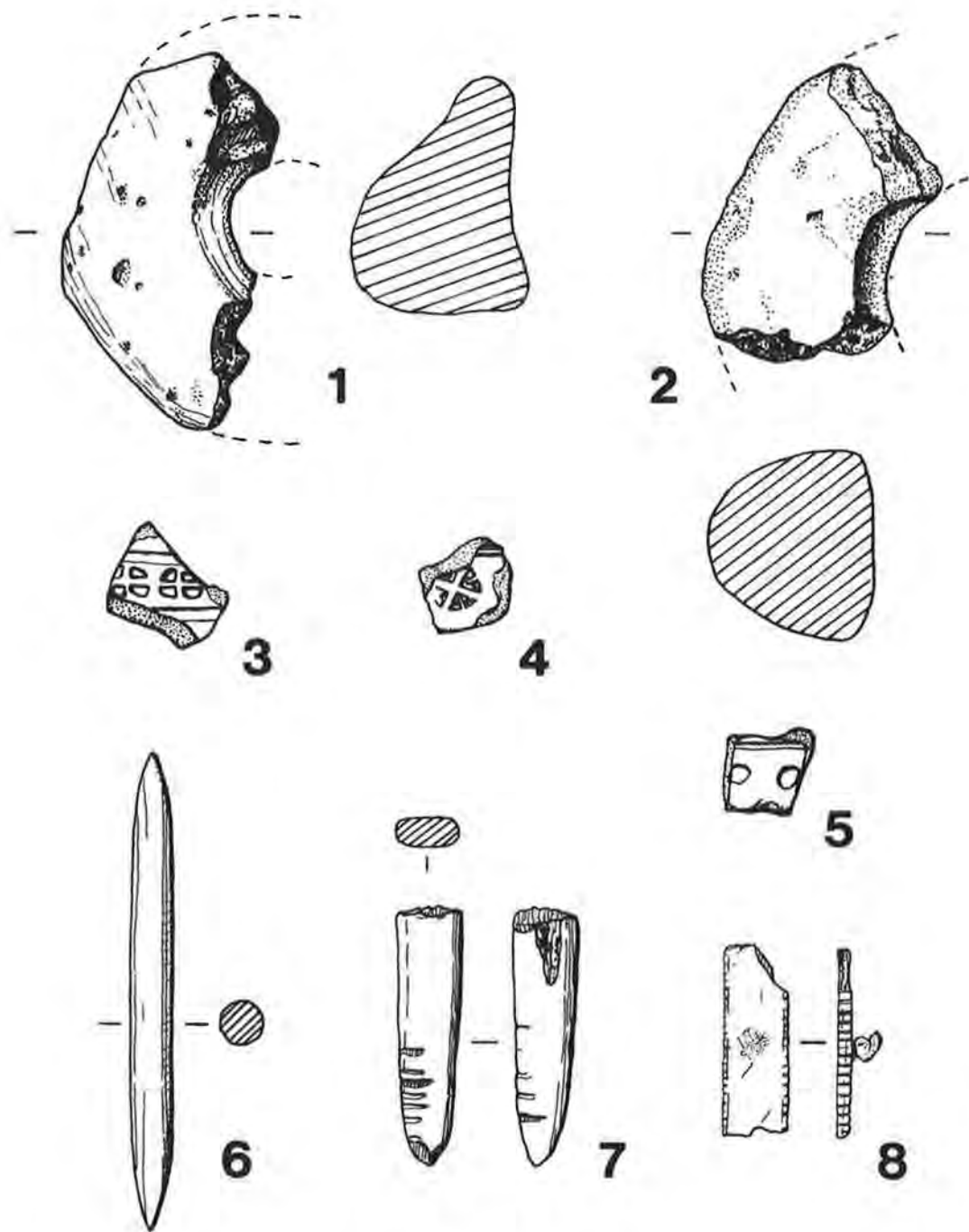


Fig. 38. Early Saxon finds. 1-2, clay loomweights (scale 2:3); 3-5, pottery stamps (scale 1:1); 6-8, worked bone (scale 2:3).



There is no direct evidence for continuity of occupation from the Roman period, since there seems to be a break in occupation in the mid fourth century. It may be that the villa estate continued as a unit in some form, with a number of 'hamlets' in the early Saxon period which coalesced to form the village of *Bortone*. However, the area of the excavation produced

no evidence of subsequent occupation until the twelfth century A.D. The status of the early Saxon site at Bierton, presumably closely related to the site at Aylesbury, remains unknown, since the nature of the Aylesbury settlement itself is highly conjectural (Allen and Dalwood 1983, 50).

## THE MEDIEVAL PERIOD

### *Structural Evidence*

The evidence for medieval activity consisted of a number of boundary ditches, isolated pits and wells, and the much-disturbed remains of two structures. Medieval pottery was widespread across the site, but no uncontaminated layers were present. However, two hearths were discovered which were apparently of medieval date. These gave some indication of the contemporaneous ground surface, although one of them was located in a distinct hollow, but no accompanying structures were identified.

#### *Boundary Ditches*

The boundary ditches were located mostly in the eastern arm of the excavation (Fig. 39), but a short length also appeared at the western limits of the site (Fig. 40). The eastern ditches averaged 1.0 m in width, and 0.60 m in depth, and lay on north-west/south-east or south-west/north-east axes. They were not all contemporary (the recut 0613/20 was later than 0611) but the excavated area was not large enough for the sequence to be appreciated to the full. The ditches all appeared to have silted naturally, but this fill did contain some objects of interest. The recut 0620 contained the ribcage, vertebrae, and lower mandibles of an ox (see p. 92) and where the recutting had taken place (0613) the protruding ribs had been neatly severed. All the ditches produced some sherds of pottery, but 0611 contained much of a late thirteenth-century cooking vessel (Fig. 44:14). An isolated length of narrow shallow gully (0608) at the eastern end of the site may have been of medieval date. The solitary ditch at the western end of the site (0109) was 1.50 m in

width and 0.40 m in depth. It ended in a simple rounded terminal 5.0 m into the excavated area. Also at the western end, and cut by 0109, was a length of shallow straggling gully (0110) apparently of medieval date but with no obvious function.

#### *Hearths, Pits and Wells*

The two hearths were located in the eastern arm of the excavation (Fig. 39). One (0532) was a more complex feature than the other (0605) but both employed the same manner of construction. This consisted simply of a layer of limestone subsoil at the centre of which the fire had been set. Hearth 0532 showed evidence of at least four episodes of burning, and spread across an area 3.0 × 2.25 m, whilst 0605 had a single seat of burning and was much more confined (1.50 × 1.0 m). No trace was found of any structures relating to these hearths.

The dozen or so pits which can be attributed to the medieval period are of a very varied nature, and were widespread across the site. The eastern arm of the excavation contained a cluster of three circular intercutting pits, the fill of which was so uniform that they were accorded a single number (Fig. 39:0612). They covered a combined area of 3.0 × 1.50 m. At the western end of the site was another group of three pits (Fig. 40:0118, 0124, 0125) but here the varied fills allowed the chronological relationships to be seen. The later pits were circular (1.0 m in diameter) and very shallow, but the earlier feature (0118) was oval (2.50 × 1.50 m). Two other intercutting pits, clearly of medieval date (Fig. 40:0122, 0142), were located



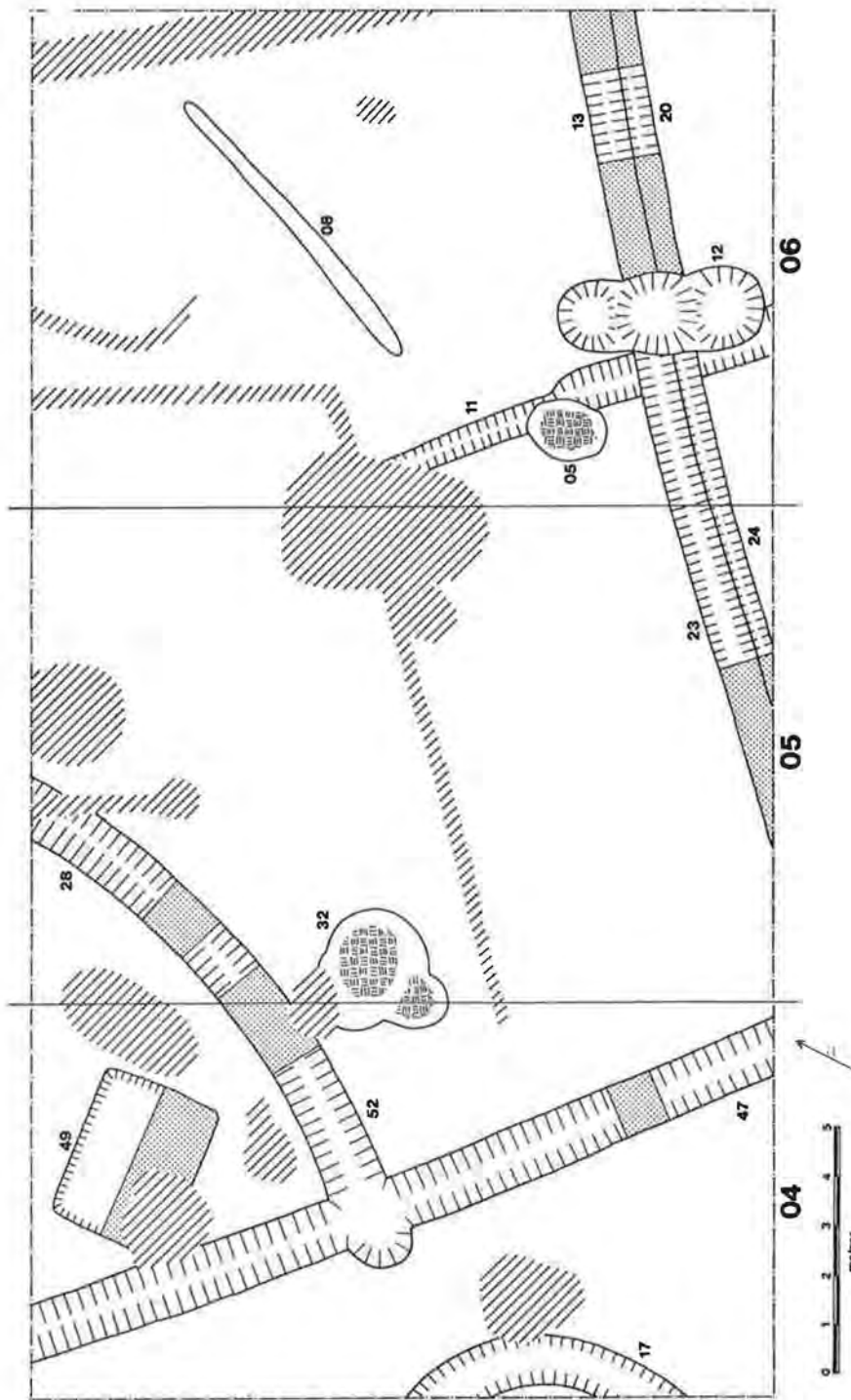


Fig. 39. Medieval features in Areas 04, 05 and 06. Unexcavated deposits stippled, later disturbances hatched.

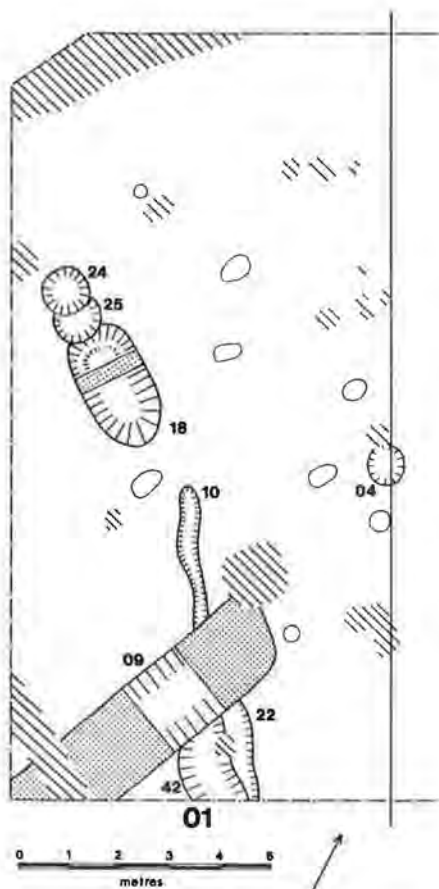


Fig. 40, Medieval features in Area 01, deposits stippled, later disturbances hatched.

in this area, appearing between the southern limit of excavation, and the later ditch 0109. It may well be that one or both of these features represents the continuation of 0110, a suggestion strengthened by their elongated shape, but the intervention of 0109 makes this impossible to prove. One other small circular pit of possible medieval date existed in this vicinity (0104, 0.70 m diameter, 0.20 m deep).

Area 02 contained two circular intersecting pits (Fig. 41: 0250/67) which overlapped with one of the possible structures (see below). The larger of these (0250) was 1.50 m diameter and 0.40 m deep, and the smaller, which was greatly disturbed by later activity, was 1.50 m in diameter and 0.35 m in depth.

The largest pit of medieval date revealed by the excavation was 1413 (Fig. 42), which measured at least  $4.0 \times 2.0$  m, with a depth of over 1.0 m. The feature had steeply sloping sides and a rounded base, and contained a high proportion of burnt material and charcoal in its black soil fill. There was no clue to its function, but in August 1979 the bottom 0.20 m held water, and it may have been dug as a waterhole. One feature which clearly was a well was the diminutive 0948 (Figs. 41, 42). This oval shaft measured  $0.90 \times 0.75$  m at the surface and tapered gradually for its 1.80 m depth. The lower fill contained many sherds of a glazed jug (Fig. 45:29).

### Two Probable Structures

In addition to the widely distributed pits and ditches, the site produced some structural evidence of the medieval period, although this was of a slight nature. The most obvious feature was a circular foundation trench (0325, 0417) 1.10 m wide and 7.50 m in external diameter (Fig. 41, Pl. VII). It survived to a depth of 0.30 m but had been completely robbed of its stone content, this having been replaced by a stiff yellow clay. However, in two places clusters of stone did remain *in situ* to provide clues to the original filling. One of these was where the foundation crossed the Roman wall-footing (0320) but here only the outer face, three stones deep, was represented. The other location was in the south-east quadrant, where a cluster of slabs occupied the full width of the trench. An interesting feature of these stones is that they were all sandstone, and not the more readily available limestone. There was no evidence of floor or ground levels relating to the structure, these having been stripped away by later activity, nor were any postholes discovered which might belong to it.

At first sight this limited evidence provides little indication as to what function the building may have fulfilled. However, an isolated circular structure of this scale is rare in medieval contexts, with the exception of one class of building, the dovecote (see p. 94).

The other probable structure (Fig. 41:0362) is far less informative, as it was badly disturbed

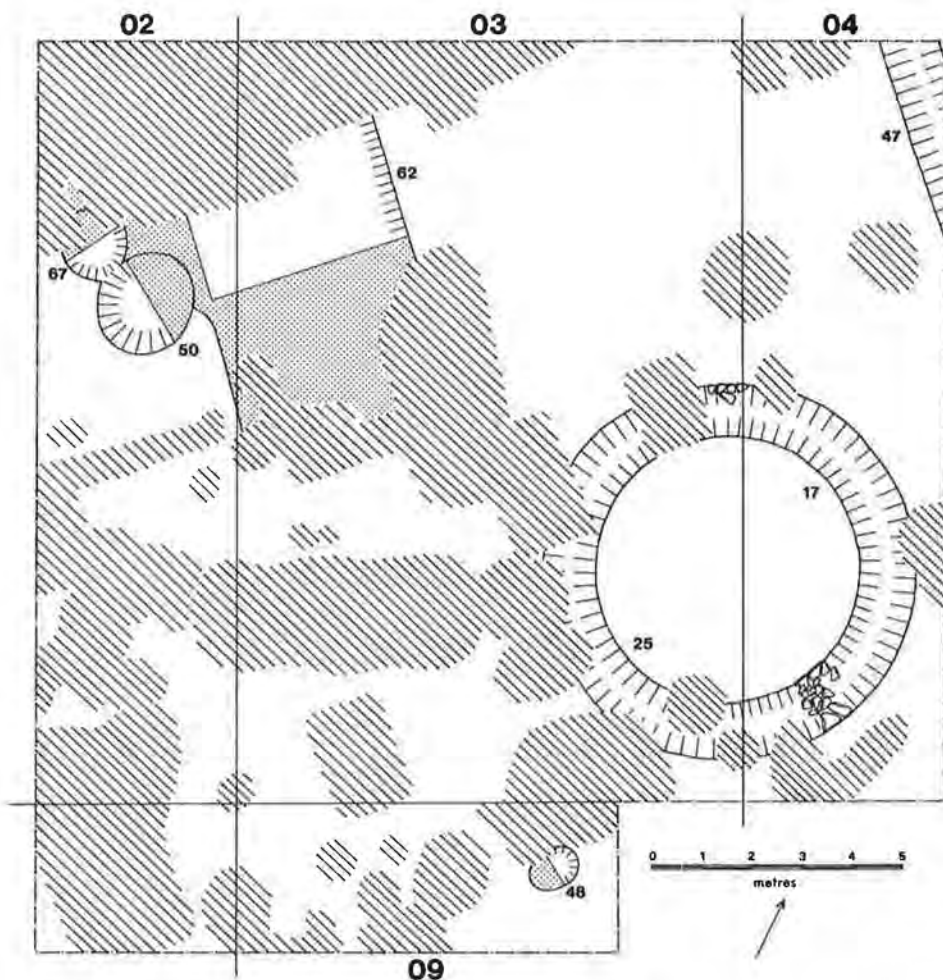


Fig. 41. Medieval features in Areas 02, 03, 04 and 09. Unexcavated deposits stippled, later disturbances hatched.

by later features. It consisted of a rectilinear pit, 4.0 m in width, but of indeterminate length (at least 6.0 m), with vertical sides and a flat base. It measured 0.35 m in depth, and was filled with black soil, which contained numerous small pieces of limestone as well as animal bones and sherds of pottery, dating the fill to the late thirteenth/early fourteenth

century. To the west there existed a shallower spread of soil, cut by pits 0250/67. Whilst unimpressive in its own right, this large regular feature is believed by the writer to indicate that a building stood on this location before the post-medieval structure was erected (see p. 95 below).

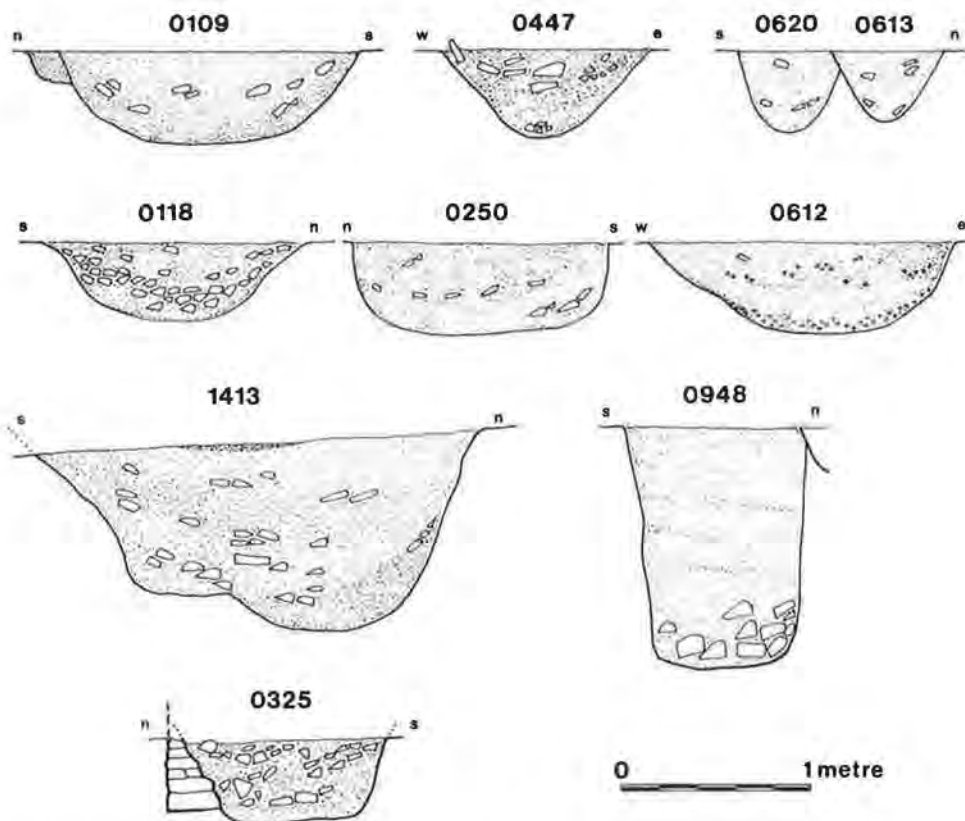


Fig. 42. Sections of medieval features. (Scale 1:40)

### *The Medieval Finds*

With the exception of the pottery, few medieval finds were recovered from the excavated area. This reflects the small number of closed contexts of this date, and the absence of occupation layers as such.

However, pieces of tile and daub, and objects of stone, iron, bronze and lead were discovered and a number of animal bones of medieval date were also recovered.

#### *Utilised Stone*

Three fragmentary rubbing-stones were found in pits or ditches of thirteenth to fourteenth-century date. They are illustrated here (Fig. 43:1-3), although it is possible that they are residual finds, relating to earlier activity.

1. Fragment of whetstone, with one worn edge remaining intact. The surface has a groove for pin-sharpening. Laminated calcareous, fine-grained sandstone. (0124)
2. Fragment of D-sectioned whetstone. Fine-grained, compact, calcareous sandstone with white mica. Local limestone beds. (0348)
3. Fractured pebble with surface smoothed by polishing. Red chert. (0447)

#### *Roof Tile*

Few of the medieval features produced any tile other than Roman, but a fair quantity (which can be considered as medieval) was recovered from later contexts and the general layers. In particular, several pieces of glazed roofing-tile were found.

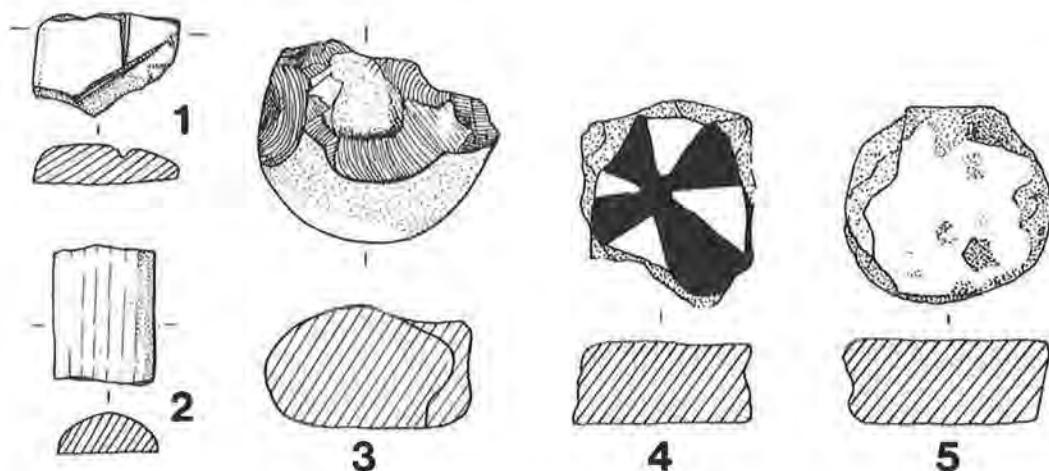


Fig. 43. Medieval finds. 1-3, utilised stones; 4-5, decorated tile. (Scale 1:2)

#### Floor Tile (Fig. 43:4-5)

Two fragments of medieval floor tile were found. Both occurred as residual finds in post-medieval contexts, and must be debris from a period of reflooring of the church. Both probably came from local tile factories, such as Penn.

4. Painted tile (fragment) with brown patée cross on yellow ground. (0115)
5. Circular tile (worn) with yellow glaze; possibly part of a tile mosaic. (0601)

#### Daub

Considerable quantities of fired clay came from two of the boundary ditches at the eastern limits of the site (0611, 0613). Some pieces retained 'witty' impressions, and may have come from a wattle and daub screen or wall, but there was no other structural evidence in this locality.

#### Medieval Pottery

The medieval pottery from the excavation is comprehensively illustrated (Figs. 44-7) and catalogued below. The pottery was used to provide dating of medieval features on the site, and their length of occupation, but resources did not permit a detailed examination of the forms and fabrics. The cataloguing of the illustrated pottery was assisted by Michael Farley, Barbara Hurman and Peter Yeoman.

#### Medieval Pottery from the Boundary Ditches (Fig. 44)

##### Boundary ditch 0109, fifteenth cent. with residual material

1. Cooking pot, diameter uncertain; pink/buff surfaces; grey core; calcareous. (0109)
2. Cooking pot, grey/brown surfaces; grey core; sparse calcareous. (0109)
3. Cooking pot, brown/grey surfaces; grey core; sparse calcareous. (0109)
4. Cooking pot; diameter uncertain; brown/black surfaces; grey core; sparse calcareous; thumbing on inside edge of rim. (0109)
5. Cooking pot; grey surfaces; grey core; sandy; thumbing on inside edge of rim. (0109)
6. Bowl; buff/pink surfaces and core; speckled clear glaze on interior; sandy. (0109)
7. Bowl; brown surfaces; grey core; calcareous. (0109)

##### Boundary ditch 0447, thirteenth cent. with residual material

8. Cooking pot; St Neots type; shelly fabric. (0447)
9. Comb-decorated sherd; red/brown surface; grey core; sparse calcareous, tenth-eleventh cent. (0447)
10. Cooking pot; grey exterior with sooting; grey/brown interior, grey core; sandy. Thirteenth cent. (0447)

##### Boundary ditch 0452, twelfth-thirteenth cent.

11. Cooking pot; diameter uncertain; brown exterior; grey interior; grey core; calcareous. (0452)
12. Cooking pot; brown/grey surfaces; grey core; sparse calcareous. (0452)

##### Boundary ditch 0611, thirteenth cent.

13. ? Jug base; brown/grey surfaces; pink/grey core; sandy; ? thumbing on base. (0611)
14. Cooking pot; grey surfaces; grey core; sandy. (0611)



*Boundary ditch 0523, thirteenth cent.*

15. Cooking pot; St Neots type; shelly fabric. (0523)
16. Cooking pot; diameter uncertain; brown/buff surfaces; brown/buff core; sandy. (0613)
17. Cooking pot; grey/brown exterior; grey interior; grey core; sandy. (0613)

*Medieval Pottery from the Pits and Well (Fig. 45)*

*Pottery from pit 0118, twelfth–fourteenth cent.*

1. Pot base, black/grey exterior; red/brown interior; grey core; sparse calcareous. (0118)

*Pottery from pit 0122, thirteenth cent.*

2. Bowl, black/grey surfaces; brown core; sandy, large inclusions. Brill/Boarstall cp fabric. (0122)
3. Cooking pot, diameter uncertain; brown exterior; grey/buff interior; buff core; sandy. (0122)
4. Cooking pot, diameter uncertain; grey/black surfaces; grey core; sandy. (0122)
5. Cooking pot, diameter uncertain; grey/black surfaces; grey/black core; calcareous, thumbing on top of rim. (0122)
6. Cooking pot, buff/grey surfaces; grey core; sandy; stabbed decoration on top of rim. (0122)

*Pottery from pit 0142, late twelfth–early thirteenth cent.*

7. Cooking pot, red/buff exterior; interior buff; grey core; calcareous. (0142A)
8. Cooking pot, grey/black exterior; grey/brown interior; grey core; sandy. (0142A)
9. Cooking pot base, grey/brown surfaces; grey core; sparse calcareous. (0142A)
10. Cooking pot base, grey/brown exterior; grey interior; grey core; sandy. (0142A)
11. Cooking pot, diameter uncertain; grey/brown exterior; brown interior; grey core; sparse calcareous. (0142A)
12. Cooking pot, grey exterior; grey/brown interior; grey core; sparse calcareous. (0142A)
13. Cooking pot, diameter uncertain; grey/brown exterior; brown interior; grey core; sparse calcareous. (0142A)
14. Comb decorated sherd; brown/grey surfaces; grey core; sparse calcareous. (0142A)
15. Cooking pot, brown/grey surfaces; grey core; sparse calcareous. (0142A)

*Pottery from pit 0250, late thirteenth–early fourteenth cent.*

16. Comb-decorated sherd; brown/grey exterior; brown interior; grey core; sandy. (0250)
17. Sherd, grey exterior; black interior; brown core; decorated applied thumbed strip; sandy. (0250)
18. Decorated jug sherd; brown glazed exterior; two applied rouletted strips, one self-coloured, one dark brown metallic finish; buff/orange interior; buff core; sandy. Brill/Boarstall product. (0250)

*Pottery from pit 0449, late twelfth–early thirteenth cent.*

19. Jug strap handle; grey exterior; brown/grey interior; red/brown core; sandy; central groove with slashing. (0449)
20. Cooking pot, diameter uncertain; grey surfaces; grey core; sandy. (0612)

21. Cooking pot, diameter uncertain; red/brown exterior; brown interior; grey core; sparse calcareous. (0612)
22. Cooking pot, diameter uncertain; red/brown surfaces; grey core; abundant calcareous; thumbing on outside edge of rim. (0612)
23. Decorated jug sherd; green-glazed exterior; applied decoration in dark brown glaze; buff/orange interior; buff/orange core; sandy. (0612)

*Pottery from pit 1413, twelfth–early thirteenth cent.*

24. Bowl, diameter uncertain; buff surfaces; grey core; calcareous. (1413)
25. Pot, diameter uncertain; grey/black surfaces; grey core; sparse calcareous. (1413)
26. Pot, grey/buff exterior; grey interior; grey core; sparse calcareous. (1413)
27. Pot, grey/black surfaces; grey core; sandy; thumbing on top of rim. (1413)
28. Pot, grey/black exterior; buff/brown interior; grey core; sparse calcareous. (1413)

*Pottery from pit 0948, early–mid fourteenth cent.*

29. Jug sherd, green-glazed exterior; grooved decoration; buff/orange interior; grey/buff core; sandy. Brill/Boarstall product. (0948)
30. Jug strap handle, buff surfaces; pink/buff core; sandy; random stabbing and thumbled edges. (0948)

*Medieval Pottery from the Hearths and Structures (Fig. 46:1–10)*

*Pottery from hearth 0532, thirteenth cent.*

1. Cooking pot; brown surfaces; grey core; abundant calcareous. (0532)

*Pottery from rectangular feature 0362, thirteenth–fourteenth cent.*

2. Cooking pot; brown surfaces; grey core; abundant calcareous. (0362)
3. Comb-decorated sherd; buff/brown exterior; buff/grey interior; grey core; sparse calcareous. (0362)
4. Decorated sherd; grey/brown surfaces; red/brown core; sparse calcareous; shallow grooving. Brill/Boarstall product. (0362)
5. Base sherd; grey/brown exterior; grey interior; grey core; sandy. Brill/Boarstall product. (0362)
6. Decorated jug sherd; orange, green speckled glazed exterior; applied brown strip; pink interior; pink core; sandy. Brill/Boarstall product. (0362)
7. Decorated jug sherd; orange, green speckled glazed exterior; pink core; sandy. Brill/Boarstall product. (0362)
8. Decorated jug sherd; green glazed exterior, applied rouletted strips; buff interior; grey/buff core; sandy. Brill/Boarstall product. (0362)
9. Jug sherd; green glazed exterior, applied and stabbed decoration; pink interior; pink core; sandy. Brill/Boarstall product. (0362)
10. Jug strap handle; grey/brown and green glazed surfaces; grey core; sandy; edges grooved, central stabbing. Brill/Boarstall product. (0362)

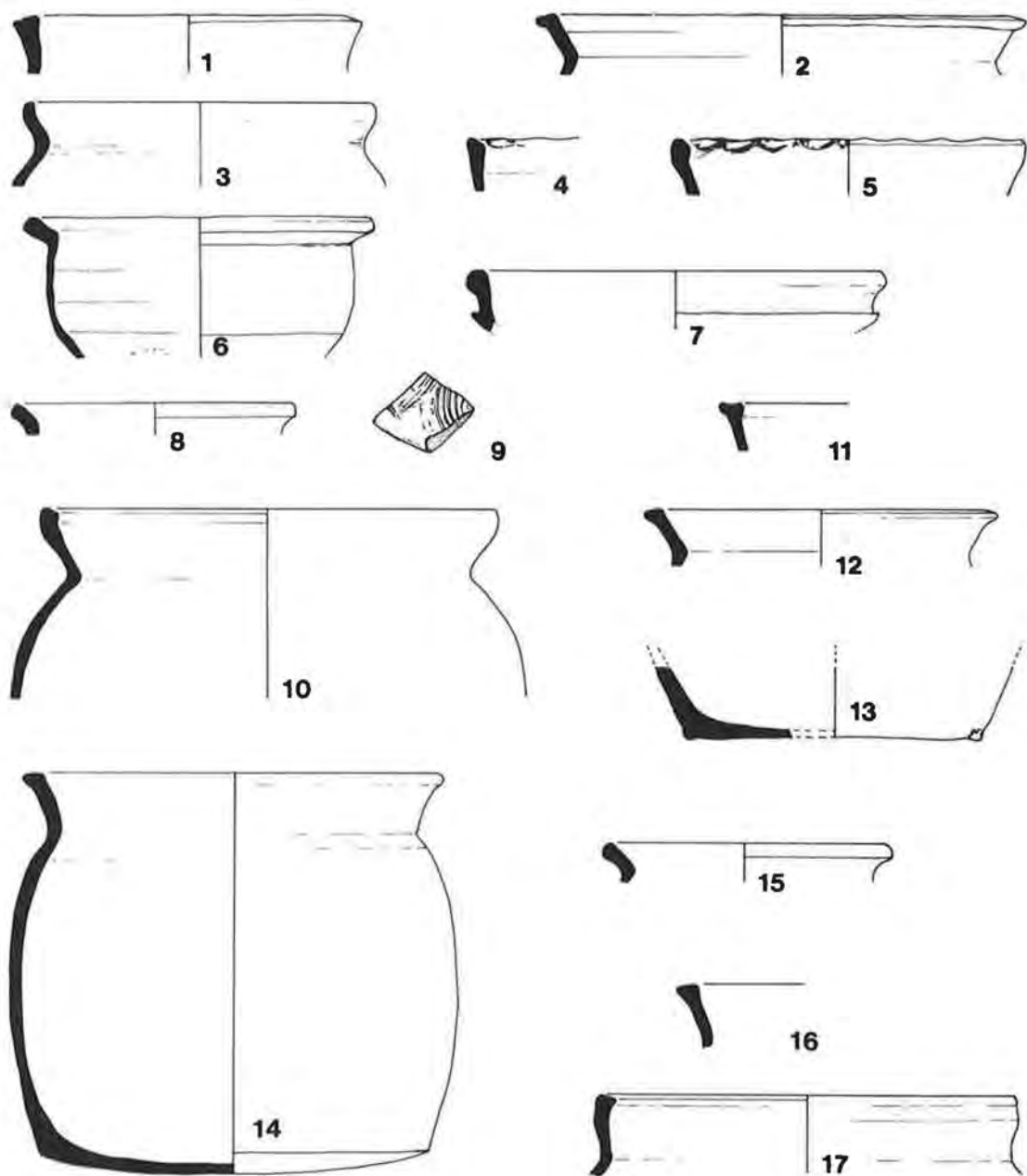


Fig. 44. Medieval pottery. (Scale 1:4)

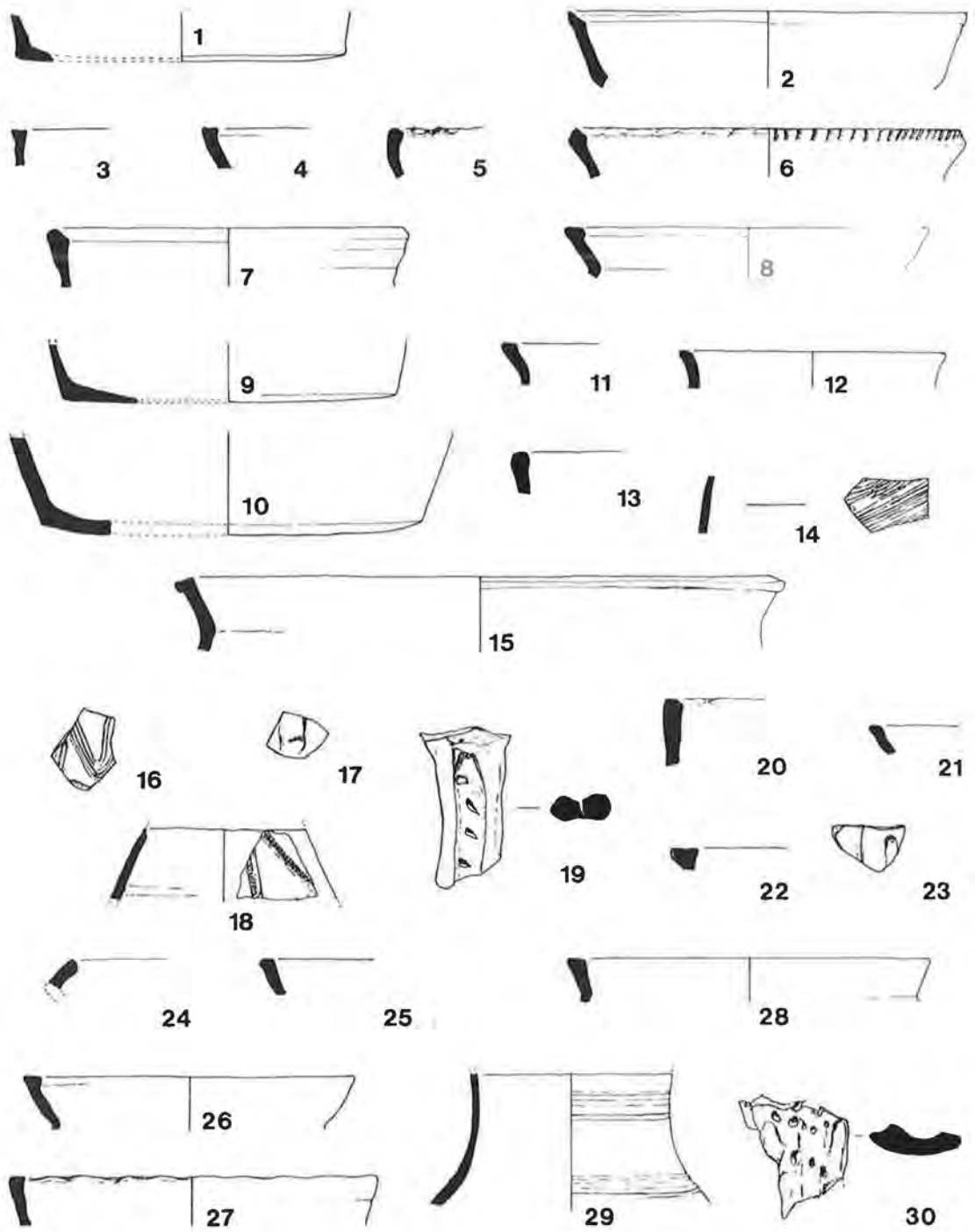


Fig. 45. Medieval pottery. (Scale 1:4)

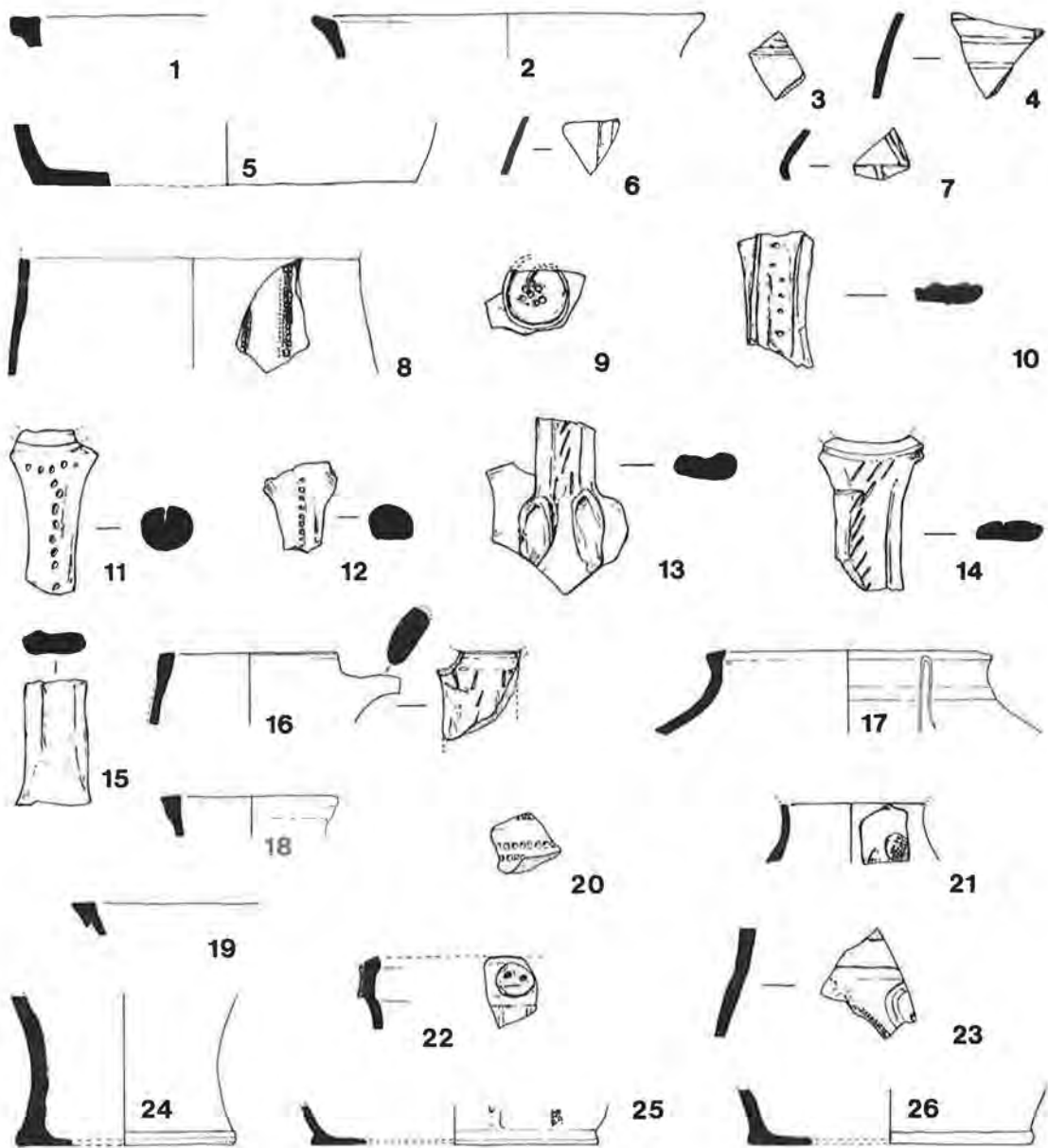


Fig. 46. Medieval pottery. 1-10, from hearths and structures; 11-26, unstratified. (Scale 1:4)

*Unstratified Medieval Pottery* (Fig. 46:11-26 and Fig. 47)

*Jugs and bowls: Brill/Boarstall products*

11. Jug rod handle; some green glaze; stabbed decoration; buff/pink surfaces and core; sandy. Brill/Boarstall product. (0115)
12. Jug rod handle; some green speckled glaze; stabbed decoration; orange surfaces; pink/grey core; sandy. Brill/Boarstall product. (0421)
13. Jug strap handle; some green glaze; slashed central groove; orange surfaces; pink core; sandy. Brill/Boarstall product. (0206)
14. Jug strap handle; some green glaze; slashed decoration; pink/buff surfaces; pink/grey core; sandy. Brill/Boarstall product. (0230)
15. Jug strap handle; shallow central groove; pink/buff surfaces; grey core; sandy. Brill/Boarstall product. (0803)
16. Jug rim and strap handle; slashed decoration; buff surfaces; pink/grey core. Brill/Boarstall product. (1503)
17. Jug rim; splash of glaze; buff-grey exterior; grey/pink interior, grey core; sandy. Brill/Boarstall product. (0402)
18. Jug rim; some green glaze; buff/pink surfaces and core; sandy; Brill/Boarstall product. (0330)
19. Bowl rim, diameter uncertain; grey/brown surfaces; orange/grey core; sandy. Brill/Boarstall product. (1508)
20. Decorated sherd; olive green glazed exterior, with squared rouletting; orange interior; grey core; sandy. Brill/Boarstall product. (0803)
21. Decorated jug sherd; olive green glazed exterior, applied pad with grid decoration; brown/grey interior; grey core; sandy. (0803)
22. Jug rim; yellow/brown glazed exterior; applied face pad motif, and applied strips of brown and self-coloured glaze; orange interior and core; sandy. Brill/Boarstall product. (0202)
23. Decorated jug sherd; speckled green glazed exterior, with squared rouletting and red/brown applied strip; buff interior; grey core; sandy. Brill/Boarstall product. (0501)
24. Baluster jug base; orange exterior with green speckled glaze; grey/buff interior; orange/grey core; sandy. Brill/Boarstall product. (0351)
25. Jug base; buff/pink exterior with traces of green glaze, and remains of brown applied strip with squared rouletting; buff/pink interior and core; sandy. Brill/Boarstall product. (0351)
26. Jug base; buff/pink exterior; pink interior; grey core; sandy. Brill/Boarstall product. (0413)

*Miscellaneous types* (Fig. 47:1-18)

1. Bowl; inturned rim; grey/pink exterior; pink interior; grey core; abundant calcareous. St Neots type. (0430)
2. Bowl; inturned rim; pink surfaces; grey core; abundant calcareous. St Neots type. (0430)
3. Cooking pot; brown pink surfaces; grey core; abundant calcareous. St Neots type. (0401)
4. Cooking pot; grey/brown exterior; brown interior; grey

- core; sparse calcareous. (0401)
5. Cooking pot; brown/grey exterior; buff interior; grey core; sparse calcareous. (1408)
6. Cooking pot; brown/grey surfaces and core; sparse calcareous. (0312)
7. Cooking pot; buff/grey surfaces; grey core; sandy; thumbing on outer edge of rim. (1404)
8. Cooking pot; brown/grey exterior; buff interior and core; sandy. (0202)
9. Cooking pot; grey surfaces; core; sandy. (0312)
10. Cooking pot; grey surfaces; grey core; abundant
11. Cooking pot; red brown surfaces; grey core; abundant calcareous. (0432)
12. Cooking pot; black surface; red brown core; sparse calcareous. (0432)
13. Cooking pot; brown/grey exterior; buff interior; grey core; calcareous. (1408)
14. Cooking pot; pink/brown exterior; pink interior; grey core; calcareous; thumbled strip decoration. (0201)
15. ?Jug; grey/brown exterior; brown/grey interior; buff core; sandy. (0202)
16. ?Jug; grey surfaces; buff core; sandy. (0261)
17. Bung-hole from pitcher; grey surfaces and core; sandy. Brill/Boarstall product. (0501)
18. ?Cistern rim; grey exterior; grey interior; buff core; calcareous. (0601)

*Discussion*

The study of the medieval pottery was limited in its scope and was used principally to date layers on the site. Comparison was made with the medieval pottery from George Street, Aylesbury (Yeoman 1983).

The pottery shows a date range beginning in the eleventh century, and the early ceramic is in the St Neots ware tradition (Fig. 44:8; Fig. 47:1-3), in local shelly limestone fabrics, cf. fabrics in the George Street Group I series (*ibid.*). South Buckinghamshire kiln products were also represented at Berton in small numbers and may be products of the kilns at Denham or other unlocated Chiltern sites. From the thirteenth century onwards, products of the Brill/Boarstall kiln sites predominated, as might be expected from the massive production in that area. The fabrics were those found at George Street, i.e. medieval fabric 4 (jugs), 5 (cooking pots) and other coarse wares (*ibid.*).

Closer examination of the pottery might reveal some finer distinctions between the urban site at George Street and the rural site at Berton. If the interpretations of the two sites as, respectively, the back plot of a burgess's



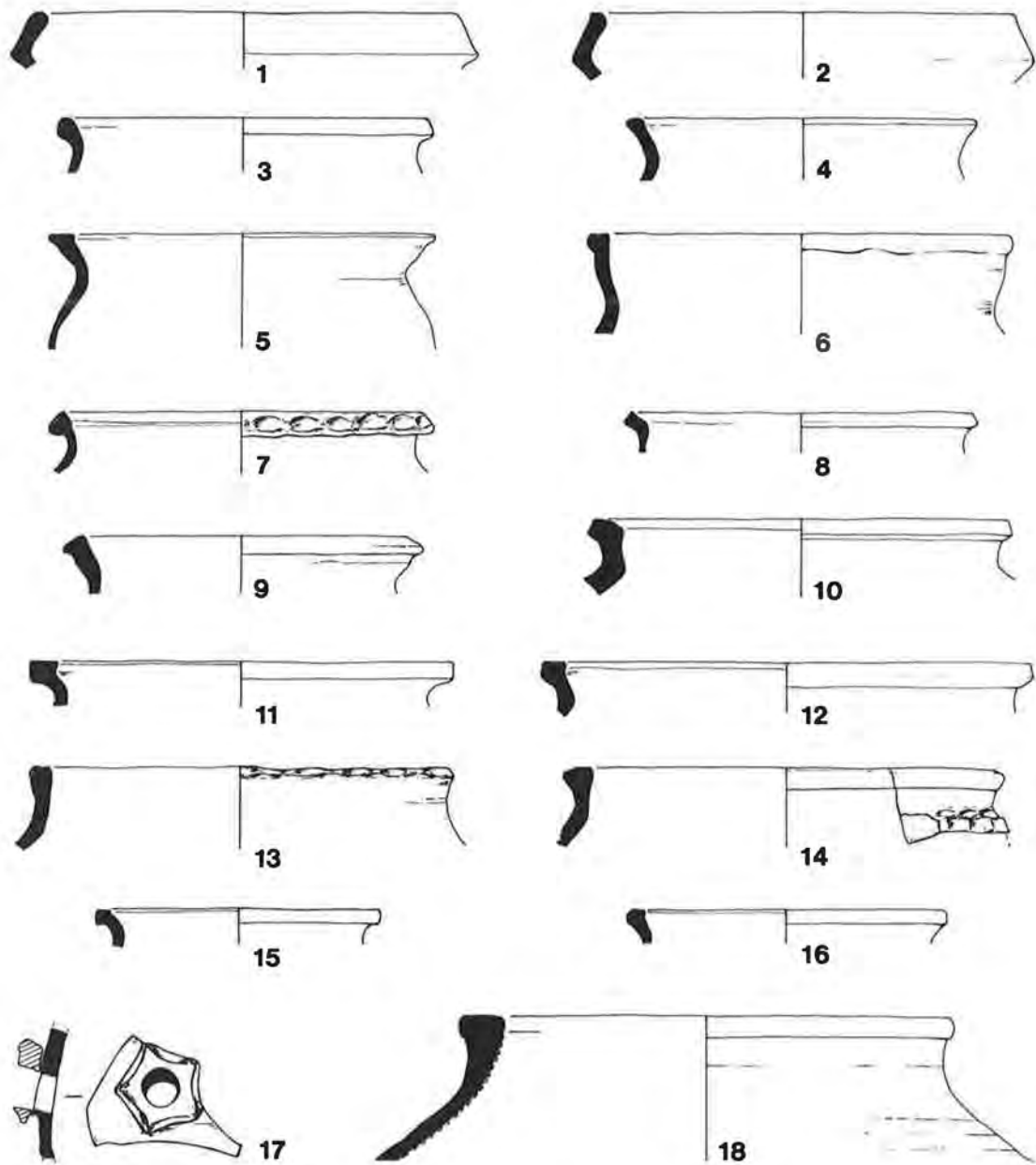


Fig. 47. Medieval pottery, unstratified. (Scale 1:4)

house, and the yard and outbuilding area of a manor house, are accepted, then it might be expected that the range of pottery in use would be broadly similar (see below p. 95 and Allen and Dalwood 1983, 54). A superficial examination of the pottery indicated that the quality of the earlier medieval pottery at Berton was rather better than that at George Street (P. Yeoman, personal comment), which might reflect the manorial status of the site. It is likely that, in general, the pottery in use at Berton was bought at market in Aylesbury, from the same traders who supplied the occupiers of the George Street site.

The detailed understanding of Buckinghamshire medieval pottery will emerge through the study and excavation of the kiln sites such as those at Denham, Brill and Boarstall: all the medieval pottery from Berton was retained and may be examined in more detail in the future, when the products of the kiln sites have been characterised.

#### *Objects of Iron, Copper Alloy and Pewter* (Fig. 48:1-6)

##### *Objects of Iron*

1. Horseshoe (broken), 90 mm long, 42 mm wide, later medieval type, post-thirteenth cent. (Goodall, I. H. 1981, 61, Fig. 60, 2). (0122)
2. Nail (fragment), 48 mm long. (0608)
3. Harness buckle, square, with roll-bar and broad pin, 58 mm long.
4. Pendant, 56 mm long (complete), two plates joined at tip. A type of object usually in bronze. (0202)

##### *Objects of Copper Alloy*

5. Leg of cauldron or skillet, 120 mm long, with rounded central midrib. Cast as a separate piece and then attached to a flat-based body, and subsequently broken at the join. Traces of charring remain on both sides of the leg. The size shows it formed part of a large cauldron, although the usual form was bag-shaped rather than flat-based, and was usually cast with the feet in one piece (Goodall, M. 1981, 65, Fig. 63); in form it is similar to a leg from Goltho (Goodall, I. H. 1975, 95, Fig. 45, 40). (0903)

##### *Pewter*

6. Decorative fitting (broken), 44 mm across, cast, with rounded cut-outs. Retains metal rivet at top. Possibly part of pilgrim badge. (0348)

#### *The Medieval Animal Bones*

G. G. Jones

The problem of residual and intrusive bone in medieval contexts is similar to that for Roman contexts (p. 74). The medieval contexts were even more mixed, and made study of the medieval bone of limited value.

Medieval features contained quantities of residual pottery and for the purpose of this report were divided into 'medieval' and 'probably medieval' by percentage weight as follows: 'medieval' (sample size 8.5 kg): 16% Iron Age, 32% Roman, 52% Medieval; 'probably medieval' (sample size 8.4 kg): 22% Iron Age, 26% Roman, 42% Medieval. For the range of animal species present see Table 8.

##### *Cattle*

The skeleton of an immature bull or steer was recovered from a thirteenth-fourteenth-century ditch. Much of the rib-cage was found in position. Common as animal bones are on excavations, it is unusual to recover articulated remains. Burial of a whole carcass is likely to be because the animal was diseased. In this case the scapulae and most of the long bones were missing. It is possible that they were removed and the meat used, although no sign of butchery was observed.

Evidence for maturity is given in detail, as the jaws were well preserved and at a very precisely definable stage of development. The front part of the jaws was present, with the first and second incisor erupted, the latter in wear over three-quarters of its occlusal surface. The deciduous third incisor and canine were missing, but the erupting third permanent incisors were visible c.4 mm below the alveolar border. The animal can be aged in modern terms as 2½ years±2 months (data from 869 cattle kept in optimum conditions, Brown *et al.* 1960) and was probably in its third or fourth year. The cheek teeth were all present as follows: (right jaw) P<sub>2</sub> erupting through bone; P<sub>3</sub> in wear; dp<sub>3</sub> in wear at stage k (method of Grant 1975); M<sub>1</sub> and M<sub>2</sub> in wear, stages j and g; and M<sub>3</sub> first two units in wear, stage d. The left jaw showed similar development and wear M<sub>1</sub>

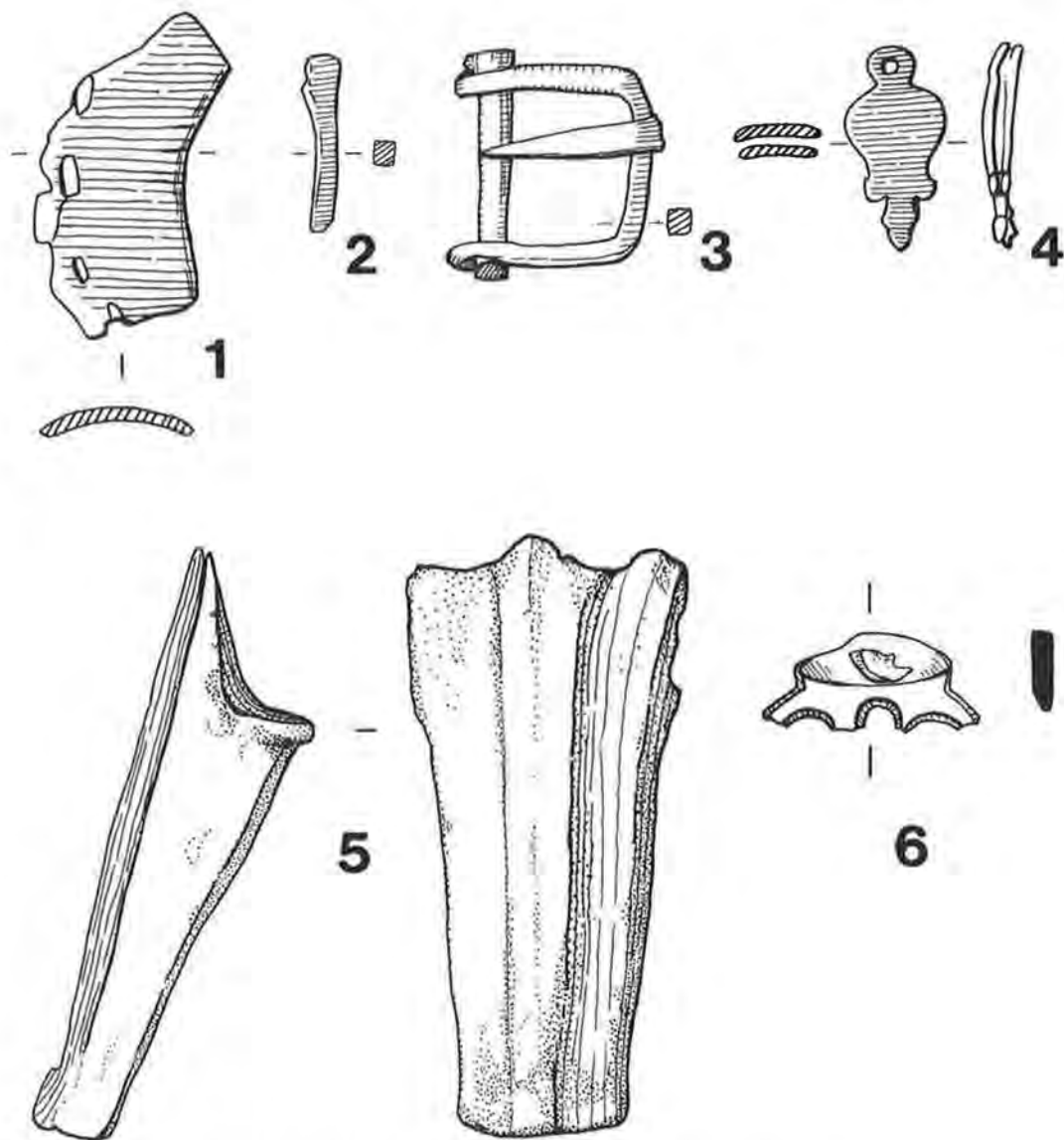


Fig. 48. Medieval finds. 1-4, iron; 5, copper alloy; 6, pewter. (Scale 2:3)

at stage k). The acetabulum of the pelvis was fused; vertebral epiphyses and the proximal femur were unfused.

#### *Pig*

The 'Medieval' layers contained remains of at least seven immature pigs and two mature ( $M_3$  erupted), which compares with fourteen and nine respectively from the Iron Age phases.

There were two 'medieval' Stage I piglets but none of this young age were found in Iron Age or 'Roman' deposits. Numbers were too small to make definite conclusions, but it does appear that pigs were fattened earlier in the medieval period.

#### *Pathology*

From the 'medieval' layers four cattle bones

Table 8. Medieval animal species present by percentage.

	N	Cattle	Sheep	Pig	Horse	Other species
'Medieval'	325	38	41	15	2	4 Red and roe deer, dog, cat, fowl, goose
'Probably medieval'	335	49	29	17	2	3 Red deer, dog, hare, goose

N: number of bones

showed pathological alteration and one cattle lumbar vertebra had a greatly enlarged foramen passing right through the centrum into the spinal cavity (cf. Baker and Brothwell 1980, 35).

### *Discussion of the Medieval Occupation and Evidence of Manorial Status*

In common with the Iron Age and Roman evidence, the nature of the medieval evidence discourages lengthy discussion. Many of the features clearly relate to activity that was centred away from the excavated area and the considerable disturbance created by post-medieval use of the site limits the inferences that can be drawn from those located fully within it. Nevertheless, the chronology of the features shows that the site was occupied throughout the medieval period.

#### *Boundary Ditches*

With the exception of one sherd from ditch 0109, of fifteenth-century date (Fig. 44:6), the pottery from the ditches indicates that these features were in use in the twelfth and thirteenth centuries.

The disposition of the ditches in the excavated area clearly related to features situated beyond, but in only one case can this relationship still be seen. Ditch 0447 would, if it continued to the north-west, link with, or form, the eastern boundary of the churchyard, assuming of course that the land given over to the church or chapel was of the same area in the medieval period as in the present day.

#### *Hearths, Pits and Wells*

Only one of the two hearths (0532) produced any finds, and this was a sherd of thirteenth-century date (Fig. 46:1, 1). In contrast, the dozen or so pits contained numerous sherds of pottery and on this evidence they can all be

attributed to the twelfth and early fourteenth centuries (Fig. 45:1-28). Sherds from the narrow-mouthed well (0948) suggest a thirteenth/fourteenth-century date for this feature (Fig. 45:29-30).

#### *The Structures*

No dating evidence was available for the construction phase of the circular structure (0325, 0417), nor indeed, strictly speaking, for its demolition. Only the backfilled robber-trench contained any datable sherds, and these suggested that the footings had been robbed out not long before the area was sealed by the sixteenth-century layer of cobbles. As a result, it is presumed that the structure was in use in the later medieval period; it is fairly certain that it was a dovecote.

The Sites and Monuments Record at the County Museum currently lists 28 dovecotes in Buckinghamshire, from documentary sources or standing remains, although it is certain that many more examples existed originally. They range in date from the thirteenth century, e.g. Fillington Farm, West Wycombe (CAS 0186), to the nineteenth century, e.g. Amersham (CAS 4231). They are constructed from either local stone or from brick, and are generally of square or circular plan, although an octagonal example exists at Stewkley (CAS 4001). Perhaps the best parallels for the excavated example at Bierton are to be found in the circular structure at Dinton (CAS 0703; Eland 1923, 92), which is still standing, and one at

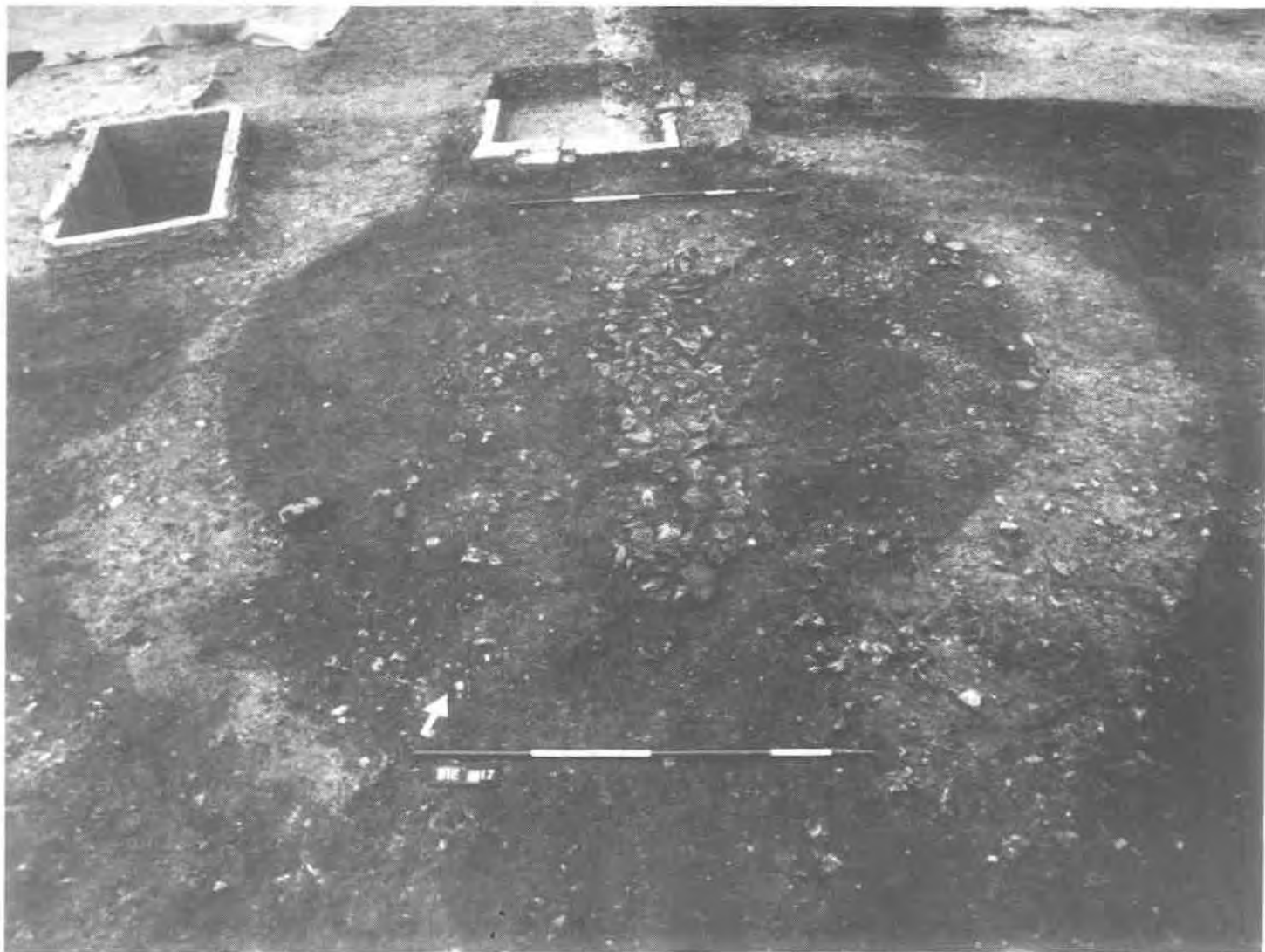


Plate VII. Robbed foundations of medieval dovecot (0325/1417), filled with lighter soil.



Clifton Reynes (CAS 1820; *RCHM Bucks II*, 93) which was demolished earlier this century.

The evidence for the other medieval structure located within the excavated area at Bierton is fairly insubstantial. However, two factors, the distribution of medieval pottery across the site, and the presence of an extensive, flat-bottomed, vertical-sided pit (Fig. 41: 0362) combine to suggest that during the medieval period a building may have stood in the area occupied by the post-medieval cellared building. Indeed, if this was the location of an important dwelling-house, then this would explain the presence of the dovecote, and the choice of the site for the Tudor building. The fill of this feature is datable to the thirteenth to early fourteenth century (Fig. 46:2-10).

The pottery from the site indicated occupation from the eleventh century, although the sparsity of medieval features meant that there was little evidence upon which to base the chronology of the site. This was largely due to the effects of disturbance in the post-medieval period, but partly because the favoured method of rubbish disposal in the medieval period would have been onto middens, for later manuring of surrounding fields. If any such midden existed in the excavated area, it would have been removed by the levelling for the sixteenth-century cobbled yard.

The finds themselves do not provide any clear evidence for the status and nature of the medieval occupation and the strongest evidence for this lies in the dovecote. Dovecotes are certainly indicative of manorial or monastic ownership, and often have a close proximity to a manor house. The large pond lying 60 m south-east of the excavation (CAS 1044) is almost certainly a fishpond, and although it is not in itself datable, a medieval date is possible, and also implies manorial land.

It is therefore tempting to suggest that the structural traces recovered were those of a manorial building, and other evidence can be found to support this interpretation.

### *Historical Evidence*

The Domesday entry for Bierton (see above p. 4) records only part of the land-holdings there, and it is clear that the rest of the parish was a part of the manor of Aylesbury, held by the King. The manor of Aylesbury (and by implication the lands in Bierton) were granted by King John to the Fitz-Piers family in 1204 (*VCH Bucks II*, 320). Other landowners are recorded holding lands in Bierton from the fourteenth century, and although details of the changing ownership of these manors is known, there is no documentary record of a manor house. Apart from the evidence from the excavation, Dove House Close, a moated site in Bierton, 150 m west of the excavation, also suggests a manor house site (see Fig. 1c:8 above and details in Miles, P. 1981, 33-5, Figs. 15-16). This may be the site of the manor house of *Stonors* manor (*VCH Bucks II*, 322) since it lay within the lands of the Boss family in the sixteenth century, who briefly held the manor of *Stonors*. Lamborn, quoted by Sheahan (1862, 97), identified Dove House Close as the site of the *Stonors* manor house, and it is quite likely that the house stood within the moat (for survey, see Miles, P. 1981, Fig. 15).

Clearly, positive identification of the site with one of the Bierton manors would require new documentary evidence. However, the close proximity of the excavated structure to the church suggests that this was the primary manor of *Bierton*, held by the lords of the manor of Aylesbury from 1204. The church at Bierton was a daughter chapel of the church at Aylesbury in the early medieval period, and was established as a separate parish church in 1266 (*VCH Bucks II*, 326). The archaeological and historical evidence that the church at Aylesbury was a Saxon *monasterium* has recently been discussed, as well as the archaeological evidence for changes in ecclesiastical organisation at Aylesbury (Allen and Dalwood 1983). The church at Aylesbury still retained ancient privileges at Domesday, and it was no doubt the erosion of these that led to the independence of the church at Bierton.

The date of origin of the daughter chapel at Bierton is uncertain, but the independence of

the church from the late thirteenth century and its substantial rebuilding in the fourteenth century is known (see above, p. 5) and must relate to changes in secular power. The evidence of a manor house may relate to the ownership of the lords of Aylesbury from 1204, although

there is clearly evidence of earlier occupation of the site which remains unexplained, but which may have been connected with the royal ownership of the manor of Aylesbury. The evidence for post-medieval continuity is discussed below.

## THE POST-MEDIEVAL PERIOD

### *Structural Evidence*

The evidence for post-medieval activity in this area consisted of wall-footings of brick, stone or clay construction, which mark the existence of a long-lived, substantial cellared building, and an apparently short-lived 'kitchen wing', an extensive cobbled area, and numerous pits, postholes, gullies and wells (Fig. 49). As with previous occupation the evidence had been much disturbed, particularly in Areas 01 and 08.

#### *The Substantial Building*

It has been suggested above (p. 83) that a medieval building was located immediately to the south of the churchyard wall, adjacent to Areas 02 and 03, although the limited evidence leaves this a matter for conjecture. There is no doubt, however, that this was the location of a substantial structure from c.1500 to c.1750. The earliest surviving evidence for this period are the wall-footings and 'platform' (0233, Pl. VII) composed of mortared limestone, the associated robber-trenches (0132, 0246) and a footings-trench which contained a considerable quantity of burnt clay and charcoal (0240). No coherent plan can be restored from these features, indeed the limestone platform clearly results from more than one episode of activity, but they presumably represent the southern extent of a substantial building with stone wall-footings, the major part of which was destroyed by the brick-built foundations which were to follow.

The brick walls were built on the same axis as their stone-built counterparts. The most prominent feature of the building was a 2.0 m deep cellar (0306, Pl. IX). This was entered by means of an external doorway and a flight of stone

steps, but there may also have been an internal means of access beyond the excavated area. The cellar floor was composed in the main of stone slabs, but a brick-built drainage channel was incorporated into this. The cellar was filled with brick and tile rubble (0204) dated to the mid-eighteenth century, presumably from the demolition of the building. To its west lay another extensive rectangular area (0203) filled with brick rubble, but not as deep as the cellar. No wall-footings were encountered here, but it seems probable that they had been robbed out. To the east of the cellar a substantial brick and stone-built culvert (0380) was discovered and followed for a distance of 15.0 m. Despite its grand dimensions the culvert was only for drainage purposes and a small iron grille at the foot of the steps permitted the escape of water from the cellar drain. Also, in the vicinity of the stone-lined well (0404) a brick-built soakaway channelled water into the feature. The culvert had been constructed by digging a trench from ground level.

#### *The Kitchen Wing*

Some 8.0 m east of the cellared building were the much disturbed remains of an oven (0407), a peg-tile hearth (0406) and associated features (Fig. 49, Pl. X). This complex lay on the same axis as the larger structures, but not all of the associated wall-footings could be traced, and the overall plan remained in doubt. However, the existence of the hearth, with a large fire-shattered bake-stone at its south-eastern corner, in conjunction with the simple bowl-shaped oven, leave little doubt that this was a 'kitchen wing', and probably contemporary with the stone-built phase of the main building.

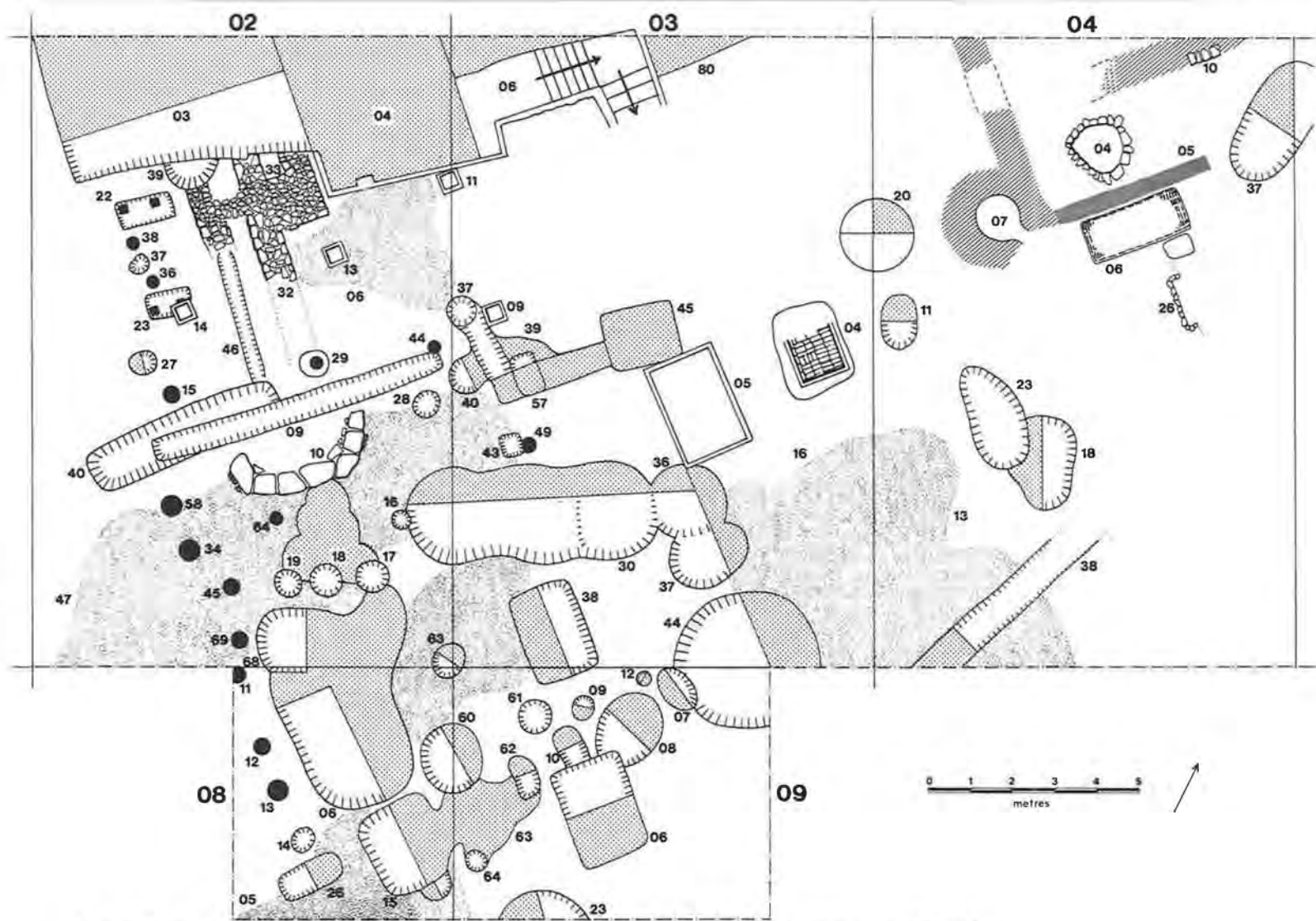


Fig. 49. Post-medieval features in Areas 02, 03, 04, 08, 09. Postholes shown in black, unexcavated deposit stippled, cobbled areas shown as random stipple, and clay wall-footings hatched.

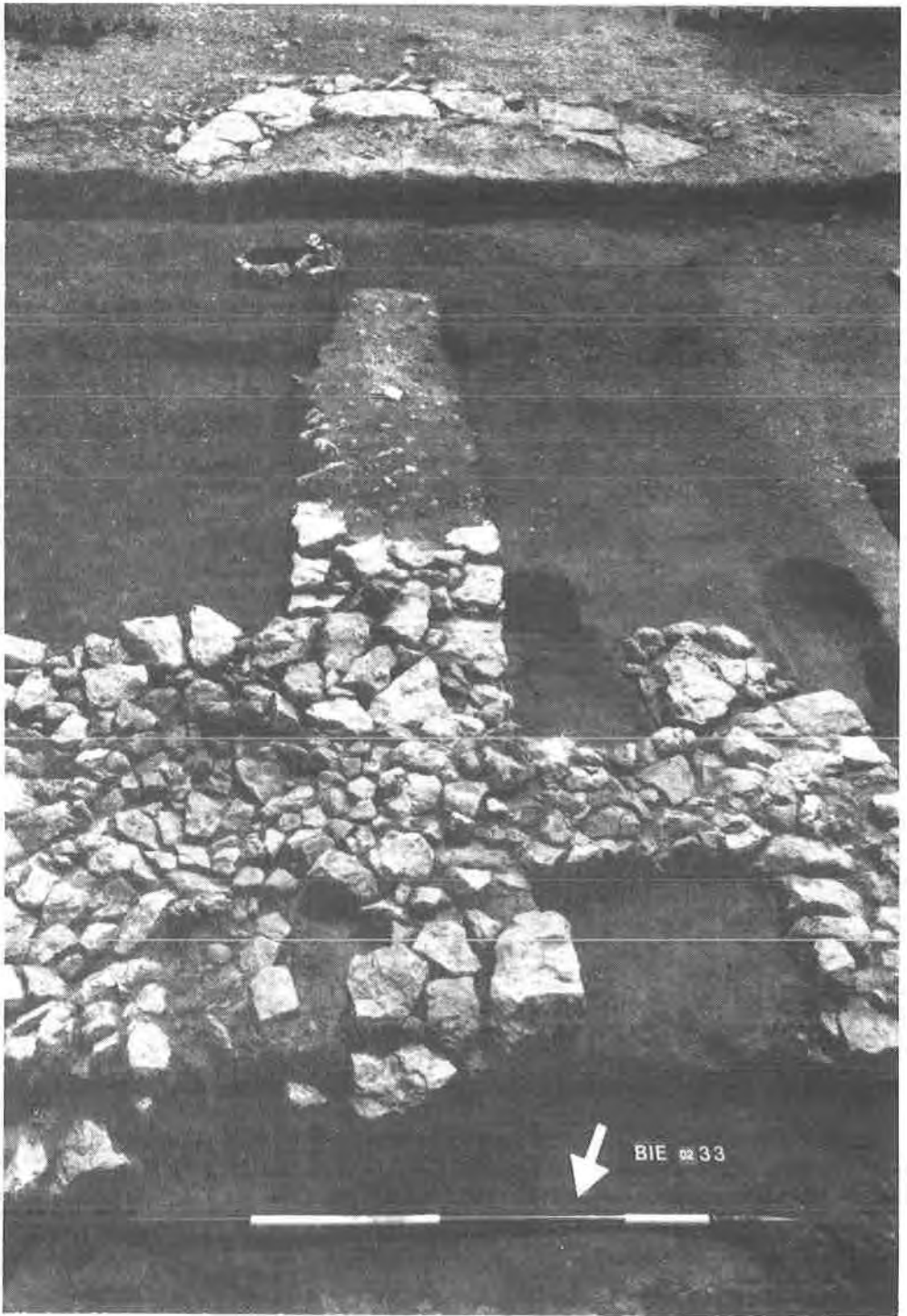


Plate VIII. Post-medieval limestone 'platform' and walls (0233).





Plate IX. Post-medieval cellar (0306) with stone steps and flagged floor.



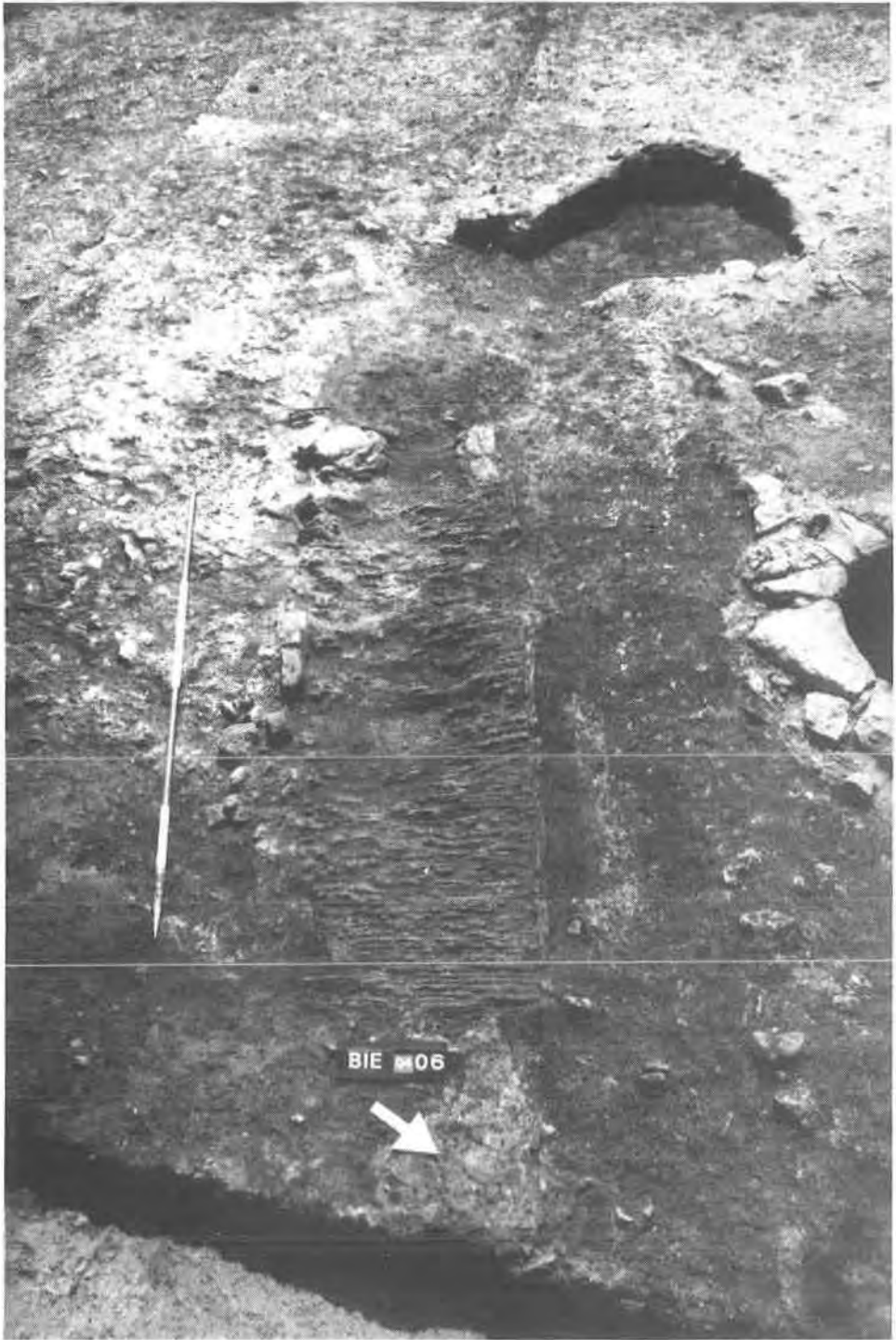


Plate X. Pitched tile hearth (0406), oven (0407) and stone-lined well (0404).

The wall-footings, composed of clay and stone (0410), were presumably intended to support a timber-framed superstructure, but could only be traced to the north and west of the hearth. They must have existed also to the south and east of this feature, but had been removed by subsequent activity. One additional structural element was a sill-beam (0405) located immediately to the north of the hearth (0406), and this was of particular interest as its heavily-charred condition suggested that the structure had burnt down. This may, of course, have been a deliberate firing when the building was abandoned, but the presence of many scorched roof-tiles in this vicinity suggests that the roof was still *in situ* when the burning took place and that the fire was unintentional.

#### *The Cobbled Yard*

Another feature which was probably contemporary with the stone-built phase of the major building was the cobble spread (0247, 0316, 0413, 0805). This had clearly suffered considerable disturbance, not just as a result of rubbish-pit digging, but also because of terracing and scarping, particularly in Areas 01 and 08. However, it had in its turn caused the destruction of earlier levels, for in Area 08 the cobbles lay directly on the clean subsoil, indicating that the locality had been scraped down in order to receive them. The cobbled layer was composed of small and medium-sized pieces of limestone but a considerable quantity of shattered peg-tile was also present. It was also strewn with sherds of pottery, pieces of animal bone and other finds. In some places, notably in Area 02, a second layer of larger cobbles covered the original surface. The full extent of the cobbled area can only be estimated but may have been as much as 30.0 m east-west  $\times$  25.0 m north-south. It presumably functioned as a yard, but apparently had a comparatively limited life-span, perhaps the same as that of the earlier substantial building and 'kitchen wing'.

#### *The Pits*

One major activity on the site in the post-medieval period was the digging of pits for disposing of rubbish. These features occur singly and in groups, with simple and complex

stratigraphy, and range in size from small pit bases c.0.30 m in diameter to examples ten times that size. However, space does not permit them all to be published in detail, and only four representative examples are described here, the remainder being confined to the archive.

#### *Pit 0938 (Fig. 50)*

This rectangular pit (2.0  $\times$  1.0 m  $\times$  0.60 m deep) contained a dark grey/brown clay soil fill with a large charcoal and ash content, as well as pieces of peg-tile and limestone. It produced numerous sherds of pottery which date it to the early seventeenth century as well as objects of iron, bronze and lead (Fig. 54:7-14 and Fig. 58:24-6) and pieces of animal bone. It cut a similarly-shaped, but much shallower pit (0941), which also had a large ash content. These two pits are comparatively isolated in the southern arm of the excavation and presumably do not belong to the main episode of pit-digging which seems to have taken place a little later (see below). They may even be connected with the cottage which stood 30 m to the south-west (see Fig. 61) rather than the main building to the north.

#### *Pit 0504 (Fig. 50)*

This large oval pit (4.0  $\times$  3.0 m  $\times$  0.7 m deep) was another comparatively isolated feature, located in the eastern arm of the excavation. It contained a complex layered fill of brown ashy soil, which contained charcoal, pieces of peg-tile, animal bones, and sherds of pottery. These date the filling of the pit to the early seventeenth century. It too was presumably related to a dwelling situated beyond the limits of excavation rather than the main building.

#### *Pit Complex 0330, 36, 37, 44, etc. (Figs. 49-50)*

The main area of rubbish-pit digging took place in the southern half of Areas 02 and 03 and the northern part of 08 and 09. The pits were generally of circular or oval shape and although of varying dimensions and depth, the fills were comparatively uniform. They consisted in the main of dark brown clay soil with a large ash content and also a considerable quantity of broken peg-tile. All of the pits in this group cut the cobble layer, and pottery from the features suggests a mid to late

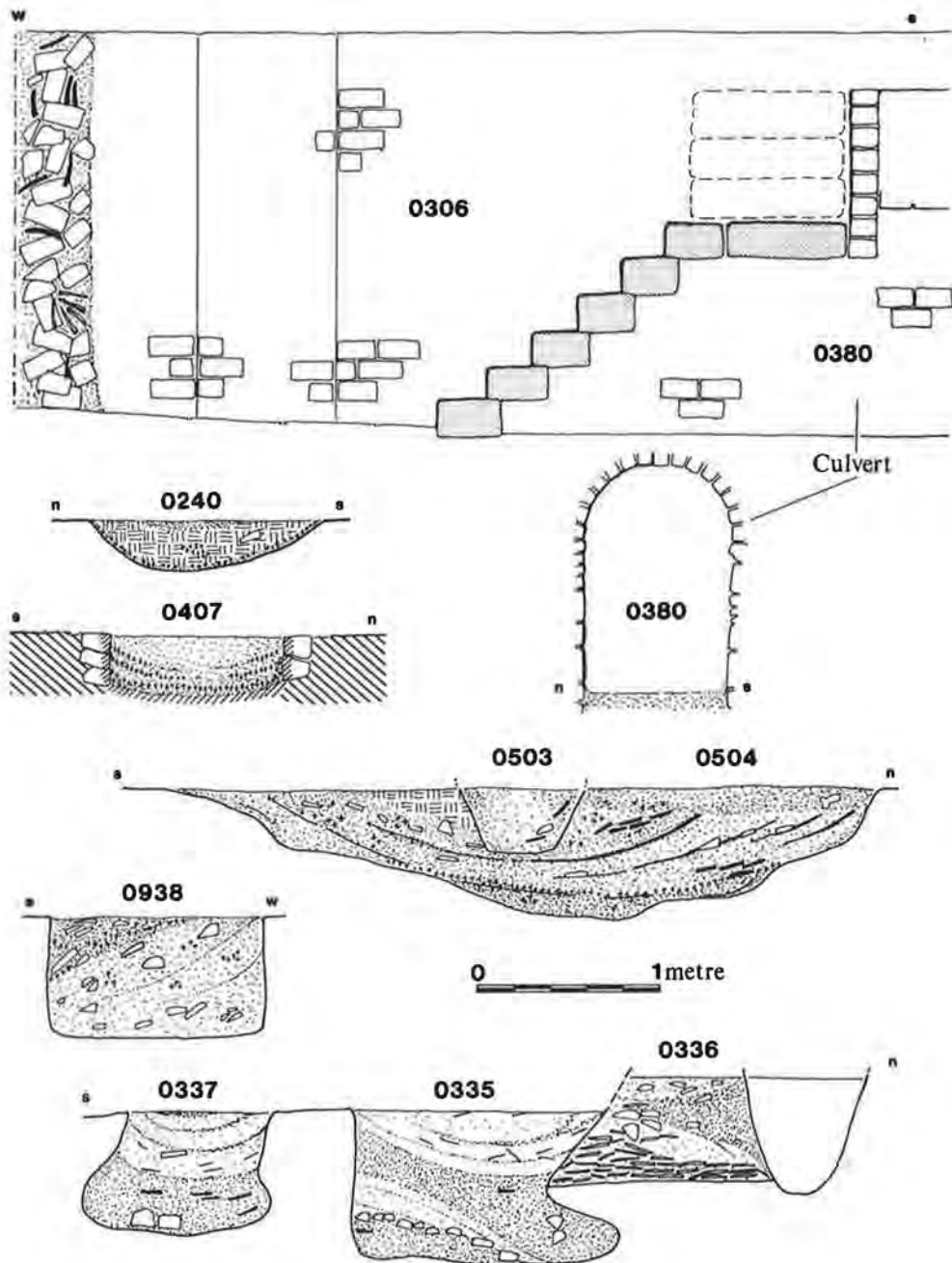


Fig. 50. Sections of post-medieval features. (Scale 1:40)

seventeenth-century date for them. As well as pottery, the pits also contained objects of stone, iron and bronze. Some of the pits had a distinctive bell-shaped profile (Fig. 50) with marked overhangs being produced where the limestone subsoil had been removed. This raises the possibility that the pit-diggers were intent on using this material elsewhere, perhaps for horticultural or building purposes, but does not affect the fact that the pits then served as receptacles for ash and rubbish, presumably from the main building, just to the north.

#### *The Postholes*

Several postholes of post-medieval date were identified during the excavation and the majority were probably fence supports, the most promising fence-lines extending from the vicinity of the main building in a south-easterly direction (Fig. 49, Areas 02 and 08). This fence-line can be equated with the property boundary shown on the 1780 Enclosure Award map (Fig. 61). Immediately to the south-west of this building, however, were two large rectangular post-pits (0222, 0223), both of which contained two square-sectioned post-pipes. Each pair of posts converged towards the top and the most probable explanation for a setting of this kind is that it was used for a sheer-legs or hoist, presumably to load and unload materials destined for or emanating from the building complex.

#### *The Gullies*

A number of small drainage gullies or boundary ditches crossed or entered the site, notably in Areas 06, 09 and 15. The purpose of such linear features is difficult to assess when such a small part of them is revealed, but it is worth noting that gullies 09 and 15 terminate on the projected fence-line suggested by the post-holes in Area 08, confirming this as a north-west/south-east boundary. A much larger linear feature was located in the southernmost

limits of the excavation (1510). This contained brick, tile and limestone rubble, and also produced a large quantity of pottery comparable with that from the rubble-fill of the cellar (Fig. 54:9-18).

#### *The Wells*

Two wells (0404, 0420) were discovered, which were in use in the post-medieval period. One of these (0404) had an almost D-shaped aperture and was stone-lined. The dark brown/grey clayey fill, containing many pieces of limestone, as well as brick and tile fragments, was removed to a depth of c.2.0 m, whereupon the water-table was reached and excavation ceased. Sherds of pottery dated the infilling to the period 1700-50 and this is corroborated by the fact that a brick-lined soakaway led from the vicinity of the well to the cellar drainage tunnel, which also went out of use c.1750.

#### *Other Structural Features*

The general plan (Fig. 62) also shows a number of other structural features in the form of footings of stone and brick (e.g. 0210, 0304, 0305, 0345), brick post-pads (0213, 0214) and bedding trenches (0209, 0337). These post-date the demolition of the cellared building in the mid eighteenth century and presumably relate to the uses to which the area was put when it passed into the hands of the church. Some of the features had an obvious function: 0304, for example, was a small sunken-floored brick-built structure which had been used for storing coal, and 0213, 0214, 0309, 0311 were brick-built post-bases which in company with trench 0209 mark the foundation of a cart shed or similar building. Other features are less easily interpreted. Perhaps the most enigmatic features are a curved setting of large limestone slabs (0210) and a massive plinth of limestone and brick (0345), for which no obvious function can be suggested.

#### *The Post-medieval Finds*

##### *Utilised Stone*

The post-medieval contexts produced thirteen whetstones, of which four are illustrated, two coming from the cobbles (Fig. 51:2-3), one

from the cellar fill (Fig. 51:1), and one from an eighteenth-century rubbish pit (Fig. 52:4). The remainder were recovered from the 'garden soil' and probably result from gardening

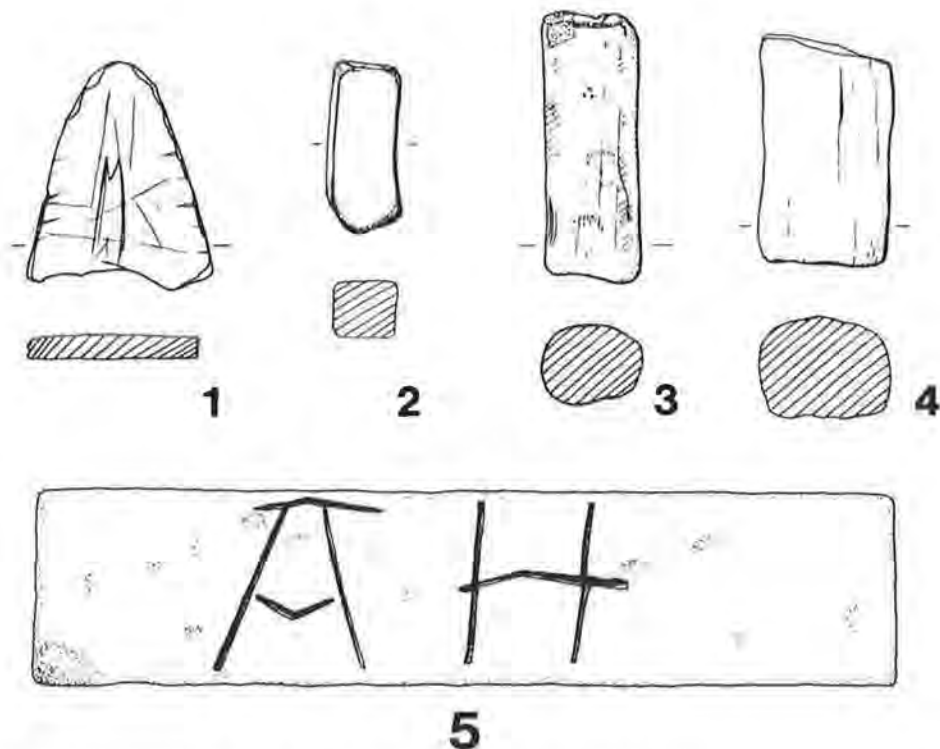


Fig. 51. Post-medieval finds. Utilised stone and brick. (Scale 1:2)

activity, although it is possible that some are residual finds from earlier occupation.

Three other items of stone were found. Two were pieces of dressed limestone (not illus.) and the third was a spindle-whorl recovered from a late nineteenth-century context, although its date of manufacture and use remains in doubt.

1. Sharpening stone, 60 mm long, broken at one end and pointed at the other, worn around edges and scored in centre. Micaceous metamorphosed slate. (0306)
2. Whetstone, 46 mm long, dished edges, from wear, (?) traces of point sharpening at both ends. (?) Basalt. (0805)
3. Whetstone, 72 mm long, broken. One end has groove from sharpening a point or needle. Quartz/black mineral/mica/schistose. (0318)
4. Whetstone, 60 mm long (broken), schistose micaceous sandstone. (0504)

#### *Brick and Tile*

As well as occurring in structural contexts, bricks and peg-tiles in more fragmentary form were liberally distributed throughout most of

the post-medieval features. In particular, tile fragments were a notable component of the cobbled surface and the rubbish-pit fills. However, whilst testifying to the amount of building and demolition which must have taken place in the vicinity, such tiles are of little use for close dating purposes, as they appear in the thirteenth century, and are still to be seen *in situ* on the roofs of seventeenth-century houses in Bierton today.

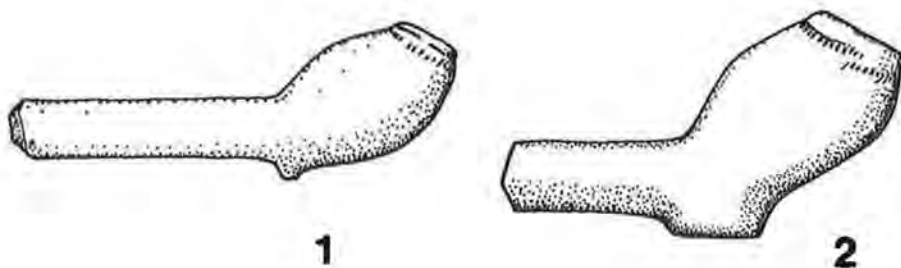
#### *Brick (Fig. 51:5)*

5. Brick, south wall of cellar, with graffito A H, possibly a maker's mark (drawn from photograph, not to precise scale). (0306)

#### *The Clay Pipes* C. H. Dalwood

The 281 fragments of clay-pipe were widely distributed throughout the post-medieval features, but the great majority came from the layers of 'garden soil'. 60 pieces consisted of bowl, or part bowl, and of these 29 were stamped. All 60 bowls have been drawn as part





•GEORGE• •WEAVER•

PP	1		1		1
TS	1		1		1
WP	1		1		1
	1		7		1
	2		1		3
	1		2		1

Fig. 52. Top: clay-pipes (scale 1:1). Bottom: clay-pipe stamps, with frequency of occurrence.

of the excavation archive, but only two, stratified in the cellar deposits, are illustrated (Fig. 52:1-2) and described here.

1. Small bulbous bowl with rouletting, spurred. Oswald type 16 (Oswald 1975, 40, Fig. 4, G). c.1610-40. (0204)
2. Medium bulbous bowl with rouletting, pedestal foot. Oswald type 4 (*ibid.*, 37, Fig. 3, G), cf. AGS type A (Jones, C. A. 1983, Fig. 20). c.1600-40. (0306)

#### *The Clay-pipe Stamps*

The 19 different stamps are published here (Fig. 52) with a view to future research into Buckinghamshire pipemakers. Identifications of 9 of the stamps have been made provisionally (fiche pp. 25-6, D1-4) and all these can be related to Aylesbury pipemakers, either on the basis of historical information or high

frequency of recovery in Aylesbury (Jones, C. A. 1983, 45). In particular, George Weaver is a well-attested Aylesbury pipemaker, active c.1680–1700, although his stamp only appeared on one pipe from the present excavation.

### Post-medieval Pottery

The site produced large quantities of post-medieval pottery, and the material used to date major structural features is illustrated here (Figs. 53–4). Resources did not permit more than a brief examination of the material, but it has all been retained for future comparative work. One item of particular interest was a seventeenth-century Italian import (Fig. 53:7). Pottery associated with the demolition of the buildings, which dates this event to the mid eighteenth century, is illustrated in Fig. 54:1–18. Identification of the post-medieval pottery was divided between Michael Farley and Barbara Hurman.

#### Pottery from the cobbled yard surface, sixteenth-cent. (Fig. 53:1–6)

1. Pot, pink-buff surfaces, grey core, sandy. Brill/Boarstall product. (0240)
2. Tankard, brown salt-glazed stoneware, probably Langerwehe/Raeren product. (0805)
3. Base, brown/grey salt glaze stoneware, frilled. Probably Langerwehe/Raeren product. (0805)
4. Cup, purplish glaze, hard fired, grey core, sandy. Brill/Boarstall product. (0805)
5. Pot, orange-brown exterior, orange interior, grey/buff core, sandy. (0805)
6. ?Chamber-pot, orange surface and core, sandy, clear glazed interior rim, firing brown. Handle scar. (0247)

#### Pottery from pit 0504, early seventeenth cent. (Fig. 53:7–14)

7. Plate, tin-glazed, interior yellow and orange rim bands containing blue pattern. One with single orange and yellow dot. Exterior, two brown bands on opaque white ground. Overall clear glaze. (0504)
- Mr D. M. Archer, Dept of Ceramics, Victoria and Albert Museum, has kindly commented on a photograph of this piece and suggests that it is Central Italian of the early seventeenth century. A complete example is known from a collection in Antwerp (*Fries Museum* n.d., Cat. 47).
8. Mug or tyg, surfaces black-glazed, red fabric, sandy. (0504)
  9. Mug or tyg base, purplish-black iron-rich glaze internally and partly externally red fabric, sandy. (0504)
  10. Mug or tyg base, surfaces green/brown glazed, red fabric, sandy. (0504)
  11. Mug or tyg, surfaces green/brown glazed, red fabric, sandy. (0504)
  12. Bowl, patchy clear glaze internally, firing brown splashes on exterior. Red surfaces, grey core, sandy. (0504)

13. Bowl, clear glazed interior, below rim, firing brown. Red surfaces and core, sandy. Base knife-trimmed. (0504)
14. Bowl, clear glazed interior, below rim, firing brown. Red surfaces and core, sandy. Base knife-trimmed. (0504)

#### Pottery from pit 0938, (?) early seventeenth cent. (Fig. 53:15–17)

15. Jug or handled bottle, traces of white slip/decayed glaze, interior of rim only. Irregular, crudely made body with red surfaces and core, sandy, rod handle. (0938)
16. Jug or handled bottle, splash of clear glaze at rim and neck, interior/exterior, firing brown, irregular crudely made body with red surfaces and core, sandy. Grooved handle. (0938)
17. Jar, orange buff surfaces and core, sandy. (0938)

#### Pottery from infill of cellar 0306, mid eighteenth cent. (Fig. 54:1–8)

1. Jug, white salt-glazed stoneware. (0306)
2. Bowl, white salt-glazed stoneware. (0306)
3. Bowl, porcelain with blue decoration. (0306)
4. Bowl, tin-glazed plain. Light blue on thick glaze. Kiln support scar under rim, white fabric. (0306)
5. Jug, clear glaze firing yellow on buff fabric with brown slip. Staffordshire type. (0306)
6. Dish, press moulded. Brown trailed slip decoration, clear glaze finish. Buff fabric. Staffordshire type. (0306)
7. Bowl, 'bricky fabric', yellow trailed slip. Clear glazed interior firing brown. (0306)
8. Bowl, bricky fabric, green/yellow slip, decoration on rim. Clear-glazed interior, firing brown. (0306)

#### Pottery from ditch 1510, mid eighteenth cent. (Fig. 54:9–18)

9. Chamber pot, salt-glazed stoneware. Alternating stamped rosettes and sprig moulded lions, with blue surrounds. Blue band above and below. Base unglazed. Westerwald product. (1516)
10. Dish, white salt-glazed stoneware. (1510)
11. Dish, white salt-glazed stoneware. (1510)
12. Tea-bowl, white salt-glazed stoneware. (1516)
13. Bowl, as no. 4 above, mid-later eighteenth cent. (1510)
14. Posset pot, similar fabric and finish to no. 5. (1516)
15. Bowl, red fabric, trailed yellow/green slip. Clear glazed interior firing brown. Brill type. (1516)
16. Bowl, as no. 15 above. (1516)
17. Jar, red fabric, clear glazed interior, firing brown. (1510)
18. Jar, as no. 17 above. (1510)

### Post-medieval Glass

Fragments of bottle, vessel and window glass were common throughout the post-medieval levels, coming from 115 contexts. Few pieces are worthy of illustration, but the culvert (0830) contained two complete bottles, which have a *terminus ante quem* of c.1750. Other

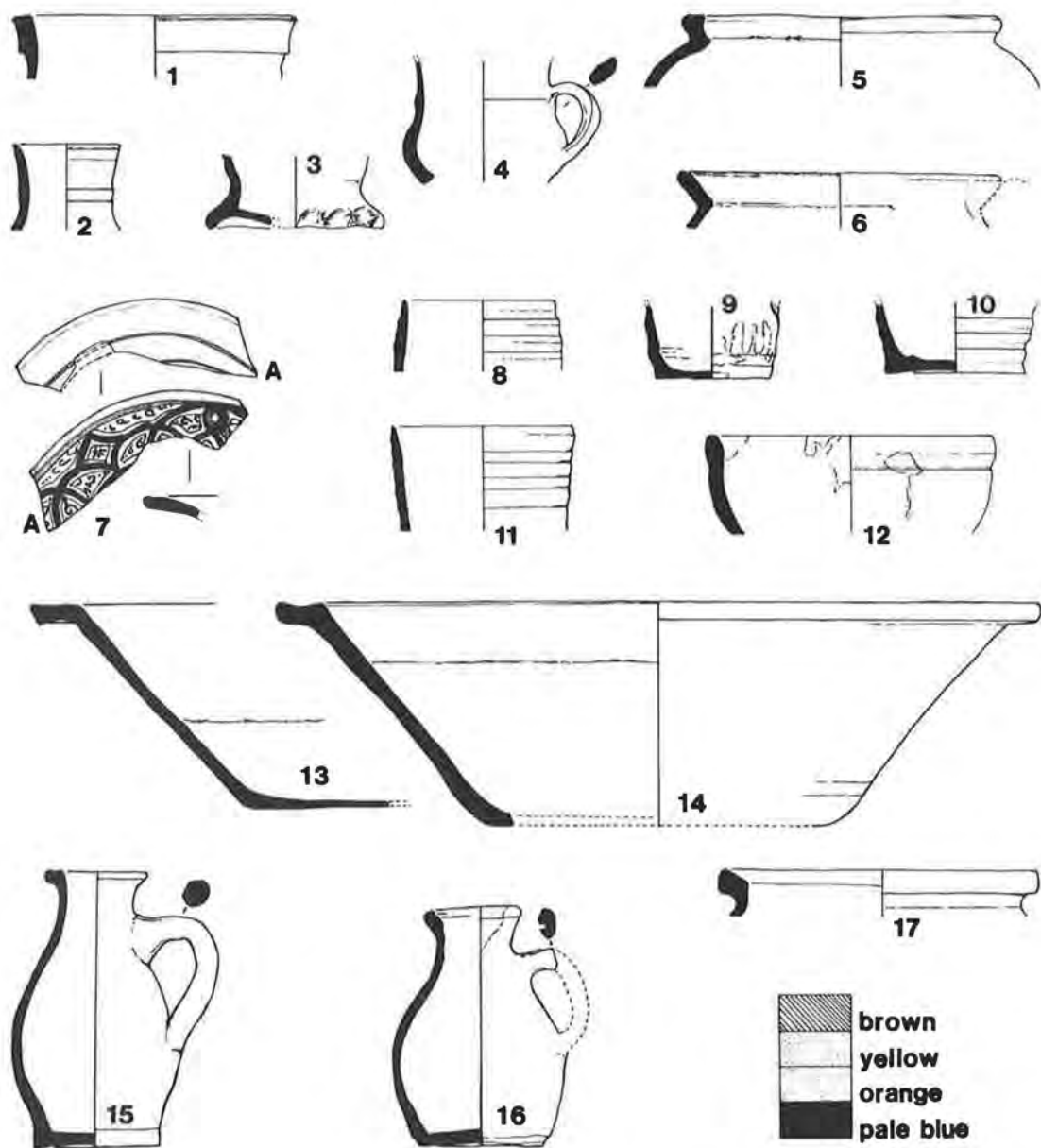


Fig. 53. Post-medieval pottery. Scale 1:4)

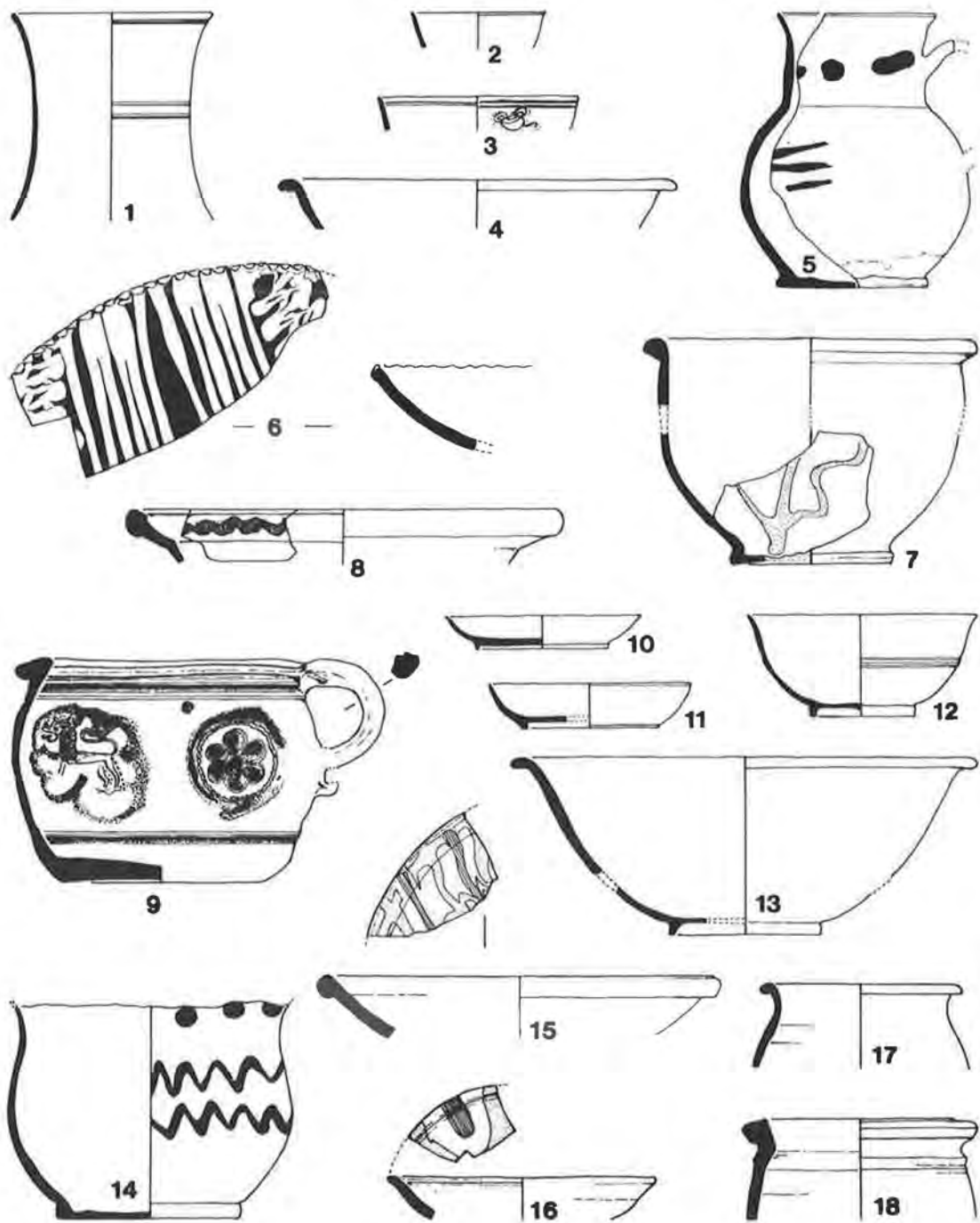


Fig. 54. Post-medieval pottery. (Scale 1:4)

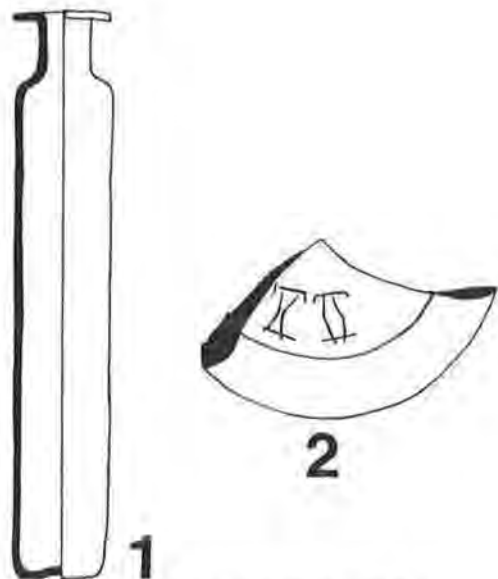


Fig. 55. Post-medieval glass. (Scale 1:2)

pieces of interest included a goblet base from pit 0504 and a bottle base with graffiti (Fig. 55:2).

1. Medicine phial, 150 mm long, complete (some of the contents remain). Eighteenth-cent. type (Barton 1969, 175-6, Fig. 70, 85). (0380)
2. Bottle base, broken, with graffiti X II. (0803)

#### *Objects of Iron (Figs. 56-8)*

Over 800 iron objects were recovered from the post-medieval contexts. By far the majority were nails, but numerous artefacts and fittings were also present. A representative selection is illustrated here, including items from the cobbles, cellar fill and rubbish-pits.

The notes on spurs are by B. Ellis (nos. 6, 18, 46-8).

#### *Iron objects from the cobbled yard, sixteenth-cent. (Fig. 56:1-13)*

1. Scale-tang knife, 122 mm long (broken), with three rivet holes in tang. (0247)
2. Knife blade, 90 mm long (broken). (0805)
3. Carving fork with socketed handle, 193 mm long, fine tips broken. (0316)
4. Horseshoe, 85 mm long (broken), simple rectangular nail-holes, medieval or post-medieval type (Goodall, I. H. 1981, 61, Fig. 60, 2). (0247)
5. Cheek-piece from a horse's bit, probably 50 mm diameter, probably from a snaffle-bit (LMMC 1940, 80, Fig. 19a). (0247)
6. Rowel spur, c.125 mm long, neck c.37 mm long, rowel

diameter c.22 mm. The flat section sides are c.20 mm deep behind the wearer's heel. Their depth reduces as they plunge into a curve under the ankles, tapering to 6 mm deep next to the stump of one terminal. The front of the other side is broken and the terminal is lost. Straight neck with uncertain section, small star rowel of 6 points. Similar iron spurs include two fragments from Sowerby (Mynard 1957, IW25 and IW26) and one from Pleshey Castle (Williams 1977, no. 44). First half (probably) sixteenth cent. (0804)

7. Heavy wood nail, 82 mm long (broken) with rectangular-sectioned wedge-shaped shank and flat head (Moorhouse 1971, 49, Fig. 22, 98). (0247)
8. Heavy wood nail, 75 mm long (complete), as no. 7 above. (0805)
9. Curved piece, 41 mm long; unidentified. (0805)
10. Buckle frame, 77 mm long (broken), sub-rectangular form, probably a harness-buckle. (0247)
11. Harness buckle, 57 mm long (complete), with trapezoidal frame, roll-bar and broad pin. (0247)
12. Strap-end buckle, 36 mm long (complete), with oval frame. (0247)
13. Small perforated bar, 32 mm long, broken, unidentified. (0247)

#### *Iron objects from pit 0504, seventeenth cent. (Fig. 56:14-18 and Fig. 57:19-23)*

14. Hinge-strap, tapering, 108 mm long (broken), with two nail-holes, one nail *in situ*. (0504)
15. Hinge-strap, D-section bar, 128 mm long (broken), with two nail holes. (0504)
16. Shears, 198 mm long (broken), broad-bladed type of shears with square shoulders. Used for shearing sheep, or other agricultural purposes; typical post-medieval form, cf. also no. 26 below (LMMC 1940, 155, Fig. 48, 9; Goodall, I. H. 1981, 57, Fig. 55). (0504)
17. Horseshoe, 88 mm long (broken), with rectangular nail-holes, and two nails *in situ*, cf. no. 4 above. (0504)
18. Rowel spur, 105 mm long, with sides projecting downwards probably to curve under the wearer's ankle; the terminals are missing. Short neck has stump of 5 or 6 points. There are mouldings encircling the neck and a hint of diagonal mouldings on the thick part of one side, but this may be due to corrosion. The rowel pin may be bronze. (0504)
19. Flat bar, 110 mm long (broken), unidentified. (0504)
20. Pointed object with rectangular section, 170 mm long, (broken); probably the point of a large nail (cf. Moorhouse 1971, 51, Fig. 22, 123). (0504)
21. Y-shaped object, with square-section arms and tapering shaft, 110 mm long. Probably part of a pitchfork (cf. Goodall, I. H. 1981, 54, Fig. 54, 7). (0504)
22. Door stud, 100 mm long, with square head, 40 mm across (complete) and tapering rectangular shank (cf. Moorhouse 1971, 49, Fig. 22, 110). (0504)
23. Nail, 60 mm long, with square head 20 mm across (complete), a smaller version of no. 22 above. (0504)

#### *Iron objects from pit 0938 (Fig. 57:24-6)*

- Fill dated to early seventeenth cent., see above p. 98.
24. Window hook, rectangular section, 266 mm long (broken). (0938)



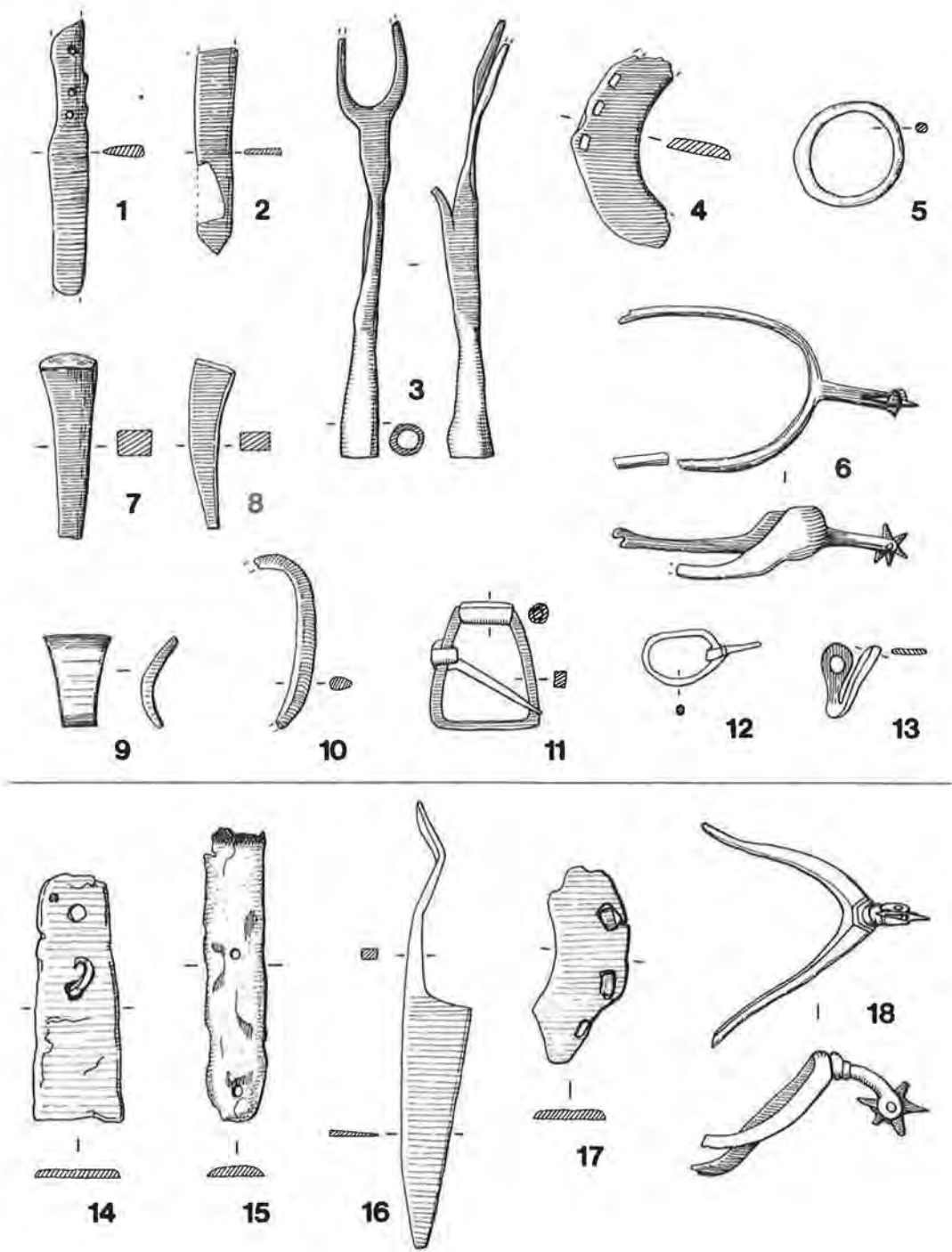


Fig. 56. Post-medieval iron objects. (Scale 1:3)

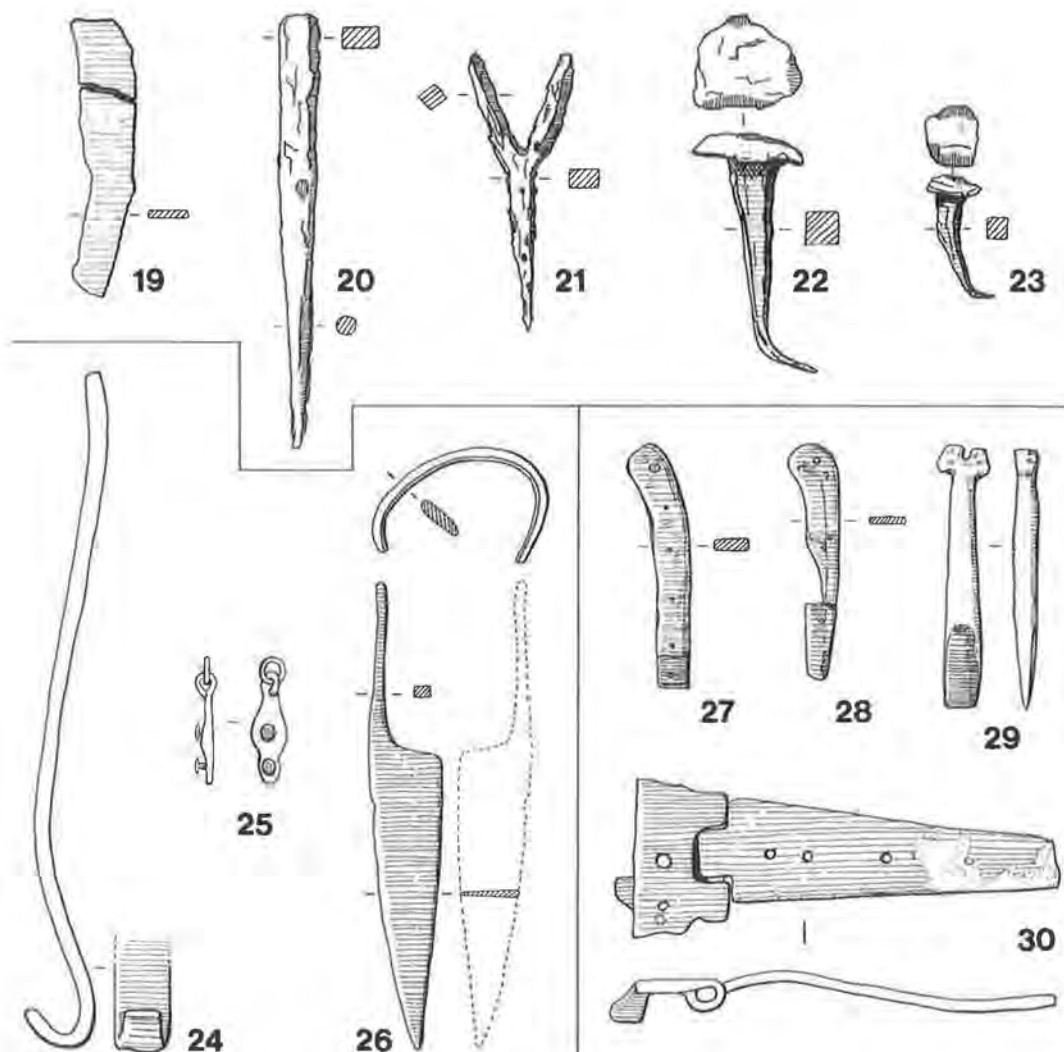


Fig. 57. Post-medieval iron objects. (Scale 1:3)

25. Escutcheon from wooden bucket 50 mm long, with two nails and a small ring held by loop at the top (cf. Moorhouse 1971, 44, Fig. 20, 64). The small ring at the top originally held the end of the iron bucket handle. (0938)
26. Shears, blade and part of spring (broken), c.220 mm long, as no. 16 but not part of the same object. (0938)

*Iron objects from cellar 0306 and ditch 1510 (Fig. 57:27-30)*

27. Scale-tang knife, handle and part of blade, 92 mm long (broken), with 4 small and 1 larger rivet hole. (1510)
28. Scale-tang knife, handle and part of blade, 92 mm long (broken), with 4 small and 1 larger rivet hole. (1510)
29. Unidentified object, 101 mm long. (0306)
30. Two-leaved hinge, 177 mm overall, with broad plate (2 nail-holes) and tapering strap with 5 nail-holes. (0306)

*Iron objects from pit complex 0330 (Fig. 58:31-36)*

31. Scale-tang knife, small, 80 mm long, with one bronze cylindrical rivet in tang. (0815)
32. Scale-tang knife, 130 mm long (broken), with two rivet holes in tang fragment. (0330)
33. Two-leaved hinge, 240 mm long (broken), with a waisted plate (with two rivet holes and a narrow projection) and a tapering strap (no rivet holes). The hinge is pinned. (0235)
34. Socketed hoe, or related agricultural implement, 146 mm long (complete). (0330)
35. Strip, 57 mm long (broken), with nail hole. Unidentified. (0330)

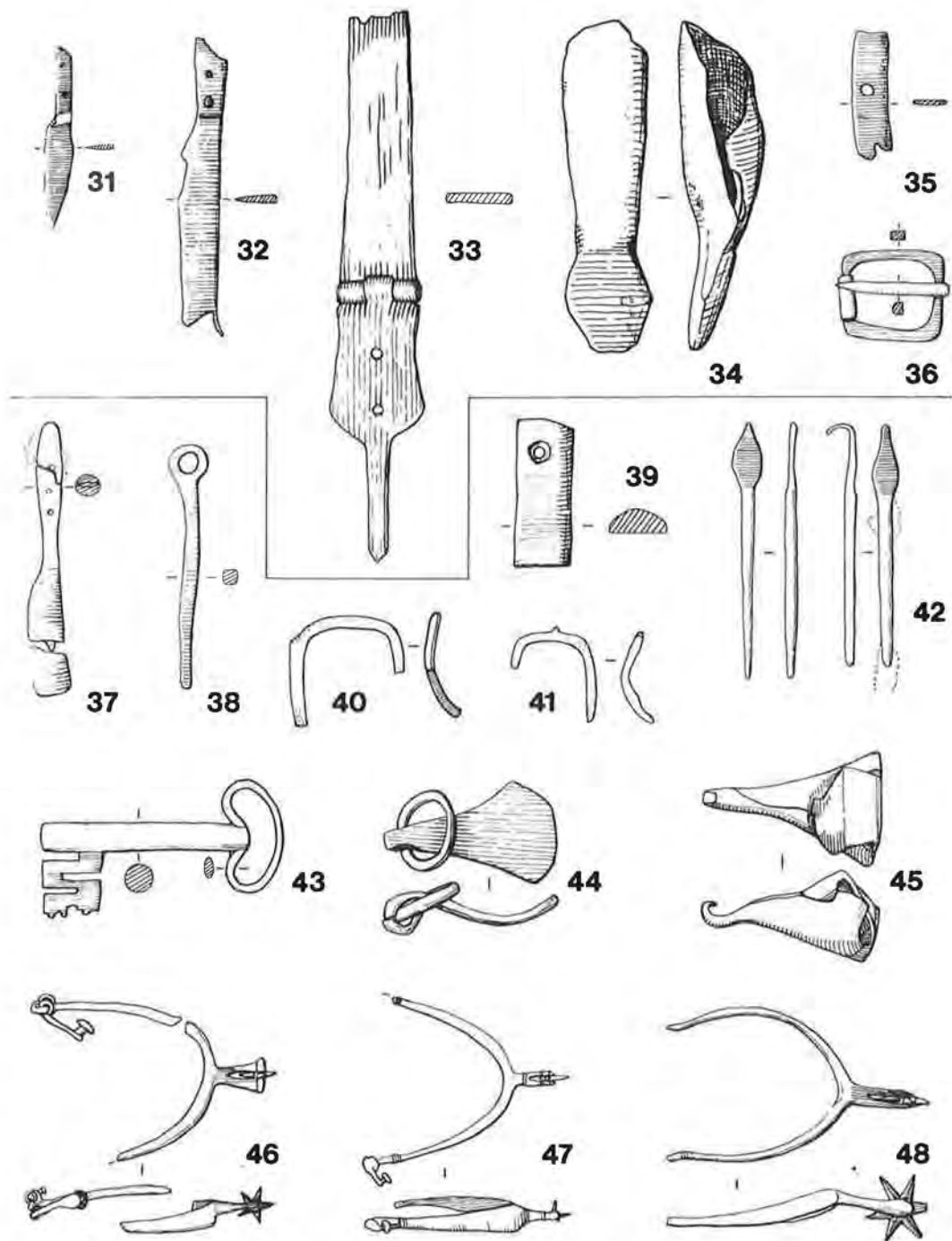


Fig. 58. Post-medieval iron objects. (Scale 1:3)

*Iron objects from various contexts* (Fig. 58:37-48)

36. Harness buckle, 50 mm long (complete), as no. 11 above. (0268)
37. Scale-tang knife, 120 mm long (broken), with bone handle (circular section, with three rivets). (0210)
38. Ring-headed object, 105 mm long, with square shaft. Not identified, but may be a handle, i.e. of a kitchen implement (cf. Moorhouse 1971, 38, Fig. 17, 13). (0261)
39. Bar-shaped object, 65 mm long (broken), D-sectioned with countersunk perforation; possibly a draw bolt, with a knob handle originally in the perforation (cf. Moorhouse 1971, 41, Fig. 18, 39). (0432)
40. Buckle frame, 43 mm long (broken), as no. 10. (1404)
41. Buckle frame, 40 mm long (broken). (1516)
42. Two barrel-padlock keys, 114 mm and 107 mm long (both broken); both have the bits missing. Simple versions of a common medieval and post-medieval type (LMMC 1940, 146-8). (0803)
43. Key, 108 mm long (complete), with solid shank, kidney-shaped bow and asymmetrical bit, which implies it was a chest-key rather than a door-key. A common medieval and post-medieval type (LMMC 1940, 138-41, Type IV; Moorhouse 1971, 39-41). (0212)
44. Unidentified object, 77 mm long, with S-shaped flat plate holding an annular ring. Possibly part of a snaffle-bit. (0421)
45. Mouth-piece from horse's bit, 79 mm long (complete), a type of mouth-piece found on curb-bits in the post-medieval period, as well as on snaffle-bits (LMMC 1940, 82, Fig. 19b, Type IV and Fig. 21, 2; Moorhouse 1971, 47, Fig. 21, 89). (0803)
46. Rowel spur, 100 mm long (broken); the detached terminal almost certainly belongs to the same spur. The narrow D-section side tapers to a small, evenly-set figure-8 terminal. One stud attachment for the spur leather remains, and a fragment of the ring of the other. The very short, straight neck (20 mm long) swells horizontally into broad rowel bosses (width 16 mm across). Star rowel with 5 points, diameter 16 mm. Traces of non-ferrous plating remain on both parts (Jope 1956). Late seventeenth cent. (0903)
47. Rowel spur, 87 mm long. Sides are flattened D-section, straight, and taper to become extremely narrow near the terminals. One terminal missing; the other is an evenly-set figure-8 retaining one stud attachment for a spur leather. The neck is 20 mm long, with a very short neck of rounded section, decorated with vertical mouldings beside the rowel box near the very small domed rowel bosses. Two points remain of a small 5-point rowel, 15 mm diameter. Late seventeenth or early eighteenth cent. (0903)
48. Rowel spur, 110 mm long, slender form with slightly curved sides, tapering to narrow ends (terminals missing). Sides are quadrangular section, with rounded outside surfaces. The radiograph shows groups of three vertical lines decorating the front end of both sides; also there are slight traces of (?) non-ferrous plating. The shallow, straight neck is 28 mm long with a quadrangular section, divided by a long rowel box. The rowel bosses are broad and flat, with a large star rowel

with 6 points, 31 mm diameter. Similar to spur from Sowerby (Mynard 1969, IW 19). Late seventeenth or early eighteenth cent. (1503)

*Objects of Copper Alloy, Silver and Lead*

Nearly 140 copper alloy objects were found in the post-medieval features. Many were in a fragmentary state, but complete harness bells, buckles, buttons, pins, rings and thimbles were among the items recovered. In addition, one silver-and-glass pendant was found. These have been drawn as part of the excavation archive, but only a small number are illustrated here (Fig. 59:1-8).

19 pieces of lead were recovered from the excavation. The majority were fragmentary pieces of lead sheet or window cames. None are illustrated here.

*Post-medieval copper alloy and silver objects* (Fig. 59:1-8)

1. Shoe buckle, cast, 58 mm long, with trace of corroded (?iron) pin on central bar. Probably seventeenth-cent. type. (0305)
2. Rumbler bell, sheet metal, 39 mm diameter, with simple suspension loop. (0231)
3. Small harness bell, sheet metal, 20 mm diameter, with clapper attached through hole in top. (0401)
4. Decorative fitting, sheet metal, 32 mm diameter, in form of stylised rose. Central perforation for attachment. (0201)
5. Balance beam, 115 mm long (broken), two arms were hinged from the central section (one missing). Originally two pans were suspended, one from either end; there is a broken suspension loop in the centre of the central section. Very similar in form to a medieval example from Goltho (Goodall, I. H. 1975, 95, Fig. 44, 37), but this type of balance was also used in the post-medieval period (Goodall, I. H. 1981, 64); the object was unstratified. (0903)
6. Ring, oval section, 25 mm diameter (complete). (0306)
7. Button, cast, 20 mm diameter, with stylised flower decoration and two perforations. (0903)
8. Silver-encased glass pendant, 40 mm long. (0306)

*Post-medieval Coins and Tokens*  
identified by N. J. Mayhew

- |   |        |
|---|--------|
| Elizabeth I groat, i.m. martlet, 1560-1.                | (1503) |
| Nuremberg jetton, sixteenth cent.                       | (0302) |
| Nuremberg jetton, sixteenth cent.                       | (0938) |
| Nuremberg jetton, Hans Schultes, c.1550-74.             | (0803) |
| Nuremberg jetton, Hans Schultes, c.1550-74.             | (0302) |
| Nuremberg jetton, Hans Krauwinkel, c.1580-1600.         | (0501) |
| Token, farthing, Joseph Freer Macert in Alesbury, 1652. | (0903) |
| William III, sixpence, c.1697.                          | (0501) |
| Queen Anne, forgery of sixpence, 1701-14.               | (1401) |
| George III, half-penny, 1729-54.                        | (0201) |
| George III, half-penny, probably eighteenth cent.       | (0302) |

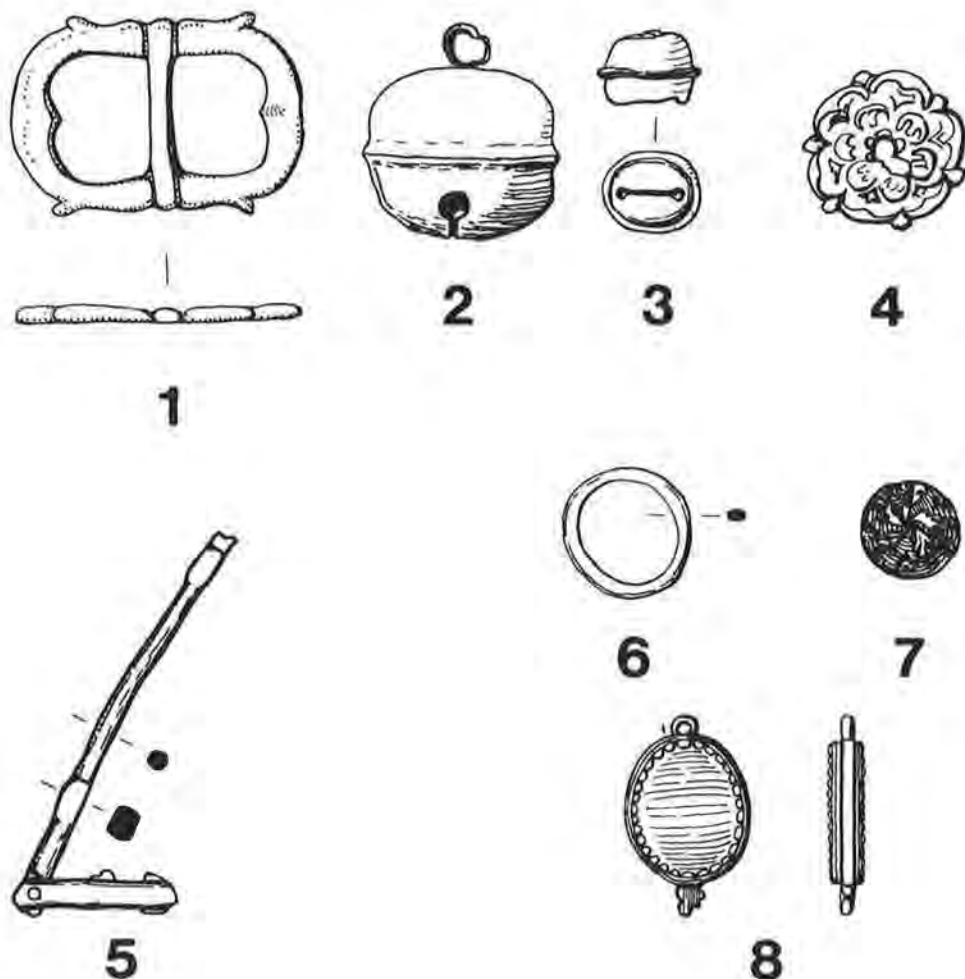


Fig. 59. Post-medieval finds. 1-7, copper alloy; 8, silver-and-glass. (Scale 2:3)

*Post-medieval and Undated Objects  
of Worked Bone and Antler (Fig. 60:1-8)*

S. Greep

1. Crude needle with a well-polished stem and a simple oval eye, 4.5 mm diameter, 81 mm long, complete. These simple types occur at all periods. (0504)
2. Fragment of a sheep metapodial. The end has been removed (sawn?) and a small perforation 2 mm in diameter made just below this point. There is a resemblance to a small series of objects, of uncertain function, of late Iron Age to Roman date (e.g. Gray 1917, Fig. 145) which utilised this bone and perforated it in such a manner. The present fragment is, however, too small for certainty. 28.5 mm long, broken. (0826)
3. Sawn red deer antler tine. The central tissue has been removed and the object used as a handle. These are common types although often the surface is removed, at

least partially, and the tip sawn off. Undatable. 148 mm long, complete. (1503)

4. Broken long-bone, 225 mm long. A single perforation 12 mm diameter has been drilled, mid shaft, through both sides of the bone. On one surface a V-shaped groove passes across it. Except for some possible polish there is little sign of function. (0916)
5. Fragment of a single-piece double-sided bone comb. The surviving teeth are cut to c.14 per cm. 39 mm long, broken. Post-medieval. (0304)
6. Turned bone 'button' 24 mm diameter, slightly conical in section. Post-medieval. (0305A)
7. Turned bone knob or stud, 17.5 mm diameter. Post-medieval. (0306A)
8. Head of a bone tooth-brush. There are traces of five rows of perforations which would have held groups of hairs. Eighteenth + cent. 41 mm long, broken. (0201)



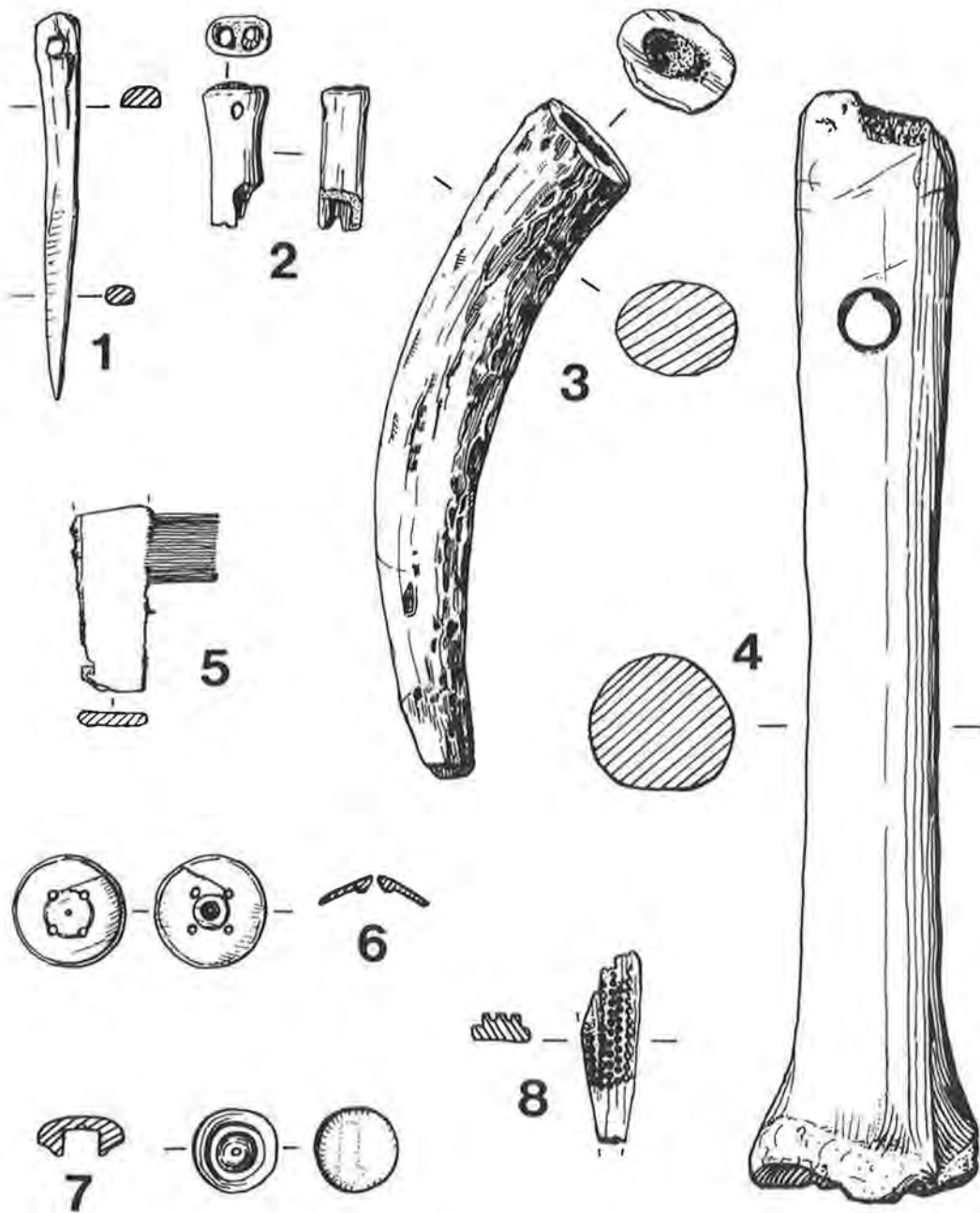


Fig. 60. Post-medieval and undated worked bone. (Scale 2:3)

### *The Animal Bone from Post-medieval and Unstratified Contexts*

G. G. Jones

Over 6,000 bones from contexts with very mixed pottery, including post-medieval, were looked through to establish species present. These included the usual domestic mammals, and some bird and fish bones. Bird bones included fowl (42 bones), goose (11), and duck (2) of mallard size (*Anas platyrhynchos*). There was no direct evidence here for the keeping of Aylesbury duck, which was chiefly a later nineteenth-century industry, popular in Bierton at that time (*VCH Bucks* II, 320), or of rock or stock dove (*Columba livia* or *oenas*) (21). Rook or crow (*Corvus frugilegus* or *corone*) (4) were also present. Of the dove bones, two were small enough to be almost certainly rock dove; most were more likely rock dove than stock

dove, from their size; one was a larger bone, either stock dove or wood pigeon (*C. palumbus*). It is the rock dove which is the domestic bird. These bones were found in seven contexts, but their distribution does not assist in the interpretation of the circular structure (0325, 0417) as a dovecote.

### *The Fish Bones*

A. K. G. Jones

A small number of fish bones were collected by hand from these mixed layers. Despite the paucity of identifiable remains, it is apparent that fish from both marine and freshwater habitats were present, i.e. a large member of the cod family (*Gadidae*), ling (*Molva* sp.), ?plaice (*Pleuronectes platessa* L.) and carp (*Cyprinus carpio* L.).

### *Discussion of Post-medieval Occupation and Evidence for Continuity as a Manorial Complex*

The excavation revealed two contiguous structural phases of post-medieval date indicative of a high-status dwelling which continued the role of the medieval manorial complex.

The first of these, datable to the Tudor period, consisted of a building with substantial stone footings, with a 'kitchen wing' to the east. To the south lay an extensive cobbled yard. Much of the structural ironwork including heavy wood nails, doorstuds and hinges, can be related to this phase.

In the seventeenth century the stone footings were replaced by a brick-built structure. A number of features apparently relate to the occupation of this building, including many of the rubbish pits cut into the area of the cobbled yard (Fig. 50). Subsequently, this building was demolished and its substantial cellar was filled with brick rubble. Closely datable finds from this feature (Fig. 55:1-8) and the fact that the building is absent from a detailed Enclosure

Award map of 1780 (Fig. 61) place this demolition in the third quarter of the eighteenth century. A reorganisation of property boundaries also took place at this time, with the substantial east-west boundary (1510) being infilled and superseded by a north-south fence represented by a line of postholes (Fig. 50). This latter can be equated with a boundary on the 1780 map.

The substantial nature and location of the post-medieval structures suggests a continued manorial status for the site up to the mid eighteenth century. The nature and range of the associated finds indicate a certain degree of wealth, but there are few outstanding items. One exception is the silver pendant from the cellar fill (Fig. 59:8).

From the mid eighteenth century until the excavation took place the site lay within the vicarage garden, and various small structures relating to this were found during excavation.

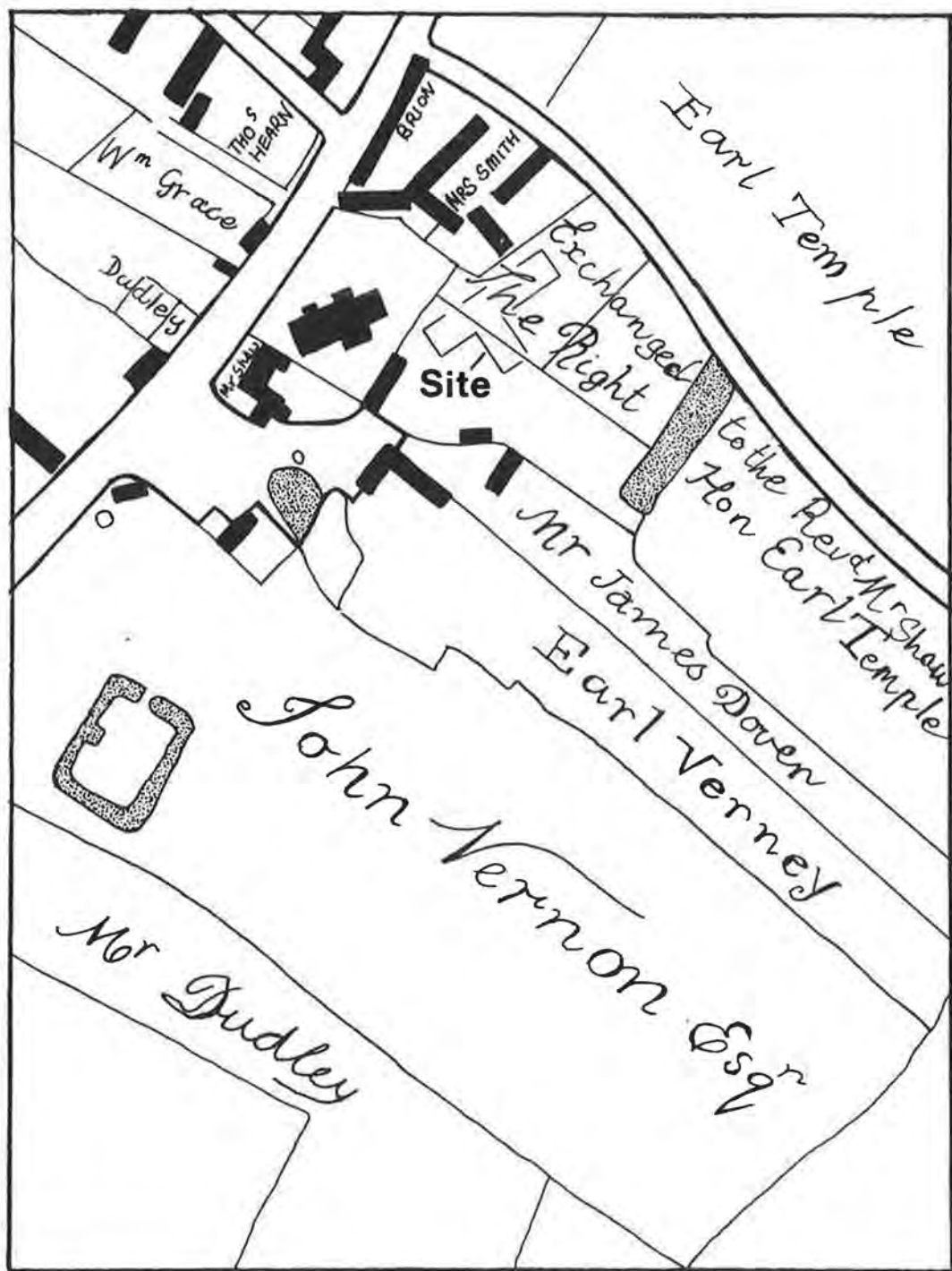


Fig. 61. Detail of Enclosure Award of 1780 (copy) with area of excavation superimposed. Water stippled. (c.1:2500)

## THE QUESTION OF CONTINUITY

The excavation produced evidence for substantial settlement in the Late Iron Age, Roman, Medieval and Post-medieval periods. The nature of this occupation has been discussed above in relation to each individual phase, but it seems appropriate to draw this evidence together in order to consider the arguments for and against continuity.

Although a quantity of earlier prehistoric material was found, this presumably relates to the general attraction of the limestone ridge as a settlement location and no later Bronze Age or earlier Iron Age artefacts were recovered. It was in the first century B.C. that permanent occupation began, on a virgin site. This *complex ditched settlement* apparently flourished into the Roman period and became established as a villa.

The question of continuity in the mid first century A.D. is one which has received increasing attention in recent years (Burnham and Johnson, 1979), but whilst it is clear that many villa sites have produced Iron Age material (ten of the thirty-five known in Buckinghamshire for example), continuity has rarely been demonstrated. Nevertheless, it is apparent that it did occur in many instances, and a parallel for the Bierton evidence exists at Gorhambury, Hertfordshire, where D. S. Neal's extensive excavations have demonstrated that the villa replaced a farmstead of the later Iron Age (Neal forthcoming b).

The finds indicate an abandonment of the villa in the mid fourth century, but the presence of Early Saxon material indicates that settlement of this date occurred close by. However, the relationship between the Roman site and the

Saxon settlement must remain a matter of conjecture.

Equally obscure are the events of the later Saxon period; the chapel at Bierton, the predecessor of the present Church, was founded on the site of the villa, but the date of its construction is unknown. In a recent paper discussing the siting of churches on Roman buildings, Morris and Roxan (1980, 175) point out that this has been hitherto a neglected subject, with clear relevance to the problem of Roman/Saxon continuity. They conclude that the presence of a church on a villa site does not presuppose the continuous use of that site since the fourth century, but more probably the continued 'management' of the villa estate (*ibid.*, 192). The decisive link, they suggest, is between the villa and subsequent Saxon hall under whose patronage the church or chapel was built. When the construction of the chapel was authorised the most obvious site, and one which may have still produced building materials in some quantity, was that of the villa.

Whatever the date of foundation of the chapel, it is known that in the fourteenth century it was replaced by the church of St James. The excavation demonstrated that a substantial dwelling, interpreted as a manor house, was constructed at that period also. The juxtaposition of church and manor was maintained until the mid eighteenth century.

In summary, whilst the excavation evidence provides a disjointed picture, the impression is of a continuous relationship to the land unit which had emerged by the Roman period as a villa estate and is today the parish of Bierton.

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