A Romano-British Potters' Field at Cowley, Oxon.

By R. J. C. ATKINSON

A n accidental discovery during the autumn of 1939 has made it possible to add one more to the list of recorded Romano-British potteries near Oxford. A general description of these sites is to be found in the Victoria County History, and a detailed report on those at Dorchester and Rose Hill has appeared in a former volume of this Journal.

Attention was first drawn to the site by Capt. C. Musgrave, and again by the late Major G. W. G. Allen, both of whom collected a quantity of pottery found during the building of an air-raid shelter. Excavation was carried out during the winter of 1939-40 by members of the Oxford University Archaeological Society, under the direction of the present writer.

GENERAL DESCRIPTION OF THE SITE AND FINDS

The site (FIG. 2) lies on a piece of waste ground adjoining the E. side of Between Towns Road. The Roman road from Alchester to Dorchester is about 1,600 yards distant eastwards at its nearest point, while the potters' field at Rose Hill lies some 1,000 yards to the SW. The finds fall into three main

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1 V.C.H. Oxon., i, 303 ff.
2 Oxoniensia, i, 81-102.
Thanks are due to the vicar of Cowley, the Rev. A. G. Whye, for permission to excavate, and to Mr. Phipps of Between Towns Road, Cowley, for storage facilities; Miss Christina Butler and Mr. R. C. Treweeks have helped in drawing the pottery, and the Oxford City Engineer's Department kindly supplied the housing-plan on which the site-plan is based. Finally, the writer gratefully acknowledges the help given him in the preparation of this report by Mr. D. B. Harden, Miss J. M. Morris and Miss M. V. Taylor.

4 To simplify recording the mass of pottery, and to cover as much ground as possible, the site was covered by a grid of interrupted trenches, each consisting of a series of pits 6 ft. by 3 ft., separated by baulks 3 ft. square. Each pit could be excavated by a single person, and formed a convenient unit for the purposes of recording. Every sherd found was collected, so as to familiarise the members of the Society, many of whom had not excavated before, with the methods of recording. The pottery was washed bag by bag. All fragments of restorable pots, rims, bases, and decorated sherds were marked and kept. The remainder were thrown away after a count had been made of the various fabrics represented in each bag and the results entered on analysis sheets. The marked pottery and other finds, together with a large-scale trench-plan, have been deposited in the Ashmolean Museum.

The site has now been converted into allotments, but should it again become available for excavation it is hoped to obtain more detailed evidence than was possible in the time at our disposal.
groups: on the S. side a kiln, two puddling-holes, and a deep pit; to the W.,
two scattered dumps of wasters, a further pair of puddling-holes, and a puddling-
table; and on the N. side a destroyed kiln, a small dump of wasters, two dumps
of clay, and an occupation-floor.

The subsoil is sandy, with frequent rafts of rock. It was covered by 2 ft.
of sandy soil which had been much disturbed. No stratification was recognisable

and in the absence of any coins the pottery constitutes the only evidence of date.
Though there is slight evidence of pre-Roman occupation, the production of
pottery did not begin until the end of the 1st century A.D., and reached its
maximum during the later part of the 2nd century; it continued until the
middle of the 4th century, when the site appears to have been abandoned. It
is probable, however, that in this rural locality styles of form and decoration
lingered on after they had become obsolete in the urban centres, and it is there-
fore unwise to rely too much upon the dating evidence of pottery alone.
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THE KILN (PL. III, A, FIGS. 2-3).

The kiln was of Grimes' type A.1, 1 (round or oval updraught kilns with projecting support for the pot-chamber), and differed from those at Rose Hill and Dorchester only in size. The walls of the furnace-chamber and the projecting support were intact, and enclosed a mass of fragments of the collapsed

\[ Y \text{ Cymmerod, xli, 53.} \]
floor and roof of the pot-chamber, together with a few sherds of red colour-coated ware, which did not seem to have been deliberately incorporated in the structure. The kiln was orientated roughly NE.–SW., the stoke-hole lying on the SW. side with its long axis inclined to that of the kiln at about 45 degrees. The surviving walls of the furnace-chamber were 16 ins. and its floor 28 ins. below the modern surface.

**Stoke-hole.** This was an oval pit, excavated about 1 ft. into the sandy subsoil, and measuring 5½ by 3½ ft. Like its counterpart at Rose Hill it appeared to have had a retaining wall of rough stone slabs, one of which was found in situ. The floor sloped up slightly towards the furnace-chamber and was covered by a layer of ashes containing numerous fragments of pottery. Above this was a layer of clean sand, showing that the kiln was not destroyed immediately it fell into disuse. Above this again was a thick layer of débris extending right over the furnace-chamber.

**Furnace-chamber.** The furnace-chamber, measuring 3 ft. 10 ins. by 2 ft., was built of sandy clay on a raft of natural rock. The walls were 4 ins. thick and sloped outwards to increase the draught. A wall of the same material, resting on a block of limestone, projected from the back of the chamber, dividing it into two parts. At the back, where the heat would be greatest, the inner surface of the walls was covered with a thin vitreous layer; elsewhere the clay was burnt to a reddish-brown colour, fading to yellow on the outer surface. The entrance, 10 ins. wide, was formed of two piers, each of three lozenge-shaped limestone slabs bound together with clay. On the W. side a small, roughly-built buttress of stones supported a weak point in the chamber wall.

**Pot-chamber.** This had disappeared completely, but it was evident that the floor had been about 4 ins. thick, and pierced with at least ten vent-holes, made roughly with the fingers, and varying from 1–2 ins. in diameter. Numerous pieces of baked clay, about the size and thickness of a hand, and bearing the impress of grass and reeds, were found all round the kiln; it seems likely that the pot-chamber was constructed of these ‘bricks,’ perhaps over a domeshaped framework of osiers, and was wholly or in part rebuilt each time the kiln was charged. One of these ‘bricks’ was pierced with a hole, 2 ins. across, which had presumably served as a vent-hole or chimney in the roof of the pot-chamber.

**THE PUDDLING-HOLES OR SETTLING-TANKS (FIGS. 2–3)**

Six feet E. of the kiln were two pits, 9 ins. apart and 3 ft. in diameter, lined with a layer of grey puddled clay 3 ins. thick; at the bottom of each was a hole 9 ins. deep, filled with small stones and sand mixed with clay. It is thought
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that raw clay was diluted with water in these puddling-holes and mixed to a thin cream; the heavier impurities, such as sand and small stones, would sink to the bottom, leaving a layer of clean clay to be scraped off for use after the excess water had been removed by drainage and evaporation; in fact, these holes were probably a kind of settling-tank.

Both these puddling-holes appear to be contemporary with the kiln; the southern one was found filled with ashes and potsherds, and evidently served as a dump before the kiln was abandoned.

THE PIT (FIG. 2, no. 3)

Thirty feet ESE. of the kiln a section was cut across a pit 6½ ft. wide and 5½ ft. deep. The bottom was slightly rounded and the sides vertical to within 18 ins. of the lip; a small gulley or drain ran into it from the west. Water was encountered 3 ins. above the bottom, and unless the water-level has risen since Roman times it seems likely that this pit was used as the source of the water needed for the manufacture of pottery, in preference to the nearest stream, which is half a mile away.

The filling of the pit was irregular, with here and there small depressions distinguishable by their harder surface, containing ashes and fragments of 3rd or 4th century pottery. It may be that the shelter afforded by the half-filled pit was utilised for cooking fires, a conclusion strengthened by the fact that the majority of the animal bones from the site were found here.¹

THE WASTER DUMPS

Three dumps of wasters were found. The southern (FIG. 2, no. 4) contained about 1,250 sherds, lying mixed with blocks of limestone on a rough platform of stones measuring 4 ft. by 8 ft. 37% of the sherds were of mortaria, 37% of other white or buff fabrics, and the remaining 26% grey and red wares. Of the datable fragments some 60% were of the 2nd and 40% of the 3rd or 4th centuries A.D.

Twenty-five feet N. of this dump a puddling-table, a second pair of puddling-holes, and a second dump of wasters were grouped close together. The puddling-table was very like that found at Dorchester;² it consisted of a platform of carefully fitted limestone slabs covered with 3 ins. of grey puddled clay, and was probably used for kneading the raw clay to the right consistency. The puddling-holes were similar in size and construction to those already described; they were filled with loose stones, among which were fragments of

¹ The following species were identified: ox, pig, sheep or goat, horse, and red deer.
² Ovomutina, 11, 201.
a small olla (28)1 and a flanged mortarium rim (76), which date the filling up of these structures to the late 3rd, or more probably 4th century A.D.

The second waster dump was larger and more scattered than the first. It was only partially excavated, and appeared to continue beneath the adjacent air-raid shelter, during the building of which large quantities of pottery were brought up. The number of sherds recovered from this dump was about 1,800, of which 40% were of mortaria, 30% of other white or buff fabrics, and 30% of grey and red wares. Of the datable fragments 64% were of the 2nd, and 36% of the 3rd and 4th centuries A.D. Mixed with the pottery were numerous fragments of baked clay impressed with grass and reeds, the debris of another kiln, which could not be located in the time available.

Fifty feet ESE. was a third dump of wasters (FIG. 2, no. 8) closely packed in a small heap. It contained about 800 sherds, of which 40% were of mortaria, 50% of white wares, and 10% of grey wares, red fabrics being almost entirely absent. The datable fragments were all of the 2nd century A.D.

Close by was a thin spread of dirty yellow clay2 covered by a layer of burnt earth and ashes; at one end was a heap of large lumps of hard, grey, fired clay, evidently the remains of a destroyed smoother-kiln for grey wares. A few sherds of late 3rd or 4th century pottery were found in the clay spread. To the E. of this area were two small depressions in the natural sand, filled respectively with clean white and yellow puddled clay; sealed beneath one of these dumps was a 2nd century mortarium rim bearing the stamp of Vossullus (cf. p. 21, FIG. 5, no. 56).

THE OCCUPATION SITE (FIG. 2, no. 7).

Definite evidence of occupation, such as the pits at Rose Hill,3 was lacking. Part of a rough stone floor was uncovered 20 ins. below the surface; on it lay a large fragment of a cheese-press (FIG. 4, no. 23) and a small decorated strip of bronze (p. 16, PL. III, c). Above it was a 6 in. layer of black occupation earth containing ashes, animal bones, and fragments of 4th century pottery. It was not possible in the time available to determine the purpose and full extent of this floor.

THE FINDS FROM THE KILN AND PUDDLING-HOLES

The furnace-chamber yielded no restorable pottery, but the ash layer at the bottom of the stoke-hole contained numerous fragments (FIG. 4, nos. 5, 14 and 15, together with parts of three beakers, Collingwood type 85, with rouletting

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1 The pottery from the site illustrated in FIGS. 4 and 5 is referred to in the text by numbers.
2 For a similar clay floor round a kiln see Sumner, Excavations in New Forest Pottery Sites, p. 57.
3 Oxoniensia, 1, 99.
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on the shoulder, and a small imitation Samian bowl of form 38). Puddling-hole I contained eight sherds (FIG. 5, nos. 32-35, and 37-40), and puddling-hole II one sherd (FIG. 5, no. 36), an iron sickle (FIG. 4, no. 1) and two burnishing-stones (PL. III, B, 1-2).

There can be little doubt that the kiln and puddling-holes are contemporary, and form a single manufacturing unit; the finds from both may therefore be treated together. With one exception (FIG. 5, no. 40), all the decorated sherds can be paralleled among the stamped wares of Ashley Rails. If, therefore, we accept the chronology of the New Forest potteries suggested by Hawkes,1 we can place the upper limit for the date of this group of structures not much later than A.D. 330. For the later history of this part of the site some evidence is afforded by the burnishing-stones, one of which is only slightly worn, though the other shows signs of considerable use in the fine polish of the working surfaces. Curwen2 states that similar modern burnishers require about twenty years of use before they become really efficient; the present examples, therefore, were probably valued tools, not easily or soon replaceable, and thrown away only when their users had definitely ceased to manufacture pottery. The kiln appears to have been the only one on the site to have produced mid-4th century pottery of New Forest type; it shows no signs of having been rebuilt, and its effective life cannot have been more than a few years. We may therefore suggest that the potters purposely destroyed their plant and quitted the site for good not many years after A.D. 340; but it should clearly be understood that this is only a working hypothesis, which cannot be substantiated until more certain evidence of date becomes available.

THE SMALL FINDS

MISCELLANEUS

1. Iron sickle (FIG. 4, no. 1), found in puddling-hole II covered with raw clay still bearing the impress of grass and reeds. The butt end was corroded and broken off, and the method of attachment, whether by tang or socket, could not be ascertained. The form closely resembles that of the modern slashing-hook used for hedging, but the present example hardly seems suitable for such heavy work.

2. Burnishing-stone (PL. III, B, 1). A smooth water-rolled pebble, slightly worn on one edge.

3. Burnishing-stone (PL. III, B, 2) showing signs of considerable use. The main working surface has been worn concave, and there are four smaller worn faces round the edge, all of which have taken on a very high polish.

4. Pottery spindle-whorl (PL. III, B, 3), biconoid in section, nicked at the side of central perforation, probably to hold the end of the thread.

1 Antiquaries Journal, xviii, 113 f.
2 Antiquity, xv, 207.
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5. Fragment of bronze bracelet (PL. III, c) with incised decoration, the circles executed with a small drill. Cf. Lydney, fig. 17, E, K. From the occupation site; 3-4 cent.

6. Fragment of pottery gaming-board. Hand-made of coarse clay tempered with straw, with chequer-board pattern incised on upper surface. 2½ ins. thick.

EARLY IRON AGE POTTERY


SILURIAN

II-III. Two fragments of form 18/31.

IV. Fragment of form 36.

All these were from the S. waster dump (FIG. 2, no. 4). They were probably used as models for the many imitations of both forms which occurred on the site.

COARSE POTTERY (FIGS. 4-5).

About 15,000 sherds were collected, representing 10 sherds per cubic foot excavated. The fabrics manufactured on the site fall into 13 groups:

<table>
<thead>
<tr>
<th>Sherds per 1000</th>
<th>Mortaria, cream or buff fabric, usually with white wash or colour-coat</th>
<th>229</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Other buff fabrics with white wash</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>White or cream fabrics</td>
<td>250</td>
</tr>
<tr>
<td></td>
<td>White fabrics with black or grey colour-coat</td>
<td>58</td>
</tr>
<tr>
<td></td>
<td>White fabrics with red painted decoration</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Imitation Samian fabrics</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td>Red colour-coated mortaria</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>Red fabrics with stamped or rouletted decoration</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Other red colour-coated fabrics</td>
<td>181</td>
</tr>
<tr>
<td></td>
<td>Other red fabrics</td>
<td>92</td>
</tr>
<tr>
<td></td>
<td>Brown fabrics</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Grey fabrics</td>
<td>104</td>
</tr>
<tr>
<td></td>
<td>Red tile</td>
<td>8</td>
</tr>
</tbody>
</table>

1000

It should be emphasised that the above figures are for sherds, and are not, as they stand, an accurate indication of the number of whole vessels represented. The thinner-walled red and grey wares tend to break into a larger number of sherds per vessel than the thicker mortaria and larger vessels of white ware. Hence to get

1 For reasons of space common sherds with numerous parallels are not illustrated, and are distinguished by Roman numerals.

2 See p. 9 note 4.
FIG. 4
COWLEY, OXON., ROMANO-BRITISH IRON SICKLE (NO. 1) AND POTTERY FROM THE POTTERS' FIELD
Sc. no. 9 = 1; remainder ¾
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a true picture of the number of vessels involved the figures for mortaria and, to a lesser extent, for white fabrics should be increased, and those for red and grey wares diminished proportionately. Thus here, as at Rose Hill (Oxon., i, 94, n. 3), mortaria and white fabrics greatly predominate.

Stamps on coarse pottery.

Eight different stamps were found; one, IXIIXIIIIXI/I on the inside of the base of an imitation Samian form 18/31 (6) (Cf. Arch., LXXVII, 223, fig. 4), the remainder on 2 cent. mortarium rims. The stamp of VOSILLUS* occurred on 12 sherds, of which three are illustrated (44, 56 and 57); of the remaining stamps, that on 49 was found twice, the others once only.

Pottery from the stoke-hole.


vii. Form as last: red, brown colour-coat. Cf. Rose Hill, Oxon., i, fig. 20, 21.


27. Fragmentary globular vessel: applied band in relief and stamped crescents and dots; red, brown colour-coat. For the pattern cf. Sandford-on-Thames, Arch. LXXII, 231, fig. 3, 1.

Other fragments of this vessel were found, but it was not possible to reconstruct the pattern with any certainty. Probably the applied semi-spiral shown in Fig. 4 is part of one or more pairs of such spirals springing from a double applied band running vertically up the side of the vessel, and perhaps merging into a handle, cf. 24. In general character the pattern is not Roman, but recalls faintly the bold curvilinear patterns of south-western Iron Age B pottery, and perhaps provides further evidence of the 'break-through' of the native artistic tradition during the fourth century A.D., see Hawkes, Antiq. J., xviii, 113 f.

Pottery from the puddling-holes.

32. Small jar: red, red colour-coat; possibly an unguent-jar. Cf. Sumner, pl. xi, 4.

33. Wide-mouthed olla: girth-grooves; brown, brownish-black colour-coat.


35. As last: red, red colour-coat. Three very similar examples occurred on other parts of the site.

36. Bulbous beaker: two black-painted girth-grooves and a band of rouletting, the body panelled with impressed vertical stamped lines: red, red colour-coat. Cf. Collingwood 85.

37. Fragmentary bowl; grooved below rim, and decorated with stamped crescents, spiral, and eight-pointed rosette; red, brown colour-coat. Cf. Sumner, pl. vi, 13.

* For the cognate form VOSILLUS see Holder, Alt-Celtischer Sprachschatz, s.v. Both forms appear to be diminutives of a Celtic root voss-.
COWLEY, OXON, ROMANO-BRITISH POTTERY FROM THE POTTERS' FIELD
Sc. nos. 37-40 = \( \frac{1}{2} \); remainder \( \frac{1}{4} \)
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39. Fragmentary bowl: stamped spirals and eight-pointed rosettes; red, red colour-coat. Cf. Sumner, pl. vii, 8.

The stamped wares 36-39 are obviously closely allied to the pottery from Ashley Rails, and serve to date all the pottery from the stoke-hole and puddling-holes to mid. 4 cent. (see Hawkes, i.e.).

40. Fragmentary bowl: scale-pattern; red, brown colour-coat. Cf. Richborough, 229-231, and Wroxeter (1914), 73-74 (1 cent.). The new condition of this sherd, and its undoubted association with fourth century types, make it certain that this is a late copy of the early form.

Unstratified pottery other than mortaria.


6. Base of imitation Samian form 18/31: stamp and rouletted ring on inside (p. 18); red, burnished red colour-coat. 3-4 cent.

7. Fragmentary olla: white, grey colour-coat.

8. Fragmentary strainer or colander: red, red colour-coat. 3-4 cent.


11. As last: grey ware.

12. Fragmentary flagon-neck, handle missing: buff, overfired to grey. Cf. Sumner, pl. xviii, 7-9, 15. Late 3-early 4 cent.


16. As last. 2 cent.

17. As last. 2 cent.


19. As last: buff ware.

20. As last: red, black colour-coat.


24. Two fragments of a globular flagon: applied band below handle decorated with stamped crescents; grey, red colour-coat. Cf. p. 18, no. 27. Prob. mid. 4 cent.

25. Base of strainer, with foot-ring: white, grey colour-coat.

26. Bowl of mortarium form, but without grit on inside: white ware. 3-4 cent.

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29. Flat-rimmed bowl: grooved hole in base, perhaps to hold a perforated metal strainer; white ware.
30. Dish: white, white colour-coat. Possibly 2 cent.

Mortaria

Mortaria were very numerous and varied. Unless otherwise stated, they were buff, usually with a white or cream colour-wash.
42. As last. Cf. Wroxeter, 22, q8.
44. As last, with stamp vossullus. Late 1–early 2 cent.
45–60 are all of the 2–early 3 cent. bead-and-roll type. Nos. 56 and 57 bore the stamp vossullus.
62–79 are all flanged. An attempt has been made to show the possible stages in the evolution of the square rim (78, 79). The plain, slightly down-turned rim of 62 becomes broader and more complicated (63–67), is turned back on itself (68–70), and assumes an almond-shape (71, 72) which gradually becomes more rectangular (73–77) and finally almost square (78, 79).
79. Square rim: buff, grey colour-coat.
80–85 are transitional between the flanged and wall-sided types. In the north the type occurs in the late 2 and early 3 cent. (Corbridge (1911), fig. 8, 108–9, Balmuildy, pl. xlii, 45–48), but there is little evidence of its date in the south.
86–90 are wall-sided types of late 3–4 cent.
88. Imitation of Drag. 45: red, red colour-coat.
89. Form and ware as last. Spouted, probably in the form of a lion's face. Cf. Sumner, p. 38, and Arch. lxxii, 229, fig. 2, 14.
COWLEY, OXON.; ROMANO-BRITISH POTTERS' FIELD.

A. The kiln and stoke-hole (outlined with dark earth) looking N. (p. 11)

B. 1, 2, Burnishing stones (p. 15); 3, Pottery spindle-whorl (p. 15). Sc. 1/2

C. Bronze bracelet; development of pattern (p. 16). Sc. 1/2.