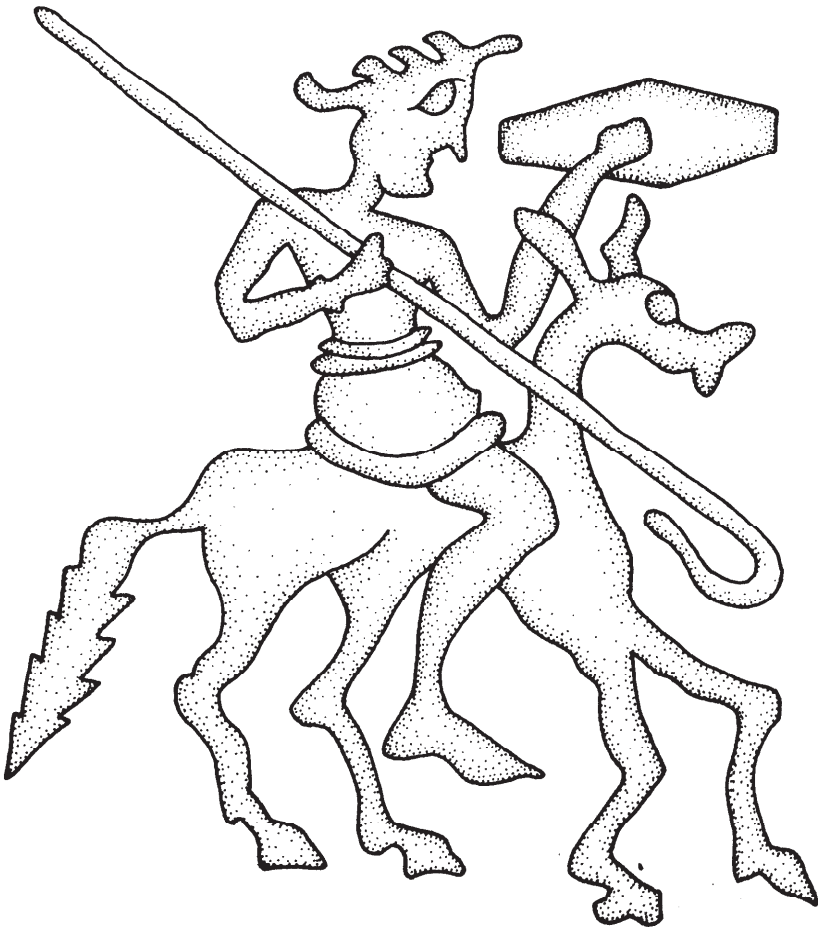
Chelmsford Archaeological Trust

Report 6

CBA Research Report 63

The prehistoric and Roman settlement at Kelvedon, Essex

by K A Rodwell



1988

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Report 6

The prehistoric and Roman settlement at Kelvedon, Essex

by
K A Rodwell

with contributions by S A Butcher,
C M Cunningham, K F Hartley, M W C Hassall,
E Healey, F Jenkins, R M Luff, B R K Niblett,
R Reece, V Rigby, W J Rodwell, D F Williams

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1. INTRODUCTION

This report is an account of rescue excavations undertaken between 1968 and 1973 on the prehistoric and Roman settlements at Kelvedon, Essex (TL 864190). A gazetteer of other finds and a general discussion have also been included.

Acknowledgements

Many people have been involved in this project since its inception. Firstly thanks are due to Braintree Rural District Council and the Department of the Environment, represented by Miss S A Butcher, who financed the work; to the Essex Archaeological Society, especially the late Major J G S Brinson, who undertook the administration of the excavation, and to the landowners Messrs A Banning, F Siggers, and G Stanton for permission to excavate.

Numerous people participated in the excavations, and particular thanks must go to the site assistants, Messrs S Bassett, D Fowler, J Schofield, P Sewter and P Walker, and Misses C Brooks, M Fox and M Haynes, also to Mr M D Astor who lent and transported equipment. Many local people provided assistance in a great variety of ways, and for information about archaeological discoveries in Kelvedon and its locality I am grateful to Mr M J Campen, the late Dr D J E L and Mrs M Carrick, Major B L Kentish, Mr F N Snowden, Mr W Wager, and in particular Mr H J D Bennett who was also instrumental in bringing the excavations about and who assisted in a multitude of ways throughout their duration. Mr D T-D Clarke provided facilities for the study of material in Colchester and Essex Museum.

Post excavation work has been conducted under the auspices the Chelmsford Archaeological Trust (formerly Chelmsford Excavation Committee) and thanks are due to all those staff members who have been involved in the production of this report, in particular to the former director, Mr P J Drury, who has assisted with the project since its inception. Illustrations have been prepared by Elizabeth Briton, John Callaghan, Christopher Going, Susan Holden, Helen Humphries, Anne Rotheram, Warwick Rodwell, and the author. Site photography was undertaken by Warwick Rodwell and other photographs were supplied by Gordon Ager, H J D Bennett, Prof G B Jones and the Oxford Institute of Archaeology.

Finally, I am grateful to all those who have contributed reports or notes: Miss S A Butcher, Mrs C M Cunningham, Mrs K F Hartley, Mr M W C Hassall, Mrs E Healey, Dr F Jenkins, Dr R Luff, Mrs R Niblett (net Dunnett), Dr D F Williams, Dr R Reece, Miss V Rigby and Dr W J Rodwell, who also acted as assistant director and who has provided advice and assistance at every stage of the project.

Siting

Kelvedon lies on the main road from East Anglia to London midway between Colchester and Chelmsford at a crossing of the river Blackwater (Fig 1). The present village is a continuous linear settlement stretching southwestwards from the Blackwater bridge for almost a kilometre along the river terrace. It is confined on the south

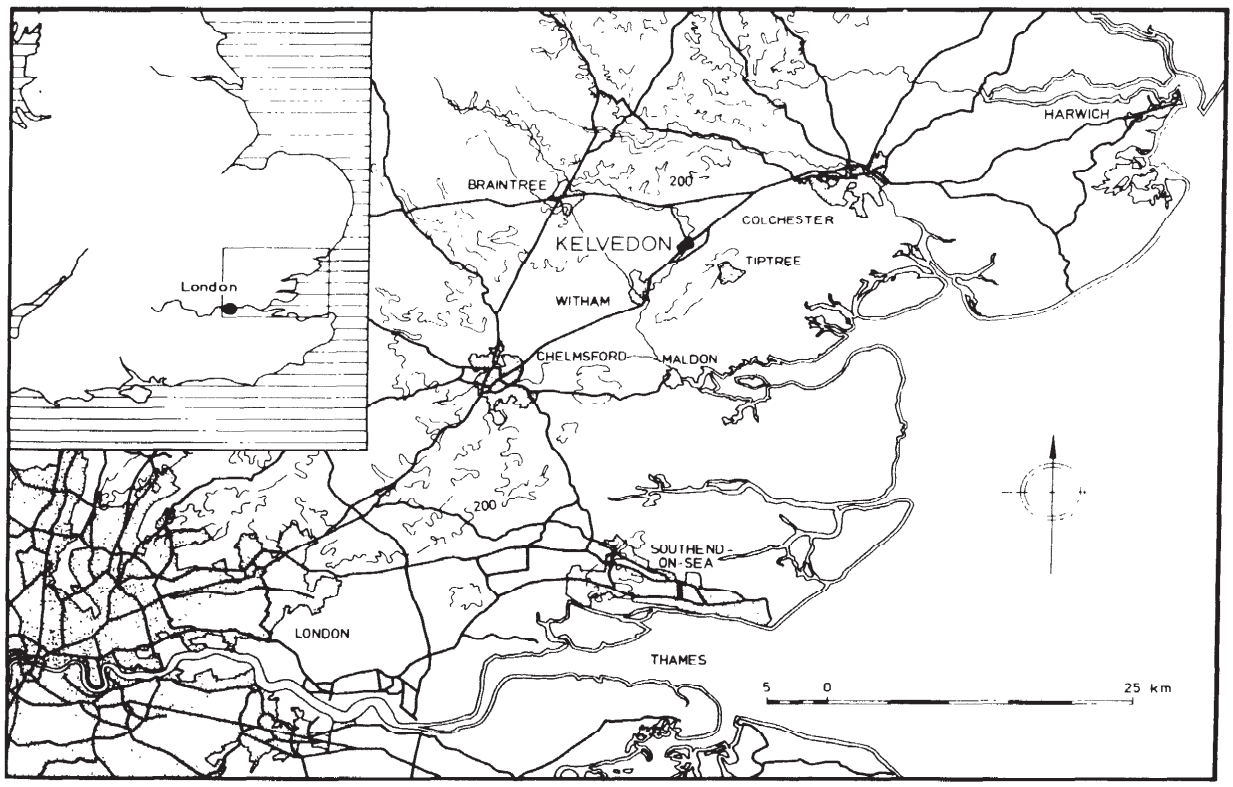


Fig 1 Location map

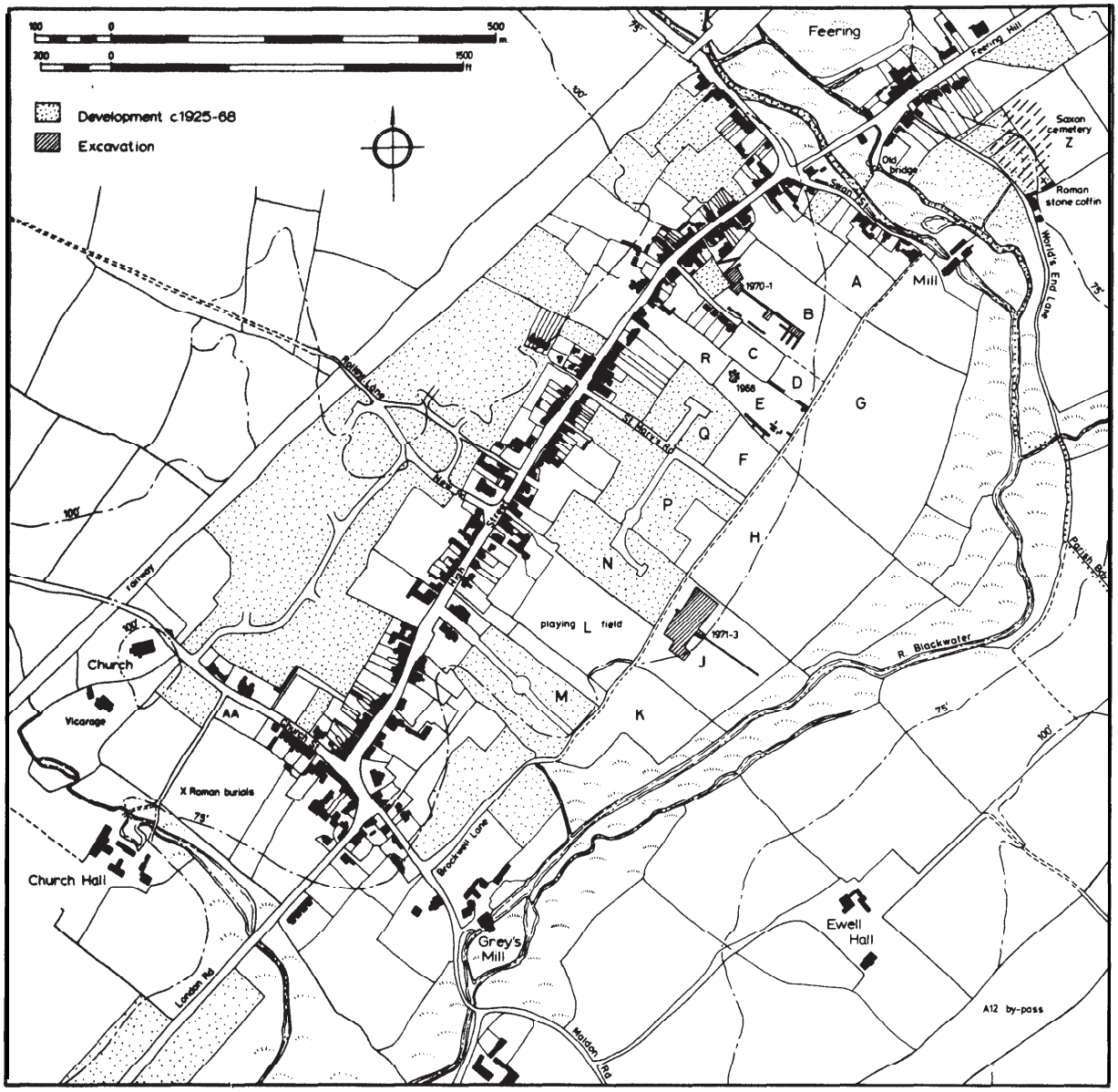


Fig 2 Kelvedon; the excavations in relation to the modern village

by the river with its flood plain and on the north, since its construction in the 1840s, by the main-line railway. There are crossroads at both ends of the village (Fig 2); one arm of the northern leads to Coggeshall, and the other to the medieval river crossing, in use until the present bridge was constructed in 1788. From the southern junction roads lead south-east to Maldon and the coast, and north-weat to Rivenhall and the further parts of the parish. The present unity of the village is a result of l9th century development. Before then there were two distinct nuclei, centred on these two junctions; the northern was commonly known as Eastford. There are many surviving medieval timber-framed buildings in the village whose incidence clearly reflects this historic pattern. During the last 50 years the farmland and allotments behind the street frontage have been extensively developed for housing, a process due to continue until all available areas between the river and the railway have been built up. It is as a consequence of this development that archaeological material has come to light and investigations have been mounted. For ease of reference the plots of land in which the Roman settlement lies have been lettered from A to R (Fig 2) and these are used as prefixes in all descriptions of excavations or other discoveries. (See also the gazetteer, p 54 and MF l.B8–13).

Geology

The village and its environs lie on the lower gravel terrace of the Blackwater (Haggard 1972) which is here fairly broad, encompassing all that area shown on Fig 2. To the north-west lies a sheet of boulder clay broken by localized pockts of glacial gravels, whilst east of the river the terrace gives way to the London clay of the Tiptree ridge.

In places the gravel terrace outcrops directly below the topsoil, but elsewhere it is capped by brickearth deposits of variable depth. Both these resources were extensively

quarried in the post-medieval period, particularly in fields E, F, J, K, and P (Figs 2 and 40). Field H, then subdivided, was known in the tithe award of 1838 as Upper and Lower Brickfield, presumably indicating the site of a brickworks, as it was not itself quarried.

Archaeological Background

The Roman settlement at Kelvedon, which lies on the main road from London to Colchester, can confidently be identified as *Canonium* recorded in Antonine Itinerary IX (Rivet 1970, 52); the etymology of the name 'place on the reedy river' (Rivet & Smith 1979, 296) is wholly consistent with the local topography. The suggestion that *Canonium* lay at Rivenhall (VCH 1963, 174) can be discounted both on topographical and archaeological grounds now that more is known about both settlements (Rodwell & Rodwell 1986).

The state of archaeological discovery prior to the excavations of 1968-73 is summarized in the Roman Essex volume of the VCH (1963, 149). Until 1938, when the St Mary's Road council estate was built, the main area of the Roman town was farmland and few discoveries had been recorded. After the war, however, Mr M J Campen, an amateur archaeologist, conducted an extensive series of small-scale excavations for about 30 years, chiefly in areas B, C, E, and latterly J (p 15, Fig 40). From these he amassed an impressive array of finds many of which still form part of a large private collection, although much has been dispersed or confused with material from the numerous other sites in northern Essex (and latterly Suffolk) which he also investigated. No written records were kept and run of the mill finds were discarded on site or given away. He was assisted for much of the time by Mr H J D Bennett, a local police officer who also excavated on his own account and was able to describe many of their investigations in some detail. The basic accuracy of his observations has been verified by subsequent excavation. At his instigation and that of Mr F N Snowden, then headmaster of the local primary school, who also participated in their excavations, first Colchester Excavation Committee, and then the Essex Archaeological Society were invited to undertake more extensive excavations in the face of increasing development of the Roman area. Accordingly Miss R Dunnett (now Mrs Niblett) excavated in area E in advance of extensions to the primary school in 1968, and the author undertook a trial season in area B in 1970. This field, formerly farmland known as Chamber's field, was already partly developed as a housing estate and excavation was restricted to areas between future houses. A second season was undertaken in 1971, but these restrictions proved archaeologically unsatisfactory. Consequently when it was learnt that area J, known locally as the Beanfields, was also designated for housing development, it was decided to excavate before detailed planning consent had been obtained and without restriction. A trial season in this area, already known to contain Iron Age material, a military-type ditch and Roman burials, was undertaken in 1971 and followed by large-scale area excavations in 1972 and 1973. As both areas B and J had been ploughed, all topsoil was stripped mechanically. Steam ploughing had been particularly severe in area J, and furrows were clearly distinct in the surface of the natural brickearth; many cremations had been destroyed as a consequence and there was no vertical stratigraphy. Other problems included the incidence of small modern excavation holes, the lack of sharp definition inherent in a brickearth subsoil, and the very poor bone preservation encountered in the cemetery area. The total duration of the 1970-3 excavations was 20 weeks, with an average of 12 people being employed.

Subsequently further housing development was delayed for a number of years pending the construction of a new sewerage scheme, and several seasons of excavation were undertaken by the archaeology section of Essex County Council's Planning Department between 1977 and 1981. Their results will be the subject of a separate report; an interim has been published (Eddy 1982).

This report includes not only an account of the 1968-73 excavations but a gazetteer of other discoveries (p 54), augmenting the information in the VCH, and a discussion of the topography and development of the Iron Age and Roman settlement based on this evidence. The most significant finds from previous investigations have also been published if this had not already taken place, but duplication of excavated by unstratified material has been avoided. Finds from the excavations have been deposited in the Colchester and Essex Museum.

Outline chronology

The following phasing sequence has been adopted in the report.

Period 1	Mesolithic to middle pre-Roman Iron Age, represented principally by a phase of Mesolithic and early Bronze Age activity in area J; finds of other periods were sparse.
Period 2	Late pre-Roman Iron Age, from the 1st century BC to the Roman conquest. Three phases were identified in area J, and one in area B.
Period 3	Roman; period 3A was mid 1st century, probably military in both B and J. For subsequent phases ready correlations cannot be made between the two areas; in J period 3C refers exclusively to the Roman cemetery.
Period 4	Saxon; absent from the excavated areas, unless represented by Structure 8 in area B2.
Period 5	Medieval; represented by a series of rear property boundaries in area B2. The wider aspects of medieval Kelvedon are not discussed in this report.

The recording system

Excavated features are referred to by means of two series of context numbers, one for area B and the other for area J (Fig 2), which are used on plans, sections and in finds descriptions. Where ambiguous these numbers are prefixed by the area letter (and in area B by a trench number, eg B3, 303), otherwise by F (feature). On sections these numbers are circled. Graves (area J only) are numbered separately, prefixed by G and enclosed by a square on sections. Sections form a continuous numbered sequence (prefixed by S) by which they are indicated on the plans and referred to in the text. (For the key to section conventions see p 9). Excavated buildings have their own series (Structures 1–8). The original site records have been deposited with the finds in Colchester Museum and a microform copy is available at the NMR.

2. EXCAVATIONS IN AREA B

For other discoveries in this area see p 54 and Fig 40.

Period 1: early prehistoric (Fig 3A)

This area appears not to have been intensively settled in the early prehistoric period. Few flints were found and only 12 sherds of handmade pottery, which included beaker coarseware (Fig 78.4). The only features of this period were two small pits in area B2 (F55 and F68, Fig 5; Fig 8.S63).

Period 2C: Late pre-Roman Iron Age (Fig 3A)

Iron Age features were confined to area B4 and correspond to period 2C in area J. A ditch F424 (Fig 6; Fig 9.S72–4) ran across B4 from north to south, curving slightly and cutting a pit F431 (Fig 9.S74) and an oven F435 (Fig 9.S73). It was 1.8m wide and 0.5m deep with shallowly-sloping sides and a flat bottom. The profile indicated that it had been recut several times, although soil conditions were such that cut-lines were no longer discernible. The fill was generally very clean and edges were difficult to distinguish, but there were pockets of darker

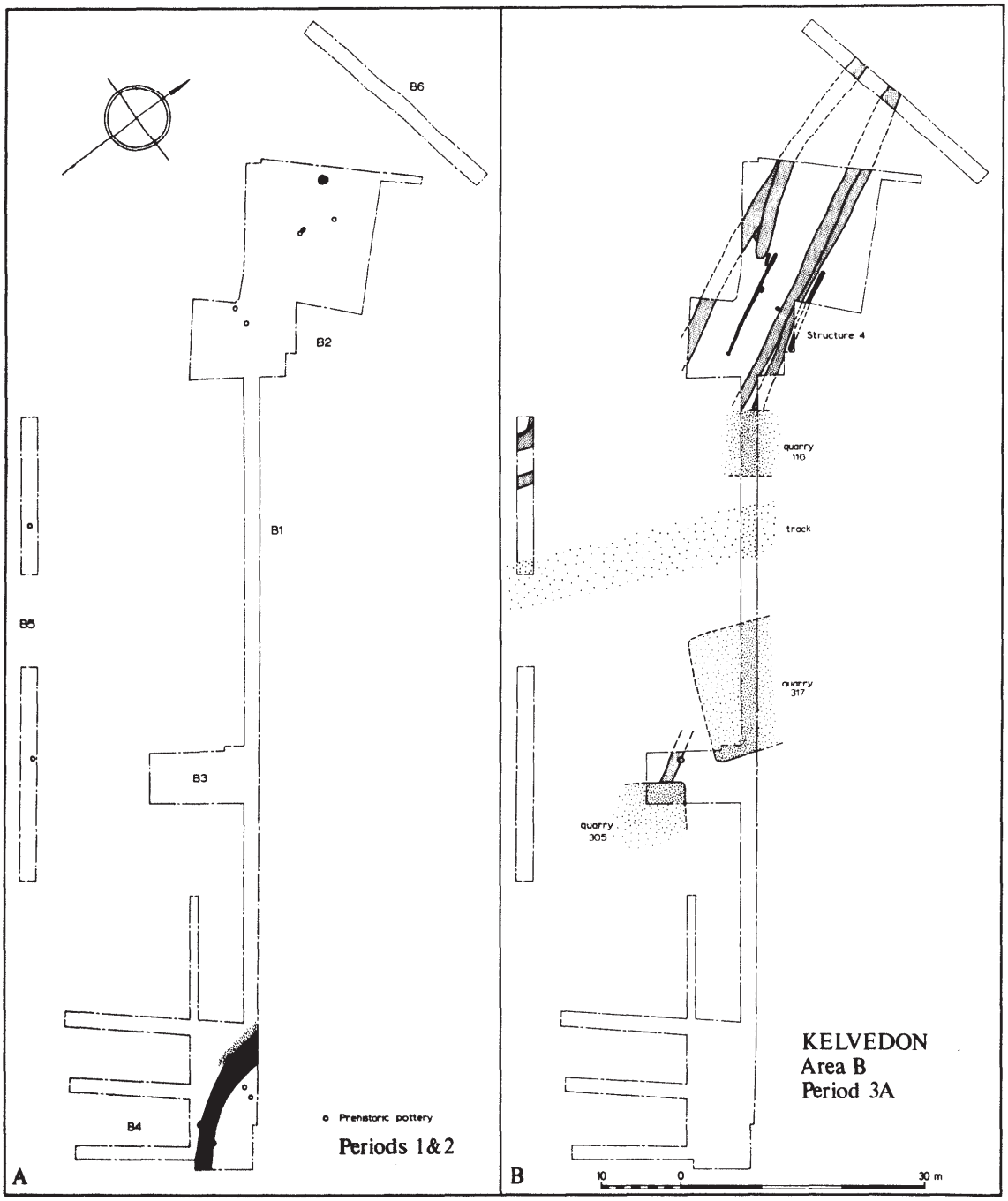


Fig 3 Area B: periods 1 and 2; period 3A

material including charcoal and fired clay. On the western lip of the ditch at its northern end was a spread of large flint pebbles, otherwise alien to this part of the site, which may have represented the denuded core of a bank. This ditch was notable for its contents, which included a large quantity of coarseware (Fig 90), Terra Rubra (Fig 75.1), Terra Nigra (Fig 90.252), an amphora fragment, part of the base of an Arretine platter with a potter's stamp (Fig 70.S43), briquetage (p 81), and two bronze brooches (Figs 43.6; 44.14). The quantity of material suggests that there was domestic occupation in the immediate vicinity, probably to the east in an area unavailable for excavation; to the west there were few features of any period.

Period 3A: mid-late 1st century AD (Fig 3B)

There was evidence for post-conquest activity in all areas but B4. This took several forms; quarry pits, ditches, a building (Structure 4), and a track. Unfortunately restrictions on the areas available for excavation prevented the full investigation of these features and a number of relationships remain unresolved. They will therefore be described individually before the sequence is discussed.

Structure 4

In area B2 was a pair of parallel timber-slots F26 and F53 (Fig 5; Fig 8.S58, 562) 6m apart and respectively 13.5 and 11m long; the southern end of the latter was denuded. Both were a maximum of 0.6m wide and 0.2m deep, and were filled with burnt material; F26 showed evidence of replacement posts including F34 (Fig 8S61). Features 26 and 34 were sealed by the period 3B gravel floor F19, but F53 had no direct stratigraphical relationships with any Roman features. Floor 19 sealed another posthole with a charcoally fill, F33 (0.12m deep).

The quarry pits

Parts of three large pits, from which brickearth, gravel and sand could have been extracted, were excavated; F116 (B1) was 8m long and 1.1m deep (Fig 8.S60); F317 was 16m long, upwards of 7m wide and 1.8m deep (Fig 6; Fig 9.S66); and F305 was lm deep (Fig 6; Fig 9.S65) and of unknown dimensions. All were vertical-sided and flat-bottomed and of regular, probably rectangular shape. Their lower fills were of clean material with few inclusions, but a good deal of rubbish from the period 3B occupation in area B3 accumulated in the hollows over F317 and F305. All were overlaid by later features; pits 116 and 305 appeared to post-date the period 3A ditches 45 and 315, although neither sequence was conclusively proved. F317 had no direct relationship with other features of this phase.

The ditches

Running across area B2 from north to south was a pair of parallel ditches; the western F5 (Fig 5; Fig 8.S53-5) cut a pit F10, and continued northward in B6 as F87. It had a recut F24 (Fig 8.S53, 58) which butted within the excavated area. The eastern ditch had been cut several times, first as F45 (Fig 5; Fig 8.S50, 51) then as F46, and finally as F49 (Fig 5; Fig 8.S50-2), which had three distinct fills: brown pebbly loam over a dump of clean brickearth (F48) with a silt layer beneath (F47). In B6 this ditch complex was represented by F86 and F88 (Fig 5; Fig 8.548, 49). Short lengths of similar ditches were found in B5 (Fig 6.F512, Fig 9.S79; Fig 6.F514-16, Fig 9.S81) but satisfactory correlations cannot be made. In area B3 (Fig 6) a ditch F315 (Fig 9.S67, 68) with clean brickearth and gravel lower fills, cut by F305 and sealed by F302, was possibly a counterpart to F45.

The track

The track, F353 (Fig 3B), a thinly-metalled gravel feature *c* 6m wide directly overlying natural brickearth and covered only by ploughsoil, was located in B1 and B5. It appears to have originated in this phase although direct evidence for its 1st century date comes from area C (C4, p 55).

Sequence

The sequence of these features cannot be precisely established but topographically the track would appear to have been primary, with Structure 4 the earliest of the features to the north-west. This was replaced by a sequence of ditches which appear to be aligned on the track for part of their course, and lastly by the quarry pit F116. South-east of the track the quarry pit F317 was, on pottery evidence, earlier than the ditch F315 and the quarry pit F305 the latest feature in this phase. The ditches F5 and F45-9 (Figs 91.261-80; 92.297-303) and the pit F317 (Fig 92.289-96), both produced pottery of Neronian-early Flavian date and were broadly contemporary. However, the greater preponderance of purely Flavian samian in the ditches reflects their longer life (Fig 71.20). They also contained items of Roman military equipment (Fig 46.35,36), which occurred elsewhere in residual contexts (Fig 46.34,37). The small quantity of pottery from Structure 4 was not later than Neronian (Fig 91.254-60). F315 was Flavian (Fig 91.281-8), whilst F305 (Fig 93.323-9) does not appear to have backfilled until the end of the 1st century; and material continued to accumulate in the top of the feature (F303, Fig 93.330-7) throughout the 2nd century.

Period 3B: other Roman (Fig 4A)

During this phase a series of buildings, probably industrial or agricultural, was contructed on either side of the track. They stood in fenced or ditched enclosures.

Structure 5 (Fig 5)

This consisted of two parallel beam slots at 5.5m centres, F18 and F50. The latter was traced for 24m from the edge of the excavations to the point where it was truncated by F2; it must have butted here as there was no northern continuation. Both slots averaged 0.6m wide and 0.2m deep (Fig 8 S51, 58, 59) but F18 became denuded and difficult to trace at its northern end. Between them was a gravel floor, F19 (Fig 8.S57-9), well-laid at its southern end but utilizing natural gravel outcrops further north. A little gravel (F21) had spilled externally, west of the beam slot F18. Both slots and floor overlaid the ditch systems of the previous phase (F18 cut

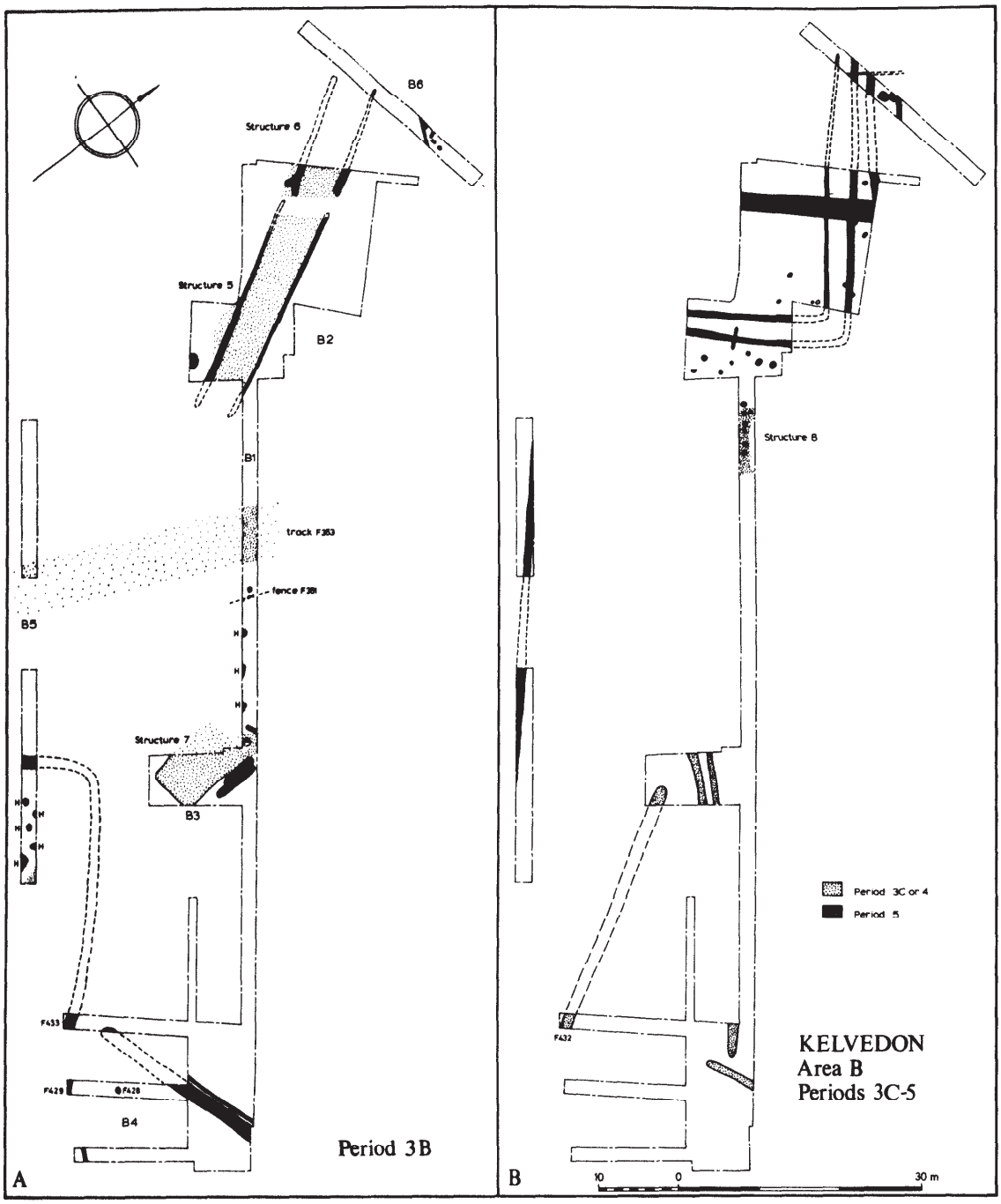


Fig 4 Area B: period 3B; Periods 3C–5

F24; F50 cut F49; F19 overlaid F49), but F19 also sealed a predecessor to F18, F22 (Fig 8.S59). There were no sealed deposits on the surface of F19, which lay directly below the ploughsoil.

Structure 6 (Fig 5)

To the north of F2 were the butt ends of four slots 5.2m apart and similar in alignment and dimensions to those of Structure 5; F58, which replaced F56 (Fig 8.S57) and F52, which replaced F51 (Fig 8.S50). Feature 56, like F22, was sealed by the gravel floor F19; F51 and F52 cut the ditch F49. The northern end of F51 or F52 was located in B6 (F82, Fig 8.S49) giving an overall length for the slot of 14m; the northern end of F58 was not located.

These structures may have been barns; two linch pins were found on the floor (Fig 54.25,26) and there was little domestic debris. They appear to have been built on a modular basis, for Structure 5 was probably twice as long (28m) as Structure 6 (14m) and may have been a double-length replacement of an earlier building (F22) contemporary with the earlier phase of Structure 6.

Other features in areas B2 and B6 which were probably contemporary include the group of gullies and postholes (F75, 76, 79, 83, 84, Fig 8.S64) which may be structural, and the pit F59 (0.8m deep) which had a banded greenish fill suggestive of a cess pit.

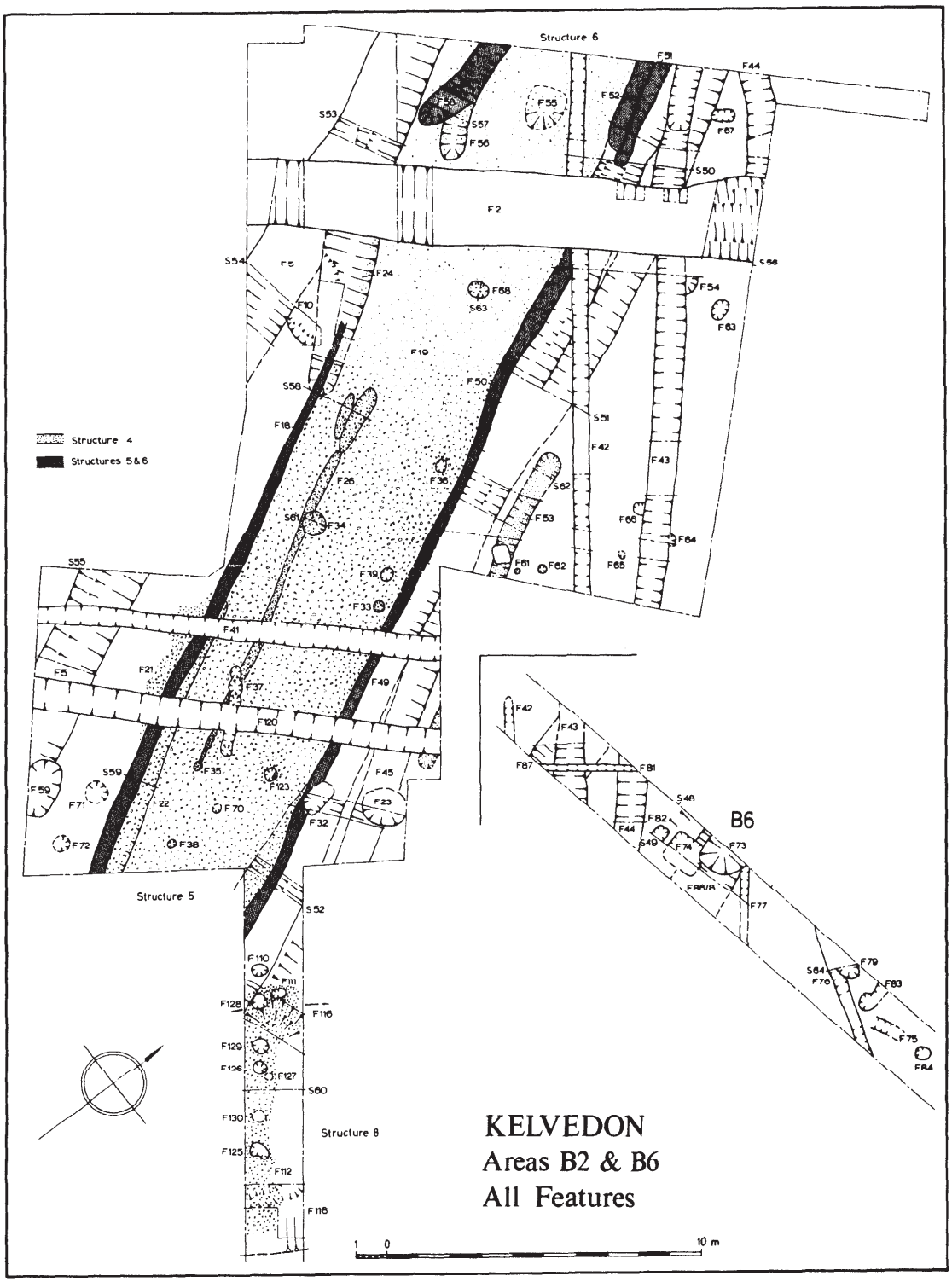


Fig 5 Areas B2 and B6: all features

Structure 7 (Fig 6)

This structure was delimited by its gravel floor, F302, which measured 6.2 x 9.5m (Fig 9.S65–8) and was well-laid and fairly thick, utilizing natural outcrops in places. It had sunk over the earlier ditches and pits F305, F317 and F315, and been relaid in places (Fig 9.S66); it lay directly beneath the ploughsoil and subsoil which were up to 0.6m deep.

The walls had left no trace and were presumably sup ported on ground-level cill beams; in one comer was a concentration of large pebbles and broken pieces of tile which may have been laid to improve drainage or to sup-port the corner of the building; two shallow features, F320 and F304 (Fig 9.S71) were probably eaves drip gullies.

To the north (Fig 4A), in the sinkage over the backfilled quarry F317, were patches of gravel, spreads of broken tile and fired clay, dumps of charcoal and iron slag (F321),

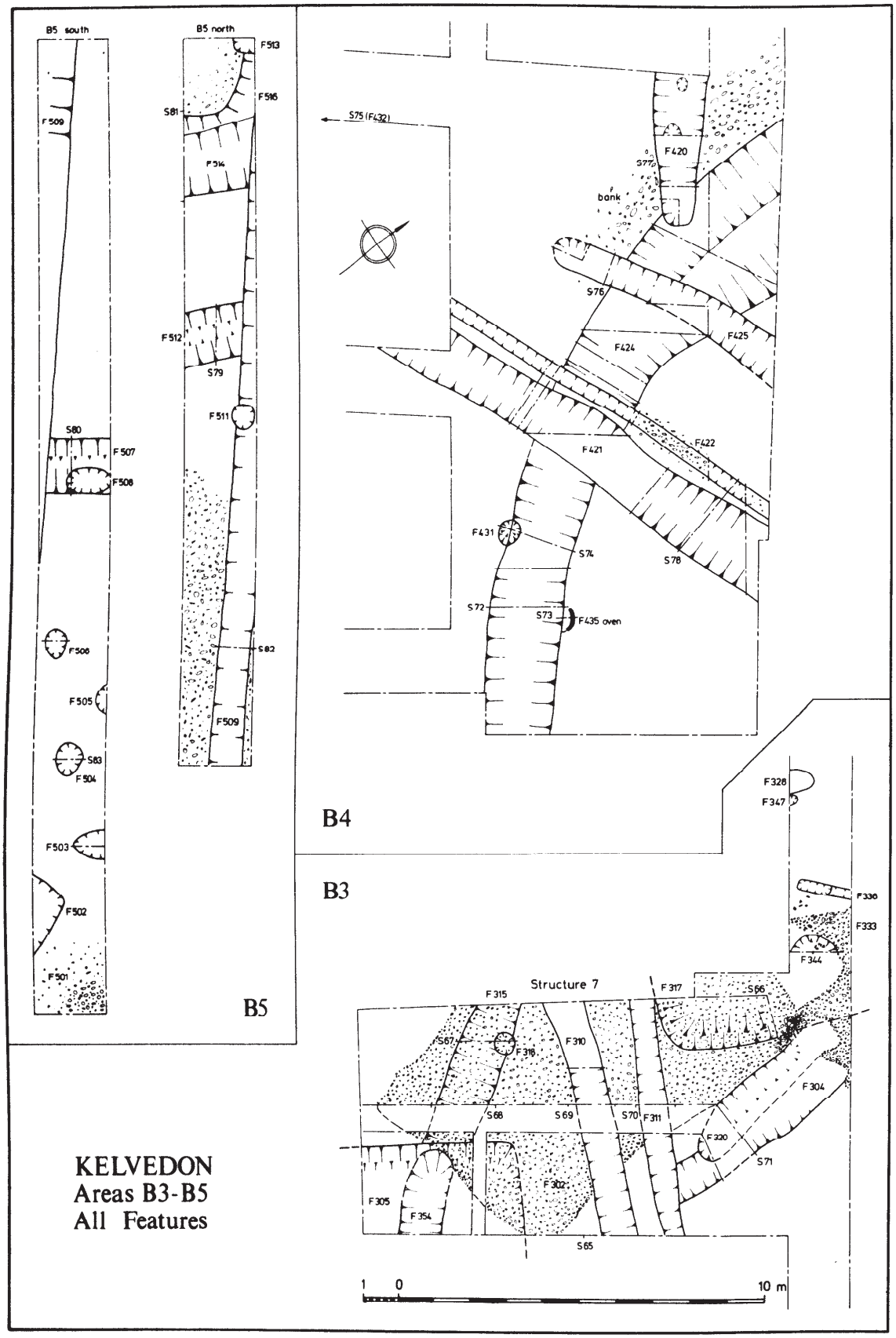


Fig 6 Areas B3, B4 and B5: all features

and a series of hearth bases, either of fired clay over large pebbles (F328), or burnt tile. This suggests an industrial function for Structure 7.

The northern boundary of the plot in which this building stood seems to have been defined by a fence of close-set small posts (F351, 0.2-0.3m in diameter and 0.3m deep) with larger bracing posts at intervals. Beyond this and separating it from Structure 5 lay the track F353.

There was another group of hearths at the southern end of B5 (Fig 6, F502-6, 508; Fig 9.S80 S83), and in the corner of the trench was a gravel spread F501 which may have been a floor. In B4 were boundary features which may have defined the plot in which Structure 7 stood. They included two ditches, F433 (Fig 9.575) and F421, and a pebble and tile-packed palisade trench F422 (Fig 9S78). To the south were a gully F429 and a small pit F428.

Dating

There was little pottery from areas B4 and B5 (F421, Fig 93.350-l) and no good sealed groups from any features of this period, but the quantity of 2nd century pottery including samian from the environs of the buildings in areas B2 and B3 suggests that they were in use during the second half of that century. (Structures 5 and 6: Fig 92.310-22; Fig 70.53; Fig 73.48; Fig 74.54. Structure 7: Fig 93.340-8; Fig 74.52). It is difficult to estimate how long a life they had, but both 3rd and 4th century material was scarce, which suggests no more than about 50 years.

Period 3C: late Roman

To this phase belong a number of features which were not closely dateable; most were stratigraphically later than features of period 3B, but they produced no finds or only a few fragments of Roman pottery. In area B3 (Fig 6) the butt end of a ditch, F354 (Fig 9.S65; B4, F432) cut Structure 7, which was also bisected by F310 and F311 (Fig 9.S69-70); these had profiles that suggested they were palisades rather than ditches. The latter contained a late 3rd century mortarium (Fig 93.349). Feature 420 (Fig 9.S77), in which individual posts were visible, was probably the termination of one or both of these features in area B4, and F425 (Fig 9.S76) its counterpart.

Structure 8 (Fig 5)

In area B2 was a 6m long row of close-set postholes (F110-F125) associated with gravel spread F112 (Fig 8.S60). The deepest (0.2m) was F125. The remainder averaged 0.lm deep although F127 and F130 were only post settings and had no depth. Most had a dark brown charcoally fill; F111 was a mass of fired clay; none contained finds. The floor F112 was of pebbles in a brickearth matrix of variable thickness (up to 0.2m), to counteract sinkage over the pit F116. The building of which these features formed part is potentially post-Roman, as close-set posts were not employed as a constructional technique in the region during the Roman period. It would appear to have been constructed end-on to the track F353. There were several other unassociated postholes in the vicinity (F36, 38, 39, 72, also F123 which was packed with fragments of Roman tile; respectively 0.14; 0.07; 0.1; 0.18m deep).

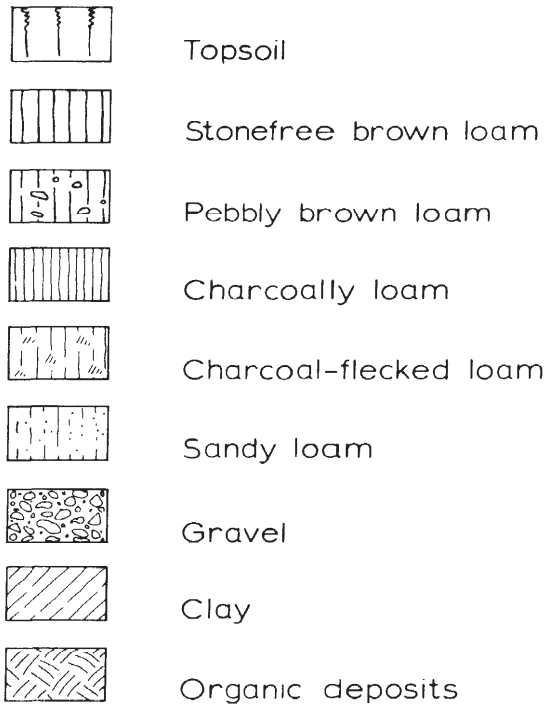


Fig 7 Key to section conventions

Period 5: medieval (Fig 4B)

In area B2 (Fig 5) the rear boundaries of properties fronting on to the High Street were defined by a series of parallel gullies (F41/2, Fig 8S50,51; F43/120, Fig 8.S50; F44, Fig 8.S56 and B6, F77), which appear to have held posts braced at intervals (F37 and probably F54,64,66). It is not clear whether they were contemporary or represent successive phases of enclosure. The eastern boundary seems also to have been defined at one stage by a fence of detached posts (F23, 32, 70, 71). With the exception of two cess pits in area B6 (F73, Fig 8.S48; F74, Fig 8.S49) there were no internal features. In the post-medieval period there was a boundary ditch F2 (Fig 8.S56), with much peg tile in its fill, cut by an animal burial, F60. Parallel to it in B6 was a gully F81, partly excavated but also visible as a depression at ground level. The modern boundary, corresponding to the northern edge of B2 was marked by a post and wire fence. Much of B5 was taken up with a 19th century field ditch F509 (Fig 9.S82) which was cut by two pits F511 and F513. To judge from the medieval pottery (p 129) the plots do not appear to have been established before the later 13th century. However, 14th-15th century wares predominated in the assemblage.

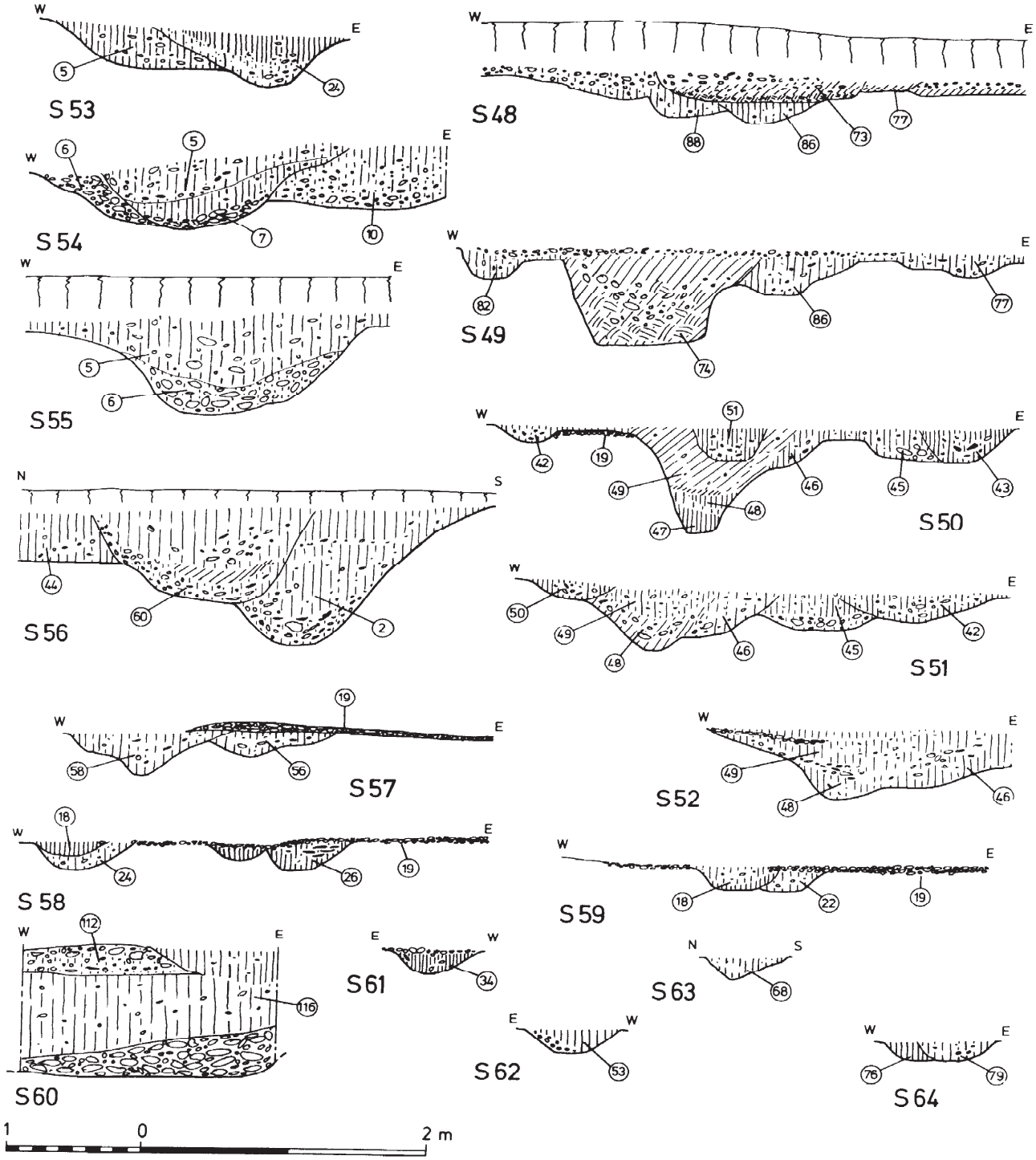


Fig 8 Area B: sections; for key see p 9

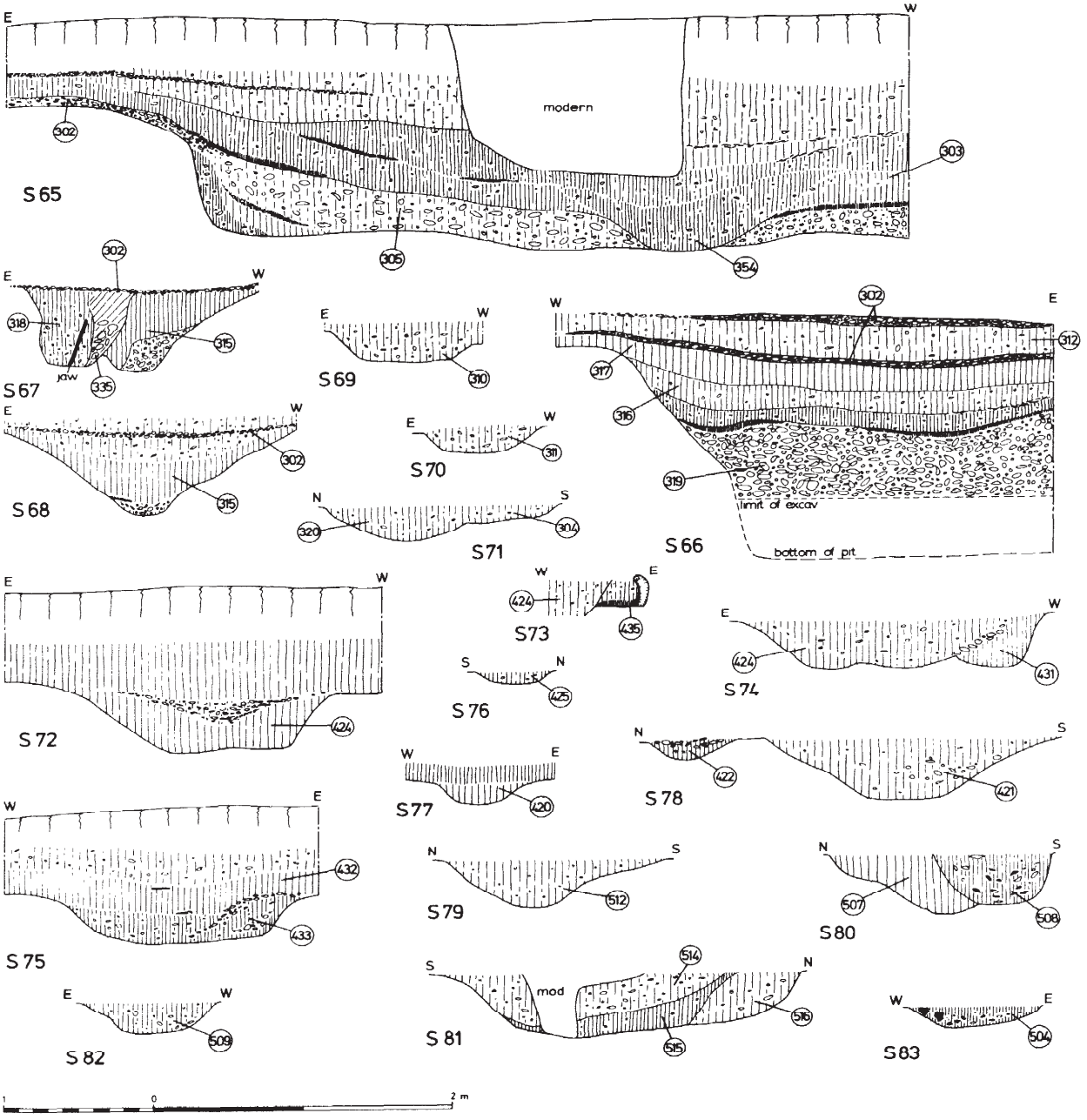


Fig 9 Area B: sections; for key see p 9

3. EXCAVATIONS IN AREAS E AND F

by B R K Niblett

In 1968 permission was given for areas E and F to be developed as a new junior school with an adjoining playing field (Fig 2). Since at that time relatively little was known about Roman Kelvedon a rescue excavation was mounted for three weeks (over Easter) by the Colchester Excavation Committee. For other discoveries in these areas see p 55 and Fig 40.

Thanks are due to the Education Department of Essex County Council for permission to excavate, and to them and their architects, A H Burnett & Partner, for their assistance. The headmaster of the school, Mr Snowden, showed unfailing enthusiasm for the project, as did Mr Campen and Mr Bennett of Kelvedon. My thanks are due to all of them for their unstinted help and advice. The excavation was financed by a small grant from the then Ministry of Public Building and Works, and a further contribution was made by the Kelvedon Branch of the Workers Educational Association, who also provided volunteer assistance on the site. Valuable help in the running of the excavation was provided by the late Mrs and Dr Brown of Kelvedon.

The excavations (Fig 10)

Area F, the site of the proposed new school, had been extensively used for tipping, making it impracticable to excavate part of the site at all. In addition contractors' stipulations prevented more than one small trench being dug in the area of the school buildings, so attention was concentrated on area E to the north, where the playing field was to be laid out. A proton magnetometer survey carried out by Dr Tite (then of the University of Essex) did not produce useful results, so in view of the limited time and resources available, it was decided to cut a series of sample trenches in an attempt to discover the general nature of occupation.

Area F (Fig 10a)

In the small trench cut at point G a well-preserved gravel floor was encountered 0.15m below the modern surface. At the east end of the trench it was sealed by a thin lens of yellow clay. The gravel petered out on the west but no delimiting features were found. Near the centre of the trench was a small area of ash and charcoal, possibly the remains of a hearth, though the underlying gravel was not scorched or discoloured. It appears that there was a gravel yard or floor here of uncertain date. A late 3rd century coin lay on the gravel surface, and a potin coin (p 78.6) was found in the burnt feature. There was also part of an unusual vessel with an applied bird (Fig 97.413).

Contractors dug a trench along the north side of Docwra Road and encountered a small rubbish pit (H on Fig 10a) of early 2nd century date.

Area E

Levels had been extensively disturbed by gravel extraction and cultivation; the ploughsoil was only 0.15-0.2m deep. For other discoveries in this area see part 5, p 55.

The largest area excavated was El C; phase 1 consisted of six pits (a-f on Fig 10b), up to 1.5m in depth and from 0.85m to 4m in diameter. They all had straight steep sides and flat bottoms and had been filled with homogenous dark clayey loam containing food bones and pottery of Flavian/Trajanic date (Fig 70.36; Fig 71.21; Fig 97.414,416). Pits a, b and c, also contained ash, charcoal, slag and lumps of burnt daub, probably derived from ovens or furnaces.

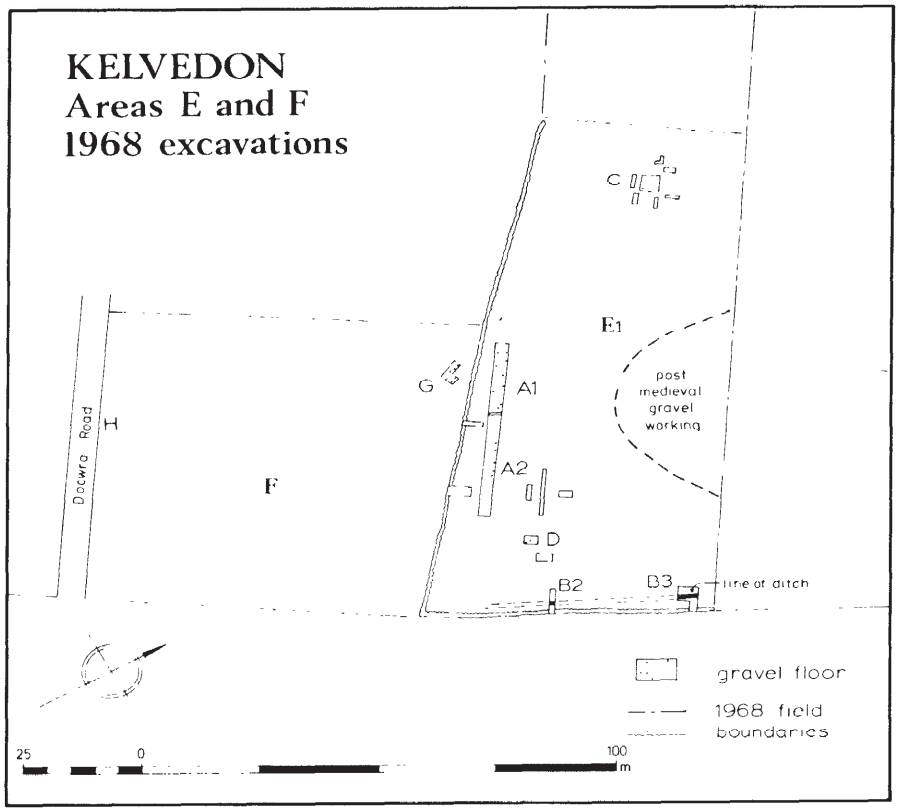
In phase 2 a floor was laid over the backfilled pits; it was made of large, rounded cobbles set into a stiff, dark brown clay base with a surface of smaller rammed gravel. There was no sign of any patching or re-surfacing.

Near the centre (A) was a small area of burnt gravel where there may once have been a hearth, perhaps originally tiled. A better-preserved hearth (B) had been partially uncovered by Mr Campen before the excavation took place. It consisted of four roofing tiles, laid with their projecting flanges turned under to produce a flat base. All had been extensively heat-fractured and were covered with much ash and charcoal. Hearth B was set in a lens of clay overlying the gravel floor, which continued beneath it unweathered and unburnt. Both hearths were sealed by weathered clay which overlaid the entire building.

The gravel floor was associated with a small trench, 0.15m deep and 0.5-0.9m wide, with a subrectangular cross-section. The floor ran right up to it and in places lapped over its lip and extended for a short distance down its side. It was filled with brown, rather stony earth with occasional lumps of charcoal and daub and appears to have been a beam slot. The superstructure was probably built of timber and daub. Large numbers of iron nails, which may have come from the roof and walls, were found on the floor together with patches of weathered clay up to 0.lm thick, which may have been the remains of collapsed superstructure. The pottery from the beam slot and the floor surface was late 1st or early 2nd century which suggests that the building was constructed shortly after the pits were backfilled, but gives no indication of how long it remained in use.

Parts of two further gravel surfaces (Fig 10a, Al and A2), about 12m and 15m across, were uncovered within 0.1m of the modern surface in a mechanically-dug trial trench along the edge of area E. They consisted of well-worn medium-sized pebbles and some re-used red *tesserae* (worn and with mortar adhering), set in an orange sandy matrix. A beam slot, filled with soft brown loam, delimited the eastern edge of Al. Trenches opened on either side located another surface in trench D (Fig 10a). A late 4th century coin was sealed beneath Al; A2 produced no stratified finds.

Two trial trenches (Fig 10a, B2 and B3) were cut across



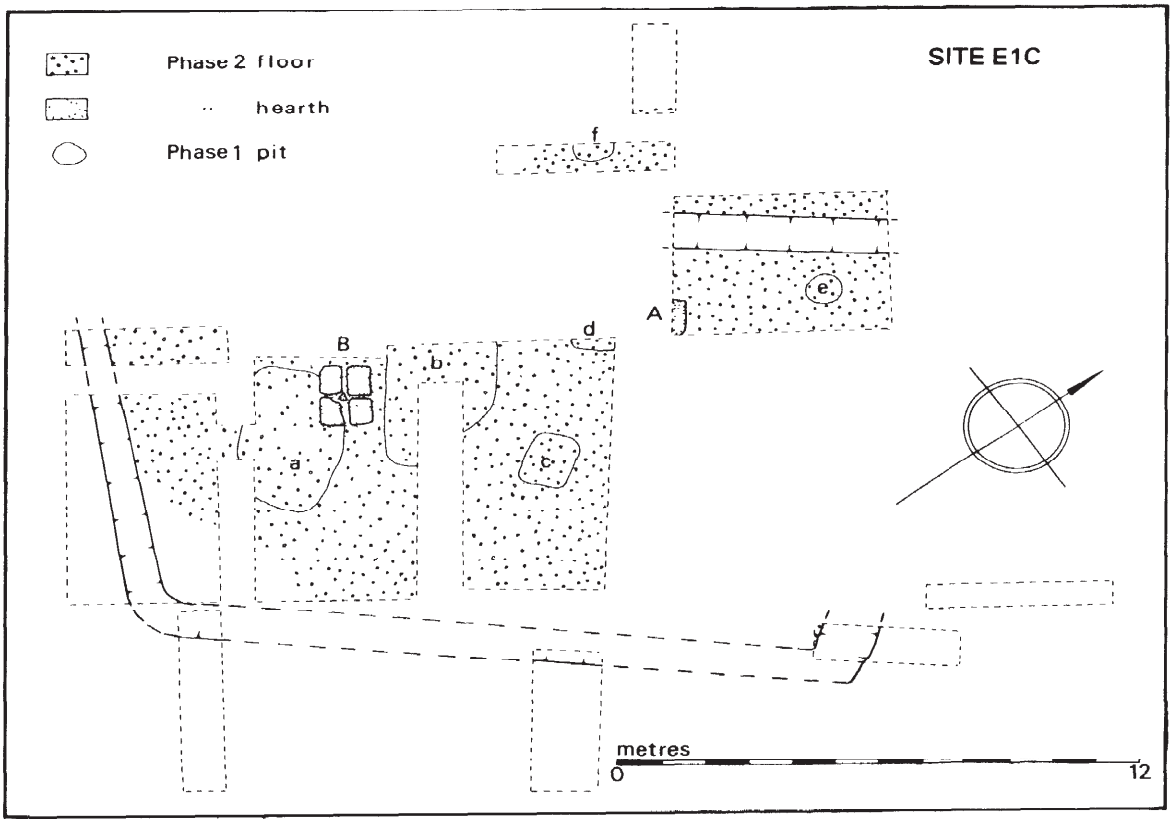


Fig 10 Areas E and F: a, location of trenches; b, building, site C

a small ditch found by school children burrowing near the hedge. The ditch ran along the eastern margin of the site; it had a steep V-shaped cross-section, nearly 2m deep at the centre. It was filled with soft black silt which contained a small quantity of mid to late 1st century pottery at a high level. Except for a small piece of Romano-British roofing tile, the primary silt was sterile. There was no sign of a bank on either side of the ditch.

4. EXCAVATIONS IN AREA J

For other discoveries in this area see p 56 and Fig 40.

Period 1: early prehistoric (Figs 11, 12)

The earliest excavated features were a series of irregular pits and hollows, all of which lay at the northern end of the site. Only two of them (F27 and F162) produced finds. The remainder are assigned to this period principally on account of their fills, characterized either by very pale pebbly brickearth or a reddish-brown stone-free brickearth, which differed from anything encountered in later features. They were frequently very difficult to distinguish from the natural subsoil and may not all be of man-made origin; some could be periglacial features or tree-pits. They were generally not more than 0.35m deep below cleared level; F28 was deeper (0.7m) and better defined than some, whilst F31(0.35m deep) appeared to be linear, with steep sides and a flat bottom. The pit F27, which produced a large collection of flints (MF l.D6-El), was oval, 2.2m long and 0.35m deep (Fig 22.Sl). Twenty-four sherds of beaker coarseware (Fig 78.3) were found in F162, a small pit barely 0.15m deep and almost impossible to distinguish from the surrounding natural brickearth. Ten more beaker fragments and two Neolithic sherds (Fig 78.1) were found in residual contexts, the majority coming from parts of the site where there were no surviving contemporary features.

Over 800 flint artefacts (Figs 64-8, p 82, MF l.D6-El) were recovered from the excavations, mostly from area J, but their distribution is uninformative. Mesolithic industries predominated.

Apart from a scatter of eleven sherds of flint-gritted pottery (Fig 78.5,6), there was no evidence for occupation on this part of the river terrace between the early Bronze Age and the beginning of the late pre-Roman Iron Age.

Period 2: late pre-Roman Iron Age

From the beginning of the late pre-Roman Iron Age a series of ditched or palisaded enclosures, containing poorly-preserved rectangular buildings, occupied the area. The quantity of associated pottery and other finds suggests that these were domestic. Three main phases of activity could be discerned, for although there was no true stratigraphy a sufficient number of features intersected to provide a sequence, and unassociated features could be dated by the artefacts they contained. Late Iron Age pottery also predominated in Roman features, indicating the former existence of occupation layers subsequently destroyed by ploughing.

Period 2A (Fig 13)

A rectangular enclosure measuring 30m x 14m was set out; it comprised features 86, 90, 328 and 352, which was recut in the following phase (F350); the entrance was in the southern corner, through F328. There appear to have been further enclosures to the east and the south-east, for features 90, 352 and 328 (as F95) extended to the limits of the excavation. The system was continued north-westwards by F37, F45 and F65, but any south-western extension had been removed by the quarry. There were no features north-east of F45. Even allowing for denudation none of these features was very substantial, being on average 0.7-0.8m wide and a maximum of 0.6m deep with steep-sided profiles (Fig 22: 352, S2-4; 86, S5-8; 328, S14; 45, S13; Fig 19: 65, S22; Fig 23: 90, S29). These factors suggest that they were not open ditches, but palisade trenches, and positive evidence for post settings was found in F86 (S5) and F352 (338, S4).

Structures 1 and 2 (Fig 14)

Internal features were confined to the western corner, an area badly damaged by a period 3 ditch intersection and modern disturbances: Enough survived to suggest that there had been a small rectangular building, Structure 1, measuring 5.5 x 8m internally, which used the enclosure, itself partly recut in the next phase, as its north-west and south-west sides. The most convincing structural evidence was provided by F357 (Fig 22.Sl1, 12) which appeared to be an angled wall trench holding a series of individual posts: a large corner post F358 in a 1.4m diameter pit, and a terminal post (0.7m), linked by three small intermediates. This feature was truncated by a period 3 ditch, but F340 may have been its continuation. Beyond lay a rectangular pit F339 (Fig 23.S36) which may have held a terminal post but could alternatively belong to the next phase. Feature 384 appeared to be a counterpart to F357, framing a doorway 1.6m wide opposite the entrance to the enclosure. The cluster of post-settings (F348, Fig 22.Sll) east of the doorway may have been part of a porch structure; it was damaged by modern disturbances.

The row of close-set postholes F377, 380, 381 and 382 (Fig 22.S9, l0), truncated by a later ditch, appeared to be associated with F376 and F387 to form a small rectangular building, Structure 2, 5.2m long X 2.6m wide, abutting Structure 1.

A domestic use is suggested by the distribution of the earliest type of Iron Age pottery to occur in any quantity (Fig 13, Fabric A, p 103) which was confined to this corner of the enclosure. Some was stratified in contemporary features (F328, 348, 357, 358), but it was more frequently residual, deriving from occupation layers since destroyed.

Period 2B (Fig 15)

This phase was marked by the extension of the enclosure and the replacement of Structures 1 and 2 by Structure 3. A ditch F350 (Fig 22S2-4; Fig 19,S24) replaced F352. It had a shallow-sided, flat-bottomed profile and contained tips of charcoally loam, semi-plastic fired clay and a large quantity of pottery. To the north-east F136 replaced F90 (Fig 23.S30-2) and F58 replaced F45 (Fig 23.S27-8); there was an entrance between them. It is probable that the well F64 (p 21) was constructed at this period.

Structure 3

Centrally placed within this new enclosure was a rectangular building (Structure 3, Fig 16). It was denuded by quarrying and lay beneath one of the foci of the period 3C cemetery, but enough survived to establish that it was 21m long and an average of 5m wide (to wall centres) tapering slightly at both ends. The south-western and north-western sides were the best preserved, consisting of a U-shaped fairly flat-bottomed trench an average of 0.6m wide and no more than 0.3m deep (as surviving),

Fig 11 Area J: all features

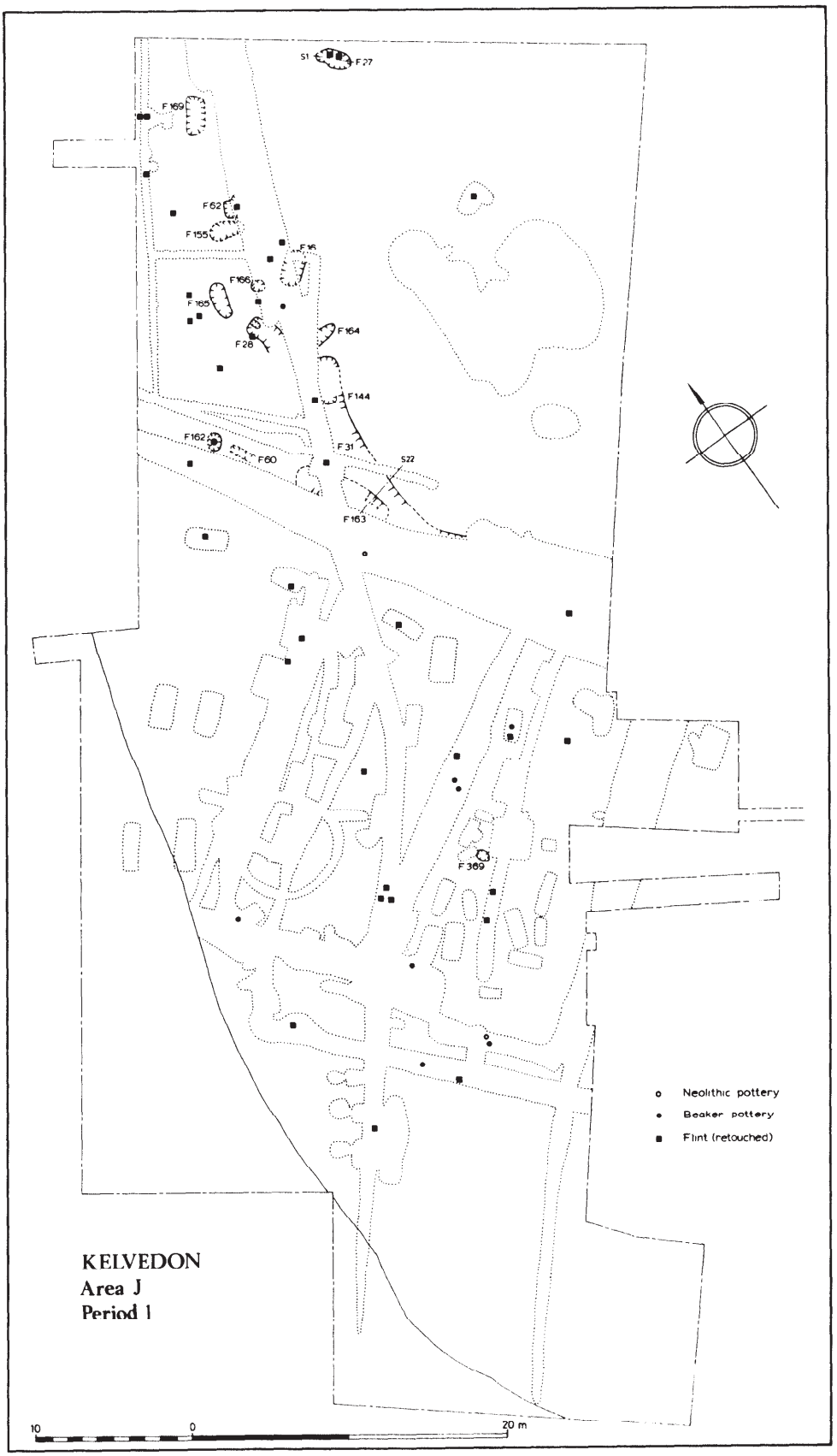


Fig 12 Area J: period 1

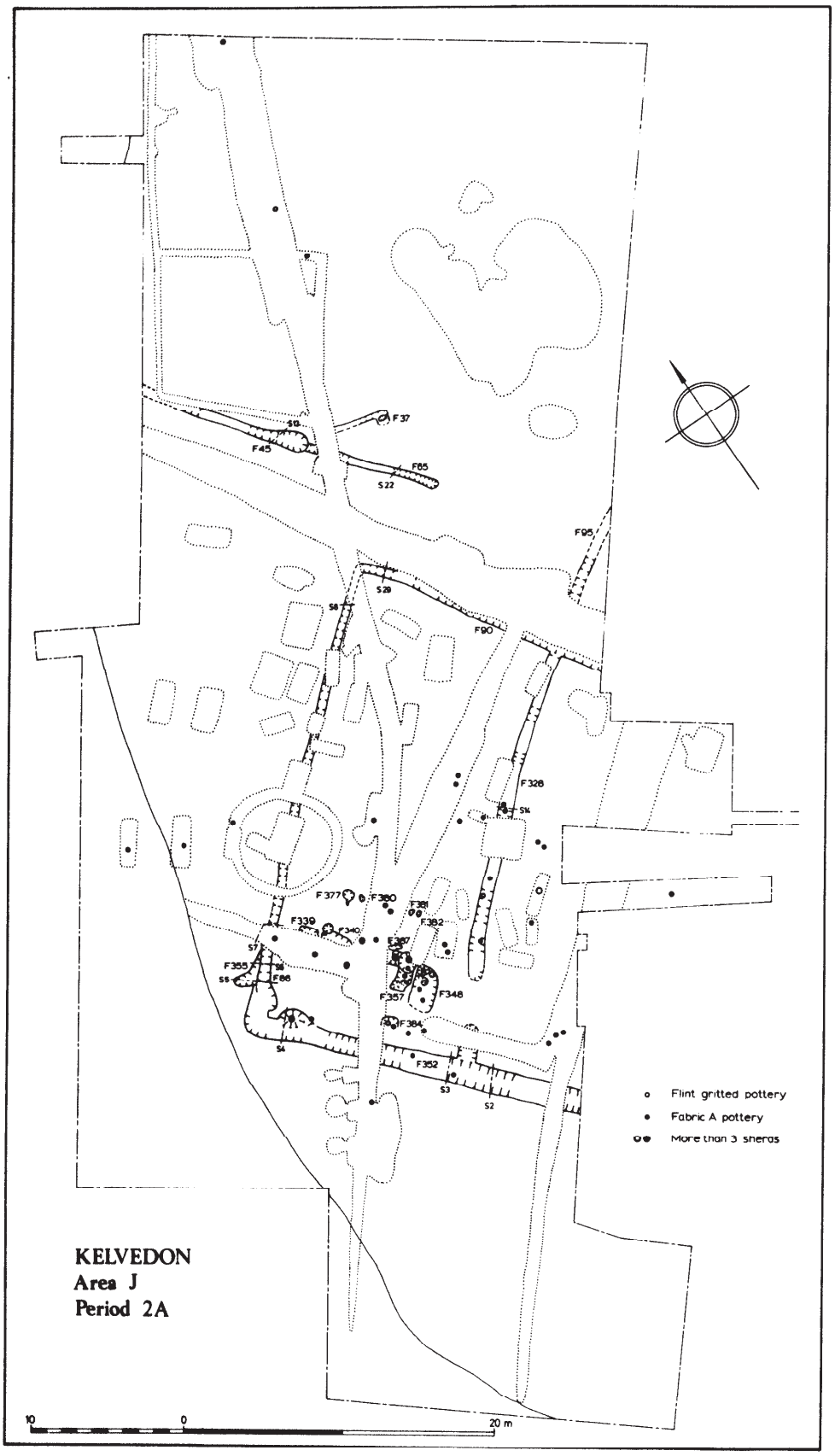


Fig 13 Area J: period 2A

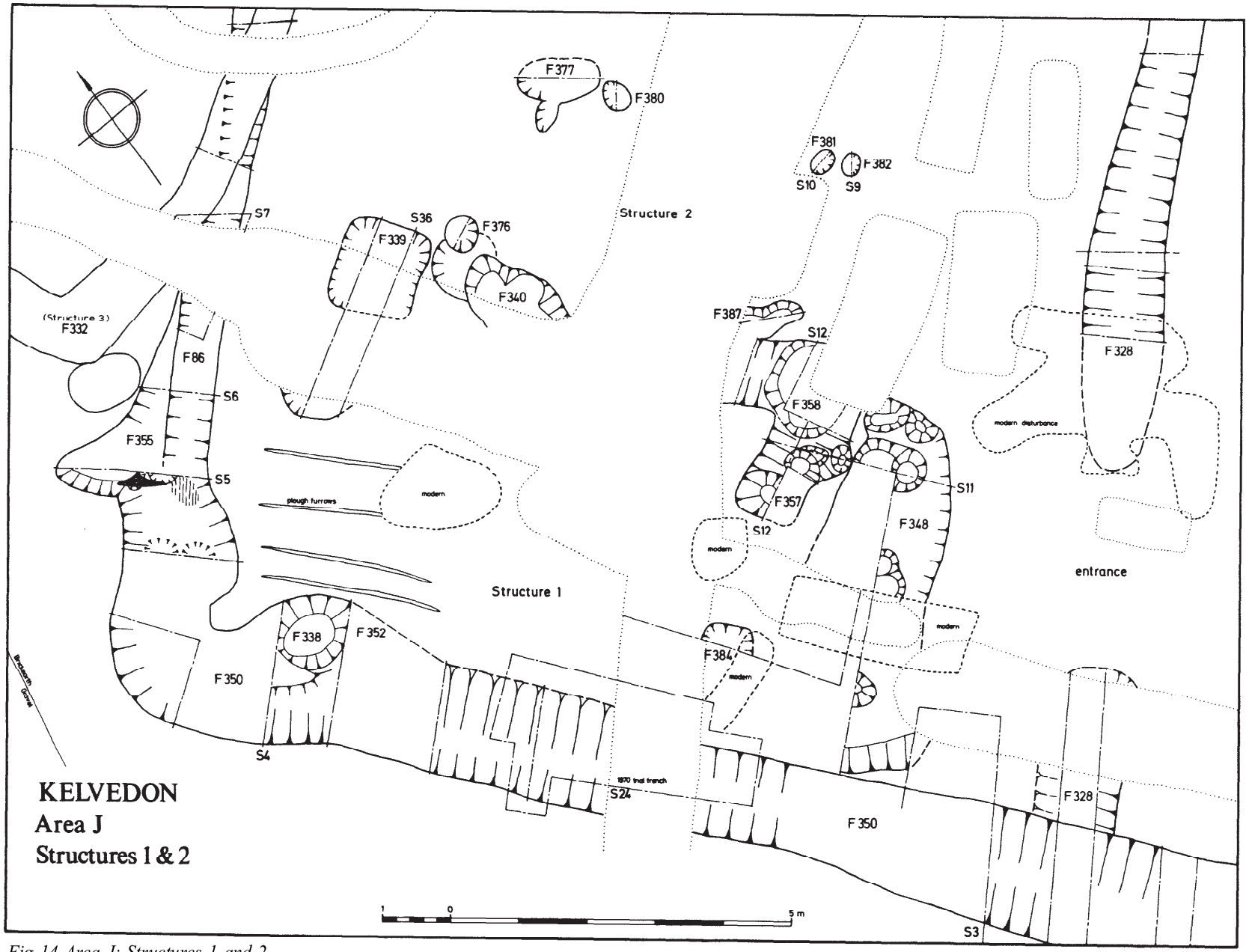


Fig 14 Area J: Structures 1 and 2

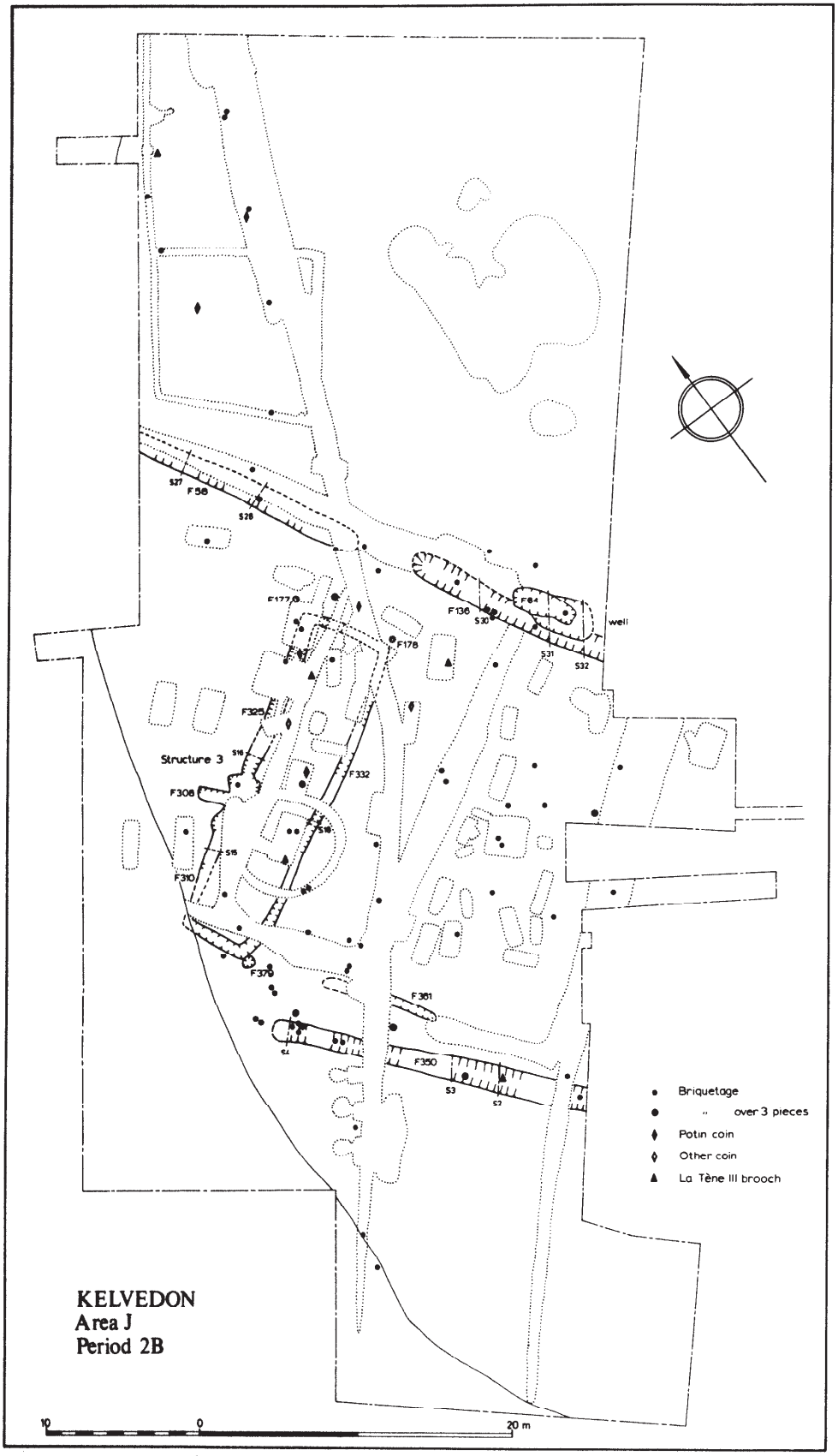


Fig 15 Area J: period 2B

with a uniform light brown brickearthy loam fill (Fig 22.S18). Its profile and character suggest that it was a timber slot.

Part way along the north-west side was a problematical group of features for which no satisfactory interpretation can be offered. Between a pair of angled projections F326 and F327 was a slot, F308, 1.8m long. All were 0.1m deep and filled with a uniform grey-brown brick earthy loam, but the butt of F308 (F307) contained charcoal and flecks of fired clay, suggesting that there may have been a terminal post. There were two further shallow patches of charcoally loam in the vicinity. It is impossible to say whether the configuration of these features is fortuitous or whether they might be the remains of a fairly elaborate entrance arrangement. Three postholes F177, F178/9 and F379 (0.4, 0.4, 0.08m deep) lay just beyond the known or presumed corners of the building and may have been associated with it.

There were no surviving floor levels, but Roman graves in the vicinity contained significant quantities of residual late Iron Age pottery, and had appreciably darker fills than their counterparts elsewhere. This suggests that occupation layers were still intact when the graves were dug. Other finds included briquetage (p 81), Dressel in 1B amphorae (Fig 84.156 and p 101), an iron linch pin (Fig 53.1), six potin coins (p 78, 2–5,7,8) and several La Tène III brooches, mostly from residual contexts (Fig 43.1–5,7). The largest group of stratified pottery came from F350 (Figs 79, 80.11–64, p 103), and there was a little from the wall trenches of Structure 3 (Fig 81.86–94: for dating see p 132).

Period 2C (Fig 17)

Structure 3 was replaced by a boundary ditch which seems initially to have taken the form of a pair of flat-bottomed gullies, F84 (Fig 22.S17) and F386, butting at the possible former entrance to the building. In the butt of F84 was a post pit F304 (Fig 22.S16). They were replaced by a single ditch F112, cut at its eastern end by the period 3A ditch F3. For associated pottery see Fig 81.95–103.

In this or the previous phase a well F64 was dug next to F136. At this point, 1.6m below cleared level, the heavy orange ballast subsoil gave way to a layer of water-bearing sand, its flow now reduced by modern lowering of the water table. Cut into this layer was a large ovoid pit about 5m long and 2.5m wide, truncated by a succession of later field ditches so that only the lowest 0.8m of its fill was intact. The feature appeared to be a composite one, deriving its shape from the repeated re-siting of a well frame in a limited area. Individual cuts could generally no longer be discerned (Fig 23.S31–2), but in S31 a flat-bottomed rectangular pit 0.8m wide replaced a slightly deeper and narrower (0.4m) circular pit, suggesting that a square frame replaced a barrel. Conditions were not sufficiently wet for wood to be preserved; in places there were traces of dense dark grey staining, produced by decomposed wood, hut these did not form a coherent pattern. Noteworthy amongst the finds from this feature was an unusual pottery vessel with figure-stamped decoration (Fig 82: for other pottery see Fig 83.105–12).

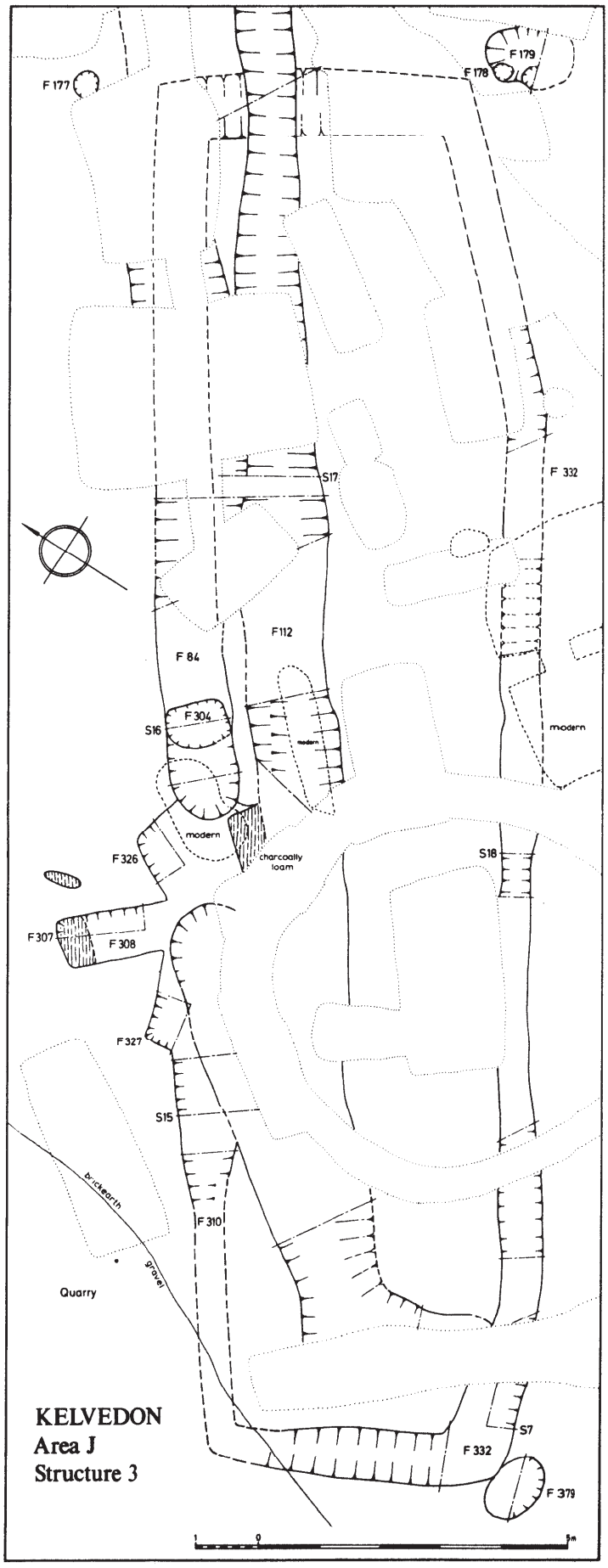


Fig 16 Area J: Structure 3 and period 2C features

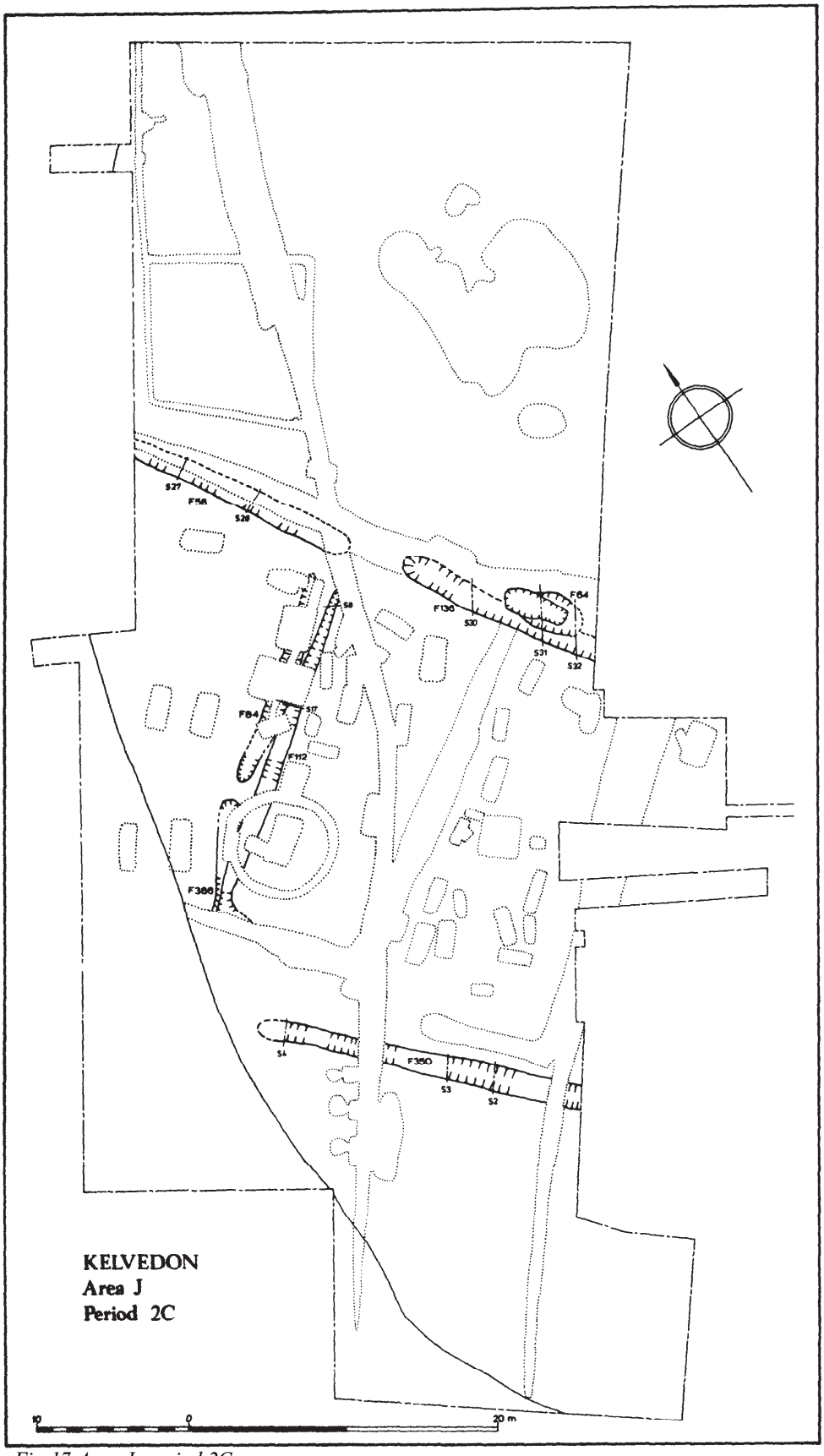


Fig 17 Area J: period 2C

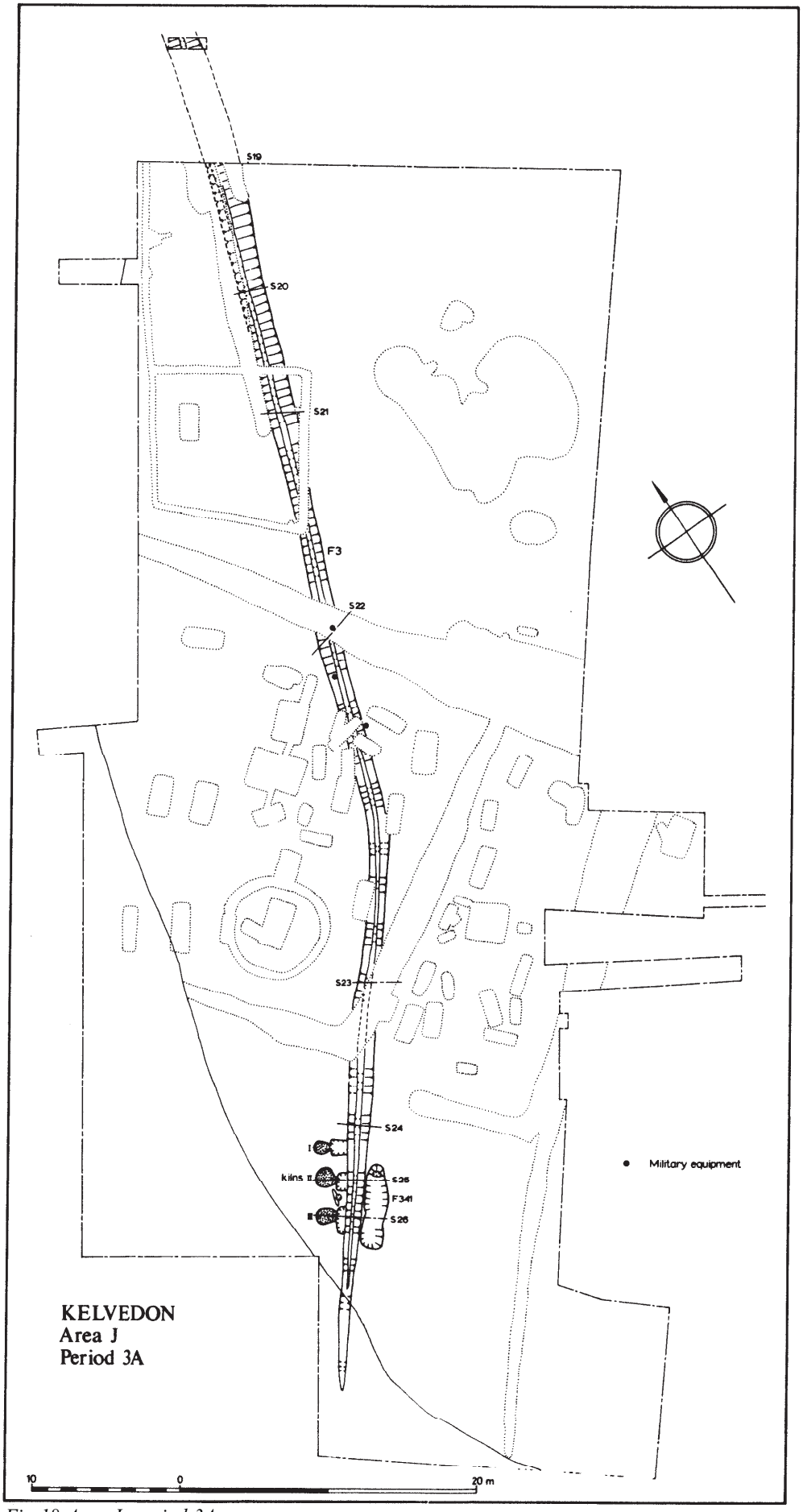


Fig 18 Area J: period 3A

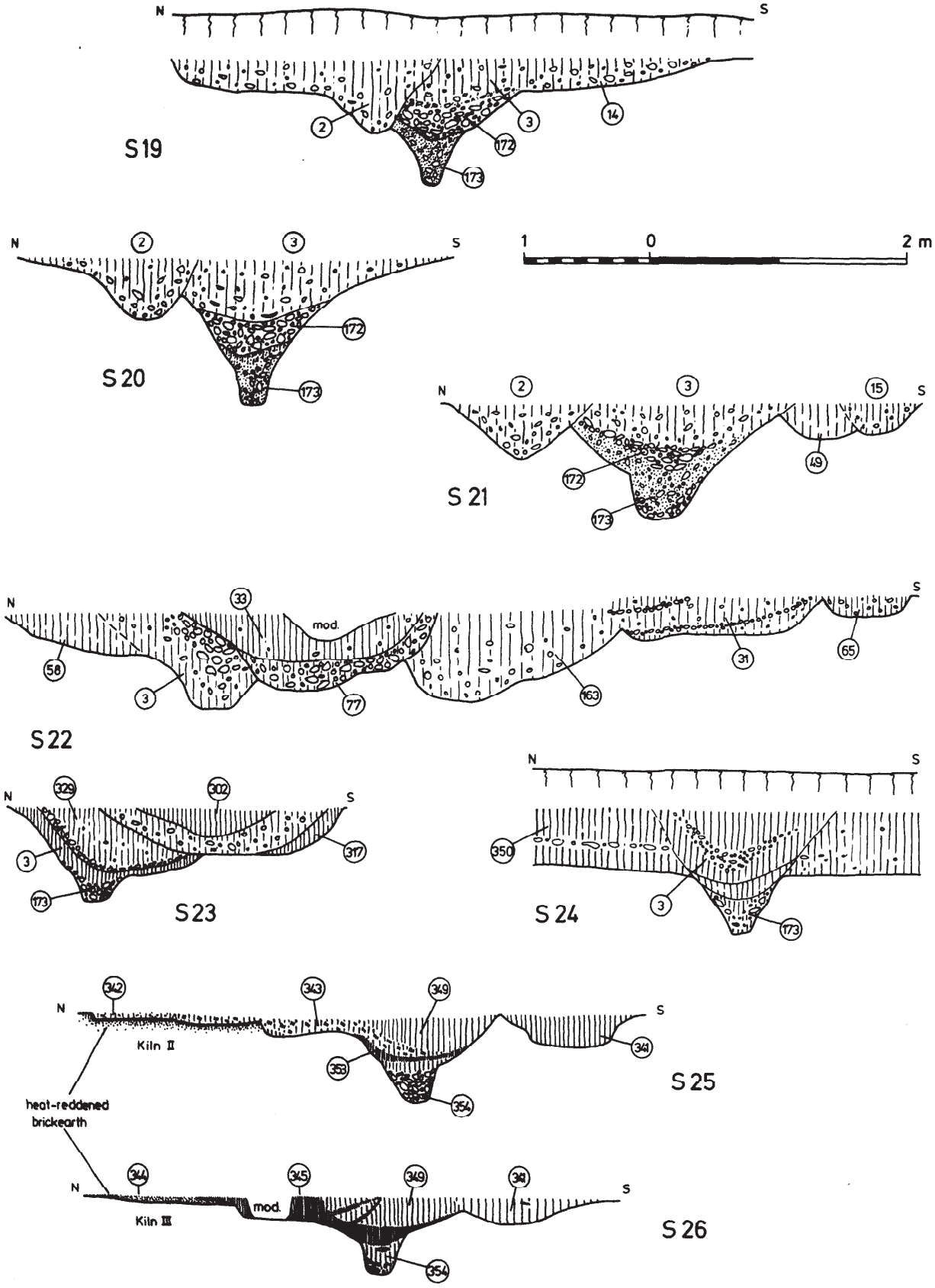


Fig 19 Area J: sections, F3; for key see p 9

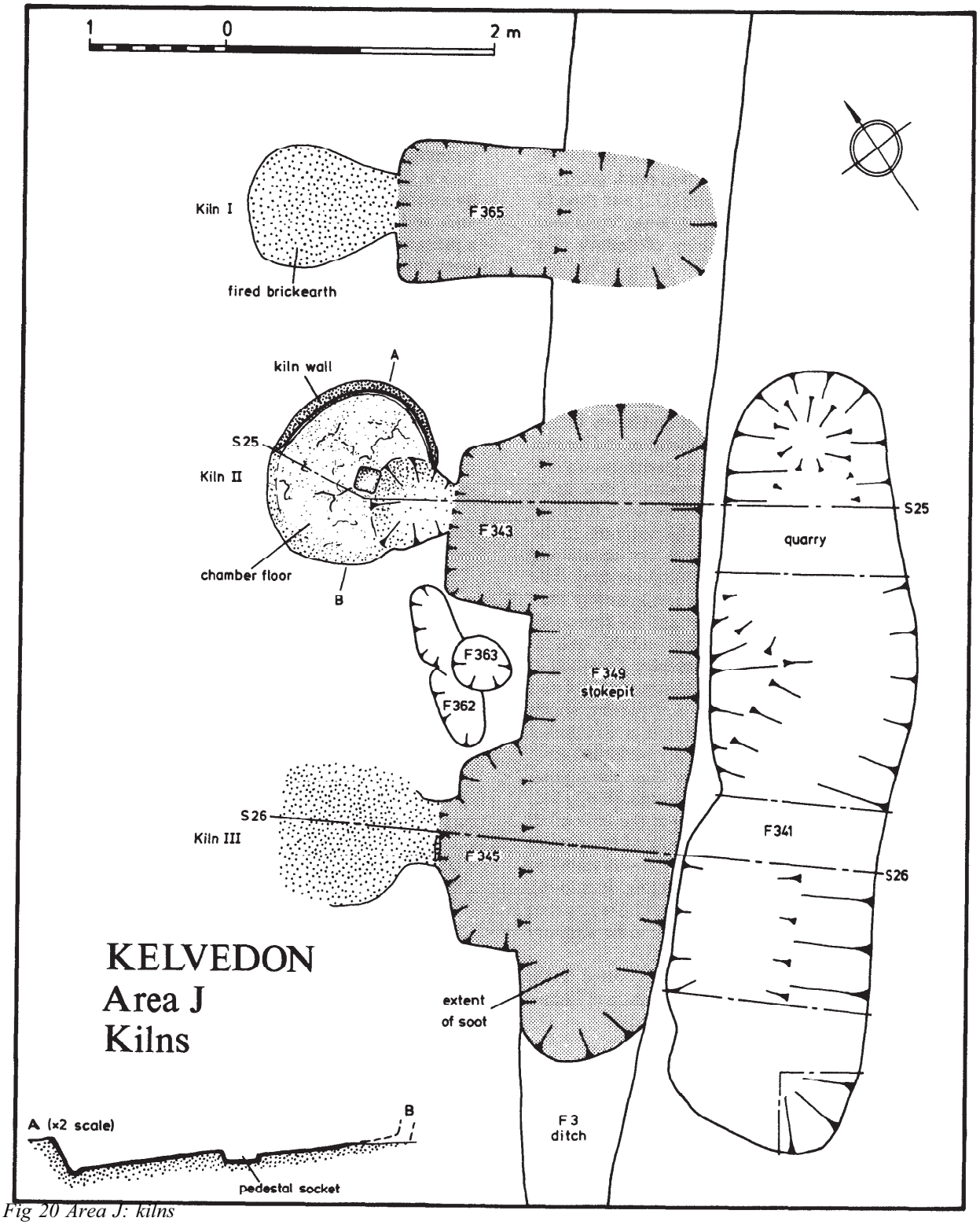


Fig 20 Area J: kilns

Period 3A: mid 1st century AD (Figs 18, 19)

This phase marks a major change in the layout of the site; the old enclosures were abandoned and a new ditch dug on a different alignment. It was traced for 85m from the north-eastern edge of the excavation to the point where it was engulfed by the quarry; there was a slight change in orientation about halfway along its length. It was also located in a small trench 8m north-east of the main exavation, but efforts to find it in a second trench 12m further north-east were inconclusive. The only associated features were a group of kilns; the ditch cut period 2 features 58, 65, 112 and 350, and was cut by the period 3 ditches 2, 15, 77, 302, 329 and all graves.

Throughout its length it was very uniform, surviving to a maximum width of 2m and a maximum depth of lm (from cleared level) with a steep-sided symmetrical V-shaped profile and a 0.2-0.4m wide shovel slot in the bottom. At its western end it became progressively more attenuated until it was completely engulfed by the quarry. Typically (eg Fig 19.S20; P1 II) the lowest fill in the shovel slot (173) consisted of fairly clean sand, gravel or silt capped by a layer of large pebbles (172) and then by a fairly pebbly brown loam (3). The two lower layers were sterile, but L3 contained a quantity of pottery (Fig 85.164-84).

Close to the quarry edge lay a battery of three kilns which used the partially-backfilled ditch (F3) as a stokepit (Fig 20). Kilns I and III were so denuded that their former chambers were marked only by patches of semi-plastic heat-reddened brickearth. Kiln II (P1 III) was better preserved; most of the floor and about half the circumference of the wall survived to a maximum height of 0.15m. The chamber was 1.4m in diameter and formed of heat-hardened sandy clay fired to a greyish-brown colour on the surface but bright red beneath. There was a pronounced groove about 0.02m deep between the floor and the wall, but no actual break in the structure. In the centre of the chamber was a socket 0.12m square and 0.04m deep which had held a removable pedestal. The interior of this recess was fired, but less intensely than its surroundings. Between the socket and the flue opening the floor was rough and hollowed, probably as a result of raking. The backfill of the chamber consisted of dirty brickearth with a very small admixture of soot and fired clay; there were only six sherds of pottery, which were probably residual. The kilns had a communal stokepit which made use of the partially backfilled ditch F3, to which they were connected by three rectangular pits each with vertical sides and a flat bottom (F343, 345, 365). There was a layer of soot (353) at the base of all these features, which produced the bulk of the pottery from the kiln complex (Fig 85.185-90). It was sealed by a sterile layer of dirty brickearth (349) (Fig 19.S25-6). East of the stokepit opposite kilns II and III was a long irregular hollow, F341, which appeared to be a quarry pit for kiln-building material.

Both the kilns and the ditch F3 can be dated to the mid 1st century, and probably belong to a phase of Roman military activity (for discussion, see p 135).

Period 3B: Roman non-cemetery features (Fig 21)

Under this heading are described all Roman period non-cemetery features. It was not considered useful to subdivide them further as some, such as the boundary ditches to the cemetery were clearly in use over a long period of time, whilst others produced insufficient diagnostic pottery to make close dating possible (Fig 86.191-211).

The period 2 boundary across the centre of the site (F58, F136) was re-established as F77. It was deepest and displayed the greatest number of recuts over the backfilled well F64 (Fig 23.S27-32; L50, 77, 40, 135). By the late Roman period it had silted up (128) and burials were made in the hollow in the top (Fig 23.S31, G86). This was filled with a fine stone -free loam (33) in the post-Roman period. The disposition of graves inside the enclosure indicates that the bank was on the south-western side. The cemetery was subdivided by two further ditches, F329, recut as F302 (Fig 23.S33-7) and F360, recut as F346 (Fig 22.S38-41).

The ditch F3 had no long-term influence on the topography of the excavated area; a partial recut, F2 (Fig 18 S19-21) was replaced by an enclosure, F15, delineated by a continuous flat-bottomed trench no more than 0.8m wide and 0.4m deep (Fig 22.S42) which probably held a palisade. It was approximately 10m square; the south-western side followed the alignment of ditch 77. From the northern corner a slot, F11 (Fig 22.S43), ran to the north-eastern limit of excavation. Postholes (F41, 48, 159, 168, 170, 171) may have been associated with it. The size and shape of this enclosure suggest that it was an open stockade, perhaps for penning animals, rather than a building. There were no internal features which can unequivocally be associated with it; a number of posthole-like features are shown in outline on Fig 21 but are probably modern. In the 4th century it may have had a secondary use as a burial enclosure.

To the south-east the gravel outcropped directly below the topsoil and there was a series of shallow interconnected quarry pits (F4, 7, 12, 17, 52; Fig 22.S46-7). These were devoid of significant finds, but antedated cremations 46 and 88.

Certain small pits or postholes, which cannot readily be ascribed to any particular phase, are also shown on Fig 21 (F160, 176, 368, 383, 372). Features 14 and 61 are probably quarry scoops.

Period 3C: the Roman cemetery (Fig 24)

The area was used for much of the Roman period as a cemetery; 95 burials were excavated, 60 inhumations and 35 cremations. The inhumations must represent a high proportion of the total burial population; it is not known how far the cemetery extended westwards into the quarry, but the limits were found on the other three sides, and within the main cemetery area care was taken to ensure complete burial recovery by repeated cleaning in different weather conditions. The graves in the south-eastern enclosure were particularly difficult to detect; consequently the weathered brickearth surface was shaved down wholesale until they were visible. The only area where inhumations may have escaped detection was in the vicinity of G41.

The excavated cremations on the other hand can only represent a small proportion of the original number. Some must have been destroyed by other burials before the end of the Roman period, others have been ploughed out, and an unknown number were dug up in recent years.

Because of the possibility of disturbance whilst work was in progress, graves were excavated as quickly as possible once grave goods were apparent. Therefore a detailed drawn record, including the three dimensional recording of most nails, was maintained but photography was generally precluded. As skeletal remains had invariably dissolved and contrast was usually poor most pictures would have been uninformative.

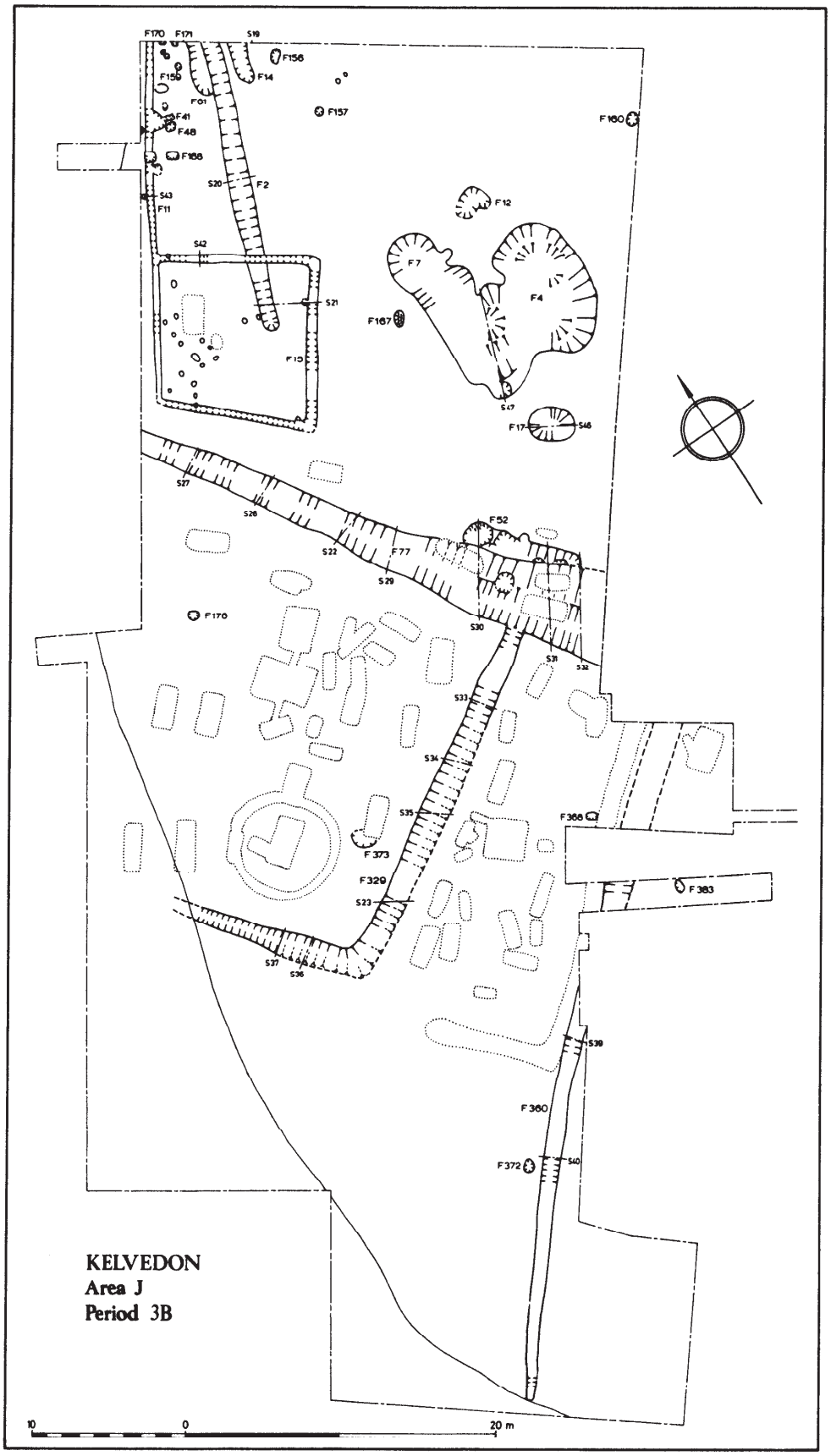


Fig 21 Area J: period 3B

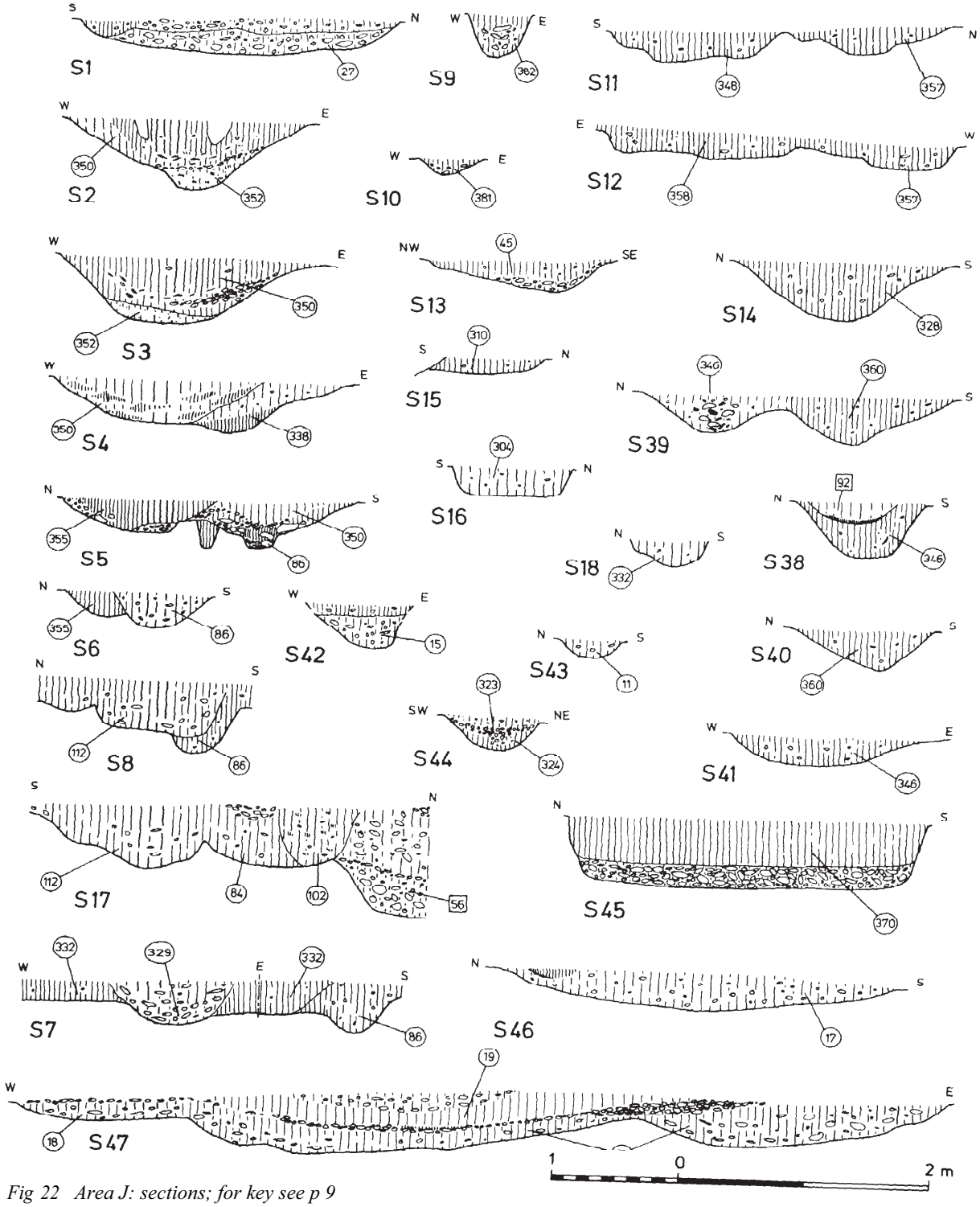


Fig 22 Area J: sections; for key see p 9

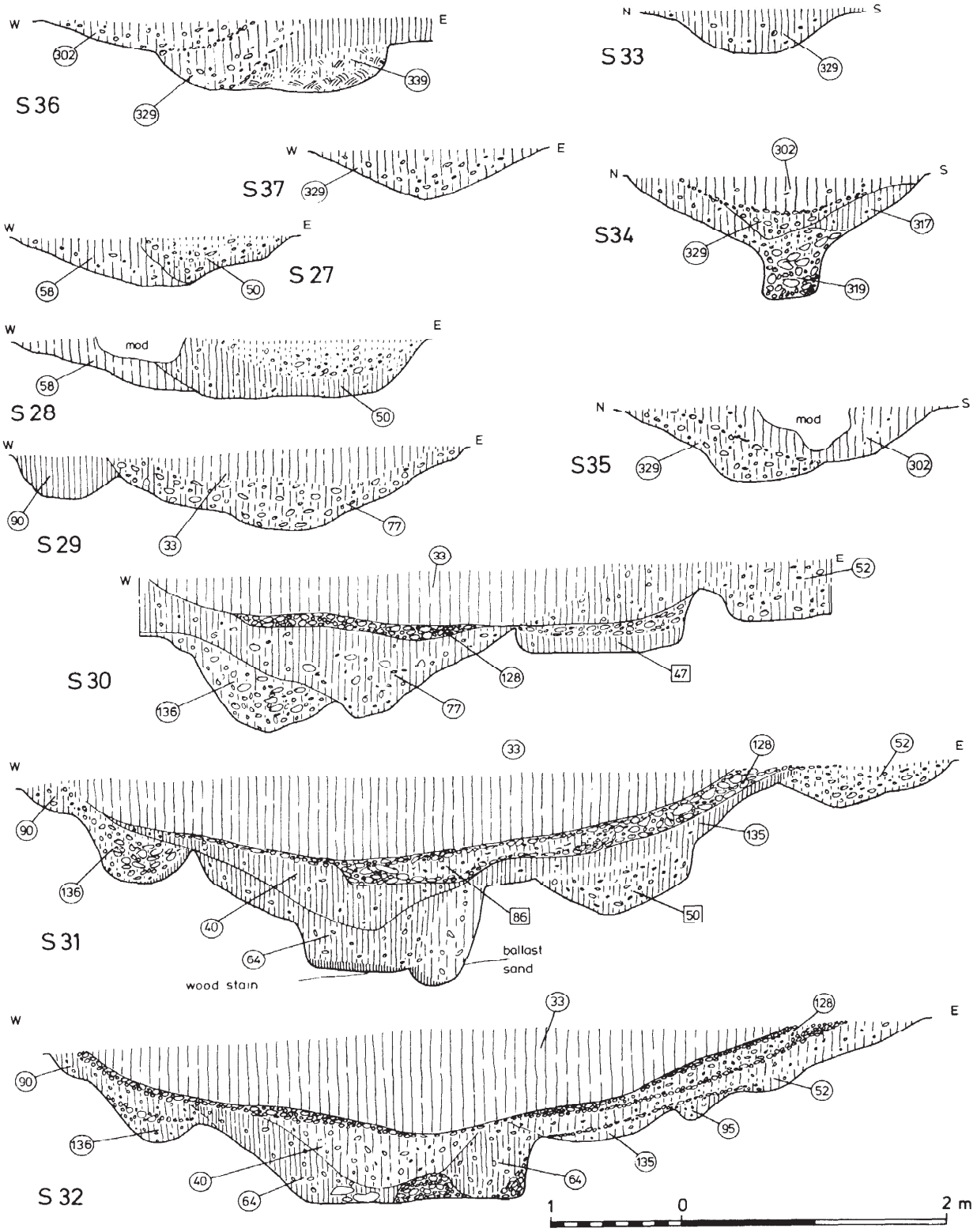


Fig 23 Area J: sections; for key see p 9

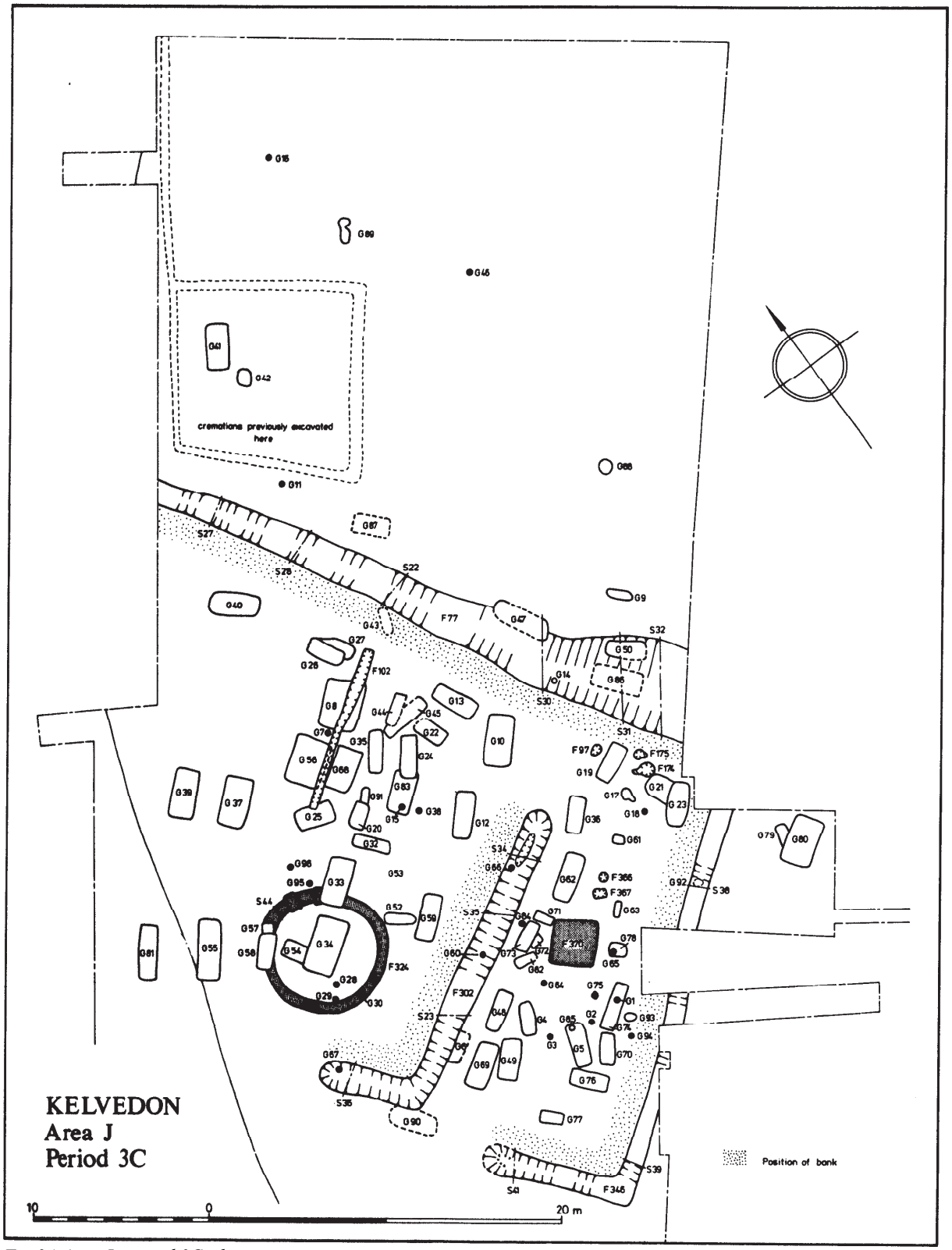


Fig 24 Area J: period 3C; the cemetery

Catalogue

A catalogue of the burials appears in microfiche (MF 1.A3-1.B7d) where an indication of the classes of evidence used to arrive at a date is given briefly at the end of each entry.

Dating is considered more fully in the discussion, for, where pottery was not present, much depends on general comparisons and topography. Grave vessels are illustrated in Figs 87-9 (p 114) and other finds are referred to individually. Grave plans appear in Figs 25-33. Information on grave type, date and contents is summarized in Table 4 for cremations, and Table 5 for inhumations. inhumations.

There were several other features associated with the burials within the cemetery enclosures, whose boundaries have already been described on p 26. Two of these, F324 and F370 occupied focal positions.

F324 (Fig 34)

A circular gully 7m in diameter, up to 0.9m wide and 0.3m deep, enclosed G34. It had a pebbly central fill (F323; Fig 22.S44) with three subrectangular patches of concentrated pebbles, over a stone-free brickearthy loam (F324), and was cut by graves 33, 57 and 58. It is interpreted as the foundation trench for a timber mausoleum enclosing G34 (see below p 51).

F370

This was a pit 2.7m square and 0.6m deep with near vertical sides and a flat base, filled with stone-free dirty brickearth over dirty gravel (Fig 22.S45); it contained a few small sherds of Roman pottery. It was not a grave since it lacked nails, wood stains or grave goods, and was much squarer and shallower than the vaults (see below p 37 and Table 2). Its central position within the southern cemetery enclosure suggests that it may have been the foundation for a monument or mausoleum of some kind.

Other features included a gully F102 (Fig 22. S17) which post-dated graves 8, 56, 68 and 25, and is best interpreted as a timber slot or palisade subdividing the cemetery at a late date. In the southern enclosure were several posthole-like features (F97, 174, 175, 366, 367) which are probably associated with the cemetery.

Analysis

Coffin types (Figs 35-38A)

Of the 60 inhumations excavated 33 had been buried in nailed coffins, and 28 of these were sufficiently well preserved to recover dimensions. The coffin corners were generally defined by clusters of nails, so that a reasonably accurate width and length could be deduced; there does not seem to have been much distortion. The depth was less easy to determine accurately, unless many nails were present. In some instances there were coffin stains and wood surviving in contact with the nails, from which board thicknesses and the direction of the wood grain could be ascertained. The coffins appear to have been constructed from charred oak and the intensity of the wood stain was directly related to the degree to which the board had been burnt.

The method of construction is most clearly illustrated by the coffin in G20, where the two sideboards (Fig 35) lapped both the base board and the end pieces, and the latter stood on the base. The sides were made from planks 25mm thick and the bottom from wood 20mm thick. Joints were not used at the corners; the sides and base were nailed to the ends. The resulting nail pattern was characteristic of all the nailed coffins and indicates that this was the normal method of construction, even where the details were less well preserved. The grain of the wood seems normally to have run with the longer dimension of the board; the only clear exceptions were the end boards of G69 where it ran vertically. There was no unequivocal information on the number of planks per side, but the overall dimensions would suggest that one wide or two narrow boards were used for the base and one board for the sides. In some coffins the sides appear to have been nailed to the base along their whole length (eg G33, G56); some such as G69 were nailed in the centre, but others such as G36 and G41 were nailed only at the corners. This would appear to leave the full length of an adult-sized coffin unsupported-an obvious structural weakness, which suggests that some other means of jointing, such as wooden pegging, was also in use. Such a combination of techniques might explain the very variable amount of ironwork encountered from coffin to coffin, ranging from 14 items in G59 or 18 in G62 to 110 pieces in G4, 102 in G34 and 72 in G49. The bottom of G49 (Fig 35) appears to have been cross-battened; there were two rows of nails equidistant from the ends.

The clearest evidence for lids came from G69 (Fig 35) where the charred impression of a board and a cross-batten survived. The batten was not secured with nails; it may have been pegged, but could equally well have been loose-laid across the top of the coffin with one or more lid boards resting on top. Few other coffins produced positive evidence that lids had been nailed down, although such nails would be the most susceptible to subsequent movement and collapse. An exception was G74 where at one end there was a row of vertical nails with their heads uppermost (Fig 35). This coffin also included a partition which separated the cremation from the inhumation. Grave 56 (Fig 37) contained the only tapered coffin; the sides projected beyond the ends.

In G4 (Fig 36) a chest appears to have been reused as a coffin; in the centre of one long side was a lock plate and close to each end there were two pairs of handles, which were not attached to the framework; they were possibly secured by leather straps. It is not clear how the lid hinged. The box was heavily nailed and its construction seems to have differed from the norm in that the ends lapped the bottom.

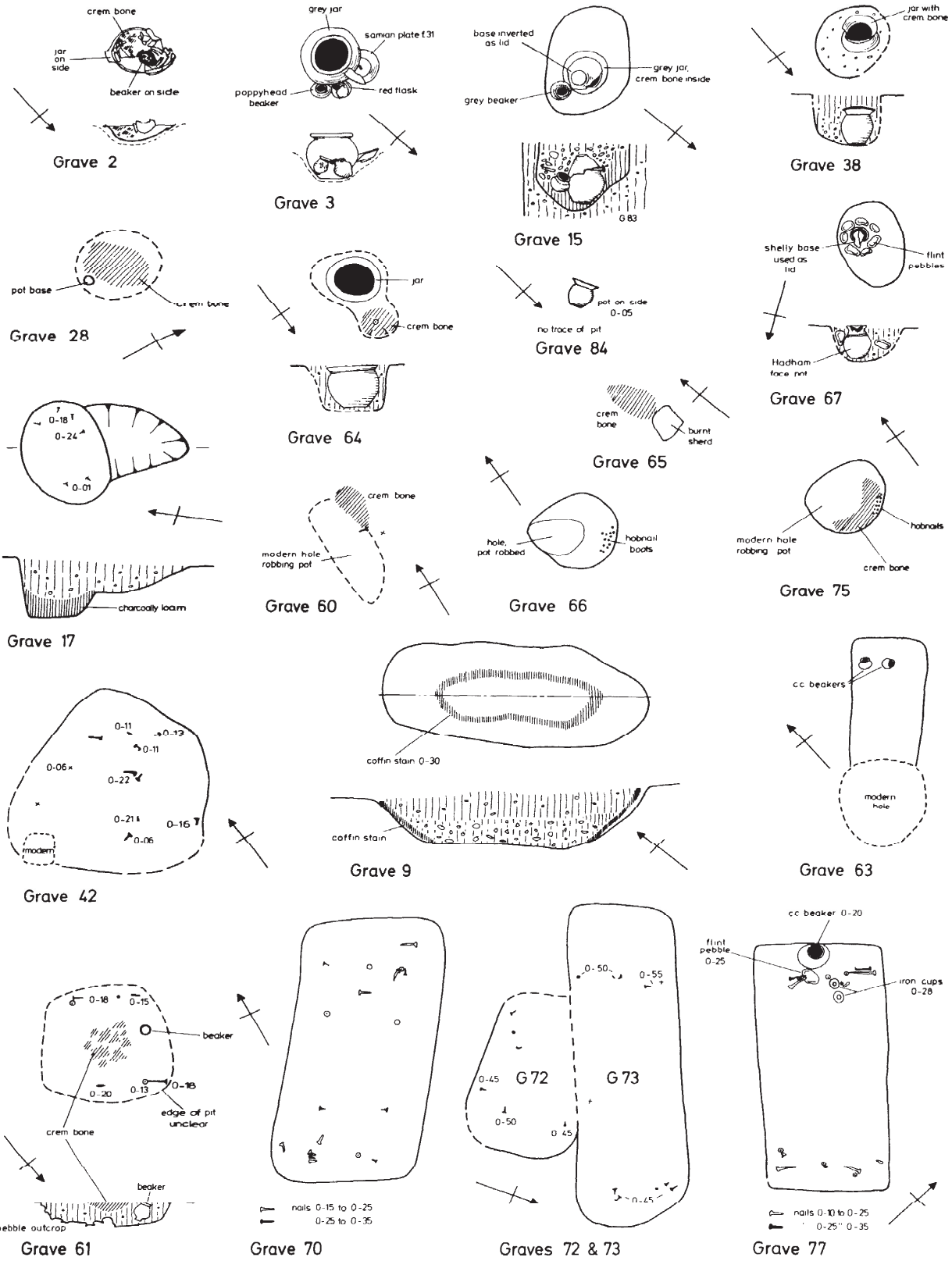


Fig 25 Area J: cremations and children's graves; scab 1:30

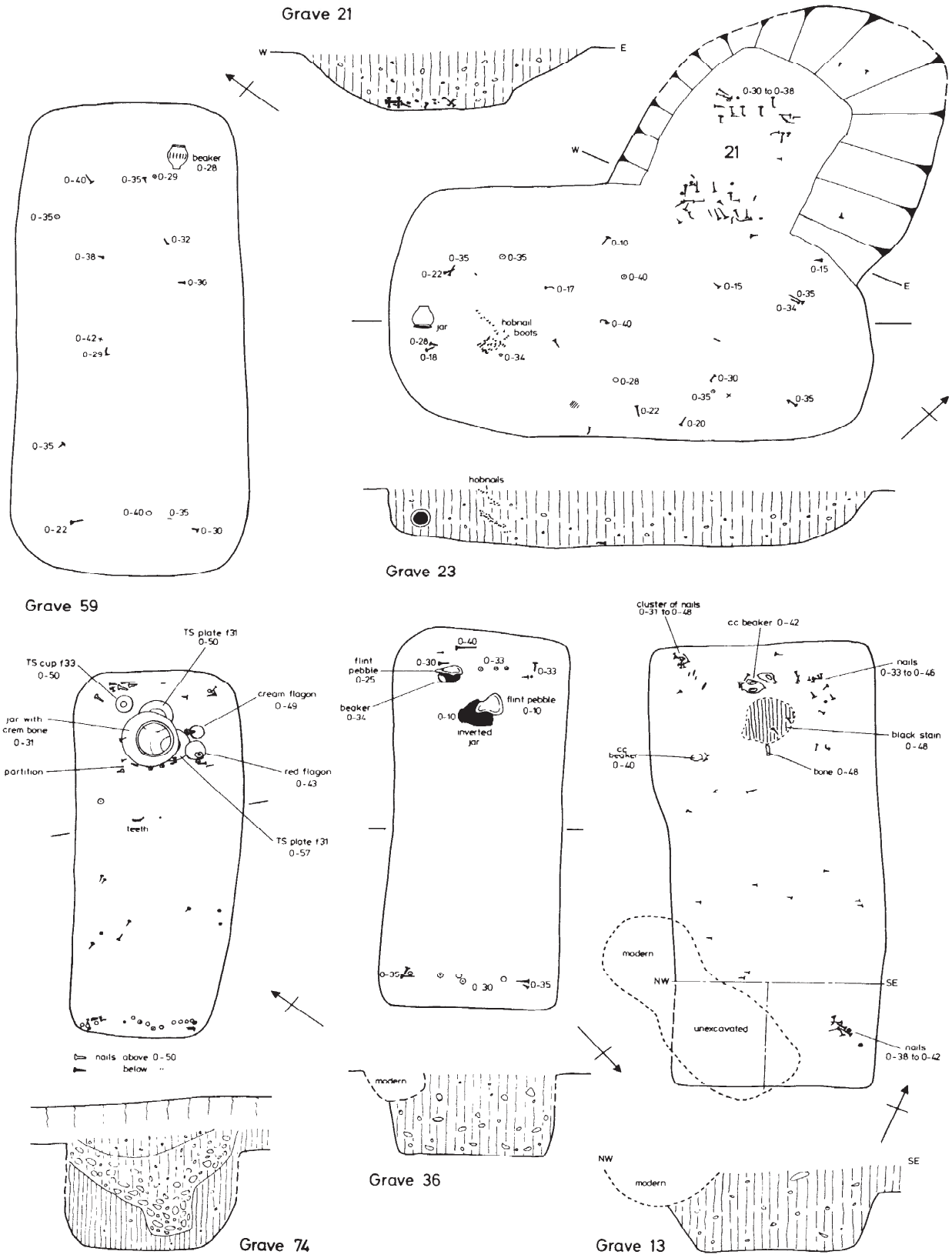


Fig 26 Area J: nailed coffins with grave goods; scale 1:30

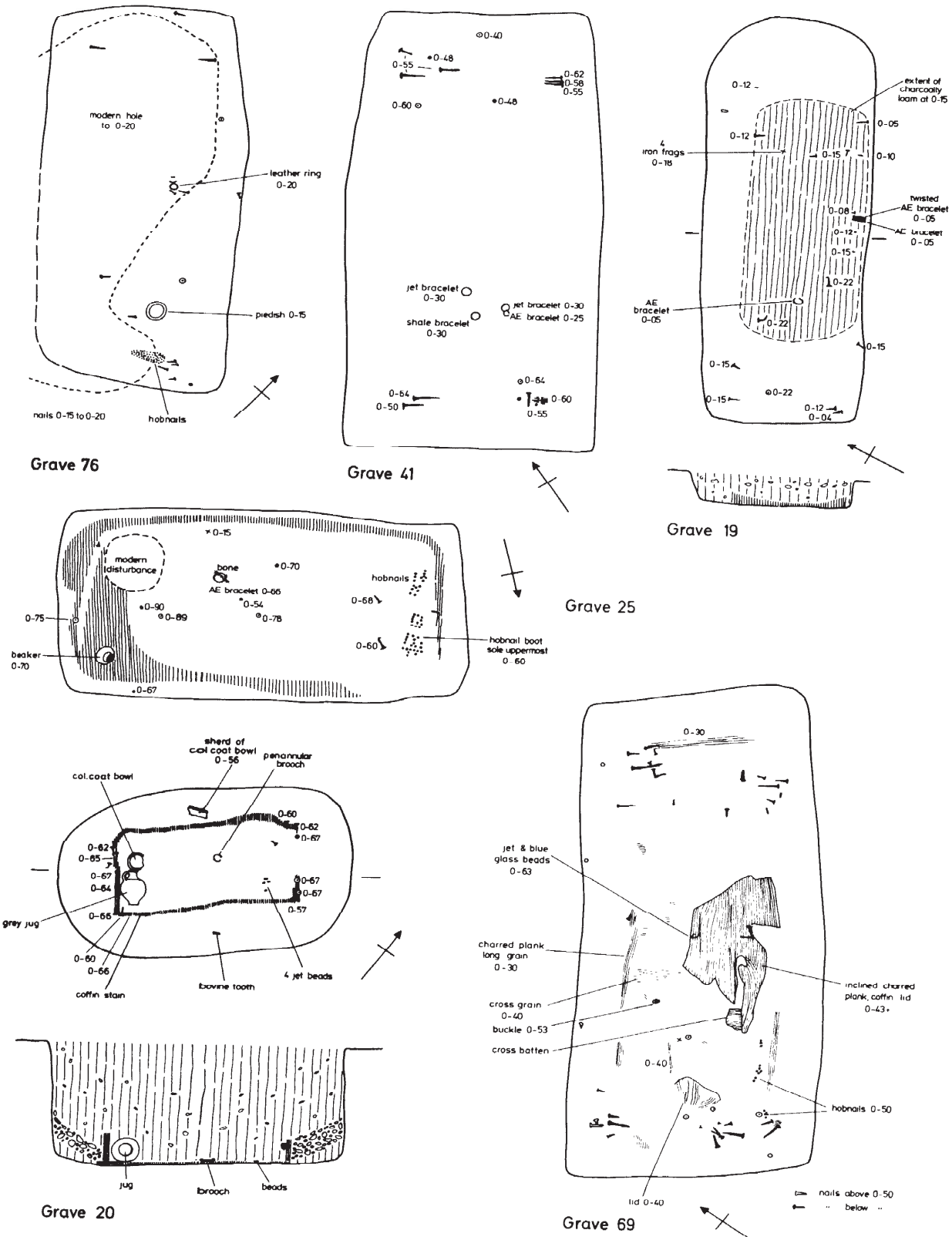


Fig 27 Area J: Nailed coffins with grave goods, mainly jewellery; scale 1:30

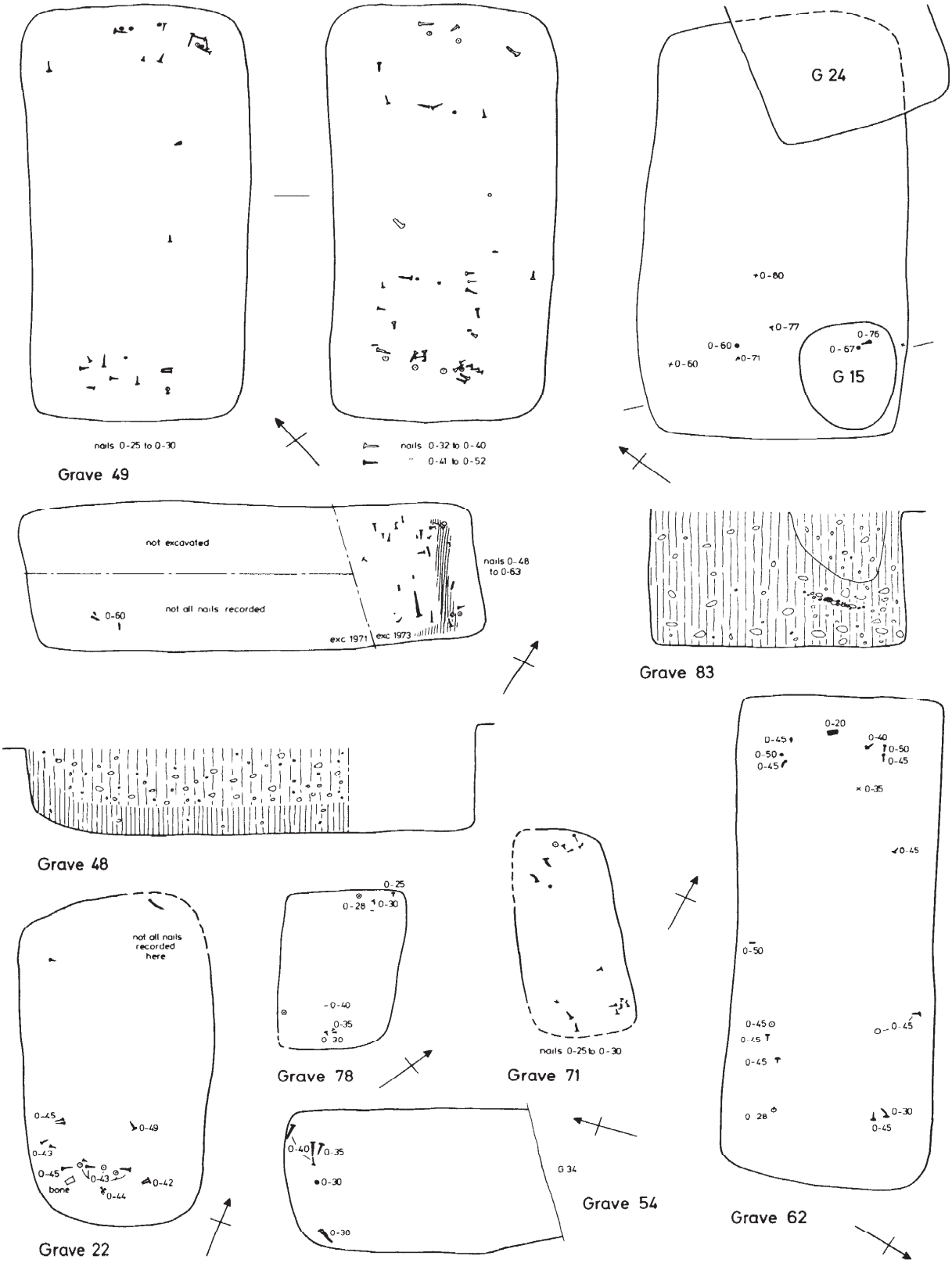


Fig 28 Area J: nailed coffins without grave goods; scale 1:30

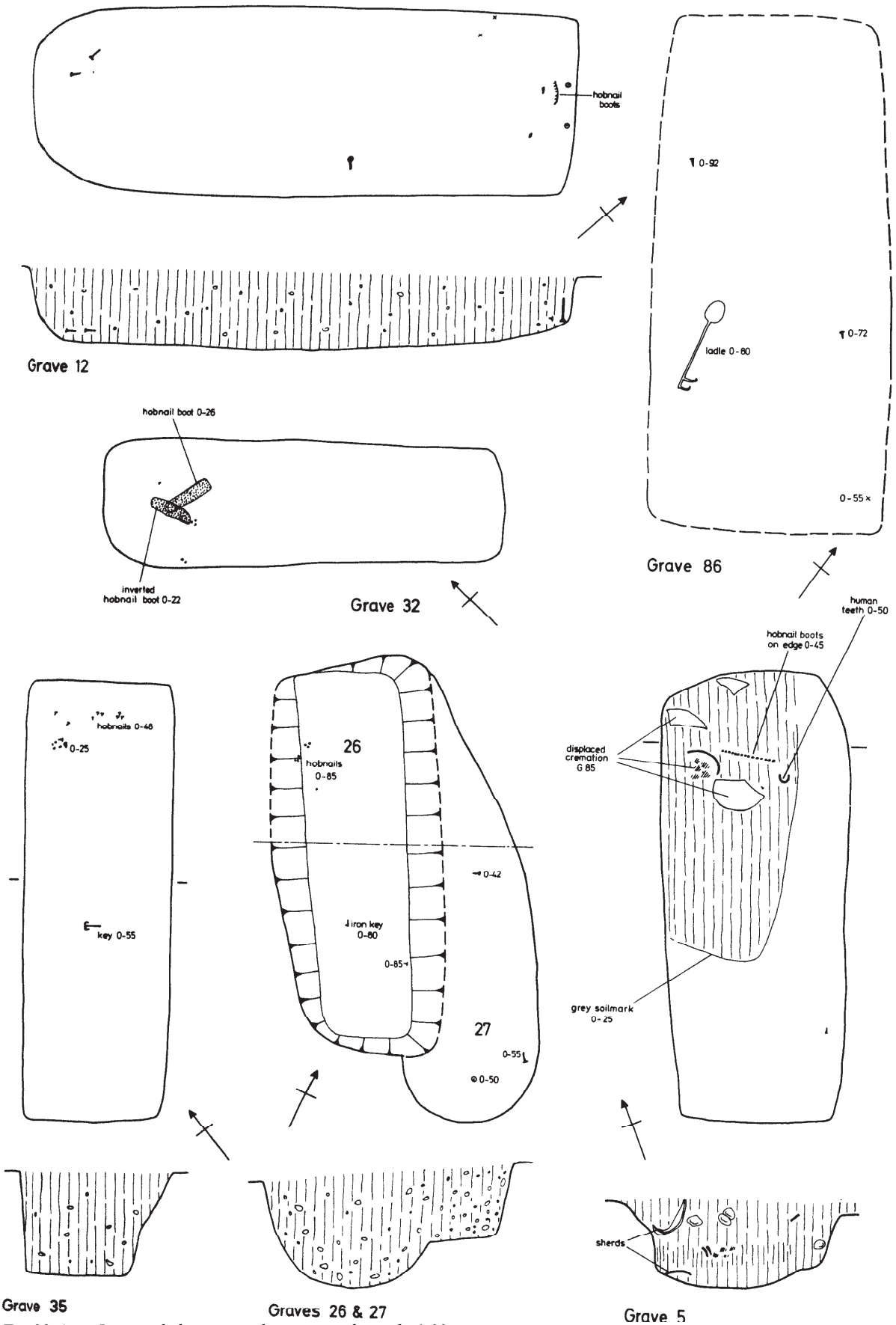


Fig 29 Area J: un-nailed graves with grave goods; scale 1:30

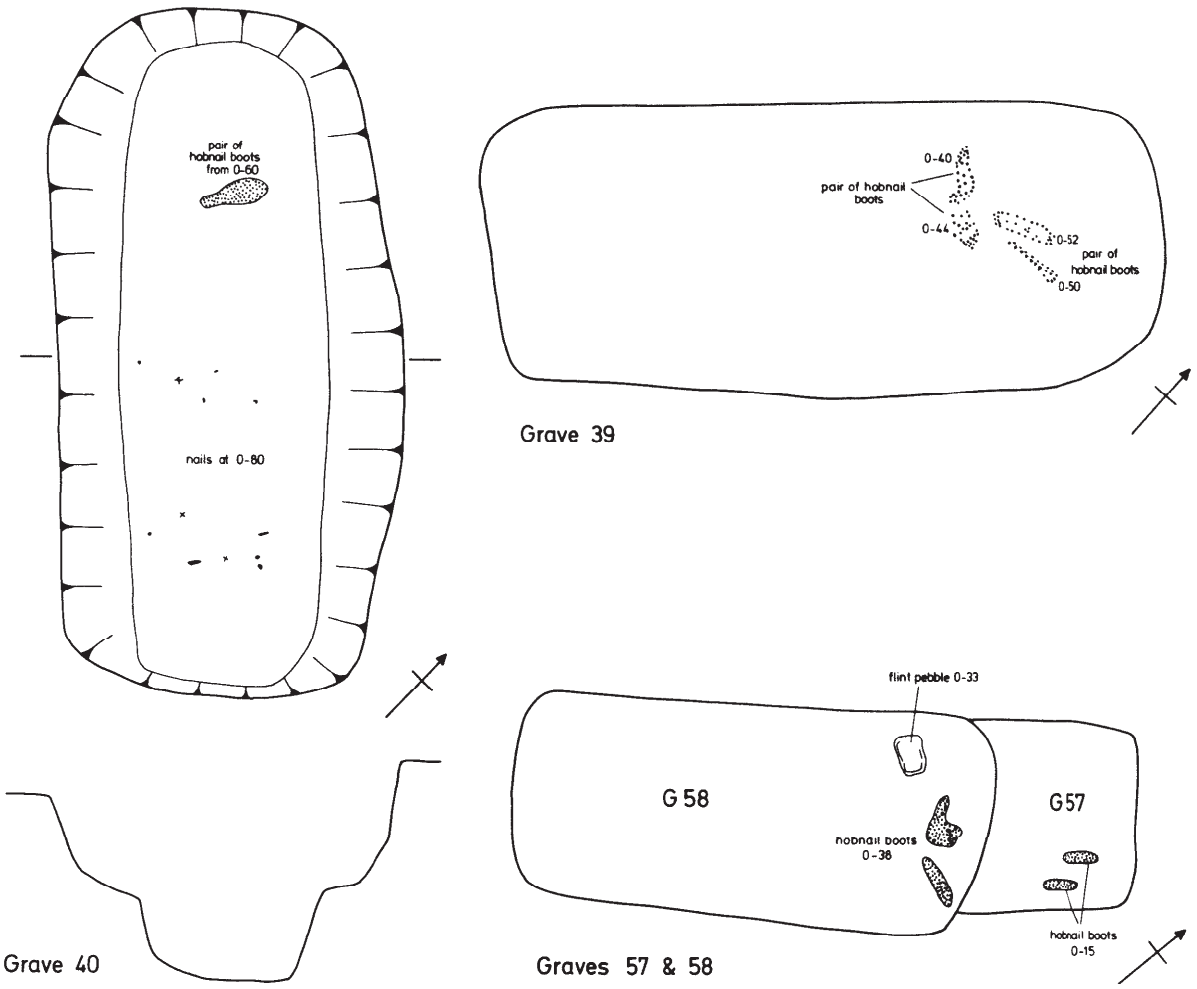


Fig 30 Area J: un-nailed graves with hobnail boots; scale 1:30

Table 1 nailed coffin dimensions

grave	*length*	*width*	*depth*
56	2.4	0.6	0.25
34	2.3	0.65	0.4
45	2.3	0.5	–
8	2.2	0.5	0.2
62	2.15	0.5	0.2
69	2.1	0.75	0.25
13	2.0	0.65	0.2
68	2.0	0.6	0.2+
74	2.0	0.6	0.22
59	2.0	*c*0.5	–
49	1.95	0.42	0.28
33	1.9	0.5	0.2
41	1.9	0.75	0.15+
80	1.9	0.55	–
23	1.85	0.55	0.15+
48	1.85	0.6	0.15+
36	1.8	0.55	–
76	1.8	0.6	–
54	1.2+	0.5	–
4	1.3	0.5	0.35
22	1.2	0.5	–
73	1.2	0.4	–
70	1.1	0.4	0.2
77	1.1	0.4	0.25
71	1.0	0.3	–
20	0.95	0.45	0.2
78	0.8	0.3	–
72	0.6	0.3	–

The measurable coffins divide into two clear groups; 56–76, adults and 4–72, children (Table 1.54 was incomplete), with the 18 full-size coffins being on average 2.0m long by 0.57m wide by 0.24m deep (averaged over 9 only). All were therefore larger than necessary, untapered (except for G56), and if constructed of 25mm boards they must have been extremely heavy even when empty. The average length of the 9 children's coffins was 1.02m, but individual variations were relatively greater, reflecting the age of the child.

Vaults (Figs 1, 31–3)

In general the grave pits were not much larger than the coffins they contained, but there were a few clear exceptions, namely graves 8, 33, 34, 56, 68 and 80. Here the coffins had usually been centrally placed in a very much larger pit, which had a separate wooden lining close to

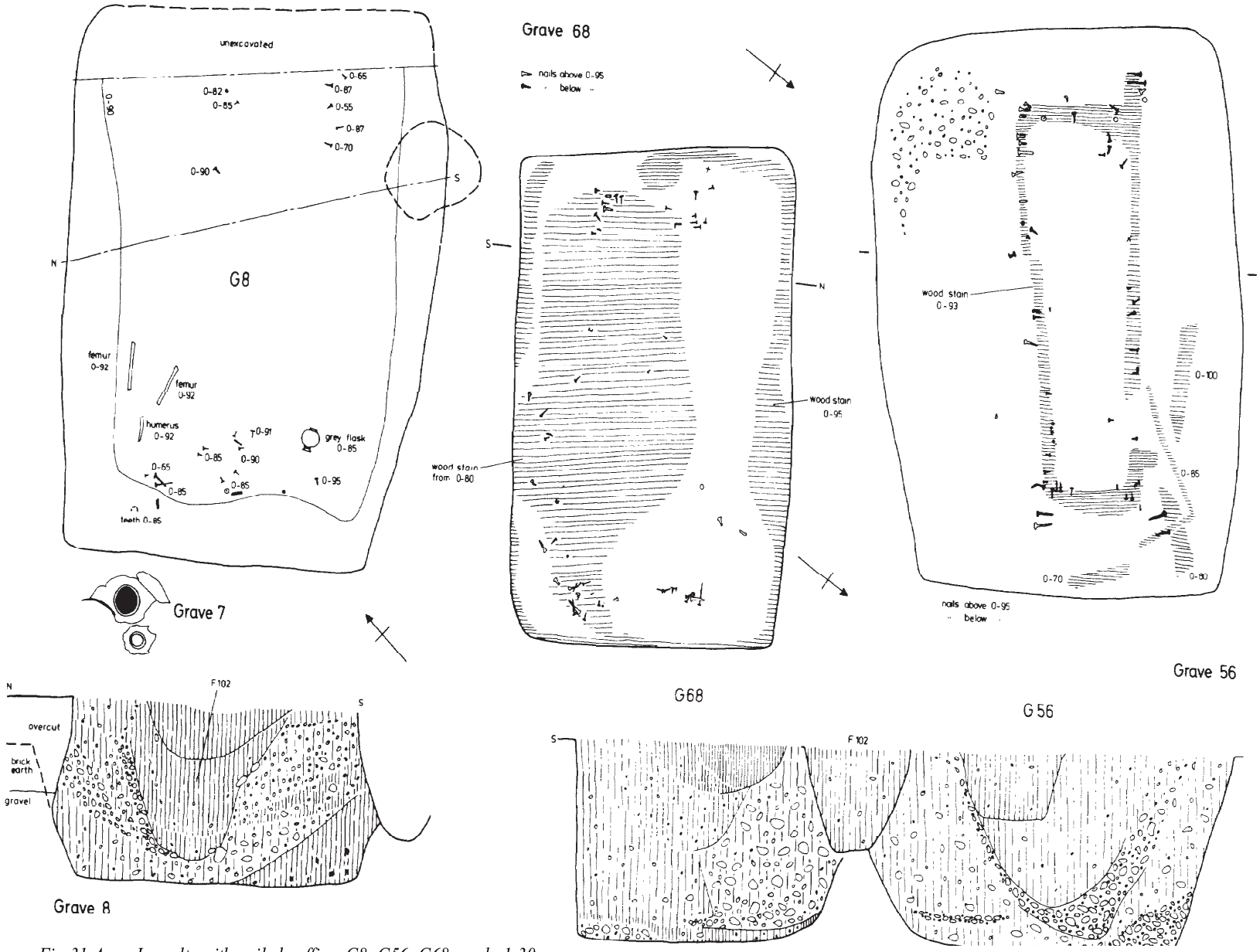


Fig 31 Area J: vaults with nailed coffins, G8, G56, G68; scale 1:30

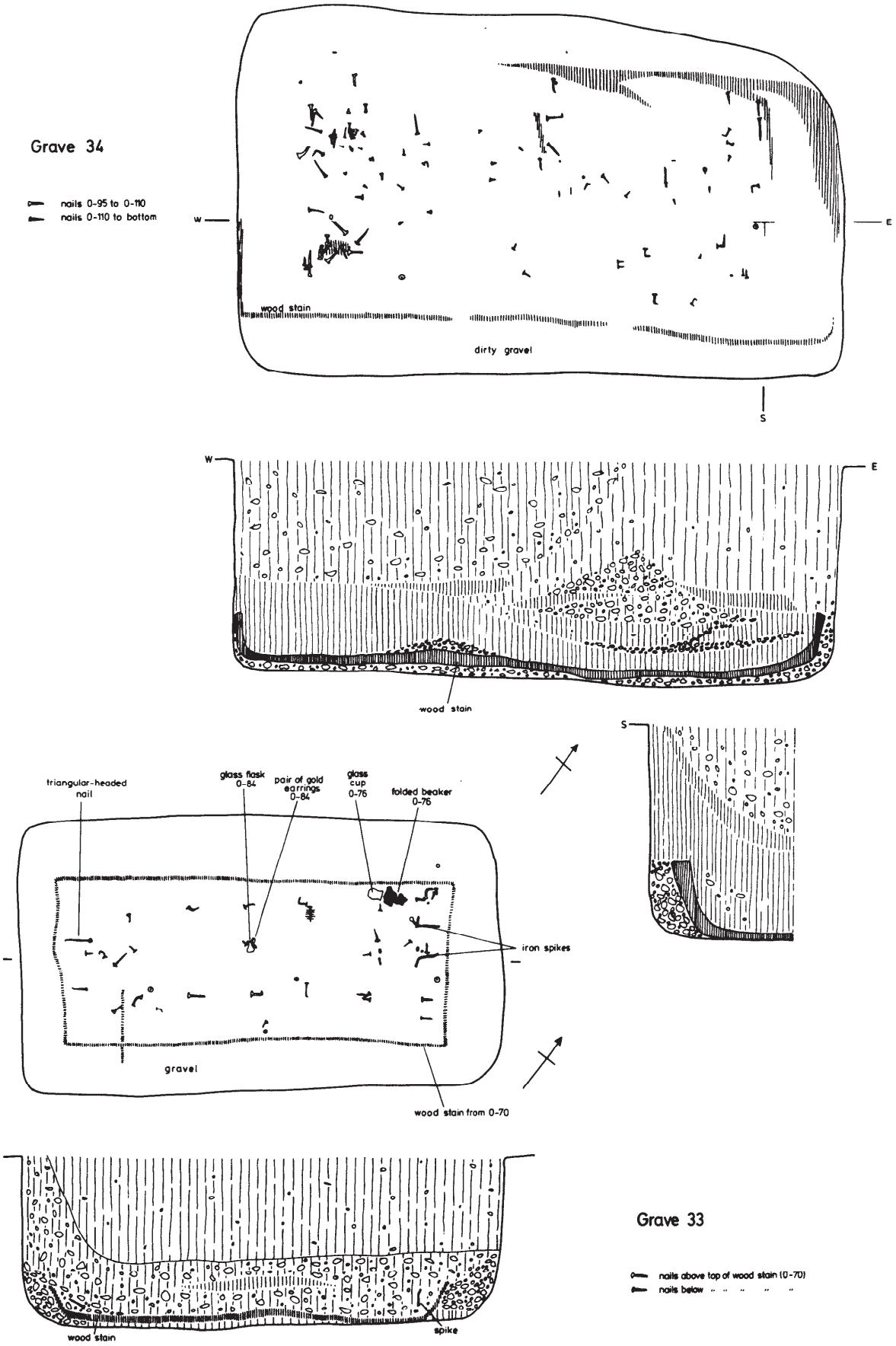


Fig 32 Area J: vaults with nailed coffins, G33 and G34: scale 1:30

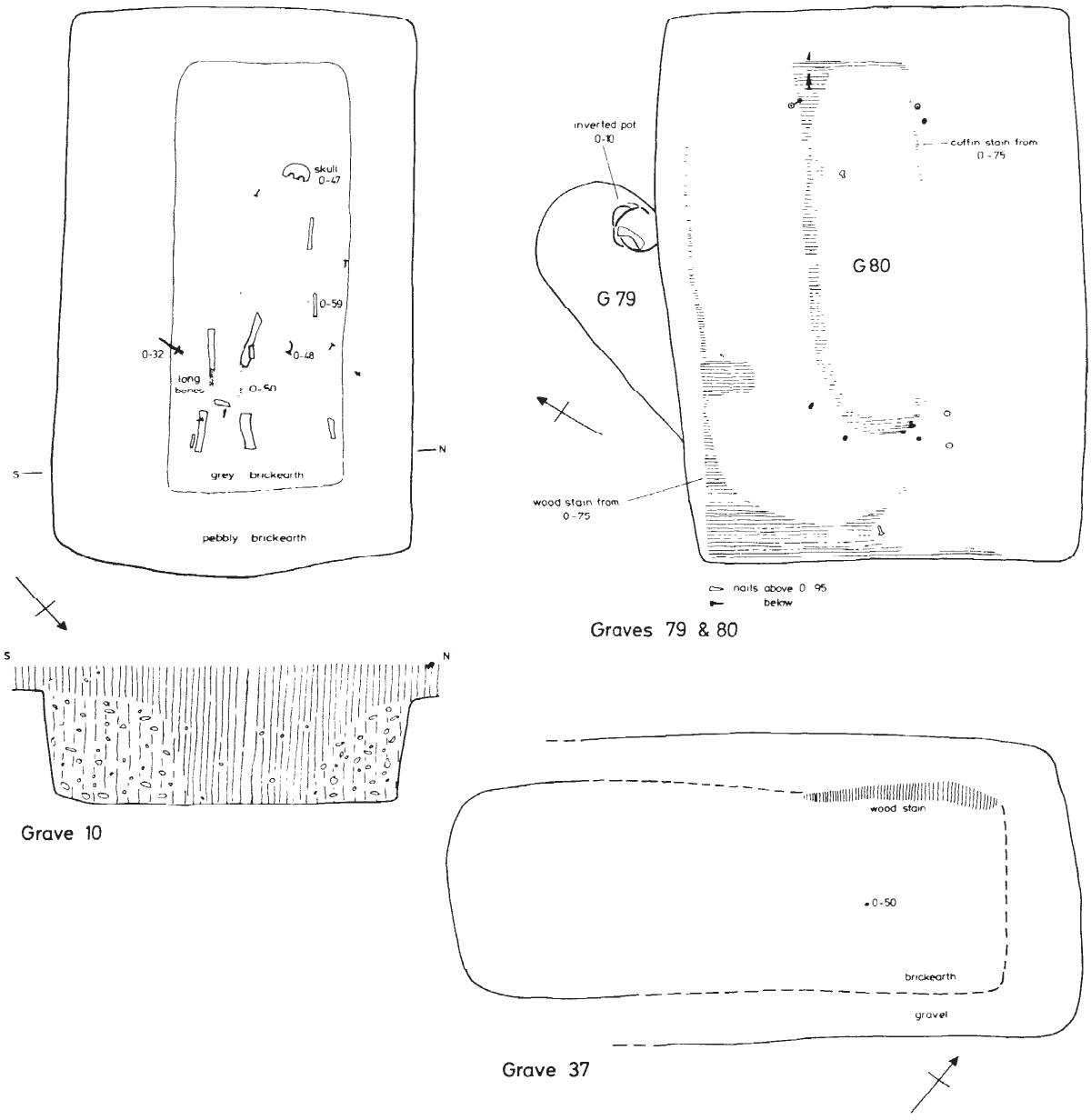


Fig 33 Area J: vaults with un-nailed coffins, Gl0, G37, G55, G80; scale 1:30

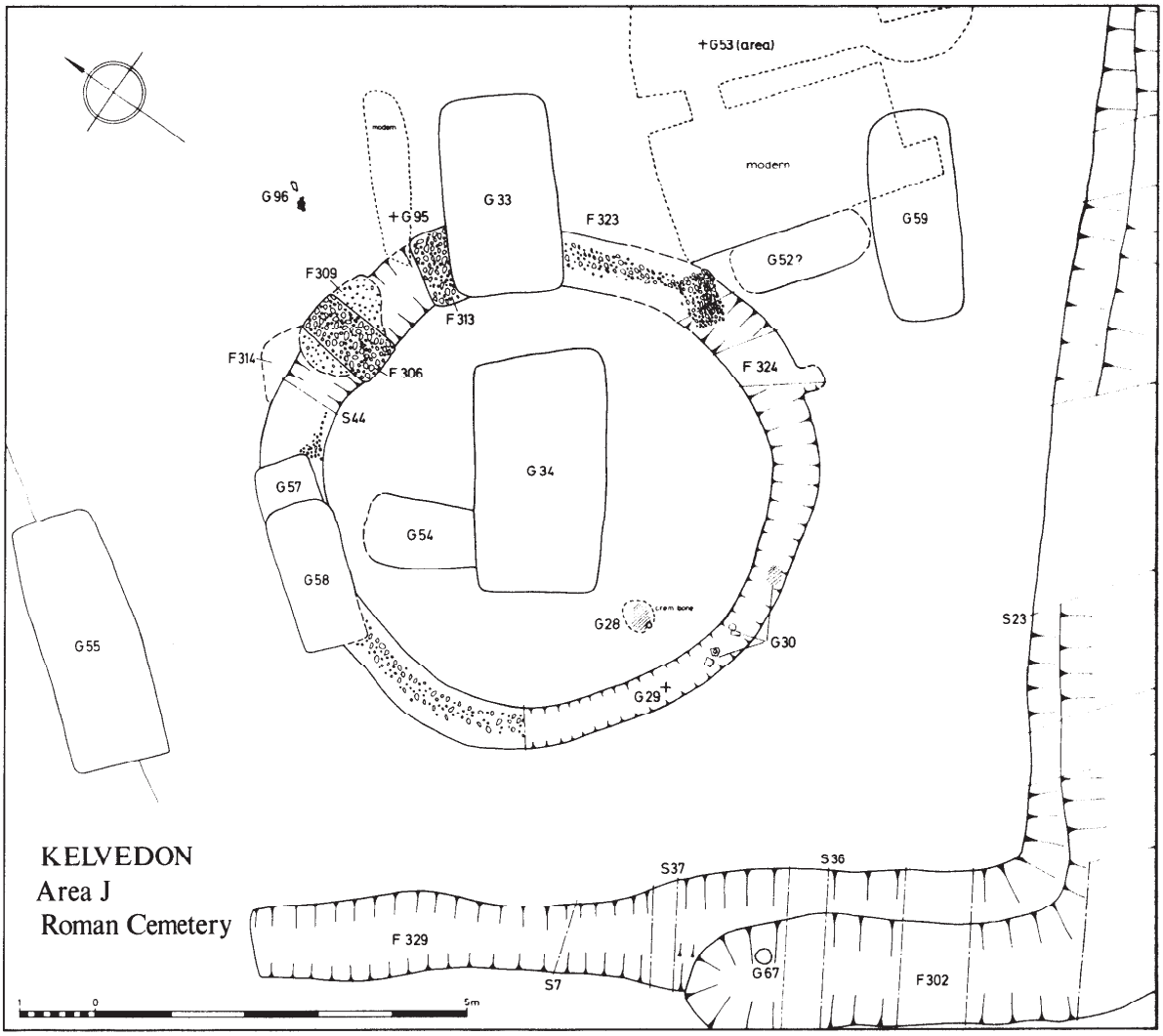


Fig 34 Area J: circular mausoleum, F324

the edge. This took the form of a framework of vertical boards, sometimes with a floor (G33, 34), which was jointed or wedged in position or retained by vertical Posts (G68, 80). Nails were not used. There was no evidence to indicate whether these vaults had an above-ground superstructure.

Three graves from the group without nailed coffins, G10, 37 and 55, seem also to have been vaulted, by virtue of their size. There was no trace of a lining in G10, but there was a central discoloured area where an un-nailed coffin may have stood; the others had wood stains of such dimensions that they must have been vault linings rather than coffins; neither was nailed. The dimensions of the chambers for the whole group are given in Table 2. The average was 2.7m x 1.34m (omitting G8 and G10 where no trace of the wood lining survived).

Table 2 vault dimensions

grave	*length*	*width*	*depth*
8 (pit)	2.85	1.9	0.9
10 (pit)	2.8	1.5	0.7
33	2.1	0.9	0.9
34	3.2	1.4	1.2
37	2.5	1.0	0.8
55	3.0	1.1	0.65
56	2.9	1.8	1.1
68	2.5	1.5	1.05
80	2.7	1.7	1.0

Other graves

There was evidence for coffins in the form of wood stains in only 5 of the 26 graves in the un-nailed group. Two of these (G10 and G55) were associated with vaults and have already been mentioned. Of the remainder G9 was a child's grave; its U-shaped profile suggests a hollowed log, whilst G19 and G25 appear to have been biers. Both contained a few nails but were distinguished from the normal coffined type by having extensive discoloured areas at the base of the grave suggesting a board or boards laid flat in the bottom, without sides. The dimensions of these coffins/biers are shown in Table 3; G55 has been omitted as the coffin stain cannot be disassociated from the vault lining. These compare well with the average for nailed coffins although G25 is noticeably wider.

Table 3 coffin dimensions

grave	*length*	*width*	*depth*
9	1.3	0.45	0.25
10	2.1	0.75	0.45
19	1.8	0.6	0.05
25	1.9	1.0	0.1

The remainder produced no positive evidence for coffined burial, although this is not therefore precluded. The incidence of wood stains was very variable even within a single grave and a jointed coffin could have left no trace. With the exception of G26 which was U-shaped and G40 which was ledged, these graves were vertical-sided, flat-bottomed and of the same overall dimensions as the others. Their average depth was 0.52m compared with 0.5lm for nailed coffins and 0.92m for vaults.

Cremations

Of the 35 excavated cremations only 14 could be considered undisturbed since the time of their deposition; the remainder were damaged by three main agencies; disturbance in the Roman period (4), ploughing (9), and robbing in recent years (8). The losses by these agencies are hard to quantify but the surviving total is unlikely to be more than half the original number and may be less.

Table 4 cremations

		BONE			*accessory*		
no	*state*	*loose*	*box*	*pot*	*vessel*	*other*	*date*
1	P	X				nails	C3-C4
2	P			X	1		cAD 120-40
3	I			X	3		Late C2
7	P			X	1		C2-early C3
11	P			X			C2-C3
14	D			X			Late C1
15	I			X	1		AD 300-350
16	P			X			Late C1-C2
17	I	X	?			nails	C3-C4
18	I	X	?			nails	C3-C4
21	I		X				C3
28	P	X			1		Later C2-C3
29	D				1+	pewter frag	C2
30	D			?	3?		Mid C2
38	I			X			AD 300-350
42	R?		X				Late C3-early C4
46	I		X		1		C2 or later
53	P			X	1		Early C4
60	R	X			1R		Later C4
61	I		X		1		Early C2
64	I	X		X		nails	C4
65	P			X			C4
66	R	X			1R	hobnails	Later C4
67	I			X		flint & tile	Late C4
74	I		X	X	5		Late C2
75	R	X			1R	hobnails	Later C4
84	I	X			1		C3
85	D			X	1?		Late C3-mid C4
88	I	X					C3-C4
89	R			?	?1+		C2-C3
92	I	X					Later C4
93	R						C2-C4
94	P			X			C2-C4
95	R				1+		Late C3-C4
96	R				1+		Late C1-C2

Key D Displaced
I Intact
P Plough damaged
R Robbed

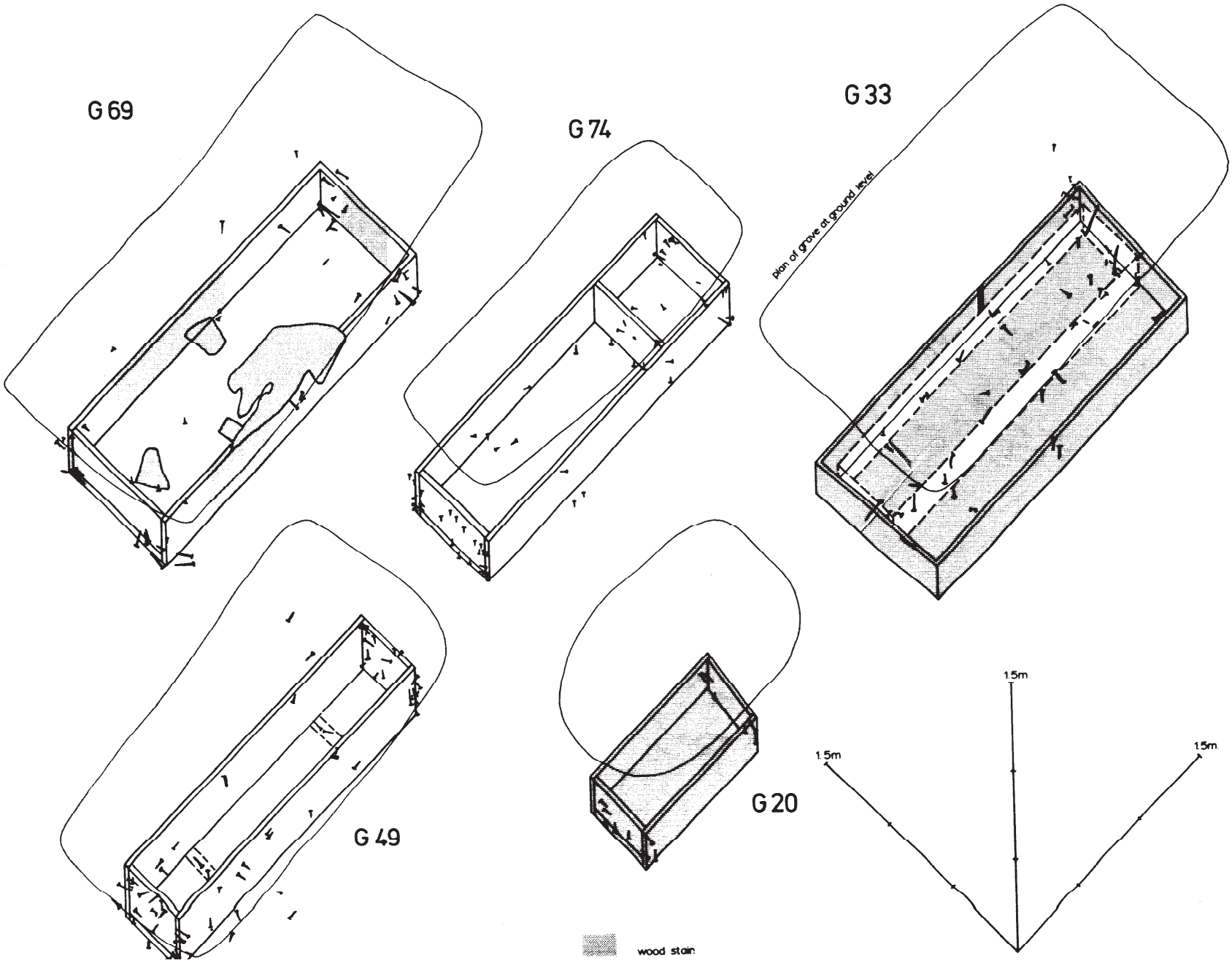


Fig 35 Area J: reconstructed coffins; axonometric views

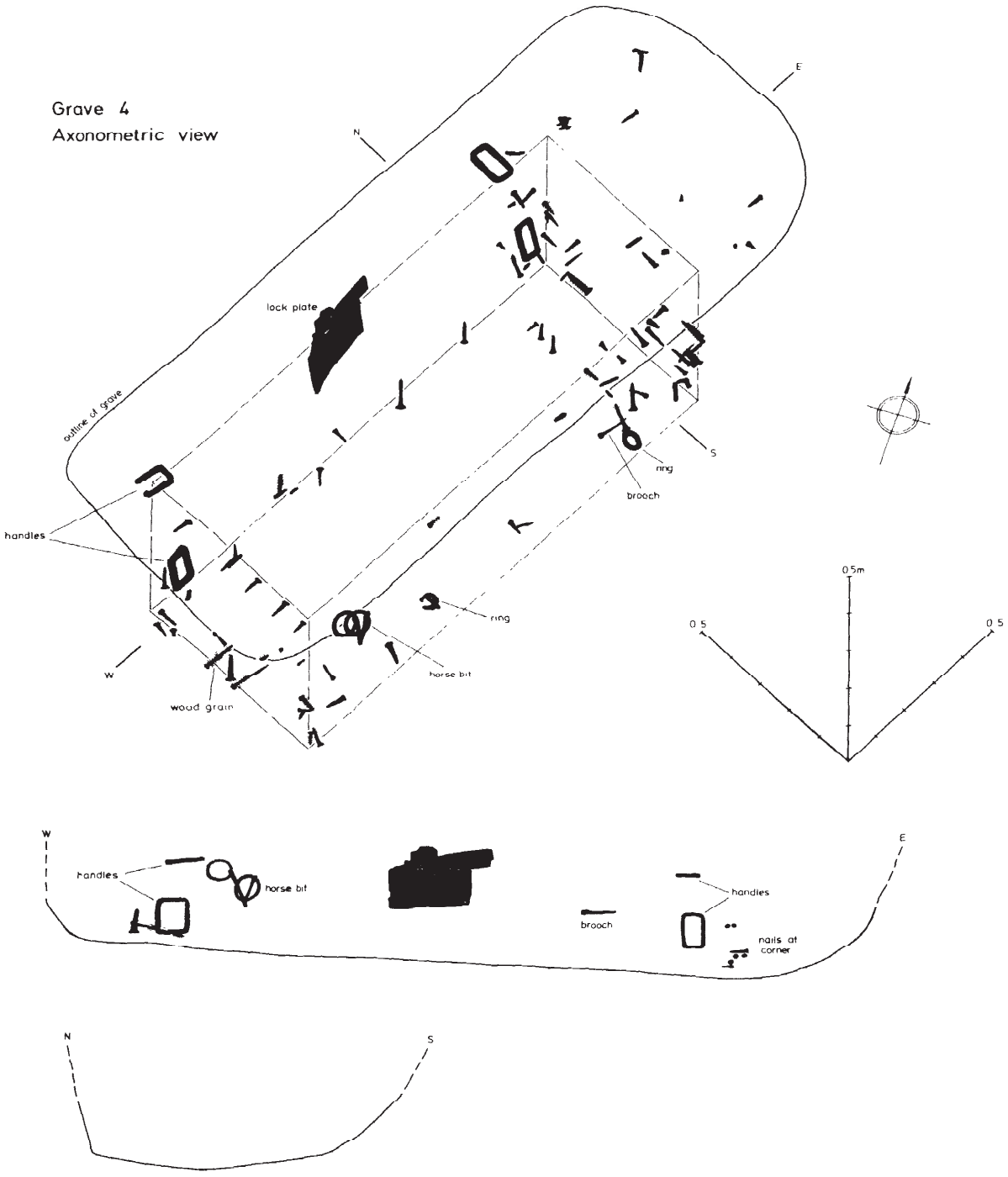


Fig 36 Area J: reconstructed chest, grave 4, axonometric view

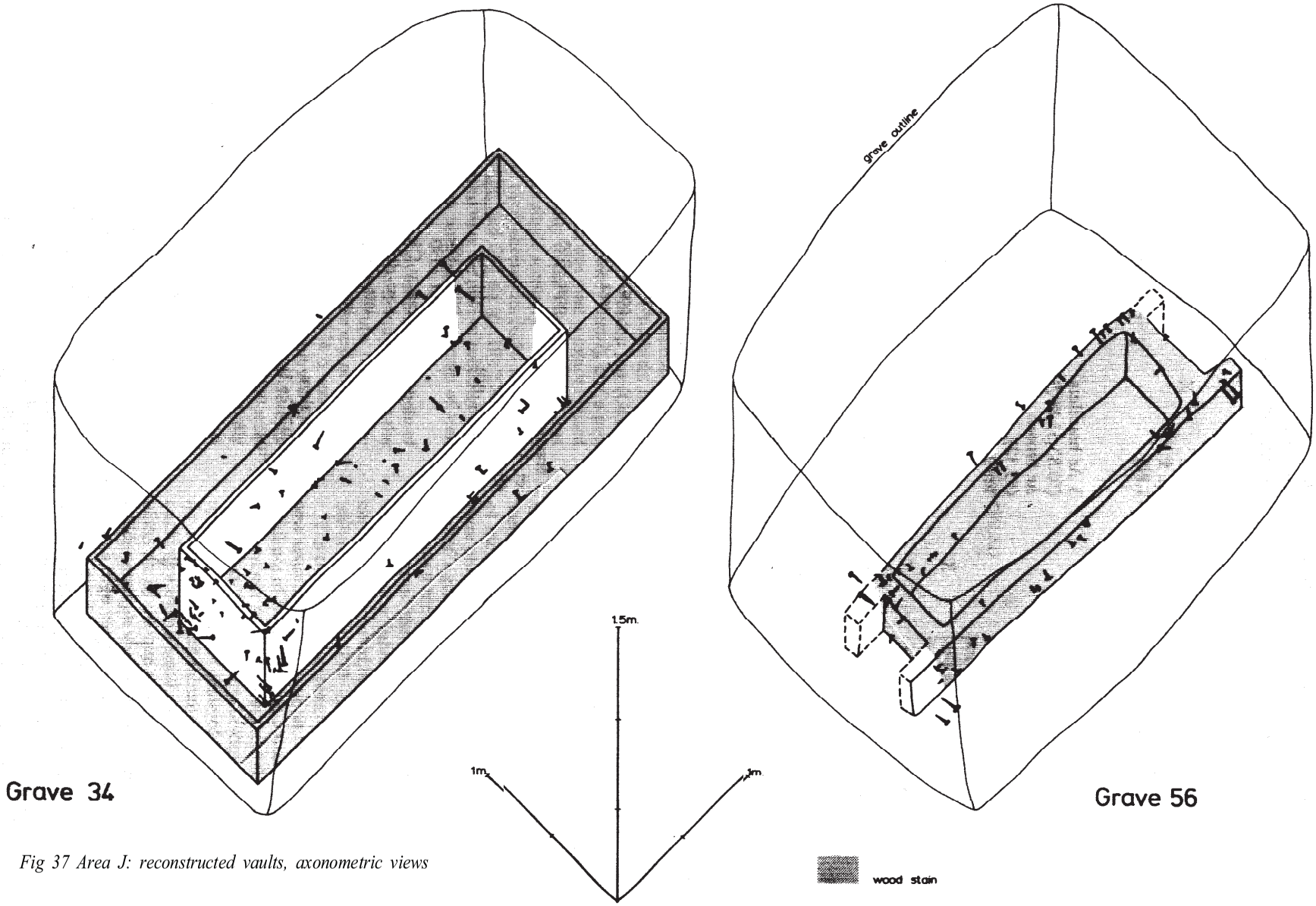


Fig 37 Area J: reconstructed vaults, axonometric views

Table 5 inhumations

no	*nailed*	*other*	*pottery*	*boots*	*other*	*date*
4	110				horse bit,, (56.82); chest fittings, (57.69-72)	C3-C4
5			?1	X		late C3-mid C4
6			1			C2
8	V23+		1			late C3-early C4
9		CS				post c350
10		V				post c350
12				X		post c350
13	54+		2			early C3
19	18	Bier			3 Ae bracelets (50.83;51.86,91)	mid C4
20	15		2		Ae brooch (45.32); 4 jet beads (61.2)	AD 300-350
22	18+					? early C3
23	24		1	X		late C3
24						post c350
25	11	Bier	1+	X (58.74)	Ae bracelet (50.82)	mid C4
26		U-shaped		X	key (59.80)	post c350
27						post c350
32				X (58.73)		post c350
33	V46		1+2 glass (61.12)		gold earrings (60.5); 2 spikes (56.68)	mid C4
34	V102					late C3-early C4
35				X	key (59.79)	post c350
36	19		2			early C4
37		V				post c350
39				2 (58.75)		post c350
40		Ledged		X		post c350
41	18				3 bracelets (2 jet, 1 shale, 60.9-11); Ae bracelet (51.89)	mid C4
43	74					post c350
44						post c350
45	26+					?early C3
47						post c350
48	28+					late C3-mid C4
49	72					late C3-mid C4
50						post c350
52					2 Ae bracelets (51.87,92)?+1; Ae ring	mid-late C4
54	7+					early C3
55		V				post c350
56	V62					late C3-early C4
57				X		post c350
58				X		post c350
59	15		1			late C3-early C4
62	18					mid C3-early C4
63			2			AD 150-200
68	V37					later C3-early C4
69	48			X	blue glass & jet beads (61.4-7); buckle (59.76)	AD 300-350
70	18					later C3-early C4

71	18				C3-early C4
72	6				C3
73	11				C3-early C4
74	52+	6 in accomp crem			end of C2
76	20+	1	X	leather ring	AD 300-350
77	19	1		2 cymbals (59.77-8)	late C3-early C4
78	9				C3
79		1			AD 300-350
80	V16				post c350
81					post c350
82					C3?
83	8+				late C3-early C4
86				laddle (59.81)	post c350
87	8+				post c350
90	4+				post c350
91	11				?early C3

Key CS = coffin stain
V = vault

Vessels from graves 1-16 are illustrated in Fig 87; 28-74 in Fig 88; and 84-96 in Fig 89.

The cremated bone was disposed of in several ways. The simplest was to place it loose in a pit with no further accompaniment, eg G92 (five certain examples), or it could be loose but accompanied by an accessory vessel (eg G28, five examples, three of them robbed). In four instances the bone was placed in a wooden box (G61 is the best example, it has an accessory vessel), but a pottery vessel, usually a large jar, was most commonly used (fifteen examples). Generally (eight examples) this was unaccompanied or had a single accessory vessel, usually a beaker, but G3 had three accessories (G30 was probably the same), G74 five, and G97 six (p 119). The only other items to be included were the pairs of hobnail boots in G66 and G75, and an unrecognizable scrap of lead or pewter in G29.

Chronologically the cremations spanned the whole of the Roman period from the later 1st century (G16) to the end of the 4th (G67), over a century longer than the inhumations, which did not begin until the end of the 2nd century; the interesting double burial G74 is amongst the earliest. Clearly in this cemetery cremation was never wholly superseded; indeed if one compares the number of cremations which appear to date after *c* AD 200 with the number before (21 as against 14), it would actually seem to have increased in popularity. This, however, is misleading, as the losses amongst the earlier group were probably higher.

Vessels from graves 4-23 are illustrated in Fig 87; 25-74 in Fig 88; and 76-104 in Fig 89. Figure references for other finds are bracketed.

Grave goods (Fig 38; Table 5)

Half of the 60 excavated inhumations were unfurnished. The grave goods in the remainder were of four main types; hobnail boots (thirteen graves), jewellery (seven graves), miscellaneous ironwork (six graves) and pottery (thirteen graves), normally one or two vessels with beaker forms predominating. In only eight instances were these types combined; boots occurred with pottery in two graves (23, 76) and with other items in four (26,35, keys; 69, beads and a buckle; 25, bracelets and pottery). Most elaborate were graves 20 (two pots, bronze brooch, jet beads) and 33 (pot, two glass vessels, gold earrings).

The disposition of the grave goods proved to be variable and of only limited value in determining the sex or orientation of the nonexistent skeletal remains (Fig 38F). Boots were not worn and could be placed (eg G5) at either end of the grave. Bracelets, however, whether worn or not, were placed at the wrists. Pottery could occur at either end of a grave and inside or outside the coffin. Grave contents were not sharply differentiated by sex (one can only suppose that those with jewellery were female), nor was there any inherent difference between adults and children; they could be richly provided for, like G20, or unfurnished like G70-73.

The content of the cremations, though more restricted, was essentially the same as that of the inhumations. Evidence of burial ritual is provided by the inversion of some vessels and the use of large flint pebbles to weight them down (G36) or encircle them (G67); but most widespread was the use of damaged vessels and 'seconds' both for cremations and inhumations. The missing portion could vary from a small chip out of the rim to a quarter of the pot in the case of some samian platters. The most striking example was the colour-coated bowl in G20, from which a large piece was missing; it was found higher up in the grave fill outside the coffin. Many of the vessels were slightly misshapen, had poor slip adhesion, or were seriously underfired, for example the flagon in G3.

The principal difference to emerge from a study of grave goods in comparison with grave types was that pottery was more common in graves with clear evidence for

Fig 38 Area J: distribution of grave types and grave goods

a coffin (26.3% against 13.6%), and hobnail boots more common in those where there was no evidence (40.9% against 10.5%). The frequency of iron objects in both was the same (13%), but jewellery occurred only in coffined burials (except G52 which was not properly excavated). Of coffined burials 57.8% were unfurnished (22 of 38) and of the rest 31.8% (7 of 22). The different classes of grave goods were distributed fairly evenly throughout the cemetery but some variations in the distribution of coffin types are worthy of comment, notably the predominance of nailed coffins in the southern cemetery enclosure, the concentration of vaults in the northern, and the incidence of uncoffined graves around their margins.

The vaults present a problem; considerable effort was evidently put into their construction, yet with the exception of G8 and G33, the richest burial encountered, none contained any grave goods. This is particularly surprising in the case of G34, over which a monument was erected, and to which the small rich group (20, 25, 33) appears to be secondary. Anomalies in the grave fill (Fig 32) and the dispersal of the nails at the east end of the coffin suggest that it may have been robbed in antiquity. The same fate may also have befallen graves 56 and 68, but others such as G37 and G55 appear to be undisturbed.

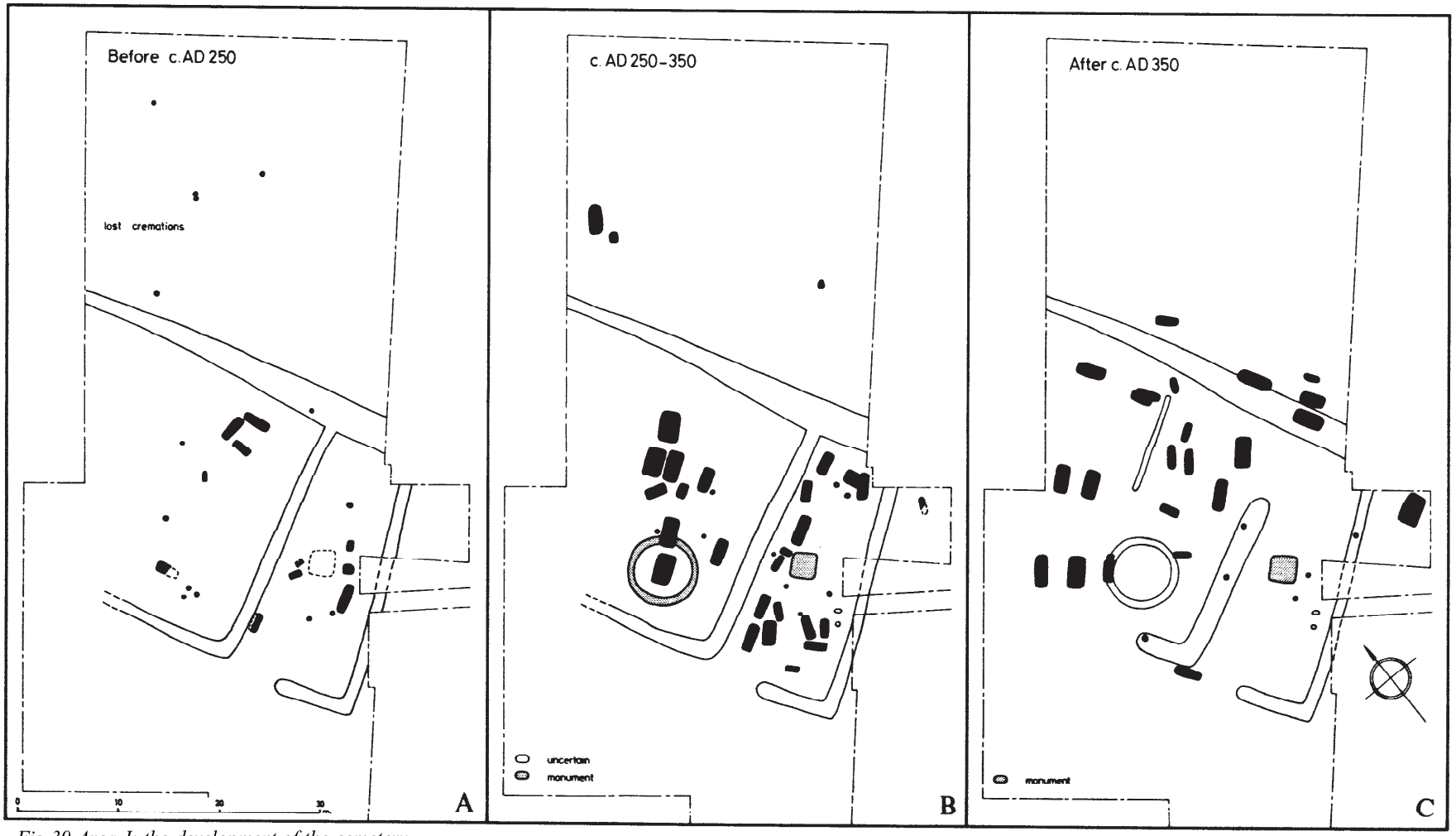


Fig 39 Area J: the development of the cemetery

Dating (Fig 39)

It was difficult to date individual burials with great precision; 38 (40%) included pottery but other grave goods were not closely datable. There were also some stratigraphical relationships and associations based on alignment. However, this did not provide a date bracket of less than half a century, and the presence of pottery may impart a spurious precision, in that its age at deposition cannot be established.

The earliest burials were cremations which began in the 1st century. They were not confined to the bounds of the later cemetery but scattered across the whole of the excavated area. The earliest inhumations (G13, 63, 74) date to the end of the 2nd century or the start of the 3rd and the cemetery subsequently developed within well-defined limits. The majority of burials in the south-eastern enclosure date to the later 3rd or early 4th century, whilst the major vaults and monuments in the north-western enclosure seem to have been established in the early 4th century. Later 4th century burials expanded on to more marginal areas, over boundary ditches, and into the area north and east of F324 where uncoffined burials, unfurnished or with hobnail boots only, tended to predominate. The end of the cemetery is impossible to date, as some of the simplest graves were also the latest, It could have remained in use well into the 5th century.

It is clear that a fairly small number of burials was made over a long period of time; 95 burials over say 340 years would average 1 every 3.5 years. The average (over 200 years) for the 78 burials post-dating *c* AD 200 would be 1 every 2.5 years. Only 17 burials antedating *c* AD 200 were excavated, but the original number (p 26) may have been double this and on this basis (ie 34 over 120 years) would average 1 every 3.5 years. These figures suggest a living population of no more than 10 or 12 at any given time and suggest that the cemetery was a family one.

Topography (Fig 24)

From the 3rd century there were two cemetery enclosures with banks on the west side of ditch 77 and the north sides of ditches 302 and 346. The banks probably became the principal boundaries in the 4th century when burials, both cremations and inhumations, were made in the silted ditches.

The majority of graves were aligned on the boundaries and were oriented east-west but those close to ditch 77 and the north-western return of F346 were north-south. Some small groups (eg 24, 35, 44) might be linked on the grounds of a common orientation; others such as G25 and G32 appear to have been influenced by the focal monument F324. There was little intercutting of burials, which implies the use of grave markers; a tombstone fragment (Fig 69.8) was found on the field surface. There appear also to have been significant voids in the burial pattern, for instance west of F370 or between G39 and G40.

Discussion

This cemetery like the walled Romano-British cemeteries at Litlington, Cambs (Liversidge have, 29) or Gurney Benham House, Colchester (Hall 1944) was used by a limited number of people over a long period of time. The cremation burials are unremarkable and all their characteristics, such as the composition of the grave groups, the inclusion of boots and the use of boxes can be paralleled at Litlington or Braughing (Partridge 1977; 1981, 245). The most unusual feature is the persistence of cremation as a burial rite until. the end of the 4th century, when inhumation had elsewhere become the norm (Clarke 1979, 350).

The majority of the grave goods in the inhumation burials were also commonplace (cf Litlington, Guilden Morden; Liversidge 1977, 29, 35) but they can be instructively compared with Lankhills, Winchester, the only published Romano-British inhumation cemetery to have been systematically excavated and analysed (Clarke 1979, 347-76). Of the eight categories of furnished burial there recognized, three occurred at Kelvedon: graves with vessels, graves with (unworn) ornaments, and combinations of the two. As at Lankhills and elsewhere *(ibid,* 363) the third class was particularly associated with children (G20, G25) and perhaps young women (G34). Coins, a component of the other five Lankhills groups, did not occur at Kelvedon. Hobnail boots occurred in both cemeteries, as did various kinds of equipment, although these were not comparable; there is a key from Lankhills but it is unlike the Kelvedon types, which otherwise occur in Saxon contexts (p 73). The horse-bit and the cymbals are unparalleled, whilst ladles in burials are known only from a few 7th century graves in Yorkshire (Faull 1977, 11).

The same chronological traits can be observed in both cemeteries, namely that nailed coffins associated with vessels, on their own or with jewellery, belonged to the first half of the 4th century, whilst uncoffined (or at any rate un-nailed) graves with equipment or hobnails came later. There must have been a proportion of unfurnished graves at all periods, distinguished chronologically by coffin type. At Lankhills unworn personal ornaments, chiefly bracelets, enjoyed a vogue *c* 350-70 (Clarke 1979, 371); at Kelvedon there is no independent dating evidence for graves of this type, and the evidence as to whether or not they were worn is inconclusive.

The use of nailed coffins in Roman inhumations was widespread; Stowe, describing Roman burials discovered in Spitalfields in the late 16th century 'beheld the bones of a man.... and round about him athwart his head, and along his sides and thwart his feet such nayles were found' (RCHM 1928, 159). These were particularly large, being up to 225mm long. Both nailed coffins and hollowed logs were found in the excavations in the Butt Road cemetery at Colchester (Goodburn 1978, 451) but other forms of construction are known; dovetailed joints were found at Harlow (VCH 1963, 142) and pegged joints are recorded on waterlogged coffins from London (Wilson 1968, 199 n3). Either method could have been used in the un-nailed coffins and vaults at Kelvedon. Considerable light has been shed upon construction methods in general, and the variation which can be encountered within a contemporary group, by the recent discovery of several late Saxon waterlogged coffins at Barton-on-Humber. The coffins were of oak which had usually been charred prior to use, as in the Roman examples from Kelvedon, and exhibited a variety of pegged and partly nailed forms. The base board and side boards generally

projected beyond the end pieces, cf G56; lids could be pegged in position or merely laid on top (Rodwell & Rodwell 1982, 310-12).

More unusual is the incidence of vaults: large deep timber-lined chamber containing a single coffin, and with the possible exception of G8 only a single burial. The effort involved in their construction was considerably more than that required for an ordinary burial, yet the additional space seems neither to have been used for multiple burial nor to accommodate grave goods. Similar vaults have been found in the Butt Road cemetery at Colchester (Goodburn 1978, 451); at Bawburgh, Norfolk (measuring 2.5 x 1.6m; Wilson, 1972, 330), and at Burntwood Farm, Hants., where there were grave pits 0.8m-1.4m wide and 2.lm-3.9m long, large enough to be vaults (Goodburn 1976, 364).

Substantial timber linings of this kind may have had their origins in the wooden chambers encountered in rich cremation burials such as the Bartlow Hills (VCH 1963, 39), which measured up to 1.3m square and 0.8m high, and were constructed of oak boards up to 0.1m thick. A comparable square timber-lined pit containing a separate boxed cremation was also found at Braughing (Partridge 1981, 260, B-XXVIII).

A wooden burial vault 2.2m square and 1.22m deep containing two lead coffins lay beneath the 'temple-mausoleum' at Lullingstone (Meates 1979, 122) and a timber-lined grave revetted by posts in the manner of G68 and G80 at Kelvedon was a focal feature in the problematical complex, interpreted as a martyrium, at Burt Road, Colchester (Crummy 1980, 266).

A mausoleum of similar type and late or post-Roman date has been discovered as the nucleus of the Saxon Minster and Cathedral at Wells (Rodwell 1982a, 3). In a pit measuring 3.1x2.0x0.9m with a mortared stone lining stood a six-post structure, similar to the previous examples. This clearly projected above ground; the post would otherwise have been unnecessary structurally and traces of the surrounding floor were found.

Square or rectangular mausolea with a central inhumation are quite common late Roman cemetery features both in masonry and timber. Examples of the former have been found at Arbury Road, Cambridge (Fell 1956), Keston (Philp 1969, 74), Litlington, Cambs (Liversidge 1977, 31), Poundbury (CJY Green 1977, 50), Richborough (Bushe-Fox 1932,25) and Stone-by-Faversham (Fletcher & Meates 1969, 279). Timber mausolea have been found at Butt Road, Colchester (Goodburn 1978, 451), Mucking (Jones 1974, 192, fig 4) and in another cemetery (G2) at Kelvedon (Goodburn 1979,311). There were also four similar enclosures at Lankhills (Clarke 1979, 183), interpreted as bedding trenches, although there seems no inherent reason why they should not be structural. All enclosed unusual burial groups.

These rectangular structures are clearly comparable in size and function to the circular mausoleum at Kelvedon, whose shape seems otherwise to have few Roman counterparts. The nature of the foundation trench F324 and the disposition of the grave within it make it clear that it was a walled structure enclosing an open space to which access could be gained. The close relationship of the rich grave 34 suggests that it occupied the entrance.

It is therefore unlike a wheel-tomb such as Keston (Philp 1969) or West Mersea (VCH 1963) which had an earth-filled interior, and much too small (7m diameter) to be a Roman barrow (Dunning & Jessup 1936, 38) whose average diameter was 24m. Circular stone-built monuments were found in the Kentish walled cemeteries of Langley (Taylor Smythe 1883,83) and Borden (Jessup 1959, 23). The former was only 3.5m in diameter, the base of an elaborately-decorated tower monument which was not designed to be entered; whereas the latter, with a diameter of 6.8m, evidently was, for on the floor inside was a tile-paved tank 2.1m square and 0.3m deep. However, many aspects of these monuments, which were 19th century discoveries, remain unclear,

The closest Roman parallel is provided by a group of three circular monuments on Overton Down, Wilts (Smith & Simpson 1964,68ff). The largest had an external diameter of 7m and consisted of a trench up to 0.6m wide and 0.6m deep preserving the ghosts of 54 circular posts, whose spacing was irregular but continuous. In the centre was a robbed cremation in a pit 0.6m in diameter and 0.6m deep. Fragments of enamelled bronze suggest that it had been a rich burial. The other monuments were similar but smaller and their structural details were less well preserved. A late 2nd or early 3rd century date was suggested for the group, for which no British parallels could be cited.

However, close structural parallels are also provided by the annular and penannular ring ditches encountered in late pagan Saxon cemeteries such as Polhill, Kent (Philp 1973, 167), St Peter's, Broadstairs (Hogarth 1973, 113), Finglesham, Kent (Philp 1973,200), Orsett, Essex (Hedges & Buckley 1978,255), Morningthorpe, Norfolk (Hills 1977, 171), and Spong Hill (Hills 1977, 167; Webster & Cherry 1978, 148). As a group these varied from 4m-10m in diameter, enclosing one or occasionally two inhumations which were frequently in wooden coffins. Despite the elaborate monument, the Kentish examples at least were ill-provided with grave goods (Philp 1973, 200). Although they are generally described as barrows, structural evidence from St Peter's (Hogarth 1973, 113) clearly indicates that the penannular ring ditches held a fence or wall of close-set wooden stakes.

Inhumation 31 at Spong Hill (Hills 1977, 169; Hills *et al* 1984, 80-2) bore striking resemblances to the Kelvedon burial, for within an annular ring ditch with an external diameter of 10m was an unusually large grave measuring 3.4 X 2 X lm, which contained a timber-lined vault 2.4m long and 1.1m wide. The burial had apparently been robbed, but surviving grave goods suggested a date in the second half of the 6th century. Saxon chambered graves are rare in this country; grave 40 at Spong Hill (Hills *et al* 1984,91-4) was of the same type. The only others are the 7th century 'princely' burials like Broomfield (VCH 1903, 302).

It is at the moment impossible to say whether or not there is a genuine typological connection between two burials separated chronologically by 200-300 years. However, so many aspects of late Roman and post-Roman burial in eastern England remain unstudied that connecting evidence may well be found. All the Roman and Saxon timber cemetery structures cited above are recent discoveries.

A possible example of an intermediate site is provided by the cemetery at Church Piece, Warborough, close to Dorchester-on-Thames (Harman *et al* 1978, 6), where there are three ring ditches of between 8 and 12m in diameter, each with a central burial, within an annexe

to a large and orderly inhumation cemetery. The site is known chiefly from cropmarks and has only been sampled. Dating evidence was ostensibly 4th century, but a cemetery such as this could well have continued in use in the post-Roman period.

The last feature to be considered is the square pit, F370, at the centre of the smaller cemetery enclosure. This clearly occupied a focal position respected by subsequent burials, and must have been a grave or monument of some kind. If it were the former, burials were not made below ground level, for the fill was very clean, nor was there any trace of stone robbing. Perhaps the most plausible explanation is that this monument was a timber version of the kind of small square tomb found at Langley (Jessup 1959, 15) in which the burial or burials, either cremation or inhumation, was contained in a chamber at ground level. There appear to have been timber monuments which may have been similar in the walled cemetery just outside Colchester (Hall 1944, 72). Clearly further investigation of cemetery sites is needed to elucidate the considerable variety of funerary structures, particularly in timber, that are beginning to come to light.

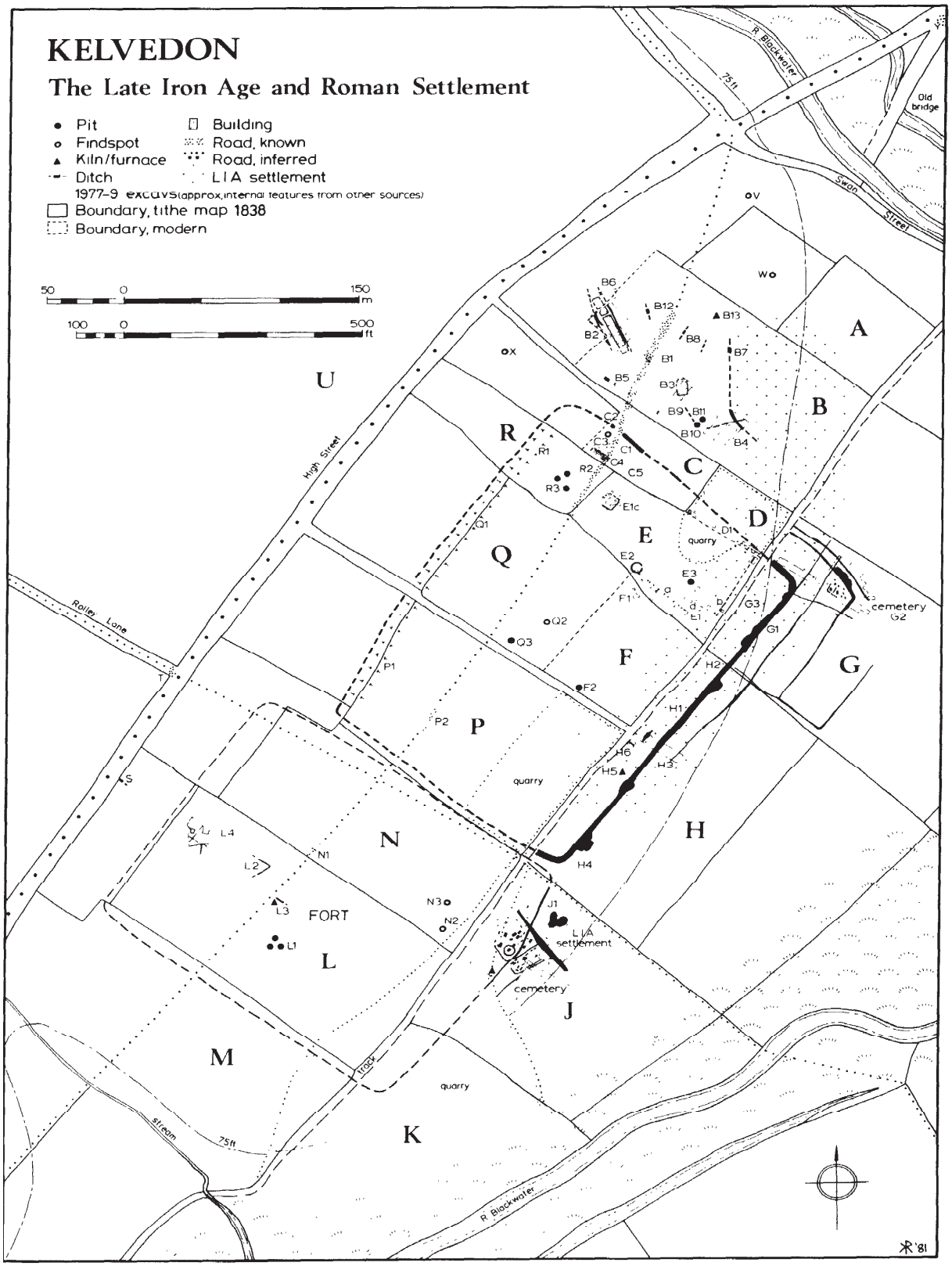


Fig 40 The Roman settlement: evidence and interpretation

5. GAZETTEER (Fig 40)

For ease of reference the parcels of land in and around the Roman settlement have been lettered from A to R using the boundaries shown on the 1838 tithe map (except for D/E and F/Q which are more modern). All discoveries are described under the appropriate letter heading and outlying finds are listed separately at the end (S to AA). This list is supplementary to the Roman Essex VCH entry (1963, 149) and includes only those finds about which positive information can be given; there are large quantities of unlocated material (mostly pottery) from the town, some of which is illustrated in the finds reports (Figs 96, 97). Sources of information are given in abbreviated form as follows: Mr M J Campen, MJC; Mr H J D Bennett, HJDB; Essex County Council Planning Department, Archaeological Section, ECCAS; Colchester Museum, CM. Museum accession numbers have been included where appropriate. Unacknowledged entries are from notes and observations by W J Rodwell or the author.

Only areas B, C, E, F and J are described below; for the remainder see microfiche (MF 1.B8-13).

Area B Chamber's field, now Swanmead Estate

1-6 Excavations 1970-1; see above p 4

7 'Belgic' ditch, excavated by MJC/HJDB, also seen in estate road service trenches 1970, probably the same as F424 (B4); pottery, Langton Down A brooch, also at least two coins of Cunobelin (CM 179.60 and possibly 187.56) from this or another ditch in the vicinity. The western boundary to late Iron Age settlement; other features further east (HJDB).

8 Roman ditches and other features in estate road service trenches, 2nd-4th century pottery, observed 1970.

9 Ditch leading to 10; four near-complete pots (CM 184-7.60), all early 2nd century, cordoned jar as Fig 94.366, two bead-rimmed and a straight-sided dish, all burnished; shear blade (Fig 54.22, CM 183.60).

10 Large pit, pottery (Figs 96.406, 97.410; also grey and colour-coat folded beakers), glass (Fig 62.5) and iron (Figs 53.21; 55.56; CM 170-78.60). Latest material 4th century.

11 Large pit; pottery including Chi-Rho graffito (Fig 96.405,408; 97.411-12; CM 189-92.60). There appear to have been a number of large pits containing iron slag in this vicinity (HJDB).

12 Continuation of track F353 in machine scrape for estate road.

13 Circular kiln or furnace (MJC), clay walls standing to a height of *c* 1.2m, tiled floor (P1 V). It contained late 2nd/early 3rd century. pottery and some fragments of human bone, possibly from a later inhumation.

Area C allotments

This area has been subject to repeated excavations by MJC and HJDB; there were stratified occupation levels including floors, pits, ditches, a roadway and many finds. The following features can be singled out:

1 A deep linear feature approximately 3m wide and 3m deep traced for 11m; finds included 1st and 2nd century samian and a blue and white glass bead of late Iron Age type (Guido 1978, 117, class 7A; 29mm diameter). A defensive ditch, see C5 below.

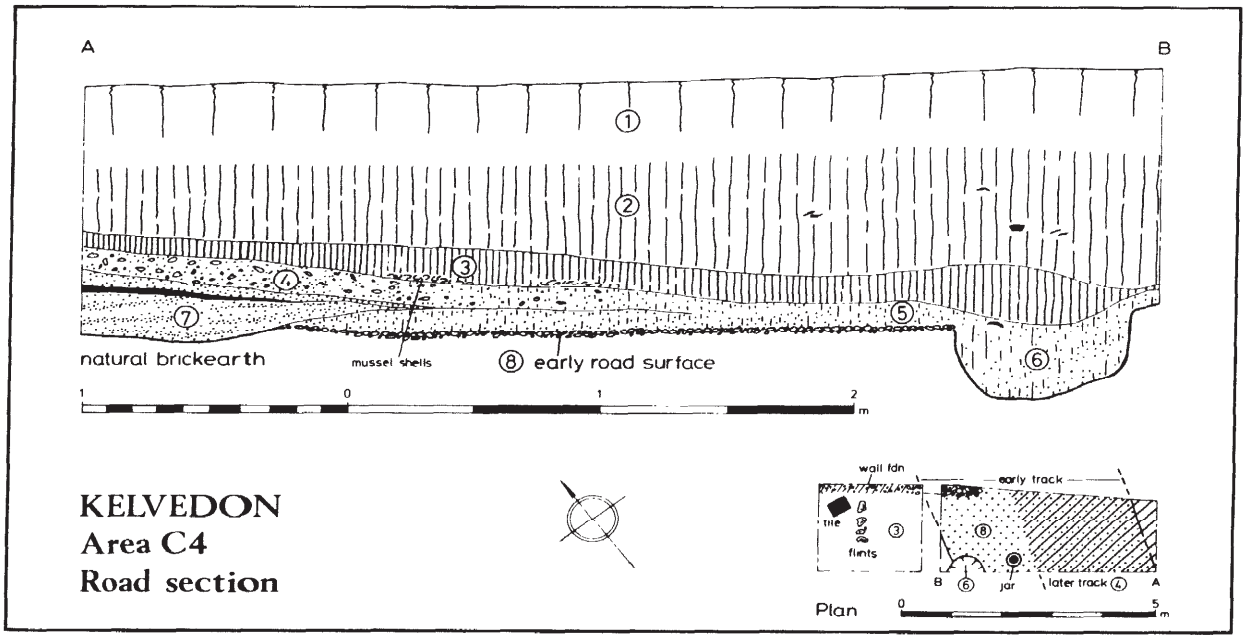


Fig 41 Area C4: section of trackway

2 A large 'pit' *c* 2.5m deep sealed by a gravel floor on which were three Constantinian coins (CM 168-9.60). In the pit was barbotine decorated colour-coat and other pottery (Fig 96.404; CM166:60), sheep and dog skulls, a lead or pewter mirror case (Fig 60.1; CM 198.60) and, rolled up at the bottom, a lead *defixio (J Roman Stud,* 48, 150, fig 20). This pit may in fact fact have been the nothern terminal of the defensive ditch (Cl) abutting the roadway (C4).

3 Hoard of 12 coins (Tetricus I and II and barbarous radiates) found in a pit south of C2; also coins of Allectus, Carausius and Victorinus and a bronze spoon (CM 158-62.60).

4. Track sectioned by HJDB in four places in area C (also in area R); a continuation of F353 (B1, B5). One cutting was recorded by the author (Fig 41). The earliest feature was a layer of pebbles, (8), 3m wide, laid directly on natural brickearth, cut by a pit (6) 0.7m wide containing early Flavian samian. The southern end of layer 8 was overlaid by several layers of sand and gravel (4, 5, 7) and all were sealed by a layer of charcoally loam (3) containing much iron slag. This lay directly below a deep topsoil and subsoil (1,2). Associated with layer 3 and 1.4m east of the drawn section a sleeper wall of pebbles, tiles and quern fragments was traced north-wards for over 3m (Fig 41, plan inset). Associated with it was a line of flint pebbles and a complete upright storage jar with a stabbed shoulder sitting on the surface of layer 3. The pottery associated with all features except layers 6 and 8 was late 1st century. There were a few later sherds including colour-coat and East Gaulish samian from layer 2.

The principal value of this cutting is that it demonstrates the pre-Flavian origin of the trackway, F353, which was not sealed by later deposits in area B. In its primary phase it was flanked in both areas by quarry pits and subsequently, from the late 1st century, by industrial buildings. In area C these appear to have encroached upon the roadway, occasioning its remetalling and displacement southwards.

5. Part of this area has subsequently been excavated by ECCAS (interim notes in *Essex Archaeol Hist,* 10, 245; 11, 104; *Britannia,* 9, 451; 10, 311; *Medieval Archaeol,* 22, 143; Eddy 1982), to reveal the track with timber-frarned industrial buildings on both sides; there was evidence for bone-working and a timber-lined well contained a chalk figurine (Eddy 1982, fig 10). Some of these buildings were cut by a large ditch (Cl), abutting the track and thought to be defensive. It had been filled in by the mid 3rd century. Occupation is believed to have ceased in the early 4th century, but against this must be set the coin evidence from C2.

Area E School playing field

1 Excavations by Mrs B R K Niblett; see above p 13 and Fig 10. Trench A, gravel surfaces; B, 1st century ditch; C, timber buildings; D, gravel surface.

2 A circular building excavated by HJDB *(Britannia,* 3, 333) was 7.5m in diameter, with an eastern entrance (Fig 42). It was defined by a wall trench up to 0.6m wide and 0.45m deep, partly destroyed by late Roman and post-medieval ditches. A gravel floor, part natural, part laid, and worn in the centre was overlaid by a deposit of burnt structural daub which covered most of the interior. This sealed the only finds from the structure, all of which were burnt: Antonine samian (Fig 73.44-5), a pipeclay lion's head (Fig 62.12), an enamelled bronze handle (Fig 48.43), and a lozenge-shaped plate brooch with enamelled 'eyes' (disintegrated). The exotic nature of these and other items from the vicinity (E3), the lack of general domestic rubbish (also noted in E1A) and the anachronistic nature of the building type suggest that this is a temple (see discussion p 136). It was burnt down at the end of the 2nd century.

3 One or more pits, said to be 2m deep and full of charcoal, contained the following items, in addition to samian, coarsewares, and coins:

(a) Quantities of 1" cube red tesserae; these were also found by Mrs Niblett reused in a gravel surface (E1A).

(b) Several bronze letters from an inscription (Fig 47 a-f).

(c) A silver necklace (Fig 61.1).

(d) A cornelian intaglio depicting Mars (Henig 1974, cat. 82).

(e) Several lengths of square-section bronze rod thought to be half-foot measures (VCH 1963, 150).

(f) Part of a human skull.

(g) A Palaeolithic hand-axe.

This material strongly suggests the clearance of a second building of greater architectural pretensions than E2 and its associated votive deposits. It is not clear whether this was linked to the destruction of E2 or a later operation. Votive material also found its way to area C (C2).

4 In 1976 this field, which became a playing field in 1968, was landscaped for a second time to a depth of 0.3-0.6m, prior to building construction without any further excavation. This will have destroyed the surviving stratigraphy. Ground conditions were too dry to make any useful observations; an oven was seen in a stanchion hole and a coin, two brooches, pottery of 1st to 4th century date, roof tile, and tesserae were recovered.

Area F School

1 Excavation by Mrs B R K Niblett; see above p 12. Trench G; gravel surface, votive pot with applied bird (Fig 97.413) and potin coin (p 78.6).

2 Observation of contractor's trench (H) by BRKN, see above p 12.

3 Much pottery was found when the school was constructed and extended, including samian (Figs 71.18; 73.41, 42).

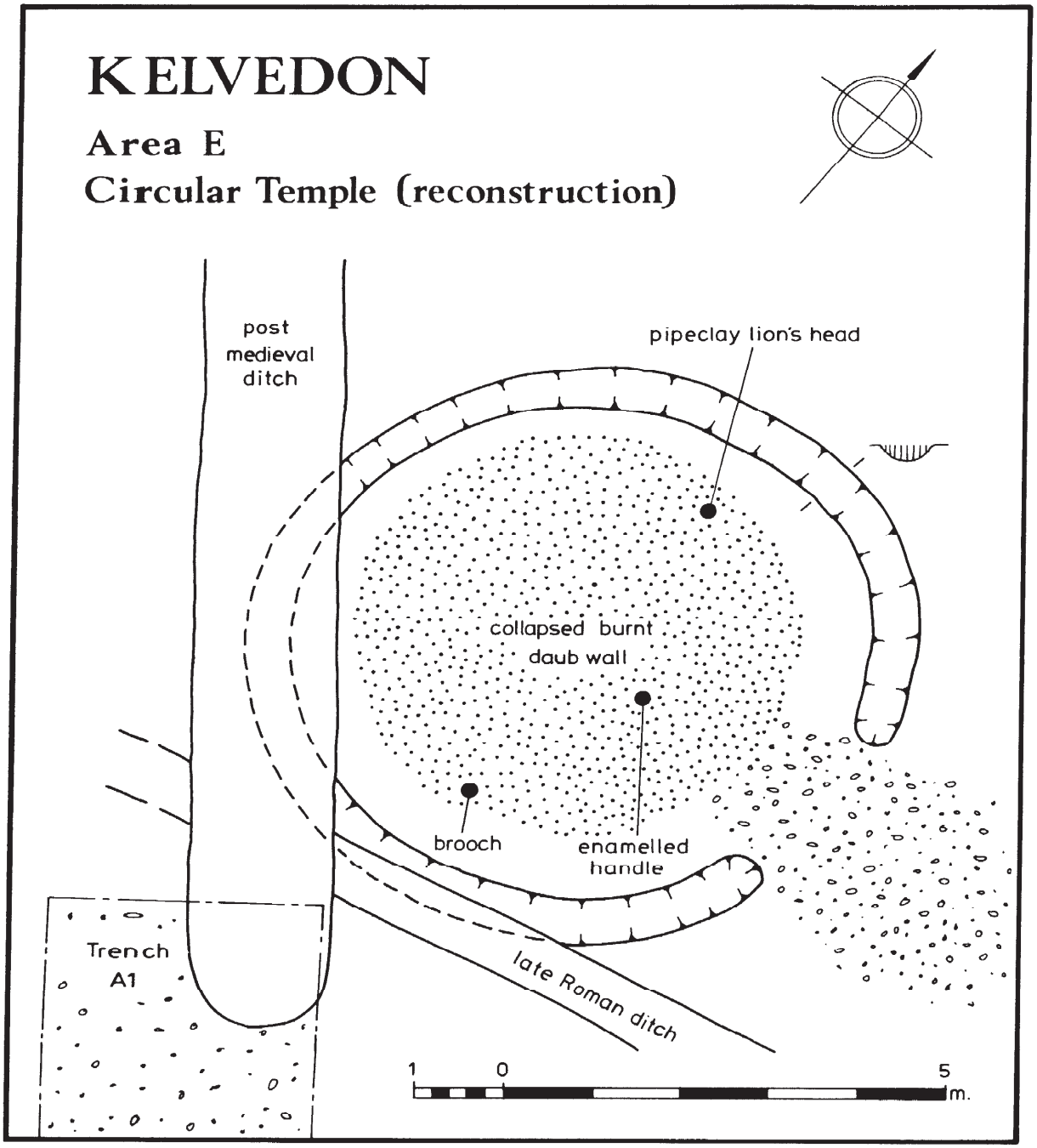


Fig 42 Area E: the circular temple

Area J Beanfield

1 Excavations 1971-3; see above p 15. These encompassed most of the unquarried area above the flood plain. Finds prior to excavation included grave vessels (G97-104), La Tène III brooches (Fig 43.3,8), a coin of Claudius, hipposandals and other ironwork (Figs 53.18-20; 55.57), and a stone moulding (Fig 69.8). The ditch F77 continued towards the river as a cropmark.

6. THE FINDS

Some finds catalogues are in microfiche; summaries appear in the text together with all illustrations and discussion. All the illustrated finds from contexts other than graves in areas B and J are correlated in Table 16 (Appendix).

Objects of copper alloy (Figs 43-52; MF l.B13-LC10)

with a note on a head-stud brooch by S A Butcher

The brooches

Numbers 1-9 (Fig 43) are La Tène III types; examples of the commonest form, with a moulded bow and pierced catchplate (1-4, 7, 8) are all from area J but in unstratified or residual contexts. The pin of a large brooch (5) comes from the period 2A/B ditch 5350. A flat-bowed brooch (6) was found in the period 2C ditch 424 (B4) together with 14 below. Its spring had been broken and the pin replaced. There is an unprovenanced example of a true Nauheim type (9).

These brooches date to the second half of the 1st century BC and consequently are barely represented in the Camulodunum type series (Hawkes & Hull 1947, 308-28) which provides the principal parallels for the remainder of the Kelvedon brooches.

Numbers 10-12 are Nauheim derivative types from residual contexts in areas B and J. The Colchester type (Cam III and IV) is represented by 14-21 (Fig 44); 14 was found with 6; 16 and 17 were from period 3A contexts (J3 and B2, 49). There are single examples of the 'thistle' type (22), rosette type (23), Camulodunum type XIV (24), 'Aucissa' type (Fig 45.25), Hod Hill type (26), Bagendon type C (27), and Langton Down type A (28). Brooches 23-26 were stratified in period 3A contexts (B3, 339; B5, 514; J3; J3). A head-stud brooch (29) enamelled in red and blue comes from area El; it is late 1st or early 2nd century.

Numbers 30 and 31 (not illustrated) are fragmentary plate brooches. A penannular brooch with coiled terminals (32) was part of the grave goods in G20 and by its context 4th century.

Other objects

There are several items of military equipment which find parallels at Camulodunum and Hod Hill (Brailsford 1962). These include a harness pendant (Fig 46.34), shield bindings (35, 36), a scale of *lorica squamata* (37), a hinge (38), a repoussé plate (39), and a harness ring (40); 34-37 come from area B, including the period 3A ditch B2.5, and the remainder are all from the period 3A ditch J3.

The fine late 1st century lamp (41, P1 VI) is an unstratified find from area L3 (MF l.B10). The letter fragments (Fig 47.42) were probably part of a votive inscription and were found with other temple debris in area E (p 55).

Also from area E was the heavily burnt open-backed handle (Fig 48.43), decorated with chequered enamel in black, yellow, blue and red. It was found in a late 2nd century context. The small bell with an iron clapper (44) was an unstratified find (L3, MF l.B10). A variety of toilet implements were found including nail cleaners (45, 46, 51, 52), tweezers (48, 49, 50), and the bowl of an ointment spoon (47). There were three bodkins (53-55), one of which was bent to form a hook (55), several hairpins with decorative terminals (56, 57, Fig 49.58, 59), a tinned rat-tailed spoon (60), a drop handle (61), a finger-ring with a clear glass stone (66), and a variety of split rings, terrets, studs, cleats, washers and sheet fragments (62-81). The majority of the foregoing items were derived from excavated contexts of later 1st or 2nd century date in areas B2 and B3.

Late Roman objects include a buckle (65) of military type (Hawkes & Dunning 1961, 41, type 1A) with stylized dolphin heads, from a possible burial in area H (MF 1.B9), and a variety of bracelets, most of which were grave goods. These included flat-section bracelets with snake-head terminals (Fig 50.82-4) or a hook and eye fastening (85); round-section bracelets with grooved or plain terminals (Fig 51.86-8), and twisted-wire (from two to five strand) bracelets (89-92). Bracelets 83, 86 and 91 came from G19; 82 from G25; 89 from G41; 87 and 92 from G52. All are 4th century.

The most notable post-Roman object is a harness pendant engraved with an owl (Fig 52.93, area N, unstratified). From area B come also a bell (94), pins (95, 96), lace ends (97, 98), and a strap end (99); and from E a post-medieval shoe buckle (100) and a keyhole escutcheon (101).

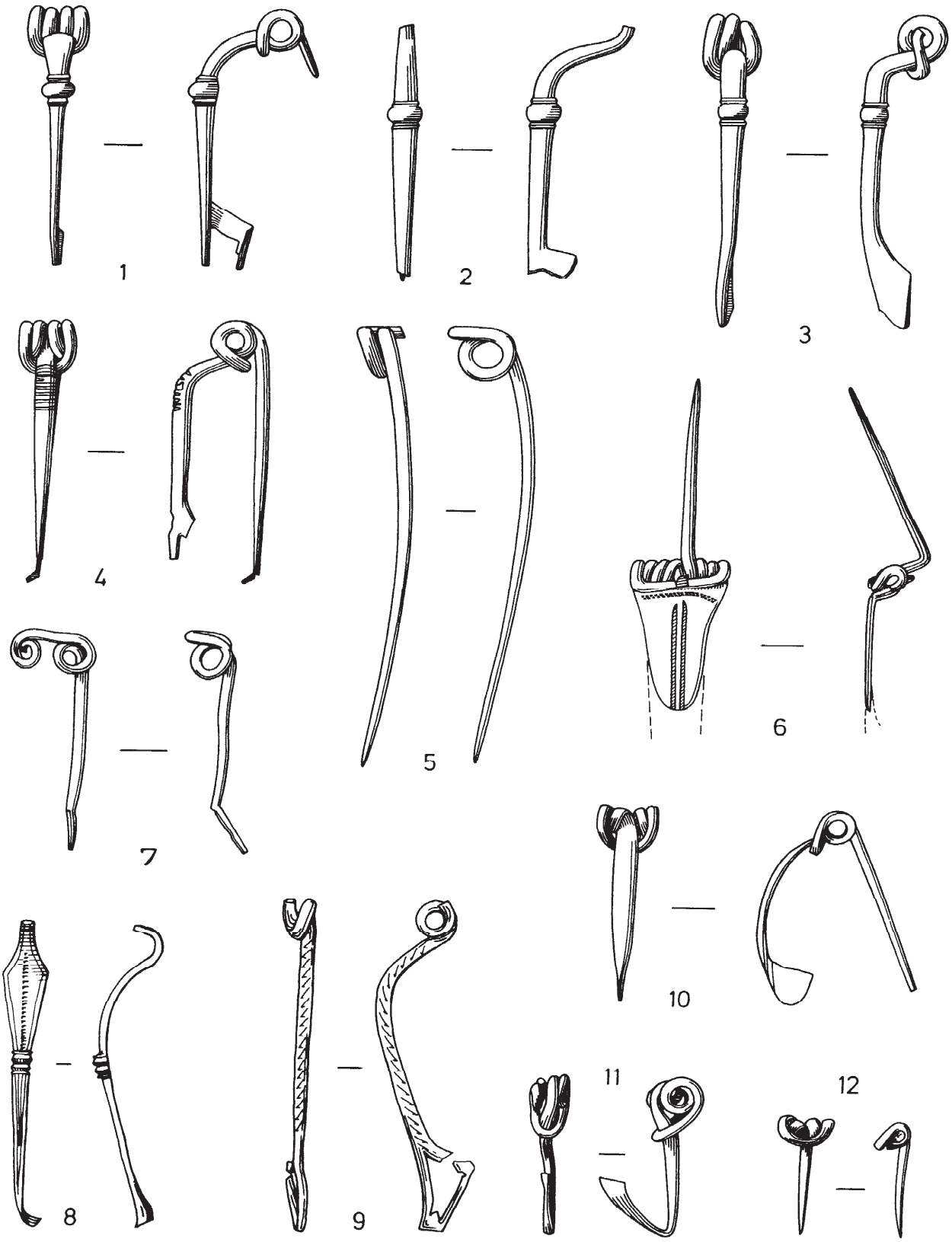


Fig 43 Objects of copper alloy: brooches; scale 1:1

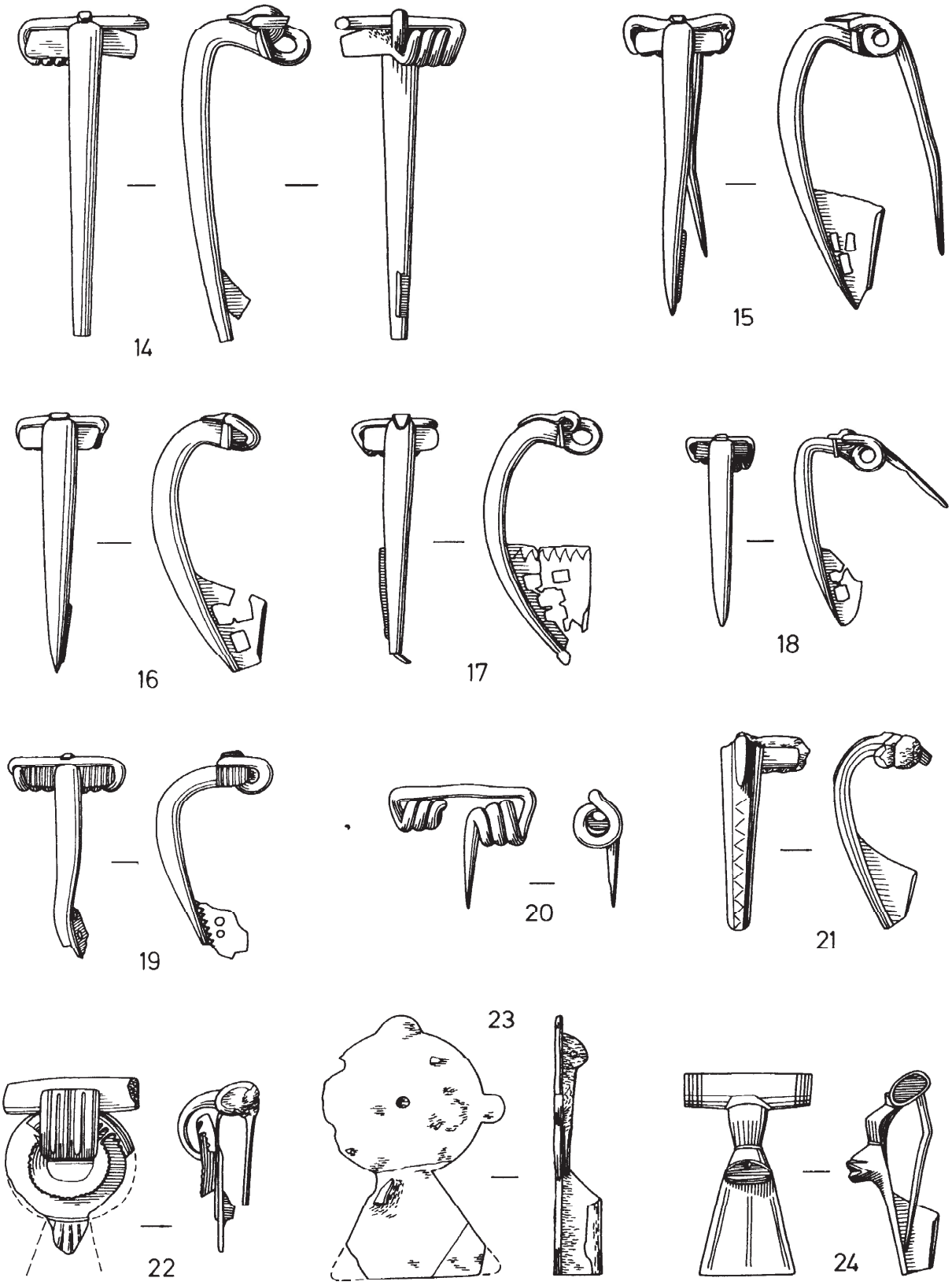


Fig 44 Objects of copper alloy: brooches; scale 1:1

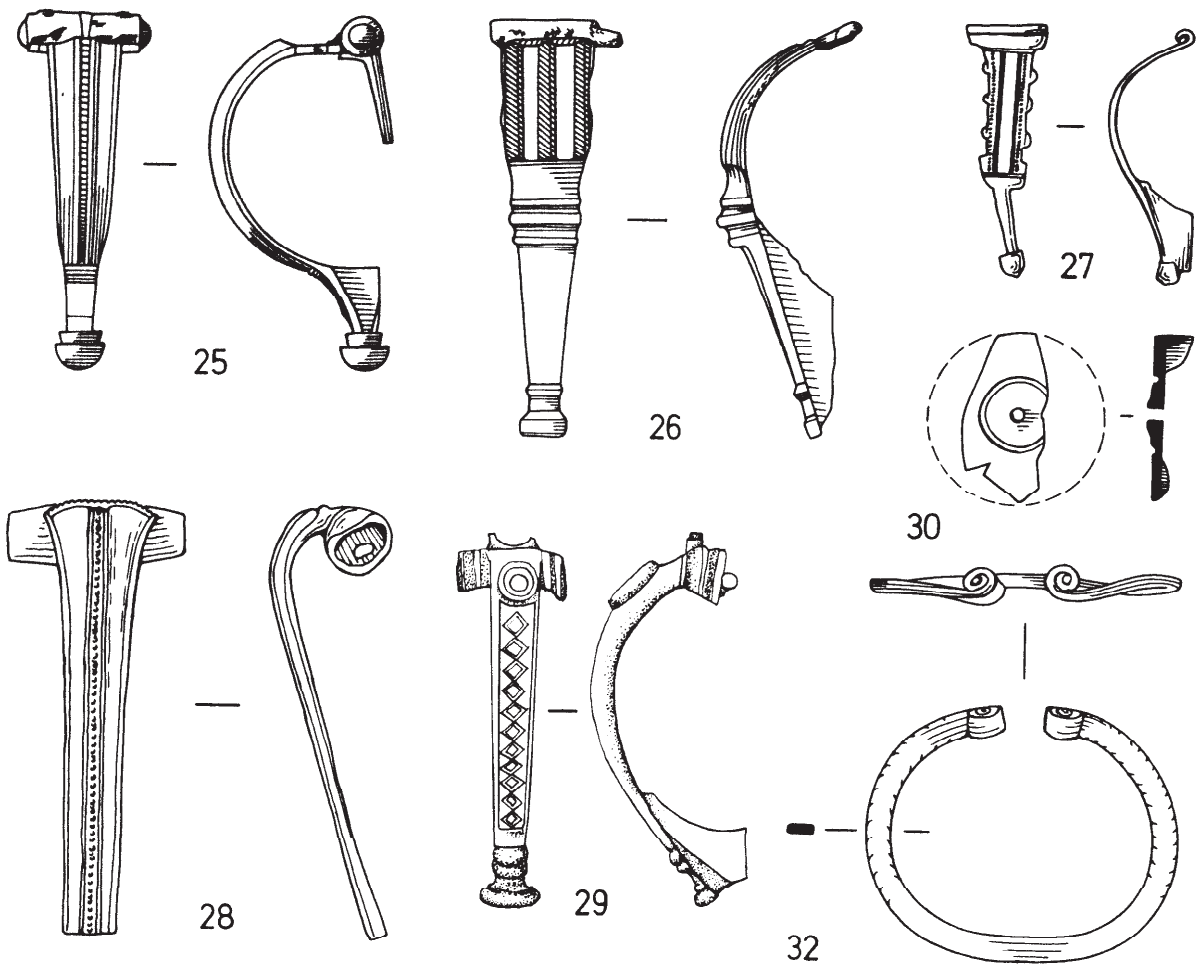


Fig 45 Objects of copper alloy: brooches scale 1:1

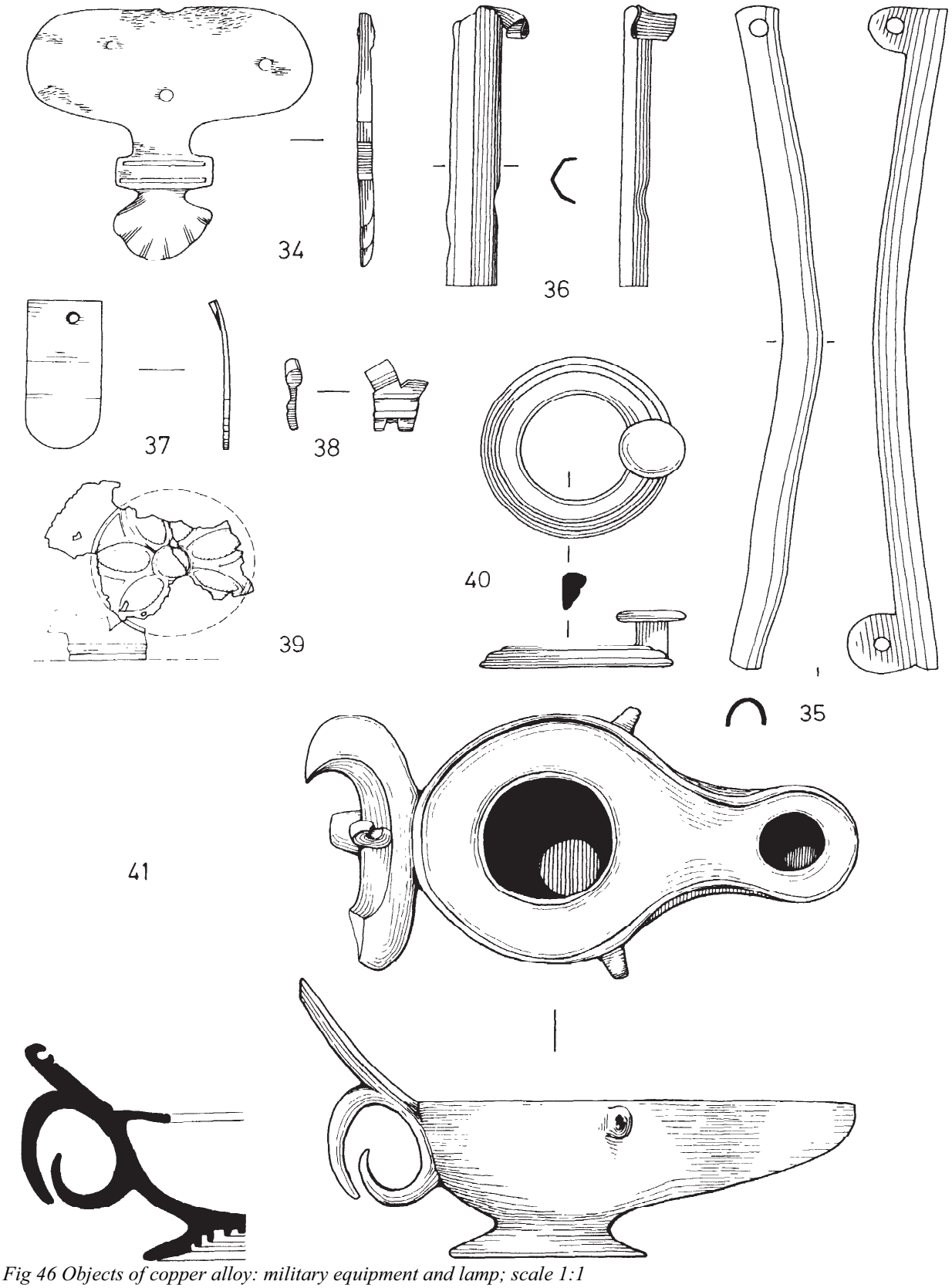


Fig 46 Objects of copper alloy: military equipment and lamp; scale 1:1

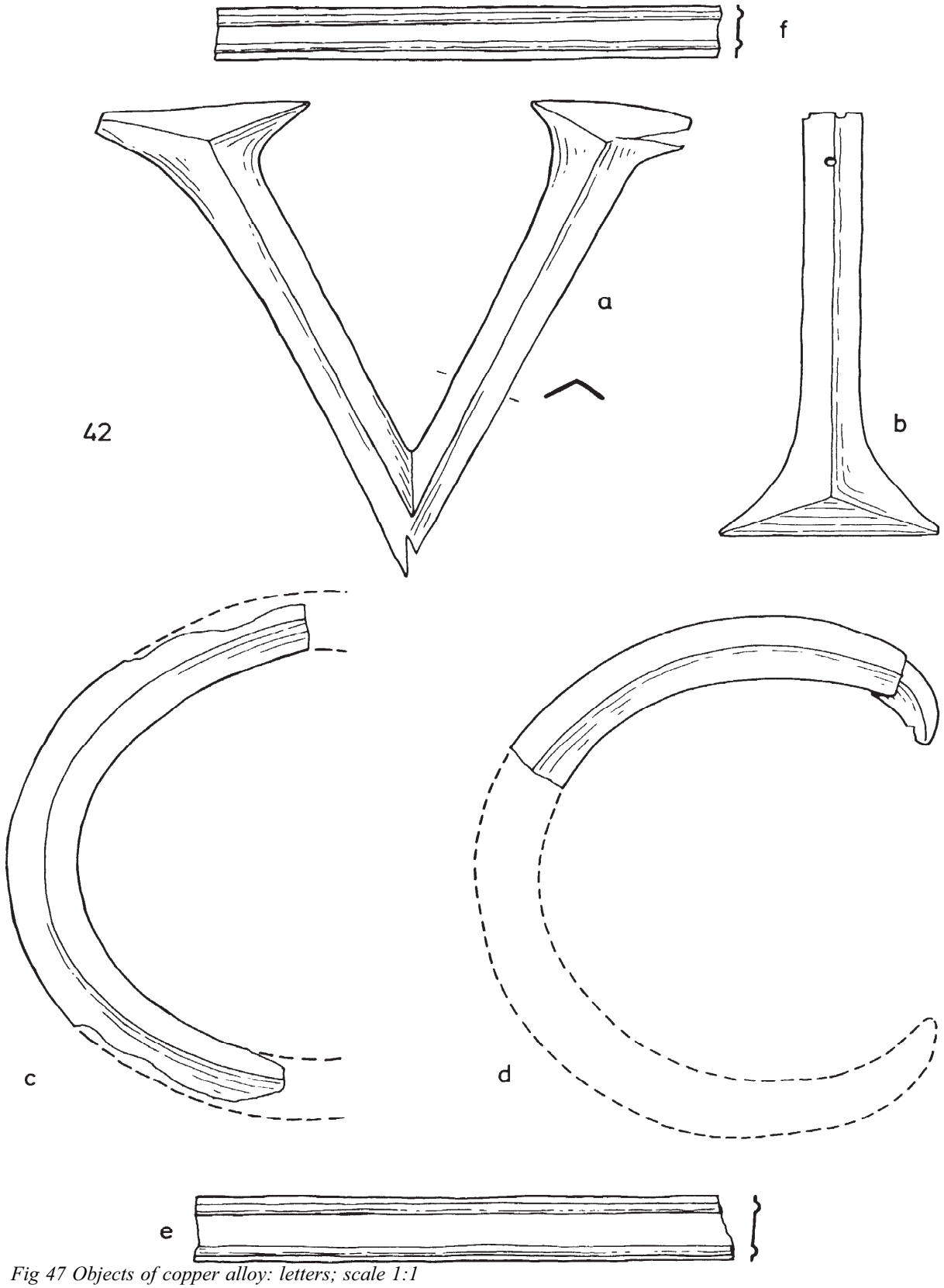


Fig 47 Objects of copper alloy: letters; scale 1:1

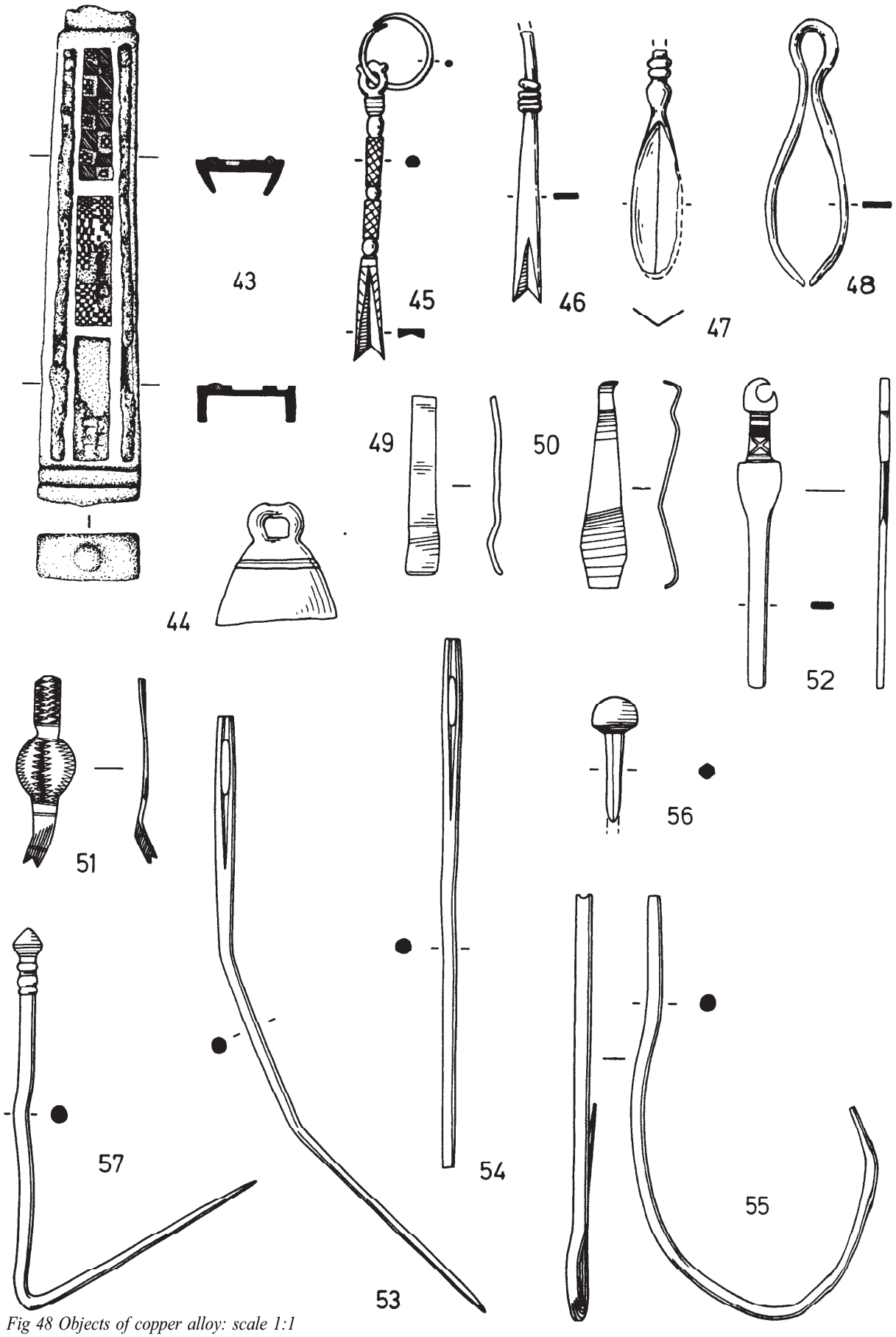


Fig 48 Objects of copper alloy: scale 1:1

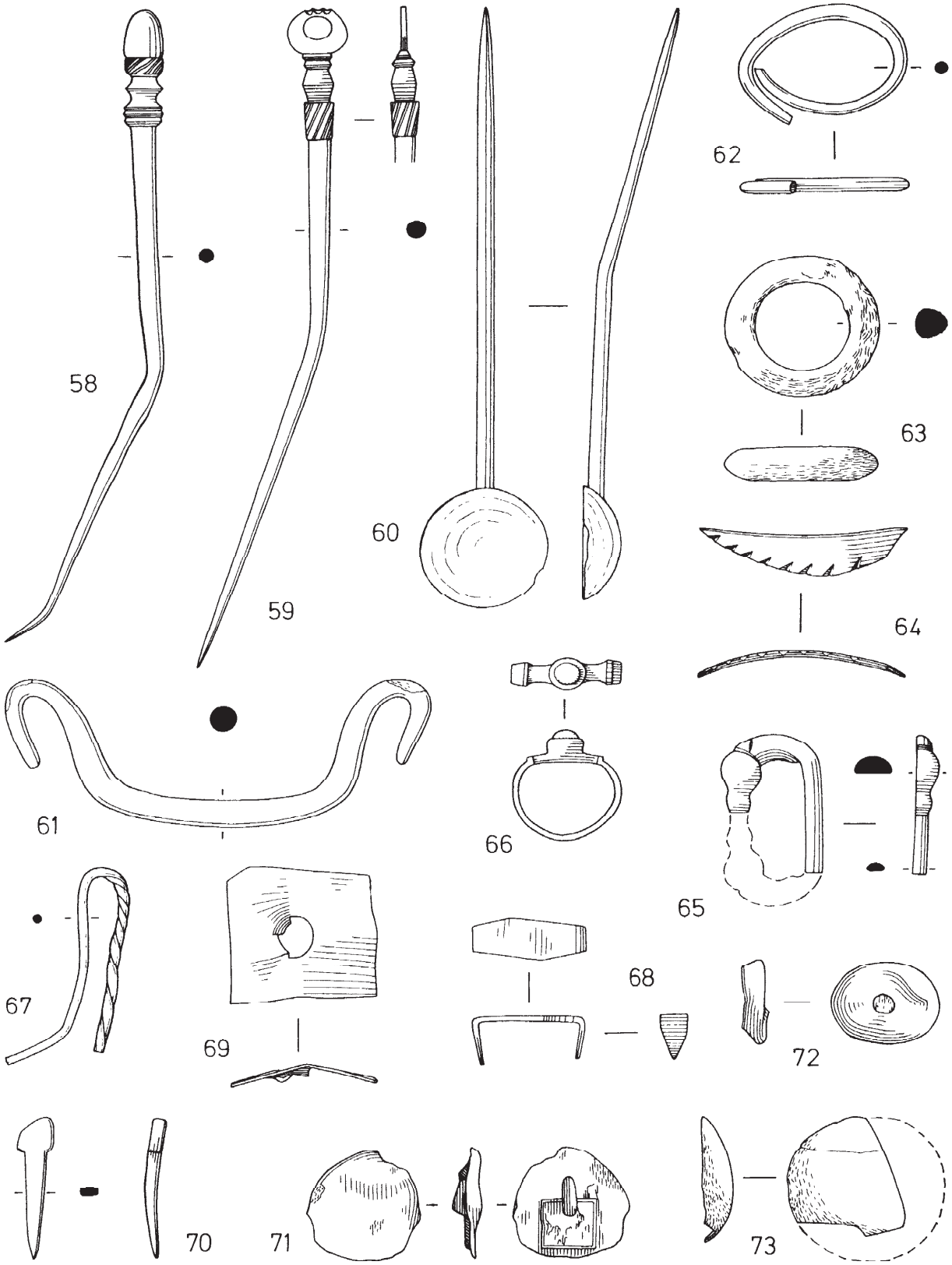


Fig 49 Objects of copper alloy: scale 1:1

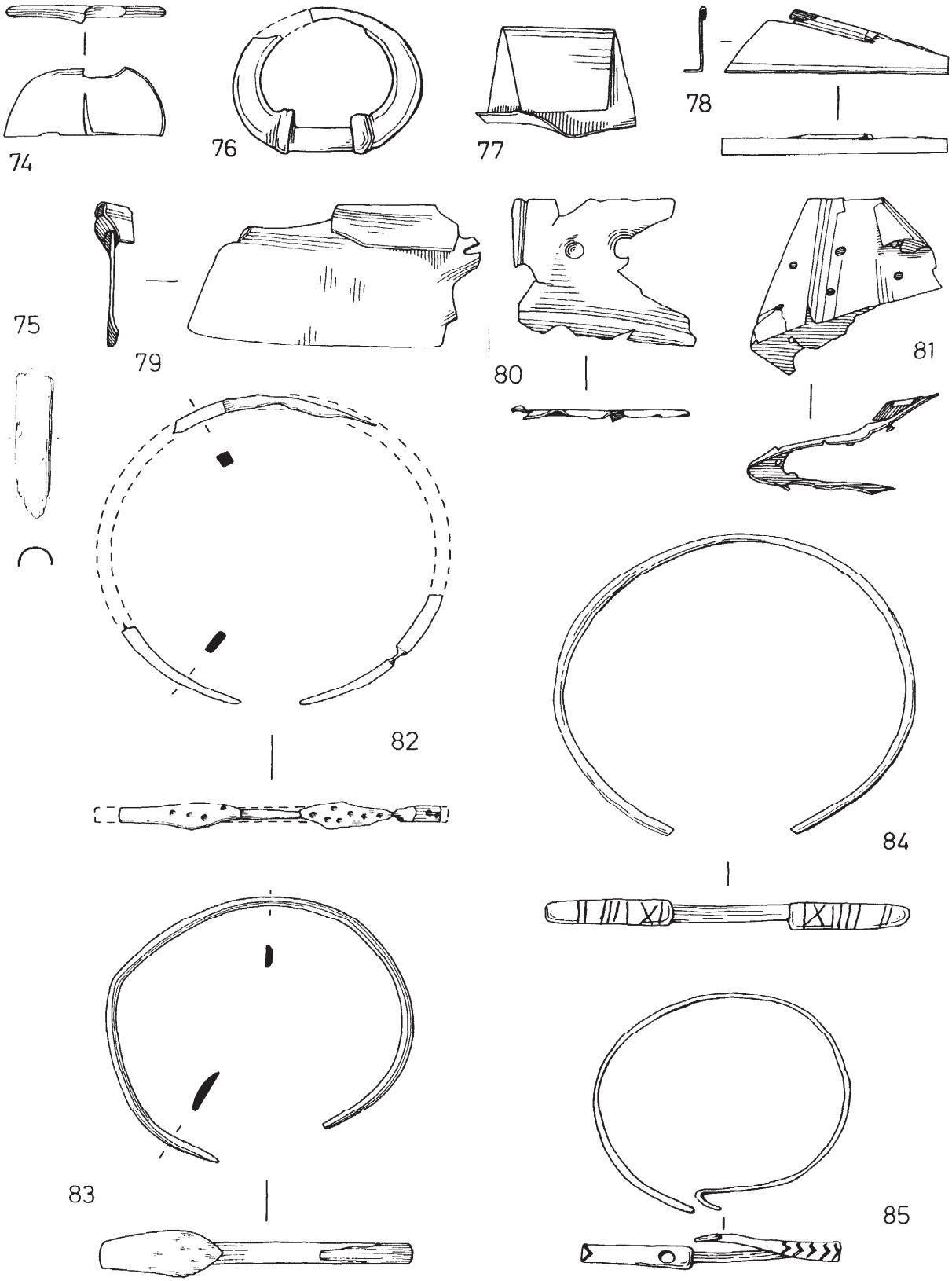


Fig 50 Objects of copper alloy: bracelets; scale 1:1

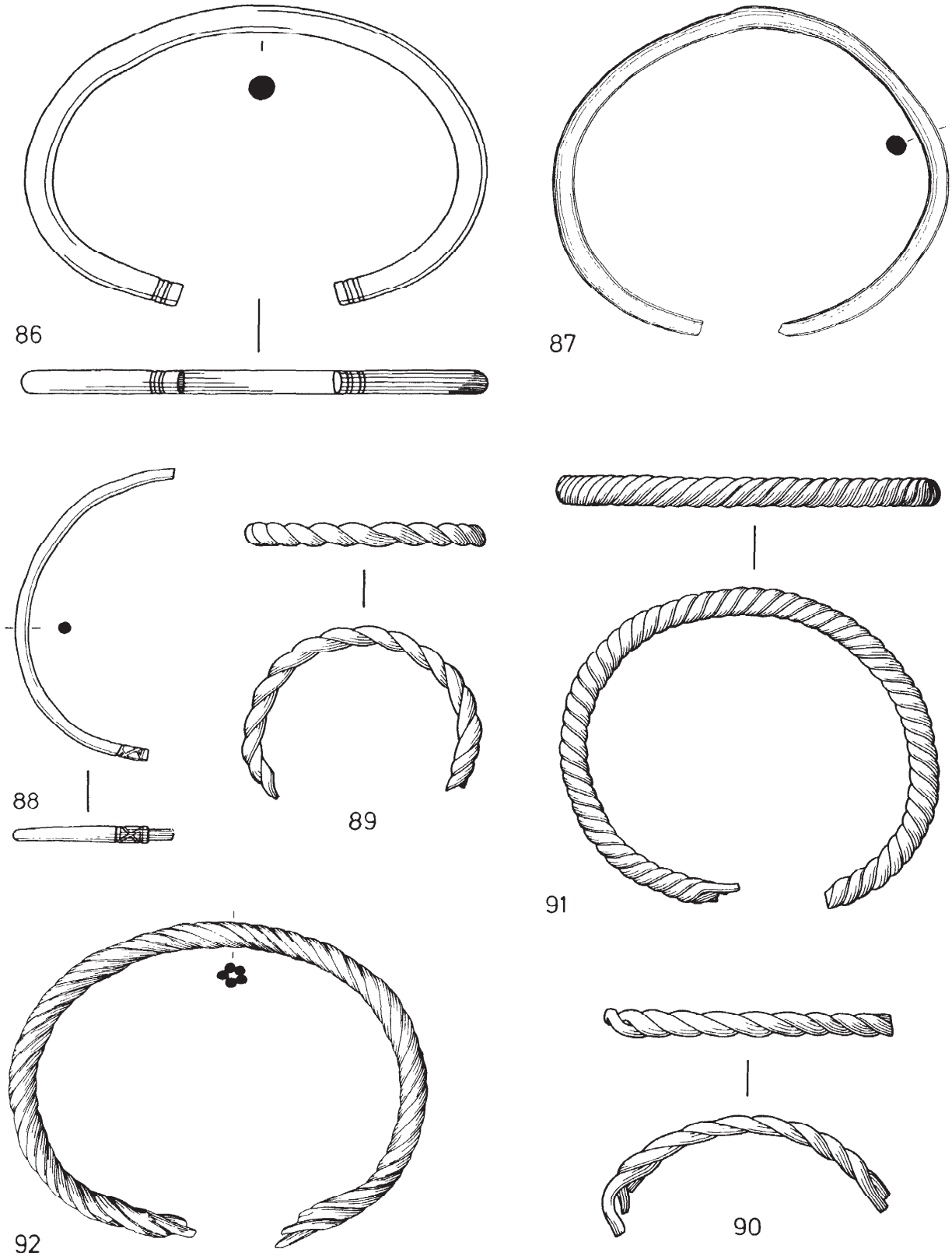


Fig 51 Objects of copper alloy: bracelets; scale 1:1

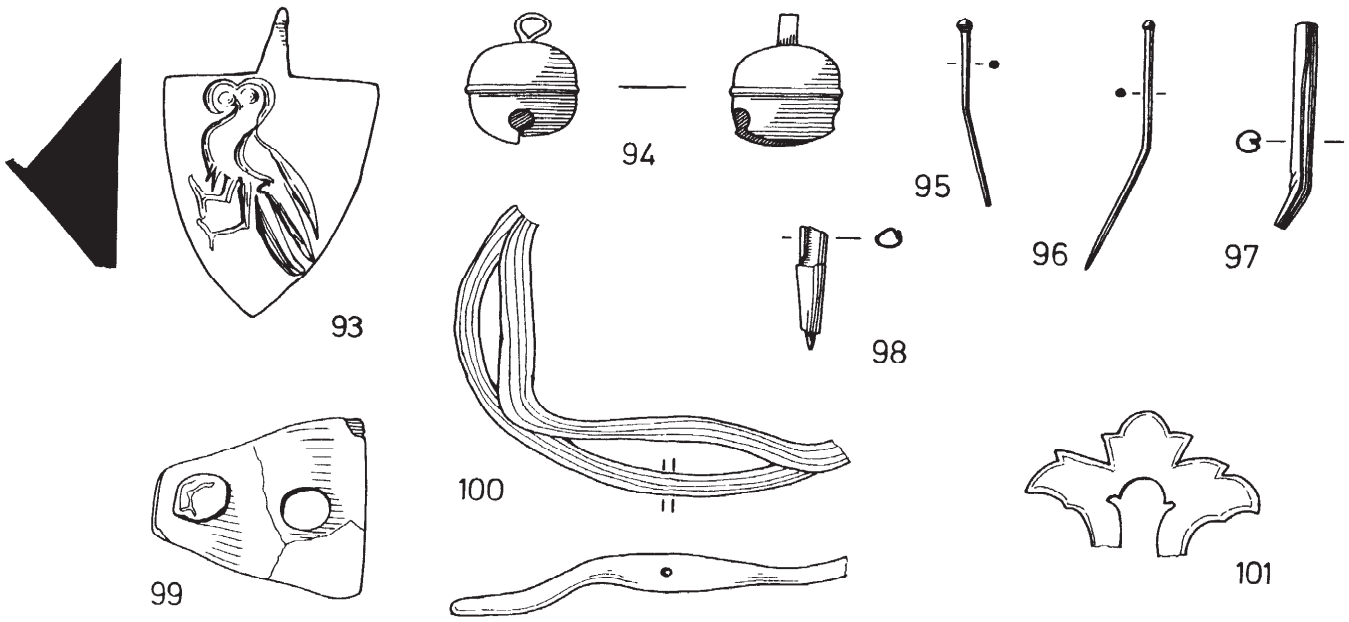


Fig 52 Objects of copper alloy: post-Roman; scale 1:1

Objects of iron (Figs 53-9; MF 1.C10-1.D1)

About 400 pieces of iron were recovered from the excavations, excluding coffin fittings and grave goods. The illustrated examples are representative and include all the recognizable items; the condition of pieces was poor and drawings have been prepared with the help of X-radiographs. The remainder consisted of nails, which fall within the range illustrated under coffin fittings, strap fragments and unrecognizable lumps.

Late pre-Roman Iron Age objects include a rare thistle-headed linch pin (Fig 53.1) and a conical-headed pin (2) both from the period 2B/C ditch J136. There were also several Nauheim derivative brooches (3-7); one came from the period 2C ditch B4, 424. Two *ballista* bolts (8) are not closely provenanced, but a small socketed spearhead of Roman military type (9) was found in the period 3A ditch J3, and 10 (J unstrat) may also be military. Other items include a socketed ferrule (11), a possible socketed chisel (12), a variety of knives (13-20), a pruning hook (21), shear blades (Fig 54.22, 23X a tanged chisel (24), linch pins (25, 26), ox goads (27-9), rings (30-2), a split pin (33), a bucket escutcheon (34), a latch lifter, and various rods, hooks, wedges, staples and straps (36-54). These (11-54) were all found in areas B and J; and the majority, although not in themselves closely datable, were derived from 1st and 2nd century features. The rush-light holder (fig 55.55), tumbler lock slide key (56), and hipposandals (57 and 58) are unstratified finds from areas E, B and J. The bolt, split pin and linch pin (59-61) are from the excavations in areas E and F.

Coffin fittings (Fig 56)

Thirty-three graves contained nailed coffins and there were four cremations in nailed boxes; the majority of this ironwork, amounting to over 1000 items, was recorded three-dimensionally and provided valuable information on coffin structure. The number of nails used in individual coffins varied from less than 10 to over a 100 (110, G4; 102, G34) but very high numbers were exceptional; there were two more with over 60 (72, G49; 62, G56), six had about 50 but the majority (14) averaged 20. Nine had about 10 nails each; six of these graves were incomplete and the coffins in the remainder were small.

Because of the poor state of preservation exhaustive analyses of nail length were not undertaken; most were between 50 and 80mm long, a few were smaller and some large nails *c* 130mm long were also used at coffin corners (eg G41, 56, 69). All were flat headed, apart from three triangular-headed nails from G33 (2) and G77.

There was little structural ironwork other than nails; most notable was G4, a box with lockplate and handles (see also G33 and G62).

Nails

62 Typical nail, 65mm long, small flat head, G56; for a discussion of comparable coffin fittings, see Clarke 1979, 332-41

63 Nail, 70mm long, flat head larger than average, wood with grain running in two directions surviving in contact with iron. G20

64 Nail, 130mm long, flat head. G56

65 Nail, triangular head, over 100mm long, Manning Type II (1972, 186). G77

66 Nail, as 65, 140mm long. G33

67 Nail, square shank with flattened wedge-shaped head bent over at near right-angles; cf Rogerson 1977 fig 62.19-21. G20

Other fittings (Fig 56)

68a,b A pair of staples 160mm long with curved hooked ends beaded on the external angle. The shaft of b is bent and the hook has been hammered upright. G33

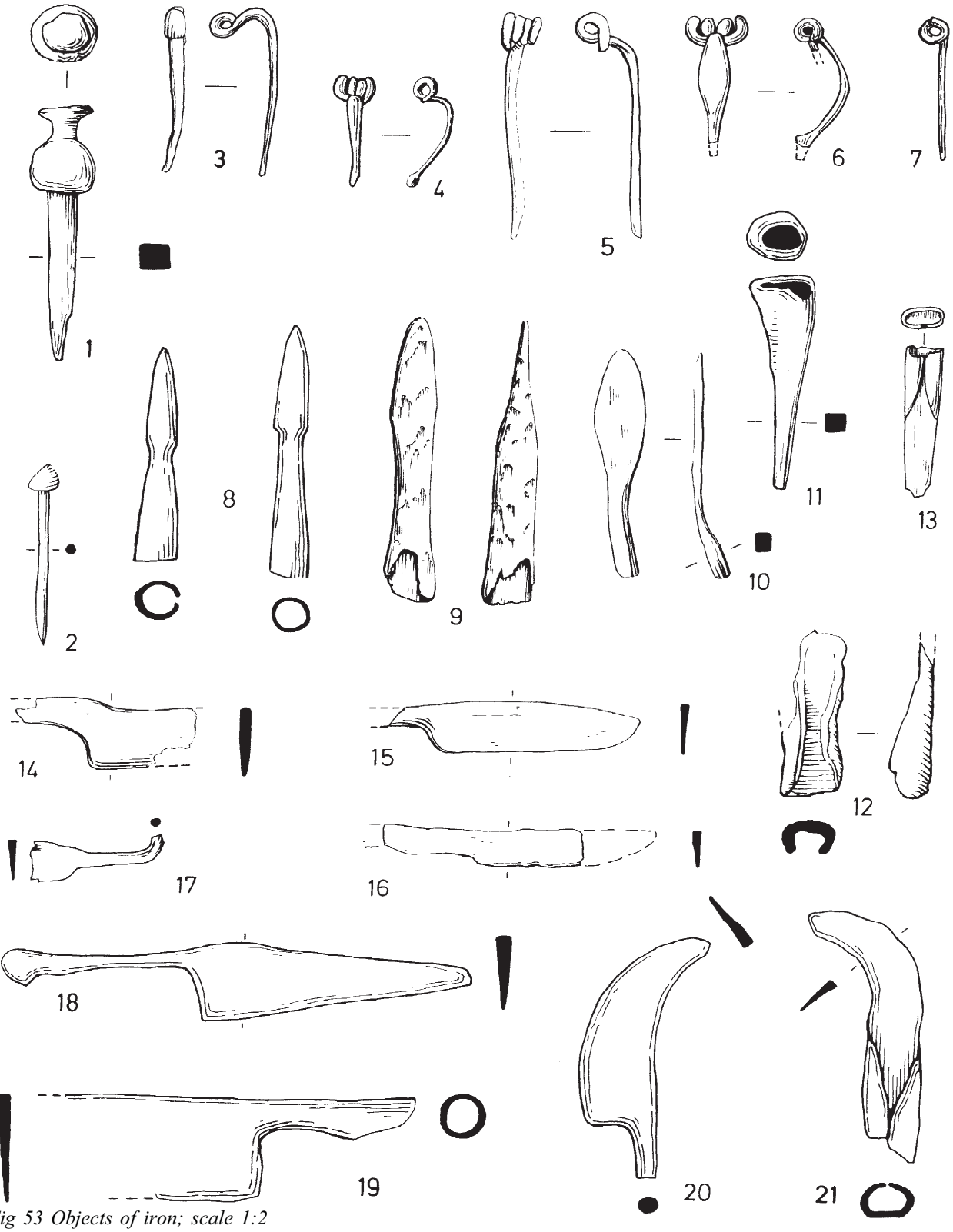


Fig 53 Objects of iron; scale 1:2

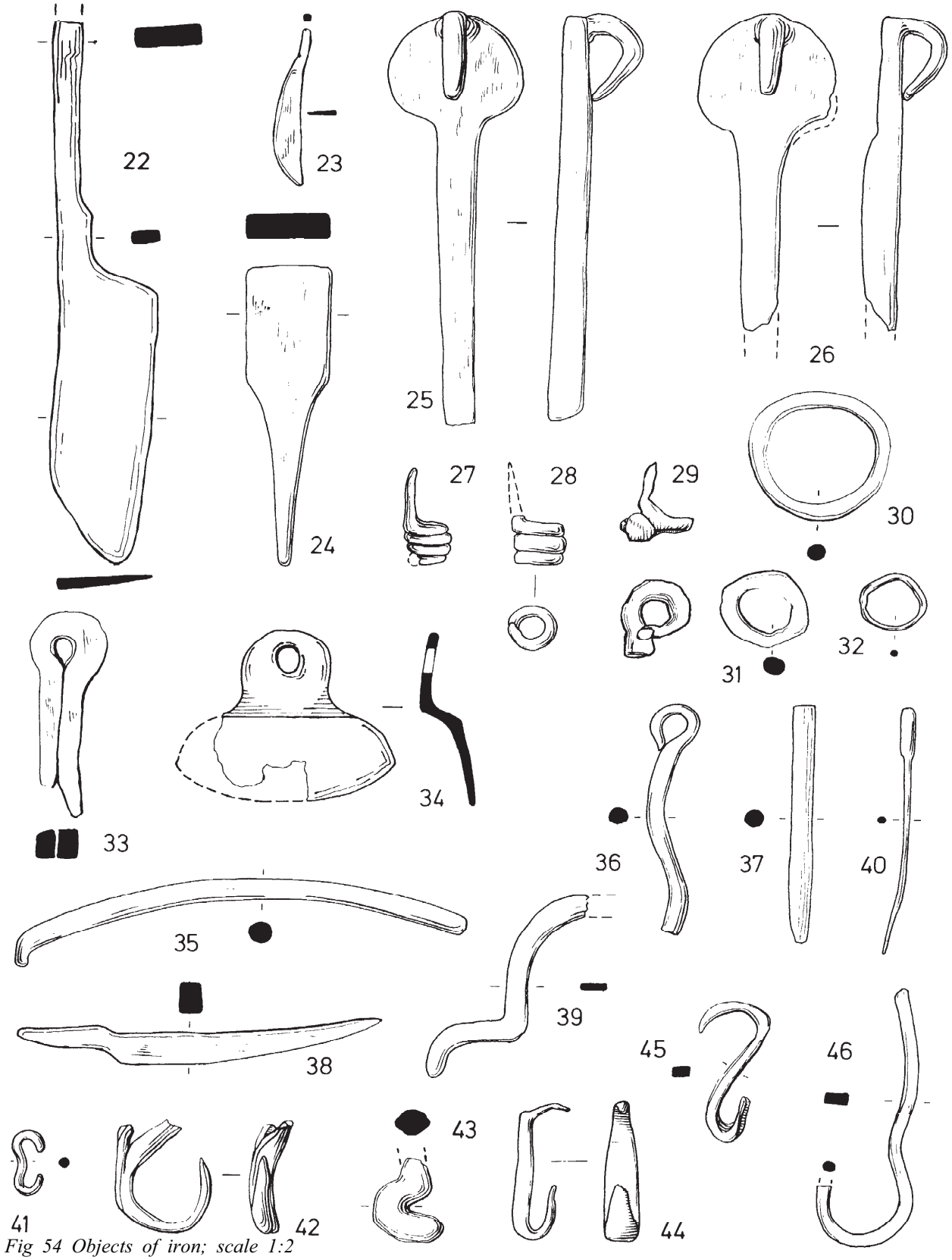


Fig 54 Objects of iron; scale 1:2

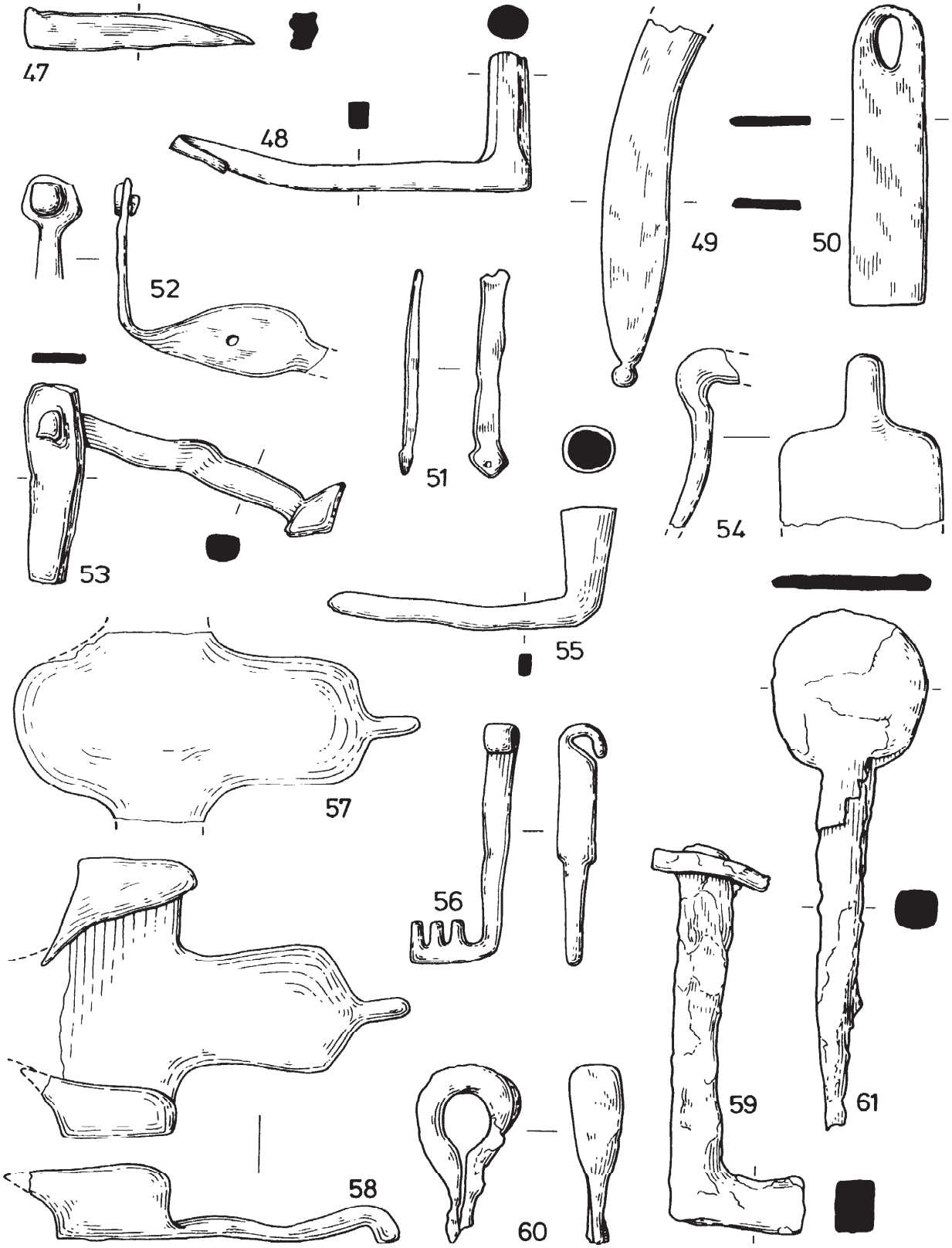


Fig 55 Objects of iron; scale 1:2

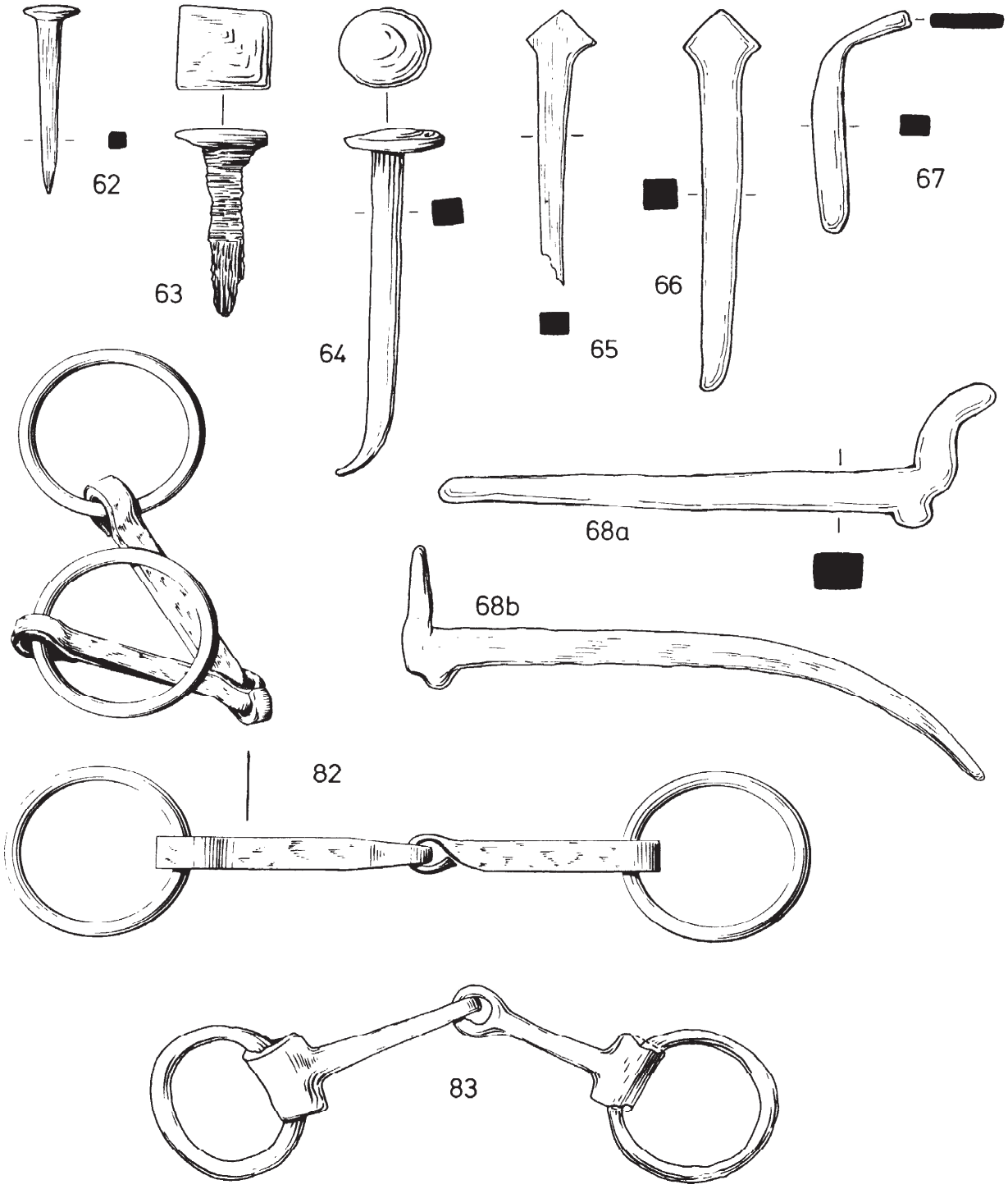


Fig 56 Objects of iron: coffin fittings and grave goods; scale 1:2

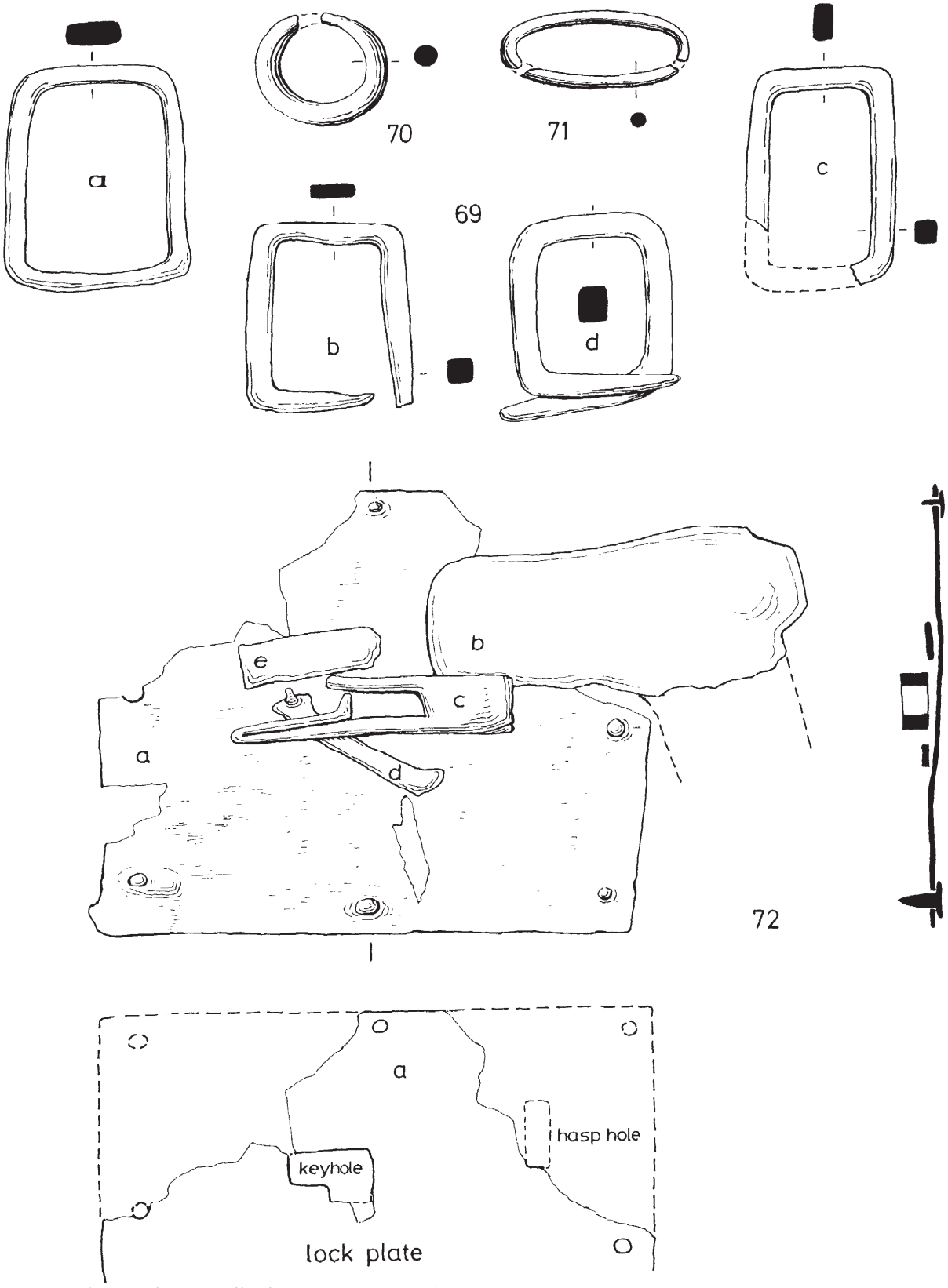


Fig 57 Objects of iron: coffin fittings grave 4; scale 1:2

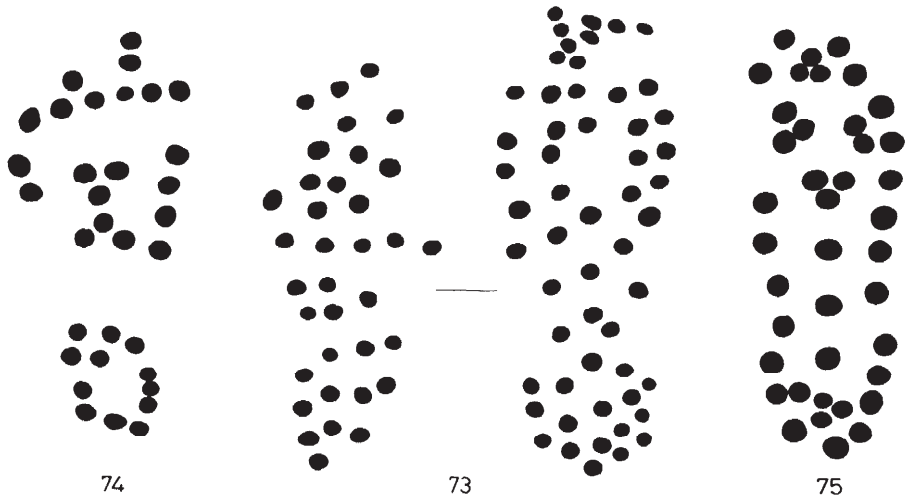


Fig 58 Objects of iron: hobnail boots; scale 1:4

Grave 4 (Fig 57)

69a-d Four subrectangular loops made from rectangular-section bars of variable dimension, found in two pairs. In each case the upper was a closed loop and the lower open with lapped terminals. From their position on the chest they would appear to be handles and must have been secured by straps as they cannot have been fixed directly to the wood.

70 Ring, broken

71 Oval ring, broken

72 Lock mechanism, plough-damaged and corroded, illustrated as found, consisting of:

a Fragmentary sheet-iron lock plate secured by eight rivets, and pierced by an L-shaped keyhole. There was little trace of a hasp-hole; a possible position has been indicated

b Plate, of heavier gauge than a, finished on three sides but broken on the fourth. It does not form part of the mechanism and may have been a hinge plate from the hasp, which was missing

c Bolt, solid at the end which engaged the hasp, pierced in the middle to admit the key and terminating in a thin folded strip

d Flat hooked and tapered rod riveted at one end, probably the spring

e Plate, riveted at both ends

The lock is in too poor a condition to reconstruct exactly but it is clearly a version of the tumbler mechanism illustrated by Wheeler (1930, fig 16). Complete locks, especially in iron, are not commonly found. Bronze escutcheons and bolts come from London (Wheeler 1930, fig 17) and Chichester (Down & Rule 1971, fig 5.16, 171K); there are iron lock plates from Gadebridge Park Villa (Neal 1974, fig 71.399, 400).

Grave goods (Figs 56, 58, 59)

Hobnail boots were found in thirteen graves, one of which (G39) contained two pairs. In a few instances the shape of the sole had been preserved and these are illustrated in Fig 58, cf Clarke 1979, 322-5; also Crummy 1983, fig 56.

73 Right and left feet. G32

74 Left foot. G25

75 Left foot, G39. The other pair in this grave was of the same pattern but less well preserved.

Fig 59

76 Buckle with a D-shaped loop, tongue missing; cf Clarke 1979, 278, fig 35.25. G69

77 Oval plate domed in the middle, with a central square hole and a flanged rim. G77

78 As 77, G77. These objects appear to be paired but are hard to parallel. Their shape and the fact that they are centrally pierced suggests that they may be small cymbals. Copper alloy cymbals are not unknown in Britain; there is an unpublished and unprovenanced example in Peterborough Museum (Act no L378) and another, similar in size and shape to the Kelvedon examples, from Verulamiurn (Act no. 79.896). Such cymbals were often mounted on a pair of metal or wooden tongs. I am grateful to Dr Graeme Lawson for the foregoing information.

79 T-shaped lift key with a loop at the end of the shank; cf Neal 1974, fig 75.569. G35

80 The shank and bit from a broken tumbler-lock slide key. The bit has three teeth, cf Neal 1974, fig 71. G26. Keys of different types were found in graves at Lankhills (Clarke 1979,255) and keys of identical type have been found in Saxon cemeteries such as Burwell, Cambs (Lethbridge 1931, figs 22.10, 33.2), and Polhill, Kent (Philp 1973, fig 56. 543.

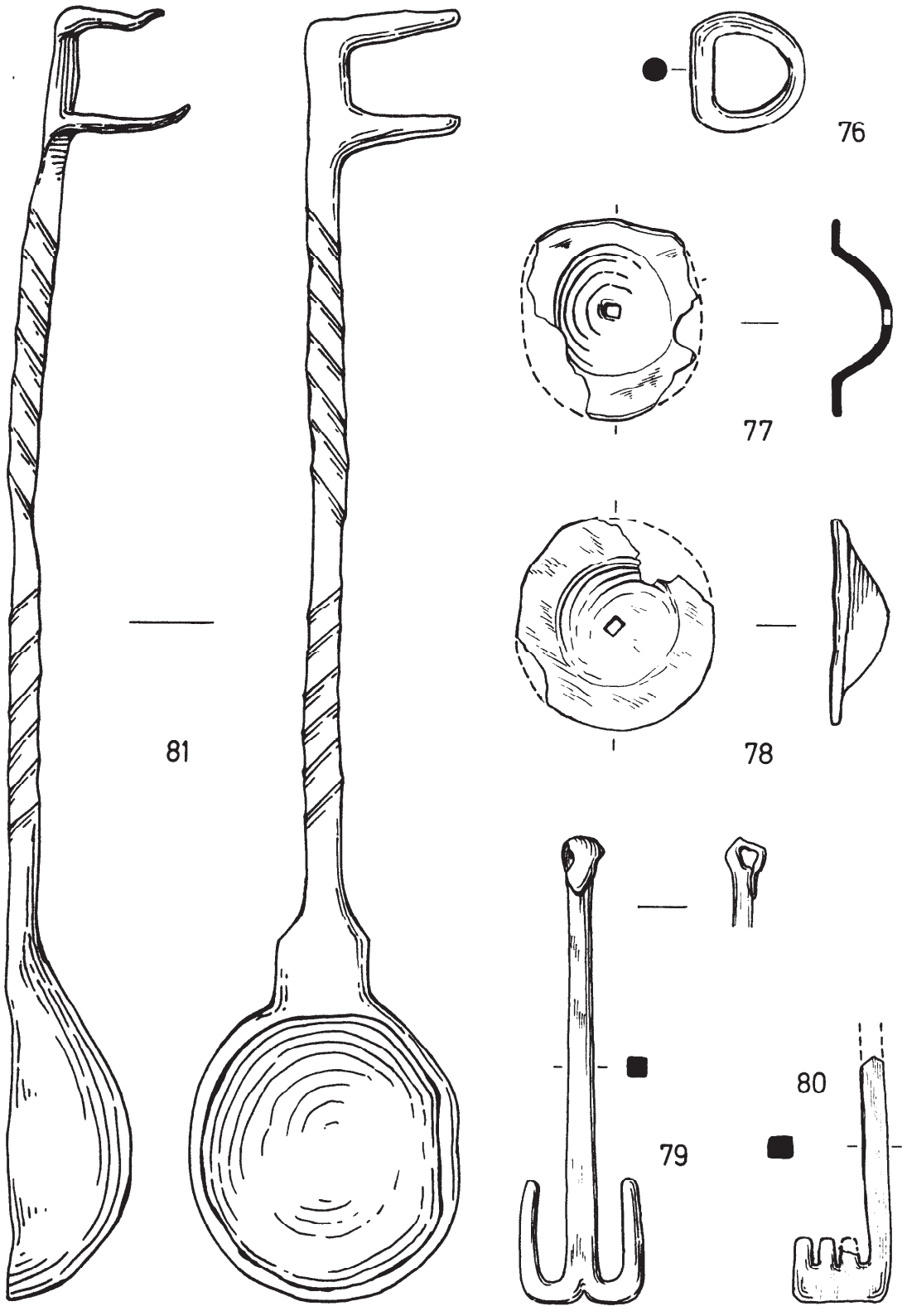


Fig 59 Objects of iron: grave goods; scale 1:2

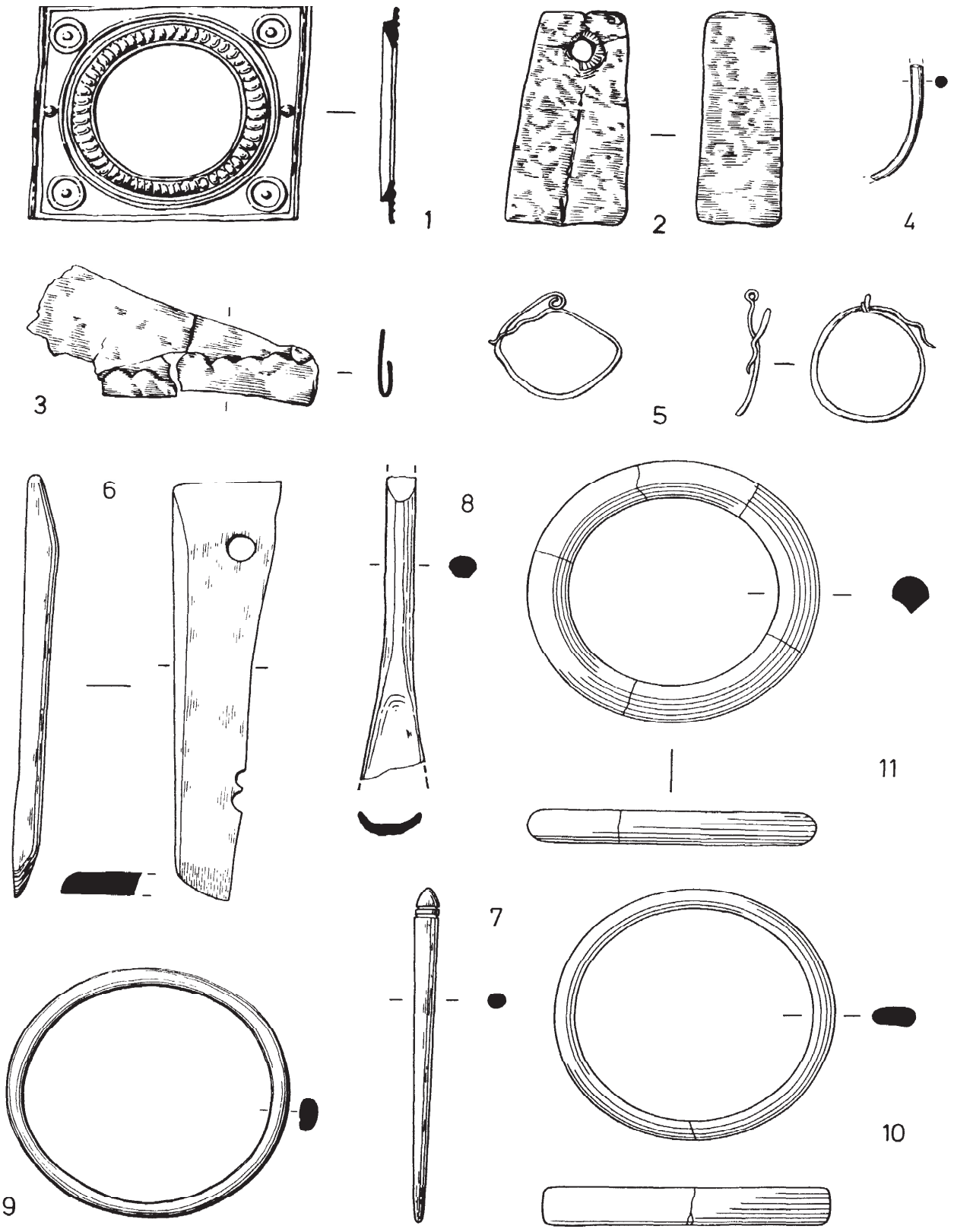


Fig 60 Objects of lead, gold, silver, bone; jet and shale bracelets; scale 1:1

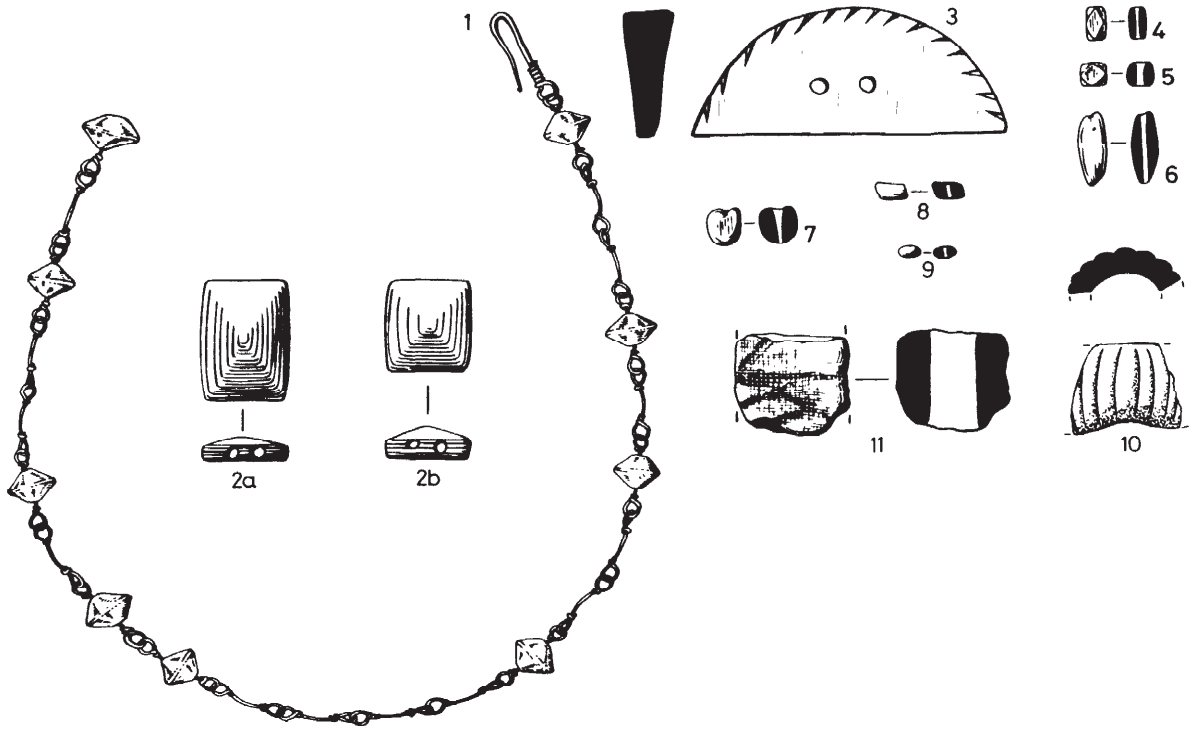


Fig 61 Silver necklace; jet and glass beads; scale 1:1

81 Ladle with deep, round bowl and twisted handle terminating in a two-pronged flesh hook. G86. cf Cunliffe 1971, fig 60.55; Cunliffe 1975, fig 131. 251; Rogerson 1977, fig 61.14, 16. There is an exact parallel from Great Chesterford (Liversidge 1968, fig 65f).

Fig 56

82 Two link horse-bit with ring heads interlocking in different planes and enclosing at the other end free-moving circular rein-rings; cf C M Green 1977, 51. G4

83 Two link horse-bit, as 82 but with cylindrical heads enclosing the rein-rings; cf Rogerson 1977, fig 61.143. J, field surface.

Other metals (Fig 60; MF 1.D1-2)

Most notable of the lead or lead alloy objects is a mirror frame (Fig 60.1) with ring and dot ornament, of 3rd century type (Lloyd-Morgan 1981, 152) from area C2 (p 55). There is also a weight (2; unstratified) and a fragment of sheet with a scalloped edge (3; B3, 311). A silver pin fragment is possibly from a brooch (4; B2, 5), see also below Fig 61.1. A pair of gold wire loop earrings (5) were grave goods in G33 and hence mid 4th century.

Bone objects (Fig 60; MF 1.D1-2)

These comprised a plate from a handle (Fig 60.6; B5, 514), a pin (7; B3, 305) and a fragment of a spoon or spatula (8; B3, 303).

Jewellery (Figs 60, 61; MF 1.D2-4)

Grave 41 contained one shale and two jet bracelets (Fig 60.9-11). A silver wire necklace threaded with blue glass beads (Fig 61.1) was found in a late 2nd century deposit in area E (E3C, p 55). Four facetted jet beads (2a,b) were grave goods in G20, and a collection of 80 small jet (4, 5) and blue glass (6, 7) beads were grave goods in G69. Both graves were early 4th century. There were single examples of a semicircular lunette jet bead (3), an opaque light green bead (8), an opaque turquoise bead (9), a fragmentary melon bead (10), and a black, burnt cylindrical bead; 8 and 10 were residual in graves 13 and 55; 11 (unstrat) may have been derived from a cremation.

Glass Vessels (Fig 62; MF 1.D4-5)

A clear glass beaker of common late Roman type (Fig 62.1; Isings 1957, form 106) and an *unguentarium (2;* Isings 1957, form 82) in natural blue-green metal were found together as grave goods in the mid 4th century burial G33. Little other recognizable glass was found; a strap handle (3), a hollow footring (4) and a ribbed handle from a late 1st century conical flagon (5), all in natural greenish metal, came from area B. No window glass was found.

Spindle whorls (Fig 62: 6-11; MF 1.D5)

All were cut from potsherds in late pre-Roman Iron Age fabrics. The counter (11) was found in the period 2C ditch B4, 424.

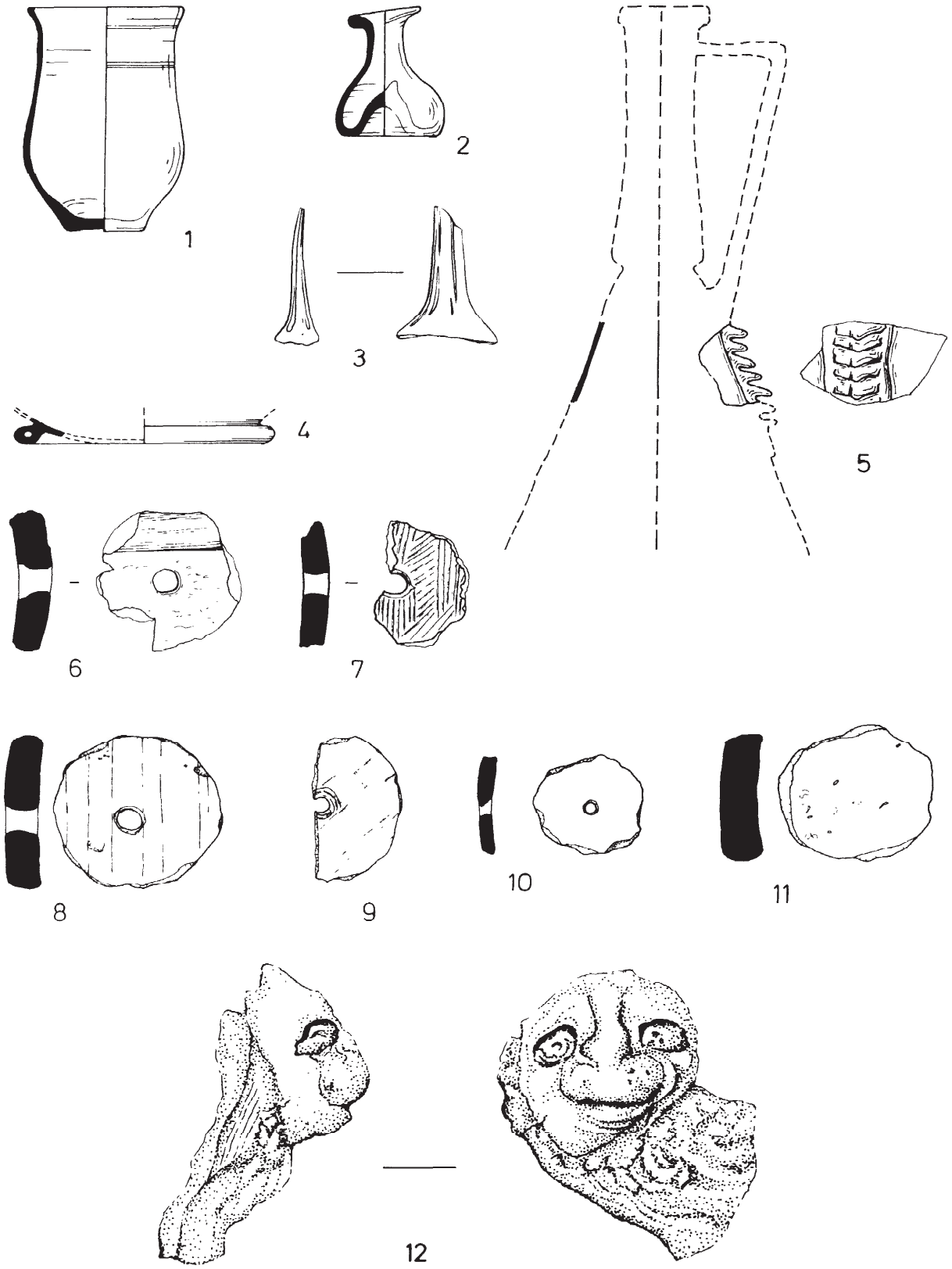


Fig 62 Glass vessels, spindle whorls, scale 1:2; pipeclay figurine scale 1:1

The pipeclay figurine (Fig 62.12; P1 VII)

by F Jenkins

The head of an animal moulded in white pipe-clay, which evidently belonged to a statuette of a lion, comes from the circular temple in area E2 (p 55). At present no exact parallels have been traced because the few examples found in Gaul and the Rhine-Mosel region all have the heads facing to the front. A head of a statuette of a lion found many years ago at Saint Pourçain-sur-Besbre (Allier) is comparable in certain aspects with the Kelvedon example (Rouvier-Jeanlin 1972, no 1093, Museé des Antiquités Nationales, St Germain-en-Laye, Acc no 28060). It is of roughly the same size, being 69mm high, and the muzzle of the animal has a similarly foreshortened profile. However, the head faces to the front; it does not have moulded tufts of hair on the shoulder, and the fabric is a rose-coloured clay. Nonetheless, clay statuettes of diverse types were produced at Saint Pourçain and at other *officinae* in the Allier in central Gaul where the potters exploited the natural deposits of white pipeclay. It is therefore highly possible that the Kelvedon statuette was a product of one of the *officinae* which specialized in the manufacture of moulded clay statuettes in that region.

At present the chronology of the industry is not fully understood, because the sites of the kilns were examined many years ago and the dating evidence is not recorded. A study of the distribution and dating of the central Gaulish clay statuettes found in Britain suggests that some had reached this country as imports by *c* AD 120. As the central Gaulish potteries ceased producing clay statuettes and samian pottery at the end of the 2nd century there seems little reason for doubting that by AD 200 the statuettes were no longer exported to Britain. Thus those found in this country which are known to have been found in dated archaeological stratified deposits, or from graves associated with other datable material, can be divided into two categories:-

1 Those found in contexts ranging in date from *c* AD 130 to 200.

2 Those found in 3rd-4th century deposits, which can be regarded as survivals in later contexts.

As the Kelvedon example must have arrived at the temple before it was burnt down in the late 2nd century, it clearly falls into the first of these categories. However, the dating of the statuette is complicated by two unknown factors: the time which elapsed between its arrival in Britain and when it was proffered as an *ex voto* at the temple; and the length of time it survived intact before the building was destroyed.

Interestingly, although many Romano-Celtic temples have been excavated in Britain, only four are certainly known to have yielded clay statuettes: Springhead, Rent (5 examples), Lowbury Hill, Berks (l), Hayling Island, Hants (l), and now Kelvedon (1). The rarity of these statuettes strongly suggests that they were not as popular as *ex votos* in Britain as they were on the Continent.

The Celtic coins (Pl VIII)

There are 11 Celtic coins from the excavations of 1968-73 and 5 other finds. All the former and most of the latter have been submitted to the Index of Celtic coins at the Institute of Archaeology, Oxford, who supplied the photographs, and were identified by the late D F Allen, R G Goodburn, or Lynn Pitts.

1 Gallo-Belgic DA, Mack 39 or 42: 1.020 gm, AV/AE 1/4 stater; X (Fig 40), unstrat from garden
2 Potin, Class II: type O, 0.594 gm; J102
3 Potin, Class II: type O1, 1.269 gm; J2
4 Potin, Class II: type O1, 0.587 gm; J3
5 Potin, Class II: type P1, 0.711 gm; J, G33
6 Potin, Class II: type Pl, 1.019 gm; F1
7 Potin, Class II: type P2, 0.700 gm; J, G41
8 Potin, De la Tour 8620, Gaulish Atrebates, 5.420 gm; J, G25
9 Cunobelin, Mack 215: 1.354 gm, AR; B2, 39
10 Cunobelin, Mack 222: 1.406 gm, AE; J, G12
11 Cunobelin, Mack 224: AE; ?B7 unstrat; COLEM 187.56, *Brit Numis J* 1956, 400
12 Cunobelin, Mack 229: 1.615 gm, AE; B2 unstrat
13 Cunobelin, Mack 251: AE; B7 unstrat; COLEM 179.60, *Report of Colchester & Essex Museum 1956-62,* 15
14 Cunobelin, Mack 252: 1.195 gm, AE; H6
15 Cunobelin, Mack 253: 1.987 gm, AE; H6
16 Uncertain, possibly Tasciovanus, Mack 170 (D F Allen): 0.999 gm; B1 unstrat

The distribution of late Iron Age coin types in the south-east and their significance has been the subject of much recent discussion (Rodwell 1976, 1981; Haselgrove 1978) and therefore will not be considered at length here. Some individual coins are rare (l), or fine examples of their type (ll), but the most interesting feature about the group as a whole is the number of potin coins it contains. These are absent from the Camulodunum coin series (222 British coins, Hawkes & Hull 1947, 133-42), although Class II potins are conventionally dated to the 1st century AD (Allen 1971, 139-40). However, an alternative case has been argued for their being very little later than the mid 1st century BC Class I types (Rodwell 1976, 206-7) and this might account for the difference between the two sites. The majority of the Kelvedon potins were derived from area J whose main period of occupation (periods 2A and 2B) was in the 1st century BC.

The Roman coins

by R Reece

Excavated coins

Area B

1	Claudius I	43- 64	?Copy as RIC 66	B1 topsoil
2	Claudius I	43- 64	Copy as RIC 66	B2, 5, period 3A
3	Trajan	98-100	RIC 385	B2 topsoil
4	Hadrian	119-122	RIC 577 Britannia	B4 topsoil
5	Hadrian	119-122	RIG 80	B2 topsoil
6	Antoninus Pius	138-161	Dupondius *Rev* illegible	B2, 2
7	Gallienus	260-8	as RIC 193	B5 unstrat
8	Gallienus	260-8	RIC 297	B2 topsoil
9	Claudius II	268-70	RIC 62	B2 unstrat
10	Victorinus	268-70	RIC 67	B3, 311, period 3C
11	?Tetricus I	270-3	*Rev?* Pax as RIC 100	B2 unstrat
12	Barbarous Radiate	270-90	*Rev* Pontificial implements	B3, 310, period 3C
13	Barbarous Radiate	270-90	*Rev?* Victory	B3, 311, period 3C
14	?Barbarous Radiate	270-90	*Rev* illegible	B3, 321
15	Barbarous Radiate	270-90	*Rev* illegible	B2, unstrat
16	Carausius	286-93	as RIC 878	B unstrat
17	Constantine II	320-4	RIC 7 London 255 (?copy)	B2, 19
18	Crispus	320-4	RIC 7 London 275	B2, 19
19	House of Constantine	330-45	Hybrid *Obv* as HK 49, *Rev* as HK 52	B unstrat

Area J

20	Claudius I	43- 54	Copy as RIG 66	J, G34
21	Claudius I	43- 54	RIC 69	J, G37
22	Hadrian	119-122	RIC 569	J, 302, period 3B
23	Constantine I	307-313	as RIC 6 London 101	J, topsoil

Area El

24	Nero	54-68	as RIC 318ff
25	Claudius II	268-70	RIG 53
26	Barbarous Radiate	270-90	*Rev* draped figure
27	Carausius	286-93	*Rev* illegible
28	Magnentius and	351-3	LRBC 219
29	Decentius		
30	?Valens	364-8	*Rev* emperor dragging captive
31	?Gratian	367-83	*Rev* standing figure with banner, XP on shield

3 1st century illegible
1 2nd century illegible
2 3rd century illegible

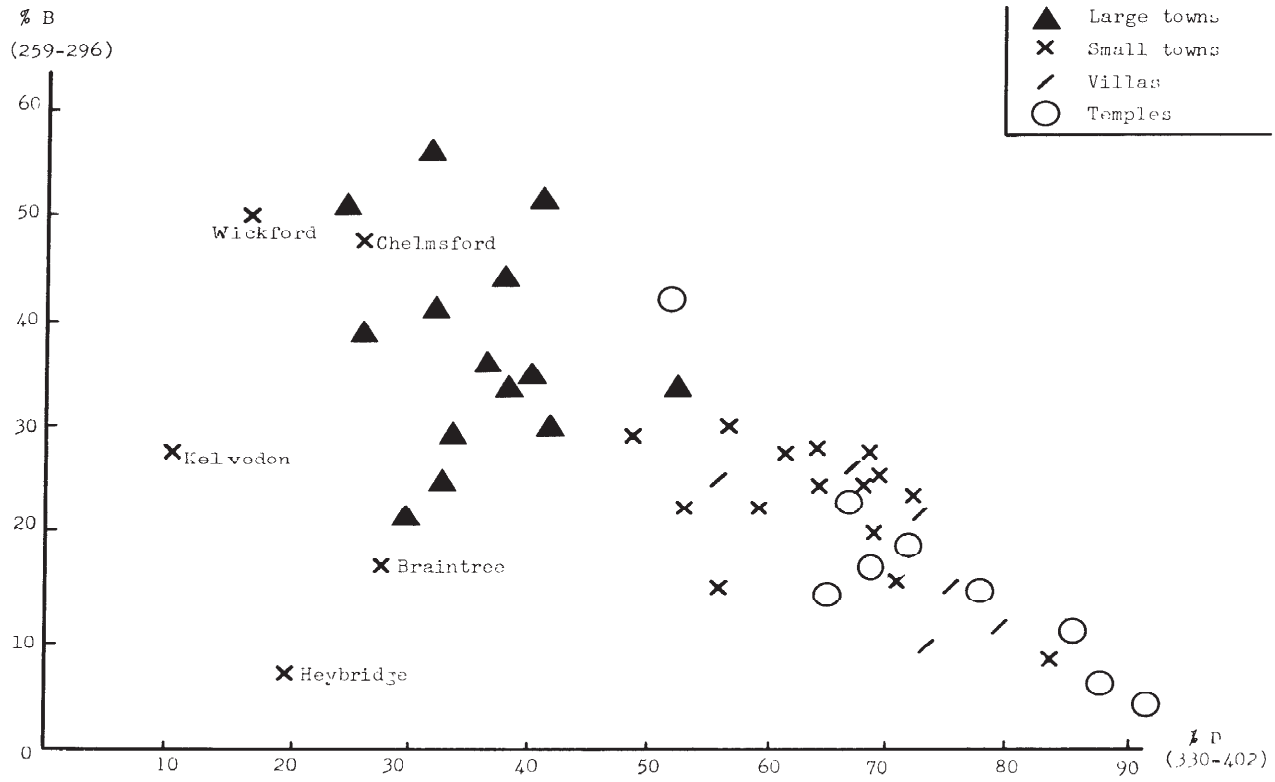
Discussion

If the various collections and finds associated with Kelvedon are taken into account the number of coins available for comment is about 100. This is likely to be a representative collection as it is made up of both excavated and chance finds, collected over a number of years from various locations by several individuals. For convenience they may be summarized by periods in the following list:

16	Iron Age	4	Hadrian	18	AD 275-296
1	Republican	7	Antoninus Pius	2	296-317
9	Claudius I	2	Marcus Aurelius	3	317-330
1	Nero	2	Commodus	5	330-348
2	Vespasian	1	Caracalla	3	348-364
1	Domitian	1	Elagabalus	4	364-378
4	Tiajan	10	AD 259-275	4	1st C illegible
				1	4th C illegible

Total 101

Table 6



Looking at this group of coins as the evidence from a small town in the east of Roman Britain, there is a good fit with the evidence from other similar sites. This can most easily be expressed by putting on a diagram the coins struck between AD 259 and 296 (28% of the total) and the coins struck from 330 to 402 (12% of the total). This method has been used several times before, particularly in dealing with the coins from The Cow Roast, Herts (Reece 1982) where small settlements in the east of Roman Britain were seen to have a quite different coin pattern from small settlements in the west of the provinces. In Table 6, the Essex small towns have been named, but the large towns *(Civitas* capitals and *Colonize),* other small towns, villas and temples are given only as symbols. The difference which the diagram brings out clearly is the different coin loss for the period AD 330-402. In general small settlements lose more of these late coins than do the large towns, but the eastern settlements seem to be low in late coin loss, and stand apart from their western and central fellows.

If we consider the list in more detail one or two other points do stand out. The number of coins of Claudius I follow on well from the coins of the late Iron Age and must presumably have been obtained by interaction between the local inhabitants and the newly arrived army and administration. The failure of Nero to strike bronze for the first ten years of his reign means that the Claudian coins must be allowed a date from the conquest to AD 64. A single coin of Nero and only two of Vespasian might suggest that the main activity in the area had declined by about AD 65, with only a basic system of trading continuing. There is certainly little evidence from the coins of any direct state payment in the form of new or high value coins after the middle 60s AD.

For a rural site, perhaps with some involvement in the administrative system, the number of coins lost in the 2nd and early 3rd centuries is high. Some of these coins are free from excessive wear and suggest that the site was in direct contact with the coin-using trading of the larger towns. The coins of the radiate period (259-296) are reasonably represented, but in every site in Britain they always form a peak in the process of coin loss. In just the same way, all sites show a drop in coin loss after 296, but Kelvedon is unusual, judged by British standards, in failing to recover from the fall. A majority of sites in Britain show a maximum coin loss from 330 to 348 for which Kelvedon has only five coins. As already noted this peculiarity is shared with other settlements in Essex, and to a lesser extent in Herts, and this seems to be a characteristic of the eastern side of the country. At Kelvedon the cemeteries make it quite clear that occupation did in fact continue, so it would be wrong to suggest that the small number of late coins lost is a direct reflection of the total activity on the site; such a point may well also be true for some of the other sites. We must therefore assume that the drop in coin loss, and perhaps therefore a drop in coin use, is a reflection of the nature of activity on the site rather than its level. Warned by the evidence from other similar sites we should not interpret it as an individual change, but a sign that Kelvedon is behaving as a typical small settlement near the east coast of the Diocese.

Having reached this point it is difficult to avoid the suggestion that the small towns of eastern Britain were

ceasing to use and lose coins quite early in the 4th century. By so doing, they were in marked contrast to the settlements further west which seem to have kept up both use and loss right to the end of the century. If further explanation is needed then I would have to suggest that we see here the process of de-Romanization starting early in the east of the province, a factor which might partly explain the change to an English culture so evident in some parts of the area from the 5th century onwards.

The briquetage (Fig 63)

A quantity of briquetage totalling 4.04 kg was recovered from the excavations. In area B (1.77 kg) small residual fragments were scattered across the whole of the excavated area; the only feature to contain a quantity of large pieces was the period 2C ditch F424 (18 fragments). The distribution of fragments in area J is shown in Fig 15 (2.27 kg); much was residual, but it occurred in the period 2A features 86, 328, 339, 340 and 352; also in F332 (period 2B) and F112 (period 2C). The largest quantity (21 pieces) came from F350. Its period of use and deposition therefore spanned the late Iron Age, and possibly continued into the immediate post-conquest era.

The briquetage consisted entirely of fragments from handmade rectangular tanks 15-20mm thick, tempered with grog and coarsely-chopped vegetable material. The pieces were usually oxidized, although some had one reduced face, with a greyish bloom on the surface caused by salt. The majority were featureless; there were only three rim fragments and a few pieces approaching a base angle, so that no dimensions for the tanks could be arrived at, except that they were in excess of 160mm wide.

Salt boiling was undertaken on a large scale at the end of the pre-Roman Iron Age in the Colne and Blackwater estuaries (Rodwell 1979, 133), and large quantities of vessels of the Kelvedon type were used in the salt boiling process as evaporation tanks. They appear to have been *c* 0.15m deep, 0.3m wide and perhaps 0.4 or 0.5m long (Rodwell 1979, fig 6) with vertical or near vertical sides, and they sat over the fire on a suspended floor of firebars.

The Kelvedon vessels show clear traces of having been heated with salt inside them, from which it follows that brine tanks were also used as containers for transporting salt inland. Fragments have indeed been found on a number of other Essex sites as far inland as Great Chesterford (Rodwell 1979, 172). It is unlikely that the converse applied; namely that pans were manufactured inland and taken to the coast for use, as no advantage in materials would be gained. Furthermore the enormous amount of waste generated on red hill sites themselves, and the absence from Kelvedon of any other types of briquetage used in the production process, militate against this. One cannot be certain, however, whether salt reached Kelvedon entirely as an object of trade or whether salt production was a seasonal occupation of the inhabitants

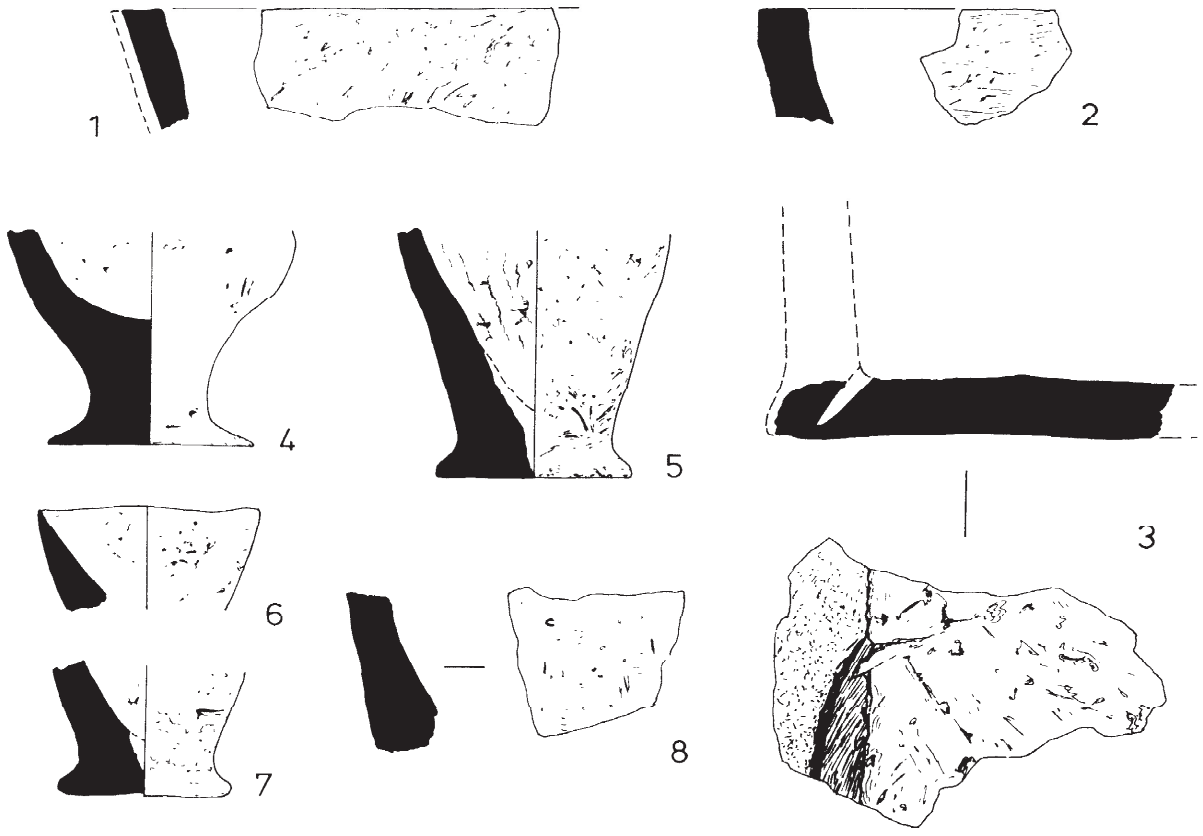


Fig 63 Briquetage; scale 1.3

(Rodwell 1979,165) for Kelvedon is only 12km from the coast. The industry was clearly carefully controlled and exploited on a commercial basis during the late Iron Age, which implies a system of salting rights. The possession of such rights might well have given a settlement or individuals within it an economic edge over its neighbours. An analogous situation existed at the time of Domesday when a number of Essex villages, some of them several kilometres from the coast, were recorded as having salt pans (Darby 1971, 246).

Fig 63

1 Two adjoining rim fragments; the rim is flat, the wall angled with a flaked outer surface. J324

2 Flat-topped rim fragment, the wall slightly angled. J370

3 Thicker than average base fragment; the underside is patchily reduction fired and the inside has a greyish salt bloom with a scar where the vertical wall has been broken off. An oblique cut has been made into the base of the wall possibly to facilitate the initial shaping or drying of the tank. Pieces 2 and 3 are illustrated in register although they are not part of the same vessel. J84

4-8 Eleven fragments of briquetage from four or five different vessels (6 and 7 may be the same). All are handmade from clay tempered with coarse sand, grit and vegetable matter, fairly hard and oxidized, with a light brown exterior; 4 was more heavily oxidized to a bright orange-pink. These conical or cup-shaped vessels with pedestal feet differ markedly from the bulk of the briquetage described above and are by implication earlier. The pieces were found together, but no associated material is preserved and their precise frndspot is unknown (CM).

Briquetage antedating the late pre-Roman Iron Age is known from a few other British sites; there is Bronze Age material of the 2nd millennium from Fengate (Pryor 1980, 18) and of the 1st from Mucking (Jones 1977, 317); also middle pre-Roman Iron Age material from Bishopstone (Bell 1977, 122) and other sites on the Hampshire-Sussex borders (Bradley 1974, 20-5; Curliffe 1984, Vol 2, 426-30), and from Gun Hill, Essex (Drury & Rodwell 1973, 92). None of this briquetage is precisely comparable with that from Kelvedon, which typologically most closely resembles material from the Saale Valley in East Germany (Gouletquer 1974, fig 3). However, the principle of supporting a cupped mould on a pedestal for the final evaporation of concentrated brine into salt cakes is seen in the Mucking and Bishopstone fragments, where mould and pedestal have evolved into two separate components; such a process also took place in the Saale Valley. There is at present insufficient comparative material to draw any chronological conclusions from this apparent evolution or to date the Kelvedon pieces closely. They probably belong to the Bronze Age or earlier Iron Age.

The flint artefacts (Figs 64-8; MF 1.D6-1.E1)

by E Healey

The lithic artefacts were mostly found in residual contexts; the few sherds of late Neolithic and Beaker pottery and related features indicate habitation at this time, but none can be stratigraphically related to the flint. The only possible exception to this is the material from J27.

Raw material

All the artefacts are of flint. Most are in a fresh, unrolled condition but one large flake, probably an axe thinning flake (Fig 65J), two cores and ten other flakes are rolled and probably derive from a Palaeolithic industry.

The flint varies in colour from dark grey, sometimes mottled, to light brown; a few pieces are stained orange. Cortex is present on a high proportion of flakes and both water-worn and fresh cortex was recorded. Some nodules were evidently corticated, as about 15% of the flakes show corticated scars truncated by knapping, particularly on butt ends. Post-manufacturing cortication is present on about 9% of the artefacts. (For the use of the term 'cor tication' rather than 'patination' see Shepherd 1972).

The presence of different types of cortex and old cortication may indicate different sources for obtaining raw materials. The sources probably include river gravels and boulder clay in the immediate vicinity; some flint may have been extracted directly from the chalk, and previously struck material lying around the site may have been reused.

The size of the cores (one is over 70 mm in length) and some of the larger flakes (up to 65 mm in length) suggests that relatively large nodules would have been available.

Technology

Apart from the rolled and presumed Palaeolithic element in the assemblage, the typological range outlined below in Table 7 suggests that the assemblage is of mixed character. Metrical data therefore have not been considered, but the division of the struck pieces into broad categories of flakes, etc is outlined below in Table 9, and it is clear that various stages in core-reduction processes are represented. These together with other technological attributes (of the unrolled material) are discussed below.

Flaking tools

Apart from one flake with a very abraded back which may have been struck from a hammerstone, no flaking tools were recovered. A few flakes show evidence of the use of soft hammer flaking.

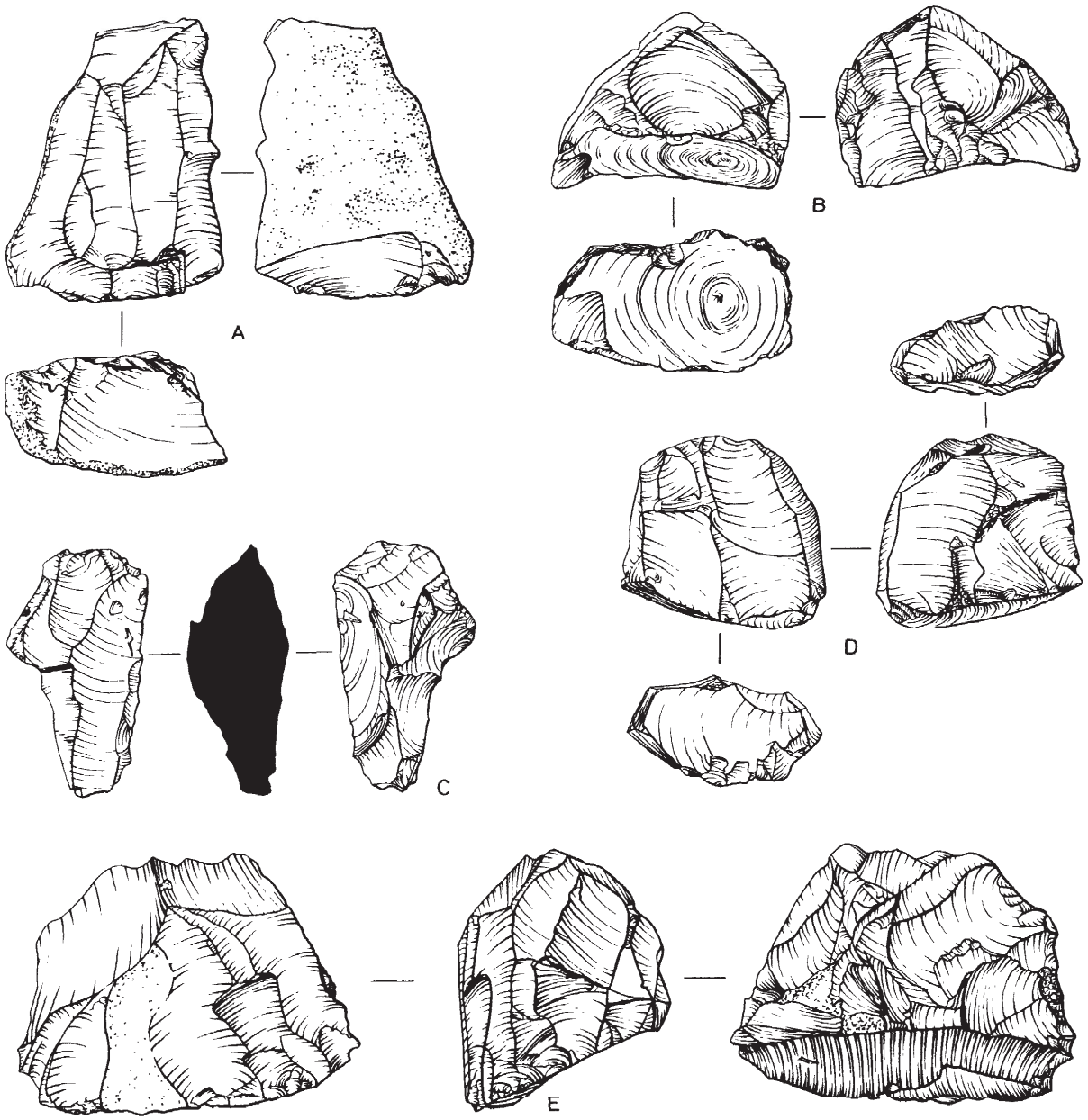


Fig 64 Flint artefacts; scale 1:1

Table 7

	Unrolled	*Rolled*
Hammerstone	?1	-
Cores	26	2
Flakes, blades, etc (unretouched)	735	11
Pick	1	-
Microliths	5	-
Arrowheads	2	-
Scrapers	8	-
Piercers	5	-
Serrated flakes	6	-
Notched flakes	7	-
Truncated blades	12	-
Uncl. retouch	2	-
Total	**810**	**13**
Joint total	**823**	

Cores (Fig 64A-E)

The twenty-six cores present have been classified by number and relationship of striking platforms and the type of removal struck from them is also indicated (Table 8).

Table 8

	Blade	*Flake*	*Flakes & blades*	*Unclassifiable*	*Total*
Single platform	2	3	3	-	8
Opposed platform	2	-	2	-	4
Changed orientation	-	5	3	-	8
Unclassifiable	?1	2	-	3	6
Total	**5**	**10**	**8**	**3**	**26**

Core classification is necessarily tentative because, as is evident from some of these cores, a core may change its form several times before being discarded, but nevertheless it does provide some idea of the type of removal the knapping was producing, and it is in broad agreement with the evidence from Table 9.

The cores are of black flint with the exception of three, one being of pale brown flint and the two others being stained. Striking platforms are mostly plain flake scars, or the earlier face of the core, but seven cores used thermally-fractured surfaces and one has a crudely keeled edge. Edge trimming (ie 'retouch' between the core-edge and the striking platform) was noted on both cores and flakes but was not invariably practised as other cores including Fig 64D have irregular untrimmed edges.

The cores are relatively large globular nodules with two or more faces flaked. Few of the cores are worked out but the rejuvenation pieces and some of the larger flakes suggest that the cores were originally large.

Removals

Details of the relative proportions of removal types present are summarized in Table 9. Flakes are clearly the predominant type though blades and blade-like flakes were more often selected for retouch. True blades are rare, which corresponds with the small number of blade cores. Spalls from flake and blade production are present. Very few true primary flakes are present though a number of thick preparation flakes suggest that cores were prepared on the site.

Core-rejuvenation pieces (Fig 65F-I) are represented by a single core-tablet, Fig 65F, and a possible keeled or crested piece. These are typical of blade production industries. The other trimming pieces include flakes struck to change the direction of flaking, plunging flakes, which are now to be seen as an accident of debitage (Tixier *et al* 1980,95), and other flakes which remove protrusions.

Remnants of striking platforms on the removal tend to be plain (over 40%) and often wide; some blades and bladelets have linear platforms (32%) and a few have very diffuse bulbs of percussion typical of soft hammer flaking. Facetted platforms are rare (about 3%). Flakes were also struck directly from the cortex (15%).

Cortex in some quantity was observed on about 25% of all removals and there seems to have been no objection to the use of flakes with cortex on them for retouch, as 30% of retouched pieces also have areas of cortex.

Table 9

(unrolled)	*Unretouched*	*Retouched*
Cores	26	
Nodule		1
Flakes	360	10
Blades	31	6
Bladelike flakes	150	15
Bladelets	70	13
Spalls	67	-
Preparation flakes	13	-
Trimming flakes	31	1
Chips (uncl.)	13	1
Other:hammerstone, thermal flake		2
Totals	**761**	**49**
Joint total	**810**	

Retouched pieces

The assemblage as a whole seems to have suffered some post-depositional damage possibly by the plough and it is often difficult to distinguish deliberate retouch from plough damage. For this reason only the more certainly retouched pieces have been described.

Pick (Fig 65K)

This is a multi-facially flaked object with much of the retouch concentrated on the pointed end, which is also heavily abraded and worn. Morphologically the object is similar to the picks described by Saville (1977, 3, fig 1; 1981, 50f) and could be Mesolithic or late Neolithic in date.

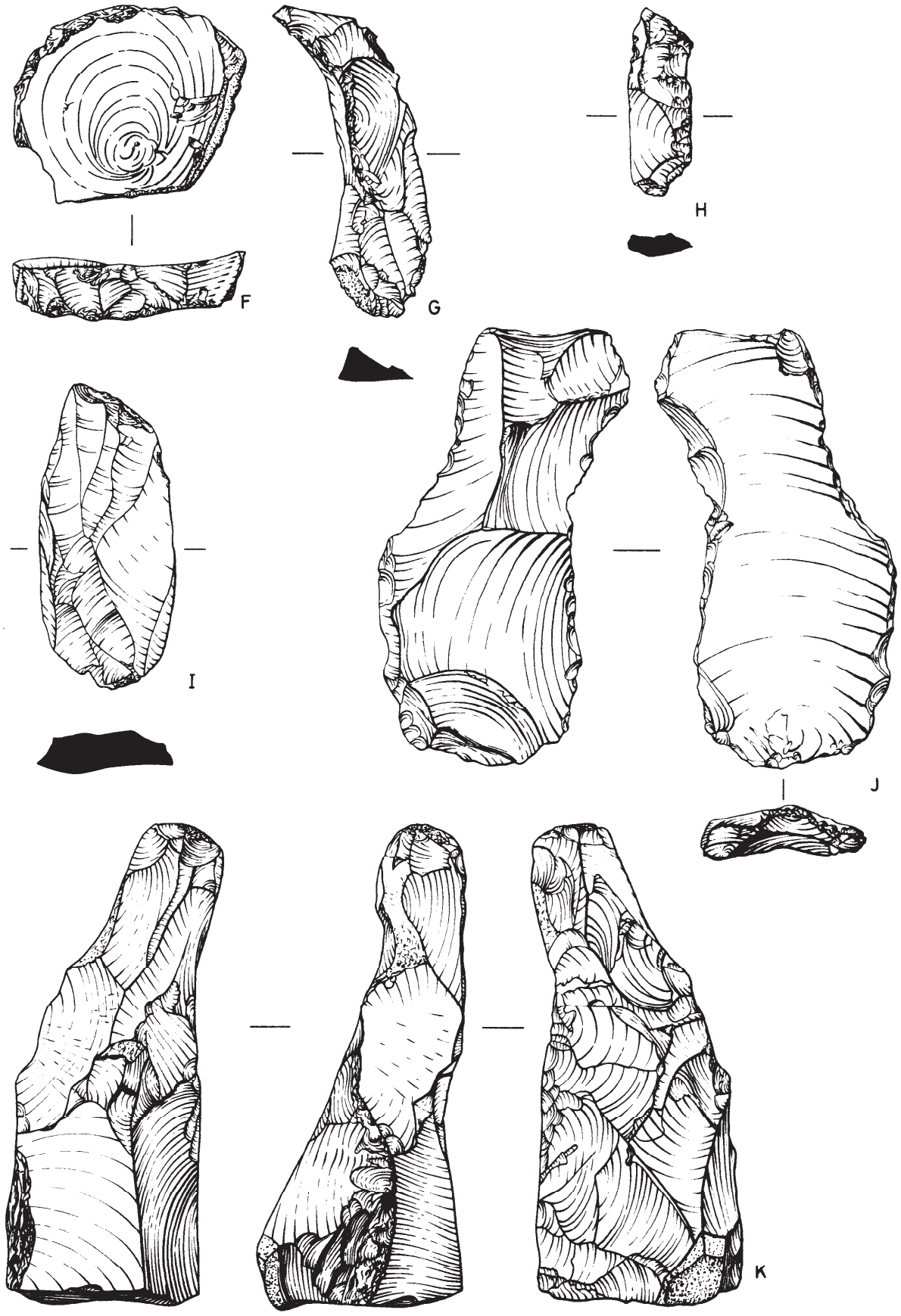


Fig 65 Flint artefacts; scale 1:1

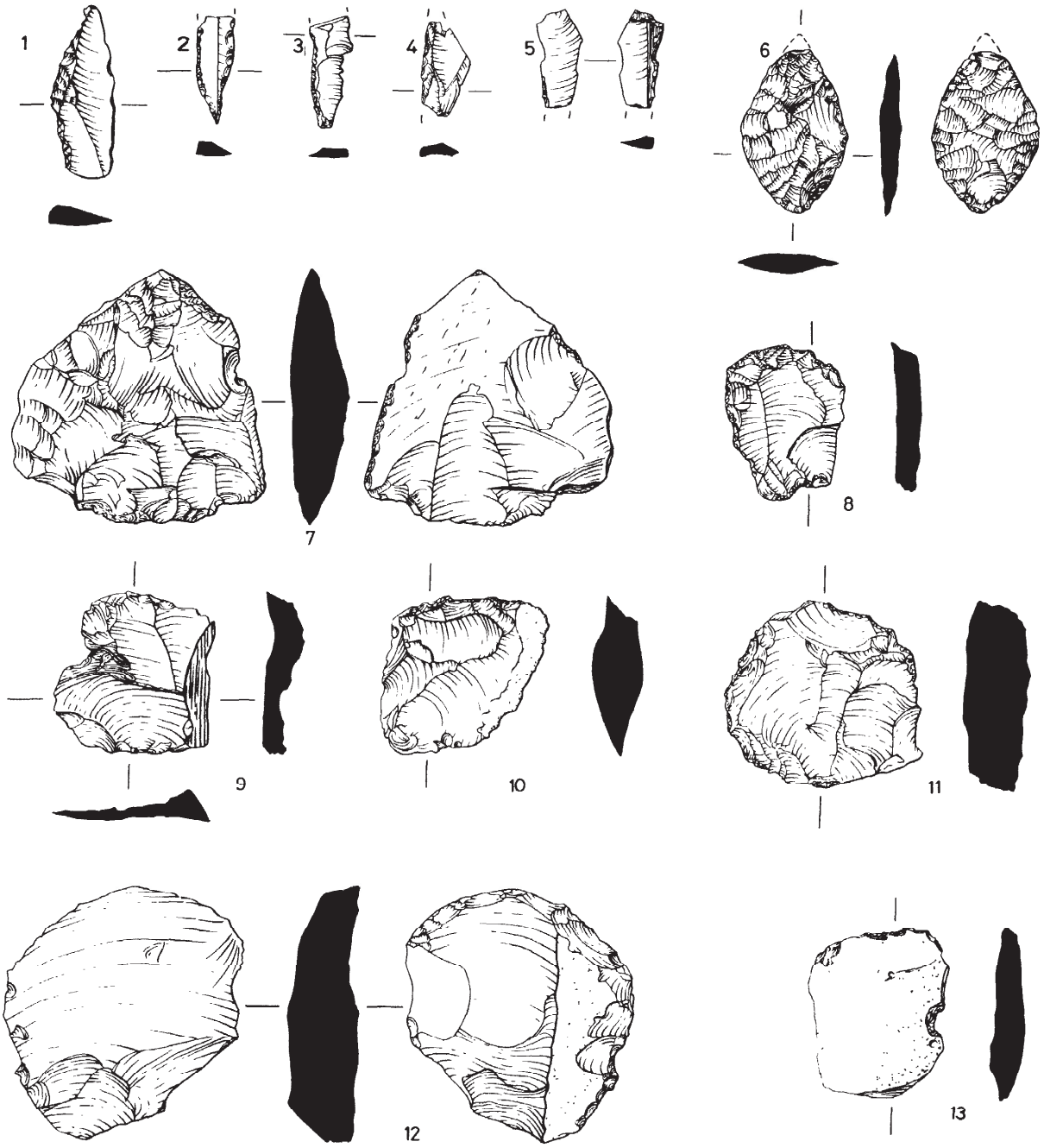


Fig 66 Flint artefacts; scale 1:1

Microliths (Fig 66, 1-5)

Four microliths and an abruptly-retouched bladelet are present, although only one is complete (Fig 66.1) and is an obliquely blunted point (Jacobi 1978, fig 6, Class 2a). Figure 66.2 and probably Fig 66.3 appear to be fragments of Class 7. The fourth fragment is burnt and too fragmentary to classify. The butt portion of an abruptly-retouched bladelet, Fig 66.5, could also be an unfinished or fragmentary microlith. The narrow blade microliths are indicative of late Mesolithic activity; although the obliquely blunted point may belong to the same horizon, it could be earlier.

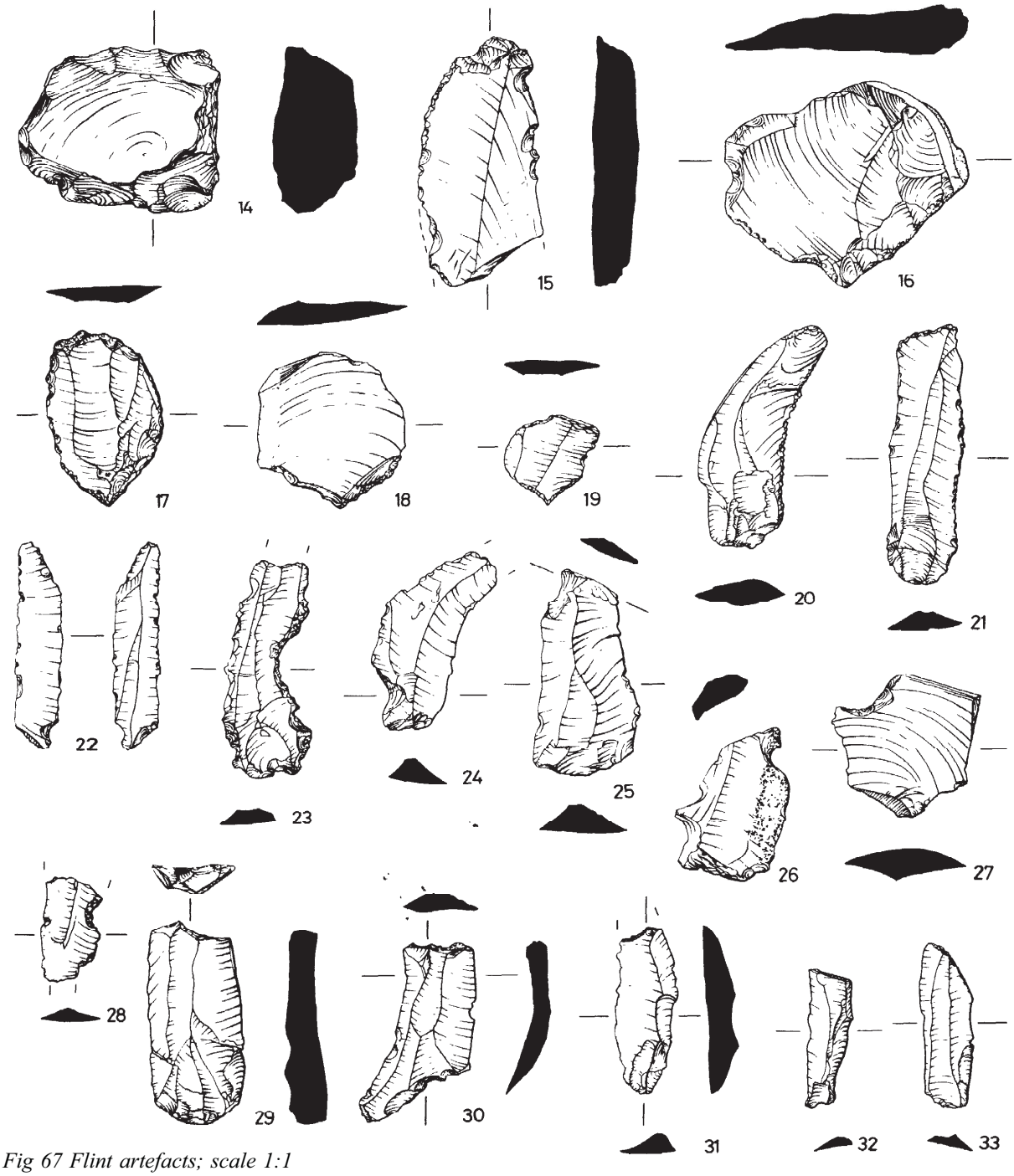


Fig 67 Flint artefacts; scale 1:1

Arrowheads (Fig 66.6-7)

One leaf-shaped arrowhead, Fig 66.6 (broken at the tip), with flat flaking all over both surfaces, was found. It is of Green's Class 3B (1980, table 11.18).

The triangular object, Fig 66.7, is probably a rough-out for a barbed-and-tanged arrowhead; one face has flat-tish invasive flaking all over it, but on the other face only the butt end has been flaked away. Edge trimming, and in some areas wear, suggest that it was also used as an edge tool. Triangular arrowheads have Southern Beaker and Yorkshire Vase Food Vessel associations (Green 1980, 142); a very similar rough-out was found at Eyebury Tumulus, Oxfordshire accompanying a Yorkshire Vase Food Vessel (Leeds 1915, 119, fig 2). (I am very grateful to Dr Stephen Green for discussing this object with me.)

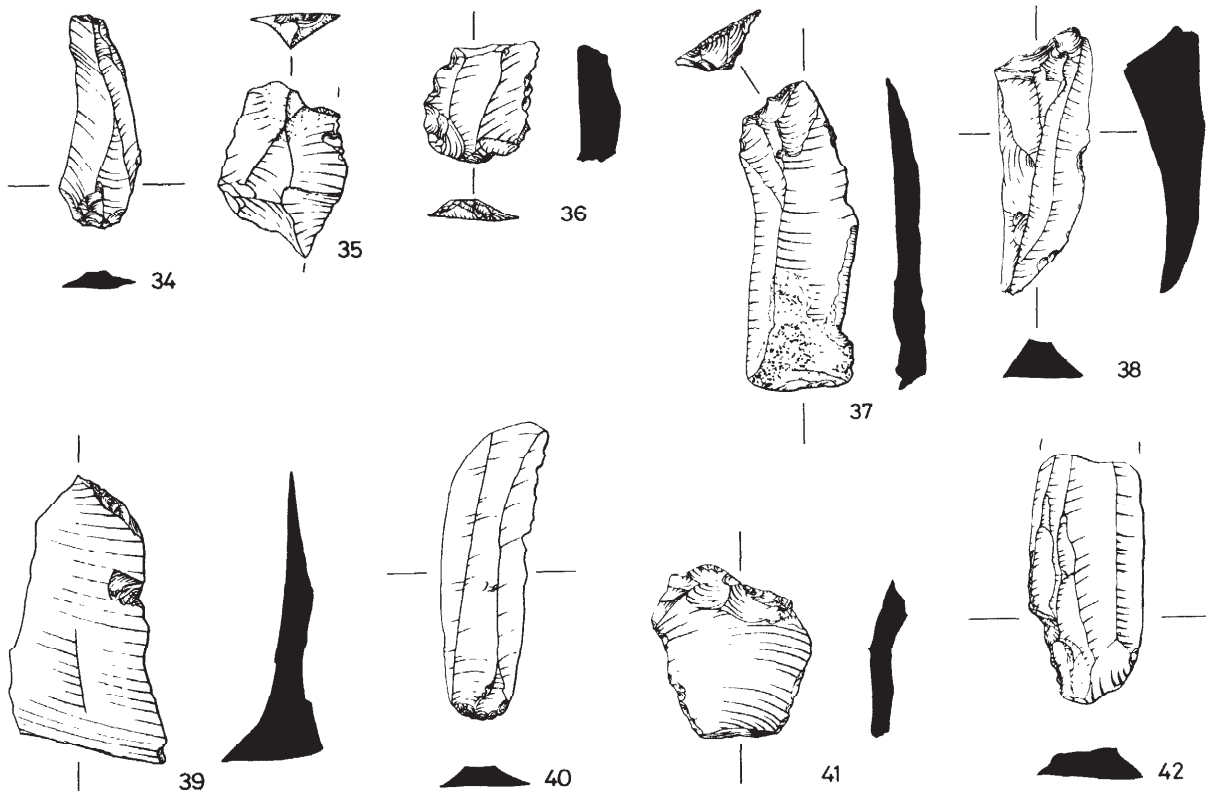


Fig 68 Flint artefacts; scale 1:1

Scrapers (Fig 66.8-13; Fig 67.14-15)

The eight scrapers present comprise two end scrapers, one side scraper, four end-and-side scrapers and a 'nosed' scraper with a small notch off-setting the retouched scraper edge. All are made on struck flakes with the exception of Fig 67.14, which is on a thermal flake; Fig 67.15 is the only example on a blade-like flake. Three have areas of cortex remaining, although only Fig 66.13 has cortex all over. This also has a small lateral notch.

Chronological attributes of scrapers have not yet been satisfactorily identified, and it is difficult to date individual examples. However, it may be noted that Fig 66.12 with its butt end flaked away and its somewhat invasive retouch, is comparable with Neolithic and early Bronze Age examples rather than Mesolithic types and the end-and-side scraper, Fig 66.11, also would be more at home in a post-Mesolithic tool-kit, whereas Fig 66.8 and Fig 67.15 can be paralleled in Mesolithic tool-kits.

Piercers (Fig 67.16-19)

The six piercers have short points; four are off-set by small notches or at least markedly concave areas. Two have thick points, Fig 67.18 being made on the butt end of a flake, and the other (not illustrated) is on the side of a thick flake. The other four piercers are made on suitably pointed blanks requiring only a minimum of shape modification. Only Fig 67.17 has been bifacially worked and apparently subjected to heavy use. Another (not illustrated) has been retouched from alternate faces. Retouch continuing from the point is present on three piercers and there is inverse retouch on the butt of Fig 67.16. None of the piercers is typologically diagnostic though the invasive retouch of Fig 67.16 suggests that it, at least, may be post-Mesolithic in affinity.

Serrated flakes (Fig 67.20-22)

Four blades and bladelets have minute regular denticulations along one edge and a fifth blade has less regular coarser denticulations. Three, including Fig 67.21 and Fig 67.22, appear to be 'backed', in that there is utilization, retouch or cortex along the edge opposite the serrations. Figure 67.22 has a lateral semicircular notch towards the butt end. Gloss is observable on the central teeth of Fig 67.20. Figure 67.21 is interesting in that the denticulations also go across the distal end of the blade. Comparable examples have been noted in an earlier Neolithic context at Hemp Knoll (Robertson-Mackay 1980, 131-2).

Notched flakes (Fig 67.23-28)

This is a heterogeneous group of seven flakes and blades having in common a small semicircular notch. Some, like Fig 67.23 and possibly Fig 67.25, appear to be unsnapped micro-burins and others are broken immediately above the notch but lack the characteristic fracture-scar of a micro-burin. In addition to the seven flakes described above, notches also occur in combination with other tool attributes, including a serrated edge, Fig 67.22, and with a scraper, Fig 66.13. Usually there is only a single notch on any artefact, but one (not illustrated) has two opposed notches and a third truncated notch towards the distal end.

Notched pieces have a wide date range and therefore cannot be closely dated (Alexander *et al* 1960, 294-5) except for the unsnapped micro-burins which, if such they be, would be of Mesolithic tradition-

Truncated pieces and associated forms (Fig 67.29-33; Fig 68.34-9)

One blade (Fig 67.29) and four bladelets (Fig 67.31-3) have their distal ends obliquely truncated. Four other blade-like flakes (Fig 67.30, Fig 68.37-9) have their butt ends retouched away. In addition, one bladelet (Fig 68.34) and two flakes (Fig 68.35-6) have partially-retouched distal ends broken, but it is not clear whether this is accidental or deliberate. Truncated blades are characteristic of Mesolithic tool-kits.

Unclassifiable retouch and utilization

As mentioned above it is not always possible to distinguish deliberate retouch and utilization from accidental damage. At a conservative estimate about 4% of the flakes have macroscopic evidence of use. Figure 68.40 is a lightly utilized blade with a narrow band of lustre on the thinner edge. Some of the more obvious examples of miscellaneous retouch are described below. Figure 68.41 has inversely executed invasive retouch removing the prominent ripple of a hinge fracture, and light retouch or utilization on the edges. Figure 68.42 is a lightly retouched blade and another (not illustrated) has retouch along the edges and around the end.

Discussion

Since there is no independent dating evidence for the artefacts the interpretation of the assemblage must rest on technological and typological factors. Details of comparative material have been noted above; this information is synthesized here and commented on in a general way.

Artefacts from three main techno-complexes have been identified, namely Palaeolithic, Mesolithic and post-Mesolithic. The Palaeolithic material is represented by a large flake, probably a hand-axe finishing flake or possibly struck from a Levallois-type core, but the artefact is very rolled. Other rolled artefacts, including a flake with a facetted butt, are deemed to be contemporary. None is likely to be in its original position and they are presumed to have derived from a late lower or middle Palaeolithic occupation. (I am indebted to Dr H Stephen Green and Mr John Wymer for their comments on this aspect of the industry.)

A hand-axe now in Kelvedon Museum was found in the vicinity of a temple (E3g, p 55) and appears to have been introduced to the site as a votive object. (For further discussion see p 136).

The typologically Mesolithic artefacts form the most numerous and most clearly datable aspect of the assemblage. These include the microliths, the truncated blades and possibly some other retouched forms, as well as the use of the micro-burin technique (if the interpretation of the unsnapped notched blades is correct), and possibly the use of a blade technology (but see Pitts & Jacobi 1979). It is interesting that several blades, flakes, cores and other knapping debris were found in J 27 (Fig 12), and while there is nothing to establish a Mesolithic date for this feature, there is nothing to contradict such an interpretation either. The narrow-blade microliths indicate a late Mesolithic date, though some of the other forms would be more usual in an earlier tool-kit. A tranchet axe now in Colchester Museum was also found in the parish but it is without a precise findspot (Wymer 1977, 91). Mesolithic settlement in Essex has been conveniently summarized by Jacobi (1980).

The post-Mesolithic techno-complex is recognizable both in tool typology and in retouch type, though its precise dating is not clear.

A Beaker-early Bronze Age presence (possibly a disturbed burial) is represented by the triangular arrowhead rough-out which was found in the vicinity of three Beaker sherds, though all were from disturbed contexts. An earlier Neolithic presence is suggested by the leaf-shaped arrowhead, but not too much weight can be put on a single isolated example as the type extends into the Bronze Age (Green 1974, 106; 1980, 96). Further evidence of earlier Neolithic activity may be seen in some of the scrapers and the serrated flakes also; a preference for blade-like flakes is also common in earlier Neolithic industries (Pitts & Jacobi 1979). However, the evidence is not without ambiguity.

The range and technology of the lithic assemblage provides a very similar picture to that given by the artefacts studied by the author from a number of other sites in Essex including Little Waltham (Healey 1978), Saffron Walden (Healey 1982), and Chelmsford (in prep). These sites have also produced small amounts of Neolithic pottery and a few contemporary features, though in each case the flint assemblage has a strong bias towards a traditionally Mesolithic technology and few readily identifiable Neolithic attributes. The absence of earlier Neolithic techno-complexes may be more apparent than real. It is not known, for instance, how the changeover from a Mesolithic to a Neolithic techno-complex was accomplished, nor over what length of time. It is greatly to be hoped that the interpretation of the phenomenon of predominantly Mesolithic techno-complexes on Neolithic sites in central Essex will be elucidated by the results of the lithic analysis from Springfield Cursus and other closely datable industries.

Objects of stone (Fig 69; MF 1.E1-2)

The rotary querns of Hertfordshire puddingstone (1) and Khenish lava (2) are representative of a number of fragments from the settlement. Several rubbing stones of sarsen erratic (4, 5) or millstone grit (3, 6) were found in area B; 6 was possibly a pestle. Fragments of Purbeck marble wall sheathing were apparently being burnt for lime (7; B5, 506). A fragment of stone moulding from the field surface of area J is possibly from a round-headed gravestone.

The animal bone

by R M Luft

The Kelvedon bone material totalled 900 fragments, of which 747 were identified. Table 10 shows the number of bone fragments per species for each period. Identified fragments from dubious contexts have been omitted. Only bones with some definite diagnostic feature, eg the presence of an epiphysis, were counted. The largest and most

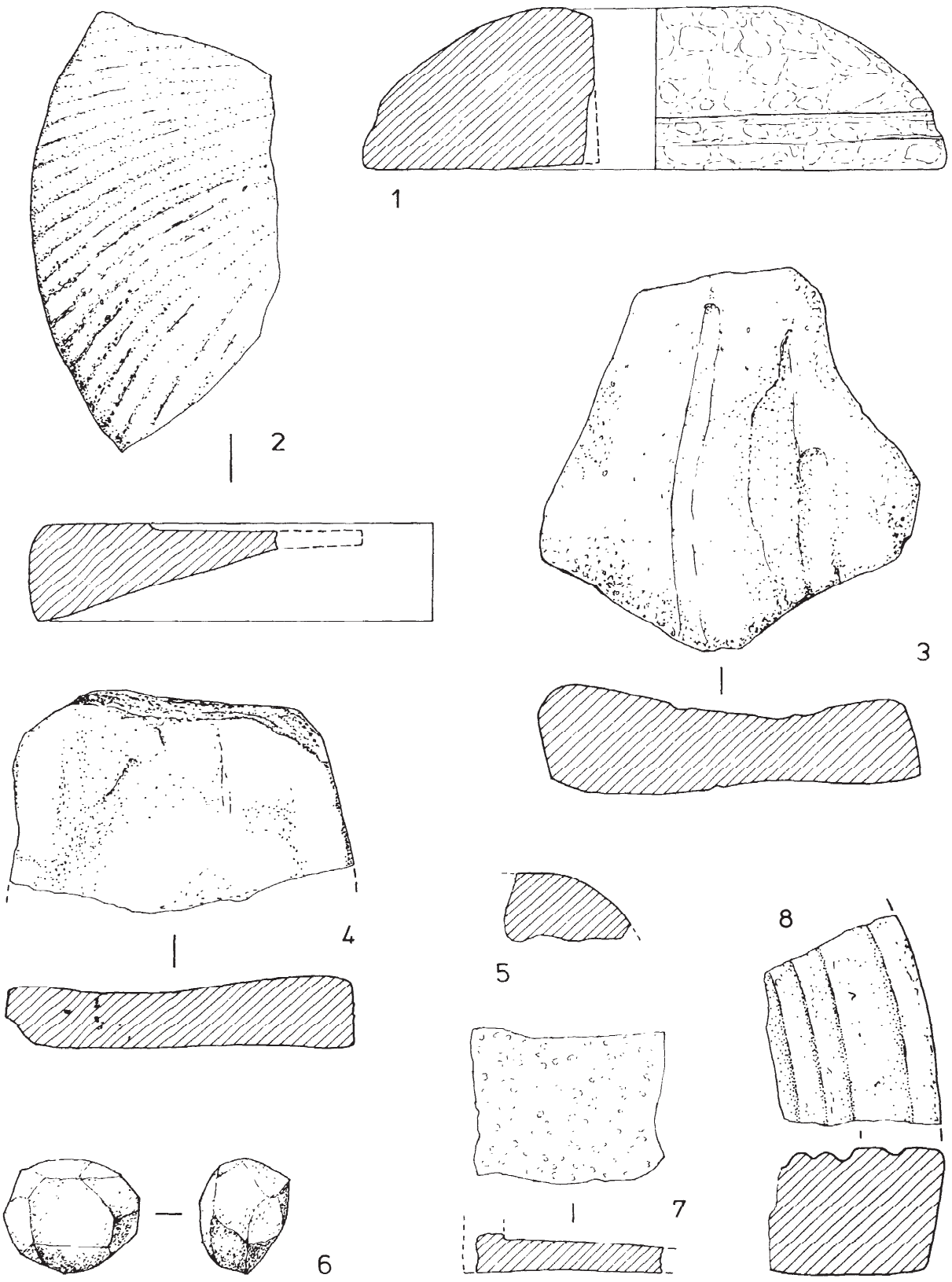


Fig 69 objects of stone; Scale 1:3

reliable samples came from the mid 1st and the 2nd-4th century levels. Care should be taken in interpreting Table 10, since the samples are small; also the bone, which had been embedded in a firm matrix, was subject to much recent breakage. No attempt has therefore been made to group the bones into skeletal elements per species.

Cattle were the most important species in the diet in both periods, and their popularity increased after the 1st century at the expense of sheep/goat and pig. This latter phenomenon has been demonstrated on many other Romano-British sites. If the mid 1st century Kelvedon deposits are compared with those from 1st century Sheepen (Luff 1982), the cattle percentages are very similar although pig was much more important at Sheepen, while conversely sheep/goat was more popular at Kelvedon. However, the former is a large sample and the latter a small one. The minimum number of animals recovered from Kelvedon is represented in Table 11.

In an assessment of ageing, difficulties arose since several mandibles were incomplete. Three 1st century sheep/goat mandibles were aged between 6 months and 2 years (Payne 1973) and 4 out of 65 1st century sheep/goat long bones exhibited unfused epiphyses. Only two immature bones occurred in the 2nd-4th century sample; both mandibles were aged between 6 and 12 months (Payne 1973). With regard to the cattle, three unfused long bones were found in the 1st century sample and five in the 2nd-4th century sample., while one 1st century mandible and five 2nd-4th century mandibles had the third molar emerging.

Measurements from the Kelvedon animals are summarized in Table 12. The cattle shoulder heights were calculated from the metacarpal bones using the factors of Fock (1966). Prior to this the sex of the bones had been tentatively determined via the method of Howard (1963). Results suggest Roman female and male shoulder heights of 1152 and 1214 mm respectively, which fit within the range of variation found on Romano-British sites in general. There is some indication from the metacarpal distal widths that cattle of the 2nd-4th century displayed a much heavier build than those of the 1st century. These animals could well have been used as draught oxen. An equine radius originated from a pony of 11 hands withers height.

The medieval features produced very little bone, but two pathological specimens were found. A cattle second phalanx exhibited an osteoarthritic condition and a sheep/goat mandible showed surface concretions on the teeth enamel together with inflammation of the teeth alveoli. This latter state could have resulted from a bad diet.

The human bone

The inhumed skeletons had almost entirely dissolved; only a few skull and long bone fragments remained. The cremations had not fared a great deal better; many had been disturbed after deposition and others appeared to have contained only a token quantity of bone in the first place. The only burials to contain more than a few fragments were graves 3, 15, 38, 67 and 74. However, as these formed only 5% of the total cemetery assemblage they have not been analysed for the purposes of this report, as they would enable no useful conclusions to be drawn about the buried population.

Table 10 Bone fragment count of the main domestic species

Period	*Cattle*		*Sheep/goat*		*Pig*		*Horse*	*Canis*
	No.	*%*	*No.*	*%*	*No.*	*%*	*No.*	*No.*
Mid C1	83	46.1	65	36.1	32	17.8	7	1
Late C1	13		3		1		1	
C2	44		7		4			1
C2-C4	103	70.1	40	27.2	4	2.7	8	
Late C2-C4	11		2		2		19	

Table 11 Minimum number of animals per period

Period	*Cattle*		*Sheep/Goat*		*Pig*	
	No.	*%*	*No.*	*%*	*No.*	*%*
Mid C1	5	41.7	4	33.3	3	25
C2-C4	4	50	2	25	2	25

Table 12 Animal bone measurements

Period	*Total length (mm)*	*Greatest breadth (mm)*
Cattle metacarpal bones		
C1	192	55.9
C1		63.1
C2-C4	194	66.8
C2-C4	199	68.8
Horse radius		
Mid C1	269	

7. THE POTTERY

The samian

by W J Rodwell

Kelvedon, in common with the other 'small towns' of Roman Essex, has yielded sigillata from a diverse range of excavations and chance finds. There is therefore no reason to suppose that any chronological or fabric bias is present, but that the assemblage truly reflects those economic and social factors which led to the importation and use of sigillata in the Roman settlement. All the available material has been examined and reported upon, and may in due course be compared with assemblages from other small towns in the region, such as Chelmsford (Rodwell 1987), Great Chesterford, Wickford, and Harlow.

Neither the quantity nor quality of the sigillata from Kelvedon is great, and the better datable and more intrinsically interesting pieces are not derived from secure ceramic assemblages. The largest collection of stamped and decorated wares is that made by M J Campen, who retained little of the plain ware from his excavations. Smaller collections were made by H J D Bennett and F N Snowden, and a few items were acquired by the late Dr D J E L Carrick. None of this material has stratigraphical associations and most of it remains in private possession, The Bennett Collection is in Colchester Museum and a few items from the Campen and Carrick collections are on loan to Kelvedon Museum. The bulk of the excavated pottery is from Mrs K A Rodwell's work and a few pieces are from that of Miss B R K Dunnett; the samian ware found in subsequent excavations by M R Eddy has not been available for inclusion in this study. We are greatly indebted to Mr B R Hartley and Miss Brenda Dickinson for providing details of potters and their manufacturing dates for the stamped wares. The die numbers given are those which will appear in Mr Hartley's forthcoming *Index of potters' stamps on samian ware,* and the superscript letters *a, b* and *c* which follow the name of the factory indicate:

a A stamp attested at the pottery in question
b A stamp not so attested, though other stamps of the same potter occur there
c Assigned to the pottery on evidence of fabric, distribution, etc

The potters' stamps (Fig 70)

There are 36 potters' stamps which are either reasonably complete or are reconstructable and another 10 which are totally illegible or hopelessly fragmentary, 7 of which are illustrated.

S1 Albucianus of Lezoux[a]. Form 33, stamped ALBVCIANI (die 6c); half-complete. *c* AD 165-200. Unlocated (Campen Coll).

S2 Albucius ii of Lezoux[a]. Form 33, stamped ALBVCI (die 6a); two-thirds complete. *c* AD 150-80. L unstrat (Campen Coll).

S3 Albucius ii of Lezoux[a]. Form 33, stamped ALBV[C.I] (probably die 6a). *c* AD 150-80. B2, unstrat.

S4 Aquitanus of La Graufesenque[a]. Form 29, stamped in centre of base OF.A[QVIT]AI (die lb); near-complete vessel with unworn footring. For decoration see D9 (Fig 71). *c* AD 45-65. L2. (Bennett Coll, Colchester Museum, CM 153.60).

S5 Bio of La Graufesenque[b]. Form 27, stamped BIOFE (die 7b). *c* AD 40-65. C unstrat (Snowden Coll).

S6 Dagomarus of Les Martres de Veyre[b] and Lezoux[b]. Form 18/31, stamped DAGO[MRI] (die lla). *c* AD 115-35. J, unstrat.

S7 Drit... of Lezow[c]. Form 33, stamped DRITM, retrograde (die la). Antonine. Unlocated (Campen Coll).

S8 Escusius of Lezoux[c]. Form 33, stamped ESCUS1.M (die 2a); near-complete, possibly from a burial. *c* AD 155-95. Unlocated. (Campen Coll).

S9 Gabrus ii of Colchester[a]. Form 31, stamped GABRV[S.F.] (die 2a); complete apart from two small pieces of rim. Soft fabric in poor condition; good orange gloss, with a pock-marked surface resulting from tiny air bubbles in the slip. *c* AD 160-200. J G74d.

S10 Gabrus ii of Colchester[a]. Form 31, stamped [GA]BRVS. FI (die la); half base, soft yellowish fabric with the gloss almost completely excoriated. Graffito under base NI. *c* AD 160-200. E unstrat. (Snowden Coll).

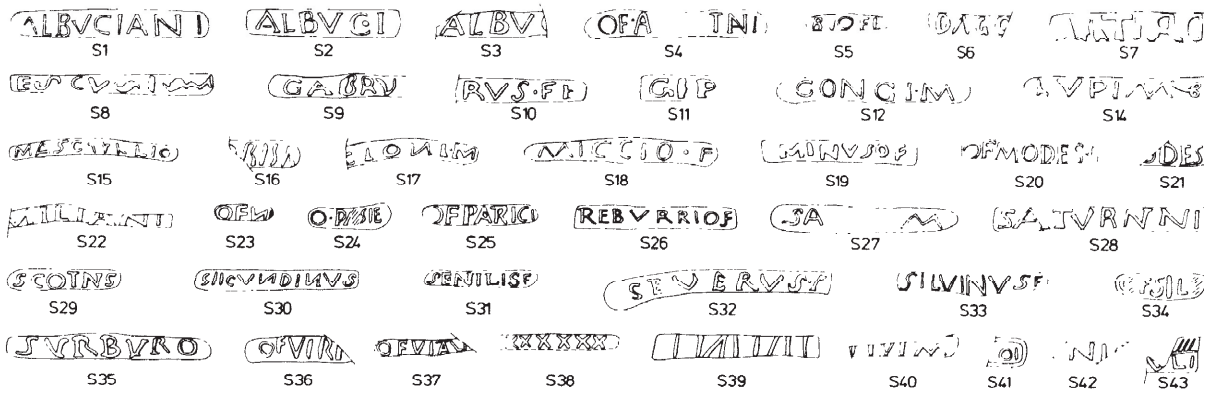


Fig 70 Samian potters' stamps; scale 1:1

S11 Gippus of Lezoux[a]. Form 31, stamped GIP[Pl,M] (die 2a); near complete but in poor condition and badly excoriated. *c* AD 160-80. J G74e.

S12 Gongius of Lezoux[c]. Form 31, stamped GONGI.M (die 2a); three-quarters complete and possibly from a burial. *c* AD 140-70. Unlocated. (Campen Coll).

S13 Licinus of La Graufesenque[b]. Form 27g, stamped LICNI (die 40c), not illustrated. *c* AD 45-65. G unstrat. (Campen Coll).

S14 Lupus iii of Lezoux[b]. Form 31, stamped LVPIM-8 (die 2e); two-thirds complete and possibly from a burial. *c* AD 150-80. Unlocated. (Campen Coll).

S15 Mascellio i of Lezoux[b]. Form 31, stamped MASCIILLIO (die 4a); two-thirds complete and possibly from a burial. *c* AD 160-200. Unlocated (Campen Coll).

S16 Memor of La Graufesenque[b]. Form 27, stamped [MEMO]RISM (die 3a). *c* AD 70-85. B3, 304.

S17 Miccio iii of Lezoux[c]. Form 18/31, stamped [MIC]C IONI.M (die 2a). *c* AD 150-70. B3, 303, period 3B.

S18 Miccio vii of Colchester[a]. Form 18/31, stamped MICCI0.F (die la); complete and probably derived from a burial. *c* AD 160-200. Unlocated. (Campen Coll).

S19 Minuso ii of Colchester[a]. Form 31, stamped MINVSOF (die la); near-complete, with part of the rim removed in antiquity. Now abraded, but formerly had a good, orange glossy slip. *c* AD 160-200. J G3d.

S20 Modestus i of La Graufesenque[b]. Form 18, stamped OFMODEST (die 2e); partly burnt, apparently after breakage. *c* AD 50-65. B3, 312, period 3A.

S21 Modestus i of La Graufesenque[a]. Form 18, stamped [OFM]ODES (die 4a); worn footring and wall cut down for reuse of base. *c* AD 50-65. Unlocated. (Campen Coll).

S22 Namilianus of Lezoux[b]. Form 31R, stamped [NAM]ILIANI (die 3a). *c* AD 160-90. Unlocated. (Campen Coll, Colchester Museum).

S23 Niger ii of La Graufesenque[b]. Form 27g, stamped OFNI (die 9b); two-thirds complete, with little wear on the footring. *c* AD 55-70. Unlocated. (Campen Coll).

S24 Passienus of La Graufesenque[a]. Form Ritt. 8, stamped O.PASIE (die 53a); half-complete, with worn footring. *c* AD 50-65. Unlocated. (Campen Coll).

S25 Patricius i of La Graufesenque[b]. Form 33a, stamped OFPARICI (die 3h). *c* AD 65-90. Unlocated. (Campen Coll).

S26 Reburrus ii of Lezoux[a]. Form 33, stamped REBVRRIOF (die 4m); slightly burnt. *c* AD 140-70. E unstrat. (Snowden Coll).

S27 Sa..... of South Gaul. Form 18, stamped SA[ ]M. Potter and die not identified; later Flavian. Graffito MAT on outer wall: J G97b, found *c* 1968. (Bennett Coll).

S28 Saturnimus ii of Lezoux[b]. Form 33, stamped SATVRNIN (die 11a). *c* AD 160-200. Unlocated. Campen Coll.

S29 Scotnus of La Graufesenque[b]. Form 15/17 or 18, stamped SCOTNS (die 5a). *c* AD 45-60. B3, 316, period 3A.

S30 Secundinus ii, iii or iv of Lezoux[c]. Form 33, stamped SIICVNDINVS (die 4a); almost complete, and possibly from a burial. *c* AD 110-45. L unstrat. (Colchester Museum, CM 188.60).

S31 Senilis i of La Graufesenque. Form 29, stamped in centre of base SENILISF (die 2a); burnt, unworn footring. For the decoration see D17 (Fig 71). *c* AD 45-65. B3, 303.

S32 Severus iii of Lezoux[b]. Form 33, stamped SEVERVSF (die 6c); graffito in the form of a six-pointed star cut on outside wall. *c* AD 130-60. Unlocated. (Campen Coll).

S33 Silvinus iii of Les Martres de Veyre[a]. Form 42, stamped SILVINVSF (die 6a); halfcomplete, with strap handle and unworn footring. *c* AD 110-25. Unlocated. (Campen Coll).

S34 Silvius i of La Graufesenque[b]. Form 27, stamped OFSILV (die 9a); near-complete, with a little wear on footring. *c* AD 50-70. Unlocated. (Campen Coll).

S35 Surburo of Lezoux[b]. Form 33, stamped SVRBVRO (die 3a). Antonine. Unlocated. (Campen Coll).

S36 Virilis i of La Graufesenque[b]. Form 27, stamped OIVIRI[L] (die 9a); orange fabric. *c* AD 75-100. E1C, below floor.

S37 Vitalis i of La Graufesenque[b]. Form 18, stamped OFVITALI[S] (die Id); half base, slightly burnt. *c* AD 55-65. B3, 316, period 3A.

S38 Illiterate stamp in the form of six crosses. Form 18/31, near-complete, and rivetted in antiquity. Central Gaulish, 2nd century. J G98b (Bennett Coll).

S39 Illiterate stamp. Form 15/17 or 18, South Gaulish, probably Flavian. Unlocated. (Campen Coll).

S40 Fragmentary and illegible stamp. Form 31R, Central Gaulish, Antonine. Unlocated. (Chelmsford Museum, 1960).

S41 Fragmentary stamp, ending 101. Form 18/31, fabric suggests Les Martres de Veyre. Hadrianic (?)-ElC, unstrat.

S42 Fragmentary stamp reading NI[. Form 33, fabric suggests Les Martres de Veyre. This does not fit any of the known dies of Nicephor. Hadrianic (?). B2, 2.

S43 Fragmentary stamp reading]VLI. Form 17R, Arretine ware, seep 101. B4, 424, period 2C.

The decorated ware (Figs 71-4; MF 2.A1-2.B1)

Outstanding among the decorated sigillata from Kelvedon are some of the pre-Flavian pieces, of which a fine bowl, form 29, by Aquitanus has been published by Hull (see D9, below). The better Antonine pieces from the Campen Collection were published in a local bulletin by Erith (1968) but several of these items could not be located when the writer studied the collection in 1971 (Erith 1968, 16, nos 1, 3-9, 11 and 12). Only the sherds which were available for study have been included in the catalogue with the addition of D40, which is redrawn after Erith *(ibid,* 16, no 5).

Fig 71 Decorated samian; scale 1:2

Fig 72 Decorated samian; scale 1:2

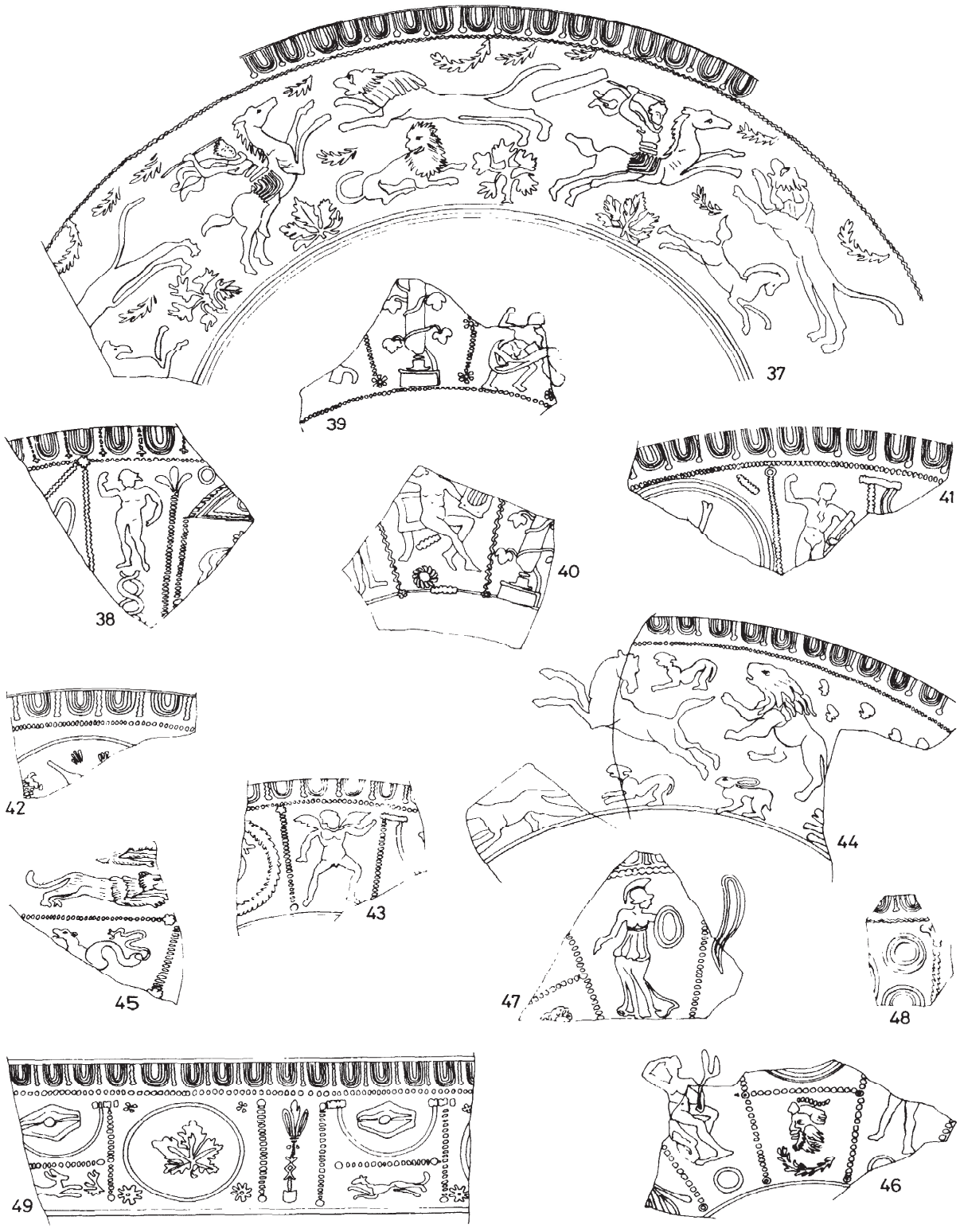


Fig 73 Decorated samian; scale 1:2

The 54 decorated vessels described, together with the 9 others published by Erith represent more than 90% of all the figured ware from Kelvedon. Only small pieces, totally devoid of intrinsic and stratigraphic interest have been omitted. Stanfield & Simpson 1958 is cited as S & S.

Claudian and Neronian AD 45-70 (Fig 71.1-17)

There are 17 vessels of this period; all are South Gaulish except for 11, which is early Lezoux ware (cf Oswald 1937, figs 14.10 and 14.22). The following can be attributed to individual potters: 1 (f29) is typical of the work of Bassus (cf Knorr 1952, taf 8A, 8B); 5 (f29) is paralleled by a signed bowl of Albinus from Bregenz (Knorr 1919, taf 1B); 6 (f29), is identical to a bowl signed by Murranus from London (Knorr 1952, taf 44C), and 7 (f29) is probably also by this potter; 9 (f29) is a near-complete bowl stamped by Aquitanus with a slight trace of a cursive mould signature below the decoration; 17 (f29) is stamped by Senilis. All are unstratified except 4 (B3 303, 315), 7 (B3 312, 316), 8 (B3 316), 13 (J329), 14 (B3 321), 15 (B2 48), 16 (B4 432), and 17 (B3 303).

Flavian (Figs 71.18-22; 72.23-32)

All the vessels in this group are South Gaulish and very few can be attributed to individual potters. The earliest pieces are 18 (f29), 19 (f29) and 20 (f30), dating to *c* AD 60-75; 21 and 22 (both f29) date to *c* AD 70-85 and the remainder, which mainly form a group from the pit Q3 (23, 27, 29-32), to *c* AD 75-95. Bowls 30, 31 and 32 (all f37) are in the style of Germanus and his associates (cf Knorr 1919, taf 36A, 39T) and the two latter are clearly from the same workshop. The other vessels were also f 37 except for 23, a poorly moulded f 78. Stratified sherds include 20 (B2 48), 21 (ElC, below floor), 25 (B2 18), and 28 (B3 312).

Hadrianic-early Antonine (Figs 72.33-6; 73.37-40)

Earliest in this group, *c* AD 110-30 is 33 (f37) in the style of the Donnaucus group (cf S & S, pls 46.529 and 47.548), although the fabric is probably East Gaulish. The remaining vessels are all Central Gaulish f 37 and lie within the date bracket *c* AD 120-50. Bowl 34 is characteristic of G I Vibius/Gelenus (cf S & S, pl 65.2); 35 is in the style of Sacer and closely similar to a signed vessel from London (S & S, pl 82.6); 37 is a freestyle bowl signed in the mould with an unreadable plain-ware stamp. This suggests the work of Acurio, but stylistically it is also very close to the work of Butrio (S & S, pl 58.65b); 38 and 39 are difficult to place having attributes in common with several Hadrianic potters; 40 can be attributed to Arcanus. None of these pieces comes from stratified contexts.

Late Antonine (Figs 72.41-9; 74.50-4)

Bowls 41-48 are all Central Gaulish f 37; the first three are in the style of Cinnamus and date to *c* AD 150-80; 44 and 45 are both burnt and come from the temple in area E2; the former is a freestyle bowl which is possibly the work of Casurius, the latter may be by Cinnamus or Doeccus. Both date to *c* AD 160-90 as do 46-48. Bowl 46 is probably the work of Iullinus; 47 is in the style of Casurius, and 48 in the style of Paternus (cf S & S, pl 104.4). Bowls 49 and 50 are both Central Gaulish f 30 in the style of Doeccus I dated *c* AD 160-200; 51-53 (all f37) are Rheinzabern products, respectively in the style of B F Atto (Ricken 1948, taf 40.14 and 40.21), Helenius *(ibid,* taf 176.11 and 176.17) an uncommon potter, and Julius-Julianus. All date to *c* AD 170-200+. Bowl 54 (f37) is Colchester samian with details typical of Colchester potter A (cf Hull 1963, figs 20.1,35.6, and 36.2) dating to *c* AD 160-200. Apart from pieces 44,45, 51 (B3, 303) and 52 (B3, 321) all are unstratified.

The plain ware

The bulk of the unstamped plain ware is derived from the excavations of 1970-3, and it is this material only which has been taken into consideration in the statistics given below. Smaller quantities of plain ware do survive, especially in the Snowden Collection, but these are devoid of any real interest, being mainly the common Antonine forms, with the addition of a few 1st century pieces.

The only unusual forms of plain ware from Kelvedon are a dish form 15/31 from Area L, and the micaceous sherd described below.

A fragment of early Lezoux Ware

A decorated sherd of early Lezoux ware has already been noted (Fig 71.11) and there is additionally a small fragment of plain rouletted rim (Fig 74.55), probably derived from the same source. It was found residually in G22. The sherd, which is somewhat abraded, is in pinkish-orange fabric, rather soft and crumbly in texture. A few tiny platelets of mica and quartz grains are visible under a hand lens; the slip is orange and very thin. The fabric description accords with that given by George Boon for early micaceous Lezoux ware (Boon 1967, 28). The rim of the vessel is slightly concave, 130mm in diameter, and is decorated with two bands of fine rouletting. It is clearly from one of the standard-sized cups of Loeschcke form 8 (cf sigillata form 11A in the *Camulodunum* series: Hawkes & Hull 1947, 185-6, pl XL). While British finds of vessels of this form are well known in Arretine and, especially, South Gaulish fabrics, few products of the early Lezoux factory have as yet been reported. A similar cup from Silchester has been published by Boon (1967, fig 2, no 7), but Loeschcke f.8 is not represented amongst the interesting collection of Lezoux ware from Fishbourne (Dannell 1971, 266-7). Date of the Kelvedon vessel, probably *c* AD 45-60.

Discussion

The assemblage of sigillata from Kelvedon is, in general terms, typical of collections obtained from 'small towns' in south-eastern Britain, where an Iron Age origin was followed by a short-lived Roman military presence. It is instructive to contrast the Kelvedon material with that from fully urban Colchester, only 9 miles away.

From the pre-Roman levels there is only a single sherd of sigillata, a fragment of a large., radially-stamped Arretine platter (S43). This is one of few such finds from Essex, outside Camulodunum: the others are from Fingringhoe, Heybridge (P Kenrick in Wickenden 1987, fig. 26.9), and Pleshey. The last two are large platters associated with burials, as probably is a third, of uncer-

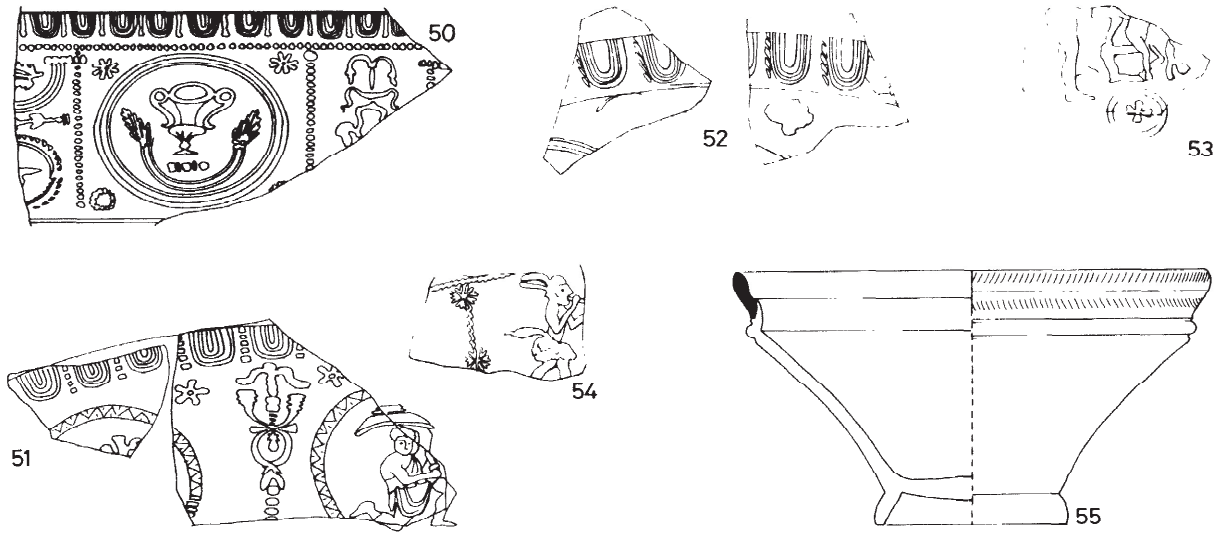


Fig 74 Decorated samian; scale 1:2

tain provenance, now in Chelmsford Museum (Rodwell in prep). Pre-conquest imports of Gaulish samian are, as yet, unconfirmed in rural Essex, and at Kelvedon there is, typically, an absence of early Claudian wares. This contrasts markedly with the late pre-conquest and conquest-period assemblages from Camulodunum.

Pre-Flavian samian is well represented at Kelvedon, particularly in Area J (Table 13), but most of the vessels are fairly certainly Neronian, with only a sprinkling of later Claudian pieces- The same story is told by the pre-Plavian potters' stamps (Table 14): the mean dates for their manufacture cluster around AD 55-60. It is well established that the occurrence of samian at this period, particularly on sites of lesser rank than *civitas* capital, is a useful indicator of the likelihood of military activity. Very little samian pottery reached Kelvedon before *c* AD 50 and thus we may confidently assert that a conquest-period military base in the mid 40s is not to be expected. In contrast to this, however, the considerable quantity of both plain and decorated wares assignable to the period *c* AD 55-70 is only satisfactorily explained in terms of a military base in the 60s, and this has now been located (p 133). The situation is precisely comparable to that at Chelmsford (Rodwell 1987) and, probably, Great Chesterford (although here study of the sigillata is not yet completed).

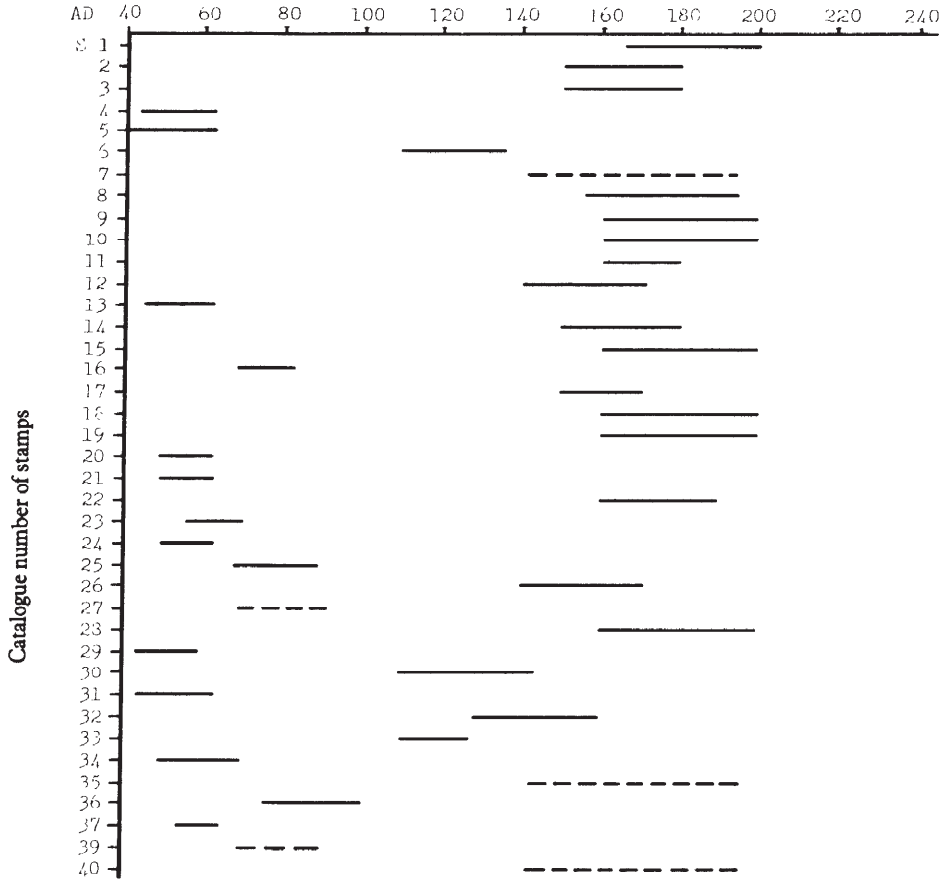
Flavian samian is represented equally well in Areas B and J, and elsewhere generally in the town. Relatively speaking, however, it is less abundant after *c* AD 80; in fact there is clearly a decline in the quantity arriving at the settlement. Then, from the late Flavian to the beginning of the Antonine period there is a major hiatus, which *may* be due more to the individual histories of the two main excavated areas than to any general phenomenon in the chronology of settlement at Kelvedon. It is, of course, normal to record a marked fall-off in the volume of early 2nd century sigillata from excavations in towns, but Kelvedon has, to date, yielded so little samian from the f&tories at Les Martres-de-Veyre that the point is worthy of notice.

Table 13 Excavated samian from Areas B and J, expressed as actual sherd counts and as percentages within each site.

	Area B *(281 sherds)*		**Area J** *(106 sherds)*		*Total*
	Vessel Numbers	*Percent of total assemblage*	*Vessel Numbers*	*Percent of total assemblage*	*percentage (both sites)*
Pre-Flavian	15	5.34	32	30.19	12.14
Nero/Flavian	25	8.90	13	12.26	9.82
Flavian	65	23.13	26	24.53	23.51
Flavian/Trajanic	3	1.07	-	-	0.78
Trajanic/Hadrianic	11	3.91	9	8.49	5.17
Hadrianic/ early Antonine	35	12.46	6	5.66	10.59
All Antonine	123	43.77	17	16.04	36.18
Colchester ware	4	1.42	3	2.83	1.81
Total	**281**	**100.00**	**106**	**100.00**	**100.00**

Table 14 Summary of the dating of samian potters' stamps from Kelvedon (based on 39 datable name stamps)

Approximate date ranges for manufacture



As usual, Antonine wares loom large in the overall sigillata record, but even here there is relatively little from the last three decades of the 2nd century; it is noteworthy that the later Antonine forms such as 79, 80, 32 and Curle 15 are scarcely represented in the record, and late examples of other common forms, such as f.37, are also few. In southern and eastern Britain it is normal to find a high incidence of East Gaulish sigillata on sites spanning the late 2nd and 3rd centuries: in Essex, between 10 and 30% of the Antonine and later samian from any given site is likely to be of East Gaulish origin. But at Kelvedon the figure is less than 5%; and there is not a single East Gaulish potter's stamp from the site.

It is not easy to provide an explanation for this phenomenon, which is presumably related somehow to economic factors. The paucity of East Gaulish ware is not simply a corollary of restricted investigations: the bulk of the potters' stamps have been collected from diverse sites in the town and are not derived from the recent excavations. It seems inescapable that there must have been a decline in settlement at Kelvedon after *c* AD 170, when East Gaulish and late Central Gaulish pottery was flooding the markets round about.

It comes as no surprise to find that Colchester samian features noticeably in the record, and accounts for four out of the seven potters' stamps which have a manufacturing date-bracket ending as late as *c* AD 200 (Table 14). The Colchester vessels may, of course, be several decades earlier in origin, since the dating of this factory is still very imprecise.

Further discussion of the implications of Kelvedon samian must await the completion of other detailed pot-

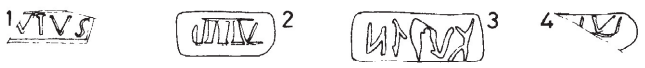


Fig 75 Gallo-Belgic and coarseware stamps; Scale 1:1

Table 15 Potters' stamps from Kelvedon and other sites compared

	Kelvedon	*Gestingthorpe*	*Chelmsford*	*Ilchester*
Arretine	1	0	0	0
South Gaulish	16	1	10	14
Central Gaulish	22	24	28	39
East Gaulish	0	6	1	6
Colchester	4	0	0	0
Total	43	31	39	59

tery studies in Essex. It is, however, generally clear that both trading patterns and individual site histories may be illuminated by rigorous study of sigillata assemblages, separately as well as in aggregate. In Table 15 Kelvedon is compared to two other sites in Essex with continuous occupation throughout the Roman period: Gestingthorpe is a villa where there was no military phase; the figures for Chelmsford represent stamps from only one group of sites in the centre of the town. Finally, figures for Ilchester are also given. This small Roman town in Somerset had a short-lived military phase which, once again, is unambiguously revealed in the samian record, although the fort has scarcely been touched by excavation (Rodwell 1982b).

Gallo-Belgic and coarseware stamps (Fig 75)

by V Rigby

[AC]VTVS Radial stamp; at least one incised circle; large platter, with a thick footring, about 15mm. TR l(C). B4, 424, period 2C.

Acutus Die 9Hl. The potter Acutus 1 and this die are discussed in detail in Partridge 1981 (165, 328). There is an additional stamp from Braughing, also on a large TR platter (Partridge 1979, 106). At present, the total for Britain is five which equals the total known from continental sites.

Source: the Marne-Vesle potteries, probably Rheims.
Date: late Augustan, *c* 10 BC-AD 10.

2 A111 A bordered illiterate mark. Central; cup base, probably *Cam* f 56. TR. Stamp not examined. Unlocated (Campen Coll).

The die is represented eight times at Camulodunum (no. 239), all the stamps being on TR cups of *Cam* f 56. There is only one dated example and that is from the more recent excavation at Sheepen undertaken by Mrs R Niblett (1985, MF 1.F9, GB Stamp 88). The stamp was found in a pit deposit dated to the post-conquest but pre-Boudican period by the excavator. This potter was one of the few to supply TR vessels to Britain in the post-conquest period.

Source: Marne-Vesle or Moselle potteries.
Date: Claudio-Neronian, AD 40-65.

Stamps on coarsewares probably of local origin

3 An illiterate mark. Central; small platter. B3, 316, period 3A. Fig 92.292.

Three stamps from this die occur on coarseware platters at Colchester. One is on a worn platter sherd from the 1934 excavations at Camulodunum but apparently unpublished. The remaining stamps are on platters in Roman cremation burials, Joslin Collection 153, Grave 44 and Taylor Collection 818, Grave 4/19.

The concentration of finds in the Colchester area suggests a local source. However, since the die-style is not typical of known British products and the forms are such close copies of their imported Gallo-Belgic prototypes they may have been imported from Northern Gaul via Camulodunum; in either case the distribution pattern would be indistinguishable. The roughcast beakers and the lamp in Taylor Grave 409 suggest a date in the third quarter of the 1st century AD, but Joslin Grave 44 includes a lattice jar which can scarcely be earlier than 2nd century in date (May 1930, pl lxxxi 44, and xci, 4).

4 A bordered illiterate mark. Central; one bordered incised wreath; small platter, no evidence of a footring. Blue-grey coarseware; burnished upper surface; smoothed lower surface with one arm from a burnished cross surviving. B3, 321.

Although no other stamps from this die have been identified, however there is an almost identical stamp on a platter base otherwise identical in every respect from recent excavations at Canterbury (excavations by the Canterbury Archaeological Trust). The two pieces must be from the same workshop and since they are clearly of British origin the source should lie somewhere in the Thames estuary and its hinterland.

The die-style is represented at the Roman potteries of West Stow and Hacheston, Suffolk, and also at London, both the City and Southwark, and Camulodunum. The style of the incised wreath also occurs at Hacheston so that the source probably lies on the north bank of the Thames. *c* AD 80-120.

Discussion

As expected the influence of Camulodunum looms large in the stamp list for Kelvedon with three of the four stamps being from dies definitely represented there. Stamps on products dated from *c* 10 BC to *c* AD 60 from sites lying north of the Thames and within about 60 miles of Camulodunum are usually represented at Camulodunum, suggesting that it was the main entrepot for North Gaulish imports at that time. Unfortunately the situation for recorded stamps on coarsewares is such that it is exceptional for a die to be represented more than once whether at the same or at different sites.

The two stamps on TR represent the full date range for such products in Britain with Acutus I one of the

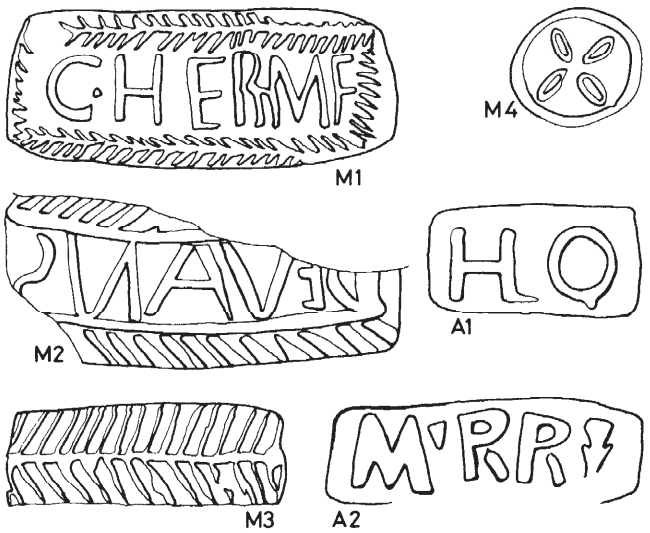


Fig 76 Mortarium and amphora stamps; scale 1:1

earliest specialist TR potters *c* 10 BC-AD 20 and 'alpha IV' one of the latest *c* AD 40-65. The resulting hiatus coincides more or less with the Tiberian period when trade in Gallo-Belgic wares was expanding and implies that the stamps are far from representative of the overall scope and use of these wares in the settlement. However, the absence of stamps on TN is even more unusual since it was imported into Britain on a much larger scale than TR, with the result that stamps on TN are much more commonly found.

It appears that the coarseware stamp on Fig 75.3 was supplied via Camulodunurn, whether it was made locally or imported from Gaul. The distribution pattern is 'tight', if two sites and four examples can be taken to justify the term. In contrast, the two findspots for Fig 75.4 are widely separated although there is little doubt that both were made in Britain by the same workshop. This 'wide distribution' may be the result of regional trade, a migratory potter, or the transfer of the workshop. At present, stamps on coarsewares present little evidence in the way of die-links for trade in non-specialized coarsewares over an extended area; however, the numbers are so small that further finds could easily produce a radical change.

Mortarium stamps (Fig 76)

by K F Hartley

M1 C. HERME. Large rim fragment with spout, stamped either side. Colchester, *c* AD 60-100. The same die occurs at Stebbing (Porters Hall villa, unpubl). G, unstrat.

M2 DEVALVS retrograde. Near-complete vessel in a cream fabric with a quadrant section rim. Stamped on one side of the spout only; the letters appear as negative impressions. Verulamium region, *c* AD 65-95. C, unstrat.

M3 Herringbone, cf Fig 93.356, die only recorded at Kelvedon. B2, unstrat.

M4 Roundel, cf Fig 96.408, also recorded from Gestingthorpe, Essex. Bl1, unstrat

Not illustrated: SATUR VALERI retrograde, broken two-line stamp with border, very much abraded. Colchester, *c* AD 55-90. EIC, pit D.

Amphorae stamps (Fig 76)

A1 HIQ Callender 71la. cf fig 7.47 from London. No date range given. One stamp at the base of the handle, Dressel 20. J3, period 3A.

A2 M.R.R.Y., Callender 1170. cf fig 11.45 from Windisch *c* AD 30-100. One stamp and handle, Dressel 20. P2 unstrat.

Fabric identifications

by D F Williams

Dressel 1B

Seven fragments (870 gm) from J2, 3, 329 and unstrat. Fig 84.156.

This type of amphora was made in the Italian regions of Campania, southern Latium and Etruria and seems to have carried wine. It is the characteristic Italian amphora found north of the Thames in pre-Roman contexts, and can be dated from shortly after the first quarter of the 1st century BC till the last decade of that century (Peacock 1971).

Dressel lB or 2-4 (26 gm) B4, 424

It is difficult to tell from this small sherd to which of the above types it belongs. The fabric, however, is distinctive and contains visible inclusions of dark-coloured augite, Peacock's (1971) 'black sand' fabric. An origin in the Latium area has been suggested for this fabric type, on the basis of the presence of yellow garnet when viewed in thin section (Courtois & Velde 1978). However, yellow-brown garnet is also a feature of the sands further south,

Fig 77 Graffiti; scale 1:1

and a Campanian origin, in particular the area around Pompeii and Herculaneum, has been more convincingly argued by Peacock (1977a). The Dressel 2-4 amphora was made during the period from the late 1st century BC to the mid 2nd century AD (Zevi 1966), though quantitative trends suggest that it was in decline by the later 1st century AD (Panella 1973). This sherd is from a pre-conquest context.

Beltran 1 (213 gm) J3, Fig 85.184

Amphorae of this form probably originated on the southern Spanish coast and the majority held fish-related products. The rim sherd at Kelvedon seems to belong to the early part of the typological sequence, which may suggest a late Augustan date for its importation (Beltran 1970).

Southern Spanish (four fragments, 555 gm) J3

This material probably derives from the coastal regions of southern Spain and seems to have been used mainly to carry fish-based products (Peacock 1971). In Britain this material occurs in 1st and 2nd century AD contexts.

Dressel 20 (94 gm) J33.

Sample only, all fragments not specifically mentioned were of this type. Dressel 20 amphorae come from the Guadalquivir region of Spain, between Seville and Cordoba, where they were used principally for the transportation of olive oil (Bonsor 1931). This type of amphora has a wide date range from the pre-Roman Period 1 levels at Camulodunum to the 3rd century AD.

The following amphorae are also illustrated: Dressel 1, Fig 91.288; Rhodian, Fig 92,298; southern Spanish, Fig 93.348.

Graffiti (Fig 77)

by M W C Hassall

1 TOVTATIS Cut on the shoulder of a grey-ware jar (Fig 94.361). One of the chief Celtic gods (normally *Teutates,* cf Ross 1967, 171-2) invoked on an altar from Cumberland (RIB 1017), and as *Mars Toutatis* on a votive plaque from Barkway, Hens (RIB 219; Collingwood & Wright 1965). Hassall & Tomlin 1978, 478, no 41.

2 MAT. Cut on the outer wall of a samian platter, part of a cremation group (Fig 89.G97b). A contraction of *Maternusla,* which was a particularly common name in the Celtic provinces, cf Kajanto 1965,303. Wright & Hassall 1972, 356, no 25.

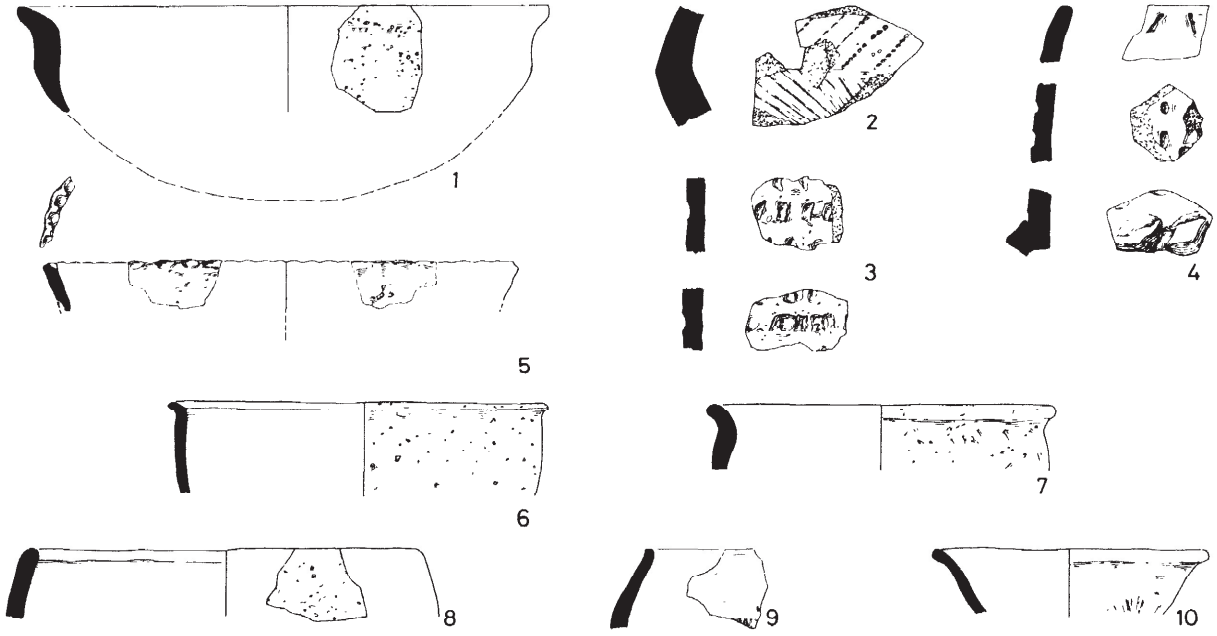


Fig 78 Pottery period 1; scale 1:4 (except 2, 3 and 4, 1:2)

3 [VVS. Cut on the neck of a flask (Fig 86.208), possibly part of a grave group destroyed in the Roman period. The first letter is doubtful but if as shown either *Ingenuus* or *Perpetuus* is possible; the former is the commoner of the two.
4 Chi-Rho on an Oxfordshire colour-coat base (Fig 96.412); cf Thomas 1981, 86-91.

Early prehistoric pottery (Fig 78; MF 2.B2-4)

Only a few sherds were found; these included two fragments of a Neolithic wide-mouthed bowl (l), and part of a beaker decorated with combing and comb-stabbing (2), both residual in area J. Twenty-five sherds of rusticated beaker coarseware (3) were found together in a pit (J 162), and there were six more sherds in the same fabric from residual contexts in area J. A vessel related to 3 in fabric and decoration but with the addition of applied pellets (4) was found in a pit (F68) in area B2. Two flint-gritted vessels (5, J350: 6, J328) were late Bronze Age or early pre-Roman Iron Age.

Four middle pre-Roman Iron Age vessels (7-10) can be closely paralleled at Little Waltham (Drury 1978a). Their fabric is the commonest Little Waltham type (Fabric H) and their forms correspond to the type-series there: 7 to F3 (eg 148, 150); 8 to F15A (eg 75); 9 to Fl5C (eg 55), and 10 to F17 (eg 264). This fabric was sufficiently common at Kelvedon to be included in the fabric series (Fabric A). In addition to two sherds from J 350 (Fig 79.11,12) and a hybrid vessel from F358 (Fig 81.8l), there were 65 sherds from J (for their distribution see Fig 13), including the period 2A features 328,338,348,352, and 358. There was none from area B.

Late pre-Roman Iron Age and Roman pottery

Introduction

The remainder of the pottery is presented in stratigraphical groups, arranged typologically within the larger deposits. A great deal of Iron Age material was residual in Roman features; this has not been illustrated unless it supplements the stratified examples. In the earlier groups distinctions have regularly been made between handmade (H/M), wheel-finished (W/F) and wheelthrown (W/T) pottery as all techniques were equally present; when this is unspecified the vessels are wheel-thrown. The Iron Age coarsewares have been assigned to a fabric type series; fine wares and Roman vessels are individually described. Quantifications for a few of the more significant groups are included (J350, p 103; J3, p 110; the kilns, p 114; J302, p 114; B4, 424, p 121) to illustrate changing fabric ratios. These were calculated by sherd count, although total weights are also given.

Fabric A

Tempered with coarse quartz sand and a little vegetable material. Colour variable, handmade, period 2A or earlier, see above.

Fabric B

Soft slightly micaceous fabric tempered with vegetable matter and moderate amounts of grog and quartz sand, with occasional larger angular grits, usually flint. The exact proportions of the inclusions vary from sherd to sherd so that one end of the range is close to Fabric A and the other close to Fabric C. Colour is variable, dependent upon firing, from black to orange-brown but often grey-brown with a black core. The surface finish varies from coarse with surface lacunae to highly burnished, often on the same vessel. It is usually handmade or wheel-finished but thrown examples are not unknown. Found in quantity only in features of periods 2A and B, always in lesser quantities than Fabric C, which replaced it completely.

Fabric C

Soft 'soapy' fabric tempered with grog; the particle size varied but it was not found useful to subdivide any but the very largest (over 2mm, Fabric D). The internal surfaces had a tendency to flake. Colour was variable, often grey-brown throughout, but some harder-fired vessels had black surfaces and grog particles in a light grey core. The surface could be vegetation-marked, combed or burnished, often on the same vessel, which could be handmade or wheel-thrown. This was the commonest late Iron Age fabric, in use from period 2A to period 3A and present in larger quantities than any other.

Fabric D

As Fabric C but with grog particles of 2mm or more, using the same range of surface finishes, including burnishing. Because of the size of the grogs the surface is often pimply. Generally but not exclusively used for large or coarsely finished vessels. Period 2A-3A.

Fabric E

Soft orange-buff fabric heavily shell-tempered, now vesiculated. Club and ledge-rim jar forms only. Very common in southern Essex but rare at Kelvedon. Period 3A.

Fabric K

Grog-tempered, but hard-fired, generally light grey throughout. A development of C, commonest in period 3A when the same forms, notably jars were made in both fabrics. Longer lived in its coarser version as a storage jar fabric developing from D.

Area J: period 2 A/B

Period A/B, ditch 350 (Figs 79, 80)

This fature produced 22.7 kg of pottery or *c* 1036 sherds from a minimum of 120 vessels; 59 are illustrated. Only two vessels (4 sherds) were in Fabric A (11 and 12); of the remainder 77% was Fabric C and 23% Fabric B, although the ratio of illustrated Fabric B pots is slightly higher (26%). A wide range of forms was present and these have been presented typologically, ranging from handmade vessels in the MPRIA tradition through a series of wheel-finished jars to predominantly wheel-thrown cordoned bowls, jars and beakers. In no group was one fabric or means of production used exclusively, although Fabric B was commoner

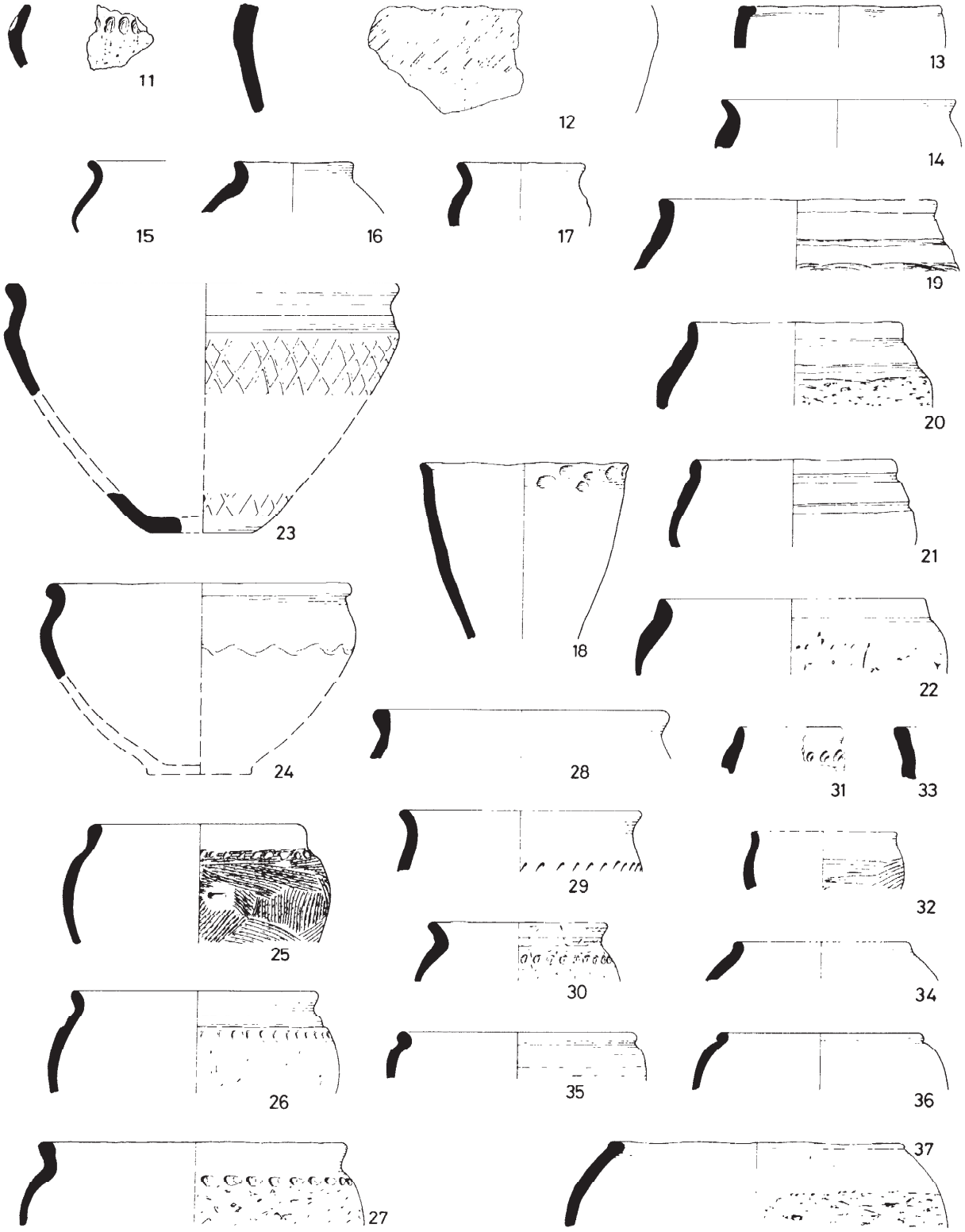


Fig 79 Pottery: area J, period 2, F350; scale 1:4

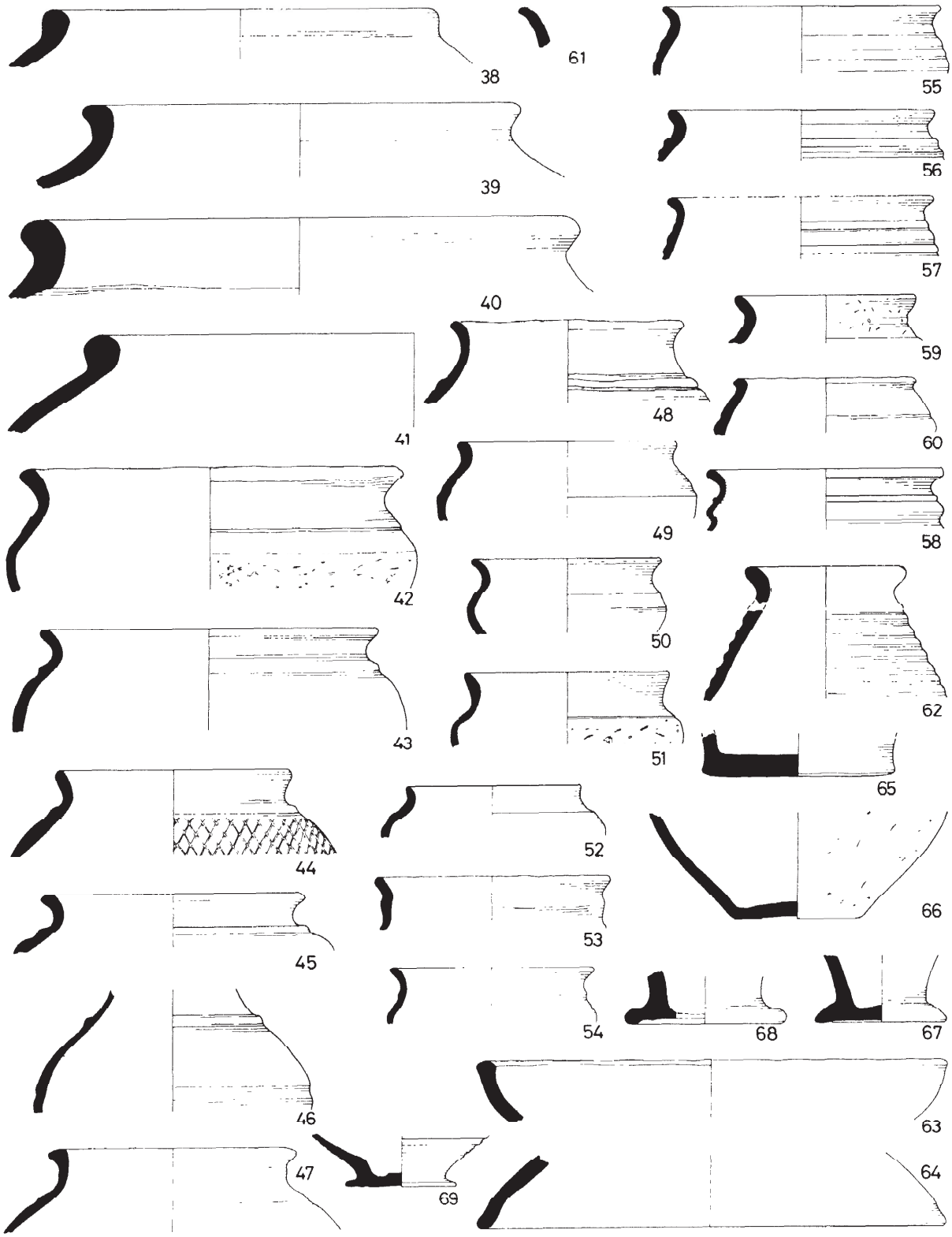


Fig 80 Pottery: area J, period 2, F350; scale 1:4

among the handmade types and the majority of wheel-thrown vessels were in Fabric C. The relative proportions of vessel types are reflected by the illustrated items: of 120 vessels 8.3% were MPRIA types; 29.2% wheel-finished jars; 5.8% storage jars; 43.4% cordoned bowls and jars, and 13.3% miscellaneous. There were no late Iron Age fine wares from this feature. The large size of the fragments and the number of conjoining sherds suggests a contemporary group containing little residual material. For a discussion of the date of this feature see p 132.

Handmade jars (Fig 79)

11 H/M Fabric A, dark grey, fingertip decoration above a weak carination, surface rough and vegetation-marked. Probably a forerunner of 25-7

12 H/M Fabric A, dark grey, oxidized externally, coarse sandy exterior decorated with incised diagonal lines. cf Drury 1978a, fig 42.17

13 H/M Fabric B, black core, brown surfaces, traces of external burnishing; related to Little Waltham form 7, cf Drury 1978a, fig 52.296, 305

14 W/F Fabric B, black, abraded, rim formerly burnished; Little Waltham form 13, cf Drury 1978a, fig 42.24.

15 H/M Fabric B, formerly black burnished, exterior now brown and slightly heat-crazed.

16 H/M Fabric B, black, burnished exterior and inner lip of rim.

17 W/F Fabric C, grey-brown, burnished exterior and inner lip of rim.

18 H/M Fabric C, conical jar, black, burnished externally with vertical striations, apart from the rim which was burnished horizontally. The faint fingertip impressions below the rim are not decorative but the result of pinching the clay to form the rim. Little Waltham form 17A, cf Drury 1978a, fig 42.23.

Upright jars with horizontal grooves

19 W/F Fabric C, grey core, black surfaces, rim and rudimentary cordon burnished, body combed; cf Loose, Kent (Kelly 1971, fig 10.5-7).

20 W/F Fabric B, grey, oxidized externally; rim and shoulder burnished externally; body rough and vegetation-marked; cf Swarling, Kent (Birchall 1965, fig 10.79).

21 W/F Fabric C, grey-brown, rim and shoulder burnished externally.

22 W/F Fabric B, grey-brown, rim and shoulder smoothed, body rough.

Bead-rim jars with burnished decoration

23 W/F Fabric B, black, oxidized in places; rim and shoulder burnished; body decorated with burnished lattice. Similar vessels from Heybridge, Essex (Birchall 1965, fig 23.195) and Teston, Kent (Ocock 1974, fig 1.4).

24 W/F Fabric C, grey-brown, rim and shoulder burnished terminating at a burnished wavy line.

Jars with horizontal stabbing/fingertipping and rough/combed bodies

25 W/F Fabric C, grey-brown, burnished rim, shoulder decorated with a row of stabbed impressions; body of vessel combed; a pot-lid fixture near the shoulder. For parallels and a discussion of this type see Rodwell 1976, 221, fig 16.

26 W/F Fabric B, black core, brownish surfaces; burnished rim; a row of faint fingertip and nail impressions on the shoulder; the body soot-encrusted and lumpy.

27 W/F Fabric C, dark grey, surfaces pitted by wear; burnished rim, shoulder decorated with a row of fingertip and nail impressions; below this the surface rough with impressions of vegetable matter.

28 W/F Fabric C, grey-brown, exterior abraded, burnished rim.

29 W/P Fabric C, red core, grey surfaces; burnished rim; shoulder decorated with a row of diagonal slashes.

30 W/F Fabric C, grey core, lumpy brown surfaces, vegetation-marked inside and out; a row of fingertip and nail impressions on the shoulder.

31 H/M Fabric B, burnished rim; fingertip and nail impressions on shoulder; soot-encrusted.

32 H/M Fabric C, grey core, brown exterior, rim smoothed, body combed.

33 H/M Fabric B, black core, light brown surfaces, a little vegetation marking.

Bead-rim jars

34 W/F Fabric C, grey, burnished exterior. *Cam* f259.

35 W/T Fabric C, grey-brown, burnished rim with two burnished bands beneath.

36 W/T Fabric C, grey, burnished exterior.

37 H/M Fabric C, grey-brown, rim and shoulder roughly burnished with traces of a black coating; cf Drury 1978a, 63; body rough and vegetation-marked; *Cam* f254.

Storage jars (Fig 80)

38 W/F Fabric C, brown, burnished exterior with traces of a black coating, flaked interior.

39 W/T Fabric C, grey core, brown burnished exterior, flaked interior.

40 W/F Fabric C, red core, grey surfaces, burnished inside and out.

41 ? W/T Fabric C, red core, flaked inner surface, grey vegetation-marked exterior with traces of a black coating, especially on the rim; cf Drury 1978a, 63.

These probably had combed bodies; a number of sherds from large vessels were found, but could not be made to join the rims; cf *Cam* f270A and Rook 1970, fig 2.6.

Everted-rim jars with single or incipient cordons

42 W/T Fabric C, grey, rim and shoulder burnished; body lumpy and vegetation-marked.

43 W/T Fabric C, brown core, grey surfaces, flaked internally, a little vegetation marking.

44 W/T Fabric C, brown, burnished rim and shoulder, burnished lattice on body; cf a similar vessel with burnished lattice on the shoulder from Heybridge (Birchall 1965, fig 23.196).
45 W/T Fabric C, grey core, black burnished exterior flaked interior; cf a similar vessel from Heybridge (Birchall 1965, fig 23.194).
46 W/T Fabric B, black, burnished exterior.
47 W/F Fabric C, grey-brown, roughly burnished lumpy surface with vegetation marking.
48 W/F Fabric C, brown core, grey surfaces.

Plain everted-rim bowls/jars

49 W/T Fabric B, black, burnished exterior. This class of vessels appears to be intermediate between MPRIA fine wares such as Little Waltham form 13 (Drury 1978a, 54) and the multiple cordoned bowl; all have incipient cordons.
50 W/T Fabric C, black, burnished exterior and inner lip of rim, grey core.
51 W/T Fabric B, internally thickened rim, black, surfaces vegetation-marked, groove on shoulder.
52 W/T Fabric C, grey, slightly abraded, vegetation-marked surface.

Multiple-cordoned bowls/jars

53 W/F Fabric C, gray core, brown surfaces, burnished externally. For further examples of this type, cf Rodwell 1976, fig 17.34-39.
54 W/F Fabric C, black core, brown surfaces, vegetation markings.
55 W/F Fabric C, black, refired brown in places, exterior and inner lip of rim burnished.
56 W/T Fabric C, black core and surfaces, oxidized in places; exterior and inner lip of rim burnished.
57 W/T Fabric C, grey, burnished exterior.
58 W/T Fabric C, grey core, black burnished exterior; traces of a black coating; cf Drury 1978a, 63. A corrugated urn; there is another from Great Chesterford (unpubl).

Beakers

59 W/T Fabric B, black core, brown surfaces; formerly burnished, some vegetable markings. A similar coarseware butt beaker from Orsett (Birchall 1965, fig 24.198).
60 W/F Fabric C, grey-brown, burnished, a little vegetation marking; cf similar vessels from Billericay and Southminster (Birchall 1965, fig 24.199 and fig 17.148).
61 W/T Fabric C, brown everted rim burnished externally; from a tazza, cf Birchall 1965, fig 15.127 or fig 16.135.

Miscellaneous

62 W/T Fabric C corrugated jar, grey-brown burnished externally. An unusual form; the closest parallel is at Camulodunum (Hawkes & Hull 1947, 274, and pl LXXVIA), more carefully moulded but in the same fabric and considered to be one of the earliest pieces there.
63 H/M Fabric C, bowl, grey-brown, crudely burnished inside and out. Similar to Little Waltham form 17; cf Drury 1978a, fig 51.283.
64 W/F Fabric C, lid, grey-brown, burnished on lip, cf Hawkes & Hull 1947, pl LXXXI.253.

Bases

65 H/M Fabric B, thick base, roughly burnished exterior.
66 H/M Fabric C, grey-brown, surfaces vegetation-marked.
67 W/T Fabric C, low pedestal brown core, grey surfaces, burnished exterior, cf Birchall 1965, fig 22.185.
68 W/T Fabric C, low pedestal, grey core, black surfaces, burnished externally, flaked internally.
69 W/T Fabric C, bowl with flared foot; brown core grey surfaces, burnished externally, decorated with four shallow grooves on the body and two on the base.

Period 2A features (Fig 81; MF Z.B4-6)

The pottery from period 2A features resembles that from F350; additional forms include the rim of a pedestal urn (72, Fabric C; cf Birchall 1965, fig 21.184) represented in F350 only by bases; and a bowl with rudimentary cordons (81) in Fabric A. Otherwise Fabrics B and C were equally represented. 586, 70-3; J 328, 74-7; J352, 78; J45, 79; 5358, 80-l; J348, 82; 5339, 83; 5340, 84-5.

Period 2B features (Fig 81; MF 2.B6-7)

The pottery in this group was derived from Structure 3. It was all in Fabric C and included platter forms (92) and, unusually for northern Essex, a jar with curvilinear decoration (86). 5310, 86; 5332, 87-93; 5308, 94.

Period 2C features (Fig 81; MF 2.B7-8)

Most of this pottery comprised jars in Fabric C; however, Fabric E (100) and Terra Rubra (101, 103; the former is an unusual form) both make an appearance. A middle pre-Roman Iron Age bowl (95) was probably residual. J84, 95-7; 5112, 98-101; J304, 102-3.

Area J: Period 2C/3A

Well pit, F64: The stamped vessel (Fig 82.104; P1 IX)

by W J Rodwell

Six non-joining sherds from a thin-walled, stamp-decorated bowl 230mm in diameter, with a very finely moulded rim and footring. The freshest sherd with the only complete die was found in F64; of the remainder which were rather more abraded, three came from F40 and the others from F70 and F136. The fabric is a hard, well-fired, finely grog-tempered grey ware with smooth black micaceous surfaces. The vessel has been carefully burnished all over but the tooling lines are visible on the inside below the rim. In general, the fabric has the appearance of a very competent copy of Terra Nigra, and the form is clearly an imitation of a metal prototype: for example, it closely resembles the

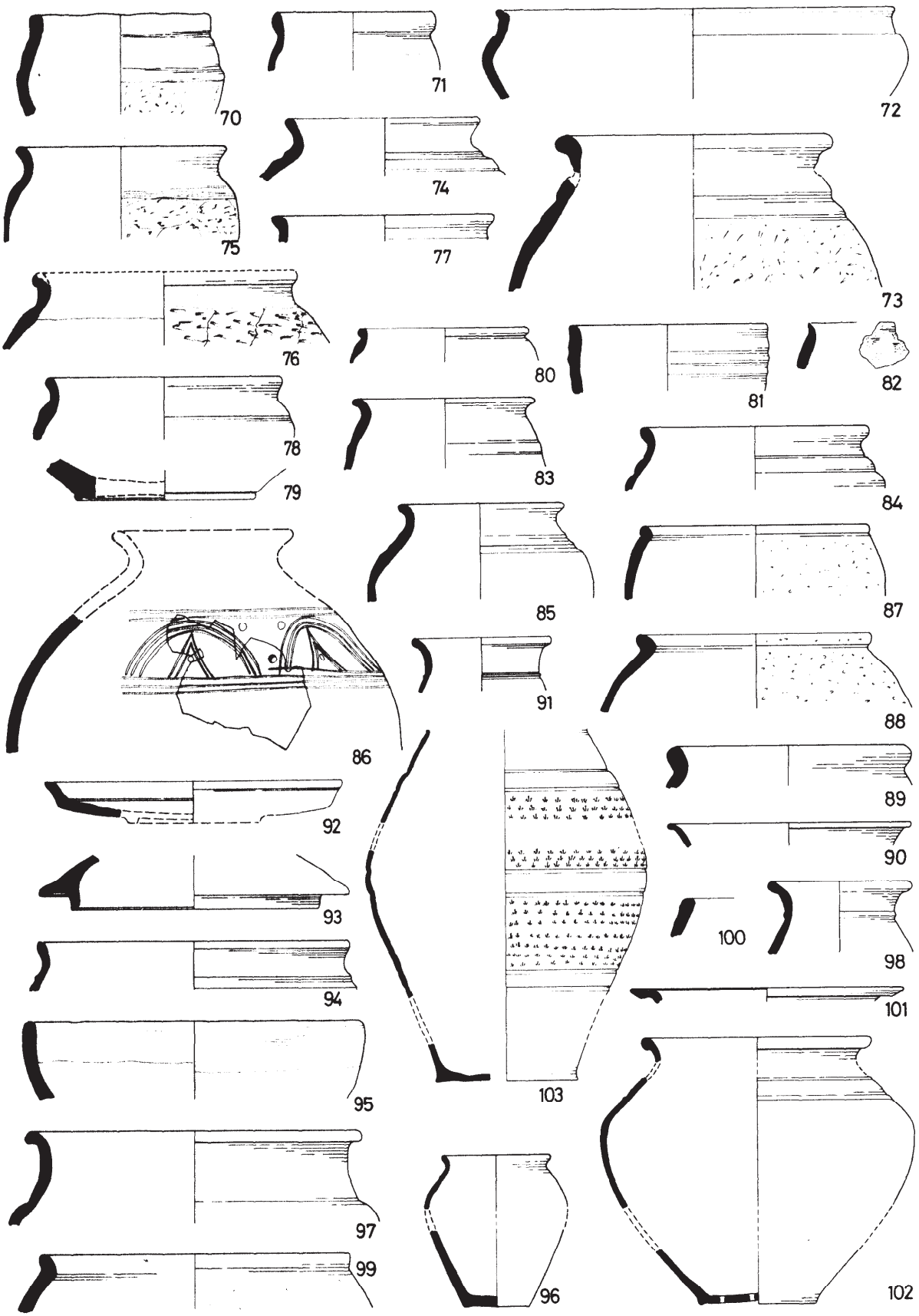


Fig 81 Pottery: area J, period 2; scale 1:4

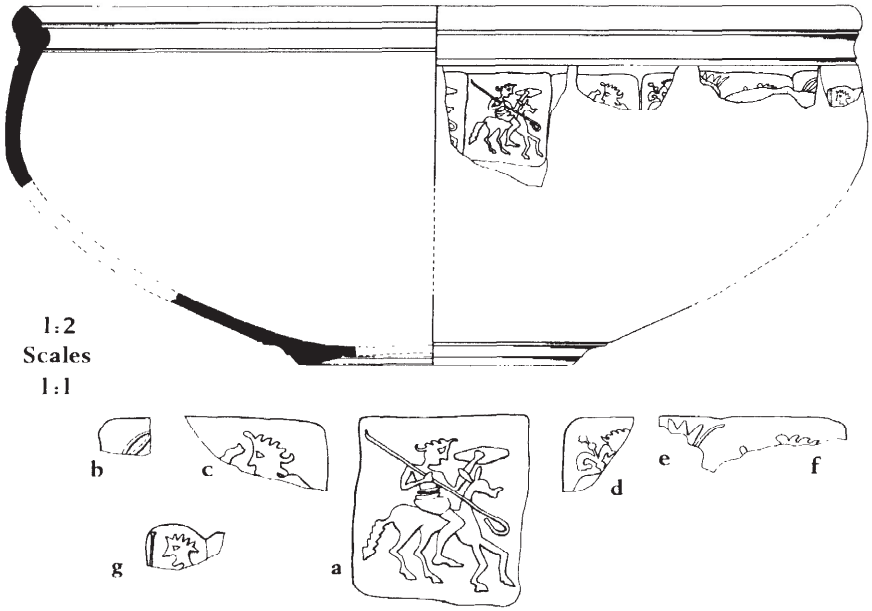


Fig 82 Area J: figure-stamped vessel 104; scale 1:2

bowl of a bronze patera in the Nijmegen collection (Den Boesterd 1956, pl IV.68). Immediately below the rim is a horizontal band of relief-stamped figures, each impressed from an individual die. The matrix of the only complete one measures 28mm x 22mm. Each outline abuts or slightly overlaps the next. The depth of the relief averages 1mm and was produced by pressing an engraved die on to the surface of the pot whilst it was still in a semi-plastic state. Considerable care must have been exercised in the placing of each impression as no finger marks are visible on the inner face of the vessel, where they are usually to be seen on pottery decorated by this technique.

Assuming that the shoulder was decorated by a contiguous row of stamps, as seems likely, there would have been 32 or 33 impressions in all. Fragments of nine impressions, from seven different dies, survive; only one is complete. The total number of different dies and the order of their impressions is unknown, but there is an instance of like impressions occurring adjacent to one another.

Die A. One complete impression survives, together with part of another adjacent to it. This die depicts a male figure riding a horse bareback, both facing to the right. In his left hand the rider brandishes a shield of the distinctive Celtic hexagonal shape, and in his right hand he carries a long-shafted instrument with a hook at the lower end, similar to a shepherd's crook. The treatment of the man's head is distinctive: it could be argued that he is wearing some form of headdress, but a stylized hair arrangement seems more likely. The rider wears a short garment which begins at the waist, where a belt is possibly discernible, and ends midway down the thigh. The treatment of the horse is neither purely Celtic nor classical; the body and legs are of classical pose, with no sign of the enlarged leg-joints commonly seen on Celtic representations. The treatment of the head and tail, however, is not consistent, for the jaw displays a marked angularity and the tail is depicted with a series of four 'knots'.

Die B. Only the top left-hand comer of this die survives and shows an oval loop.

Die C. The top right-hand comer of this die shows a human head and shoulder facing towards the left. The treatment of the hair is identical with that in die A. The figure appears to be carrying some unidentifiable object, part of which can be seen in front of the face. It is almost certainly not a horseman because of its closeness to the edge of the die, which would leave no room for the animal's hindquarters.

Die D. The fragment of the top left-hand comer of this die shows part of the head and shoulder of a figure to the right. Again, the limited space makes it unlikely that he is a horseman. The figure appears to be carrying a standard over his right shoulder, but insufficient survives to show the form clearly. Once more the hairstyle is distinctive.

Die E. The top right-hand comer of this die shows an unidentifiable crown-like object which is partly overstamped on to die F.

Die F. The top edge and right-hand comer of this die survive whilst the left-hand edge has been obliterated by the overstamping of die E. The top of a human head, with distinctive hairstyle, can be seen facing left.

Die G. The top edge of the die, showing a human head with the same hairstyle as the rest facing left. He appears to be holding a staff with a knobbed terminal.

There is no certain evidence visible on the surface of the pottery to indicate the material from which the original dies were made. The fineness and quality of engraving are comparable with Arretine ware, where there is some evidence for the use of metal poinsons. Certainly, a matrix of pottery or wood seems most unlikely, and whilst one of bone may be a possibility, metal was surely preferable. It can be observed that the corners of the dies are rounded, as too were the edges along the whole of their length. The slight rounding of the edges is a

phenomenon which would occur naturally in the process of casting a metal flan in an open mould; hence the matrix impressions which appear unintentionally on the surface of the pottery lend support to the suggestion that metal dies were used. The competence and quality of the work would imply that the dies were cut by a skilled engraver.

It is by no means impossible that they were made by a man conversant with the cutting of coin dies, for it is with the scale and, in the case of die A, the iconography of these that the stamps have their closest parallels. It is unlikely that they were produced specifically for use on pottery, for the effort involved is not commensurate with the decorative effect achieved. More probably they were dies to produce repousse decoration on sheet metal. Several dies, all with abstract ornament, are known, in a variety of materials; from Great Bedwyn, Wilts, a triangular pottery stamp 25mm long *(Proc Soc Antiq,* **19** (1902), 188); from Lochlee, Ayrshire, a relief-carved ash wood block (Megaw 1970, 172); from Wroxeter an iron block with designs on two faces (Atkinson 1942, 216, pl 52); and from Santon, Norfolk, two bronze press-moulds (Megaw 1970, 172, n 2).

Strips and plates of embossed bronze were used regularly in the late pre-Roman Iron Age as decoration for caskets (Fox 1946, 22, 89; Megaw 1970, 172.299) or buckets, such as the one from Aylesford, Kent (Megaw 1970, 119.187). The former, though abstract in decoration, are of a size commensurate with the Kelvedon designs; the latter are larger in scale but also feature horses and human heads. The majority of the Kelvedon dies are too fragmentary to allow much comment on either individual or overall iconography. The general form of die A recalls familiar Celtic coin types (in particular Catuvellaunian and Atrebatic) where a horseman is portrayed brandishing a carnyx or a lance, or alternatively a shield and short sword (Allen 1958, 43f; Mack 1964, nos 96, 109, 110, 125, 154-6, 158, 194, 244, 251, etc). Unfortunately, no Belgic coin depicts a horseman with a crook-like object. This may be because the horsemen on Belgic coins are usually warriors, whereas the Kelvedon figure may be a hunter. The simplest explanation is to regard the 'crook' as a hunting instrument used to hook and throw an animal in just the same way as a shepherd would use his crook. The fact that the rider carries a shield need not be inconsistent with such an interpretation, for shields were carried by hunters as well as warriors.

The distinctive treatment of the hair and the strongly modelled profiles of all the figures find a parallel on the Marlborough bucket (Fox 1958, pl 35a), and a pair of confronted horses on the same vessel (pl 35b) have the same long ears, flaring snout, and front legs bent at the knees as the Kelvedon beast.

The scene depicted is clearly a complex one, in which a procession of horsemen approaches other figures, seated or standing, who carry attributes such as rods and standards. It recalls scenes such as the procession of horsemen on the Gundestrup cauldron (Megaw 1970, fig 209), but the symbolism is obscure.

In summary, these dies could have been used to produce elaborate repoussé metalwork to ornament caskets, buckets or cauldrons in bronze or finer metals. It is noteworthy that the pottery vessel to which they were applied imitates a metalwork form and has been highly burnished to a metallic lustre.

The context in which it was deposited appears to be mid 1st century AD; post-conquest but pre-Flavian, although it contained residual material. Neither the fabric nor the unusual form allow the dating to be further refined. If the connection tentatively postulated between these figures and the Catuvellaunian coin dies is valid, then a date in the final years of the 1st century BC or the earlier part of the 1st century AD would seem most probable. Finally it may be significant that this vessel was deposited in a well. Previously published in *Britannia,* **4** (1973), 265-7.

Other pottery from F64 (Fig 83.105-112; MF 2.B8-9)

This included jars in Fabrics C and K, a large white flagon (111), and a mortarium of Colchester manufacture (112). The latter, together with the Fabric K jars (107, 108) indicates a post conquest date for the feature.

Residual pottery from features cutting F64 (Fig 83.113-36; MF 2.B9-11)

This pottery was probably derived from F64. It included as the only example of a flint and sand-tempered fabric (Little Waltham Fabric J) a cordoned jar (113) with burnished lattice decoration. There were also bowls and jars in Fabrics D (117, 118) and K (119), a range of Fabric C platters (120-24), Fabric C and fine ware butt beakers (116, 129, 130), a tazza (128), cream flagons (131, 132), Terra Rubra (133, 134), Terra Nigra (135), and a rusticated beaker (136).

Residual pottery from other contexts (Fig 84; MF 2.B11-14)

These included further handmade types (137, 138); a jar reused as a funnel (139); large cordoned jars (140-3); storage jars (144-6), the two latter with a red finish; a range of types in Fabric E (147-9); a pedestal base (150), a carinated cup (151) and a cordoned lid (152); a platter (153), butt beakers (154, 155) and a Dressel 1B amphora (156); Terra Nigra (157-60) and Terra Rubra (161-3).

Area J: period 3A

Ditch F3 (Fig 85)

This feature produced *c* 1700 sherds from a minimum of 150 vessels. The incidence of sherds from the same vessel was not particularly high and there was a certain amount of residual material. The proportions of the fabrics represented were as follows:
Fabric B, 1.2%; C, 53.7%; D, 18.9%; K, 18.6%; Cream flagons, 3.4%; Amphorae, 1.8%; Other fine wares, 2.4%

A date in the third quarter of the 1st century AD is indicated by the samian (17 sherds), all Neronian plain wares.

164 Fabric K, light grey core and surfaces, burnished externally on rim and shoulder, grooved footring; *Cam* f221.

165 Fabric C, black, oxidized in places, burnished externally on rim and shoulder; *Cam* f222.

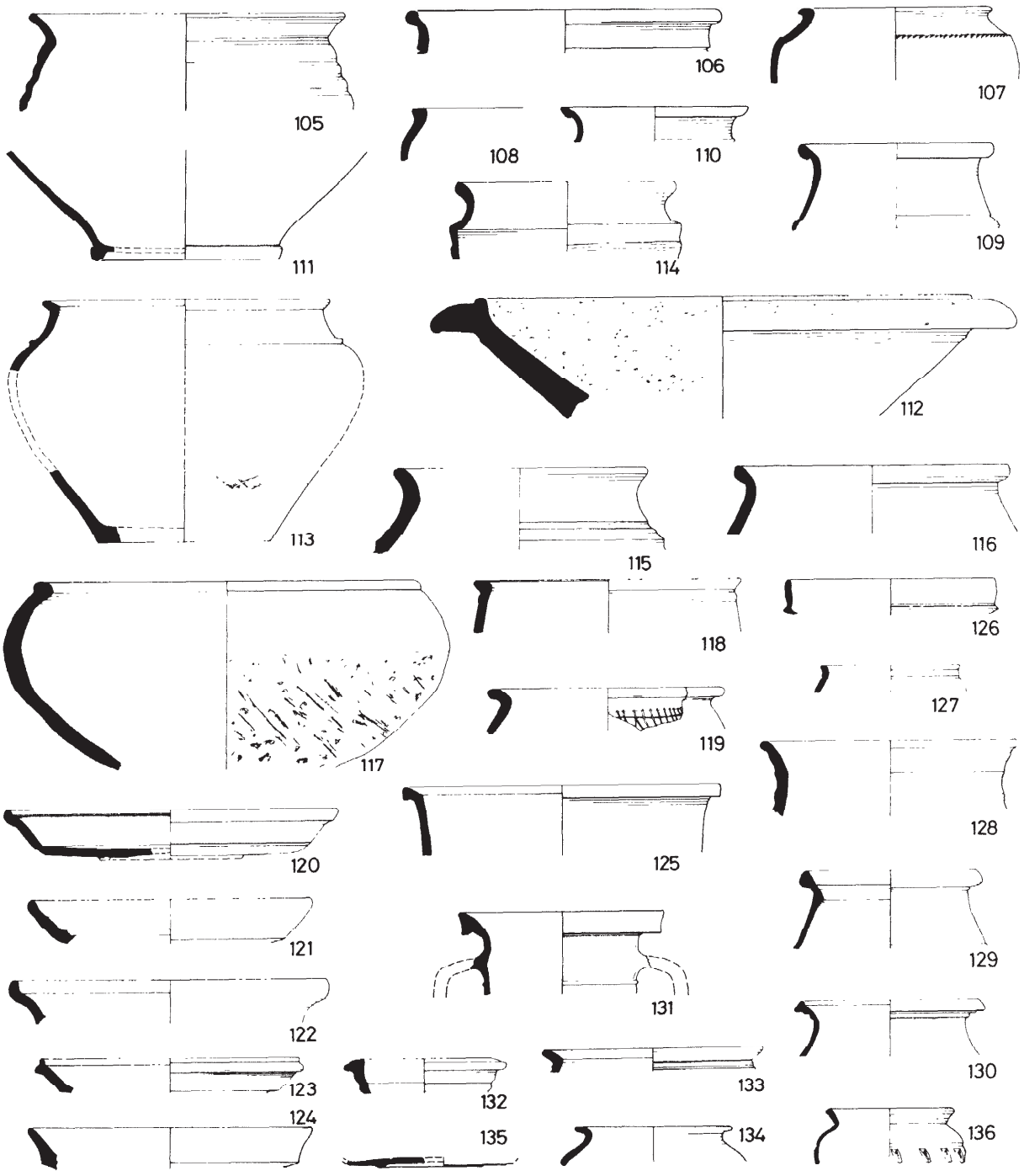


Fig 83 Pottery area J, period 2 residual, derived from F64; scale 1:4

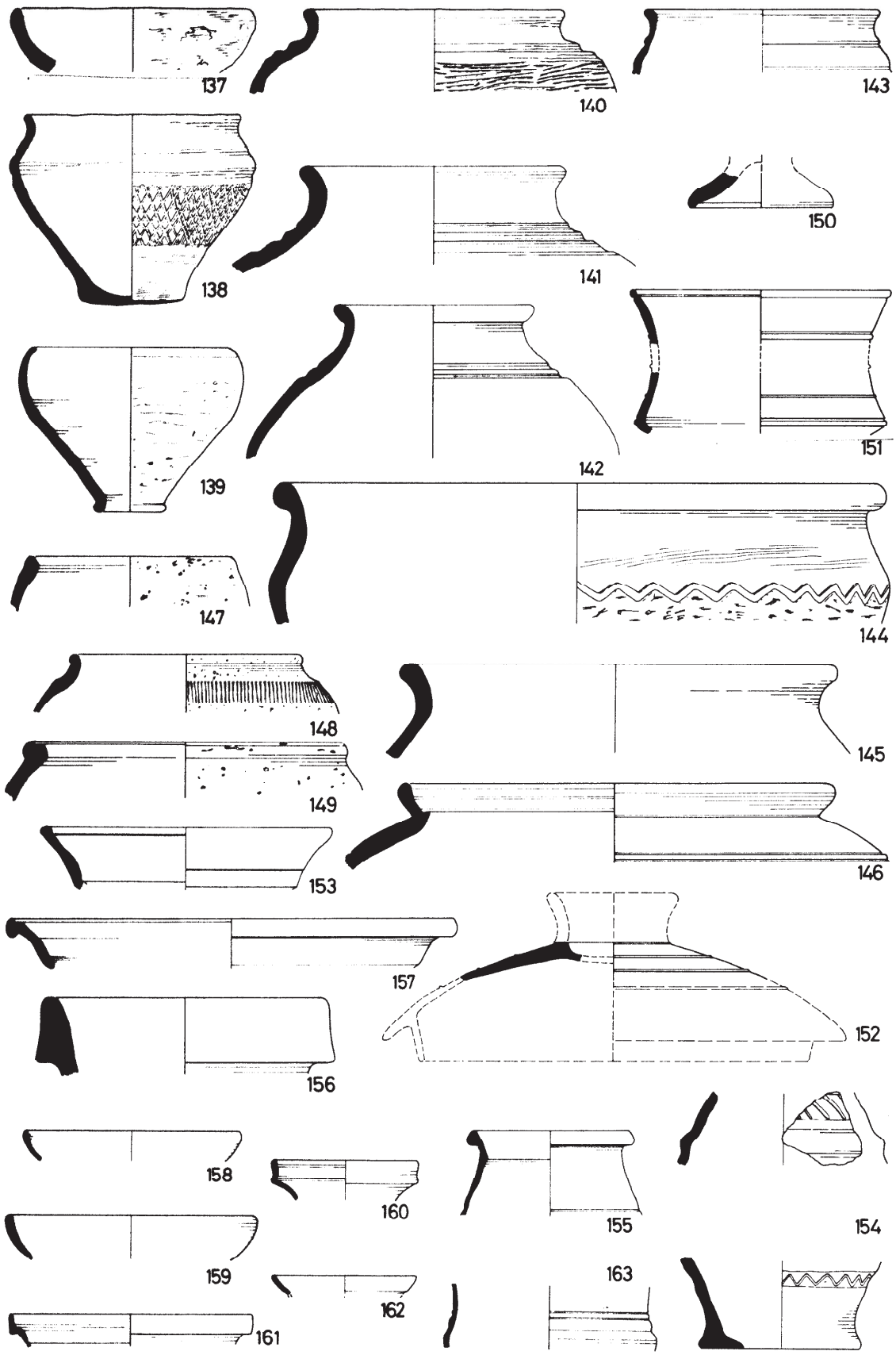


Fig 84 Pottery: area J, period 2 residual in Roman contexts; scale 1:4

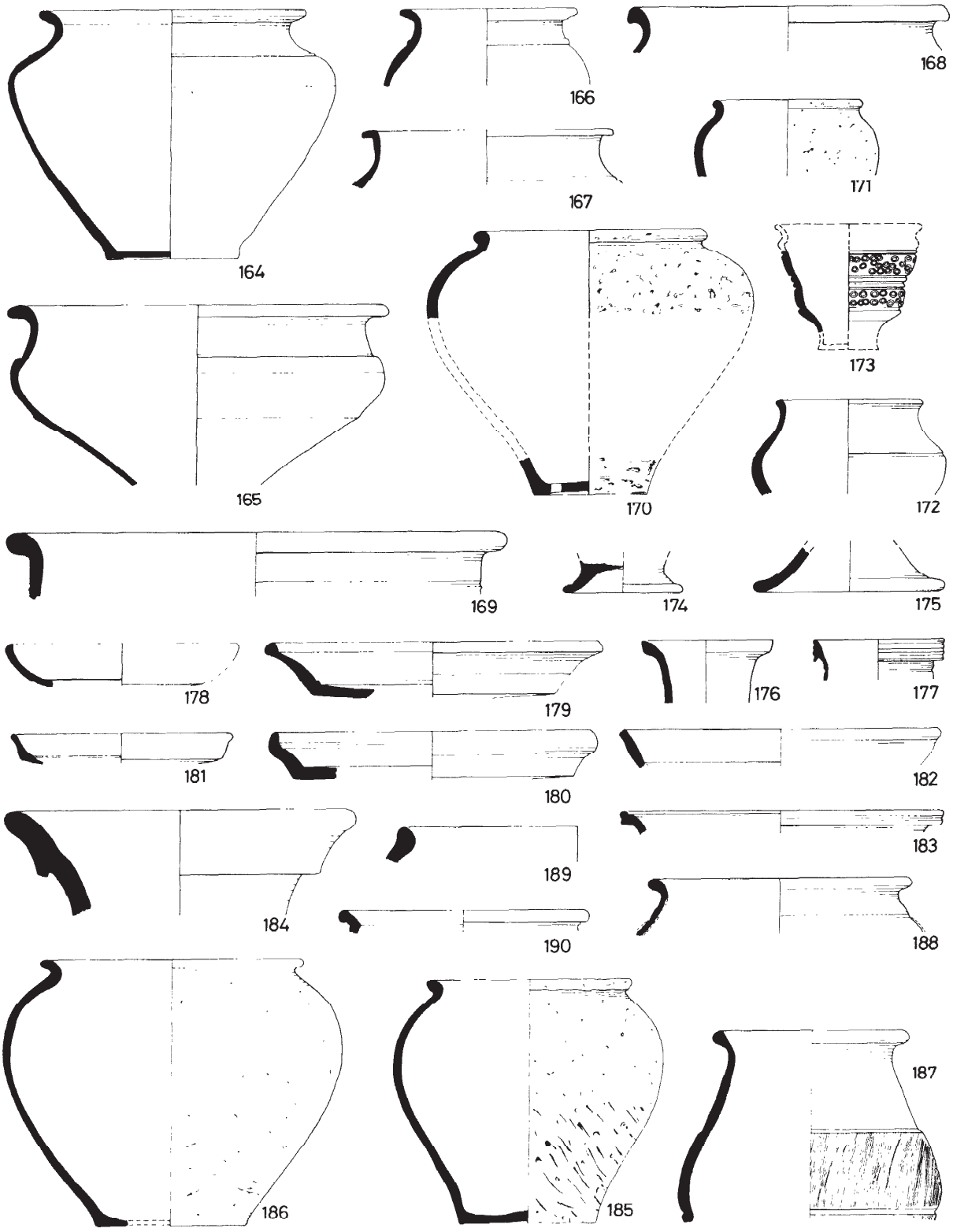


Fig 85 Pottery: area J, period 3A, F3 and Kilns; scale 1:4

166 Fabric C, grey-brown, traces of a black coating and burnishing externally.
167 Fabric C, brown core, black surfaces, burnished externally; cf Frere 1972, fig 104.152.
168 Fabric 4 red core, dark brown surfaces, roughly burnished externally.
169 Fabric C, grey-brown, burnished externally.
170 Fabric D red core, lumpy black surfaces, holes drilled through base; *Cam* f259.
171 Fabric D, red core, lumpy black surfaces.
172 Fabric K, light grey, burnished externally.
173 Fabric C, girth beaker, light grey core, dark grey surfaces, burnished externally with two zones of ring-stamped decoration, some deeply impressed to produce pronounced 'bosses'; cf *Cam,* f96 for the same decoration on a different form.
174 Fabric C, pedestal base, light grey core, black burnished surfaces.
175 Fabric C, grey pedestal base, burnished externally.
176 Soft buff flagon, surfaces worn; *Cam* f136.
177 Jug with reeded lip, hard pale buff fabric; *Cam* f163.
178 TN copy platter, hard light grey sandy fabric; *Cam* f16.
179 Fabric C, light grey core, black burnished surfaces; *Cam* f28.
180 Fabric C, grey-brown, traces of burnishing; *Cam* f24.
181 Fabric C, brown core, black burnished surfaces; *Cam* f21.
182 Fabric C, grey-brown, burnished surfaces; *Cam* f21.
183 Fabric C, brown core, black burnished surfaces.
184 Amphora, Beltran 1 (p 102) residual in this context. There were also southern Spanish fragments (p 102) and an amphora stamp (Fig 76,Al) from this feature.

The pottery kilns (Fig 85)

There were 180 sherds in the chamber and stokepit areas of kilns II and III, the ratio of fabrics being:
C, 33.3%; D, 17.3%; E, 1.6%; K, 47.8%

The majority of Fabric C and Fabric E sherds are unlikely to be kiln products, as they were small and abraded. By contrast sherds in Fabrics D and K were large and fresh and belonged to only a few vessels, all of which are illustrated. Kiln I produced only 12 small stray sherds of Fabric C.

185 Fabric D, unevenly fired red to black, lumpy surfaces, vegetable-marked and knife-trimmed at the base; Cam f259. J345
186 Fabric K with an admixture of sand, unevenly fired red to black, lower body vegetation-marked and knife-trimmed. J345
187 Fabric K, light grey butt beaker, traces of a black coating, decorated with finely combed lines; *Cam* fl19. J345
188 Fabric C, cordoned jar, misfired, black core, orange surfaces much flaked and pitted, burnished externally. J365
189 Fabric E, orange-brown internally-thickened rim. J345. Not a kiln product.
190 TR4 butt beaker; *Cam* fl16. J342. Not a kiln product.

Area J: period 3B

Feature 2 (Fig 86; MF2.B14-Cl)

This ditch can only post-date F3 by a few years; the pottery is similar but more abraded, in a mixture of Fabrics C, D, E and K (191-6). A 2nd century cremation, G16, was cut into the top of the ditch after it had been backfilled.

Other features (Fig 86; MF 2.Cl-2)

The proportion of Roman pottery in Period 3 features was low in relation to residual material from Period 2, and much of what there was probably derived from damaged grave groups. The ratio of fabrics in F302, a ditch, is typical (473 sherds):

Fabrics A & B, 14.0%; Fabrics C, D & K, 56.0%; Iron Age fine wares, 1.3%; Roman coarsewares, 22.6%; Roman fine wares, 6.1%; ie or an aggregate of 71.3% residual Iron Age against 28.7% Roman. The ditches appear to have been open for a long time and cannot be closely dated.

Most of the pottery was late 1st or 2nd century; large jars (197, 199, 205-7, 209), which were probably former cinerary urns, were the commonest type. There were several dishes, mainly bead-rimmed (201-3) but including a 4th century flanged type (198) in BBl. More unusual vessels included a flask with a graffito JVVS (208, Fig 77.3) and (204, not illustrated) a fragment of a glazed vessel, probably Central Gaulish with an off-white fabric and a pale yellowish glaze. Unstratified pottery included a 2nd century Colchester mortarium (210), and a 4th century Nene Valley rouletted colour-coat beaker (211) which was possibly an accessory vessel in a burial (H6, MF 1.B9).

Area J: period 3C

Pottery from graves and cemetery features (Fig 86; MF 2.C2-4)

Apart from the grave groups themselves the burials contained little Roman pottery; residual Iron Age material predominated. Pottery from the following graves is illustrated: G24, a shell-tempered jar (212); G25, a BBl dish (213); G33, a beaker and a jar (214-5); G34, a folded beaker, a jar, a bowl and a rilled dish of unusual form (216-9); F324, a flask and a bowl with West Stow type stamped decoration (220-l); G41, a Colchester mortarium (222); G70, a folded beaker (223); G73, a ledged-rim jar (224); G80, a Colchester colour-coat beaker with barbotine decoration (225). Much of this pottery was 2nd century and hence residual in the graves in which it was found. Exceptions are E24 (late 4th century), G34 (early 4th century; 219 which is later, suggests a subsequent robbing) and G70 (later 3rd century).

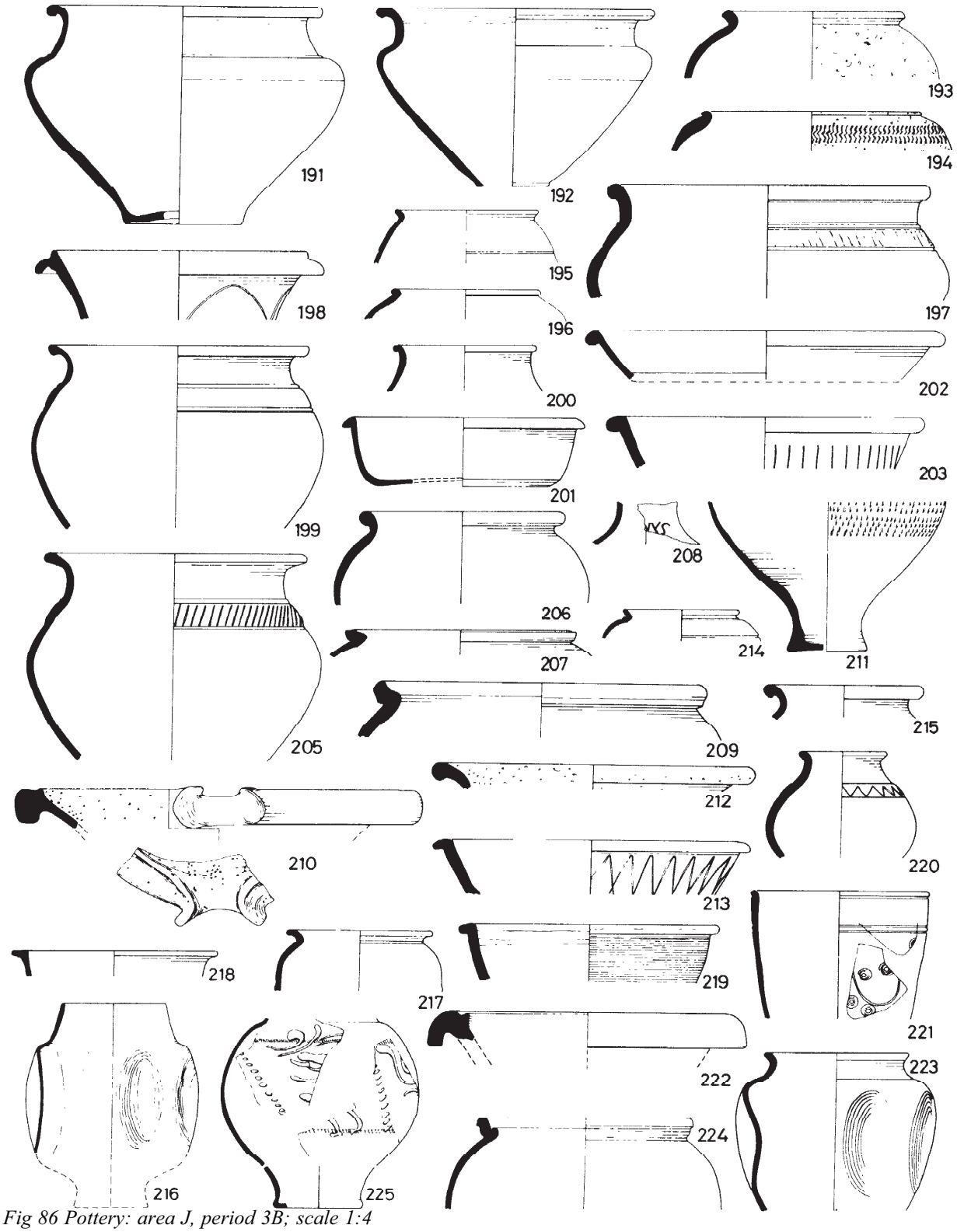


Fig 86 Pottery: area J, period 3B; scale 1:4

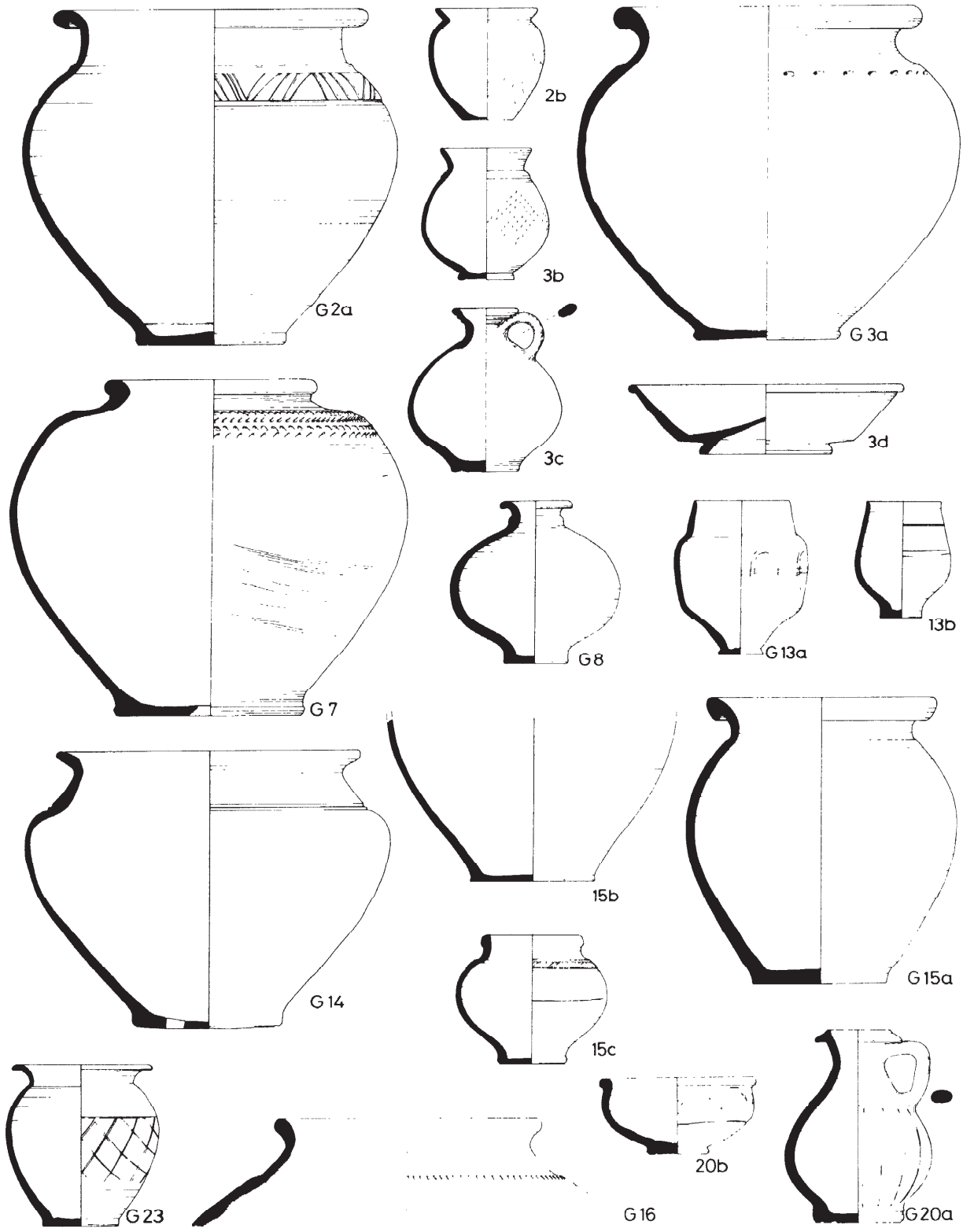


Fig 87 Pottery: area J, grave vessels; scale 1:4

Area J: grave groups (Fig 87)

The vessels from the cemetery have been classified (bracketed numbers) according to the typology devised for the Romano-British pottery from Chelmsford (Going 1987). Dating evidence for the types is presented there.

Grave 2 *c* AD 120-40

a. Jar, sand-tempered, brown core grey surfaces, burnished in bands externally with line decoration on shoulder, broken by plough. (G17)
b. Beaker, fine sand-tempering, sandwich core, grey surfaces, burnished externally with lattice decoration; damaged by plough, but rim anciently chipped and slightly misshapen. (G9.1)

Grave 3 *c* AD 140-80

a. Jar tempered with coarse sand and grog, grey, refired brown in places. Rim and neck burnished, shoulder stabbed, body rough and vegetable marked. Small piece missing from rim, otherwise complete. (G44)
b. Beaker, fine sand-tempered fabric, dark grey surfaces, flaking in places, sandwich core; burnished externally and decorated with panels of barbotine dots. (H6.2)
C. Orange-buff flagon, underfired, very soft and friable, crushed.
d. Samian platter f31, see Fig 70.19.

Grave 6 *(not illustrated)* 2nd century

Jar, coarse grog-tempering, brown core, grey lumpy surfaces, rim and neck burnished, stabbing on shoulder, crushed.

Grave 7 2nd-early 3rd century

Jar, light grey grog-tempered fabric, rim and neck burnished, two bands of chevron-stabbing on shoulder, body coarse and vegetation-marked. A hole drilled through the centre of the base from the outside after firing. Complete but crushed. (G44)

Grave 8 *c* AD 200-300

Flask, light grey sand-tempered burnished externally; intact, a small chip out of the rim. (G40)

***Grave* 11** *(not illustrated)* 2nd or 3rd century

Base of grey sand-tempered jar.

Grave 13 *c* AD 200-50

a. Colchester colour-coat folded pedestal beaker, red body, abraded slate grey slip, crushed, fragment anciently missing from rim. (H32)
b. Colchester colour-coat pedestal beaker, red body, slate grey slip, crushed. (H23-4)

Grave 14 *c* AD 80-120

Jar, grog-tempered, brown core, grey surfaces, burnished externally, four holes drilled in base, crushed.

Grave 15 *c* AD 280-300/20

a. Jar, light grey, coarse sand and flint-tempering, rim misshapen and a fragment anciently missing, otherwise complete. Inworth kiln product. (G24.2)
b. Lower half of coarse grey sand-tempered jar, cut down for use as a lid.
C. Beaker, light grey, fine sand-tempering, burnished externally, shoulder rouletted. Intact but for small hole on shoulder. (R)

Grave 16 2nd century?

Storage jar, sand-tempered, stabbed shoulder, crushed.

Grave 20 *c* AD 280-350+

a. Flagon light grey, sand-tempered, burnished externally to a metallic finish, with vertical strokes on neck and lines on body; intact, but rim and footring chipped and abraded. Hadham kiln product.
b. Nene Valley colour-coat bowl, pink-buff body, metallic orange-brown slip with white painted decoration. In two pieces widely separated in the grave.

Grave 23 *c* AD 220-260/70

Beaker with zone of lattice decoration, brown core, light grey surfaces burnished externally, rim mishappen and nearly half missing, otherwise intact.

Fig 88

Grave 25 *c* AD 260-300/20

Pedestal beaker, fine sand-tempering, grey-brown, burnished externally, cross scratched on body, rim missing.

Grave 28 *c* later 2nd-3rd century

Fine light grey beaker, plough damaged.

Grave 30 *c* AD 125/30-160/70

a. *(not illustrated)* Storage jar, grey, coarse grog-tempering, stabbed shoulder, fragmentary, as G16.
b. Beaker, light grey, sand-tempered with burnished lattice decoration, crushed.
c. Red flagon, soft and abraded, crushed but piece anciently missing from rim. (J3)
d. Bead-rim dish, sand-tempered, brown core, black surfaces burnished externally with lattice decoration. (B2.3)

Grave 33 *c* 260/70-320+

Colour-coat folded pedestal beaker, buff fabric, grey-brown slip, complete but crushed. Probably Nene Valley, found with two glass vessels (Fig 62.1,2). (H38)

Grave 36 *c* AD 320-350/60

a. BB1 jar with zone of burnished lattice decoration. (G9.4)
b. Pedestal beaker, grey sand-tempered fabric, surface abraded, intact but rim chipped.

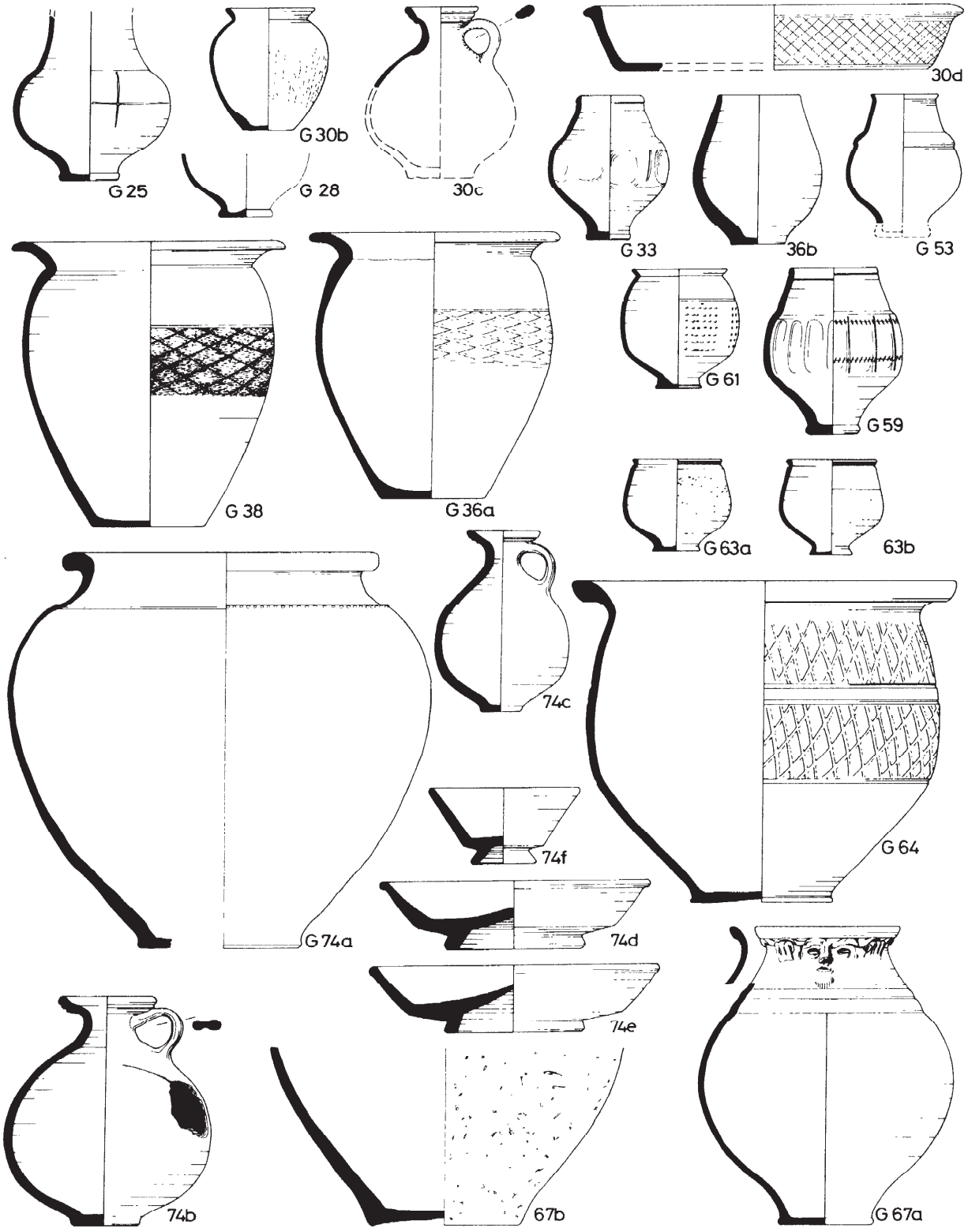


Fig 88 Pottery area J, grave vessels; scale 1:4

Grave 38 *c* AD 320-350/60

BBl jar with zone of lattice decoration, complete but crushed, piece anciently missing from rim.

Grave 46 *(not illustrated)*

Grey sand-tempered straight-sided dish.

***Grave* 53** *c* AD 300-50

a. *(not illustrated)* Light grey, coarsely sand-tempered jar, lower half only, plough damaged.
b. Pedestal beaker, orange sand-tempered fabric burnished externally, fragmentary; *Cam* f395. (H43)

Grave 59 *c* AD 260-300/20

Colour-coat folded pedestal beaker with two bands of rouletting, red body, slate grey slip, intact. Probably Colchester.

Grave 61 *c* AD 80-120

Beaker, fine light grey fabric, burnished externally with panels of barbotine dots, rim and footring chipped, otherwise intact. (H5)

Grave 63 *c* AD 120-160/70

a,b. Pair of Colchester colour-coat roughcast beakers, red body, grey-brown slip, crushed. (H20.1)

Grave 64 3rd-4th century

Hard grey jar tempered with coarse white sand, burnished externally with two zones of lattice on a reserved background.

Grave 65 *(not illustrated)*

Sand-tempered storage jar with stabbed shoulder, red core, grey surfaces crushed, as G74a.

Grave 67 *c* AD 360/70-400+

a. Hadham ware face pot, fine orange fabric burnished externally using vertical strokes above the cordons, frilling below rim and three small 'blind' lugs, two serving as 'ears'; complete but crushed.
b. Base of late Roman shell-tempered jar, used as lid, grey core, buff surfaces. (G27)

Grave 74 *c* AD 160-200

a. Coarse grey sand-tempered jar with stabbed shoulder, over half of rim and centre of base missing. (G44)
b. Flagon, red body, abraded cream slip, piece missing from rim and circular hole in side. (J3)
C. Flagon, cream, abraded surface, piece missing from rim. (J3)
d. Samian platter f31 see Fig 70.9
e. Samian platter f31 see Fig 70.11
f. Samian cup f33, Colchester manufacture, complete but distorted in firing, no wall grooves, *c* AD 160-200

Fig 89

Grave 76 *c* AD 300-50

BBl straight-sided dish, intact. (Bl)

Grave 77 *c* AD 260-300/10

Colour-coat pedestal beaker with white painted decoration between two bands of rouletting, buff body, blue-grey slip. Probably Nene Valley. (H41)

Grave 79 3rd-4th centuries

Jar, light grey sand-tempered fabric, crushed.

Grave 84 *c* AD 220-50/60

Jar, fine sand tempering, light grey core, black surfaces, burnished externally with a zone of lattice decoration, crushed.

Grave 85 *c* AD 260-80/300

a. Jar, hard light grey sand-tempered fabric, rim and shoulder burnished with burnished line decoration below. (G36)
b. Jar, light grey sand-tempered fabric, fragmentary.

Grave 94 *(not illustrated)*

Base of grey-brown coarsely sand-tempered jar.

Grave 95 Late 3rd or 4th century

Straight-sided dish, sand-tempered, dark grey burnished surfaces, fragmentary.

Grave 96 Late 1st or early 2nd century

Jar, grog-tempered, brown core, black surfaces, burnished externally on rim and shoulder, fragmentary.

Supplementary grave groups (Fig 89)

The following grave groups were recovered from area J before the excavation took place.

Grave 97 *c* AD 125/30-60

a. Everted rim jar, fairly bard finely sand-tempered fabric; rim, shoulder and lower part of body burnished, with a zone of deeply burnished lattice between; brown core, grey surfaces, half the vessel heat-reddened. Slightly misshapen, the rim tilted.
b. Samian platter fl8 see Fig 70.27.
C. Samian cup, f27, (South Gaulish) soft pale pink paste with rather matt brown gloss, later Flavian. Badly abraded, stamp too excoriated to read; graffito X on exterior, complete.
d. Jar, fine hard slightly sandy fabric with a dark grey slip fired orange-brown in places. Burnished externally with a zone of latticed lines in groups of three, complete. (G9.1)
e. Dish, fine brown slightly sandy fabric with a grey slip. Burnished internally, and on rim, bevel and base externally; a burnished wavy line on the reserved zone, complete. (Bl)
f. Cream flagon, soft slightly sandy abraded fabric, complete. (J3)

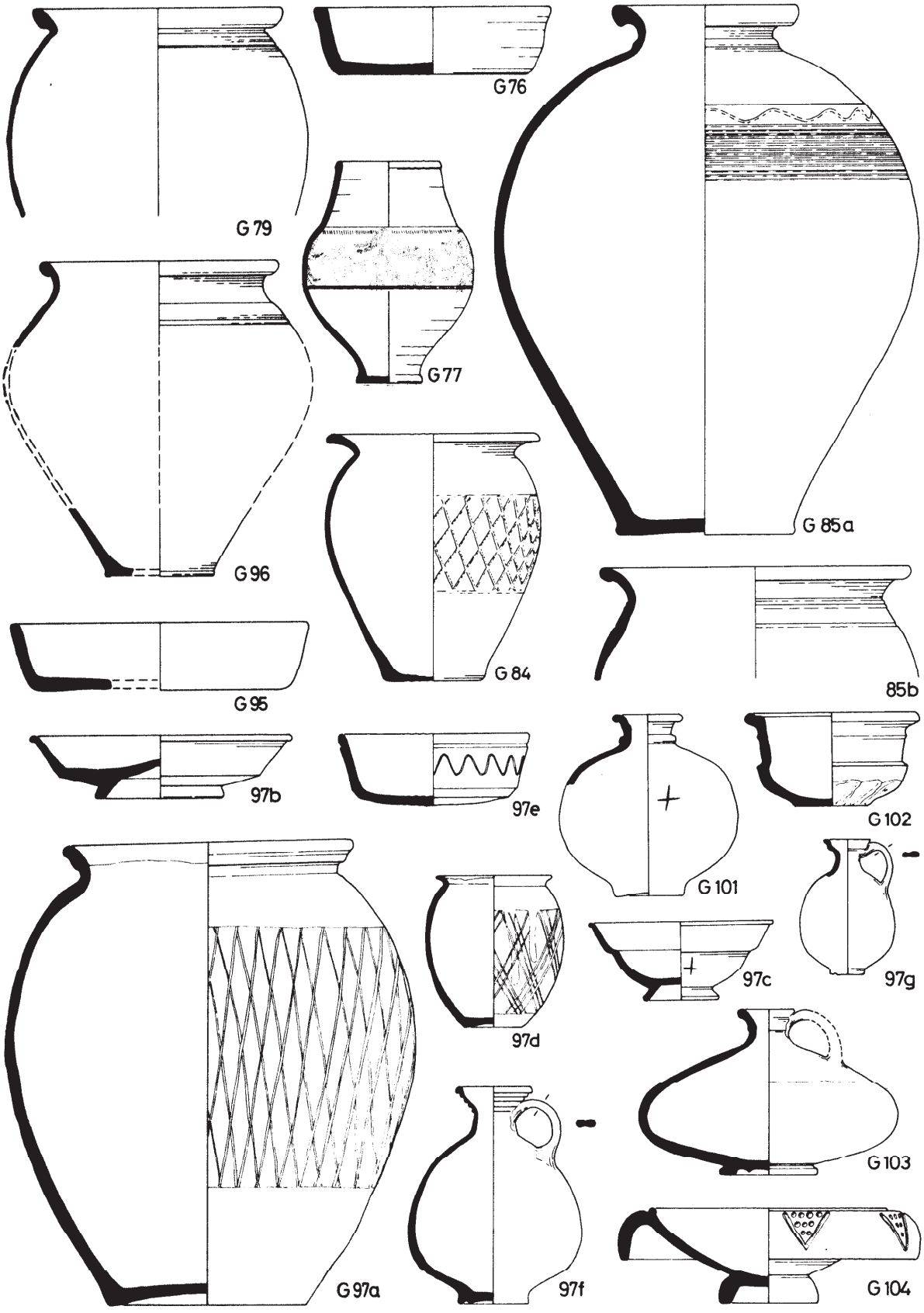


Fig 89 Pottery: area J, grave vessels; scale 1:4

g Red flagon, poorly made with irregular profile, soft, sandy abraded fabric, with traces of a buff slip, complete. (J3)

Grave 98 *(not illustrated) c* AD 125/30-60

a. Grey sand-tempered pear-shaped narrow-necked jar without a rim, bands of burnishing on shoulder, 270mm high.
b. Samian platter f18/31. Inverted over a, see Fig 70.38.
C. Red flagon, underfired sandy abraded fabric with traces of a cream slip, complete except for rim; 120mm high, as G97g.
d. Cream flagon, soft slightly sandy abraded fabric, complete except for rim; 110mm high, as G74c.

Grave 99 *(not illustrated) c* AD 140-60/70

a. Jar, Fabric K with heavy rolled rim and a stabbed shoulder, as Fig 94.358, complete.
b. Cream flagon, sandy fabric; as G74c, complete.

Grave 100 *(not illustrated) c* AD 130/40-60/70

a. Cordoned jar with hooked rim and beaded foot, fine sandy fabric, brown core, black surfaces burnished externally and over inner lip of rim; crushed. 240mm high, late 1st century.
b. Red flagon, as G74b.

The following vessels were probably buried singly:

Grave 101 3rd century?

Flask, sand-tempered, brown core, grey surfaces, burnished externally with several surface blemishes, graffito X on body, complete, cf Fig 87.G8.

Grave 102 3rd century

Bowl, coarse, hard grey sand-tempered fabric, trimmed on wheel below carination, base heat-crazed, near-complete.

Grave 103 3rd-early 4th century?

Flagon, fine sand-tempered fabric, grey core, orange surfaces, burnished externally, lower half of pot heat-blackened, near-complete; late 3rd/early 4th century.

Grave 104 *c* 360-400+?

Bowl with a heavy flange, sandy orange fabric, abraded, but with traces of an orange slipped surface, no internal grits. On the flange seven incised chevrons filled with dimples, either 4-3-2 or 3-2-l. Partly heat-discoloured, probably Hadham ware, near-complete; 4th century.

The following vessels are probably derived from burials *(not illustrated);* both are near-complete.

a. Cordoned jar, light grey sand-tempered Fabric, as Fig 93.352.
b. Bead-rim dish, light grey sandy fabric, burnished internally, zone of burnished lattice externally, as Fig 93.346.

Area B: period 2C

F424 (Fig SO)

This feature produced *c* 830 sherds from some 60 vessels; there was a high incidence of large adjoining sherds and little of the material is likely to be residual. Fabric C predominated to the virtual exclusion of any other coarseware fabric.

Fabric C, 90%; Fabrics B, D, E, 1%; Cream flagons, 5%; Terra Rubra, 3%; Other (TN, Arretine, Amphora), 1%. For a discussion of the date of this feature see p 133.

Jars

226 H/M Fabric B, grey perforated base of jar.
227 W/T Fabric C, grey-brown jar, rim and neck burnished, shoulder combed horizontally, body knife-trimmed and vegetation-marked.
228 W/F Fabric D, grey-brown jar with internally thickened rim. Rim and shoulder horizontally combed, body knife-trimmed and vegetation-marked; *Cam* f255A.
229 H/M Fabric D, grey-brown jar, rim and neck burnished, shoulder decorated with deeply-incised chevron, body combed.
230 W/T Fabric C, dark grey jar, rim and neck burnished, regular horizontal combing on body; *Cam* f260B.
231 H/M Fabric E, grey-brown jar with internally thickened rim.
232 H/M Fabric C, grey-brown cup, rim and shoulder roughly smoothed, body rough and vegetation-marked.
233 W/T Fabric C, grey-brown jar, rim and shoulder burnished, body horizontally combed.
234 W/T Fabric C, light grey core, dark grey surfaces, plain burnished jar with footring, similar to *Cam* f 234B.
235 W/T Fabric C, brown core, dark grey surfaces, burnished externally, narrow-necked jar with incipient cordons; cf Birchall 1965; fig 24.206.
236 W/T Fabric C, single-cordoned jar burnished externally.
237 W/T Fabric C dark grey jar with double cordon, formerly burnished externally.
238 W/T Fabric C, dark grey jar, burnished externally; *Cam* f 221, cf Birchall 1965, fig 18.152,155 (Great Wakering).
239 W/T Fabric C, brown core, black surfaces, burnished externally, cordoned pear-shaped jar; cf Birchall 1965, fig 1.4 (Swarling), fig 9.68 (Aylesford), and fig 26.219-20 (Billericay).
240 W/T Fabric C, fairly hard fired, grey core and surfaces, burnished externally; *Cam* f218.
241 W/T Fabric C with an admixture of sand, grey and red 'sandwich' core, dark grey surfaces, burnished externally on rim and shoulder. A large ovoid jar with a flat cordon in the tradition of Bimhall 1965, fig 7.51 (Aylesford) and resembling Birchall 1965, fig 24.199 (Billericay). There is a plain vessel of the same form from Chelmsford, Thompson 1982, 669 [780].

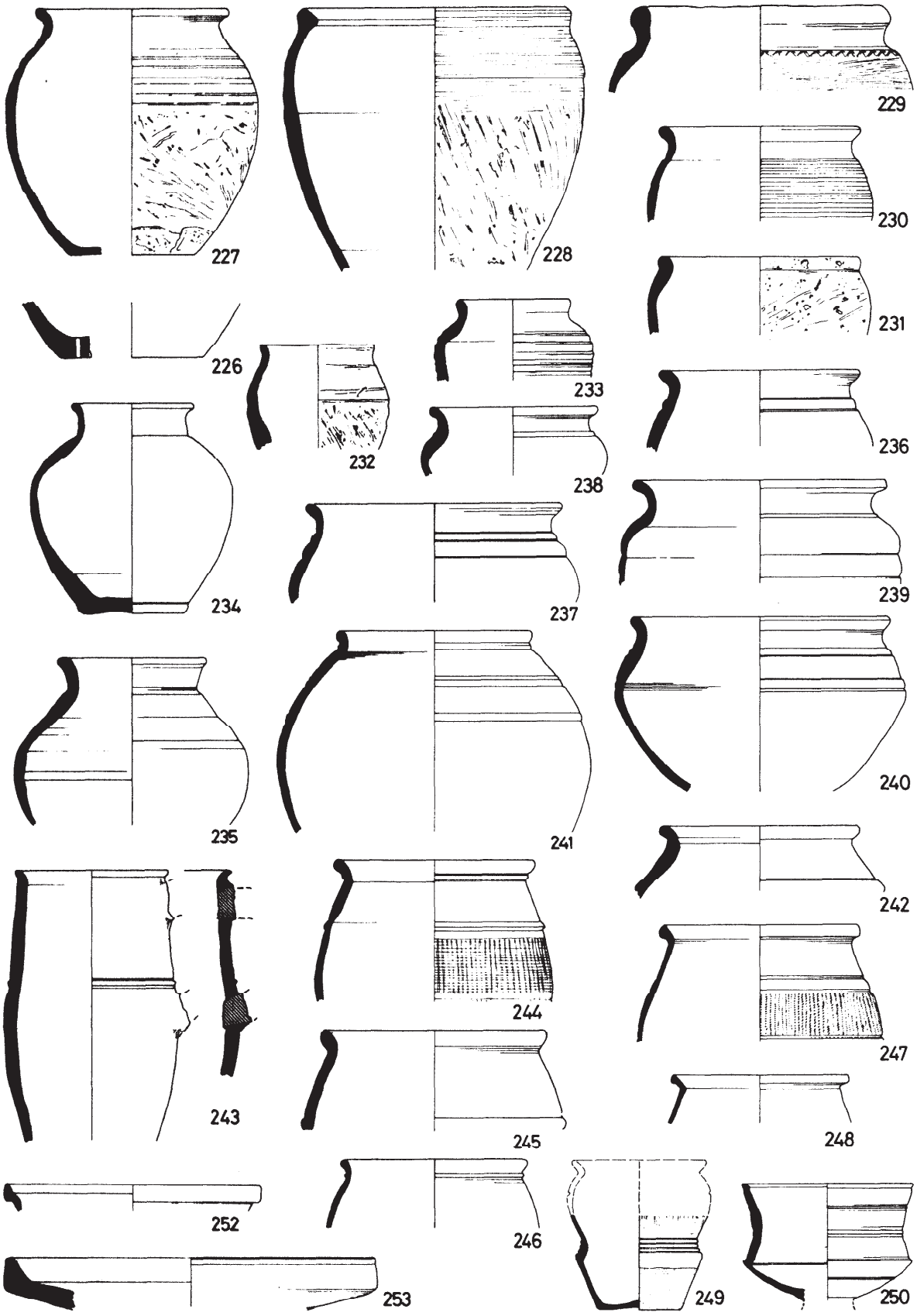


Fig 90 Pottery: area B, period 2C, F424; scale 1:4

Beakers

242 W/T Fabric C, grey butt beaker, burnished externally cf Birchall 1965, fig 24.198 (Orsett).
243 W/T Fabric C, butt beaker with single cordon, grey-brown, burnished externally with traces of a black coating. There are stubs of a broken handle just below the rim and the cordon, luted on by piercing right through the body of the pot. Cum fl17, but the addition of a handle is unprecedented.
244 W/T Fabric C, dark grey butt beaker burnished externally with a zone of cross-hatching, the horizontals inscribed with a sharper tool than the verticals; Cum fl15.
245 W/T Fabric C, black butt beaker, burnished externally with traces of a black coating; Cum fl15.
246 W/T Fabric C, black butt beaker, burnished externally.
247 TR4 butt beaker, zone of rouletting; *Cam* fl16.
248 TR4 butt beaker, traces of cream slip on inner face of rim; *Cam* fll6.
249 TR4 girth beaker, the lower part coated with cream slip, groups of vertical incised lines above the constriction; *Cam* f85B.
250 W/T Fabric C, dark grey pedestalled tazza, well-finished externally but no surviving burnishing. Cam f210; cf a very similar example from Creeksea (Birchall 1965, fig 26.215).

Platters

251 *(Not illustrated)* TRl(C) footring from large platter with radial stamp of Acutus (Fig 75.1).
252 TN platter; *Cum* f8.
253 W/F Fabric C, light grey core, black burnished surfices, very thick copy of a TN platter.

Also *(not illustrated),* Arretine platter with radial stamp Fig 70.43).

Area B: period 3A

Area B2, Structure 4 (Fig 91.254-60; MF 2.C4)

This feature produced a range of jars and a butt beaker in Fabrics C and D (255-60) very like those from F424. However, the presence of a barbotine-decorated beaker with a white body and partial pink slip (254) indicates a post-conquest date.

Ditches (Fig 91; MF 2.C5-6)

The samian, which was predominantly Flavian, with some Neronian pieces (Fig 71.15) provides the closest dating for these features. The coarseware fabrics are a mixture of late Iron Age (C, D, K) and early Roman sand-tempered types, which suggests that as a group they antedate the much more uniform late 1st century deposit from Q3 (p 128), in which sand-tempered fabrics are standard. In addition to the range of jars, forms included lids (267,277); platters (265, 272, 274), the former in Fabric C, the two latter Terra Nigra copies; beakers in buff(270) or fine greywares (264, 268, 276); and bowls including a Drag f30 copy in a buff fabric (273) and mica gilt ware (278). B2 46, 261-3; B2 47, 264-5; B2 48, 266-9; B2 49, 270-3; B2 10, 274; B2 24, 275-6; B2 5, 277-80.

Area B3, F315 (Fig 91.281-8; MF 2.C6-7)

Coarsewares included jars in Fabrics C, D and K, an early version of the dish *Cam* f37 (287), and a residual handle from a Dressel 1 amphora (288). There were also fragments of plain Flavian samian.

Layers in quarry pit 317 (Fig 92.289-96; MF 2.C7-8)

In addition to the usual range of coarsewares, this feature contained fragments of a barbotine decorated St Rémy beaker (291, cf Greene 1979, fig 43.8), and of 'Pompeian Red' ware (294, cf Greene 1979, 129). There were also two Terra Nigra copy platters (292-3) one of which (Fig 75.3) was stamped. There was a relatively large quantity of samian from this feature, including stamps S29 and S37 (Fig 70) and decorated sherds 7, 8 and 14 (Fig 71). Together with the imported fine wares 291 and 294, they suggest a date bracket of *c* AD 55-70 for the infilling of the feature.

Area B5 (Fig 92; MF 2.C8-9)

Pottery from the ditches in this area included jars in Fabrics E (299) and K (297, 303), a cream barrel beaker (300), a carinated cup in Fabric C (301), a TR3 butt beaker (302), and a Rhodian amphora handle (298). B5 512,297; B5 514,298-300; B5 515, 300-1; B5 516,303.

Unstratified (Fig 92; MF 2.C9)

Unstratified 1st century pottery from area B included an angular jar in Fabric K (304); platters in Fabric C (305) and Terra Nigra (306); a Fabric D bucket (307, cf Drury & Rodwell 1973, fig 16.80); a lid (308), and a wheel-thrown Fabric C version (309) of an MPRIA form (cf Drury 1978a, fig 38 F17).

Periods 3B and 3C

Area B2 (Fig 92; MF 2C9-11)

The pottery from Structures 5 and 6, though unsealed, suggests a construction date not before the mid 2nd century. Sand-tempered jars and dishes, frequently with burnished line decoration (313, 316, 317) predominate, but a fine dark grey fabric was used for flask (314), flagon (315) and beaker (318) forms; 321 is a late 2nd century mortarium, 319 and 320 in Fabrics C and D are residual. The unusual stamped vessel 310 in Fabric C is probably Iron Age although the stamps are unparalleled (Elsdon 1975). B2 18, 310-15; B2 22, 316-18; B2 56, 319-20; B2 74, 321; B2 unstrat, 322 (Fig 93), BBl dish.

Area B3 (Fig 93; MF 2.Cll-12)

Quarry pit

This feature had two distinct layers; the lower (305) was late 1st century, but the upper (303), in addition to much residual material, contained late 2nd century pottery such as the Colchester colour-coat beaker (330) or the samian, Figs 70.17 and 74.51. The flat-topped bowl (334) is an unusual form on this site. B3 305, 323-9; B3 303, 330-7.

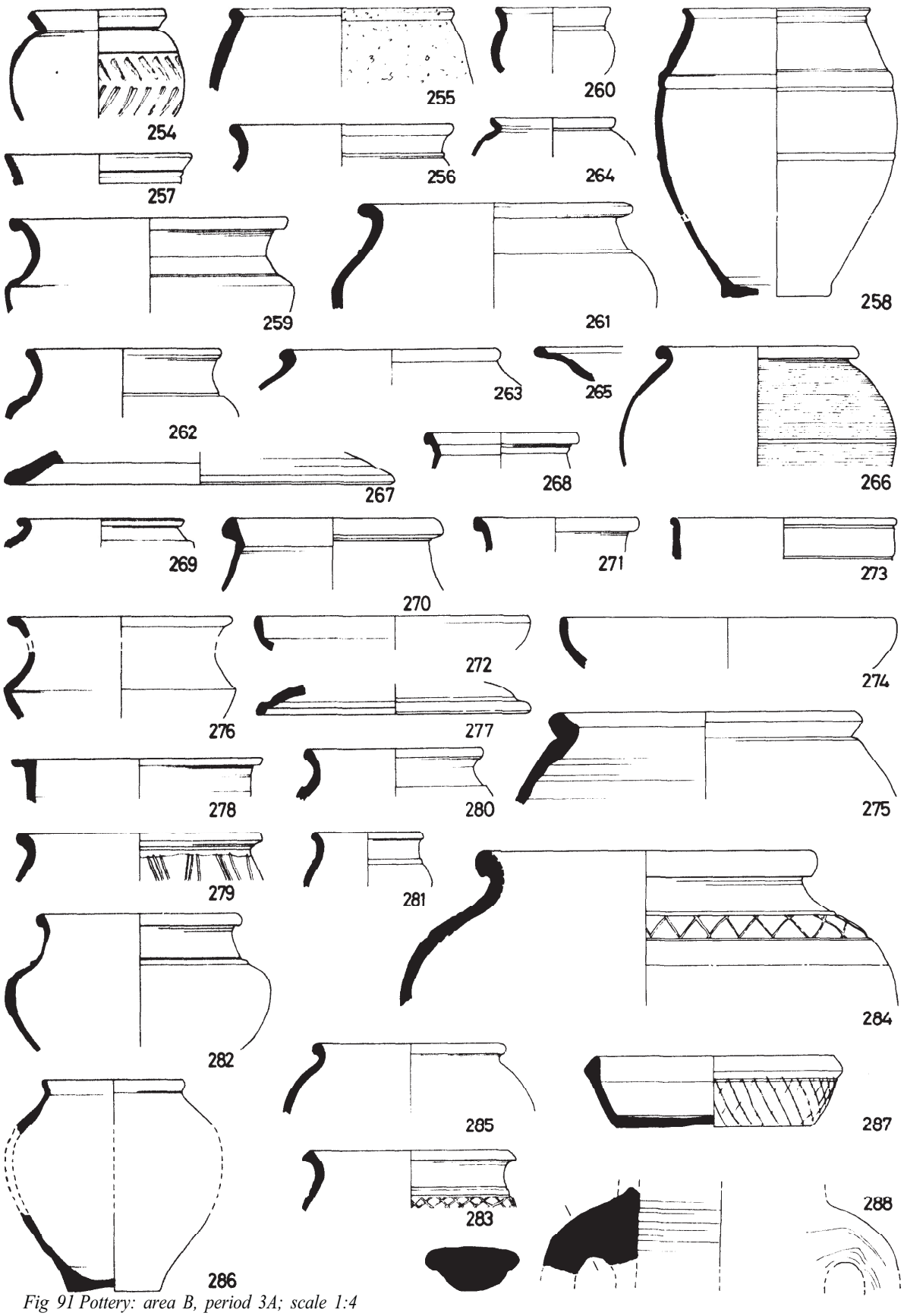


Fig 91 Pottery: area B, period 3A; scale 1:4

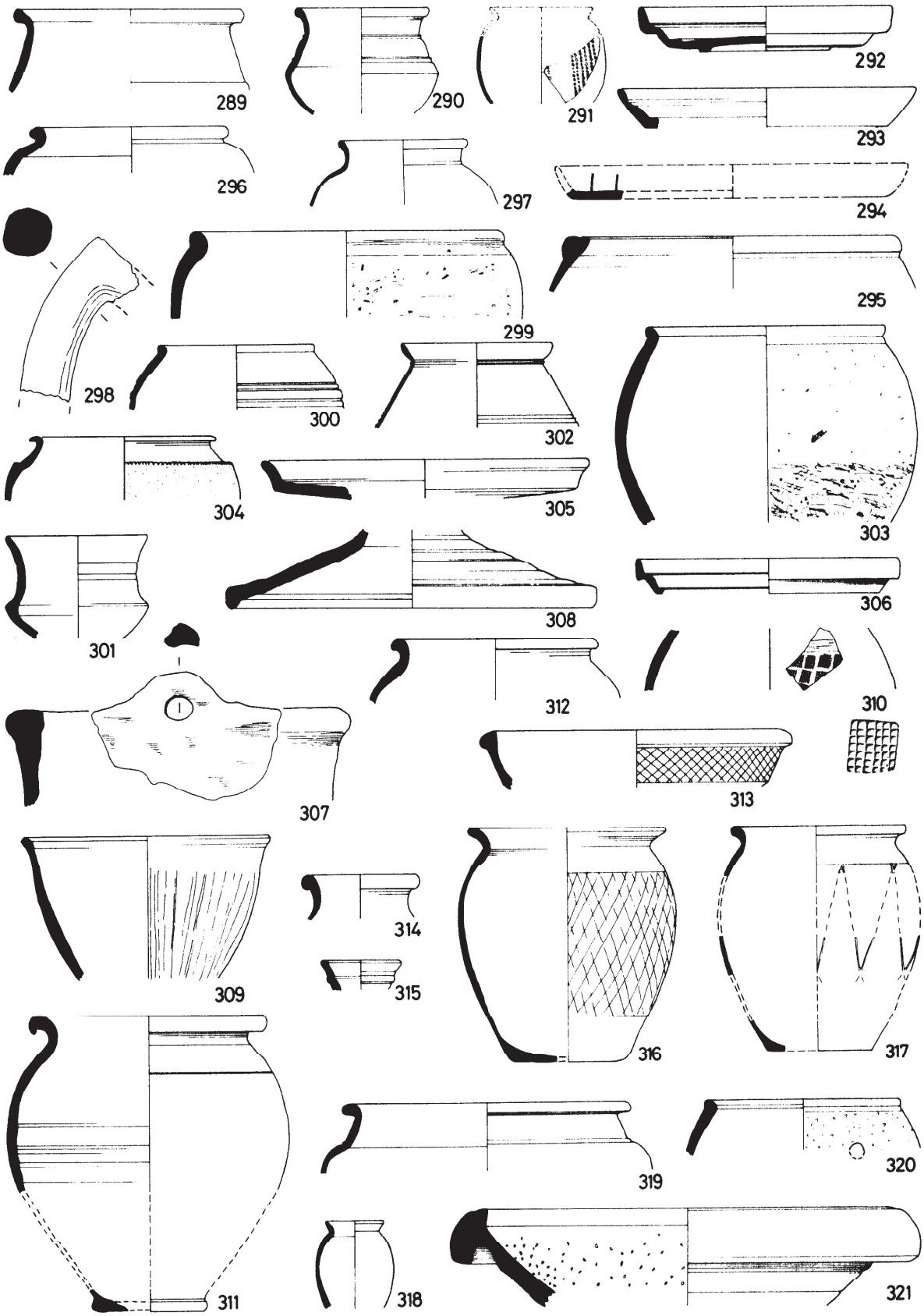


Fig 92 Pottery: area B, periods 3A and 3B; scale 1:4

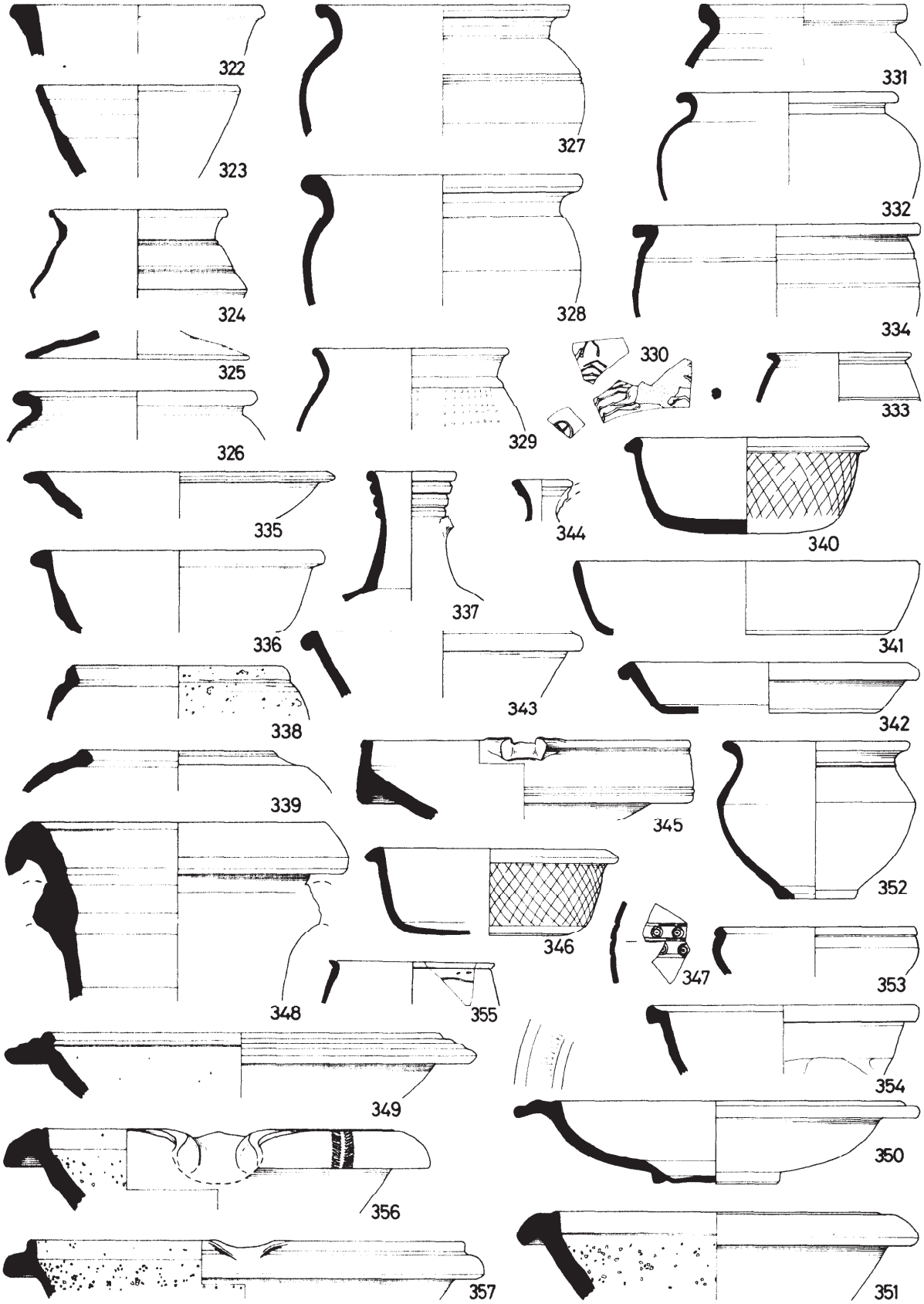


Fig 93 Pottery: area B, periods 3B and 3C; scale 1:4

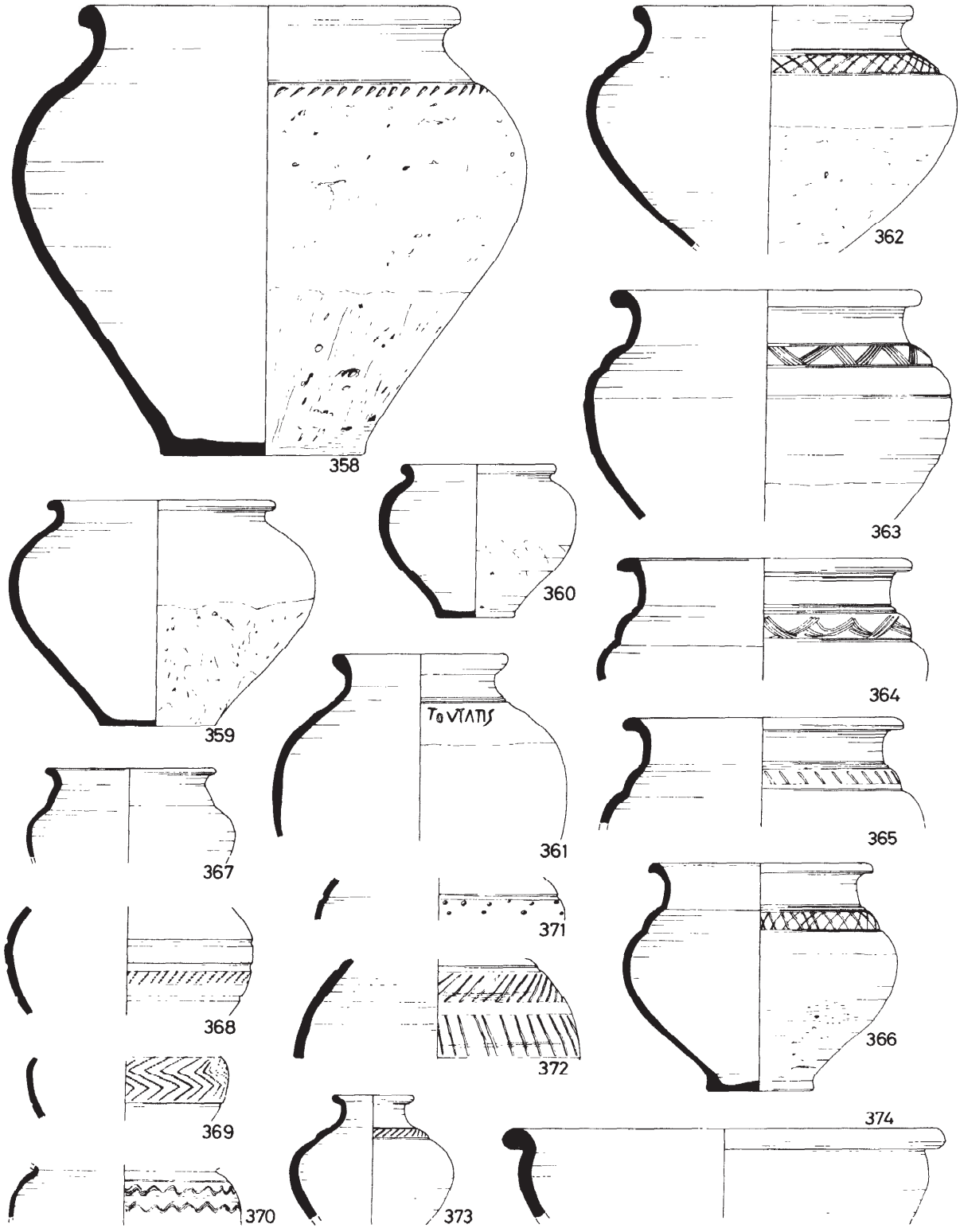


Fig 94 Pottery area Q pit group; scale 1:4

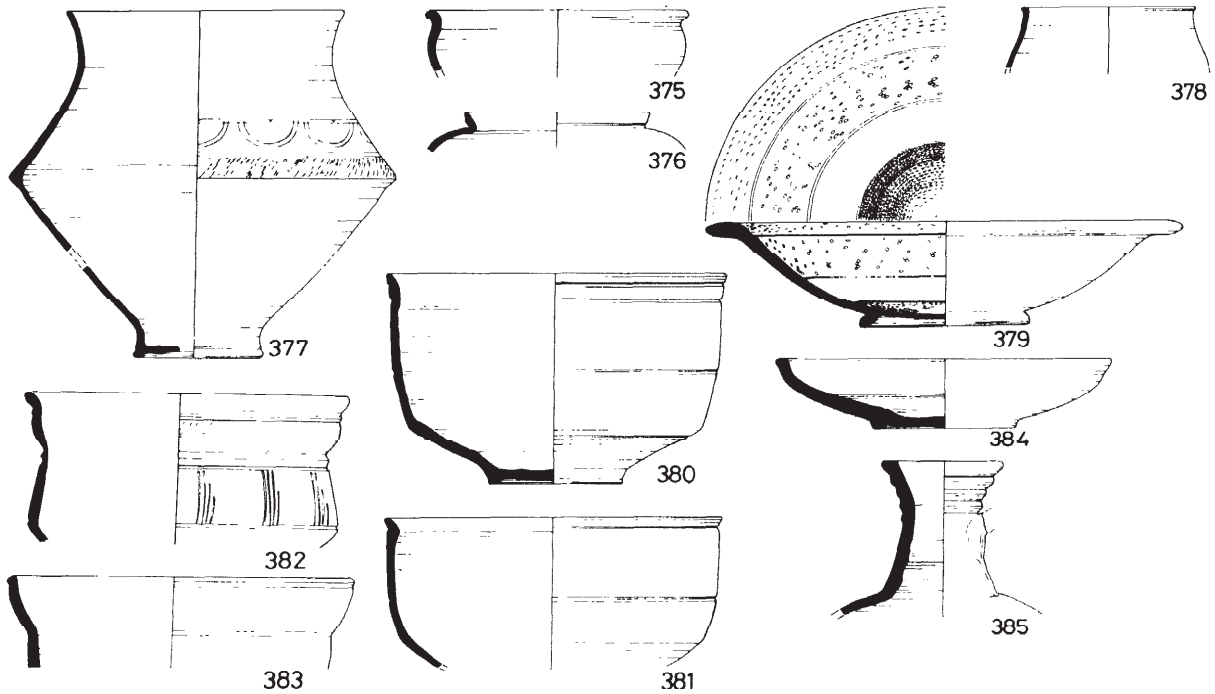


Fig 95 Pottery: area Q pit group; scale 1:4

Other features (Fig 93; MF 2.Cl2-13)

From F318 and F312, 1st century jars (338, 339); from F321 a range of dishes (340-3, 346), a flagon (344), a late 2nd century Colchester mortarium (345), a fragment of a West Stow ware beaker (347, Rodwell 1978c, 251), and a Spanish amphora (348); and from the Period 3C ditch 311, a late 3rd century mortarium, probably Colchester (349).

Area B4 (Fig 93; MF 2.C13)

These features contained a little 2nd century pottery; there was a fine greyware bowl (350) and a Colchester mortarium (351) from F421; from F432, 352-3.

Area B unstratified (Fig 93; MF 2.C14)

An unusual dish tempered with coarse quartz sand, probably 4th century (354); a Nene Valley barbotine-decorated colour-coat beaker (355); a mortarium with a herringbone stamp (356, Fig 76.3); an Oxfordshire colour-coat mortarium.

Area Q3: pit group from St Mary's Road (Figs 94, 95)

Some 700 sherds of pottery were recovered from a pit in the side of a gas main trench. Despite the circumstances of their discovery they comprised a cohesive and interesting late 1st century group *c* AD 80- 100 with no later contamination and very little residual material. The pieces were large and fresh with many joins. For the associated samian see Fig 72.23, 27, 29-32.

358 Storage jar, Fabric D, grey-brown, stabbed shoulder, rim and neck crudely burnished, lower body vertically striated and vegetation-marked.

359 Bead-rim jar, light grey sand-tempered fabric, exterior rough and soot encrusted in places, lower half knife-trimmed.

360 Bead-rim jar, grey sand-tempered fabric, lower half knife-trimmed.

361 Narrow-necked jar, light grey sand-tempered fabric, rim and shoulder crudely burnished; on the shoulder a neatly incised post-firing graffito, TOVTATIS (Fig 77.1). The broken lower edge evenly trimmed; reused as a funnel; cf Frere 1972, fig 104.164.

362 Cordoned jar, grog and sand-tempered, red core, black surfaces, rim and shoulder burnished externally with lattice on the cordon; cf Frere 1972, fig 104.149-56.

363 Cordoned jar, light grey with fine sand-tempering, rim and shoulder burnished externally with chevrons on the cordon.

364,365 As 363; further examples of burnished line decoration.

366 Cordoned jar, grey, sand-tempered, rim and shoulder burnished externally with lattice on cordon, base knife-trimmed.

367 Jar, Fabric K, light grey core, dark grey surfaces burnished externally.

Decorated jars, hard, light grey, fine sand-tempered fabric:

368 Partly obliterated comb stabbing.

369 Multiple comb stabbing.

370 Combed wavy lines.

371 Barbotine dots.

372 Shoulder of jar, grog and sand-tempered, red core, dark grey surfaces, diagonal burnished line decoration.

373 Narrow-necked flask, sand-tempered, red core, black surfaces, burnished externally with diagonal lines on the cordon.

374 Bowl, sand-tempered, red core, black surfaces.

Fig 95

375 Bowl, fine micaceous fabric, red core., grey surfaces, burnished externally.
376 Beaker, fine micaceous fabric, grey core, black surfaces, burnished externally.
377 Carinated jar, fine hard light grey, slightly micaceous fabric, burnished externally and decorated with incised semicircles and rouletting; a hole was drilled in the centre of the base. London ware; cf Marsh 1978, 150, type 17.
378 Rim of a similar vessel, fabric as 377.
379 Dish with flanged rim, hard fine sand-tempered micaceous fabric, light grey core, dark grey surfaces, once burnished now abraded, profusely decorated with rouletting and stabbing; for form but not fabric, cf Marsh 1978, 166, type 33.
380 Bowl, soft, slightly micaceous fabric, grey core, orange-buff surfaces, burnished orange slip externally, now largely removed; cf Rodwell 1978c, 234, 243; although plain, fabric and form are identical to his group 2 stamped 'London' wares which were probably made in the Hadham region.
381 Bowl, fabric as 380, exterior abraded, only traces of slip.
382 Bowl, Gallo-Belgic derivative, fabric as 380 but buff throughout, surface abraded; a zone of rouletting below the rim and groups of vertical incised lines on the body.
383 Bowl, Gallo-Belgic derivative, fine fairly hard slightly micaceous pink-buff fabric with sparse white inclusions, surfaces worn, no trace of slip or burnishing; cf Marsh 1978, 178, type 44.
384 Platter, hard micaceous, grog-tempered fabric, brick red with a grey core where thickest, completely coated with an orange-brown slip.
385 Ring-neck flagon, hard white coarse sand-tempered fabric.

Various localities, unstratified (Fig 96; MF 2.C14-D4)

A large quantity of pottery, none of it closely stratified, has been dug up in Kelvedon at various times. Much of it duplicates material from stratified contexts but a selection of pieces which extend the typological range is published below, and more of the late Iron Age pottery is published in Thompson 1982 (743-9). First century material predominated, late Roman pottery was relatively scarce. Provenances are given when known, as well as Colchester Museum accession numbers.

Middle pre-Roman Iron Age forms are represented by 386, a Fabric A lid; 387, a Fabric B cup and an omphalos base, 388 (Fabric C). Further late Iron Age coarsewares (Fabrics C and D) include carinated bowls (389, 390), combed storage jars (391, 393), the latter with two small cups luted to the rim, and a butt beaker (392). Fine wares include Terra Rubra cups (394, TR4; 395, TR3) and a range of Terra Nigra platters (396-9).

Roman pottery includes the platter, jar and cup (400-2), which form a late 1st century grave group (unlocated), a miniature jar in Fabric C (403); a BBl dish (404); a handled cup (405); an ointment pot (406); a ring-necked flagon (407); a rosette-stamped mortarium (408, Fig 76.4); part of a triple vase (409); a Hadham ware flagon (Fig 97.410); a slip-decorated Oxfordshire colour-coat bowl (411); and an Oxfordshire colour-coat base with a Chi-Rho graffito (412, Fig 77.4).

Areas E and F (Fig 97.413-7 MF 2.D4-5)

Most of the excavated pottery from these areas was late 1st century and duplicates published material. A few pieces were of individual interest, including a low Fabric C pedestal base to which are applied in high relief the legs and feet of a bird, possibly a cockerel (413). There were several fine late 1st century grey and cream ware bowls and cups (414-6), and a fragment of ring-stamped London ware (417).

The medieval pottery (Fig 97.418-20)

by C M Cunningham

Areas B2 and B6

Two hundred and two medieval and post-medieval sherds were recognized: of these 66 are stratified and the remainder are from surface cleaning.

Very little undecorated greyware (Fabric 20, Cunningham & Drury 1985) was identified: the only stratified example is one very fragmentary rim of a cooking pot (B6, 73) of standard 13th century form with a blocked rim and upright shoulder (cf Drury forthcoming a, no 184). A similar rim and part of a slashed jug handle, both unstratified, are contemporary. The two other greyware sherds came from glazed jugs, one with slip decoration (B6,73), and one with overall slip (B2,41). A decorated handle with a centrally-applied thumbed strip from a greyware jug was recovered from Swan Street (cf Drury & Petchey 1975, fig 13.72, dated to the 14th century).

One sherd of Hedingham ware (Fabric 22), a ribbed body sherd (B2,43), is typical of those found at Rivenhall. It occurs at least from the early 13th to the late 14th century, but it is possible that decorated, more globular jugs may be a 14th century type (Drury forthcoming a).

A few hard, rather sandy orange-red sherds (Fabric 21), mainly from jugs, correspond to Rivenhall's local group 7 (Drury forthcoming a), dated between the late 13th and early 15th centuries. One (B2, 120) has slip decoration under an external glaze, and there are a few plain sherds (B2, 43 and unstrat) and thumbed bases (unstrat).

The largest and most significant group are the hard sandy wares of the 14th and 15th centuries (Fabric 21): Fig 97.418 (unstrat) is a fragment from a vessel of sgraffito ware (Bushnell & Hurst 1952), which occurs in Essex in the 14th and 15th centuries (Rivenhall type A, Drury forthcoming a). Fig 97.419 (B6, 81) is the upper part of a howl in an identical fabric, with a similar overall cream slip, now on the inside, whose profile extends just far enough to reveal the beginnings of internal basal glazing, without any sgraffito decoration; Fig 97.420 (B6,81 and unstrat) is a well-fired sandy bowl with traces of cream slip on the outside, and with a thin glaze on the inside base. The closest parallel to this, a large bowl from

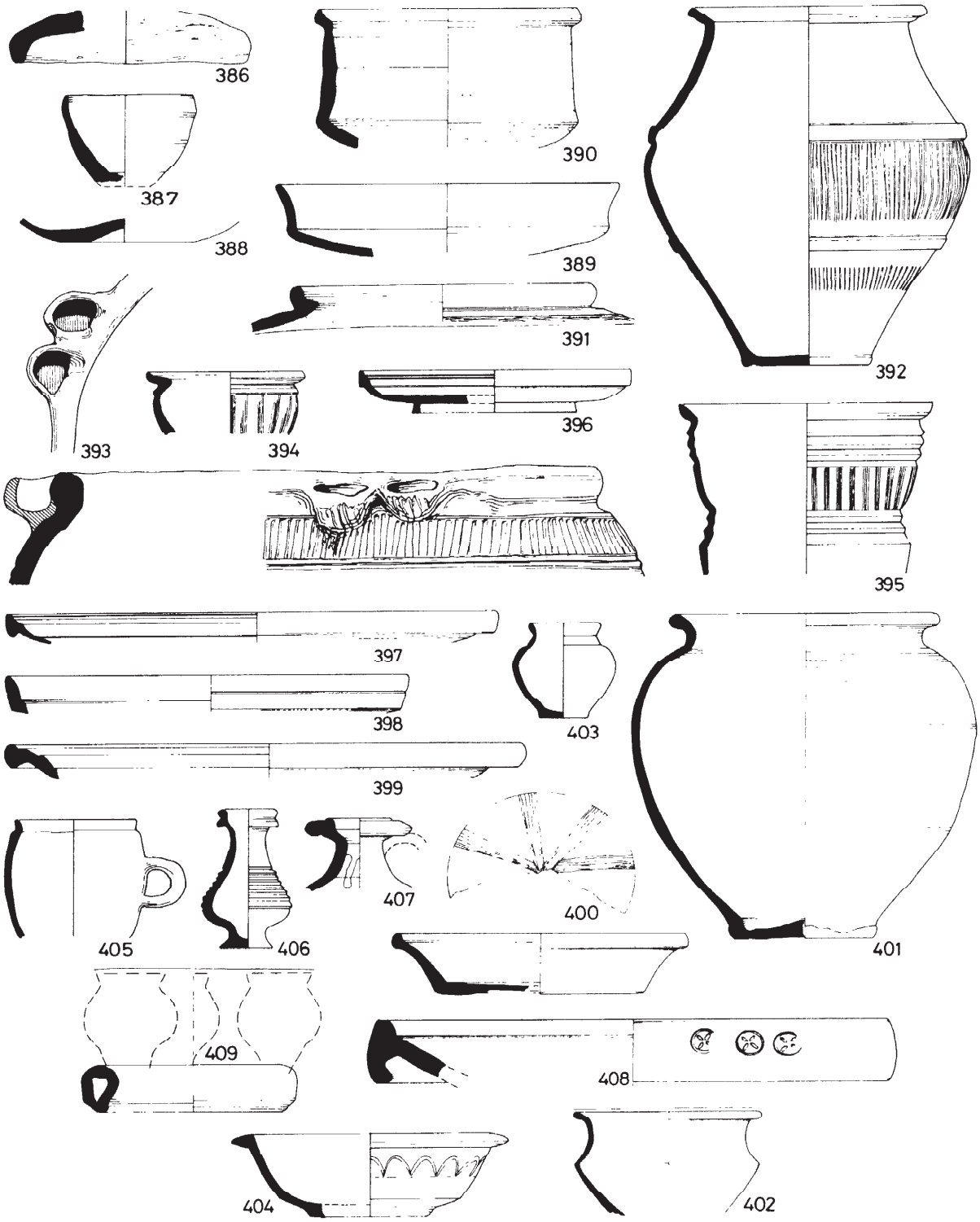


Fig 96 Pottery unstratified from various localities; scale 1:4

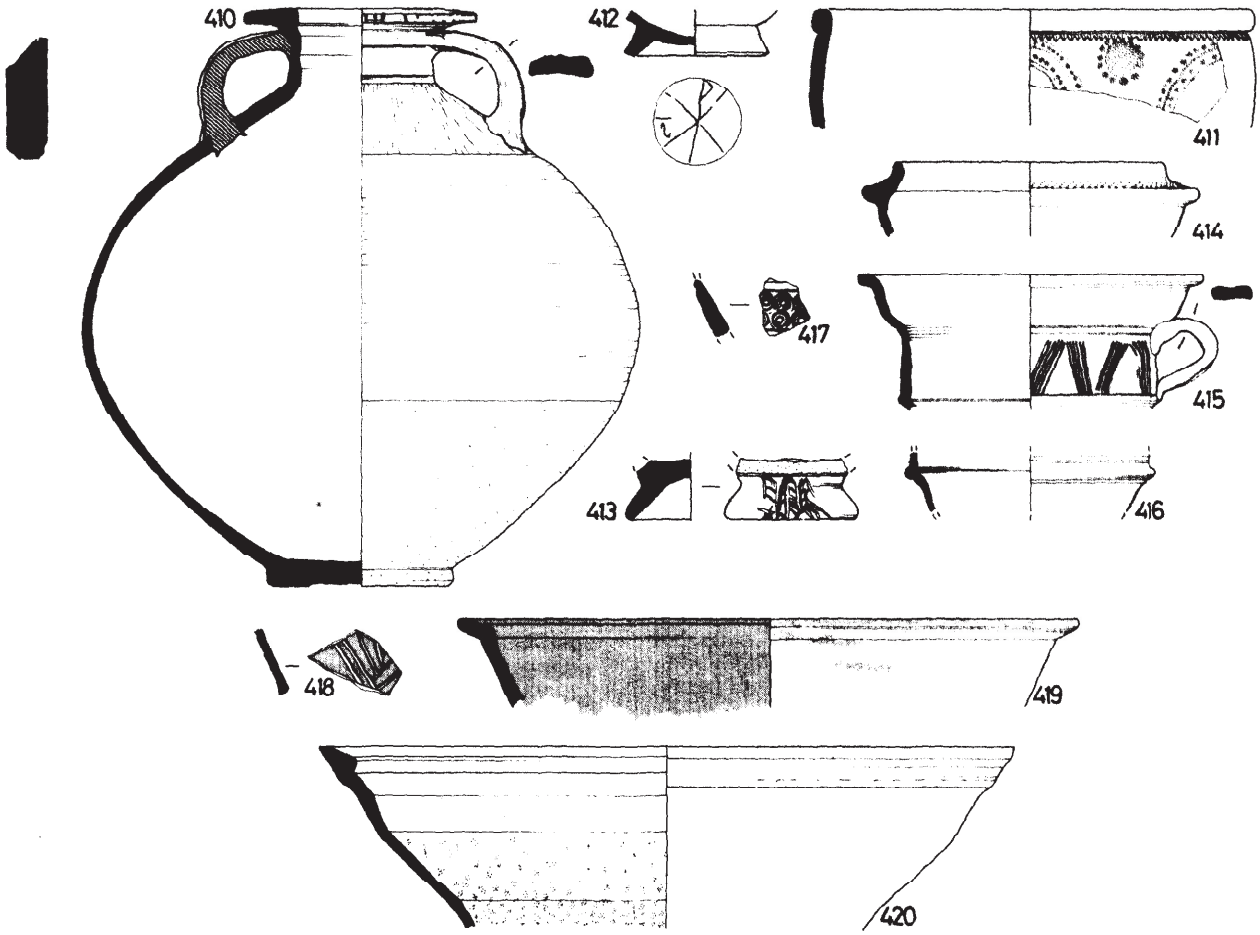


Fig 97 Pottery: Roman, areas B, E and F; medieval scale 1:4

Colchester (Cunningham 1982, fig 32.84), is probably residual in a late 15th–early 16th century context. Part of a dripping pan (B6, 73, 74), a large subrectangular, coarsely made, knife-trimmed, soot-blackened vessel, with internal glazing, belongs to the same group, as do fragments of a thumbed, slightly sagging base with glazing underneath (B6, 81). The coarse hard orange sandy ware, which shows very little glaze but more slip-decoration, and which has inclusions not unlike those of 'Colchester ware' (Cunningham 1982), is presumably contemporary. This comprises a sherd from the neck of a jug or storage jar (B2, 42), a handle (unstrat), and body sherds (B2, 2, 44 and unstrat), all with slip-decoration. A hollowed, everted rim (B6, 73) and an unstratified handle are undecorated.

A small but distinctive group includes a standing cup, not illustrated, but as in Cunningham & Drury 1985, Form E3B, fig 9.59 (B2, 2, 120, and unstrat). It is finely modelled with an angular profile and fine horizontal rilling on the body of the cup, with one rod handle, a fluted, pedestal base, and a clear overall glaze inside and out. The fabric, which is fine, orange and slightly micaceous, is almost certainly Hedingham ware (Fabric 22), perhaps one of the latest products of that industry. Similar cups occur at Chehnaford (Cunningham & Drury 1985), Maldon (unpubl) and Rivenhall (Drury forthcoming a), where a middle to late 14th century date is suggested. The form of the cup, which is not lobed, is very clearly reminiscent of metal prototypes (Jackson 1911, 113), possibly 15th century.

There is also a thumbed, slightly sagging base (B2, 43), in a very coarse white gritty ware (Fabric 23), with a thin light green glaze inside and out, presumably of Surrey type.

The remaining fabrics comprise the typical post-medieval red earthenwares with flat bases (Fabric 40, cf Cunningham & Drury 1985; B2, 32, 42–4, 120; B3; B6, 77 and unstrat) including rim fragments from bowls; nine sherds of stoneware and large fragments of a rectangular dish in combed slipware (B5, 509 and unstrat) of the late 17th–18th centuries (cf Camp 1976, fig 4.16). A few pieces of china (B5, 509 and unstrat) complete the group.

Conclusions

This assemblage is a typical scatter of pottery, ranging from the 13th to the 19th century, but with a very marked peak around the 14th - 15th centuries. Despite its limited nature, the 13th and 14th century pottery corresponds very closely with that from Rivenhall (Drury forthcoming a), and the later pottery conforms to the pattern shown at Colchester (Cunningham 1982).

8. DISCUSSION (Figs 40, 98)

Early prehistoric settlement

The brickearth and gravel terraces of the river Blackwater have attracted settlement from the Mesolithic period onwards, as is attested by a large number of flint artefacts and a few sherds of contemporary pottery. However, these are largely residual and the type of occupation they represent remains obscure. This situation is typical of many Essex sites where early prehistoric material has been found incidentally during the excavation of later settlements (cf Little Waltham; Drury 1978a, 10, 118; others are listed by Hedges in Buckley 1980, 26), and is in part due to the intensity of subsequent agricultural activity, which has frequently removed all but the last traces of these early features. At Rivenhall, where a buried soil survived beneath a villa, this could be seen to have taken place by the early Roman period (Rodwell & Rodwell 1986).

The late pre-Roman Iron Age

The late pre-Roman Iron Age settlement occupied the edge of the terrace above the flood plain of the river (areas B, G, H, J, L), with the earliest material coming from the excavations in area J. It is of particular interest for the comparison it provides with other Iron Age settlements in the locality, notably Little Waltham, with which it was partly contemporary.

Rectangular houses

From its inception the settlement in area J comprised a single rectangular building within an enclosure. In Essex, as elsewhere, the round house was the norm for dwellings until the end of the middle pre-Roman Iron Age (Drury 1978b), but the type is noticeably absent from late pre-Roman settlements in the south-east and appears to have been superseded by a variety of rectangular building forms, although there were some vernacular survivals such as the huts on Tilbury foreshore (VCH 1963, 190). These buildings remain incompletely understood, for the majority of examples so far discovered have either been poorly preserved or only partially excavated. They have been classified and the problems of identification and interpretation discussed by Rodwell (1978a).

The earlier of the two Kelvedon buildings (Structure 1) was of small rectangular type (Rodwell group l), although with a floor area of 44 sq m it was slightly larger than average. Structurally it may be compared with a building at Fengate (Rodwell 1978a, fig 2.13; 7x5.5m) whose foundations comprised a seemingly incomplete mixture of beam slots and individual posts. Its situation on the perimeter of a palisaded enclosure which was integral with the house wall, can be paralleled by several examples at Mucking (Jones 1974, fig 3; one side only) and at Ardleigh, where a rectangular enclosure was added to a circular hut (Drury 1978b, fig 16.5). At Mucking also can be seen an instance of a small rectangular lean-to structure, similar to Structure 2, appended to a larger building, in this case a round house (Jones 1974, fig 3).

Structure 3 was a building of large rectangular type (Rodwell 1978a, 32, group 4), a class not well represented in the excavated evidence; there are incomplete examples from Canterbury, Wickford *(ibid,* fig 3) and elsewhere in Kelvedon (L4, MF 1. B8-1. B13). It has affinities with the large aisled building of post and trench construction excavated at Camulodunum (Hawkes & Hull 1947, 89). Both buildings had tapered ends, and if one considers only the central section of the latter (minus aisles and east end which may all be additions), they were of similar dimensions (Camulodunum 22m x 4m; Kelvedon 21m x 5m). Both also displayed some evidence for an entrance just under halfway down the length of the building. At Camulodunum this took the form of three grouped posts (for the door jambs and an internally hung door-a structural arrangement often seen in Saxon buildings; Addyman & Leigh 1973, 14), whilst the disposition of internal posts and subdivisions in the north aisle suggests that there may have been a complete cross-passage. Further examples of this type of building doubtless await excavation; an aisled hall of four bays measuring 16.5m x 12m has recently been discovered beneath the Roman villa complex at Gorhambury, Herts *(Britannia,* 12, 1981, 345).

No internal features survived in Structure 3. The width of up to 5m is close to the maximum for a normal single-span building (a 'pole' measures 5.02m--16ft 6in) and with an internal area of about 105 sq m it represents a considerable advance in size upon Structure 1; for comparison a Little Waltham round house 12m in diameter had a floor area of 113 sq m.

Structures 1 and 3 stood in isolation in ditched or palisaded enclosures sufficient to control stock but not ostensibly defensive. However, it is not clear to what kind of settlement they belonged; they may have been successive phases of a single isolated farmstead, but more probably, considering the evidence from area L (MF 1. B10), they formed part of a loosely-knit series of buildings within enclosures scattered along the terrace.

Chronology

The establishment of a chronology is exacerbated by several factors, such as the lack of deep stratigraphy and the fact that most of the 'datable' items were not derived from contemporary contexts. The largest pottery group from area J (Figs 79, 80) was recovered from F350, a ditch open during the life of Structure 3. It contained some vessels of wholly middle Iron Age type (Fig 79.11-18), comparable with Little Waltham material, the whole range of vessel types considered by Rodwell (Rodwell 1976, 221) to be 'early Belgic', and a few pieces of standard 'Aylesford-Swarling' pedestal urns and tazzas (Fig 80.58, 61, 67, 68). There were no Gallo-Belgic imports or copies, but there was the pin from a large La Tène III brooch (Fig 43.5). The whole group exhibited a mixture of fabrics and potting techniques suggestive of a ceramic tradition in transition from a handmade middle Iron Age to a wheel-thrown late Iron Age style.

Other features ascribed to this period (2B) produced similar material in much smaller quantities, although the slot for Structure 3 also contained a Gallo-Belgic copy platter (Fig 81.92). However, as this was not an open feature but a wall trench, it is more likely to date the demolition or decay of the building than its period of use. Pottery from the succeeding phase (2C) included Gallo-Belgic fine wares and was comparable with material from area B. Several brooches and coins were found in the vicinity of Structure 3 and although all but one were

residual, chiefly in Roman graves, it is not unreasonable to assume that they derived from contemporary occupation deposits in and around the building, now destroyed by ploughing but extant when the graves were dug. The brooches, at least 6 of them, were all of La Tène III type; the coins included an issue of the Gaulish Atrebates and five class II potins. The dating of these has conventionally been pushed as late as the Claudian conquest, but a case has been made for an earlier date in the 1st century BC (Rodwell 1976, 203), and they do not occur in 1st century AD contexts at Kelvedon or indeed at Camulodunum (p 78). The pottery from the earliest period of occupation in area J (2A) resembled that from F350 but included a higher proportion of middle Iron Age types and a greater quantity of Fabric A (Little Waltham Fabric H).

In summary, Structure 3 was probably occupied during the second half of the 1st century BC, going out of use about the turn of the century, whilst a date in the second quarter of the 1st century BC is probable for Structure 1. This does not presume a life for either building of longer than a generation or so, which is probably an underestimate, particularly for the later structure. Period 2a would appear to be partly contemporary with period III at Little Waltham and 2b with period IV At Little Waltham the former phase was wholly middle Iron Age, with late Iron Age pottery only making its appearance in small quantity in period IV; whereas at Kelvedon both styles already coexisted in period 2A and the latter was supplanting the former in period 2B. This, however, is consistent with other differences in settlement form, house type and geographical location. Kelvedon, barely 16 km from Camulodunum, or more properly at this period, Gosbecks, is well within a 'Belgic' sphere of influence whereas Little Waltham, in central Essex, appears to lie on its borders (Drury 1978a, 129). The differences therefore may be cultural rather than chronological, and the defended settlement of period IV at Little Waltham a response to the growth of sites such as Kelvedon (Drury 1978a, 129).

Other Iron Age material from Kelvedon includes a Gallo-Belgic D quarter-stater (Fig 40.X), a glass bead (Cl), an unusual votive pot (F1) found close to what became a religious complex, and quantities of pottery of the 1st century AD from areas B, G, H, L, and E. Little can be said about the morphology of this phase of Iron Age settlement, but ceramic assemblages such as that from F424 (B4) afford a useful contrast with the earlier material. Fabric C predominated and the majority of vessels were wheel-thrown. Early forms, with the exception of the combed jar, disappeared and were replaced by a large range of cordoned jars and butt beakers. Fine wares included Arretine, amphorae, cream flagons, Terra Rubra and Terra Nigra, associated with two brooches, a Colchester type and a repaired La Tene III. The group as a whole has close affinities with material from Camulodunum, where much of it was probably made. There are, however, idiosyncratic pieces like the handled butt beaker (Fig 90.243) which is probably of local manufacture. Taken as a whole the evidence suggests a Tiberian date for the deposit.

The economic background of the settlement was presumably agricultural, but it is unfortunate that soil conditions are so unfavourable to the survival of ecological and faunal evidence. Trade, probably via Camulodunum, clearly played a major part from an early period and salt appears to have been important. This could have reached the settlement simply as a traded product, but its production may have been a seasonal occupation of the inhabitants (see above, p 81), and may have been a factor in the evident prosperity of the settlement.

The Roman settlement (Figs 40, 98)

The road

The Roman road from London to Colchester is a dominant feature of the local topography and is closely bound up with the development of the settlement, It runs for the most part in a series of long straight alignments (VCH 1963, 24), and consequently the marked dog-leg at the southern end of the High Street (Fig 2) has given rise to alternative suggestions for its exact course through Kelvedon. The most plausible was that it ran south-east of its present line through the centre of the Roman settlement to the crossing of the Blackwater.

One of the original aims of the excavation was to test this hypothesis, but it is now clear that there was no major road between the present road and the flood plain of the river. A minor road with an early origin (p 5) did indeed exist in the postulated position, but this must be discounted as a major route on grounds of size. In the two places where the London-Colchester road has been sectioned, at Gurney Benham House, just outside the west gate of Colchester (Hull 1958, 6, fig 2, III) and at Old Ford, London (Sheldon 1971, 42-6), it was found to be a triple carriageway, solidly built of rammed gravel, sand and clay, with an overall breadth of 20-21m. At Chelmsford, where it passed through a 'small town' it averaged 10-12m between road ditches (P J Drury pers comm). The Kelvedon trackway which was only 3-4m wide, was clearly a side road; side roads in Chelmsford were between 4 and 5.5m wide.

The only remaining course for the Roman road is therefore its present one, and a considerable depth of well-compacted gravel has been observed in places beneath the modern road surface (Fig 40; VCH 1963, 25). This is probably a combination of laid gravel and utilized natural gravel, for heavy ballast naturally cemented with iron outcrops directly below the topsoil in areas B2 and B6. The departure of the road from an anticipated straight course could be explained on topographical grounds if it were diverted northwards to avoid an obstacle which already occupied the most direct route. It is suggested below that this may have been a Roman fort. The dog-leg can then be seen to originate as a normal realignment on a slight eminence between two small stream valleys (Fig 2), which was subsequently accentuated by medieval encroachments.

The road alignment and the fact that the flood plain is there at its narrowest indicate that the Roman river crossing was in the same position as the present one, spanned by a brick bridge of 1788; the medieval river crossing was some 70m downstream. The river may have been navigable in the Roman period; by 1086 its flow had been impeded by numerous water mills.

Fig 98 The development of the settlement at Kelvedon

The military phase (Figs 40, 98)

There is a certain amount of evidence pointing to military activity at Kelvedon in the mid 1st century AD. The most substantial remains were encountered in area J, where a mid 1st century ditch (p 25) of characteristically military profile and containing military equipment (Fig 46) was traced for 93m. For much of this distance it was heavily denuded and appeared insubstantial, but including topsoil, it would originally have been 3.5m wide and 1.5m deep, well within an acceptable military size range for the period. It may be compared with Nanstallon, also a single circuit (Fox & Ravenhill 1972, 63), 2.7m wide and 1.6m deep with a shovel slot; Longthorpe (Frere & St Joseph 1974, 10) where the ditches averaged 3m in width and had recorded depths of between 1.52 and 1.98m; or Hayton (Johnson 1978, 64) where at one point the two ditches were 2.2 and 3.8m wide and lm deep (without topsoil). One had a shovel slot, but the other a shallow V-shaped profile.

The overall size of the enclosure is not known; aerial photography is of no assistance. However, local topography dictates that it must encompass areas L and N, in the angle between the flood plain of the river and the tributary stream bounding area M. Excavations in area H (H4) failed to locate the ditch and the north-western side would therefore seem to lie in the vicinity of the boundary between areas N and P The north-eastern side must be bounded by the main road. A possible reconstruction is shown on Fig 40, with sides of 190-200m in a ratio of 9:10 (Jones 1975, 51), giving an internal area in the order of 4ha (10 acres). The pre-Flavian track (C4) may originally have led to the gates.

The only internal feature to survive the quarrying within the excavated area (J) was a battery of three pottery kilns, which were clearly secondary as the partially backfilled ditch was used as a stokepit. The kiln chambers had been cut into the rampart, and barely survived, whilst the length of the connecting stokepits (Fig 20) indicates that the berm must have been narrow, less than 1m. A close parallel in both form and date is provided by the military pottery kilns at Longthorpe (Wild 1973, 8) situated some 500m from the fortress. These were also surface-built, of similar size *(c* 3m in diameter) and could share a communal stokehole. They appear to have produced finer wares than the Kelvedon kilns, but little pottery from the latter survived for comparison. At Usk (Manning 1981,201) a battery of nine similar structures was found cut into the outer edge of the fortress ditch. They were interpreted in this context as ovens and thought to date from the time of the demolition of the fortress.

There are only two contexts for a Roman military presence in the area; the initial years of the conquest, prior to the foundation of the *colonia* at Colchester, or the immediate aftermath of the Boudican revolt. Neronian samian *(c* AD 55-70) occurs in some quantity at Kelvedon (p 98), but there is very little samian antedating *c* AD 50 thus rendering a Claudian military occupation unlikely. The pattern of coin loss (p 80) reflects the same picture.

A Neronian date for a fort implies that the construction of the Roman road only took place after the Boudican revolt, if the hypothesis that the latter was diverted round the former is correct. It is possible that the fort may have had a secondary function as a depot for road building, and this might explain some of the mid 1st century features in area B, where military equipment was also found (Fig 46), if compounds were being constructed or gravel quarried for road building.

The disposition of troops in eastern England in the aftermath of the Boudican revolt remains ill-understood (Drury & Rodwell 1980, 64). There was certainly a fort at Chelmsford (Drury 1975, 159); the post-Boudican military situation at Colchester is unknown; Kelvedon lies mid-way between the two at the most considerable intermediate river crossing. Further afield, a large fort at Great Chesterford (Rodwell 1972, 290) probably belongs to this period whilst in East Anglia proper, recent aerial photography has revealed forts at Ixworth (Jones 1975, 157), Stuston (Edwards 1977,236) and Stanninghall (Edwards 1976, 261), all of which, like Kelvedon, command river crossings. The former is triple and the two latter are single-ditched; Stanninghall has an area of 9.6 ha: the others are only partially visible. At Grandford, Cambs is another instance of a road diverted round a fort (Potter 1981, 85); it also is thought to be post-Boudican.

The sequence in both areas B and J indicates more than one phase of potential military activity. However, it is unlikely on either archaeological or historical grounds that any fort would have remained in use for more than a decade after the Boudican revolt.

Development and economy

Kelvedon is one of a number of Romano-British 'small towns' in Essex situated at road junctions and river crossings. Their characteristics are discussed in Rodwell 1975 (85-101), supplemented by Drury & Rodwell 1980 (65-8).

The settlement appears not to have developed along the main road but along the minor road to the south, which suggests that it may have originated as a *vicus* outside the north-east gate of a fort. Development seems to have remained linear, and to have covered a total area of about 12 ha, although it is unlikely that more than 8-10 ha was occupied at any one time. Several minor roads serving the Roman settlement can be suggested on topographical grounds (Fig 40; Rodwell 1978b, 93), for instance Rolley lane-now a track leading nowhere, but formerly a Saxon estate boundary which may originally have led to a villa in the vicinity of Felix Hall.

The settlement was enclosed for a time by a defensive earthwork, partly visible as a cropmark (P11), which has been sectioned in several places (C1, 2, 5; G1; H1-4). Its possible size is indicated on Fig 40 (P1, Ql, R1), where it encloses *c* 5 ha.

There is little dating evidence for its construction, but by the early 3rd century it was being backfilled or put to secondary use; in area H the sides were being quarried for gravel (H4) whilst in area C it was overlaid' by an early 4th century building (C2). It would therefore seem to be one of the hastily-constructed and short-lived earthwork defences of late 2nd century date which surround other settlements in the region (Rodwell 1975, 88). The area enclosed and the dimensions of the ditch are similar to the defences at Chelmsford (Drury & Rodwell 1980, fig 25), constructed within the period *c* AD 160-220.

All those buildings so far excavated within the settlement were timber-framed, with cill beams resting on gravel floors, wattle and daub walls and probably thatched roofs. Roof tile was found, but not in sufficient quantities to suggest that it was the major roofing material in areas B and C; its most frequent use was in hearths. Flue tile, building tile, red tesserae and Purbeck marble wall sheathing attest the existence of at least one more elaborate building, probably located in area E. This may have been of stone (flint rubble), at least in its lower courses, although no stone foundations have ever been seen. However, these would have been comprehensively robbed, owing to the shortage of good building material in the locality, and robber trenches are difficult to detect in other than controlled conditions. Tile (and probably flint rubble) derived from Roman buildings was used extensively in the earliest phase of the present church, but it is not certain that this came from the small town rather than outlying structures.

Building density on the edge of the settlement (area B) was low; both here and in area C, excavated structures appear to have been primarily industrial (or perhaps in B2 agricultural). Iron and bone working (C5) are attested; the function of the kiln or furnace B14 is unknown. One of the buildings excavated in area E, with a hearth and several rooms (E1C), appears to have been domestic, but another circular structure (E2) has been interpreted as a temple (below p 136).

The industrial buildings appear to have gone out of use in the 3rd century and much of area B reverted to agriculture.

This structural decline is reflected both in the lack of East Gaulish samian at the turn of the 3rd century (p 98) and in the sharp fill in coin loss in the 4th century (p 80). The former may have been a temporary consequence of the disturbances at the end of the 2nd century which are implied by the construction of the defences, for 3rd century coin loss was relatively high. However, by the 4th century trade and industry appear to have dwindled and the settlement had probably become purely agricultural. The cemeteries indicate continued occupation of some kind,

Religion

The small round building in area E (E2) appears to be a temple of simple circular type (Rodwell 1980, 568). This is suggested by its plan, anomalous for a Roman domestic building in this region, the associated finds, which are few but exotic, and by its environs. It was surrounded by a gravelled *temenos* in which were cut pits containing votive objects (E3) and debris from a second more sophisticated building. The arrangement recalls the circular temple within a *temenos* at Hayling Island (Downey *et al* 1980, 289), The second structure had a tessellated floor and may have been of masonry but no evidence for its plan has been recovered. Both buildings appear to have been burnt down at the end of the 2nd century and the site cleared, so that votive material found its way into the backfilling of the defensive ditch (C2). It is not known whether they were rebuilt.

The Kelvedon *defixio* (C2) invokes Mercury and Virtue, and a connection with the former deity is also suggested by the late Iron Age votive pot (F1) depicting what may be a cockerel. This vessel hints at a pre-Roman origin for the temple site. The Palaeolithic hand-axe (E3g) is also clearly a votive object; more than 30 have been found at the nearby shrine at Witham, where they have been interpreted as (thunderbolts' connected with a cult of Jupiter (Turner 1981, 6). A graffito on a jar from area Q3 invokes the Celtic deity Toutatis; a small chalk figurine was found in a niche in a timber-lined well in area C5.

There is also a growing body of evidence for Roman Christianity in the area. The late 4th century strap-tag from Durwards Hall, on the boundary of Rivenhall and Kelvedon parishes, has long been known (Tonnochy & Hawkes 1931, 123) and is now seen to be one of a group of similarly-decorated items (Hawkes 1973, 145-58; Thomas 1981, 129). It depicts a crudely-drawn tree of life flanked by a peacock and a gryphon. To this can be added the Chi-Rho monogram scratched on the base of an Oxfordshire colour-coat bowl from Kelvedon itself (B11) and a gypsum burial from the Feering cemetery (p 137 below). There is also an unusual lead object with possible Christian associations from C5 (Eddy 1982, 14; *Britannia* **17** (1986), 355-8—Since identified as a candlestick by Paul Barford). The focus of Christian activity in the locality was apparently at Witham, where a late Roman baptistery and church replaced a Romano-Celtic shrine (Grew 1980, 378; Turner 1982, 21-8).

The cemeteries

Four separate cemeteries are known in the immediate environs of the Roman settlement, and there are several other more distant burials within the parish (VCH 1963, 150). One of these cemeteries (area J) has already been described and discussed at length (pp 26-31), whilst another (G2) containing over 40 burials is described briefly in Eddy (1982, 17). Between them lay an apparently isolated inhumation (H6) containing a buckle of late Roman military type (Fig 49.65).

The remaining cemeteries are known only from chance finds and 19th century investigations. There are two references to finds of greyware burial urns south-west of the town; close to Church Hall, with Roman and 'Danish coins (VCH 1963, 150), and in the churchyard, where Roman tile has also been found (notes, Capt A Hamilton, 1914).

The other cemetery lay north-east of the town, on the opposite bank of the Blackwater in Feering and Inworth parishes, and contained both Roman and Saxon burials. Unfortunately it was indifferently excavated in the last century and has never been properly published. The fields where the discoveries were made were known as Barrow Field and Barrow Hills. This may refer to Bronze Age round barrows, but more probably implies Roman barrows, which are quite common in northern Essex. There is an extant example in the neighbouring parish of Messing (VCH 1963, 161) and one or more formerly existed at Rivenhall (Rodwell & Rodwell 1973, 122).

The only Roman burial about which there is specific information comprised a plain monolithic coffin and lid of oolitic limestone (CM) containing 'a lady (with a false tooth of pebble) buried in plaster' (notes, Capt A Hamilton, 1914). The contents of the coffin were not kept and there is no mention of any grave goods. This burial was overlaid by a Saxon inhumation without closely datable grave goods (VCH 1903, 327).

All that survives of the Saxon cemetery is a collection of grave goods in Colchester Museum *(Essex Naturalist,* II, 124; IV, 106). These include several pots (Myres 1977, 90; figs 13, 206, 278), glass and amber beads, a sword, spears and knives, a variety of brooches including penannular, saucer, plate and short-long types, and a buckle set with a garnet (VCH 1903, 326, pl facing 322). As this material spans the 5th and 6th centuries, whilst the Roman burial was 4th century and many graves could not be closely dated, it would appear that this cemetery, like that in area J, was in use by a limited number of people over a long period of time. It is not the only example of a cemetery containing both Roman and Saxon burials; in Essex they are known at Prittlewell, Great Chesterford (Drury & Rodwell 1980, 71), Saffron Walden (Bassett, 1982, 9-11), Heybridge (Drury & Wickenden 1982, 30), and Colchester (Crummy 1981, 23); there is also Girton, Cambs (Liversidge 1977, 16). In all these instances a reasonable case can be made for continued use rather than casual reuse and they raise questions about the nature of Saxon transition in the region and of post-Roman burial generally. 'Saxon' cemeteries remain scarce in Essex by comparison with East Anglia despite much recent work (Jones 1980, 87-95) and it is legitimate to ask just where and how the post-Roman population was buried. However this is not the place to pursue the matter further.

The post-Roman settlement

At Kelvedon as elsewhere in the region there is no evidence for a sudden or violent end to the settlement in the late 4th or early 5th centuries (Rodwell 1975, 95), and its demise was probably due to changing economic conditions (Drury & Wickenden 1982, 33) unconnected with Saxon incursions. This process appears to have started early in the 4th century.

The two 'mercenary' belt fittings (pp 57 and 136), and the early 5th century material from Rivenhall (Rodwell & Rodwell 1973, 123) indicate the introduction at the end of the Roman period of a small number of Germanic people who lived initially in controlled conditions amongst a declining but persistent Romano-British culture (Drury & Rodwell 1980, 71). The longevity of Roman traditions in this locality is demonstrated by the 5th and 6th century structural sequence at Rivenhall (Rodwell & Rodwell 1986, 121), and not least by the wholesale survival of Roman landscape features over much of the area (Rodwell 1978b, 93-5). This implies a continuity of land use, though not necessarily of land ownership, in which the former Roman small town occupied only a marginal place. The process was probably centred on those places which emerged as manors at Domesday, as for example has been demonstrated at neighbouring Rivenhall. However, the earlier history of the Kelvedon manors is archaeologically untested, although there is evidence to suggest that some had Roman origins (VCH 1963, 150).

In the Domesday survey of 1086 the lands of Kelvedon were divided between three manors, Church Hall (5 hides), Felix Hall (3½ hides), and Coggeshall Hall (3 virgates, partly in Little Coggeshall parish); all had mills on the Blackwater (VCH 1903, 444, 497, 436). The Church Hall estates were given to Watminster Abbey in AD 998 by Leofwine son of Wulfstan (Hart 1957, 19) and are first described in detail in a survey of 1294 (Kentish 1974, 13), in a form which is still recognizable. It is evident that the former Roman settlement area was laid out as 8 plots (Fig 98) each with a notional measurement of 50 poles by 20 poles at some time before the 13th century, for by then this earlier pattern was in decline and the existing medieval tenement pattern well established. The most likely context for this replanning would be at the acquisition of the Church Hall estates by Westminster. The present church was probably also built at that time (Rodwell & Rodwell 1986, p 136).

The growth of freehold tenements on the main highway probably originated in the 12th century and the medieval settlement was not a planned one, for rents were paid to four different manors. Two distinct nuclei grew up; Kelvedon, around the western crossroads, and Easterford at the river crossing over 1 km away. There was a scatter of tenements in between, but the settlement only assumed its present continuous linear form in the later 19th century, whilst the backlands, including the main Roman settlement area have only been built upon in this century.

APPENDIX

TABLE 16

The following table lists all the excavated contexts other than graves from areas B and J and correlates the published plans and sections on which they appear with the illustrated finds. References are to figure numbers, except for the coins, which are prefixed by C if Celtic and R if Roman.

Area B Context No.	*Description*	*Period*	*Plan*	*Section*	*Copper Alloy*	*Iron*	*Other*	*Coin*	*Flint*	*Samian*	*Other Pottery*
2	Ditch	5	5	8.56	52.94, 96	-	-	R6	-	70.42; 74.54	-
5	Ditch	3A	5	8.53-5	46.35-6; 48.52	-	60.4	R2	-	-	91.277-80
6	Ditch fill	3A	-	8.54-5	-	-	-	-	-	-	-
7	Ditch fill	3A	-	8.54	-	-	-	-	-	-	-
10	Pit	3A	5	8.54	-	-	-	-	-	-	91.274
18	Beam slot Str 5	3B	5	8.58-9	49.73	54.40	-	-	-	71.25	92.310-5
19	Floor (surface) Str 5	3B	5	8.50,57 -9	43.11,12; 48.49; 49.62,67	54.25	62.4	R17, 18	-	-	-
21	Gravel Str 5	3B	5	-	-	-	-	-	-	-	-
22	Beam slot Str 5	3B	5	8.59	49.63	-	-	-	-	-	92.316-8
23	Ph	5	5	-	-	-	-	-	-	-	-
24	Ditch recut	3A	5	8.53,58	50.79	-	-	-	-	-	91.275-6
26	Beam slot Str 4	3A	5	8.58	-	-	-	-	-	-	91.255-7
32	Ph	5	5	-	-	-	-	-	-	-	-
33	Ph	3A	5	-	-	-	-	-	-	-	-
34	Ph Str 4	3A	5	8.61	-	54.44	-	-	-	-	91.254
35	Ph Str 4	3A	5	-	-	-	-	-	-	-	-
36	Ph	3C	5	-	-	-	-	-	-	-	-
37	Phs	5	5	-	-	-	-	-	-	-	-
38	Ph	3C	5	-	-	-	-	-	-	-	-
39	Ph	3C	5	-	-	-	-	C9	-	-	-
41	Palisade	5	5	-	-	-	-	-	-	-	-
42	Palisade	5	5	8.50-1	-	-	-	-	-	-	-
43	Palisade	5	5	8.50	-	-	-	-	-	-	-
44	Palisade	5	5	8.56	-	-	-	-	-	-	-
45	Ditch	3A	5	8.50-1	48.56; 49.71	-	-	-	-	-	-
46	Ditch recut	3A	5	8.50-2	-	-	-	-	-	-	91.261-3
47	Ditch fill	3A	5	8.50	-	-	-	-	-	-	91.264-5
48	Ditch fill	3A	5	8.50-2	-	54.34	-	-	66.10	71.15, 20	91.266-9
49	Ditch recut	3A	5	8.50-2	44.17	-	-	-	-	-	91.270-3
50	Beam slot Str 5	3B	5	8.51	-	-	-	-	-	-	-
51	Beam slot Str 6	3B	5	8.50	-	-	-	-	-	-	-
52	Beam slot Str 6	3B	5	-	48.51	-	-	-	-	-	-
53	Beam slot Str 4	3A	5	8.62	-	-	-	-	-	-	91.258-60
54	Ph	5	5	-	-	-	-	-	-	-	-
55	Pit	1	5	-	-	-	-	-	-	-	-
56	Beam slot Str 6	3B	5	8.57	-	-	-	-	-	-	92.319-20
58	Beam slot Str 6	3B	5	8.57	-	-	-	-	-	-	-
59	Pit	3B	5	-	-	54.42	-	-	-	-	-
60	Pit	5	5	8.56	-	-	-	-	-	-	-
61	Ph	3	5	-	-	-	-	-	-	-	-
62	Ph	3	5	-	-	-	-	-	-	-	-
63	Ph	5	5	-	-	-	-	-	-	-	-
64	Ph	5	5	-	-	-	-	-	-	-	-
65	Ph	3	5	-	-	-	-	-	-	-	-
66	Ph	5	5	-	-	-	-	-	-	-	-
67	Ph	5	5	-	49.68	-	-	-	-	-	-
68	Pit	1	5	8.63	-	-	-	-	-	-	78.4
70	Ph	5	5	-	-	-	-	-	-	-	-
71	Ph	5	5	-	-	-	-	-	-	-	-

Context No.	*Description*	*Period*	*Plan*	*Section*	*Copper alloy*	*Iron*	*Other*	*Coin*	*Flint*	*Samian*	*Other Pottery*
72	Pit	3C	5	-	-	-	-	-	-	-	-
73	Pit	5	5	8.48	-	-	-	-	-	-	-
74	Pit	5	5	8.49	-	-	-	-	-	-	92.74
75	Gully	3B	5	-	-	-	-	-	-	-	-
76	Gully	3B	5	8.64	-	-	-	-	-	-	-
77	Gully	5	5	8.48-9	-	-	-	-	-	-	-
79	Ph	3B	5	8.64	-	-	-	-	-	-	-
81	Gully	5	5	-	-	-	-	-	-	-	97.419-20
82	Beam slot Str 6	3B	5	8.49	-	-	-	-	-	-	-
83	Ph	3B	5	-	-	-	-	-	-	-	-
84	Ph	3B	5	-	-	-	-	-	-	-	-
86	Ditch	3A	5	8.48-9	-	-	-	-	-	-	-
87	Ditch	3A	5	-	-	-	-	-	-	-	-
88	Ditch	3A	5	8.48	-	-	-	-	-	-	-
110	Ph Str 8	3C	5	-	-	-	-	-	-	-	-
111	Ph Str 8	3C	5	-	-	-	-	-	-	-	-
112	Floor Str 8	3C	5	8.60	-	-	-	-	-	-	-
116	Quarry	3A	5	8.60	-	-	-	-	-	-	-
120	Palisade	5	5	-	-	-	-	-	-	-	-
123	Ph	3C	5	-	-	-	-	-	-	-	-
125	Ph Str 8	3C	5	-	-	-	-	-	-	-	-
126	Ph Str 8	3C	5	-	-	-	-	-	-	-	-
127	Ph Str 8	3C	5	-	-	-	-	-	-	-	-
128	Ph Str 8	3C	5	-	-	-	-	-	-	-	-
129	Ph Str 8	3C	5	-	-	-	-	-	-	-	-
130	Ph Str 8	3C	5	-	-	-	-	-	-	-	-
302	Floor Str 7	3B	6	9.65-8	49.64, 69	53.15	69.4	-	-	-	-
303	Quarry fill	3B	-	9.65	44.21; 46.34; 48.53; 49.59	54.23, 39; 55.52	60.8; 69.3	-	-	70.17, 31; 71.4,17; 74.51	93.330-7
304	Gully Str 7	3B	6	9.71	-	-	-	-	-	70.16	-
305	Quarry	3A	6	9.65	-	54.35; 55.50	60.7	-	-	71.4	93.323-9
310	Gully	3C	6	9.69	-	-	-	R12	-	-	-
311	Gully	3C	6	9.70	48.57; 49.66	54.33	60.3	R10, 13	-	-	93.349
312	Make-up over quarry	3B	-	9.66	-	-	-	-	-	70.20; 71.7; 72.28	93.339
315	Ditch	3A	6	9.67-8	49.60	53.17	-	-	-	-	91.281-8
316	Quarry fill	3A	-	9.66	-	-	62.10	-	-	70.29, 37; 71.7.8	75.3; 92.289-92, 296
317	Quarry	3A	6	9.66	44.24	55.49	-	-	-	-	92.293-5
318	Ph	3B	6	9.67	-	-	-	-	-	-	93.338
319	Quarry fill	3A	-	9.66	-	-	-	-	-	-	-
320	Gully Str 7	3B	6	9.71	-	-	-	-	-	-	-
321	Industrial over quarry	3B	-	-	49.58	53.11; 54.24	62.3	R14	-	71.14; 74.52	75.4; 93.340-8
328	Hearth	3B	6	-	-	-	-	-	-	-	-
333	Floor	3B	6	-	-	-	-	-			-
335	Post hole packing	3B	-	9.67	-	-	-	-	-	-	-
338	Gully	3B	6	-	-	-	-	-	-	-	-
344	Pit	3B	6	-	-	-	-	-	-	-	-
347	Ph	3B	6	-	-	-	-	-	-	-	-
351	Fence	3B	4A	-	-	-	-	-	-	-	-
353	Track	3A	4A	-	-	-	-	-	-	-	-
354	Ditch butt	3C	6	9.65	-	-	-	-	-	-	-
420	Gully	3C	6	9.77	-	-	-	-	-	-	-
421	Ditch	3B	6	9.78	-	-	62.8	-	-	-	93.350-1
422	Palisade	3B	6	9.78	-	-	-	-	-	-	-
424	Ditch	2C	6	9.72-4	43.6; 44.14	53.3	62.11; 69.5	-	-	70.43	75.1; 90.226-53
425	Gully	3C	6	9.76	-	-	-	-	67.16	-	-
428	Pit	3B	4A	-	-	-	-	-	-	-	-
429	Gully	3B	4A	-	-	-	-	-	-	-	-
431	Pit	2C	6	9.74	-	-	-	-	-	-	-
432	Ditch recut	3C	4B	9.75	-	-	-	-	-	71.16	93.352-3
433	Ditch	3B	4A	9.75	-	-	-	-	-	-	-
435	Oven	2C	6	9.73	-	-	-	-	-	-	-
501	Floor	3B	6	-	-	-	-	-	-	-	-
502	Hearth	3B	6	-	-	-	-	-	-	-	-
503	Hearth	3B	6	-	-	-	-	-	-	-	-

Context No.	*Description*	*Period*	*Plan*	*Section*	*Copper alloy*	*Iron*	*Other*	*Coin*	*Flint*	*Samian*	*Other Pottery*
504	Hearth	3B	6	9.83	-	-	-	-	-	-	-
505	Hearth	3B	6	-	-	-	-	-	-	-	-
506	Hearth	3B	6	-	-	-	69.7	-	-	-	-
507	Ditch	3B	6	9.80	-	-	-	-	-	-	-
508	Hearth	3B	6	9.80	-	-	-	-	-	-	-
509	Ditch	5	6	9.82	-	-	-	-	-	-	-
511	Pit	5	6	-	-	-	-	-	-	-	-
512	Ditch	3A	6	9.79	-	-	-	-	-	-	92.297
513	Pit	5	6	-	-	-	-	-	-	-	-
514	Ditch	3A	6	9.81	44.24	54.38	60.6	-	-	-	92.298-300
515	Ditch	3A	6	9.81	-	-	62.9	-	-	-	92.301-2
516	Ditch	3A	6	9.81	-	-	-	-	-	-	92.303
Area J											
2	Ditch	3B	21	19.19-21	(45).31	-	55.47, 51	C3	-	-	84.157; 86.191-6
3	Ditch	3A	18	19.19-24	44.16; 45.25, 26; 46.38, 40; 50.78	53.4,9, 14; 54.27-9; 55.53	-	C4	65.G; 66.2; 67.21; 68.38	-	76.A1; 85.164-84
4	Gravel pit	3B	21	-	-	54.37	-	-	-	-	-
7	Gravel pit	3B	21	-	-	-	-	-	-	-	-
11	Gully	3B	21	22.43	-	-	-	-	66.5; 68.34	-	-
12	Gravel pit	3B	21	-	-	-	-	-	-	-	-
14	Quarry scoop	3B	21	19.19	-	-	-	-	-	-	-
15	Gully	3B	21	19.21;22.42	-	-	-	-	64.B,D; 67.25, 29,33	-	-
16	Pit	1	12	-	-	-	-	-	-	-	-
17	Gravel pit	3B	21	22.46	-	-	-	-	-	-	-
18	Gravel pit fill	3B	-	22.47	-	-	-	-	-	-	-
19	Gravel pit fill	3B	-	22.47	-	-	-	-	-	-	-
20	Gravel pit fill	3B	-	22.47	-	54.43	-	-	-	-	-
27	Pit	1	12	22.1	-	-	-	-	64.C; 67.15	-	-
28	Pit	1	12	-	-	-	-	-	-	-	-
31	Hollow	1	12	19.22	-	-	-	-	-	-	-
33	Ditch	3C/4	-	19.22;23. 29-32	-	-	-	-	65.J	-	83.113, 118,125, 131; 86.198
37	Gully	2A	13	-	-	-	-	-	67.22	-	-
40	Ditch	3B	-	23.31-2	-	-	-	-	-	-	83.114, 116,120, 127-30, 134; 86.197
41	Post trench	3B	21	-	-	-	-	-	-	-	-
45	Gully	2A	13	22.13	-	-	-	-	-	-	81.79
48	Ph	3B	21	-	-	-	-	-	-	-	-
49	Pit	1	-	19.21	-	-	-	-	66.1	-	-
50	Ditch	3B	-	23.27-8	49.61	-	-	-	-	-	83.115,119 124,132, 136
52	Gravel pit	3B	21	23.30-2	-	54.36	-	-	-	-	83.133; 84.155
58	Ditch	2B/C	15, 17	19.22;23. 27 28	-	-	-	-	66.8	-	-
60	Pit	1	12	-	-	-	-	-	-	-	-
61	Quarry scoop	3B	21	-	-	-	-	-	-	-	-
62	Pit	1	12	-	-	-	-	-	66.3	-	-
64	Well	2B/C	15, 17	23.31-2	-	54.32	-	-	67.28	-	82;83.105-12
65	Gully	2A	13	19.22	-	-	-	-	-	-	-
77	Ditch	3B	21, 24	19.22;23. 29-30	-	54.41	-	-	-	-	83.117, 122-3,126, 135
84	Ditch	2C	16, 17	22.17	-	-	63.3	-	-	-	81.95-7
86	Gully	2A	13, 14	22.5-8	-	-	-	-	-	-	81.70-3

Context No.	*Description*	*Period*	*Plan*	*Section*	*Copper alloy*	*Iron*	*Other*	*Coin*	*Flint*	*Samian*	*Other Pottery*
90	Gully	2A	13	23.29, 31-2	-	-	-	-	-	-	-
95	Gully	2A	13	23.32	-	-	-	-	-	-	-
97	Ph	3C	24	-	-	-	-	-	-	-	-
102	Gully	3C	24	22.17	-	-	-	C2	67.30	-	84.142
112	Ditch	2C	16, 17	22.8,17	-	-	-	-	-	-	81.98-101
128	Ditch fill	3C	-	23.30-2	-	-	-	-	-	-	83.121
135	Ditch recut	3B	-	23.31-2	-	-	-	-	-	-	-
136	Ditch	2B/C	15, 17	23.30-2		53.1 2				-	-
144	Pit	1	12	-	-	-	-	-	-	-	-
155	Pit	1	12	-	-	-	-	-	-	-	-
156	Pit	3B	21	-	-	-	-	-	-	-	-
157	Ph	3B	21	-	-	-	-	-	-	-	-
159	Ph	3B	21	-	-	-	-	-	-	-	-
160	Ph	3B/C	21	-	-	-	-	-	-	-	-
162	Pit	1	12	-	-	-	-	-	66.4	-	78.3
163	Pit	1	12	19.22	-	-	-	-	-	-	-
164	Pit	1	12	-	-	-	-	-	-	-	-
165	Pit	1	12	-	-	-	-	-	-	-	-
166	Pit	1	12	-	-	-	-	-	-	-	-
167	Pit/Ph	3B	21	-	-	-	-	-	-	-	-
168	Ph	3B	21	-	-	-	-	-	-	-	-
169	Pit	1	12	-	-	-	-	-	-	-	-
170	Ph	3B	21	-	-	-	-	-	-	-	-
171	Ph	3B	21	-	-	-	-	-	-	-	-
172	Ditch pebbly fill	3A	-	19.19-21	-	-	-	-	-	-	-
173	Ditch slot fill	3A	-	19.19-21, 23-4	-	-	-	-	-	-	-
174	Ph	3C	24	-	-	-	-	-	-	-	-
175	Ph	3C	24	-	-	-	-	-	-	-	-
176	Hearth pit	3B/C	21	-	-	-	-	-	-	-	-
177	Ph, Str 3	2B	15, 16	-	-	-	-	-	-	-	-
178	Ph, Str 3	2B	15, 16	-	-	-	-	-	-	-	-
179	Pit, Str 3	2B	16	-	-	-	-	-	-	-	-
302	Ditch	3C	24	19.23;23.34 -6	-	-	62.6	R22	66.6,7; 67.31	-	78.9;84.140; 86.199-203
304	Pit, Str 3	2B	16	22.16	-	-	-	-	-	-	81.102-3
306	Pit	3C	34	-	-	-	-	-	-	-	-
307	Ph, Str 3	2B	16	-	-	-	-	-	-	-	-
308	Slot, Str 3	2B	15, 16	-	-	-	-	-	-	-	81.94
309	Pit	3C	34	-	-	-	-	-	-	-	-
310	Gully, Str 3	2B	15, 16	22.15	-	-	-	-	-	-	81.86
313	Pit	3C	34	-	-	-	-	-	-	-	-
314	Pit	3C	34	-	-	-	-	-	-	-	-
317	Ditch recut	3B	-	19.23;23.34	-	-	-	-	-	-	-
319	Palisade	3B	-	23.34	-	-	-	-	-	-	-
323	Gully upper fill	3C	-	22.44	43.10	-	-	-	-	-	-
324	Gully	3C	24	22.44	-	-	63.1	-	-	-	86.220-1
325	Gully, Str 3	2B	15	-	-	-	-	-	-	-	-
326	Pit, Str 3	2B	16	-	-	-	62.7	-	-	-	-
327	Pit, Str 3	2B	16								
328	Gully	2A	13, 14	22.14	-	-	-	-	66.9	-	78.6,10; 81.74-7
329	Ditch	3B	21	19.23;22.7; 23.33-7	-	54.45	-	-	-	71.13	84.143-5,163; 86.204-8
332	Gully, Str 3	2B	15, 16	22.7,18	-	-	-	-	-	-	81.87-93
338	Pit, Str 1	2A	14	22.4	-	-	-	-	-	-	-
339	Pit, Str 1	2A	13, 14	23.36	-	-	-	-	-	-	81.83
340	Pit, Str 1	2A	13, 14	-	-	-	-	-	-	-	81.84-5
341	Quarry for kilns	3A	18, 20	19.25-6	-	-	-	-	68.39	-	-

Context No.	*Description*	*Period*	*Plan*	*Section*	*Copper alloy*	*Iron*	*Other*	*Coin*	*Flint*	*Samian*	*Other Pottery*
342	Kiln II chamber fill	3A	-	19.25	-	-	-	-	-	-	85.190
343	Kiln II stokepit fill	3A	20	19.25	-	-	-	-	-	-	-
344	Kiln III floor	3A	20	19.26	-	-	-	-	-	-	-
345	Kiln III stokepit	3A	20	19.26	-	-	-	-	-	-	85.185-7, 189
346	Gully	3C	24	22.38-9,41	-	54.30	-	-	-	-	-
348	Hollow with Phs, Str 1	2A	13, 14	22.11	-	-	-	-	-	-	78.8;81.82
349	Communal stokepit	3A	20	19.25-6	-	-	-	-	-	-	-
350	Ditch	2A/B	14, 15	19.24;22.2 -5	43.5	-	-	-	64.E; 67.26, 32	-	78.5;79.11-37; 80.38-69
352	Gully	2A	13, 14	22.2-3	-	-	-	-	-	-	81.78
353	Soot(stokepit)	3A	-	19.24	-	-	-	-	-	-	-
354	Ditch fill	3A	-	19.25-6	-	-	-	-	-	-	-
355	Gully	2A	13, 14	22.5-6	-	-	-	-	-	-	-
357	Phs, Str 1	2A	13, 14	22.11-2	-	-	-	-	-	-	-
358	Ph, Str 1	2A	14	22.12	-	-	-	-	-	-	81.80-1
360	Ditch	3B	21	22.39-40	-	-	-	-	-	-	84.154
361	Gully	2B	15	-	-	-	-	-	-	-	-
362	Ph	3A	20	-	-	-	-	-	-	-	-
363	Ph	3A	20	-	-	-	-	-	-	-	-
364	Kiln I floor	3A	20	-	-	-	-	-	-	-	-
365	Kiln I stokepit	3A	20	-	-	-	-	-	-	-	85.188
366	Ph	3C	24	-	-	-	-	-	-	-	-
367	Ph	3C	24	-	-	-	-	-	-	-	86.209
368	Pit	3B/C	21	-	-	-	-	-	-	-	-
370	Pit	3C	24	22.45	-	-	63.2	-	-	-	-
372	Pit/Ph	3B/C	21	-	-	-	-	-	-	-	-
373	Pit	3B	21	-	-	-	-	-	-	-	-
376	Ph, Str 2	2A	14	-	-	-	-	-	-	-	-
377	Phs, Str 2	2A	13, 14	-	-	-	-	-	-	-	-
379	Ph, Str 3	2B	15, 16	-	-	-	-	-	-	-	-
380	Ph, Str 2	2A	13, 14	-	-	-	-	-	-	-	-
381	Ph, Str 2	2A	13, 14	22.10	-	-	-	-	-	-	-
382	Ph, Str 2	2A	13, 14	22.9	-	-	-	-	-	-	-
383	Hearth	3B/C	21	-	-	-	-	-	-	-	-
384	Slot, Str 1	2A	13, 14	-	-	-	-	-	-	-	-
386	Ditch	2C	17	-	-	-	-	-	-	-	-
387	Phs, Str 2	2A	13, 14	-	-	-	-	-	-	-	-

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PLATES

I Kelvedon from the SE, showing the defensive ditch as a cropmark. Area J is the field on the extreme left, area B the new housing estate top right.

Photo G B Jones

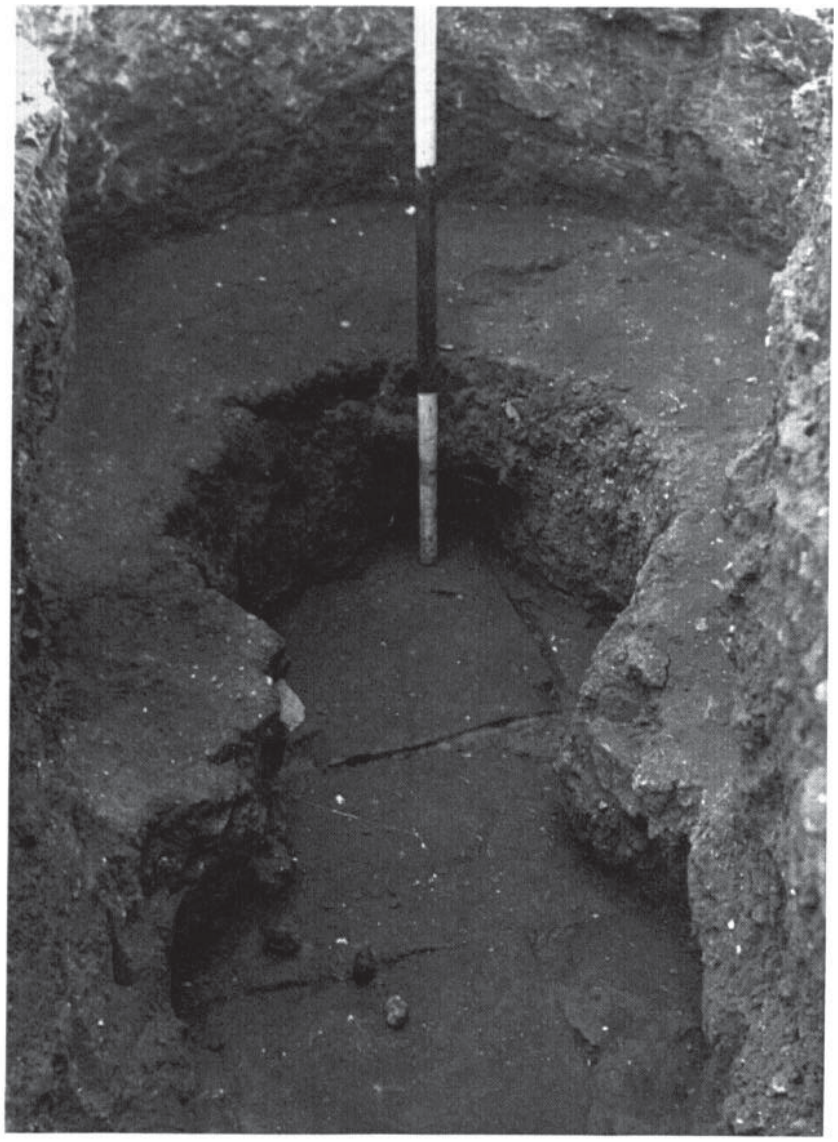
II Kelvedon, area J; military-type ditch, F3, with a recut, F2 looking north.

Photo W J Rodwell

III Kelvedon, area J; Kiln II looking NW showing the central pedestal socket, steam plough scratches in the background.

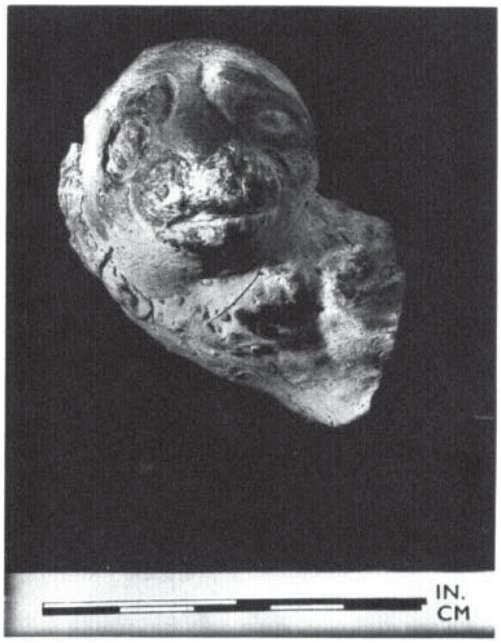
Photo W J Rodwell

IV Kelvedon, area J; cremation burials 2 and 15.
Photo W J Rodwell



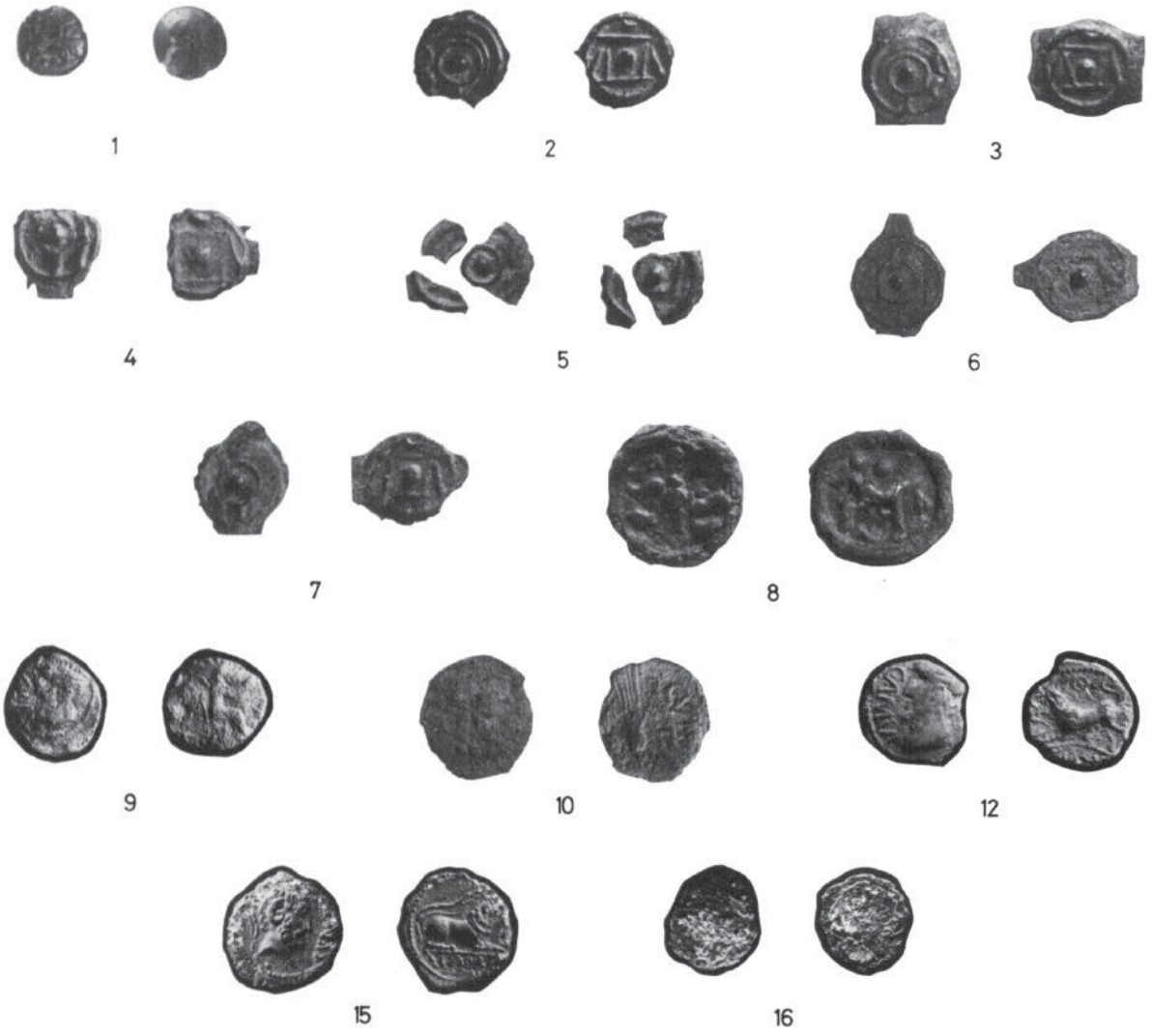
V Kelvedon, area B; kiln or furnace (B13).
Photo H J D Bennett

VI Kelvedon, bronze lamp.
Photo G Ager



VII Kelvedon, pipeclay lion's head.
Photo W J Rodwell

VIII Kelvedon, the Celtic coins; scale 1:1.
Photos Institute of Archaeology, Oxford



IX Kelvedon, late Iron Age stamped sherd.
Photo G Ager