

# The Roman Kiln Site at St. Luke's Road, Cowley, Oxford

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**SUMMARY.** *A watching brief, carried out on the known kiln site at Cowley, Oxford, during building operations, recovered material from a small 2nd century pottery tip, a late 3rd century stoke-hole and a pit of the same date. The main 2nd century product was mortaria; the main products of the late 3rd century were red colour-coated enclosed vessels and bowls, and orange ware jars. A re-examination of the distribution of features shows clearly that the areas investigated in 1940 and 1972 were used only for dumping until the late 3rd century when structural features began to appear. A number of potters' stamps, including examples from both mortaria and from red colour-coat bowls were found and are published in an Appendix with all other stamps found on Oxford kiln sites.*

**D**URING 1972 rescue work was carried out on the known Roman kiln site in the area of St. Luke's Road and Between Town's Road, Cowley, in the eastern suburbs of Oxford (SP 545041). The construction of a telephone exchange affected a large part of the site and observation work was carried out during the building work by myself and others on behalf of the Oxford Archaeological Excavation Committee. Our thanks go to the Post Office, for whom the site is being developed, and to Messrs. Waldens, the contractor, for permission to work on the site, and to Mr. Johnson, the foreman, for his assistance and tolerance.

## THE SITE (FIG. 1)

This has been for some time one of the better known kiln sites of the Roman pottery industry of the Oxford region and lies in the main area of that industry.<sup>1</sup> It was first discovered in 1934 when the Cowley Conservative Club was built north-east of St. Luke's Road.<sup>2</sup> No structures were recorded, but a quantity of pottery, mainly of 2nd century date, was recovered and is now in the Ashmolean Museum (acc. no. 1936. 151). It has not yet been published. Further pottery was found on this side of St. Luke's Road in 1969. This included late Roman colour-coated wares but is no longer extant.<sup>3</sup>

South-west of St. Luke's Road work was done in the winter of 1939-40 by the Oxford University Archaeological Society under the direction of Mr., now Professor, R. J. C. Atkinson.<sup>4</sup> No trace of these excavations was seen during the 1972 work, suggesting, as does the distribution of the features found in 1939-40,

<sup>1</sup> C. J. Young, 'The Pottery Industry of the Oxford Region', *Current Research in Romano-British Coarse Pottery* (ed. A. P. Detsikas) (1973), 150-115, Fig. 1.

<sup>2</sup> *Victoria County History of Oxfordshire*, I, 335.

<sup>3</sup> Seen by the author in 1969.

<sup>4</sup> R. J. C. Atkinson, 'A Romano-British Potters' Field at Cowley, Oxon.', *Oxoniensia*, VI (1941), 9-21.

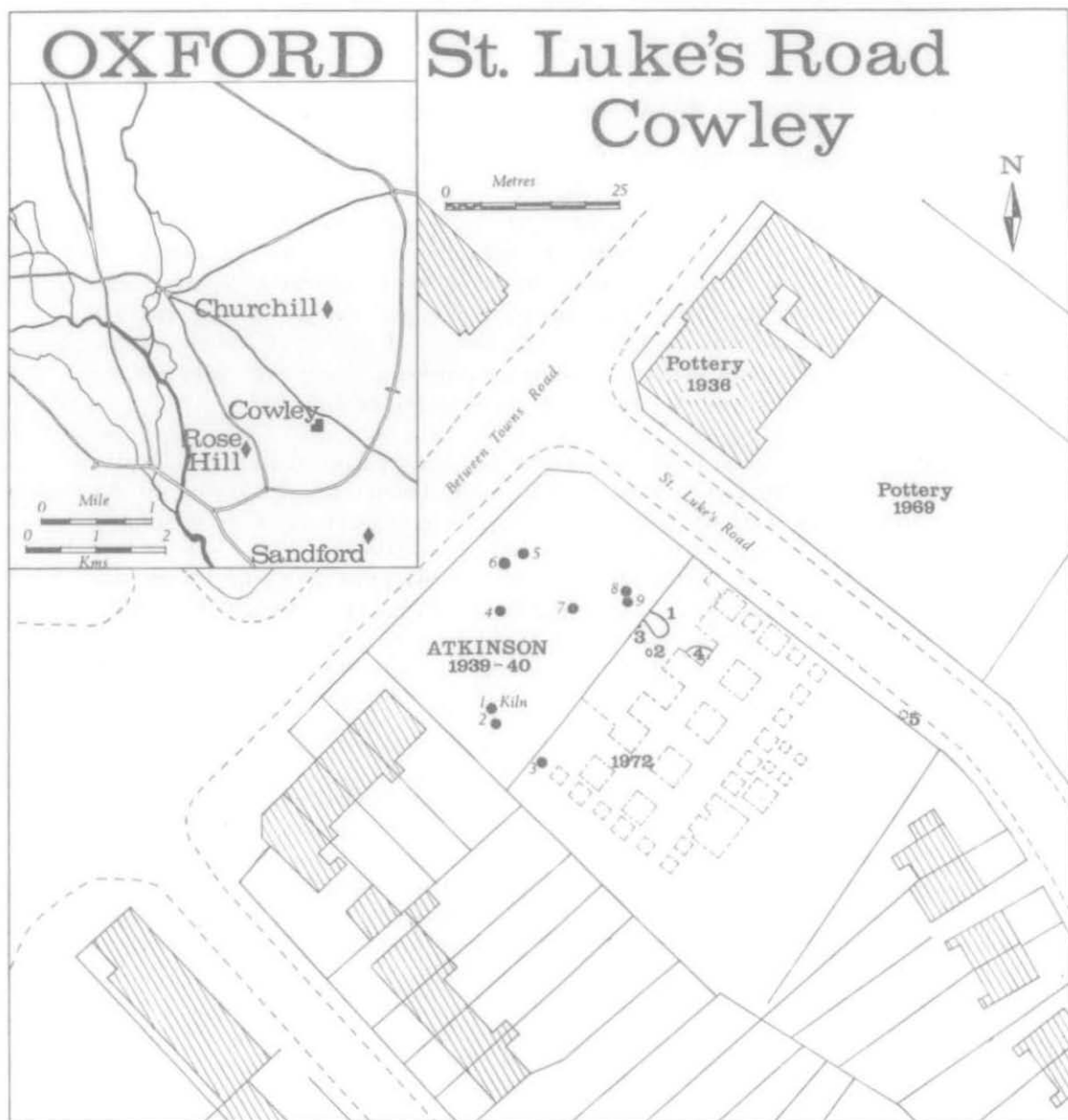


FIG. 1

St. Luke's Road, Cowley, site plan ; italic numbers refer to features found in 1940 (see p. 216). Based on the O.S. maps with the sanction of H.M. Controller. Crown Copyright Reserved.

that they were confined to the northern third of the site. The 1939-40 work located one kiln, the remains of another, ancillary structures such as puddling holes and a puddling table, waster and clay dumps, and a stone floor, perhaps the remains of a hut; this showed that the site had been used for potting from the early or mid 2nd century until the 4th century. Throughout this period, one of the major products was mortaria. In the 2nd and 3rd centuries the site produced a variety of other wares; in the late 3rd and 4th centuries a large amount of red colour-coated ware and some coarse wares were made.

#### THE 1972 RESCUE WORK

In April 1972 the building of a telephone exchange began on the area south-west of St. Luke's Road, previously used as a car park. This involved the destruction of archaeological deposits in the southern two-thirds of the area, as the building is supported on stanchions and has a large subterranean cable chamber (stanchion holes and cable chamber are shown on Fig. 1). It was possible only to carry out a watching brief and this could not be continuous as the digging-out operation continued intermittently over several months. It is possible, therefore, that some features escaped observation.

Overlying the whole site was c. 0.5 metres of topsoil and hard-core laid down for the car park. Under this was brownish-yellow sand which lay over bright yellow sand containing rafts of calcareous grit. Roman features were cut into the brownish-yellow sand and are listed below:

1. Pit which extended 4 m. into the cable chamber, varying in depth from 0.3 m. to 0.7 m. below topsoil. At its widest point it was c. 2.5 m. wide. It was filled mainly with black ashy soil, containing streaks of yellow sand, much kiln debris, burnt clay and pottery, and some fragments of stone. At the northern end there was a thick layer of red fired clay at the bottom of the pit, attaining a maximum depth of 0.6 m. in the northern side of the cable chamber, where stone retaining walls were visible on either side of the clay. This was probably the stokehole and part of the flue of a kiln. The furnace chamber itself must lie to the north of the cable chamber and was not affected by the building operations. The pottery from this feature dated to the late 3rd century (see below, p. 220).
2. Small circular depression, c. 0.85 m. in diameter and c. 0.1 m. deep. This contained much pottery, including sherds of stamped mortaria. It was presumably a small pottery tip of the 2nd century. Only a small quantity of the pottery could be recovered.
3. Small feature filled with dark ashy soil, containing some red kiln debris. It was seen only in the side of the cable chamber and did not contain any pottery. In section it looked like a post-hole.
4. Large pit filled with brown soil. It was over 1.5 m. deep and very large, although its diameter could not be ascertained. The pottery in it dated to the late 3rd century (see below, p. 224). This pit seems to have been similar to one found by Atkinson in 1940 and interpreted by him as a well.<sup>5</sup>

<sup>5</sup> *Ibid.*, 13.

5. Small pit seen in a sewer trench cut across the pavement of St. Luke's Road. A few sherds of late Roman pottery were recovered from it.

## THE FINDS

### Abbreviations :

<i>Churchill Hospital</i>	C. J. Young, 'Excavations at The Churchill Hospital, 1971 : Interim Report', <i>Oxoniensia</i> , xxxvii (1972), 10-31.
<i>Cowley, 1940</i>	R. J. C. Atkinson, 'A Romano-British Potters' Field at Cowley, Oxon.', <i>Oxoniensia</i> , vi (1941), 9-21.
<i>Oxford Pottery</i>	C. J. Young, 'The Pottery Industry of the Oxford Region', <i>Current Research in Romano-British Coarse Pottery</i> (ed. A. P. Detsikas) (1973), 105-115.
<i>Park Street</i>	H. E. O'Neil, 'The Roman Villa at Park Street, near St. Albans, Hertfordshire ; Report on the Excavation of 1943-5', <i>Archaeol. J.</i> , cii, 21-110.
<i>Shakenoak I-IV.</i>	A. C. C. Brodribb, A. R. Hands, D. R. Walker, <i>Excavations at Shakenoak</i> , i (1968), ii (1971), iii (1972), iv (1973).
<i>Verulamium</i>	S. S. Frere, <i>Verulamium Excavations</i> , i (1972).

With the exception of one nail from feature 4, all the finds were ceramic. The pottery from features 1, 2 and 4 is published here in full since a major difficulty in the study of the Oxford pottery industry has always been the shortage of associated groups of material from the kiln sites. Recovery of material from these features was of course far from total but it is hoped that the selection of sherds recovered, which was necessarily random, was also representative. It should be noted that, although these groups contain wares and forms not previously published from this site, the total range is in fact broadly similar to that of the surviving material from 1939-40.

In the catalogue of the pottery the following conventions have been used. The number preceded by P which is first given is that given to the sherd in the original recording of the pottery. This is followed by a brief description of the form of the vessel, if necessary. The description of the fabric gives first the texture and temper of the fabric, followed by its colour. (E = outside surface ; I = inside surface ; Bk. = cross section). Any special feature of the fabric, such as colour-coating or other surface treatment is described last. Potters' stamps are fully discussed in the appendix to this report. The features are listed in chronological order.

### Feature 2 (FIG. 2)

#### WHITE WARES

#### Mortaria

1. P.1 ; hard, sandy ; E, I orange-buff, Bk. off-white ; multi-coloured translucent quartzite grit.
  2. P.6 ; hard, sandy ; E, I buff with pinkish patches, Bk. off-white ; gritting as last. The pink patches are possibly patches of slip.
  3. P.2 ; hard, sandy ; E pink-buff, I buff, Bk. red with light grey-buff core ; gritting as last.
  4. P.4 ; hard, sandy ; E, I, Bk. off-white ; gritting as last.
  5. P.5 ; hard, sandy ; E, I off-white, Bk. off-white with grey core.
- Not illustrated : 1 sherd as no. 2, 6 sherds as no. 5, 13 body sherds. Examples of stamps nos. 2 and 5 occurred in this layer (see Appendix, p. 228). All these mortaria are typical Oxford products of the 2nd century in form and fabric. They closely resemble types in use at Verulamium in the early and middle parts of the century (*Verulamium*, Figs. 121, 130). Mortaria of the form of no. 4 had reached

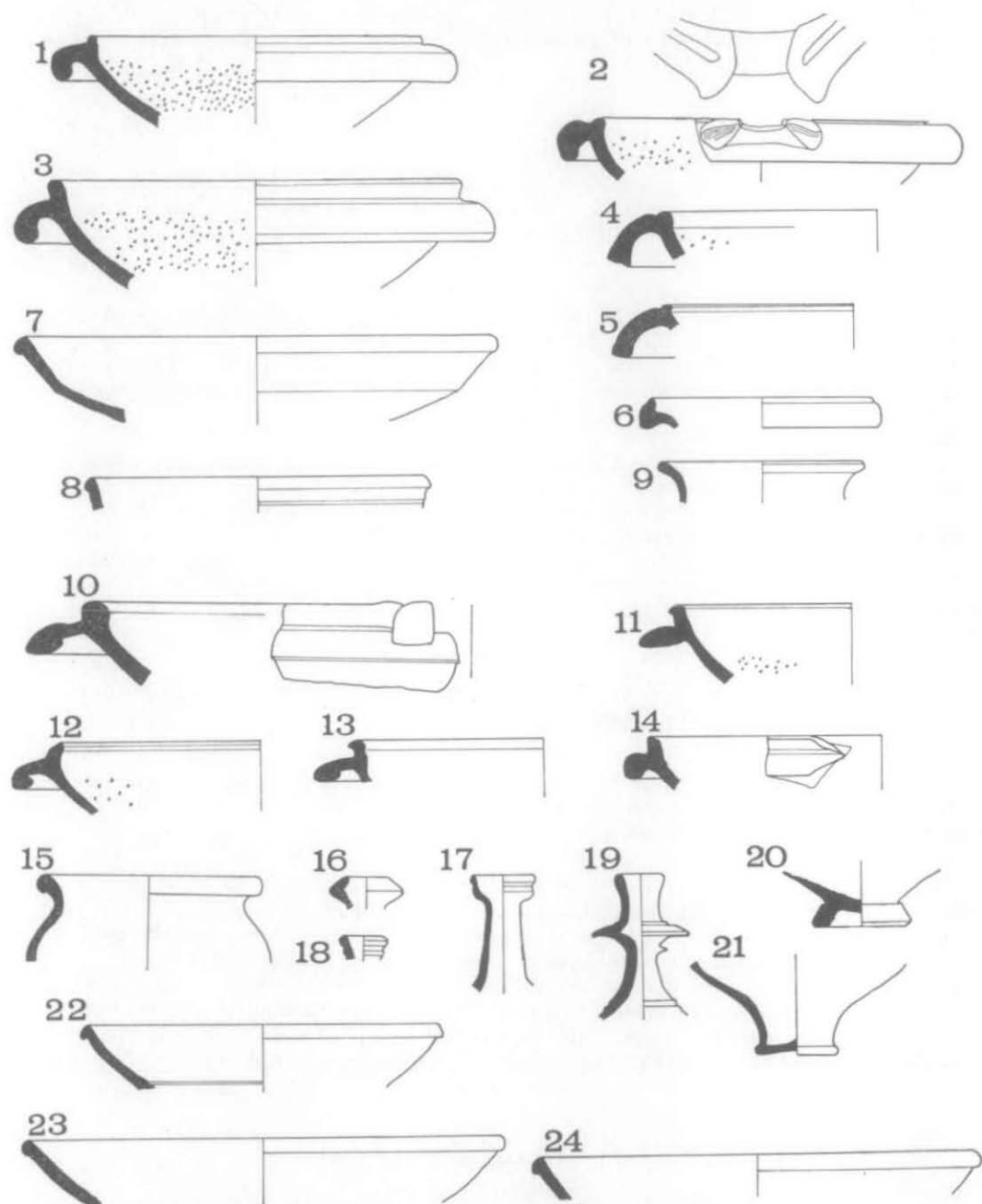


FIG. 2

St. Luke's Road, Cowley. Pottery, nos. 1-9, feature 2, nos. 10-24, feature 1. ( $\frac{1}{4}$ ).

Verulamium from the Oxford region by A.D. 150-155/160 (*Verulamium*, Fig. 129, 1010). Mrs. Hartley considers that the Oxford potters' use of stamps had ceased by c. A.D. 170 (*Shakenoak* II, 71-2, no. 173).

### Flagons

6. P. 10 ; hard, sandy ; E, I orange-off-white, Bk. off-white.

Form as *Verulamium*, no. 818, A.D. 150-155/160.

Not illustrated : P. 11, flagon neck, form probably as *Verulamium*, no. 566, c. A.D. 130-150, no. 811, c. A.D. 150-155/160 ; 22 body sherds of flagons, P.12 1 body sherd of flagon in ordinary white ware with exterior orange speckled purple-grey slip.

### BURNISHED ORANGE WARE

7. P. 13 ; imitation Dr. 18 ; hard, sandy, micaceous ; E orange, I and Bk. orange to brick-red, traces of burnish on outer and inner surfaces.

8. P. 14 ; rim of bowl, perhaps imitation Dr. 27 (see no. 36 for form) ; hard, sandy, slightly micaceous ; E buff-orange, I, Bk. orange ; traces of burnish on outer surface. Not illustrated : 1 sherd as no. 7, 4 sherds of flagons or jars.

Examples of this ware found in 1940, but not illustrated in the report include copies of Dr. 18, of Dr. 38, shallow bowls, wide-mouthed bowls and narrow-necked jars. The essential feature of this ware is its burnished surface and its use here in the imitation of samian is the earliest context in which this ware definitely occurs. It is found also in residual contexts in later groups from the site (see no. 27). At Shakenoak straight-sided bowls of a similar burnished ware were found in layers dating to the first half of the 2nd century (*Shakenoak* I, nos. 1-10), and a bead-rimmed hemispherical bowl was found in a deposit dated to c. A.D. 160 (*Shakenoak* II, no. 223).

### ORANGE WARES

Not illustrated : P. 15, sherd of enclosed vessel, grey ware with orange surface, burnished purpleish-orange bands on exterior.

### GREY WARES

9. P. 16 ; rim of jar or poppy-head beaker ; hard, sandy ; E, I, Bk. light grey, dark grey burnished patches on outer surface.

Not illustrated : 1 sherd, as no. 9, 1 body sherd.

### COLOUR-COATED WARES

Not illustrated : neck of flagon or bottle in grey ware, black colour-coat. This is the only sherd in this feature which is likely to be late Roman. It is presumably intrusive.

With the exception of the colour-coated sherd there is nothing in this group which is not 2nd century. The dating of the mortaria (see above) suggests a date before A.D. 170 for the group as a whole. Although the group is so small it is of interest in emphasizing yet again that even at this date the Oxford potters were strongly involved in the production not only of mortaria, but also of other specialized or fine wares such as imitations of samian forms.<sup>6</sup>

### Feature 1 (FIGS. 2, 3)

#### WHITE WARES

#### Mortaria

10. P. 56 ; hard, sandy ; E, I grey, Bk. off-white to grey ; multi-coloured translucent quartzite grit.

11. P. 55 ; hard, sandy ; E, I, Bk. grey ; grit as last.

12. P. 57 ; hard, sandy ; E, I, Bk. off-white ; grit as last.

<sup>6</sup> See also Young, *op. cit.*, 107.

13. P. 58 ; hard, sandy ; E, I off-white, Bk. pink ; grit as last.

14. P. 59 ; hard, sandy ; E, I off-white, Bk. off-white with light grey core ; grit as last ; one dot of red paint on rim.

Not illustrated : 1 sherd as no. 10, 1 sherd as no. 13, 3 of general type of nos. 11-13 ; P. 60, body sherd with row of red painted dots on outer surface ; 3 sherds as no. 4 (residual) ; 23 body sherds.

No. 14 is of the Churchill Type A variety of Oxford mortarium, common from A.D. 250 onwards (*Churchill Hospital*, Fig. 6, 26). No. 10 is a type made at the Churchill in the late 3rd century A.D. (*Churchill Hospital*, Fig. 5, 1). The remaining examples have a wide flange folded over at the tip. These do not correspond exactly to either of the dated Churchill varieties but occur in 3rd century contexts (*Shakenoak II*, nos. 341, 343, 344), and are considered by Mrs. Hartley to be 3rd century types (*Verulamium*, no. 1185).

#### *Other vessels*

15. P. 45 ; Jar ; hard, sandy, red inclusions ; E pinkish grey with blackening on rim and neck, I cream, Bk. off-white.

Not illustrated : 1 fragment of flagon neck, 22 body and base sherds.

#### COLOUR-COATED WHITE WARES

White ware vessels with colour-coats are extremely rare products of the Oxford industry. Seven sherds were found in this feature. Two of these were flange fragments, probably of bowls copying Dr. 38, one with a creamy-orange colour-coat, the other with a red one. The remainder were all body sherds and comprised a beaker sherd with orange-red colour-coat, a bowl base sherd and a bowl body sherd with red colour-coat, and two mortarium sherds with red colour-coat.

#### RED COLOUR-COATED WARES

##### *Enclosed Vessels*

16. P. 34 ; discus-rimmed flagon or bottle ; hard, sandy ; E, I, Bk. orange ; red colour-coat.

17. P. 32 ; cup-rimmed flagon or bottle ; hard, sandy, white inclusions ; E, I, Bk. orange ; red colour-coat on outer surface and on inner side of rim.

18. P. 31 ; ring-necked flagon or bottle ; hard, sandy ; E, I, Bk. pink-orange ; red colour-coat.

19. P. 33 ; flange-necked flagon with scar of one handle under flange, grooved at base of neck ; hard, sandy with white inclusions ; E orange, I pink, Bk. orange ; red colour-coat on outside and running down inside of neck.

20. P. 36 ; base, probably of enclosed vessel ; hard, sandy, red inclusions ; orange colour-coat.

21. P. 37 ; base of enclosed vessel ; hard, sandy, E, I, Bk. orange ; orange-red colour-coat on exterior ; the colour-coat on the underside of the base is crinkled, suggesting that the pot was stood on its base before the colour-coat was dry.

Not illustrated : 1 sherd as no. 19, 1 sherd as no. 22, 3 neck and 2 handle sherds of flagons, P. 38, P. 39, eleven body sherds of enclosed vessels with horizontal rouletted bands, 59 sherds of enclosed vessels.

##### *Bowls*

22. P. 24 ; imitation Dr. 31 R, with hooked rim, hard, sandy ; E, I, Bk. orange ; red-brown colour-coat outside, red on inside.

23. P. 22 ; imitation Dr. 31 R ; hard, sandy, white inclusions ; E, I orange, Bk. orange with buff-orange core ; red colour-coat.

24. P. 23 ; imitation Dr. 31 R ; hard, sandy ; E, I, pink-orange, Bk. pink-orange with buff core ; orange colour-coat.



Not illustrated : 7 sherds as no. 23, one as no. 25, 2 bowl bases with potters' stamps within rouletted circles (Appendix nos. 3, 4), 2 bowl base sherds with internal grooves, 8 bowl base sherds with internal rouletted circles, all probably from copies of Dr. 31 R ; 2 flange sherds from copies of Dr. 38 ; four body sherds.

The excavations at Shakenoak have isolated three varieties of Dr. 31 R copies, an early type with a hooked rim, as no. 23, a type with bead rim common throughout the period of manufacture of Oxon colour-coated ware, and a variety with a very fat bead rim, dated to the second half of the 4th century and not found at all in this deposit (*Shakenoak* II, 88 ; IV, 79). The same chronology is apparent at Park Street (*Park St.*, fig. 18, nos. 22, 23 ; fig. 21, no. 10).

### Jars

25. P. 30 ; wide-mouthed jar ; hard, sandy, micaceous with small white inclusions ; E, I, Bk. pinkish-red ; black colour-coat.

Jars of this type in red colour-coat ware are not common. Previous examples have been found at Cowley (*Cowley*, 1940, no. 33).

The chronology of the different types of red colour-coat ware has not yet been fully worked out. The only secure indication of date from this deposit is that given by the Dr. 31 R copies ; these are predominantly early and contain no definite late examples, suggesting a date in the late 3rd or early 4th century. The other types present would not conflict with this chronology.

### BURNISHED ORANGE WARE

26. P. 52 ; straight-sided bowl with slightly chamfered base ; hard, sandy ; E, I orange, Bk. pink-orange ; burnished surfaces.

Not illustrated : P. 50, P. 51, 2 body sherds of narrow-mouthed jars, both decorated with diagonal burnished lines between horizontal grooves and cordons. These must be residual.

### OTHER ORANGE WARES

#### Jars

27. P. 47 ; wide-mouthed jar ; hard, sandy ; E, I, Bk. orange ; smoothed on outer surface and on top of rim.

28. P. 48 ; form as last ; hard, sandy, micaceous ; E buff-orange, I buff-orange with grey-orange patches, Bk. orange with dark grey-orange core.

29. P. 49 ; form as last ; hard, sandy, white inclusions ; E pink-buff, I orange-buff, Bk. orange ; exterior and top of rim partially burnished.

30. P. 54 ; form as last ; hard, sandy ; E, I grey-buff, Bk. buff ; exterior and top of rim partially burnished.

Not illustrated : 3 base sherds, 8 body sherds with girth grooves, 38 plain body sherds, all of jars, fabric as nos. 28-30 ; 2 sherds form and fabric as no. 41, 3 body sherds with girth grooves, 20 plain body sherds, all of jars, fabric as no. 31.

This jar form is the most common type of Churchill orange ware (*Churchill Hospital*, Fig. 5, 6), made at that site in the late 3rd century. At Shakenoak these vessels were most common in the late 3rd century (*Shakenoak* II, nos. 309-315). Similar jars have also been found in late 4th century levels there (*Shakenoak* IV, nos. 679-681, 685), but it is noticeable that the earlier examples from Shakenoak often have undercut hooked rims while the later ones have heavy, rounded rims. If this difference has any chronological significance it suggests that nos. 29 and 31 at least are early rather than late within the period A.D. 250-400+.

### GREY WARES

Not illustrated : P. 46, 1 rim sherd of a jar, form as no. 31, 2 bases and 17 body sherds, all of jars, 1 base sherd of flat-bottomed bowl or dish.

See below p. 225 for discussion of the date and significance of this deposit.



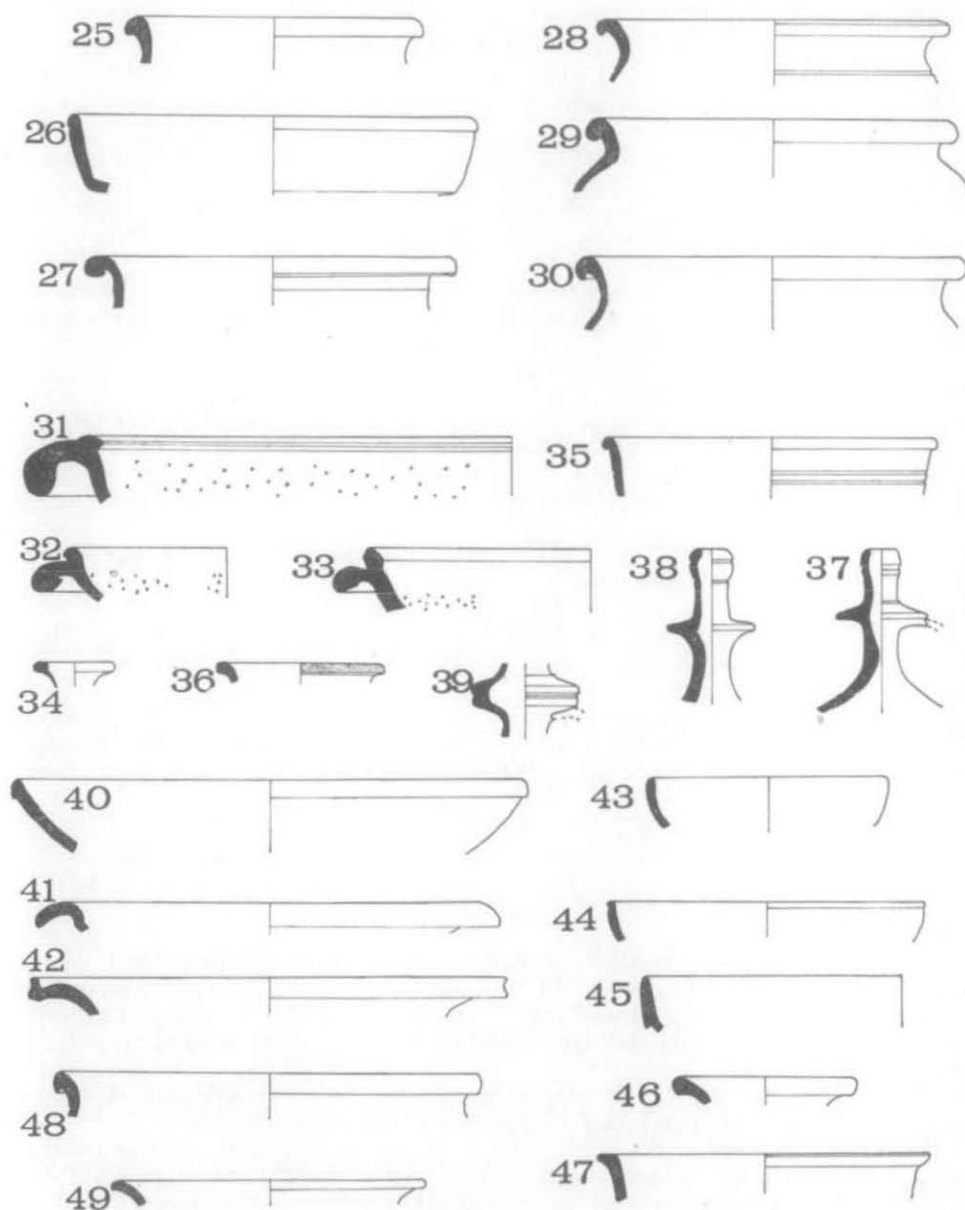


FIG. 3

St. Luke's Road, Cowley. Pottery, nos. 25-30, feature 1, nos. 31-49, feature 4. (1).

*Feature 4 (FIGS. 3, 4)*

This feature contained a few sherds of post-medieval pottery and cannot be regarded as a securely sealed group.

## WHITE WARES

31. P. 62 ; hard, sandy ; E, I off-white, Bk. pink to off-white ; multi-coloured translucent quartzite grit ; fragmentary maker's stamp (Appendix 1, no. 4) ; 2nd century.

32. P. 63 ; hard, sandy ; E, I light grey, Bk. pink-buff ; grey translucent quartzite grit ; date as no. 10 (*Churchill Hospital*, Fig. 5, 1).

33. P. 64 ; hard, sandy, black inclusions ; E, I, Bk. off-white ; surface coated with orange colour-wash ; gritting as last ; standard late Roman product of Oxford kilns, c. A.D. 250-400+ (see no. 14).

Not illustrated : 4 sherds as no. 5, 1 sherd as no. 10, 3 as no. 13, 1 as no. 14.

With the exception of the residual 2nd century sherds, a late 3rd century date best suits the mortaria in this feature.

*Other vessels*

34. P. 78 ; Flagon rim ; hard, sandy ; E, I cream, Bk. off-white ; this type was made in the 2nd century kiln sites in the Oxford region ; residual.

35. P. 81 ; imitation Dr. 37 ; hard, sandy, many red inclusions ; E, I, Bk. off-white ; fabric and form found on 2nd century Oxford kiln sites ; other examples found at Cowley in 1940.

Not illustrated : P. 79, rim sherd of trefoil-lipped jug, 1 as no. 35, 2 as no. 6, 1 rim and body sherds as no. 15, 41 body and base sherds.

## PARCHMENT WARE

36. P. 82 ; small, globular jar ; hard, sandy ; E, I parchment to off-white, Bk. off-white ; red paint on rim.

This is one of the less common types of the parchment ware made at certain Oxford kiln sites in the late 3rd and 4th centuries. A waster of this form, found here in 1940 (*Cowley, 1940*, Fig. 4, 28), suggests that this ware was produced at Cowley.

## COLOUR-COATED WHITE WARES

One body sherd of a white ware with external red colour-coat was found.

## RED COLOUR-COAT WARE

*Enclosed Vessels*

37. P. 70 ; disc-flanged flagon, scar on one handle below flange ; hard, sandy ; E orange, I purple grey, Bk. grey ; black colour-coat (see *Cowley 1940*, nos. 21, 34).

38. P. 71 ; bulbous-rimmed disc-flanged flagon, scar on one handle below flange ; hard, sandy ; E, I, Bk. pink-orange ; red-brown colour-coat on exterior, red matt colour-coat on interior.

39. P. 73 ; box-flanged flagon, rear of one handle below flange ; hard, sandy ; E orange, I, Bk. pink-orange ; dark brown-black colour-coat on outside.

Not illustrated : 1 sherd as no. 19, 2 bases as no. 20, 5 neck and 3 handle sherds of flagon, 1 rim sherd and 4 body sherds of rouletted beakers (form as *Oxford Pottery*, Fig. 3, 25), 1 body sherd of bulbous beaker with white painted decoration, 1 body sherd of indented beaker (form as *Oxford Pottery*, Fig. 3, 27), 5 base sherds and 104 body sherds, all of enclosed vessels.

*Bowls*

40. P. 65 ; imitation Dr. 31 R ; hard, sandy ; E, I orange, Bk. red-orange ; red-brown colour-coat.

41. P. 66 ; imitation Dr. 36 ; hard, sandy ; E, I dark orange, Bk. grey ; black colour-coat.

42. P. 77 ; variation of last ; hard, sandy, containing quartzite grit ; E, I orange, Bk. pink-orange ; traces of orange colour-coat.

43. P. 67 ; hemispherical bowl ; hard, sandy, white inclusions, E, I, Bk. orange ; red colour-coat.

44. P. 68 ; form as last, grooved below rim ; hard, sandy ; E, I, Bk. red-orange ; dark purple-red colour-coat.

Not illustrated : 4 sherds as no. 23, 5 sherds as no. 25, 5 rim and flange sherds of imitation Dr. 38. See above p. 222 for discussion of the date of these types.

#### *Mortaria*

45. P. 69 ; imitation Dr. 45 ; hard, sandy ; E, I, Bk. orange ; dark red-brown colour-coat.

Not illustrated : 2 sherds as no. 46, 5 body sherds.

All the types of red colour-coat vessel in this feature were made in the late 3rd century and certain of the Dr. 31 R copies were made only in the late 3rd and perhaps in the early 4th century (see above p. 222).

#### ORANGE WARES

46. P. 74 ; flagon ; hard, sandy ; E, I orange with purpleish patches, Bk. orange to pink-orange.

47. P. 76 ; straight-sided bowl with out-turned rim ; hard, sandy ; E, I orange, Bk. pink-orange.

48. P. 75 ; jar ; hard, sandy, quartzite inclusions ; E, I orange, Bk. pink-orange ; outer surface and top of rim smoothed.

Not illustrated : 1 sherd as no. 30, 1 as no. 48, 1 as no. 50, 5 sherds, form and fabric as no. 31, 32 body sherds of jars, 1 neck and 1 handle sherd of flagon.

The dating of the jars, the predominant product in this fabric, is discussed above, p. 222. The other forms in this group do not conflict with this dating.

#### GREY WARES

49. P. 80 ; jar ; hard, sandy ; E, I, Bk. light buff-grey.

50. P. 86 ; bowl, expanded out-turned rim ; hard, sandy, micaceous ; E, I, Bk. grey ; traces of dark grey outer surface.

51. P. 85 ; bowl ; hard, sandy, micaceous, quartzite inclusions ; E, I, Bk. grey ; patchy dark grey inner and outer surfaces.

52. P. 83 ; jar ; fabric as no. 53.

53. P. 84 ; jar ; hard, sandy ; E, I dark grey, Bk. white ; this black or grey-coated white ware is found on 2nd century kiln sites in the Oxford area.

Not illustrated : 1 sherd as no. 52, 22 body sherds in grey ware, 1 sherd, form and fabric as no. 55, 1 body sherd fabric as no. 55.

The range of fabrics and forms in features 1 and 4 are very similar, so their date and significance is discussed jointly. The similarity and the proximity of the two features suggest strongly that they are part of the same complex. Within each group colour-coated wares make up about half of the whole. If quantities of different fabrics within kiln waste tips is at all relative to the quantities of those wares actually produced, colour-coated wares must have been the main product of this kiln, with the orange ware as the chief subsidiary product. The amounts of other fabrics present are much smaller. It is not possible to say whether they were actually produced in the complex under consideration or whether they are stray sherds from other kilns in the near vicinity,

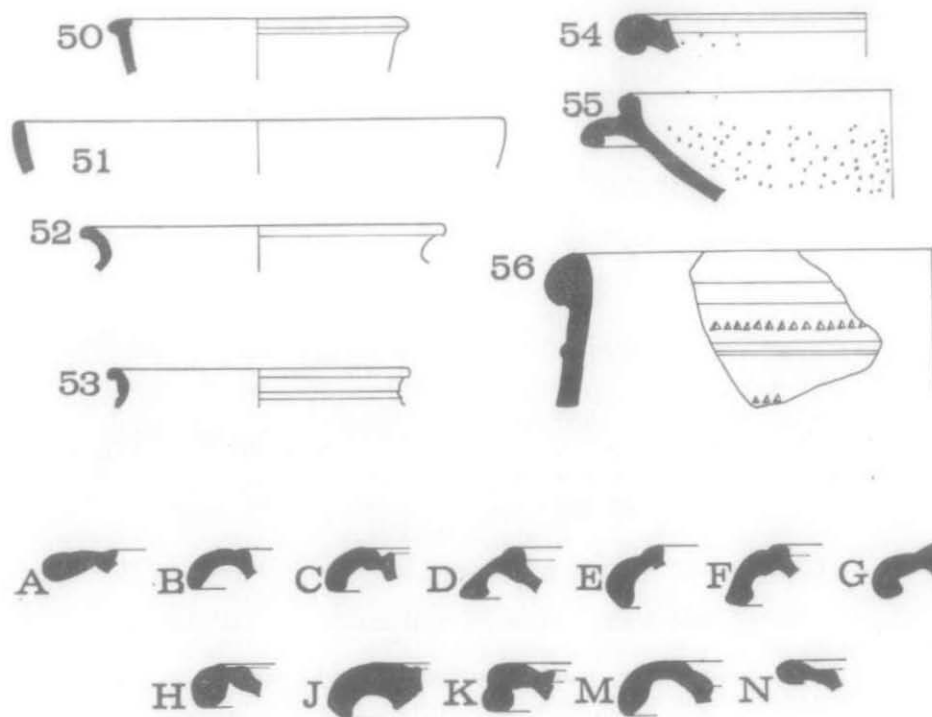


FIG. 4

St. Luke's Road, Cowley. Pottery, nos. 50-53, feature 4, nos. 54-56, unstratified ; A-N profiles of stamped mortaria from the Oxford region. (4).

especially as the 1940 excavation produced ample evidence of the production of such vessels as mortaria at about the same date.

The main colour-coat products were flagons and other enclosed vessels. A number of bowls, principally copies of Dr. 31, were produced and it is possible that the few colour-coat mortaria sherds were also made in this complex. The very high proportion of flagons and beakers is unusual as the most successful and common Oxford colour-coat vessels were bowls and mortaria. The principal product in orange ware was the necked jar with girth grooves, as was the case with the similar ware made at the Churchill Hospital site. The orange ware jars, one variety of the Dr. 31 copies, and most of the white ware mortaria present, are not likely to be later than A.D. 300 and none of the other vessels in the two features is definitely later than that date. The colour-coat vessels on the other hand are not earlier than A.D. 250 and it would seem that the date of the two groups of pottery must lie within the second half of the 3rd century.

#### UNSTRATIFIED POTTERY (FIG. 4)

Only a few unstratified sherds were recovered. The following types, not already represented in the stratified groups, were found :

56. P. 18 ; mortarium ; hard, sandy ; E, I off-white, Bk. light pink-buff ; multi-coloured translucent quartzite grit ; 2nd century.

57. P. 20 ; mortarium ; hard, sandy ; E, I off-white, Bk. light pink ; gritting as last ; 3rd century (*Shakenoak* II, no. 344).

58. P. 22 ; cylindrical vessel ; hard, sandy, slightly micaceous ; E, I dark orange,

Bk. orange ; cordoned and rouletted on the body ; the inside of the vessel is stained black. It is difficult to find parallels for this sherd. It seems most likely that it is part of a modern open-ended cylindrical vessel, used until quite recently for forcing the growth of rhubarb.<sup>7</sup>

Not illustrated : 1 stamped sherd of mortarium (Appendix, no. 10).

#### CONCLUSIONS

The 1972 work at Cowley is important in two main respects. Firstly, further information was gained on the distribution of Roman features. From the plan (FIG. 1), it seems that the main centre of the site lies north of the area investigated. If the features are divided up on a chronological basis this impression is accentuated. The bulk of the pottery now surviving from the 1934 discoveries is 2nd century, although the sample is so small that it cannot be taken as a secure indication.

The principal structures found by Atkinson were a kiln (1)<sup>8</sup>, a pair of puddling holes (2), and a pit (3) on the south-west side of his excavations, a second pair of puddling holes and a puddling table (6), a stone floor covered by debris, probably of domestic occupation (7), and a destroyed kiln (8). All these features were dated by Atkinson to the late 3rd or 4th century. In the case of (1) and (2) this can be checked by reference to the published material,<sup>9</sup> which dates to the period A.D. 250-400. One of the puddling holes of (6) contained a mortarium and a parchment ware jar of the same date.<sup>10</sup> He dated (3), (7) and the destroyed kiln at (8) to the late 3rd or 4th century.<sup>11</sup> From this it would seem that all the structural remains date to the expansionist period of the Oxford kilns. The 1972 features 1 and 4 are of this date also.

The waster dumps, on the other hand, at (4), (6) and (8) present a different picture. The dump at (8) apparently contained only 2nd century material, while over half the pottery of both the other dumps was of 2nd century date. If these datings are accurate it is clear that before the expansion of the Oxford industry after A.D. 250 the area in which excavation has taken place was used only for dumping, suggesting that the 2nd century kilns lie to the north or east of the 1940 excavations. It was only in the period of the greater expansion of the industry that this area was utilized for anything except dumping. This perhaps signifies a growth of activity on the site to cope with increased demand.

The second respect in which the 1972 work is significant is the recovery of the two late 3rd century pottery groups. In particular it is important that they can be dated to that period since so few closely dated Oxford wares have yet been published. Also they perhaps indicate a certain degree of specialization within a large kiln site, since it is clear from the 1940 work that Cowley was producing mortaria in white ware at this date. These features, however, contain few mortaria and obviously the potters making them concentrated on colour-coated and orange wares. It can also be suggested that these potters were making very few vessel forms at the time when these dumps were building up.

<sup>7</sup> I am grateful to Mr. P. D. C. Brown for this suggestion.

<sup>8</sup> Numbers in parentheses refer to those in *italic* on Fig. 1.

<sup>9</sup> Atkinson, *op. cit.*, 18.

<sup>10</sup> *Ibid.*, Figs. 4, 28; Figs. 5, 76; p. 14.

<sup>11</sup> *Ibid.*, 13, 14, 15 respectively.

Regrettably, without very much more work than could be done, it is impossible to say whether this concentration was merely the result of one or two firings to fulfil particular orders, or of stockpiling of certain types, or was really the result of genuine long-term specialization.

## APPENDIX

### POTTERS' STAMPS FROM THE OXFORD KILNS

It has long been known that the Oxford region potters stamped their wares at two periods. In the second century stamps were impressed upon mortaria and in the late Roman period upon red colour-coat vessels copying samian ware. Few of the stamps found on the kiln sites have been published and none has been adequately illustrated. The discovery at Cowley in 1972 of a number of mortarium stamps including one previously unknown, and of two new imitation samian stamps provides a suitable opportunity for full publication and the purpose of this appendix is to make accessible a corpus of all the stamps known to have been found on Oxford kiln sites. It is not intended that this should anticipate the full study of stamped mortaria being undertaken by Mrs. Hartley or of the imitation samian stamps being made by myself as part of a wider study of the Oxford industry. Only stamps found actually on kiln sites have been included. I am grateful to the authorities of the Ashmolean Museum, Oxford, and of the Buckinghamshire County Museum, Aylesbury, for permission to publish material in their collections.

### MORTARIUM STAMPS (FIGS. 4, 5)

Stamped mortaria have been found on six Oxfordshire kiln sites. Five of these sites lie close together in the northern focus of the industry, the sixth, Allen's Pit, Dorchester, in the southern area of activity.<sup>12</sup> The stamps are listed by sites in alphabetical order. References to vessel forms refer to the rim profiles illustrated in Fig. 4.

#### *Blackbird Leys*

This site was destroyed by housing development in 1961. Pottery recovered by Mr. D. Sturdy from three kilns and various other deposits shows that the site was in use in the 2nd century and produced mortaria, flagons and bowls. One stamped mortarium was found.<sup>13</sup>

1. Herringbone stamp; vessel form A. (Ashmolean Mus., 1972. 1956).

#### *Cowley*

See above for full discussion of this site. Examination of the stamps shows that they fall stylistically into four separate groups, perhaps reflecting the activities of three separate potters or groups of potters.

- (a) Stamps with names: One die only, that of Vossullus is represented here. Two examples were found in 1934, twenty-one in 1940 and one in 1972.
2. Stamp divided into two zones: upper with chevron pattern, lower reading either VOSSULLUS or VASSULLUS. The impression of the stamp is frequently incomplete. Vessel forms B, C, D, F.
- (b) Quadripartite stamps: The characteristic feature of these stamps is their division into two large and two small rectangles. Each of these zones is filled with meaningless patterns. The impression of the stamp is frequently incomplete.
3. Nine examples found in 1940. Vessel form B.

<sup>12</sup> Young, *op. cit.*

<sup>13</sup> I am grateful to Mr. D. Sturdy for information on this site.

4. One example from 1940, fragmentary example from 1972, feature (4). Vessel form E.  
 5. One example found in 1934, three in 1940, two from feature (2) in 1972. Vessel form F.  
 (c) Stamps divided longitudinally: The characteristic feature of this group is a lengthwise division into two or more zones. One panel is always filled with herringbone pattern.  
 6. Incomplete specimen found in 1940. Vessel form B.  
 7. One found in 1940. Vessel form B.  
 8. One found in 1940. Vessel form G.  
 9. One found in 1940. Vessel form H.

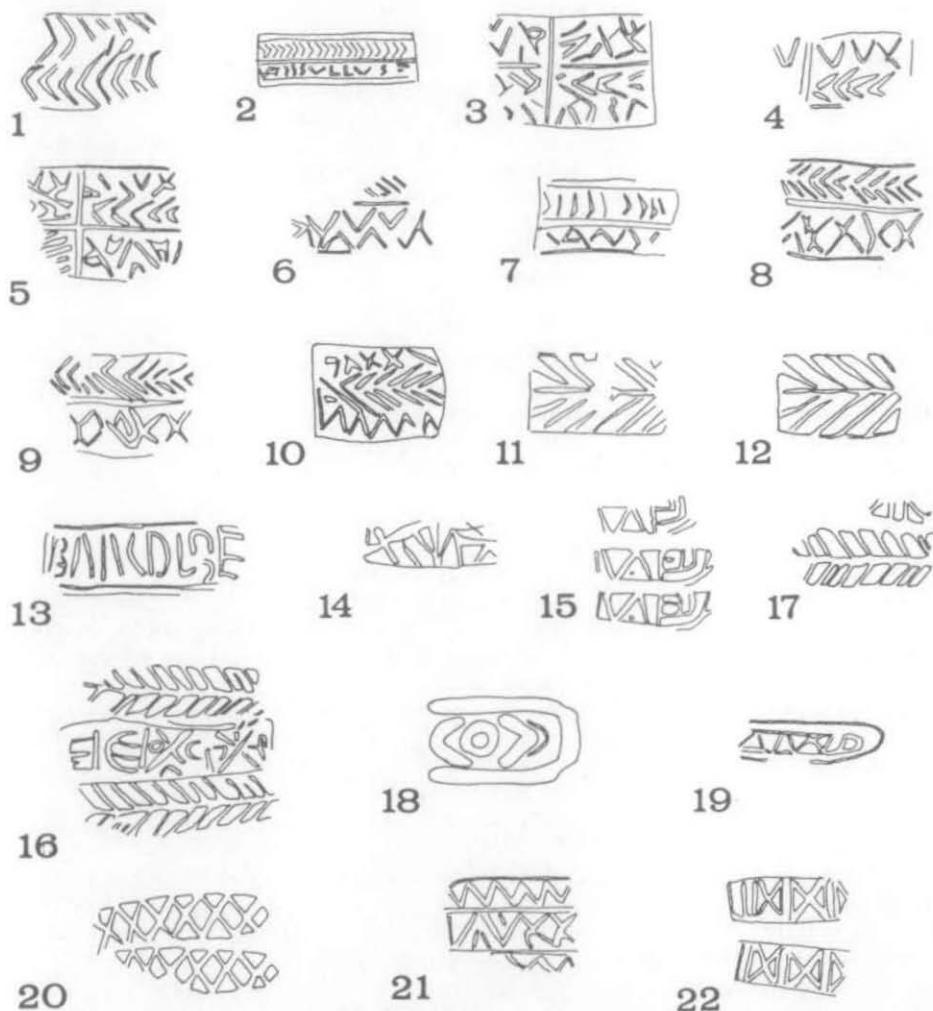


FIG. 5

Stamped mortaria of the Oxford region. 1, Blackbird Leys, 2-12, Cowley, 13-15, Dorchester, 16-19, Littlemore, 20-21, Rose Hill, 22, Sandford. ( $\frac{1}{2}$ ).



10. One found in 1972, unstratified. Vessel form B.  
(d) Herringbone stamps
11. One specimen found in 1940. Vessel form B.
12. One found in 1940. Vessel form B.

#### *Allen's Pit, Dorchester*

This site was dug in 1935.<sup>14</sup> Most activity took place in the late Roman period but the waste dump contained 2nd century pottery also. Three mortarium stamps were found.

13. This mortarium is not a product of the Oxford kilns. In fabric it best matches products of the kilns of the Verulamium area.<sup>15</sup> Vessel form J.
14. One example. Vessel form H.
15. One stamp repeated three times ; one specimen only. Vessel form K.

#### *Littlemore Hospital*

The pottery from this site was found during building operations in 1954.<sup>16</sup> The site produced mortaria and flagons, all of 2nd century date.

16. A herringbone stamp has been used to produce the border and a separate nonsense stamp has been used to produce this impression ; one example only. Vessel form M.
17. Fragmentary stamp, type probably similar to last ; one example only. Vessel form G.
18. One example only. Vessel form N.
19. One example only. Vessel form G.

#### *Rose Hill*

This site was excavated in 1935<sup>17</sup> and produced evidence of pottery manufacture from the 2nd to the 4th centuries. A stamped mortarium of the Verulamium potter Albinus was found. Two Oxford mortarium stamps are known from the site.

20. One stamp repeated twice ; one example only. Vessel form M.
21. One example only. Vessel form G.

#### *Sandford*

This site was excavated in 1879. The pottery was later published by Thomas May.<sup>18</sup> One mortarium stamp is known from the site.

22. One stamp, repeated twice ; one example only. Vessel form B.

Little can be said at present about these stamps. Close dating is not yet possible as so few Oxford stamps have been found in well-dated deposits. Typologically all are clearly of 2nd century date and none would seem to be much later than the third quarter of that century. The Littlemore ones, indeed, might well be somewhat earlier. The only other point to be stressed at this stage is that certain distinctive types of stamp (e.g. nos. 3-5) seem to occur only on one kiln site and probably reflect the activities of particular potters or groups of potters who worked only at those sites.

#### IMITATION SAMIAN STAMPS (FIG. 6)

Imitation samian stamps on Oxfordshire colour-coated vessels have been found on four kiln sites. In all cases the stamps are placed centrally across the bases of shallow bowls copying Dr. 31R ; almost invariably they are surrounded by circular rouletted bands. With one exception, none of the stamps found on the kiln sites is literate.

<sup>14</sup> D. B. Harden, 'Two Romano-British Potters' Fields near Oxford,' *Oxoniensia*, 1 (1936), 81-94.

<sup>15</sup> K. F. Hartley, 'The Mortarium Stamps', in S. S. Frere, *Verulamium Excavations I* (1972), 372.

<sup>16</sup> *Oxoniensia*, xix (1956), 118.

<sup>17</sup> Harden, *op. cit.*, 94-102.

<sup>18</sup> T. May, 'On the Pottery from the Waste Heap of the Roman Potters' Kilns discovered at Sandford, near Littlemore, Oxon, in 1879', *Archaeologia*, LXXII (1922), 225-242.

They were undoubtedly intended to imitate the stamps on the samian originals copied by the Oxford potters in the late 3rd and 4th centuries. Closer dating is difficult but the evidence from Cowley (see above p. 218) suggests that they date earlier rather than later within the production period of the Oxford colour-coated wares.

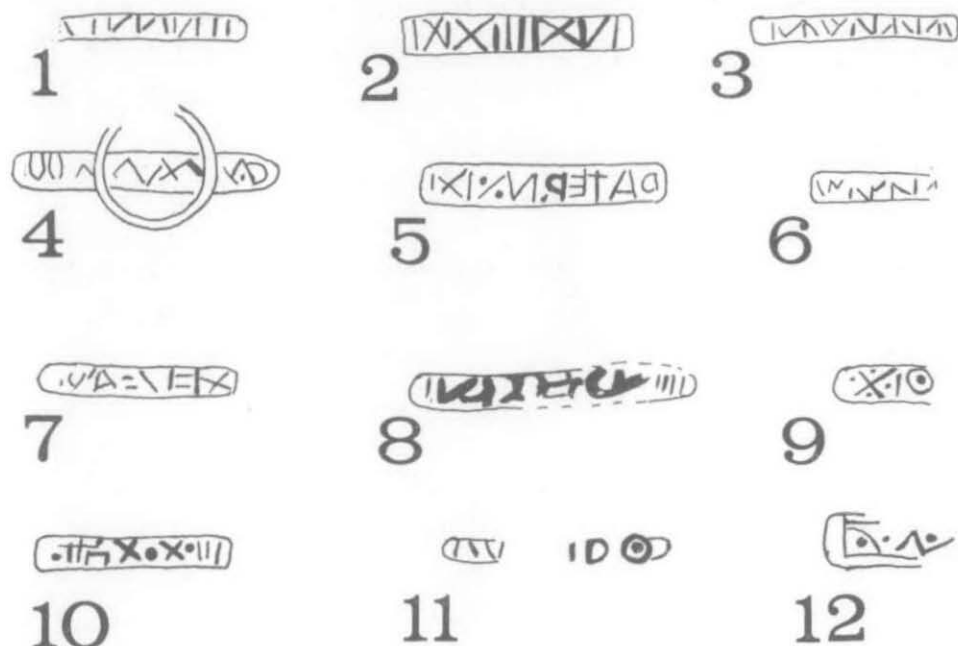


FIG. 6

Imitation samian stamps of the Oxford region. 1-4, Cowley, 5-7, Dorchester, 8, Rose Hill, 9-12, Sandford. (†).

#### Cowley

1. Nonsense stamp, found in 1940.
2. Nonsense stamp, found in 1940.
3. Nonsense stamp, found in feature (1), 1972.
4. Nonsense stamp, provenance as last.

#### Dorchester

5. This is the only remotely literate stamp found on an Oxfordshire kiln site. It reads retrograde PATERN. The remainder of the stamp is filled with nonsense patterns. From the potters' dump.
6. Nonsense stamp. From the potters' dump.
7. Nonsense stamp. Found near kilns.

#### Rose Hill

8. Nonsense stamp. Found in 1935.

#### Sandford

Forty-seven stamped sherds (including mortaria, samian and imitation samian stamps) were found here in 1879; only ten imitation stamps survived when May

published the material.<sup>19</sup> These have suffered further attrition and only four can now be identified. These are among the Hambleden collection in the Buckinghamshire County Museum. May seems to have worked on the material from Sandford and Hambleden in successive years and this probably accounts for the confusion of the two collections. The four stamps illustrated here do not correspond with anything noted from Hambleden but they are identical to four of the ten stamps published by May from Sandford.

9. Fragmentary nonsense stamp.
10. Nonsense stamp.
11. Worn nonsense stamp.
12. Fragmentary nonsense stamp.

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<sup>19</sup> *Ibid.*, 225.