

EXCAVATIONS AT HIGH CROSS 1955

by

ERNEST GREENFIELD and GRAHAM WEBSTER

INTRODUCTION

The excavations at High Cross were made necessary by the road widening and diversion scheme across this known Roman site. The work was organised as an emergency by the Ministry of Works (as it was then known), Inspectorate of Ancient Monuments. It was carried out in two stages, the first at Easter 1955, when arrangements were made at short notice under the impression that road works were imminent. The initial intention was to examine Area 1, but on arrival at the site it was discovered that the landowner was still in possession and unwilling to allow any work to take place. As the contractor had already assembled his gang and equipment and it was believed that the road works were due to start within a matter of weeks, the director (Graham Webster) decided *faute de mieux* to attempt a running line of trenches along the headland on the south side of the road with the hope at least of finding evidence of buildings and/or civil or military defences which could be developed at a later stage. The whole of the first stage of excavation was thus limited to a stretch of ground not more than ten to twelve feet wide, for which permission was obtained from a different owner. Conditions were not improved by wretched weather and at one stage the trenches were all filled with water to within six inches of ground level. There were no discoveries of any real significance and the scatter of occupation with its scanty structural elements could not be fully interpreted in the method which it was necessary to adopt. It clearly demonstrated the futility of trenching a site of this nature, but it appeared at the time to be this or nothing. Had it been appreciated that the road works were not to start for another nine months the project would have been deferred until Area 1 became available. When in due course this ground was purchased, as Graham Webster was at this stage busy elsewhere, Ernest Greenfield was engaged by the Ministry of Works to complete its excavation, which he did in the autumn of the same year. It is hardly surprising that the report of this work is more meaningful and coherent than that of stage one.

Geology

The site lies on glacial drift consisting of brown clay with intercalated sand and gravel, underlain by Keuper Marl, and occupying the high ground of the site and area to the north-west. Deposits of Boulder Clay abut the site to the south and approach to within a quarter to half a mile of it from the north-east and east.¹

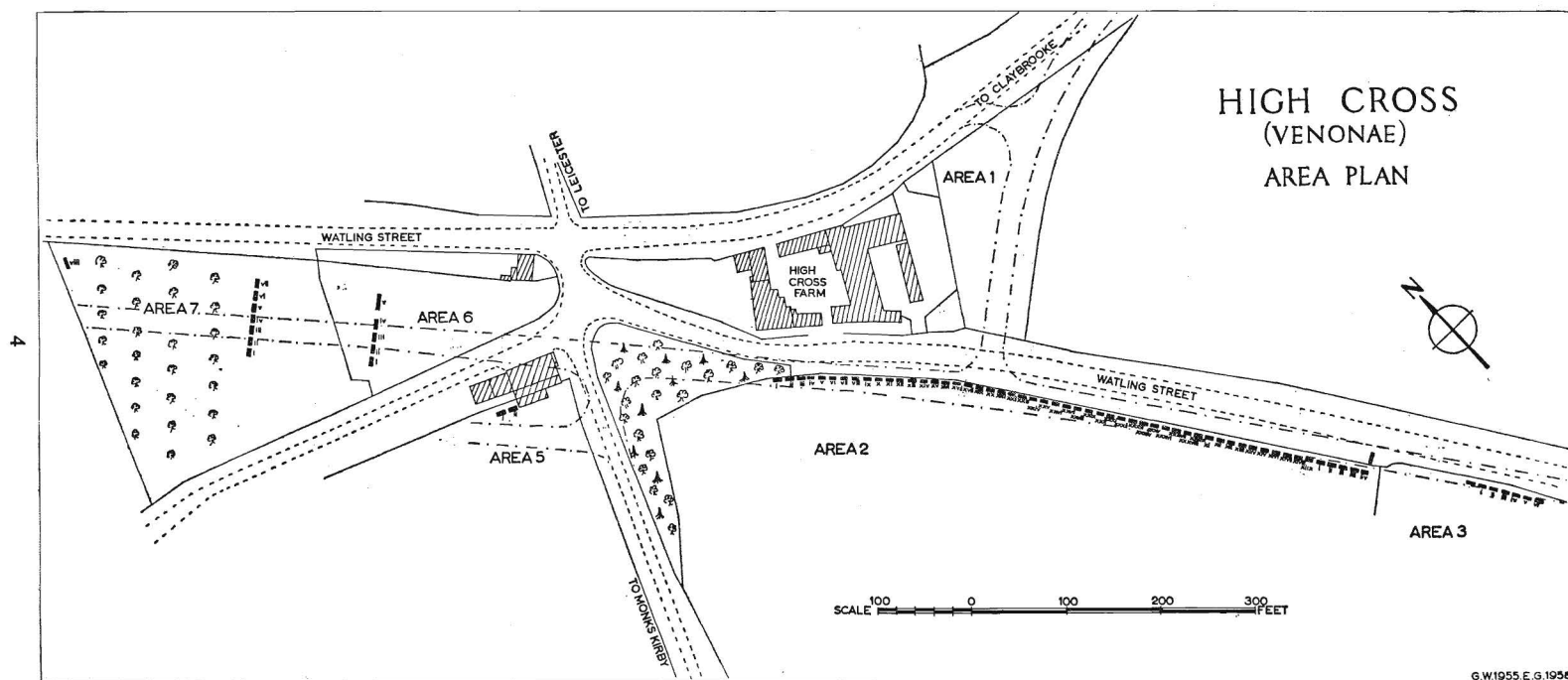


Fig. 1.

AREA I (Area Plan, Fig. 1)

by Ernest Greenfield

The excavations revealed evidence of continuous Romano-British occupation of the late-first to the fourth centuries A.D. Pebbled levels of the late-first and second centuries were found to front and underlie the junction of the Watling Street and the Fosse Way. The Fosse Way showed in section (Fig. 3) one main pebbled surface. Roadside ditches and gullies, together with post-holes, hearths and pits indicated fairly considerable domestic settlement of the area, but no evidence was found of stone structures or of a military or large-scale industrial use of the site throughout its occupation.

The area examined was scheduled to be incorporated in the scheme of straightening the Watling Street (A 5) by the Ministry of Transport and the Leicestershire County Council. It was pasture land, the north-western tip of the field on the south-east side of the stack-yard of High Cross Farm. A link road had been planned to cross the area.

Excavation (Plan, Fig. 2)

The area was examined by a grid of seventy 16-ft. squares with 3-ft. baulks on a N.E.-S.W. alignment. Fifty-seven of these were tested by trenches and extensions were made north-westwards from the grid squares 3, 5, 8 and 10 to cut the suspected line of the Fosse Way. These extensions became cuttings A, B, C and D. Cuttings A, B, and D were terminated on the north-west by the stack-yard fence and shrubberies and only cuttings C and D revealed complete transverse sections of the Fosse Way (Section A-B, Fig. 3).

Stratification (Sections A-B and C-D, Fig. 3)

The site was covered by deep humus between 9 and 17 in. in thickness and consisted of grey-brown, soft sandy soil containing fragments of stone, angular flint-gravel, pebbles, and Roman and modern artifacts. Victorian and Georgian domestic rubbish was met with in some quantity in the vicinity of the stack-yard fence, and pits containing Victorian rubbish were in cuttings C and D. A modern land-drain was encountered in cuttings A-B.

A general level of scattered rubble was found immediately below the humus in every square tested but was absent on the surface of the Fosse Way (see Section A-B). This was more concentrated against and over the road fringes,² but thinned out towards the south-west away from the road³ where it varied in thickness from 4 to 17 in. In consistency it varied from mixed rock and pebble containing Roman artifacts of many periods, to a thin scatter of pebbles and soil, which varied from ginger-brown sandy soil to gritty grey-brown. Concentrations of rubble were found in the tops of some of the features⁴ and indicated main areas of occupation, especially in⁵ the area surrounding Pit F.13, grid squares 45/53.

Two main levels of hard-surfaced pebbling were recognised:

1. The lowest level (Section A-B, Layer 14, and Section C-D, Layer 12) being the primary artificial surface laid direct on the previously unoccupied natural subsoil (where tested). This level extended over the whole of the area examined and was intact except where it had been penetrated by features and where the surface had loosened. It was composed of large and small flint pebbles and sand which had been compacted by "iron-pan". The natural subsoil (where tested) was consistently the same: a grey clayey loam which in some places was stained orange-brown, probably by iron minerals.
2. This level of pebbling formed the basic road surface of the Fosse Way (Section A-B, Layer 8). A similar layer was found overlying the primary pebbled surface in grid squares 13 and 25. (Section C-D, top of Layer 7.)

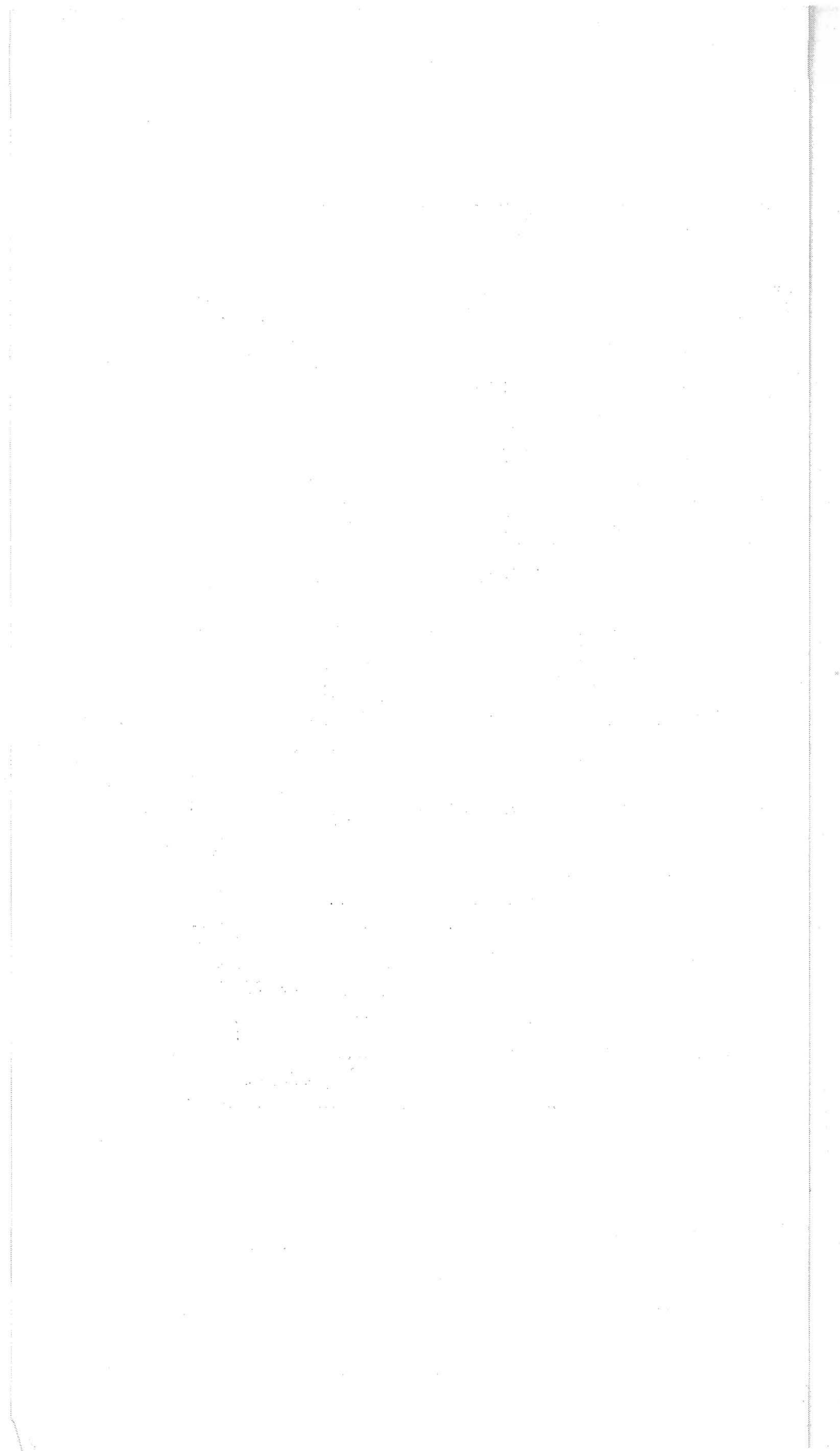
At the extreme south-west end of grid squares 2, 13 and 25 (Section C-D, Layers 3 and 4), and at the north-west end of cutting A, was found a rubble level composed of worn broken rock, pebbles and brown-black soil. In square 2 (Pl. I), this was overlaid by another level of unworn broken rock and soil. These levels represent a make-up of the north-eastern fringe of the Watling Street frontage; they are discussed further, see p. 7.

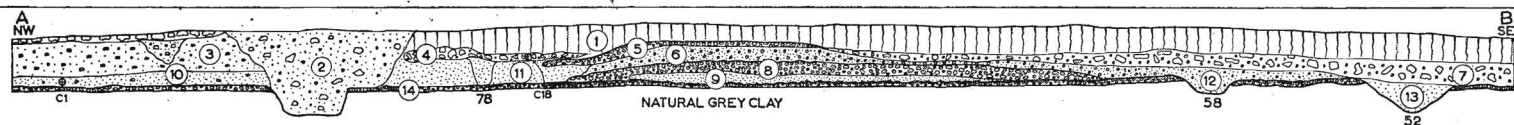
Accumulated silt levels occurred in all features, and were widespread over the whole of the primary pebbled surface (Section C-D, Layer 5). The fillings of features ranged in colour from buff-brown, ginger-brown to black-grey-green sandy soil. General silt levels outside features were from buff-brown, ginger-brown to black-orange in colour, the latter colour no doubt due to iron staining. These levels contained scattered pebbles and rock rubble with light sandy soil. Pottery and other artifacts occurred in many of the levels.

Chronology of Features

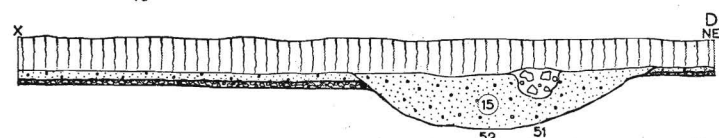
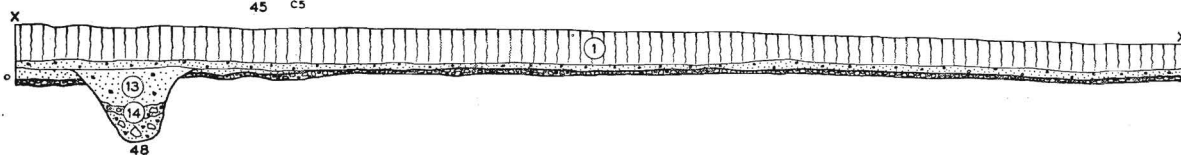
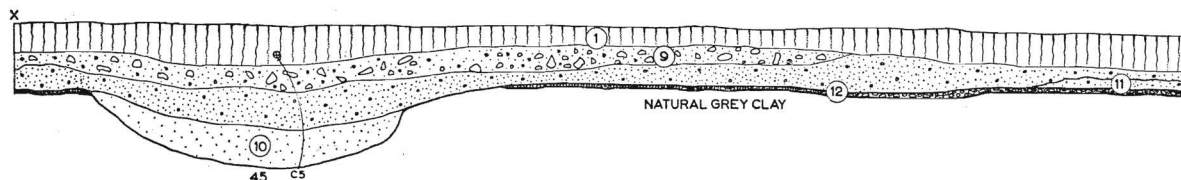
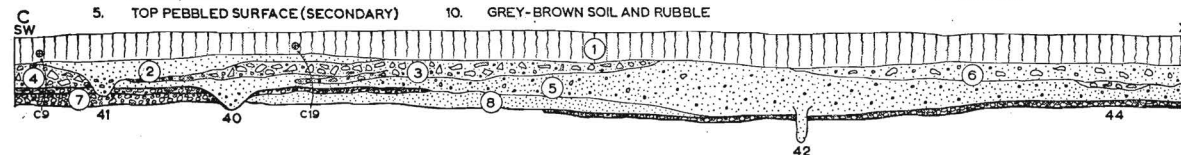
Very little of the dating evidence found on the site should be considered as reliably stratified. On a site of this kind where almost all of the stratification consisted of accumulated silt levels, (with the exception of the primary pebbling, the Watling Street fringe and the Fosse Way make-up), only a wide dating bracket can be accepted. An attempt will be made to correlate the features by the associated dating evidence.

There appears to be overwhelming evidence to suggest that there was no occupation on the site before Flavian times. Features 13 and 70 are those which produced purely Flavian dating evidence from their fillings. Features 10, 11, 12, 18, 20, 52, 58, and 66 are those which can be dated to the late-first to early-second centuries A.D., and features 29, 34-38 to the early-second century A.D. Features 2, 6, 8 and 30 are of uncertain date but can be placed somewhere between the late-first and second centuries. Post-hole 77 can be reliably dated to the third century, and features 31, 45 and 48 are probably fourth century as all contained confused deposits of pottery from the second to the fourth century.





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| 1. TURF AND TOP SOIL | 6. PEBBLE AND SAND MAKEUP | 11. BLACK-ORANGE SANDY SOIL |
| 2. RECENT PIT | 7. RUBBLE AND SOIL | 12. BUFF SANDY, SOME PEBBLE |
| 3. DISTURBED SOIL AND RUBBLE | 8. PRIMARY PEBBLED ROAD SURFACE | 13. BUFF-BROWN SANDY |
| 4. RUBBLE MAKEUP | 9. GREY CLAY ROAD FOUNDATION | 14. PRIMARY PEBBLED SURFACE |
| 5. TOP PEBBLED SURFACE (SECONDARY) | 10. GREY-BROWN SOIL AND RUBBLE | |



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| 1. TURF AND TOP SOIL |
| 2. BROWN SANDY SOIL |
| 3. RUBBLE AND SOIL |
| 4. RUBBLE MAKEUP |
| 5. BLACK-ORANGE SANDY |
| 6. GREY-BROWN SOIL AND RUBBLE |
| 7. PEBBLED SURFACES (PRIMARY and SECONDARY) |
| 8. ORANGE-BROWN SAND |
| 9. LIGHT RUBBLE AND SOIL |
| 10. GREY-BROWN SANDY SILT |
| 11. ORANGE-GREY SAND |
| 12. PEBBLED SURFACE (PRIMARY) |
| 13. GREY-BROWN-BLACK SILT |
| 14. RUBBLE GREY-BROWN SILTING |
| 15. BUFF SANDY SILT, SOME PEBBLES |

HIGH CROSS SECTIONS

SCALE 2 1 0 2 4 6 8 10 FEET

E.G.
1958

DESCRIPTION OF FEATURES⁶*Ditches and Gullies*

The drainage facilities of the site comprised ditches of fairly large size and small gullies of V-shape for roadside and domestic drainage. The roadside ditches and gullies are on two alignments, *i.e.* those associated with the Fosse Way⁷ draining from S.W. to N.E., and those on the fringe of the Watling Street,⁸ draining from N.W. to S.E. These features were planned to convey water away from the road surface.

The domestic drainage ditches and gullies, being undoubtedly of successive phases of the occupation and not of one particular period, follow no methodical plan for the draining of the area, but seem to be concentrated in those areas⁹ that suggest habitation. The features consist mainly of small, meandering gullies emptying into small or large sumps.

Pits and Sumps

In view of the limited cutting of the grid, resulting in the shape of some of the larger features remaining unproved, it is not possible to classify them as either pits or sumps with any certainty. No feature of this type revealed evidence of deliberate filling; the indications are that (with two exceptions) they had silted up by natural means. One feature, No. 2 (square 68) had received deposits of white ash, and the khaki-green colour of the filling of No. 24 (square 45), suggested use as a latrine. Large features Nos. 13 (Pl. II, squares 45/53) and 45 (squares 15, 16, 27 and 28) are the largest examples of pits or sumps found on the site. No. 13 was completely cleared of its filling as finds were fairly numerous.

Post-holes

Twenty-five features have been classified as post-holes but in view of the partial cutting of the site by the method used, it is difficult to separate groups of holes to suggest definite structures. It may be suggested that the four holes¹⁰ in squares 45/53 indicate the possibility of a rectangular-shaped structure on a N.W.-S.E. alignment, and three holes¹¹ contained within the limits of a beam-slot, in square 19 (Pl. IIIa), suggest part of one side of a structure on a S.W.-N.E. long axis. A line of three holes¹² in squares 2, 3 and 14 suggest, when linked with a line of four holes¹³ at right angles, in squares 14, 26 and 27, a structure of considerable size. Isolated post-holes¹⁴ may in fact be single examples but it should be remembered that due to the limited cutting of trenches many that would no doubt link with these were not found. Post-hole 77 (Pl. IIIb) had a coin (C.8) of Claudius II on its base, sealed by the filling.

Hearths

Four hearths were found: a single example, No. 72 (square 5) over the roadside ditch filling, and a group of three, Nos. 15, 27 and 57 (in squares 45/53) around the large pit or sump. These call for little comment as they appeared to be domestic cooking fires or bonfire sites.

SECTIONS

Cutting C (Section A-B, Fig. 3)

The cutting shows a cross section of the Fosse Way in relation to the accumulated levels of silt and make-up overlying and abutting against it, and later disturbances that have penetrated the Roman stratification.

Layer 14 represents the primary pebbled surface of the site and it was on this level that the clay foundation¹⁵ (Layer 9) of the Fosse Way was laid. The road surface (Layer 8) was laid over this and is shown on the section as a thick level of pebbles and sand with a hard, cambered surface, 22 ft. in width and 7 in. in depth at its deepest part. Above this and completely covering the road surface was a level of loose pebbles and sand¹⁶ (Layer 6), 25 ft. in width and 9 in. in depth. A secondary "road" surface¹⁷ (Layer 5), overlaid this in part and consisted of pebbles and sand with a hard cambered surface, 12 ft. in width and 6 in. thick at the north-west end. It will be seen from the section that this secondary surface is not on the same alignment as the road and as this level was not found in cuttings A, B and D, it can be assumed that this probably represents a patch at this point and not a secondary re-surfacing of the road. Layer 4, on the north-west side of the road and partly overlying the north-west end of Layer 5, was a level of heavy rubble consisting of worn angular rock lumps and stone and brown-black soil. The level had been disturbed at its north-west end by a recently-dug pit. The accumulated soil or silt levels (Layers 10 and 11) are more evident on the north-west side of the road than on the south-east. Layer 10 produced a coin (C.1) and both levels contained sherds.

Dating of the Section

Dating evidence was sparse and no Roman artifact was found in the road make-up levels (Layers 8 and 9) or in the superimposed levels above them (Layers 5 and 6). The coin (C.1) of Vespasian was found one inch above the primary pebbling together with a samian sherd (F.27) of Flavian date, and coarse pottery sherds that cannot be dated more closely than late-first to early-second centuries. Layer 4 contained mixed sherds of the first to fourth centuries and a coin (C.18) of *Urbs Roma*. Sherds from Layer 3, the disturbed filling of the pit, and Layer 7 are not considered. The filling of roadside ditch (F.58) contained a samian sherd (F.18/31) of early second-century date and fragments of coarse pottery that cannot be more closely dated than to the Flavian-Trajanic period. Roadside ditch (F.52) contained evidence of the late-first to early-second centuries.

Section C-D (Fig. 3)

This section shows the relation between the fringe of the Watling Street and the accumulated occupational silt and rubble levels for a distance of 192 ft. on a N.E.-S.W. alignment. The primary pebbled surface (Layer 12 and base of Layer 7) spreads throughout the section except where it is penetrated by features, and where it was non-existent between features Nos. 40 and 42. Its general depth was about 4½ in., except at the south-west end

PLATE I



Squares 2 and 13. Rock make-up overlying secondary pebbling

PLATE II



Pit F 13—sections

PLATE III



(a) Beam-slot with post-holes looking NE.



(b) Third-century A.D. post-hole—cutting D, F 77

where it was 7 in. The pebbled surface (the top of Layer 7) which presumably equates with Layer 8 in Section A-B, had been applied in direct contact with the primary pebbled surface at this point and extended north-east partly overlying a silt level (Layer 8). A make-up level of angular rock (Layer 4) was found overlying the secondary pebbled surface, in direct contact with it on the south-west side of gully F.41. A level of rubble and soil (Layer 3) overlies silt level (Layer 5) and probably equates with Layers 4 and 7 in Section A-B.

Dating of the Section

No dating evidence was found in or beneath the primary pebbled surface (Layer 12, base of Layer 7), but the secondary pebbled surface, top of Layer 7 (south-west side of F.40), contained a bronze brooch (Fig. 12, No. 2, p. 33) dated to the second half of the second century, and a samian sherd (F.37) of Antonine date embedded in its surface. Layer 5 contained sherds dated to the first half of the second century. Layer 3 (the rubble spread overlying Layer 5) contained mixed sherds dating from the late-first to fourth centuries. Two coins, (C.19) a copy of Constans and (C.9) a coin of Claudius II were found in Layer 1, 8 in. and 10 in. from the turf.

Pit or sump (F.45) contained in the top half of its filling (Layer 5 in section) coarse pottery dating from the Antonine period to the early part of the third century, and a samian sherd (F.33; Fig. 5, No. 25, p. 16), dated to A.D. 140-170 and seven other sherds, all of the Hadrianic-Antonine period. Layer 3 contained two mortarium sherds of the fourth century (Fig. 11, Nos. 19 and 20, p. 29), and sherds of coarse pottery of mixed periods. A coin (C.5) of Domitian was found 1 ft. 2 in. from the turf in Layer 1.

The top half of the filling of F.48 contained part of a mortarium (Fig. 11, No. 18, p. 29) of fourth-century date and coarse pottery of the late-second to the third century A.D.

The roadside ditch (F.52) contained coarse pottery sherds that are assignable to the late-first to early-second centuries.

THE EXCAVATION OF AREAS 2 TO 7¹⁸

by Graham Webster

Area 2

As indicated in the Introduction, conditions did not allow any more than a single line of trenches three feet wide along the headland, south of Watling Street. It was hoped that at least this would reveal the presence of civil or possibly early military defences but no trace of either was found. The trenches exposed remains of buildings throughout the whole length of 620 ft. The structures were of timber with clay and gravel floors: no stone walls, foundations or floors were encountered. It is possible, however, that the space investigated may have been for the most part the fore-court of buildings fronting the main Roman road. The pottery indicates that the occupation of this area was early Flavian in origin and extended to the end of the fourth century. The quantity of fourth-century pottery in the humus clearly indicated that the latest occupation levels on the site had been ploughed away.

The Fosse Way was encountered (in trenches xx and xxi) where it had been conjectured by previous investigations¹⁹ and was later more fully examined by Mr. Greenfield. In Area 2, only two road sequences had survived; the upper one consisted of a 9-in. packing of large, rounded stones, forming a width of 22 ft.: the road surface had been ploughed away. The lower road was a compact, gravel surface about 12 ft. wide.

Area 3

Traces of occupation spread to the extreme south of the area investigated but appeared to be thinning out. In this area the road-side ditch of the Roman road was found, 5 ft. 6 in. wide and 2 ft. deep, and pottery recovered from the lower silt is Flavian in date.

Area 5

Two trenches only were excavated, and were found to be negative.

Areas 6 and 7

No trace of any structural elements were found here and very little pottery; one sherd (Fig. 9, No. 55) is part of an early girth- or butt-beaker.

THE COINS

From Area 1, by Mr. George C. Boon

1. Vespasian (A.D. 69-79). *Obv.* [IMP] CAES VESPASIAN AVG COS III head laur. R. globe? *Rev.* (S C) Eagle on globe. *As.*, *R.I.C.*,²⁰ 497, A.D. 71. Much worn.
2. Domitian (A.D. 81-96). *Obv.* CAESAR AVG FL DOMITIANVS retr. Head laur. R. *Rev.* COS (V) Wolf and Twins. *Denarius*, *R.I.C.*, 241, A.D. 77-78 (under Vesp.). Worn.
3. *Obv.* IMP CAES DOMIT AVG GERM COS XII CENS PER P P Head laur. R. *Rev.* (IOVI) VICTORI S C, J. std. L. hdg. Victory and spear. *Sestertius*, *R.I.C.*, 313, A.D. 86. Very much worn.
4. *Obv.* [IMP CAES] DOMIT AVG GERM COS XVII CENS [PER P P] Head rad. R. *Rev.* FORTVNAE (AVGVSTI) S C, F. stg. L., hdg. rudder and cornucopiae. *Dupondius*, *R.I.C.*, 417, A.D. 95-96. Worn.
5. *Obv.* IMP CAES DOMIT AVG GERM COS XIII CENS PER P P. Head laur. R. *Rev.* (VIRTVTI AVGVSTI S C), V. stg. R. hdg. spear and parazonium. *As.*, *R.I.C.*, 356.b (probably), A.D. 87. Much worn, defaced.
6. Nerva (A.D. 96-98). *Obv.* IMP NERVA CAES AVG P M TR P COS III P P. Head rad. R. *Rev.* FORTVNA AVGVST S C, F. stg. L. as No. 4 *Dupondius*, *R.I.C.*, 99, A.D. 97. Worn and pitted.
7. Hadrian (A.D. 117-138). *Obv.* [HA]DRIANVS AVGVSTVS. Head laur. R. *Rev.* [] AVG S C Figure stg. R. etc. *As.*, A.D. 125 + +. Worn and pitted.
8. Claudius II (A.D. 268-270). *Obv.* IMP C CLAVDIVS AVG. Bust rad. dr. R. *Rev.* GENIVS EXERCI, G. stg. L. hdg. patera and cornucopiae. Mint: \perp Rome. *R.I.C.*, 48. *Antoninianus*, worn.

9. *Obv.* IMP C(LA)VDIVS AVG) Head rad. R. *Rev.* Uncertain (not struck up). *Antoninianus*, small; unorthodox? Worn.
10. Radiate, possibly orthodox; defaced.
11. Constantine I (A.D. 306-337). *Obv.* CONSTANTINVS P F AVG. Bust laur. cuir. R. *Rev.* SOLI INVICTO COMITI. Sol rad. L., hdg. whip and globe. Mint: $\frac{T|F}{PTR}$ Trier. J. Maurice. *Numismatique Constantinienne*, IV, 4, II. (A.D. 313-317). 23 mm. Worn.
12. *Obv.* VRBS ROMA Bust helm. dr. L. *Rev.* Wolf and Twins; two stars above. Mint: $\frac{|}{TRS}$ Trier. Maurice. IX 2. (A.D. 330-333). 18 mm., slightly worn.
- 13-14. *Gloria Exercitus* (one standard) types, 13 probably of Constantius II. Dms. illeg. Defaced.
15. Valentinian I (A.D. 364-375). *Obv.* D N VALENTINI-ANVS P F AVG Bust diad. dr. cuir. R. *Rev.* GLORIA ROMANORVM Emp. R. hdg. Labarum and R. hand resting on head of suppliant. Mint: Illeg. Worn and defaced.
16. *Rev.* SECVRITAS REIPVBLICAE S. L. hdg. palm and wreath. Mint: $\frac{■|■}{CO[}$ Arles. Worn, pitted.
17. Valens (A.D. 364-378). *Obv.* D N VALENS P F AVG. Bust diad. dr. cuir. R. *Rev.* As preceding. Mint: $\frac{OF|I}{LVGA[}$ Lyons. *R.I.C.* 12? (A.D. 364-367). Worn.

Fourth-century copies

18. *Urbs Roma* type. 14 mm. Worn.
19. *Victoriae Dd Auggq Nn* type. 17 mm. Unorthodox: if not extremely poor. Mint: $\frac{D}{TR[}$. Constans. Worn.
20. *Fel Temp Reparatio* type (horseman and legionary). 12 mm.
21. ditto. 10 mm.

From other areas of the site, by Dr. J. P. C. Kent

22. Gratian (A.D. 367-383). *Rev.* GLORIA NOVI SAECVLI. Arles Mint. *R.I.C.*, 9, 66, No. 15.
23. Tetricus or Victorinus (A.D. 268-273). *Rev.* P]AX A[VG. Pax. standing L. holding olive branch and sceptre.
24. Tetricus I (A.D. 270-273). Barbarous copy. *Rev.*]SX A[Pax type.
25. Late-third century, barbarous copy of an *Antoninianus*, probably c. A.D. 270
26. Illegible.

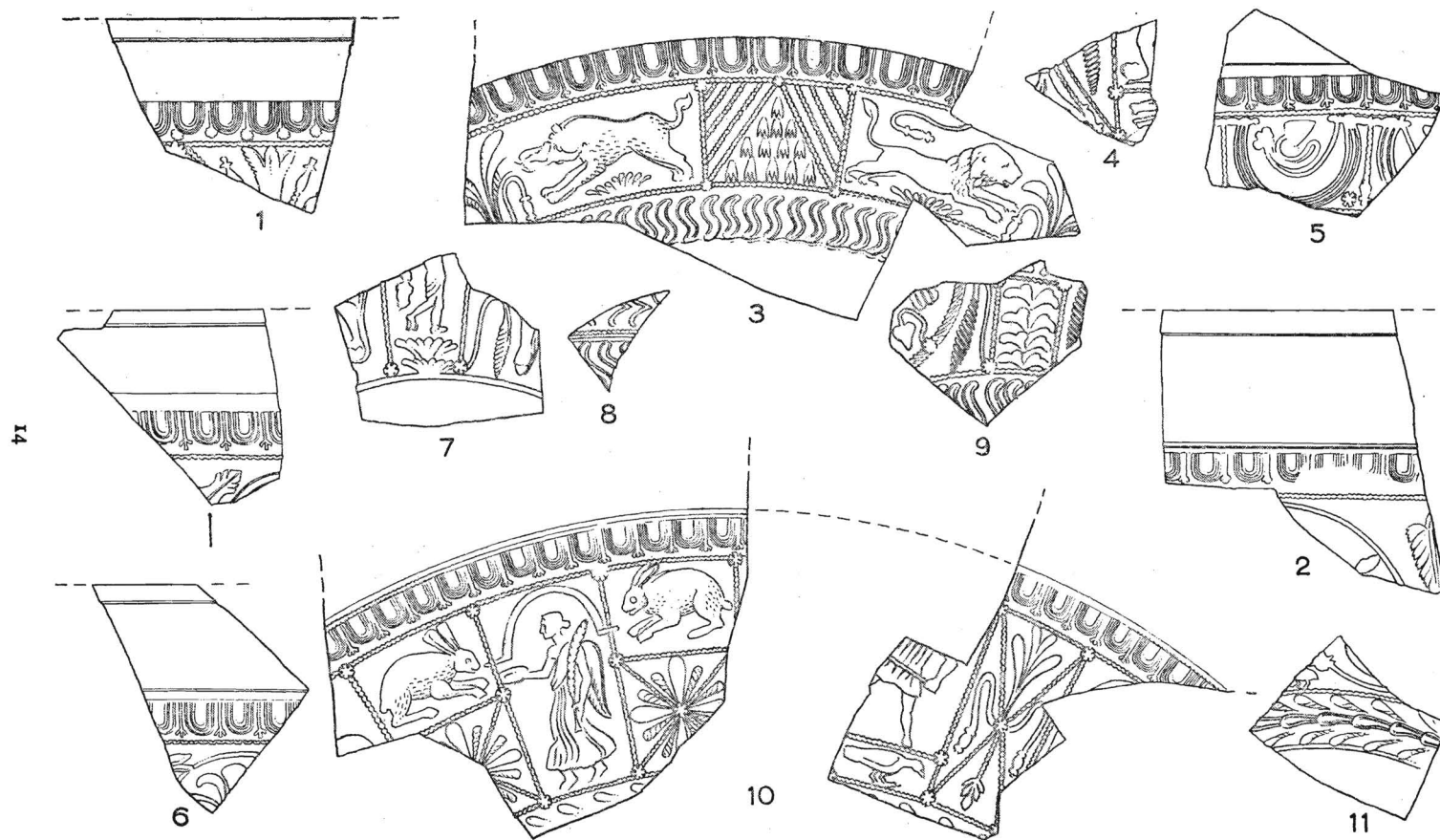


Fig. 4. Decorated samian from Area 1 (4)

SAMIAN

by Mr. B. R. Hartley

Knorr 1912 = R. Knorr, *Die Terra Sigillata Gefäße von Aislingen* (1912).*Knorr 1919* = R. Knorr, *Töpfer und Fabrikanten des Terra Sigillata des ersten Jahrhunderts* (1919).*Knorr 1952* = R. Knorr, *Terra Sigillata Gefäße des ersten Jahrhunderts mit Topfurnamen* (1952).*Fölzer 1913* = E. Fölzer, *Die Bilderschüsseln der ostgallischen Sigillata Manufakturen* (1913).D = J. Déchelette, *Vases ornés de la Gaule romaine* (1904).O = F. Oswald, *Index of Figure-types on Terra Sigillata* (1936/7).*Decorated Samian from Area 1* (Fig. 4, Nos. 1-11, South Gaulish)

1. Form 37, panel decoration. Flavian. (5/5)²¹
2. Two joining pieces. Form 37. Large scroll of the type used by BIRAGILLVS, FLAVIVS GERMANVS and other late South-Gaulish potters, *Knorr 1919*, Textbild 20. c. A.D. 80-100. (F.13/2/45-53)
3. Three joining pieces. Form 37. Panel decoration. Boar (D.837), lion (D.747), grass-tufts. c. A.D. 85-105. (Same as No. 2)
4. Form 37. Vespasian. (3/38)
5. Form 37. Cf. *Knorr 1912*, Taf. xx,1. Rim fragment has rivet hole. c. A.D. 75-90. (2/52)
6. Both Form 37. c. A.D. 85-100. (Same source as No. 3)
7. Form 37. Satyr (D.323), and grass-tufts. c. A.D. 85-105. (34/3/38)
8. Form 37. Zonal decoration with S-shaped gadroons and straight wreath. Flavian. (2-3/26)
9. Form 37. Cf. the work of MEMOR in the Pompeii Hoard, *Jour.Rom.Stud.*, 4 (1914), Pl. xiv. c. A.D. 75-85. (Same source as No. 8)
10. Form 37. All the elements of the decoration are common in the work of BIRAGILLVS, cf. *Knorr 1919*, Taf. 16. Victory (D.481), bestiarius (D.633), bird (D.1031) and hares (O.2056, 2114). c. A.D. 85-105. (F.48, in top of filling, 13/30)
11. Form 37. c. A.D. 85-105. (2-3/3)

(Fig. 5, Nos. 12-32: 19 and 24 East Gaulish, others Central Gaulish)

12. Form 37. The ram's horn wreath and sharp wavy line point to the work of an early Martres de Veyre potter, perhaps IOENALIS or the "Crown" potter. c. A.D. 100-120. (2/14)
13. Form 37, Martres de Veyre ware, style of the "Crown" potter. Unrecorded figure (cf. O.571 A) c. A.D. 100-120. (F.45/5/27)
14. Form 37. Probably Blickweiler ware, but just possibly Lezoux and the work of one of the SACER group. c. A.D. 120-145. (Same source as No. 7)
15. Form 37. Style of the "Anchor" potter, whose name was probably DRVSVS. Lion (O.1424), lioness (O.1520). c. A.D. 100-120. (F.45/6-9-5/28)
16. Form 37. Free-style. The ovolo and fine beads are common in the work of IOENALIS, while the feathery leaf is known on one of his bowls from Shefford. The piece is, therefore, to be assigned to him or to one of his associates at Martres de Veyre. c. A.D. 100-120. (F.18 filling/51)
17. Form 37. A free-style bowl with a partial impression of the serpent on rock (D.960 bis). The ovolo is similar to one used by the RANTO Group, but it may also be paralleled in the work of DRVSVS of Lezoux. This piece seems to be in Lezoux fabric, rather than that normal at Martres, where RANTO worked c. A.D. 110-140. (34/3/37)

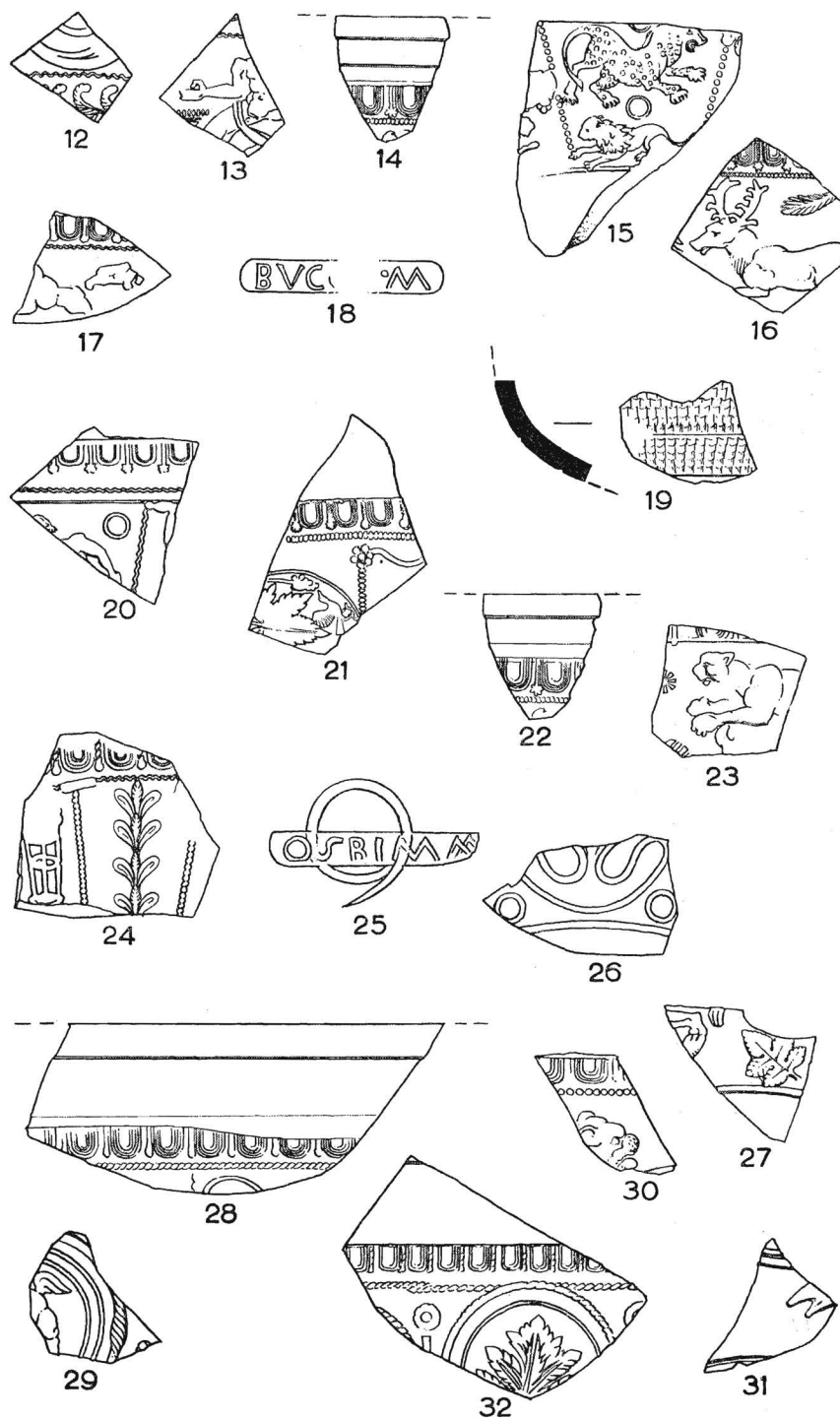


Fig. 5. Decorated samian from Area I. Nos. 18 and 25 (actual); others ($\frac{1}{2}$)

18. Form 18/31. Stamp BVC[...].M. This is the stamp of the Central Gaulish potter BVCCIVS (F. Oswald, *Index of Potters' Stamps on Terra Sigillata* (1931) 49; cited later as Oswald, *Stamps*). Probably Hadrianic.
19. Form 37—with rouletted decoration. These bowls were made at several centres, including the Argonne potteries and Heiligenberg. They were introduced in the early-second century (*Arch.Ael.*, 3rd series, 5 (1909), 269, No. 4), but continued to be manufactured for a long time, though never in large quantities. I doubt if this is earlier than c. A.D. 130. (3/20)
20. Form 37. The ovolo and the straight line under the top border occur in the work of GRATVS (*Trans. Cumberland and Westmorland Antiq. & Arch. Soc.*, 30, (1930), Pl. vii, 1) and other associates of QVINTILIANVS. c. A.D. 125–145. (Same source as No. 15)
21. Form 37. Style of DRVSVS. cf. *Chester Arch. Soc. Jour.*, 39 (1952), Fig. 7, 17 and *Y Cymmrodor*, 41 (1930), Fig. 49, 150, which is perhaps from the same mould as the High Cross piece. c. A.D. 130–150. (Same source as No. 7)
22. Form 37. Unidentified.
23. Form 37. The ovolo is divided from free-style decoration (with lioness D.792) by a straight line, as in the work of SECVNDVS, and perhaps PVGNVS. The ovolo is that normally used by SECVNDVS, and the bowl was made from the same mould as a piece from Corbridge (J. A. Stanfield & G. Simpson, *Central Gaulish Potters* (1958), Pl. 155, 28, wrongly attributed to PVGNVS). c. A.D. 150–180. (2/17)
24. Form 37. Probably Lavoye ware, cf. *Fölzer*, Taf. VII, 40. The date of most of the East-Gaulish potteries is very uncertain. At present, the best we can do is to say Hadrianic or Antonine for pieces like this. (Same source as No. 15)
25. Form 33. Stamp OSBIMA or OSBIMANVS. A well-attested Antonine potter probably of Lezoux (Oswald, *Stamps*, 225, 411). This piece is probably c. A.D. 140–170. (Same source as No. 15)
26. Form 37. Vine-scroll of the type found in the late work of SACER and of other Antonine potters, such as CINNAMVS. c. A.D. 150–170. (3/51)
27. Form 37. Free-style. Hind feet of bear (O. 1621 etc.). Antonine. (2/15)
28. Form 37. The ovolo and rhomboidal beads suggest the work of PATERNVS. Antonine. (F.40 filling/2)
29. Form 37. Style of PATERNVS, cf. *Chester Arch. Soc. Jour.*, 36 (1949), 66, 2. Cupid (O.444a). Antonine, c. A.D. 150–180. (Same source as No. 15)
30. Form 37. Free-style decoration with bear (D. 808). Style of CASVRIVS of Lezoux c. A.D. 160–190. (In surface of secondary pebbling/13)
31. Form 37. Free-style, tail of dolphin. Antonine. (Same source as No. 15)
32. Form 37. The small square ovolo and the general arrangement may be matched in the work of MERCATOR of Lezoux. c. A.D. 150–180. (Same source as No. 7).

Samian from other areas of the Site

A. Stamped pieces (Fig. 6, Nos. 1–5)

1. In a filling of a gully. (HC 3 VIII 2)²² Form 27, South Gaulish, Stamp OI: SVRII. Probably the stamp of SVRIVS of Montans(?) (Oswald, *Stamps*, 309). c. A.D. 75–100.
2. Sand and clay layer below a hearth. (HC 2 XXXVII 1) Form 33. Stamp VIMI(?).

The likeliest candidate for this stamp is VIMVS or VIMMVS of South Gaul (Oswald, *Stamps*, 336). The cup has the ridge round the base which is commonly found on Flavian examples of the form, the fabric is coarse, suggesting a date c. A.D. 80–100.

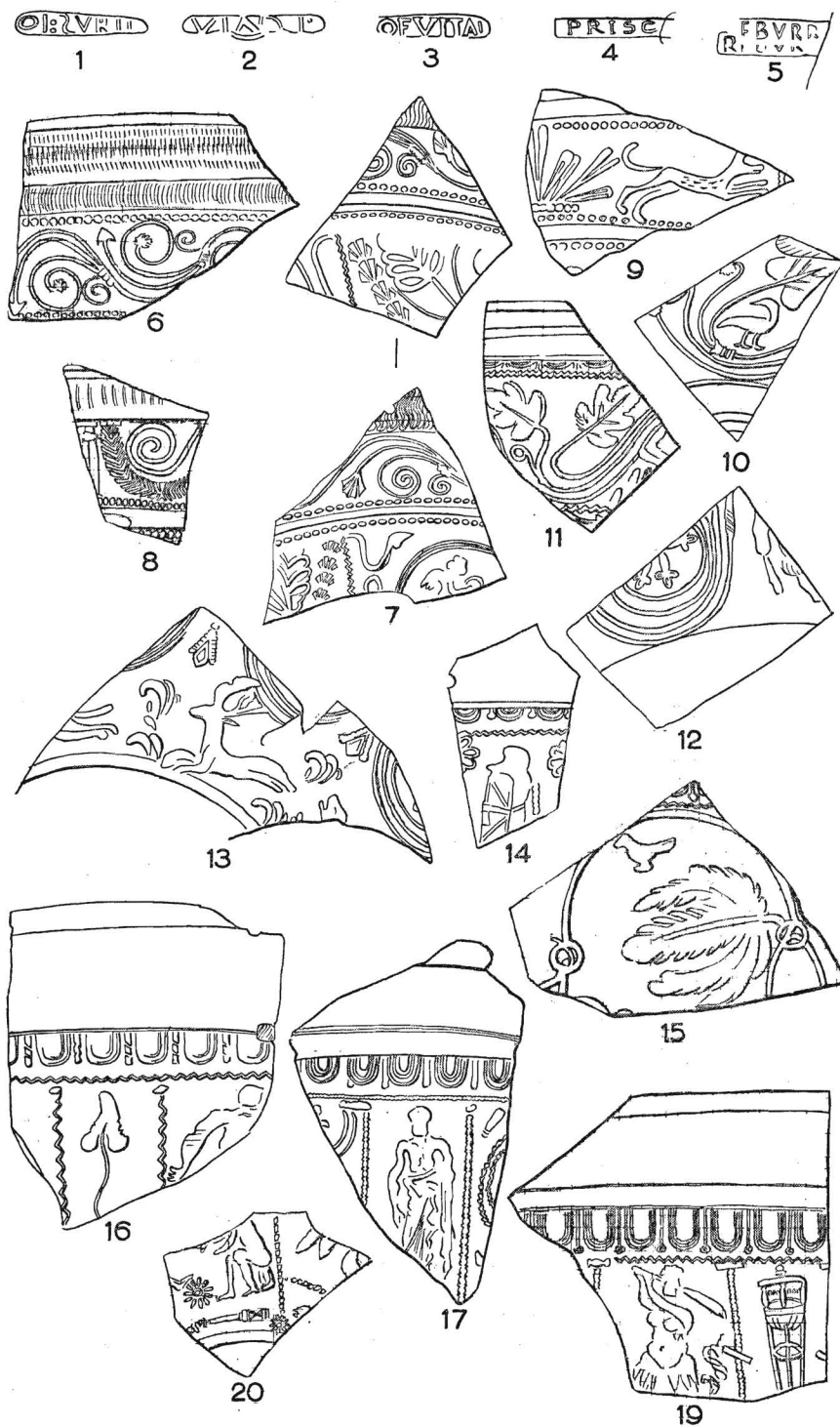


Fig. 6. Decorated samian from other areas on the site. Nos. 1-5 (actual); others ($\frac{1}{2}$); 18 not illustrated

3. Lower filling of a pit or gully. (HC 3 VI 2) Form 15/17 or 18. Stamp OFVITAI.
VITALIS of La Graufesenque (Oswald, *Stamps*, 340 ff., 442). This potter began work in the pre-Flavian period, but he was still active under Domitian. This piece is probably Vespasianic.
 4. Unstratified. (HC 2 XIII 1) Form 31, Central Gaulish. Stamp PRISC....
PRISCVS, PRISCINVS, PRISCIANVS and PRISCILLVS are all possibilities. Antonine.
 5. Unstratified. (HC 2 XLIII +) Form 33. Stamp REBVRR....
The Lezoux potter (Oswald, *Stamps*, 259, 415, "Trajan-Hadrian"). His Antonine activity is well-attested by stamps on Forms 38 and 79 and by site distribution, but he may well have begun work under Hadrian as his stamp is known on Form 27. This piece is probably not earlier than c. A.D. 150.
- B. *Decorated ware—South Gaulish* (Fig. 6, Nos. 6-11)
6. Sandy layer below humus. (HC 2 XLI 1) Upper zone with winding scroll. c. A.D. 65-75.
 7. Sandy layer below humus. (HC 3 V 1, VI 2, VII 1) Form 29. Upper zone with winding scroll; lower panels with festoons enclosing leaves and medallion with small cupid (O. 501—MOMMO, FRONTINVS). c. A.D. 75-85.
 8. Clay and sand layer below humus. (HC 2 XVIII 1) Form 29. Upper zone with festoons enclosing spirals as in the work of many Domitianic potters. c. A.D. 75-85.
 9. Black occupation layer below a clay floor. (HC 2 LIII 2) Form 29. Upper zone with dog (O. 1946) and fan-shaped plant. The dog is known only on the work of MOMMO so far. c. A.D. 75-85.
 10. Sandy layer below humus. (HC 2 LIV 1) Form 29. Lower zone with large scroll and bird (O. 2247) as used by FL GERMANVS and M CRESTIO (*Knorr 1919*, Text b. 20 and Taf. 31). c. A.D. 70-85.
 11. Unstratified. (HC 2 XVI +) Form 37. Large winding scroll with leaf-tips in the lower concavities. FRONTINVS used a similar arrangement (*Knorr 1952*, Taf. 25A). c. A.D. 75-95.
- C. *Decorated ware—Central Gaulish* (Fig. 6, Nos. 12-20)
12. Dark occupation layer sealing timber structures. (HC 2 XLIV 3) Form 37. Style of the RANTO group, cf. *Ant. Jour.*, 10 (1930), 350, No. 9, Hercules (O. 753). c. A.D. 110-130.
 13. Sandy layer below humus. (HC 2 XLI 1) Form 37 (two fragments joining). Small, neat footstand. Zonal decoration; festoons (with birds?) above a free-style hunting scene below. The style is typical of the SACER group. Stag (O. 1822Q), panther (O. 1550?). c. A.D. 130-150.
 14. Dark turfy layer below a layer of disturbance. (HC 2 XLIII 2) Form 37. Fragment showing ovolo with large rosette tongue., gladiator (O. 1002) and large rosettes in the field. I have seen several fragments by the potter of this piece, but do not know of any stamped examples of his work. The gladiator is always paired with O. 1001. Probably Hadrianic.
 15. Sandy layer below humus (HC 2 LIV 1) Form 37. Large vine scroll. The rings masking the junctions of tendrils and the ovolo with large knobbed tongue occur in the work of MASCELLIO. Bird, cf. O. 2276 and 2279. Antonine, c. A.D. 150-180

16. Dark layer below humus. (HC 2 XLII 1) Form 37. This bowl may be assigned to CASVRIVS of Lezoux, for whom see *Trans. Cumberland and Westmorland Antiq. & Arch. Soc.*, 35 (1935). All the elements of decoration are listed by Stanfield in his classic monograph, but the interest of this piece lies in the use of sharp wavy lines as demarcation. These had previously been noted on a stamped bowl by CASVRIVS drawn by Stanfield (*Central Gaulish Potters*, 183, 3), but that bowl was assigned to the earliest phase of the potter's activity. The present piece makes it clear that he also used wavy lines at a later stage in his work and, indeed, poses the question of whether the piece drawn by Stanfield is really Hadrianic at all. Antonine, c. A.D. 150-180.
17. Unstratified. (HC 2 XLII 1) Form 30. Panelled decoration in the style of CINNAMVS. The beads of the bead rows tend to be alternately large and small. Antonine, c. A.D. 150-180.
18. Gully cut into timber structures. (HC 2 XLIV 5) Form 30. Probably pre-Antonine. (not illustrated)
19. Unstratified. (HC 3 X +) Form 30. Panelled decoration. Triton (O. 19) and tripod (D. 1071). The ovolo was used by several potters, the likeliest to have combined it with a wavy line, as here, being CENSORINVS. Antonine, c. A.D. 150-180.
20. Unstratified. (HC 2 XLII +) Form 30. Panelled decoration with rhomboidal beads. Cupid (D. 261; O. 444), dolphin (O. 1050 etc.), small column. All the elements of decoration are found in the work of PATERNVS, to whom the piece may be ascribed. Antonine, c. A.D. 160-190.

COARSE WARES ²³

by Graham Webster

Coarse Wares from the first excavation (Figs. 7-10: Nos. 1-76)

1. A store jar in coarse buff ware with a lid-seated rim and rilling below; the coarse store jars from the site bear a close resemblance to those from the Jewry Wall site, Leicester (Figs. 29 and 30).²⁴ (From the black filling of a pit or ditch; HC 2 III 1)
2. A jar or bowl in grey ware decorated with a large cordon, one of the many examples of the Belgic type vessels (*Camulodunum*²⁵ types 211-217), it may be deeper, like No. 48 (from a cobble layer below the plough; HC 2 IX 2).
3. Jar with inbent rim in buff ware with traces of black surface, this is presumably a development of *Camulodunum* type 253, see also No. 71 (from a black filling below gravel; HC 2 IX 2 and 2 X 1).
4. A store jar in red gritty ware with notched decoration on the rim (same layer; HC 2 X 1).
5. A neck-rim jar in grey ware (same layer; HC 2 X 1).
6. An ovoid jar with small rim in light grey ware with a darker outer surface decorated with vertical grooves; probably a development of *Camulodunum* type 249 and the precursor of the poppy-head (from black filling above a gravel spread on the natural subsoil; HC 2 XVII 2).
7. A carinated bowl in light grey ware with black outer surface (same layer; HC 2 XVII 2).
8. Rim of a store jar in black gritty ware with notching on the rim (from a red sand layer below the heavy cobbled foundations of the Fosse Way; HC 2 XX 4).
9. A cooking-pot in coarse gritty, light red ware with a blackened outer surface and slight rilling on the body (a layer below the humus; HC 2 XXIII 1).
10. A small bowl with bead and flange rim in buff ware with decoration in white paint on the rim, a fairly common second-century form (from a pit; HC 2 XXIV 2).

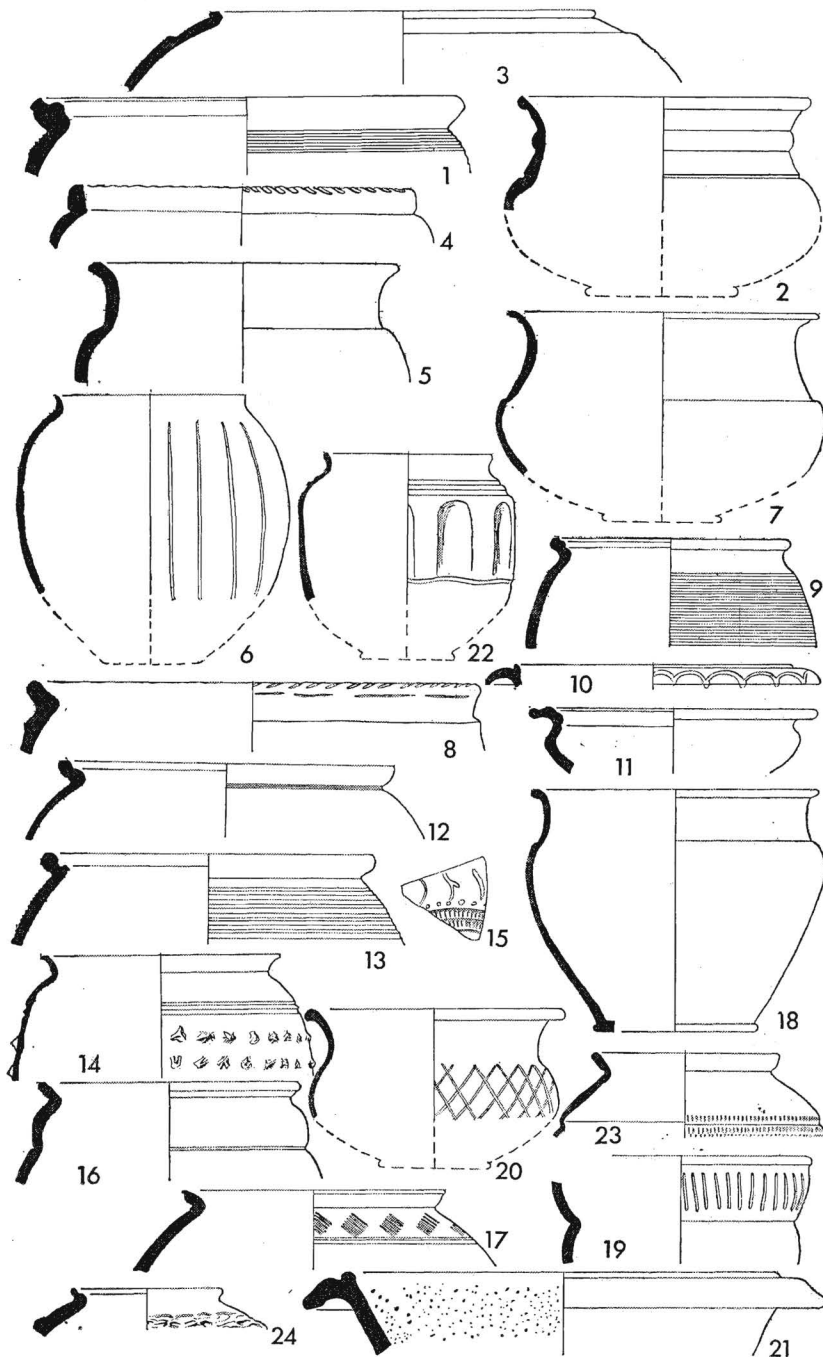


Fig. 7. Coarse wares from the first excavation (4)

11. Small shallow bowl in buff ware with horizontal rim (*cf. Jewry Wall*, Fig. 23, No. 1; same layer; HC 2 XXIV 1).
12. Jar with slight lid-seating in grey ware (from a dirty sandy layer below a gravel spread below the humus; HC 2 XXV 1).
13. A cooking-pot with lid-seating in a red gritty ware with rilling on the body (same layer; HC 2 XXV 1).
14. A thin jar in hard grey ware with rusticated knobs arranged in horizontal rows, probably late-first century (for rim form *cf. Ant. Jour.*, 38 (1958) Fig. 5, No. 11; from a black layer above the natural subsoil but below a thick, hard gravel spread; HC 2 XXIX 5).
15. A fragment of grey ware with barbotine decoration and rouletting (from a red sand layer below a burnt layer below the humus; HC 2 XXX 2).
16. A jar in light grey ware, a devolved version of a Belgic type as at Margidunum (*Ant. Jour.*, 21 (1941), 326, No. 10). (Same layer; HC 2 XXX 2).
17. A jar in hard dark grey ware decorated with neat panels of diagonal lines (same layer; HC 2 XXX 2).
18. A jar with neck rim in grey ware (same layer; HC 2 XXXI 2).
19. A vessel in light grey ware, the upper part decorated with short vertical lines, possibly derived from the girth beaker (*cf. Jewry Wall*, Fig. 37, No. 1; same layer; HC 2 XXXI 1).
20. A small bowl with recurved rim in hard grey ware decorated with a zone of latticing, probably deeper than the reconstruction suggests (from a dirty stony spread below the humus; HC 2 XXXVIII 1).
21. A mortarium in buff ware with a red surface (same layer; HC 2 XXXVIII 2).
22. A small folded beaker in light red ware, probably Antonine (from a sandy layer below HC 2 XXXVIII 1 and 2; 2 XXXIX 1).
23. A jar in cream ware decorated with rouletting, possibly derived from the butt-beaker (same layer; HC 2 XXXIX 1).
24. Jar in dark grey ware with lid-seated rim and rusticated surface (from a dirty filling below a gravel spread and above the natural subsoil; HC 2 XLII 1).
25. A lid in sandy buff ware (layer which produced 22 and 23; HC 2 XXXIX 1).
26. A stamped mortarium described by Mrs. K. Hartley: "This stamp is particularly notable, because only three others are known on mortaria of this type (Bushe-Fox,²⁶ 182), which seems to be the precursor of the hammerhead series. Both the fabric and grit point to manufacture at Hartshill or Mancetter, where the type came popular in the third century. The stamp is impressed horizontally along the rim, but unfortunately the profile is so strongly convex that only the centres of the letters have registered and the stamp cannot be read. Its borders appear on the flanking mouldings of the rim and suggest affinity with IVNIVS. This is all the more interesting, because two of the other stamps on the type are ones of IVNIVS and it is likely that all four stamps came from the same workshop. Although forty-three stamps of IVNIVS are known, site-dating evidence is curiously meagre and only two stamps (from Ebchester and Binchester) may be adduced as evidence for activity after c. A.D. 160. The rim forms themselves are consistent with a late second-century date and one would expect the Bushe-Fox 182s to belong to the last phase of his work. We do not yet know when the practice of stamping mortaria ended in the Midlands, but there is no hint of its continuation into the third century. As with SENNIVS and MAVRVS (*Trans. Birmingham Arch. Soc.*, 77 (1961), 8), stamps of IVNIVS appear as far north as Hadrian's Wall, but are conspicuously absent from Scotland." (From the upper filling of a pit or gully; HC 2 XLIII 3).

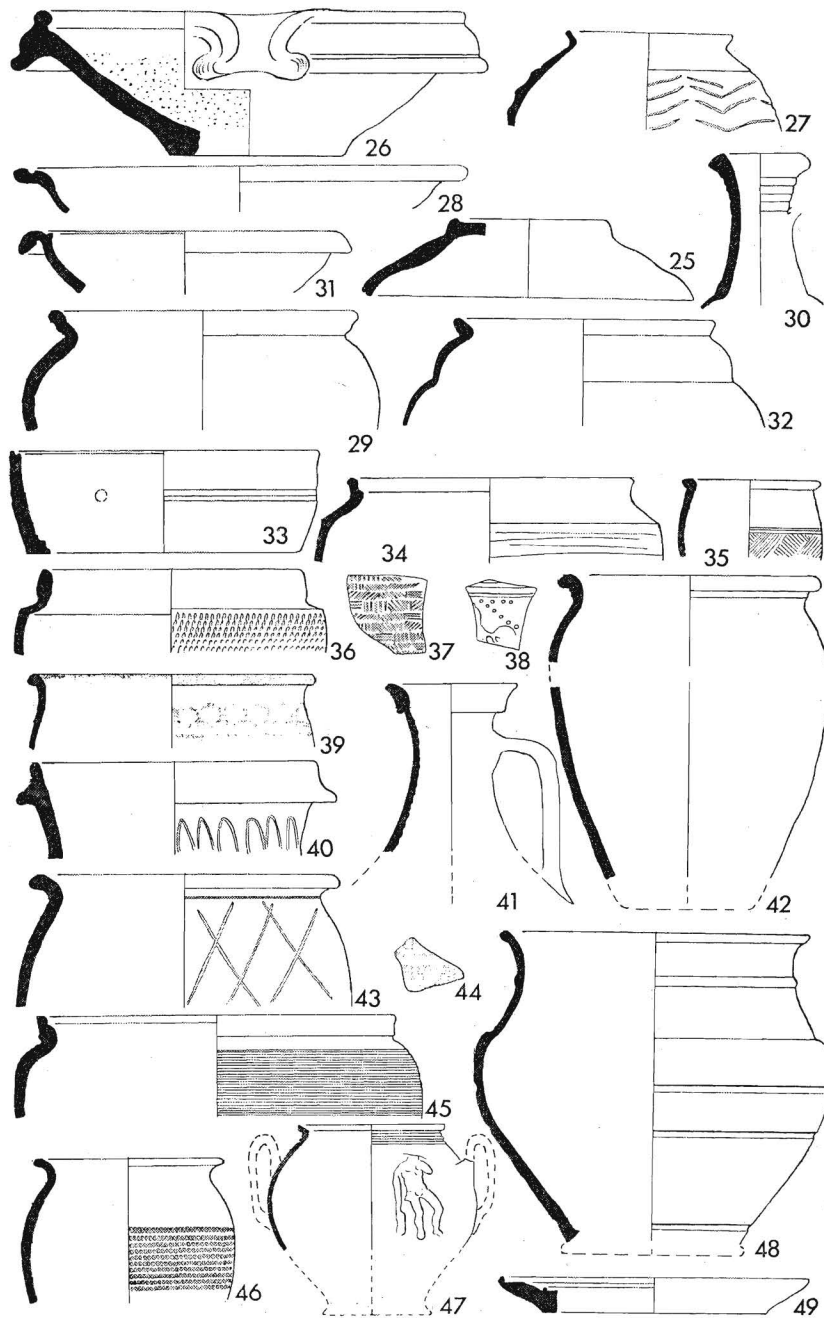


Fig. 8. Coarse pottery (1)

27. A jar in hard light grey ware decorated with thin applied strips in depressed "V" formation; an unusual form of rustic ware (from a pit or gully, with samian decorated ware, C 18 (not illustrated), HC 2 XLVI 2).
28. Large shallow bowl or lid in buff ware (from a dirty sandy layer below the humus; HC 2 XLVI 1).
29. A coarse cooking-pot in buff, "oatmeal" ware with blackened outer surface (same layer; HC 2 XLVI 2).
30. A ring-neck flagon top with predominant upper rim, in cream ware (same layer; HC 2 XLVI 2).
31. A bowl with bead and flange rim in dark grey ware (from a dirty occupation spread above the natural subsoil; HC 2 LII 4).
32. A jar in light grey ware with a darker outer surface, very similar to one from Baginton (*Trans. Birmingham Arch. Soc.*, 54 (1932) Pl. vii, No. 8). (Same layer; HC 2 LII 4)

Unstratified

33. A bowl in light red ware with a circular hole in the side, possibly part of a cheese press.
34. A hand-made jar with lid-seating in coarse buff ware with blackened outer surface,
35. A small jar in buff ware with cross diagonal hatching.
36. A bowl of a "Castor Box" in cream ware with a red-brown colour-coat.
37. A body sherd in buff ware with imitation roller stamped decoration common to this part of the Midlands (*cf.* Mancetter, *Trans. Birmingham Arch. Soc.*, 53 (1931), Pl. xxvi, No. 37 and Pennocrucium, *ibid.*, 74 (1958), Fig. 1, p. 10, No. 2).
38. A small fragment of light grey ware with barbotine decoration.
39. A bowl or jar in cream ware with red painted decoration. This may belong, like No. 44, to the painted pottery which was probably made in the upper Nene Valley as examples seem more numerous in this area (*Jour. Northants. Nat. Hist. Soc.*, 33 (1957), Fig. vii, Nos. 51 and 52; *Records of Bucks*, 16 (1958), Fig. 4, No. 4; *Trans. Leics. Arch. Soc.*, 18 (1934), Pl. iv, No. 1, also unpublished examples from Duston in Northampton Museum).
40. Rim of a large jar in hard, light grey ware, with a flange decorated with a looped line, there is a trace of a handle. It is reminiscent of the late vessels made at Swanpool, Lincoln (*Ant. Jour.*, 27 (1947), Fig. 3, C. 41).
41. A flagon rim of Hofheim type (*Camulodunum* type 136 C).²⁷
42. A cooking-pot in coarse black ware.
43. A jar in black ware with lattice decoration.
44. Small body sherd in a sandy cream ware with red painted decoration, see No. 39.
45. A store jar or cooking-pot in light red gritty ware, darkened on the outer surface with rilling.
46. A small jar in black ware decorated with rows of small rectangular impressions made either by a roller or some kind of rouletting.
47. A double-handled jar (D. 74) in cream ware with black colour-coat decorated with an appliqué male figure with a club (listed by Dr. G. Simpson, "Metallic Black Slip Vases from Central Gaul with Applied and Moulded Decoration", *Ant. Jour.*, 37 (1957), No. 32).
48. A jar in grey ware, decorated with a cordon and grooves.
49. An unusual form of small flat plate or lid in light grey ware with traces of burnishing (see note for No. 41).

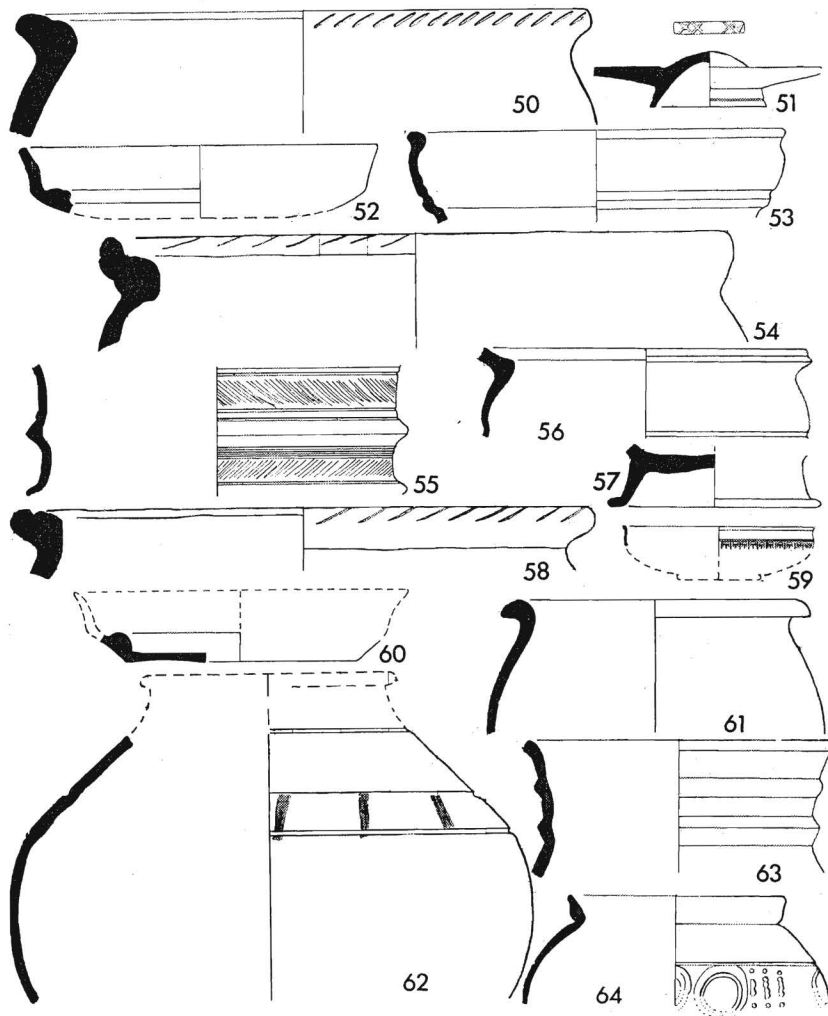


Fig. 9. Coarse pottery (4)

50. A large store jar in coarse red gritty ware, decorated on the rim with diagonal marks.
51. The base of a flat platter with central omphalos and illiterate stamp, in light grey ware with traces of a fine polish. This is an unusual form of base as the general practice appears to have been to make the whole base convex rather than have a central boss (J. H. Holwerda, *De Belgische Waar in Nijmegen* (1941), Pl. xv). Illiterate stamps are a late feature of the Gallo-Belgic industry according to Mr. M. R. Hull (*Camulodunum*, 213) but this fragment clearly indicates Claudian occupation somewhere on the site. (Mr. Lees' collection)
52. A platter in dark grey ware with traces of burnishing. This and No. 60 are presumably native imitations of samian form 15/17.

53. Rim of a bowl in cream ware, probably imitating samian form 29 like those illustrated from Mancetter (*Trans. Birmingham Arch. Soc.*, 53 (1928), Pl. xxiv, Nos. 9 and 10).
54. Rim of large store jar in dark red gritty ware with lid-seating and marks inside the rim.
55. A body sherd of a girth or butt-beaker in a smooth brown ware and lightly scored diagonal lines and pronounced cordons (from Area 7).
56. Bowl in grey ware with an everted rim with shallow lid-seating, possibly a devolved form of girth-beaker.
57. A pedestal base in coarse brown ware (*cf. Camulodunum* types 71-81).
58. Rim of a large store jar in red-brown gritty ware with slashed decoration on the rim.
59. Small bowl in thin cream ware with shiny brownish green slip decorated with impressed pattern probably made with a roller stamp. Small bowls of this type of ware are common in Claudian deposits (*cf. Camulodunum* type 62).
60. Part of a platter in internal half-round moulding in light grey ware, see No. 52 (Mr. Lees' collection).
61. Jar in black ware.
62. Large jar in grey ware decorated with short vertical combing on the shoulder.
63. The upper part of a carinated bowl in grey ware decorated with cordons, derived from a Belgic form (*Camulodunum* type 210).
64. A jar with everted rim in hard grey ware, decorated with barbotine circles and vertical rows of dots, this type, although dated at Jewry Wall, Leicester, to the early second century, was found in association with Antonine type flagon rims (Fig. 40, Nos. 21 and 24).

Coarse Wares from Area 1

65. A girth-beaker in brown-buff ware, decorated with pronounced cordons in the form of corrugations and the lower half with incised semicircles. It differs from the *Camulodunum* types (types 82-85) in having a beaded instead of an everted rim and in this has a greater affinity with the Margidunum examples (*cf. F. Oswald, The Commandant's House at Margidunum* (1948), Pl. iii, No. 14) c. A.D. 50-75. (From F.13 (Layer 4), Squares 45/53)
66. A bowl imitating samian form 29, in buff ware, is comparable to examples from *Camulodunum* (type 68) and *Margidunum* (Claudian Well, *Jour. Rom. Stud.*, 13 (1923), Pl. xi, No. 17; *Commandant's House*, Pl. xi, No. 12; Verulamium, Pit 6, *Ant. Jour.*, 21 (1941), Fig. 1, 273) c. A.D. 75-120. (From Layers 2-3, Square 3)
67. A platter in coarse black ware, in imitation Gallo-Belgic form (*cf. Camulodunum* type 24; *Jewry Wall*, Fig. 35, No. 17; Verulamium, *Archaeologia*, 90 (1944), Fig. 11, No. 4, *etc.*) c. A.D. 50-75. (From middle filling of F.11, Square 54)
68. A deep bowl with inturned rim in a hard, dark grey ware with attempts at smoothing on the inside. May be derived from *Camulodunum* type 44. (From filling of ditch, F.22, Square 46)
69. Reeded rim of a carinated bowl in hard dark grey ware (*cf. Jewry Wall*, Fig. 38, No. 13; Fig. 42, No. 8; Verulamium, Pit 6, type 1), c. A.D. 75-120. (From filling of ditch, F.52, Square 3)
70. Large store jar with everted rounded rim in a coarse pinkish brown ware with a grey core, the body decorated with incised wavy line. This is a type of vessel which occurs throughout the occupation and is difficult to date closely. (From filling of ditch (middle) F.52, Square 18)

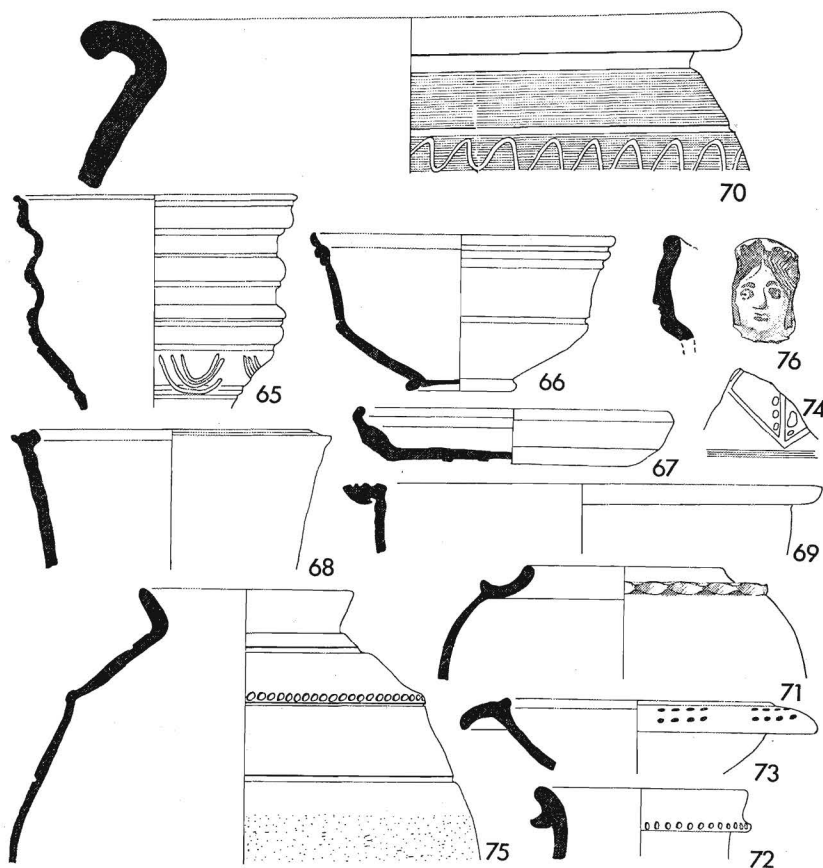


Fig. 10. Coarse wares from Area 1 (4)

71. Jar in light red ware with inbent rim and frilled decoration on the shoulder. This vessel has an interesting Iron-Age ancestry as a Belgic type at Swarling (*Excavation of the Late-Celtic Urn-field at Swarling, Kent* (1925), Pl. ix. No. 33) and also Hengistbury Head (*Excavations at Hengistbury Head, Hampshire in 1911-12* (1915), Pl. xxvi, No. 7). Its development can be traced from the former to *Camulodunum* types 252 and 253, and Verulamium (R. E. M. and T. V. Wheeler, *Verulamium, A Belgic and Two Roman Cities* (1936), Fig. 22, Nos. 3 and 4), and from the latter into the south-western channelled bowl found in the territory of the Durotriges (Mr. Brailsford's type 3, *Proc. Prehistoric Soc.*, 24 (1958), 101; *Dorset Nat. Hist. and Arch. Soc. Proc.*, 79 (1959), 118, Pl. 1). The subsequent development of this form into Romano-British times is difficult to follow as examples are so few. One of the rare examples was found at Richborough in a fourth-century pit (J. P. Bushe-Fox, *Excavations on the Roman Fort at Richborough IV* (1949), No. 486) and it is not easy to understand this unless it is a survival, but on the Rhine this type appears in third-century contexts at Neiderbieber (Gose, *Gefäßstypen der römischen Keramik im Rheinland* (1950), Nos. 497 and 498). In view of this confusion it would be wise to leave the dating of this form until more examples come to light. (From lower half of filling of ditch F.34, Square 38)

72. Rim of jar in light grey ware with a flange decorated with incised marks. This is a typical fourth-century form (cf. Swanpool, *Ant. Jour.*, 27 (1947), C. 40-48; Gillam type 32, *Arch. Ael.*, 4th ser., 35 (1957). (From Layer 2, Square 2)
73. Small flanged bowl in cream ware decorated on the rim with horizontal groups of dots in red paint. This type of bowl is fairly common, several examples occur at Wroxeter (cf. *Wroxeter I* (1912), Fig. 17, No. 16) and there is a good range from *Jewry Wall* (Fig. 22) c. A.D. 75-120. (From Layer 2, Square 29)
74. Body of a jar in brown burnished ware, decorated with panels of dots and vertical strips in white paint. This is a form of decoration which was very common at Leicester (*Jewry Wall*, Fig. 27, No. 23, etc.) c. A.D. 80-200. (From top of filling of F.70, Square 14)
75. Large jar in a hard light grey ware with slightly everted rim, body decorated with a line of notches and grooves. This is a type of jar probably made in the Midlands in the early-fourth century, and possibly at Wappenbury, Warwickshire (*Trans. Birmingham Arch. Soc.*, 79 (1964), 93-108; cf. *Colchester*, Fig. 68, No. 111, etc., from fourth-century deposit. (Same source as No. 15)
76. Rim of a flagon with face mask. This is a common late form of this type of vessel (cf. *Richborough III* (1932), Pl. xxxiii, No. 184), late-third to early-fourth century. (From Layer 2, Square 25)

MORTARIA

by Mrs. K. F. Hartley

Mortarium Stamps (Fig. 11, Nos. 1 to 9; Nos. 1, 2 and 6 are from Dr. Graham Webster's excavations, the remainder are from Area 1, see also No. 26 above).

1. From Die C of the potter DOINVS. His work can be dated c. A.D. 80-115, and the use of Die C, which was probably his latest die, is likely to have been confined to the second half of this period. (HC 2 XXVIII unstratified)
2. A retrograde stamp of G. ATTIVS MARINVS. This potter began his career in the Radlett area; a waster of his found on a kiln site at Radlett (*Proc. Soc. Ant. London*, 17, 2nd ser. (1898), 266), and the fabric of his mortaria both here and at Verulamium clearly indicate this. There can be no doubt that he later worked in the Midlands, since the vast majority of his known mortaria are in typical Midland fabric. His working life can be dated c. A.D. 90-130, and the High Cross example, a Midland product, is likely to be later than A.D. 100. (HC 2 II unstratified)
3. Coarse and sandy buff fabric with orangey-brown slip; the inner surface is worn but a few grey, white and black grits survive. Approximately Bushe-Fox form 34, and typical of products of the large mortarium factories south-east of Verulamium. The crudely formed letters of the stamp are deeply impressed but cannot be intelligibly read and the potter appears to have been illiterate. He also used a counterstamp (not preserved at High Cross) which represents an illiterate attempt at reproducing the word FECIT.

Other stamps of this potter, all from the same die, have been noted from: Hassocks, Sussex; London (4); Wilderspool and Wroxeter. The fragmentary stamp from Wroxeter was found in a pit with pottery dated c. A.D. 60-90 (D. Atkinson, *Excavations at Wroxeter 1923-27* (1942), 280 and 281, Fig. 40, No. 8). It is probable that this potter was working in the latter half of this period and possibly until the end of the first century. He is noteworthy as the only known illiterate potter in the large group of Flavian potters working between Verulamium and London. (Square 15, Layer 3)

4. Flange fragment of Bushe-Fox form 34 in slightly sandy, cream fabric. The broken stamp JOINVS, is from Die B of the potter DOINVS. Fabric and forms alike are typical of the mortaria produced in the important pottery factories between Verulamium and London, in the late-first and early-second centuries, and there can be no doubt that he worked in this area.

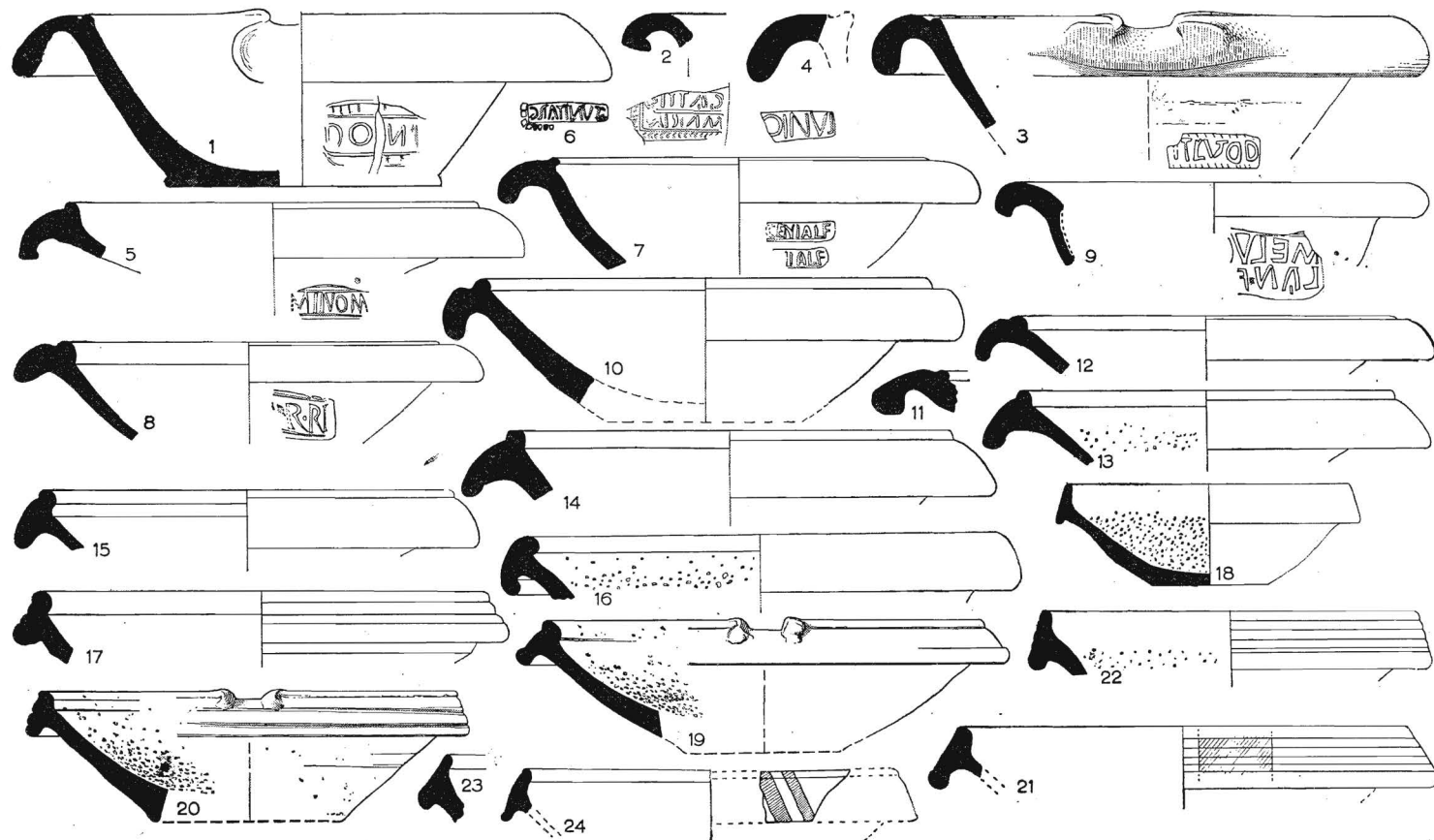


Fig. 11. Mortaria. Nos. 1, 2 and 6 stamps ($\frac{1}{2}$); others ($\frac{1}{4}$)

It is reasonably clear from the forms on which it occurs that Die B is one of his early dies. As a stamp from Die C, apparently his latest one, was found on the last intervallum road of the Flavian II fort at Dalswinton (*Trans. Dumfries and Galloway N. H. and Arch. Soc.*, 34 (1955-6), 21), abandoned c. A.D. 105, his active life may be estimated as about A.D. 80-115. Judging by the die and the form of the vessel, the High Cross mortarium would have been made in the first half of this period. (Square 18, Layer 3)

5. Hard cream fabric with buff slip; a few brown grits survive immediately below the bead. There are traces of burning on the surface of the flange. The incomplete stamp,]MINOM[, is one of MINOMELVS. He often failed to impress the whole of his dies, but it seems possible that some, including this one, gave abbreviated forms of the name such as MINOM.

Stamps of MINOMELVS have been found on many sites in the Midlands and in the north, including forts on the Antonine Wall. While his work is certainly Antonine a closer date is not yet secure, though the first half of this period seems the more probable. His kiln site has not yet been found but the fabric and rim shapes used, together with the distribution of his work, indicate that he worked in Warwickshire, possibly in the Hartshill area, where two of his stamps have been found. (Square 39, F.31, top of pit filling)

6. The faint stamp, reading SVNITARG or TVNITARG (retrograde), is only otherwise known on a fragment at Ribchester which gives the last four letters clearly. It is interesting to note that if each letter is laterally inverted the reading GRATINVS is possible, though it would be unwise definitely to assign the stamp to the well-known potter of that name on present evidence. Fabric and form taken together suggest an Antonine, or just possibly a Hadrianic-Antonine, date of manufacture and a Midland origin. (Unstratified)
7. Hard orange-buff fabric with slip misfired to a purplish-brown and grey; sparse medium-sized grey grits. There are two badly impressed stamps, close together; the more complete stamp may be read GENIALF, the first two letters being very faint. There can be no doubt, however, that the potter's name was GENIALIS.

In Britain, stamps reading GENIALIS, more or less fully, are at present known from five different dies, the High Cross stamp being from Die E, which appears to stand alone. Other stamps from the same die have been noted from Wilderspool (read EVIAIF by May, *Warrington's Roman Remains*, 64), and Melandra Castle? (*Derbyshire Arch. & Nat. Hist. Jour.*, 29 (1907), 90 and Pl.v, No. 3, now missing). The fabric and rim shapes used with this die clearly point to a second-century date for his work and if the identification of the Melandra stamp is correct he was working before the Antonine period. (Square 53, Layer 2)

8. Hard cream fabric with buff slip; abundant, flint grit beginning immediately below the bead.

The incomplete stamp, which reads]R RI, is from Die A of the well-known potter SARRVS, who had at least four other dies during his lifetime. SARRVS began his career in the Midlands, probably at Hartshill (*Proc. Soc. Ant. London*, 16, 2nd ser. (1897), 405), and subsequently moved to Rossington Bridge, near Doncaster. The fabrics produced at the two sites are distinct, and the High Cross mortarium is clearly a Midland product.

There are nine stamps from Antonine sites in Scotland, but there is no evidence for pre-Antonine activity. SARRVS moved to Rossington Bridge only when he was using his fourth die (D), which he took with him, but a stamp from Die C, probably its immediate predecessor, has recently been found in a terminal Antonine I deposit at Mumrills. This suggests that he could scarcely have left his Midland kiln site before c. A.D. 160-165, especially as there are many Midland mortaria stamped with Die D. The High Cross stamp, therefore, can be firmly dated to c. A.D. 140-165. (Square 27, F.45 filling)

9. Hard greyish-cream fabric with drab cream slip; no grit survives. The two-line stamp is in unusually large, retrograde letters and is almost complete. The first four letters in the upper line read MELV, and the lower LANF, but the beginning of a fifth letter in the first line suggests that the potter's name was MELVOLANVS rather than MELVLANVS. This being so, the name would probably be followed by FE (for FECIT), to complete the lower line. No other stamps of this potter are known.

The shape is similar to that most frequently used by G. ATTIVS MARINVS, who was working at the end of the first and the beginning of the second century. A precise dating of the work of MELVOLANVS cannot be given, but the rim profile and fabric of the High Cross example make it probable that this mortarium was manufactured in the second century. (Square 37, Layer 3)

Not illustrated is a partly-impressed stamp from a wooden die, reading]ENI. No parallels have been noted and it cannot be assigned to a known potter. The profile of the rim leaves little doubt that the piece is Antonine, and the fabric is a typical Midland one. (HC 2 XLVIII 2, in a gravel spread)

Unstamped Mortaria (Fig. 11, Nos. 10 to 24, from Area 1)

10. The soft fabric is burnt throughout to a pinkish-grey; rilled on the inside, and some tiny whitish grit which extends over the flange. There is a close parallel from Colchester (*Camulodunum*, 255, Fig. 53, No. 32). This mortarium is undoubtedly first century, possibly as early as the Neronian period. (Square 41, unstratified)
11. Soft, pinkish-cream fabric containing tiny red, tile-like fragments; no grit on fragment. Probably first half of the second century. (Square 38, F.34, lower half of filling)
12. Hard cream fabric; greyish-black grit. Second half of the second century. (Square 15, Layer 3)
- 13 and 14. Fragments of similar type and fabric, but not from the same vessel. Hard, slightly sandy cream fabric with buff-cream surface; a few greyish-black grits. Second half of the second century. (Square 38, Layer 2)
15. Probably fragments of the same vessel. Pinkish-cream fabric; a few black grits survive. Compare Bushe-Fox type 114. Early third century. (Square 27, Layer 2, and Square 38, Layer 3)
16. Hard, smooth, cream fabric with greyish core and with a trace of reddish-brown paint on the flange; prolific, hard, angular, red-brown and dark-brown grits. Compare Corbridge (*Arch. Ael.*, 15, 4th ser. (1938), 269, Fig. 7, No. 1), for a near parallel. Diameter 11 in. Third century. (Square 40, Layer 2)
17. Hard, smooth pipe-clay fabric with creamy-buff slip; sparse, black grit on the fragment. Compare High House, Period 3, A.D. 297-367 (*Trans. Cumberland & Westmorland Antiq. & Arch. Soc.*, 13, 2nd ser. (1913), Pl. 18, No. 115). Late third to fourth centuries. (Square 65, Layer 2)
18. Unusually small mortarium in hard, smooth pipe-clay fabric; prolific, hard, angular grit in various shades of brown. Diameter c. 7 in. Fourth century. (Square 30, F.48, top of filling)
19. Hard, smooth pipe-clay fabric with buff slip; prolific, medium and small-sized, hard black and brown grit. Diameter 9 in. I know of no exact parallel for the shape. Probably fourth century. (Square 28, Layer 2 and top of filling of F.45)
20. Hard, smooth pipe-clay fabric; prolific, hard grit, mostly black. Bushe-Fox type 182. Diameter 11 in. A near parallel from Bewcastle (*Trans. Cumberland & Westmorland Antiq. & Arch. Soc.*, 38 (1938), 228, Fig. 26, No. 66) is dated to the mid-fourth century. (Same source as No. 19)

21. Hard, smooth pipe-clay fabric with broad, widely-spaced vertical stripes of reddish-brown paint; a few fragments of brown grit. Compare Bewcastle (*Trans. Cumberland and Westmorland Antiq. & Arch. Soc.*, 38 (1938), 228, Fig. 26, No. 64) for a near parallel. Fourth century. (Square 31, Layer 2)
22. Hard, slightly sandy pipe-clay fabric with drab cream slip; no grit survives. Similar type to No. 21. Fourth century. (Square 2, Layer 2)
23. Soft, smooth pipe-clay fabric black and reddish-brown grit. Compare Bird-Oswald, Period 3, A.D. 297-368 (*Trans. Cumberland and Westmorland Antiq. & Arch. Soc.*, 30 (1930), 188, Fig. 13, No. 12c). Fourth century. (Square 15, Layer 2)
24. Hard, smooth white pipe-clay with groups of diagonal stripes of reddish-brown paint, placed at intervals round the flange. Approximately Bushe-Fox form 190. Late third or more probably fourth centuries. (Square 38, Layer 2)

GLASS (from Area 1)

The glass from the site was submitted to Dr. D. B. Harden who stated that all the fragments were uniformly Roman and early in date (later first to second century A.D.), and that there was nothing outstanding in the group with the possible exception of fragments of dark blue bottle (Nos. 6-7). None of the fragments is illustrated.

1. Two fragments of sides of green cylindrical bottles, later first to second century.
2. Two fragments from lower part of side of colourless bowl or beaker with one thin wheel cut, second century.
3. Two fragments of sides of green cylindrical bottles and lone fragment of bottom or body of rectangular bottle, later first to second century.
4. Fragment of bottom of green rectangular bottle, later first to second century.
5. Fragment of lower part of side of bluish-green bowl with two engraved circles, second to third century.
6. Fragment of bottom of dark "cobalt" blue cylindrical bottle, later first century.
7. Fragment of cylindrical neck of No. 6.
8. Fragment of side of green cylindrical bottle, later first to second century.
9. Fragment of side of green cylindrical bottle, later first to second century.
10. Fragment of side of greenish-colourless beaker, surface pitted by weathering, second century.
11. Two fragments of shoulder and one side of green rectangular bottle, rather bubbly, second century.
12. Fragment of side of green beaker, later first to second century.

Intaglio (Fig. 12, No. 17)

Intaglio of glass, surface worn. Animal (probably goat) left, standing on concave platform. Found with bronze ring No. 18, p. 35.

BRONZE

Brooches (Fig. 12, Nos. 1 to 4. Nos. 1 to 3 reported on and drawn by Mr. M. R. Hull)

1. A very heavy "dolphin" brooch with long spring of twenty-four turns. The cross-bar decorated with astragaloid mouldings. Much obscured by corrosion. Triangular hole in catchplate. It is unusual to find a brooch of this type with the cord of the spring passed through a lug, it is usually held by a hook. Mid-first century A.D. From north edge of pit or sump (F.13) in Layer 3, Squares 45/53.

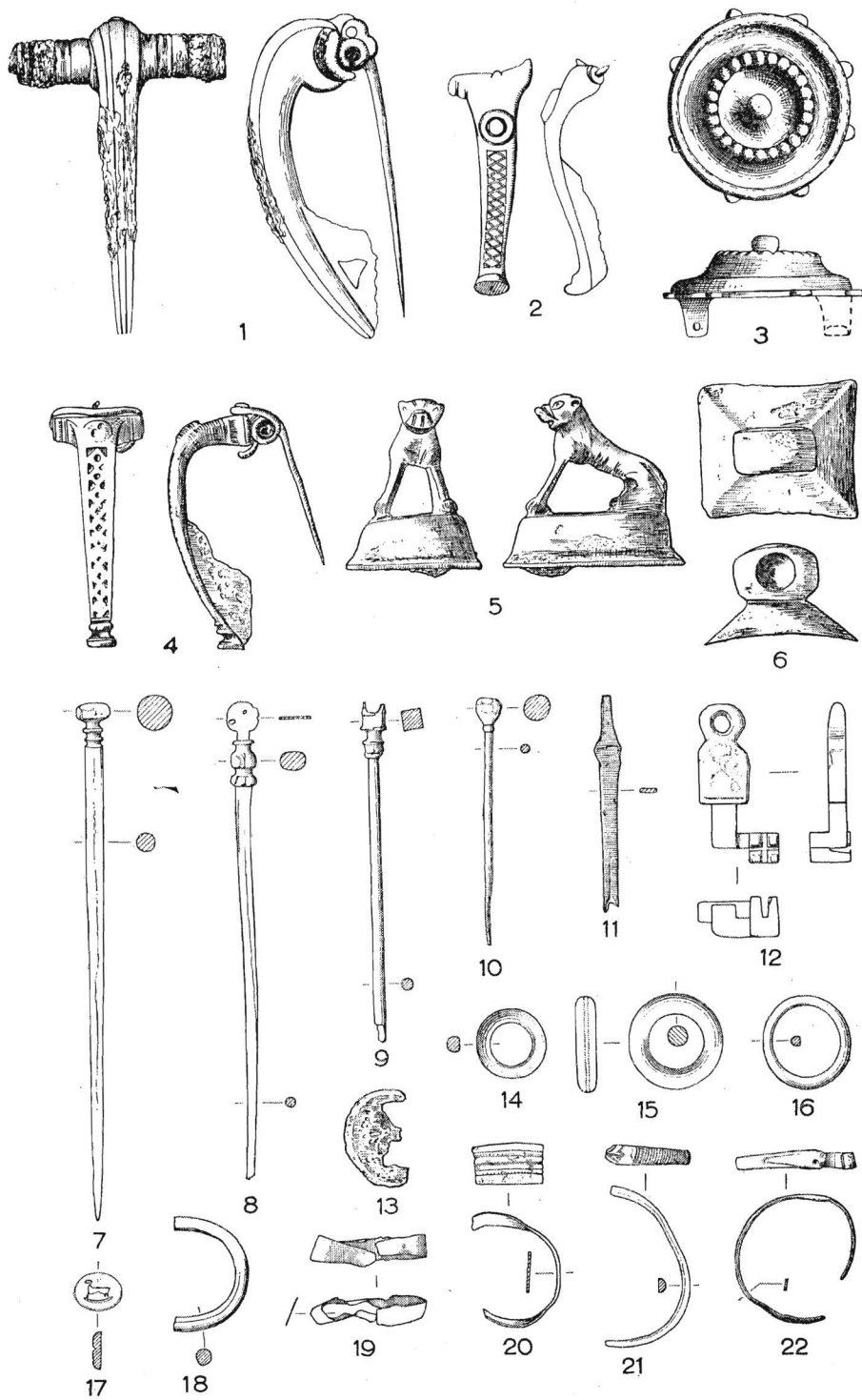


Fig. 12. Bronze. Nos. 1-13, 17-19 ($\frac{3}{4}$); 14-16, 20-22 ($\frac{1}{2}$)

2. Rather debased example of the Lamberton Moor brooch which, however, has a wire protruding at one side of the head as if it had a movable wire loop, but this may merely have been a pin through the spring. This brooch is slightly restored in the drawing, the enamelling has gone. Second half of the second century. From Layer 7 (Fig. 3, Section C-D) embedded in secondary pebbling, Square 25).
3. Brooch with eight small lugs round the edge and decorated with a highly repoussé plate applied to it which has a central knob. (Mr. Hull states that he has not seen a brooch of this type before.) Probably second to third century. From Layer 2 (F.13), Squares 45/53.
4. Brooch with moulded foot, head-stud and triangular recesses for enamelled inlay. This appears to be a development of the type with head-plate and loop of which there is an example from *Richborough* (IV, Pl. xxviii, No. 34). Originally the head-stud was attached to the chord which secured the coils of the spring. It is probable that this particular example belongs to the late-first to early-second century.

Dog (Fig. 12, No. 5)

5. A small bronze dog sitting on its haunches with its forelegs spread out in front. It is cast complete with a hollow stand to which still adhere pieces of lead for attaching it to some kind of fixture. This is an unusual type of object and at first some doubt was expressed about its age. Professor J. M. C. Toynbee kindly examined it and considers it to be probably of Romano-British origin, but it is difficult to find any parallels. Small figurines are not usually placed on stands of this type. The base of the statuette of Mars from the Fossdike, Lincolnshire, is clearly to take the inscription (*Brit. Mus. Guide to the Antiquities of Roman Britain* (1922), Pl. viii), but other plain examples have been found (cf. the Straubing hoard, *Der Römische Schatzfund von Straubing*, Taf. 36-41). The presence of lead in the socket suggests that it was fixed to a metal object and was either independent or part of a lid or a piece of wooden furniture. One possibility is that it was a terminal of a folding tripod (J. Liversidge, *Furniture in Roman Britain* (1955), 35).

The dog had a distinctive part in Romano-Celtic religion. At Lydney Park the animal is most likely to be associated with healing (*Soc. of Antiquaries Research Report* No. 9), but elsewhere he appears as a lap-dog symbolising his close association with man as companion and protector (*Arch. Cant.* 70 (1956), 192), and connected in particular with Nehalennia (A. Hondius Crone, *The Temple of Nehalennia at Domburg* (1955), 103). The High Cross animal with its pug-like characteristics looks friendly enough.

Miscellaneous (Fig. 12, Nos. 6 to 22)

6. A mount with knob with a round recess, the underside is curved as if to fit a circular object but no means of attachment is visible.
7. Pin with rounded head. From Layer 3, under slight rubble, Square 3.
8. Pin with spatula head. From Layer 3, in silt, Square 51.
9. Pin with castellated head. From Layer 2, in slight rubble, Square 35.
10. Small pin with rounded head. From base of humus, top of Layer 2, Square 5.
11. Nail cleaner. From Layer 2, Square 8.
12. Slide key. Almost identical with one from Jewry Wall, Leicester (cf. *Jewry Wall*, 358, Fig. 86, No. 9). From Layer 2, over top of filling of post-hole (F.73), Square 3.
13. Small mount of pelta shape for attachment to wood or leather for decoration.
14. Heavy cast ring. From Layer 2, rubble, over (F.13) Squares 45/53.

15. Heavy cast ring with two parallel milled lines round exterior. From middle of filling in roadside ditch (F.52) Square 18.
16. Terrett ring, worn on interior. From Layer 5, top of filling of (F.45) Square 18.
- 17 and 18. Glass intaglio (see p. 32) and part of finger ring. From top of filling of (F.70) Square 14.
19. Squashed ring in thin strip. From base of Layer 2, Square 22.
20. Part of arm band or bangle, decorated with double row of knurling between parallel grooves. From top of ditch filling (F.34) Square 38.
21. Half bracelet with snake's-head terminals. Oblique grooving on exterior. From Layer 2 (heavy rubble) over (F.13) Square 53.
22. Nearly complete bracelet with snake's-head terminals. Cluster of three impressed dots and single dot linked by grooves. From top of filling of (F.18) Square 51.

SHALE

Part of cup or small bowl, $\frac{1}{4}$ to $\frac{3}{8}$ in. in thickness, of shale, most probably Kimmeridge.²⁸

STONE

(Geological identifications by Mr. G. J. Snowball, then of Leicester Museum)

1. Complete top of millstone in three pieces. Diameter 14 in., depth on edge $1\frac{1}{2}$ to 2 in. Diameter of central hole 3 in. Interior worn concave, edges show polish. Socket for handle, square sectioned, $3 \times 2\frac{1}{2} \times 1$ in. and $\frac{1}{2}$ in. in depth. Millstone grit. From top of filling of F.70, Square 14.
2. Part of millstone. Depth of edge 2 in. Millstone grit, probably Derbyshire. From top of filling of F.13, Square 53.
3. Whetstone. Rectangular shape, $4\frac{1}{2}$ in. in length, $1\frac{1}{2}$ in. in width and 1 in. deep. All surfaces worn hollow irregularly. Diorite, probably from Stoney Stanton, Leicestershire. From Layer 2 (rubble), Square 54.
4. Piece of haematite. From top of filling of F.70, Square 14.
5. Rock fragment. Sandstone, probably from Derbyshire. From Layer 2 (angular rock make-up) Square 2.

LEAD

1. Piece of thin sheet with one circular pierced hole. From Layer 2, Square 3.
2. Curved length of cast rod of circular section in untrimmed condition. From Layer 11, Cutting C.

FOOD SHELLS

Eight deposits were found; these have been identified as oyster, *Ostrea edulis* Linne, by Mr. C. P. Castell, British Museum (Natural History).

TOOLED BONE AND ANTLER

(Fig. 13, Nos. 1 to 3)

1. Needle.
2. Counter with a central recess.
3. Probably handle of a knife, in two pieces. It has been crudely shaped by paring down part of an antler tine. An irregularly-shaped hole penetrates narrowest end for $2\frac{1}{2}$ in.

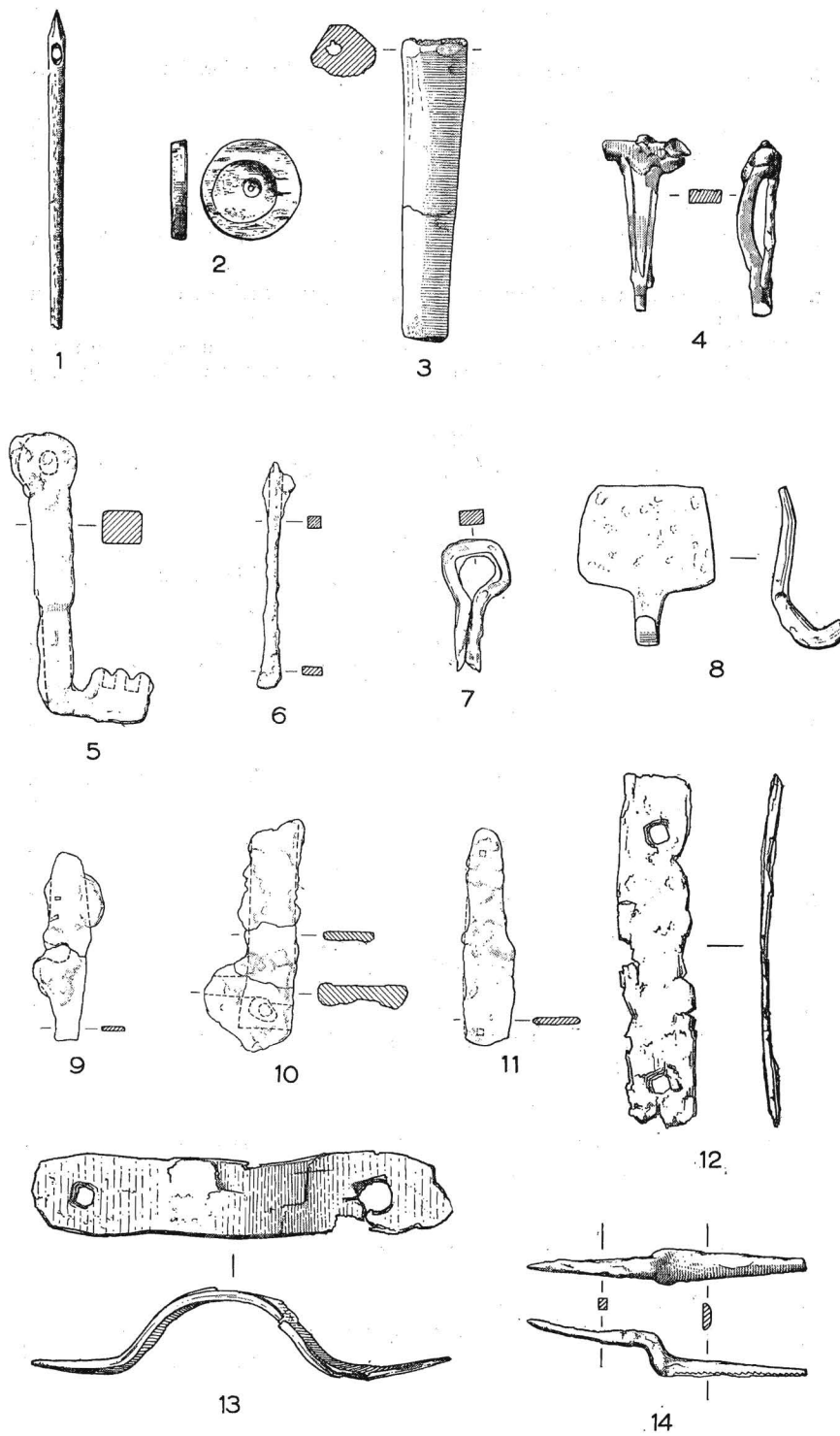


Fig. 13. Nos. 1-3 bone and antler, 4-14 iron. 1 and 2 ($\frac{3}{4}$); others ($\frac{1}{2}$)

IRON

(Fig. 13, Nos. 4 to 11 from Area 1; Nos. 12 to 14 from other Areas)

4. Brooch²⁹ of "dolphin" type with pin attached. From top of filling of ditch F. 34, Square 38, with pottery of the second century.
5. Key.³⁰ From top of pit or sump filling (Layer 2, F.45, Square 28).
6. Stylus.³¹ From Layer 2, Square 40.
7. Split-pin. From Layer 2, rubble level over filling of pit, F.13, Square 53.
8. Part of plate with hook. From same find spot as No. 7.
9. Piece of plate or strip (two joining fragments). Use unknown. From same source as No. 5.
10. Three pieces of plate or strip joined at an angle.³² From Layer 2, Square 54.
11. Length of strip.³³ From same source as No. 7.
12. A strip of iron with two square nail holes where it has been fixed to the frame of a door or for a similar function. (HC 2 LIV unstratified)
13. A curved iron strip with nail holes. This piece has been made for fixing to a door to provide a support through which a draw-bar could function. (HC 3 VI unstratified)
14. A small iron file.³⁴ (HC 2 XXIX stratification uncertain)

ANIMAL BONES

(From Area 1, all from Roman levels)

by Miss Judith E. King, British Museum (Natural History)

The following animals are represented: ox, horse, sheep or goat, pig, deer, dog and bird. Most of the bones are thus from domestic animals, ox and sheep or goat remains being the most abundant. Horse and pig are only represented by a few bones, and dog only by two bones. Only one piece of antler is present, a worked fragment too incomplete to be identified to species.

BIRD BONES

identified by Mrs. Margaret Jope

Raven, *Corvus corax corax* L

1. Humerus L.
2. Radius L.
3. Ulna L.
4. Carpometacarpus L.

HUMAN BONES

identified by Dr. D. R. Brothwell,

Duckworth Laboratory of Physical Anthropology, Cambridge

1. Three bones. The bones consist of three metatarsals from a left foot. Their size suggests maleness, although sex cannot be determined with certainty. The individual was probably fully adult. From Layer 3, Square 51.
2. One bone. Most of the right tibia is present for examination. Only the proximal condylar area is badly damaged. The bone is from an adult individual, its overall size suggesting maleness. The shaft is swollen in parts owing to some form of osteitis, but the exact infection is difficult to suggest. From base of filling of F.20, Square 50.

CHARCOAL

by J. F. Levy, Department of Botany, Imperial College of Science

1. Fragments of oak (*Quercus* sp.), probably from trunk or large branch, exceeding 6 in. in diameter. From F.45, Square 27.
2. Fragments of twigs of hazel (*Corylus* sp.), about $\frac{3}{4}$ in. in diameter. From F.45, Square 28.
3. Fragments of oak (*Quercus* sp.), probably from trunk or large branch. From Layer 2, Square 51.
4. Fragments of oak (*Quercus* sp.), from twigs $1\frac{1}{2}$ in. to 2 in. in diameter. From Layer 3, Square 4.

BAKED CLAY AND SLAG

by Mr. L. Biek, Inspectorate of Ancient Monuments Laboratory

Three groups of baked clay were examined:

1. From Layer 3, Square 38.
2. From filling of ditch, F.52, Square 35.
3. From primary filling of ditch, F.28, Square 41.

The principal one (No. 3) consists of a number of fragments which all appear to have been part of a larger piece. This was deliberately shaped and smoothed all round, in the form of a flat cake about $7\frac{1}{2}$ to 8 in. in diameter, about 2 in maximum thickness, and of roughly quadrant section.

The clay contains much iron in the form of ironstone fragments of small size (average about $\frac{1}{4}$ in. diameter) and irregular shape, although "stains" of larger size also occur. They are largely weathered, presumably by burial after firing. The material seems to have been heated to a temperature in the region of 500°C, in an atmosphere that was predominantly oxidising at the end.

There is some evidence of the presence of vegetable material, before firing, on both surfaces as well as in the interior. In addition, there are some shallow scratches on the "convex" surface, mainly in straight lines which in places form a grid about $1\frac{1}{2}$ in. "mesh".

The other two groups (Nos. 1 and 2) consist of fragments of essentially similar material. No. 1 carries one smoother surface, and contains a large fragment of (?) ironstone, about one inch square and $\frac{1}{8}$ in. thick. No. 2 resembles the "core" of No. 3, although it is unlikely to have been part of it. No. 1 may have belonged to No. 3. Both Nos. 1 and 2 may have been part of a piece essentially similar to No. 3.

The material could presumably have been produced from local clay. Its function is not clear, but if the association with the slag specimens is significant, the principal piece (No. 3) at least, might perhaps have served as a plug or damper in a smelting furnace.

Eight fragments of slag were found and examined:

1. From Layer 2-3, Square 2.
2. From top 8 in. of F.13, Squares 45/53.
3. Unstratified.
4. Unstratified.
5. From Layer 4, Square 16.
6. From Layer 3, Square 4.
7. From filling of ditch, F.28, Square 41.
8. From filling of ditch, F.52, Square 18.

We are grateful to Mr. H. F. Cleere (Iron and Steel Institute) for arranging, and to Mr. A. Harrison and staff (Messrs. Jessop-Saville Ltd.) for carrying out the analytical work mentioned below; also to several of our scientific colleagues, notably Mr. D. W. Brown (Morgan Crucible Co.), for helpful suggestions and discussion.

Spectrographic analysis showed, apart from iron and normal slag-forming elements in all eight specimens, a significant amount of copper in one (No. 7), and traces of it in the others. A full chemical analysis carried out on No. 1 gave the following results:

SiO ₂	-	-	-	-	64.5%
Fe (as Fe ₂ O ₃)	-	-	-	-	12.0%
TiO ₂	-	-	-	-	1.0%
Al ₂ O ₃	-	-	-	-	13.7%
Mn (as MnO)	-	-	-	-	0.25%
CaO	-	-	-	-	1.5%
MgO	-	-	-	-	5.9%
P ₂ O ₅	-	-	-	-	0.08%
					<hr/>
					98.93%

All the specimens have a fairly porous structure and most of them (including No. 1) appear to carry a layer of hearth material on one side. A temperature of about 1100°C. or more might have been reached in the course of producing them.

For No. 1 the analysis tends to confirm the presence of hearth material (rich in silica and alumina). The high magnesia figure is interesting but not unusual, at least for regions where the ore might have been, or contained, *chamosite*, and or where a magnesium-rich limestone might have been used as a flux. The specimens are heterogeneous, and the fragment analysed may well have contained some material particularly rich in magnesium.

Two of the specimens, Nos. 6 and 8, differ from the others in appearance, being denser and resembling material of a higher iron content.

Firm interpretation would require more work than these isolated specimens seem to warrant. Considered in isolation, the evidence could indicate any of three activities: iron smelting, copper smelting or a coal fire taken to a high temperature in some unspecified connection.

Some coals from the Nuneaton area can give an ash containing iron in amounts equal to, and even greater than, that present in No. 1 (corrected for hearth material). Such a fuel slag could have been formed in the firing chamber of some structure designed to produce a very high temperature from coal, such as a metal smelting or glass furnace, or pottery kiln.

In the smelting of pyritic copper ores, the considerable quantities of iron oxide present after the roasting stage must be slagged off before the copper oxide can be reduced to the metal. If efficient, this process can result in a slag that is essentially similar to an iron smelting slag. Only when it contains copper, also, is it possible to interpret it with certainty.

The present evidence is divorced from any feature, and no firm reliance can be placed on such meagre association with other material as there is. No coal was found, and in any case its use for the purposes suggested above is here unlikely. The specimen containing a significant amount of copper (No. 7) showed no obvious differences in appearance from the others. There was no other evidence to suggest copper smelting.

On balance, the most likely connection of the specimens is with iron smelting. In particular, the two denser fragments, Nos. 6 and 8, are almost certainly iron slag, and if the others are associated with them, all could have been produced by the same process. In addition, the baked clay suggests the presence of "ironstone", and may even be associated with the smelting. Coal measures, probably with some ironstone bands, outcrop in the Nuneaton area, only some ten miles to the north-west.

REFERENCES

1. We are indebted to Dr. Vernon Wilson, The Geological Survey and Museum, South Kensington, for this information.
2. Squares 2-10, 13-20, 26-28.
3. Squares 16-23, 29-35, 39-46, 50-54, 58-61, 63-65, 68-69 and 70.
4. F.1, 3-6, 8-13, 16-21, 23-26, 28, 31, 39-40, 44-45, 49-50, 52-53, 55, 58, 60, 65-67, 70, 72-76.
5. Squares 42-46, 50-54, 58-60, 63.
6. Details of each feature have been deposited at Leicester Museum.
7. 52 (linking with 22 and 4), 55, 56, 66, 68.
8. 39, 40, 41, 70.
9. Squares 2, 3, 14, 15, 26 and 27.
10. 24, 26, 53, 54.
11. 61, 62, 64.
12. 69, 71, 73.
13. 42, 43, 46, 68.
14. 5, 14, 32, 47, 49, 51, 59, 60, 67, 75, 77, 78.
15. This clay level was also found beneath the road in Cutting A, but not in Cuttings B and D.
16. Not evident in the other road cuttings.
17. Only in Cutting C was this level found. Cuttings A, B and D revealed on the road surface.
18. Due to circumstances it was not possible to excavate Area 4.
19. Arthur J. Pickering, *Trans. Leics. Arch. Soc.*, 18 (1934), 10. This includes an excellent summary of all previous knowledge of the site.
20. H. Mattingly and E. A. Sydenham, *Roman Imperial Coinage* (1923-5).
21. Indicates find spot, i.e. Layer 5/grid Square 5. Where a feature is involved the number precedes layer number. The pottery, together with the plain samian, has been deposited in the Leicester City Museum (E.G.).
22. The field numbers marked on each sherd are given and the field sections with these numbers are deposited with the pottery in the Leicester City Museum (G.W.).
23. Detailed sections showing the layers indicated have been deposited in Leicester City Museum.
24. K. M. Kenyon, *Excavations at the Jewry Wall Site, Leicester* (1948).
25. C. F. C. Hawkes and M. R. Hull, *Camulodunum* (1947).
26. *Wroxeter I*, 1912, Fig. 20.
27. This piece, like Nos. 49, 51, 52 and 60, had been ploughed up and collected by Mr. Lees and form part of his collection.
28. Kindly identified at the Geological Museum, South Kensington.
- 29, 30 and 31. Drawn with the aid of an X-radiograph taken at the Ancient Monuments Laboratory.
32. Three pieces (all matching fits). These are seen essentially as (fragments of) two strips attached at an angle by means of a rivet. The X-ray evidence would also be consistent with brazing. Coppery metal is visible, running as thin sheet at least for the greater part of the strip—"backed" by a strip of iron itself (L. Biek).
33. There is some (visual and X-ray) evidence of "folding" and sandwiching of the main "horizontal" strip just to the right of the main rivet so that there would appear to be three thicknesses of iron at that point (L. Biek).
34. Drawn with the aid of an X-radiograph taken at the Ancient Monuments Laboratory.

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All finds from the site have been deposited with the Leicester City Museum.

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