

REPORT ON THE EXCAVATIONS AT BROCKLEY HILL, MIDDLESEX,

AUGUST AND SEPTEMBER, 1951

By P. G. SUGGETT, M.A.

FOLLOWING the discoveries made in the Mound Cut during the 1950 excavations,¹ the Sulloniacæ Excavation Committee decided that there was scope for a further season's work on the same site in 1951. Permission was willingly given and a fortnight's digging was carried out from 19th August until 2nd September.²

The excavation had two main objects. The first was to examine a further portion of the bank (see Fig. 1) in the hope of finding other kilns sufficiently well preserved to throw light upon the design of the structure found in 1950. The second was to recover evidence from the ditch and to determine more precisely the relation between the bank and the layers beneath. Particular importance attached to the dating of the ditch in view of the local belief that it represented, if not a continuation of the Middlesex Grim's Dyke, at least a feature of considerable antiquity.

THE DITCH AND BANK (Plate 1 (*a*) and Fig. 2, No. 1).

The ditch, in its present form, was found to be of recent date. Beneath the layers of rubble and mixed filling deposited in modern times was found a silver-plated patch box lid of the period around 1790. This lay at the bottom of the fine soil forming the primary silting and may be regarded as contemporary with the making of the ditch.

There is strong evidence against the view that the present ditch follows the line of a more ancient dyke recut in modern times. In the soil composing the bank, by far the greatest proportion of Belgic pottery was found at a high level and overlay the few pieces of 4th century date that occurred. This is a normal stratification, had the ditch been first dug in modern times. A large medieval sherd was also found below the bank.

The bank is thus a modern accumulation. Had a ditch existed before the 18th century, it is necessary to suppose that the original soil was taken away before the making of the

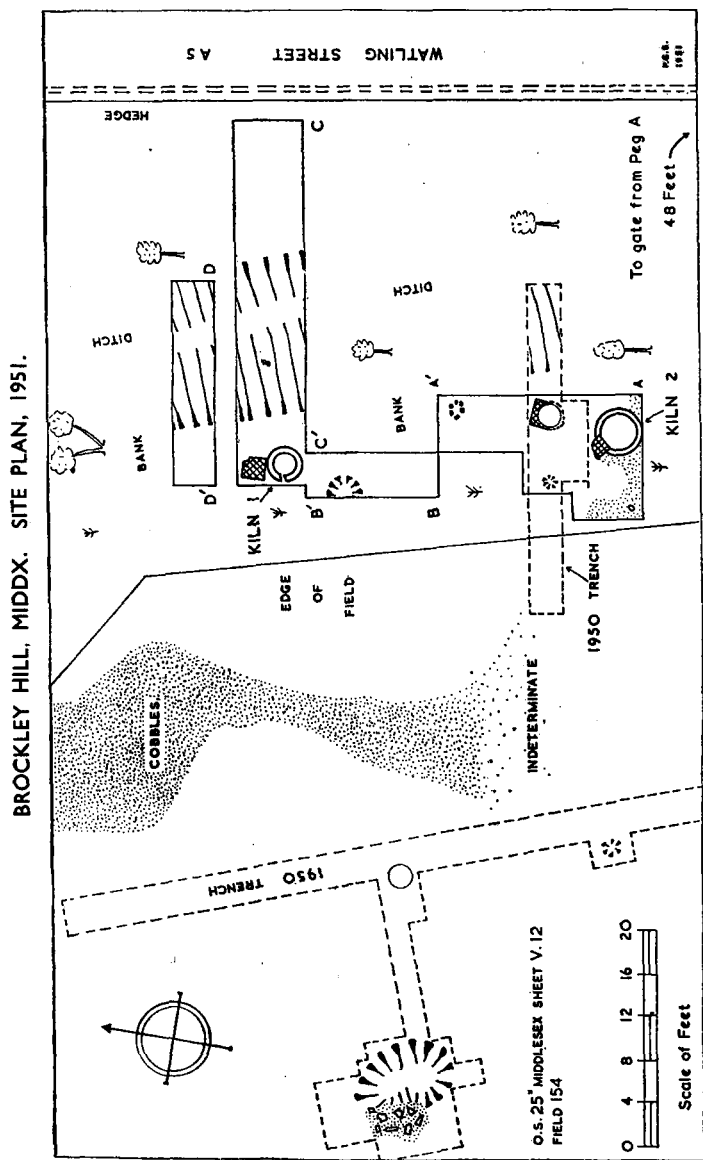


FIG. 1. PLAN OF 1950 AND 1951 EXCAVATIONS.

present bank, or that it had been deposited on the eastern side of the ditch and subsequently removed. Either supposition is unlikely. Whatever the truth, it is clear that the bank is unconnected with the kilns beneath.

KILN NO. 1 (Fig. 3).

Beneath the bank two more kilns were found, similar in design to that discovered in 1950. Both were in a very ruinous state, the northern kiln (Plate 1 (b)) being slightly the better preserved.

This kiln lay beneath a scatter of roofing tiles, doubtless the remains of a rough shelter which eventually collapsed after the kiln had been abandoned. Only the base of the kiln walls survived, standing to a height of 9-12 in. The kiln measured about 3 ft. in diameter and was filled with soft red burnt clay, pieces of tile and ashes. An opening in the walls on the west

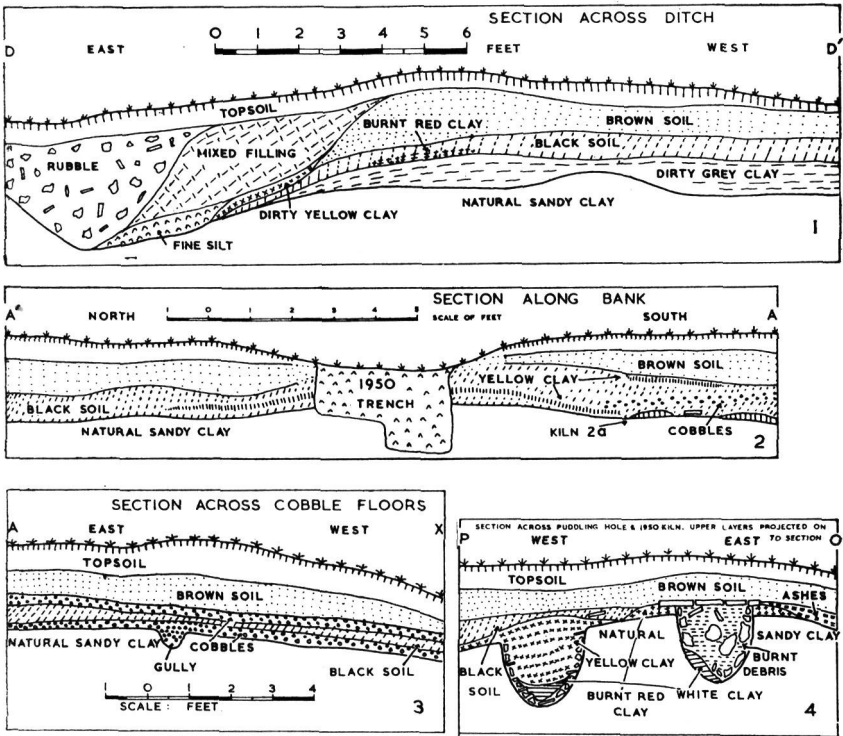


FIG. 2. SECTIONS.
 (1) DITCH, (2) ALONG BANK, (3) COBBLE FLOORS, (4) PUDDLING HOLE AND 1950 KILN.

side gave the appearance of a flue passage. No ashes, however, were found in it, and the absence of a similar opening in the southern kiln makes it safe to assert that neither kiln was fed from an external stokehole of the usual type. Below the burnt clay filling were found two lines of flat tiles set at right angles to each other; they clearly formed part of the structure, since the endmost tile of each line was built into the kiln wall.

No trace was found of the oven floor and it is quite possible that no permanent floor existed. Instead, some arrangement involving the use of loose components may have served the purpose.³ The advantage of a removable floor and supports is that the furnace chamber can be cleared of soot and ashes with the minimum of trouble. In this instance, the two lines of tiles at the bottom of the furnace chamber would provide the necessary firm surface on which the supports for the floor could rest.

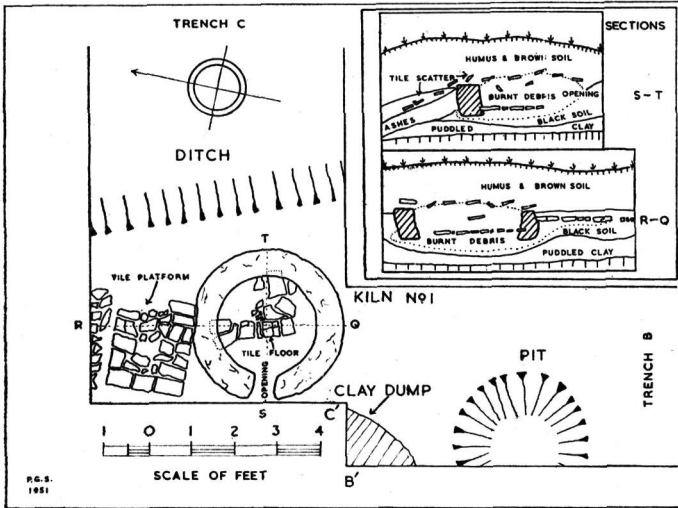
The square platform attached to the kiln on the north-west side is difficult to parallel. It was complete and consisted of tiles which were broken and showed signs of considerable wear. One of them bore the remains of a stamp. The purpose of the platform can only be guessed. It may have been used as a floor for the purpose of "wedging" the clay before it was put on the wheel. More probably it served as a hob on which the fire was lighted before being pushed into the furnace chamber. Hobs of baked clay or stone are not uncommon,⁴ situated at the end of flues of varying length. The present kiln dispensed with a passage of the usual kind and was equipped instead with a vent in the wall placed in the direction of the prevailing wind. It is suggested that this vent served a double function. When open, it would provide the draught necessary for complete combustion; on other occasions it could be closed to form a "smother kiln" when smoke was required for fuming the pottery.

The coarse ware found beneath the structure, taken in conjunction with a piece of Castor beaker and a Samian rim of form Drag. 35 of Hadrianic date from the ashey kiln waste, does not allow a closer dating than A.D. 90-150.

KILN NO. 2 (Fig. 3).

The southern kiln was almost a replica of the northern one. It was built upon the remains of an earlier kiln which had not been completely dismantled. The accumulation of debris was

BROCKLEY HILL 1951. KILN No. 1.



BROCKLEY HILL 1951. KILN No. 2.

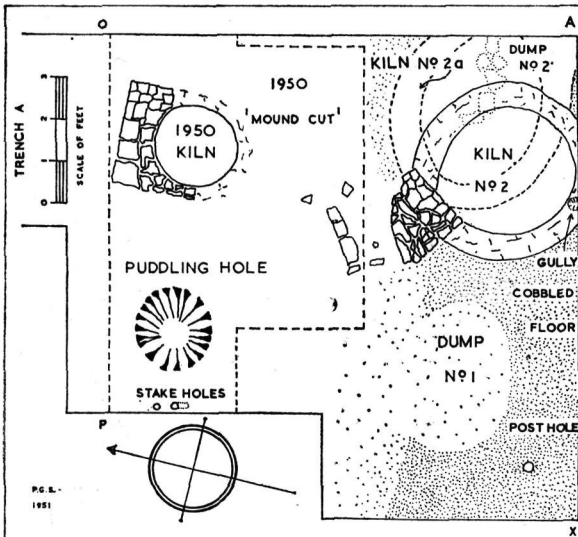


FIG. 3. DETAILED PLANS OF KILNS.

much deeper at this end of the site suggesting that there had been activity over a longer period than in the case of Kiln No. 1.

The walls of this kiln had been destroyed practically to the level of the cobble floor which adjoined it to the west.

DESTRUCTION OF THE KILNS.

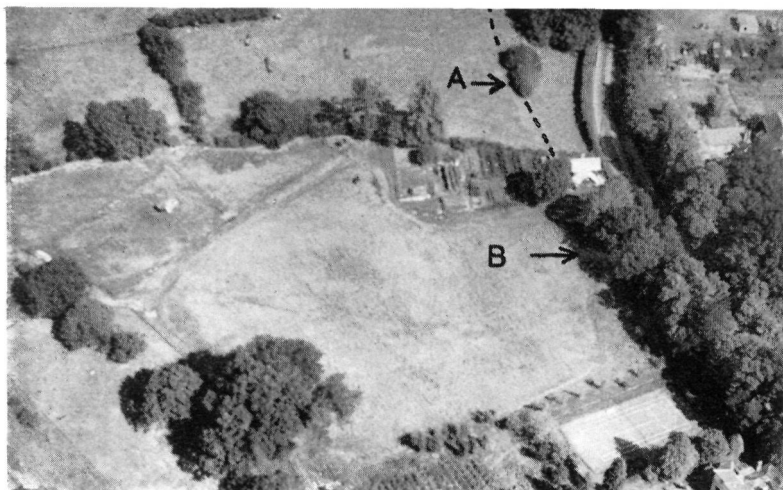
Both kilns seemed to have been deliberately destroyed. The reason was not immediately apparent, since it was unlikely that the structures had contained material which it would have been worth while to remove. Examination, however, of the pottery found at kiln level showed that the soil had been seriously disturbed. In addition to several fragments of 4th century date, there occurred a large portion of a shallow bowl with glaze on the inside, belonging to the 16-17th century. There can be no doubt that at some time after the kilns were abandoned the site was cleared and put under cultivation, probably during the earlier part of the 4th century, and continued to be cultivated until recent times.⁵

FUNCTION OF THE KILNS.

The walls of both kilns were unusually soft and could be scraped away quite easily with a trowel. In addition, no pieces of fused clay were found such as normally occur in the ruins of pottery kilns. Doubts arose during the excavation as to whether these structures had, in fact, been true kilns employed for firing pottery to a biscuit state. It was suggested that they might have been drying ovens whose purpose was to harden the shapes before firing. Drying is an essential preliminary to firing and, in modern potteries, entails the use of a separate chamber in which the vessels can be protected and the rate of drying controlled. In addition, the surface of the vessels must be rendered sufficiently hard to allow the application of a finishing coating and stacking in the kiln itself to be carried out without damage. On the other hand, the quantity of burnt debris in the furnace chamber of Kiln No. 1 seemed to point to the use of greater heat than would be needed in the case of a simple drying oven. It is, however, possible that Roman practice differed from the methods employed to-day.

THE COBBLED FLOORS (Fig. 2, No. 3, and Fig. 3).

Associated with the kilns at the southern end of the site were found two working floors made of small pebbles. Beneath



[Photo by R. K. Powell

(a) AERIAL VIEW SHOWING A. CONTINUATION OF DITCH TO NORTH.
B. THE SITE.



[Photo by T. Kirwan

(b) KILN NO. 1 LOOKING WEST. TILE PLATFORM TO RIGHT.

the lower floor, resting on the natural clay, lay a much corroded *as* of Domitian. The later floor was separated from the earlier by a layer of soil varying from 1-6 in. in depth. Nothing precisely datable was found in this soil, and the later floor cannot be dated more closely than the earlier part of the 2nd century.

THE PIT AND POTTERY DUMPS (Figs. 1 and 3).

Close to the kilns were three depressions in the natural clay filled with small pieces of pottery. They were not sealed, but threw an interesting light upon the general arrangements of the kilns. The pit attached to Kiln No. 1 contained about 400 sherds. They included fragments of at least four Samian vessels of 2nd century date and a small amount of pottery which did not appear to be of local make. Besides the pottery three pieces of coloured glass were found; these had belonged to two elegant flasks and a bowl of 1st century type. The dumps were smaller, containing about 200 sherds each, and were filled entirely with kiln ware, a remarkable feature being the number of jar bases whose sides appeared to have been broken off deliberately.

The small size of the pieces makes it certain that we are not dealing with normal "waster" dumps. Although the heaps were completely excavated, it was not possible to reconstruct any whole vessels from the pottery. Similar accumulations of small sherds were found at the kilns at Silchester, where they were mixed with the clay that was used for building and repairing the kilns.⁶ The close proximity of the pit and dumps to the kiln suggests that this was their purpose on the present site.

The presence of the non-local pottery in the pit is probably without significance: the potters would have used a variety of wares, both as models for their own products, and for their everyday needs, and the fragments would tend to be widely diffused. It should not be forgotten that the kilns lie within 50 ft. of the huts discovered in 1950.

THE COBBLED AREA (Fig. 1).

A short distance to the west of Kiln No. 1 a hard surface giving the impression of cobble flooring was detected by the probe. Its shape suggested the presence of a building, but it was not possible to explore it owing to lack of time.

THE PUDDLING HOLE (Fig. 2 and Fig. 3, No. 4).

An accumulation of yellow clay had already been noted in 1950 lying to the west of the kiln found in that year. It was found to cover the remains of a puddling hole which had been dug for a depth of 2 ft. into the undisturbed clay. The sides of the hole had been strengthened by a packing of broken tiles, and a white substance, either clay or fuller's earth, was found at the bottom. This hole may have been used for preparing the white slip commonly applied to red fabrics to improve their appearance.

CONCLUSION.

This part of Sulloniacaе is now revealed as lying on the northern outskirts of the industrial area of the town. Hitherto, the kilns were thought to have been restricted to the eastern side of Watling Street. No certain date can yet be fixed for the setting up of the present kilns although the evidence points strongly towards the middle of the Flavian period (A.D. 70-80). Production reached its highest level during the first half of the 2nd century, diminishing slowly until work came to an end, probably in the early years of the 3rd century. There are indications that Kiln No. 1 was established rather later and abandoned rather earlier than Kiln No. 2. This might be expected in the case of an outlying kiln, as No. 1 seems to have been.

It is tempting to link the growth of pottery manufacture at Sulloniacaе with the shift of emphasis from Colchester to London as capital of the province after Boudicca's rebellion in A.D. 61. There is no doubt that London provided the main market for the products of these kilns; vessels identical in shape and fabric to those recovered from the site may be seen in abundance in the City museums. The problem of the collapse of the industry remains without a definite answer. Lack of clay was certainly not the cause; shortage of easily obtained wood fuel is possible, though unlikely. Perhaps the true reason was the falling off of demand caused by the progressive impoverishment of the towns and the disturbed condition of the province during the 3rd century.

The ditch and bank are modern features. They may perhaps be assumed to represent the boundary between the confines of the road and the gardens of the large house which is known to have stood upon the site of the modern Brockley Hill House at the end of the 18th century.

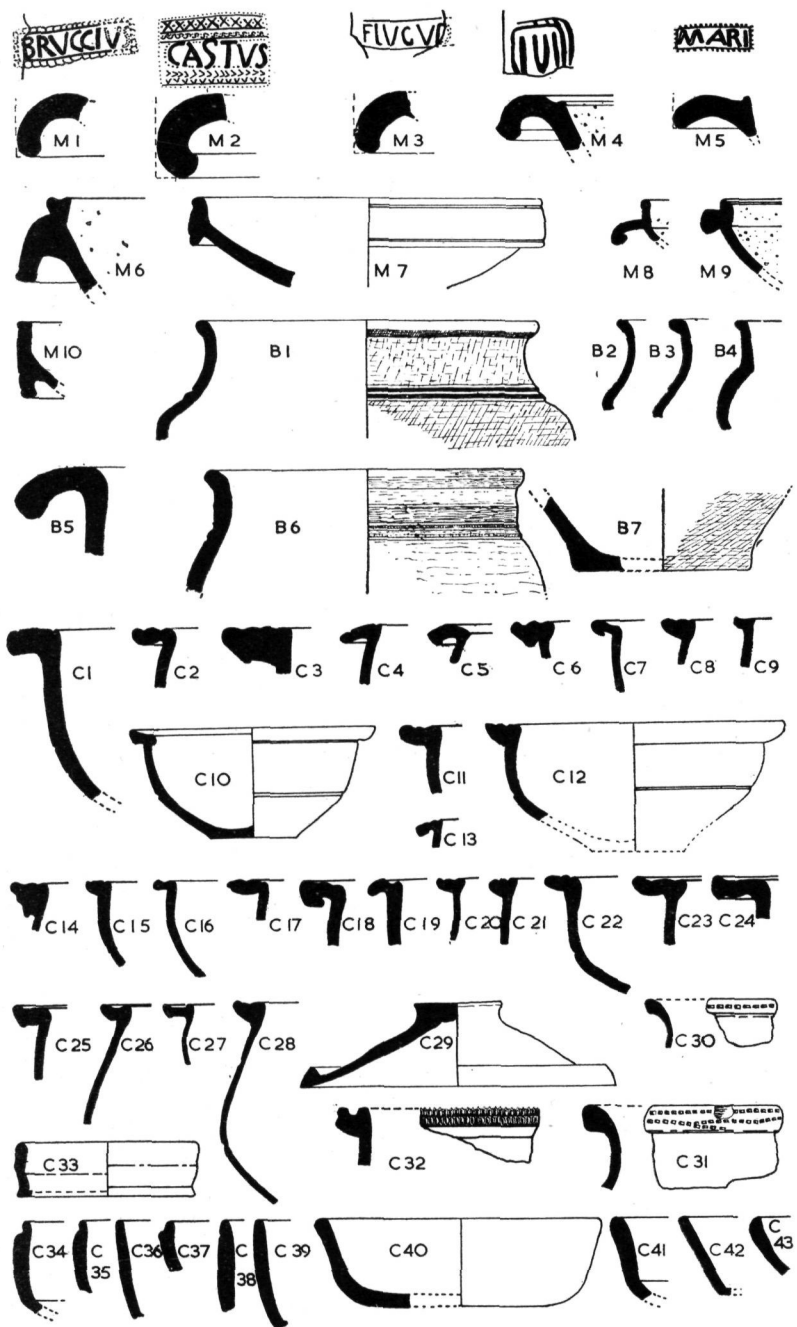


FIG. 4. COARSE POTTERY. M1-10 MORTARIA, B1-7 BELGIC, C1-43 KILN WARE (Scale $\frac{1}{4}$).

THE FINDS

I. COINS.

1. Domitian (A.D. 81-96). AE *as*. *Obv.* . . . IT AVG GERM . . . laureate head r. *Rev.* illegible. Below cobble floor by Kiln No. 2 on natural clay.

2. Constantine I (A.D. 307-337). AE *minim.* GLORIA EXERCITVS type, two standards. Mint mark illegible. Low level in bank.

II. POTTERY.

A. SAMIAN.

As in 1950, the majority of the sherds were so badly flaked and abraded as to render them valueless. The datable fragments gave the following analysis:—

- Early Flavian, 1.
- Domitian-Trajan, 5.
- Trajan-Antonine, 6.
- Later 2nd Century, 1.

The bulk of the Samian ware thus falls within the period of the late 1st to mid 2nd centuries. The following forms were present: Drag 18/31, 27, 29/37, 30, 33, 35, 37. Utilitarian types preponderated, as they did in 1950.

B. COARSE POTTERY (Figs. 4 and 5).

The kiln ware consisted chiefly of bowls with reeded rims, upright-sided dishes, poppyhead beakers, small screw-necked flagons and roll-rim store jars. Owing to the restricted scale of the excavation, no analysis of output has been attempted; in any case, the small size of most of the fragments would tend to diminish the value of such an attempt. There was, however, no doubt that reed-rim bowls formed the staple product of the kilns.

Types already described in the 1947 and 1950 Reports have, for obvious reasons, been excluded.

B1-7. Belgic cordoned urns and storage jars. These sherds are typical of the Belgic ware recovered from the soil immediately above the natural clay and from the upper part of the bank. They are of uniform fabric, having a smooth grey paste with few grits and a "soapy" surface ranging in colour from orange to dark brown and black. They exhibit a marked resemblance to the pottery (Group B) found at Belgic

Verulamium, where they are dated to the first half of the 1st century A.D. These vessels are the ancestors of the wide-mouthed jars of Roman date (see 1947 *Report*, Nos. 68-82; 1950 *Report*, Nos. 18-20). For the series in general see *Verulamium*, Fig. 16, p. 153 ff., and *Ant. Journ.*, XVII, pp. 238-240.

M1-10. Mortaria.

M1. BRVCCIVS. Stamp impressed vertically downwards on hooked rim. Smooth pinkish buff surface, almost certainly a local product. This is the first complete example of his stamp so far recorded. See May, *Silchester Pottery*, Plate LXXXIII (where the reading is RVCCIVS). Found also at Chesterholm, Corbridge, Godmanchester, Wroxeter and London. Three fragments were recovered in 1950 (see *Report*, Nos. 2, 9 and 10). Late 1st century. A surface find.

M2. CASTVS. Hooked rim fragment stamped vertically upwards. Greyish-buff ware, apparently not local. Two kilns, filled with products of this potter were found at Radlett in 1898 (*V.C.H., Herts.*, IV, pp. 159-162). Late 1st—early 2nd century. Dump No. 1.

M3. FLVGVD. Impressed upwards on hooked rim. Buff paste with yellowish surface. A common and enigmatic stamp, studied in detail in *Jewry Wall*, p. 214. Used as a counter stamp by the potter Albinus, one of whose products was found in the Radlett kilns. A.D. 60-90. Below Kiln No. 1.

M4. IVI. Impressed upwards. Sandy, pinkish-buff fabric, possibly of local make. One of the counter stamps of Albinus. Dump No. 2.

M5. MARI. Impressed downwards. Downbent rim, off-white surface, grits on rim. Perhaps a stamp of Marinus (see 1950 *Report*, No. 1). Brown soil in bank.

M6. Sharply downbent rim, high furrowed bead. The predominant type made at the Brockley Hill kilns. Numerous examples were found in a variety of fabrics. Early 2nd century on many sites, e.g. Ewell (*Surrey Arch. Coll.*, XLVIII, p. 50, Fig. 5, 17) and West Blatchington (*Sussex Arch. Coll.*, XC, Plate 5, Fig. 8). But the shape persists into the 4th century. Compare Nos. 5 and 6 in the 1950 *Report*. All levels.

M7. Wall-sided mortarium. Tile red body, remains of red coating. Perhaps an imitation of the Samian form, Drag. 45. Compare Wroxeter type 238 and Canterbury (*Arch. Cant.*, LXIII, Fig. 13, 57, p. 105) dated to the 4th century. The examples quoted, however, possess a single poorly-defined groove on the upper part of the rim, and it is possible that the present type is ultimately derived from a shape such as M6 above.

M8. Meagre body, thin light buff paste, few grits. An uncommon type, apparently 1st century. Resting on natural clay.

M9. Flanged type with almost square rim. Light buff, heavily gritted. Cf. the series from the Cowley kilns (*Oxoniensia*, VI, Fig. 9, Nos. 73-79). Probably 4th century. Above tile scatter over Kiln No. 1.

M10. Wall-sided mortarium in hard buff fabric imitating Samian type, Drag. 43. Cf. May, *Colchester Pottery*, type 336, 4th century. Brown soil of bank.

C1-28. Bowls with reeded rims. These occurred in great abundance throughout the site. The surface varied in colour from drab buff to tile red, but all possessed the harsh, sandy texture characteristic of Brockley Hill pottery. This type of bowl is said to appear first c. A.D. 60 and to die out about the middle of the 2nd century. The examples figured fall mostly towards the end of the series: the flange is set at an obtuse angle to the shoulder and is often undercut. Of the earlier examples, C26 and C27 are well attested Flavian forms. For the type in general see *Jewry Wall*, pp. 28-9. Compare the series found in 1947 (*Report*, Nos. 11-30).

C29. Lid in dirty buff ware for use with reed-rim bowls and small jars.

C30-32. Examples of notched rouletted decoration, characteristic of Brockley Hill wares. C30 and C31 are jar rims; C32 with remarkable "crimped" design is the rim of an incense bowl. An example showing similar decoration is in the London Museum.

C33-43. Upright-sided bowls in rough grey ware. This type appears to be derived from the Belgic plate with incurved sides. It had a long life, extending from the late 1st until

the 4th century, often with trellis decoration on the sides. See V7 below.

C44. Roll-rim pie dish. A single example, but probably kiln ware (see 1950 *Report*, No. 17). Grey ware with black polished surface. A common Antonine type; similar dishes were made at the Verulamium kilns (*Archæologia*, LXXII, pp. 227-28, Fig. 1, 3). Brown soil of bank.

C45. Plain incense bowl rim. Pinkish-buff fabric. Brown soil of bank.

C46. Handled beaker with pedestal base. The vessel is incomplete and may have possessed two handles in imitation of the Arretine chalice form, Drag. 9. Tile red body with white slip. Similar beakers without handles are common. Cf. the example from the Fulmer kilns (*Records of Bucks.*, XIV, pt. 3, Fig. 1, No. 5). Compare *Wroxeter* I, p. 70, Nos. 6-8, and the series of Gallo-Belgic beakers in *Camulodunum*, Fig. 49. A local product. Late 1st century. Dump No. 2.

C47. Fragment of flower vase. Pipeclay. The cups were usually arranged in groups of three on an annular base. See *London in Roman Times*, Plate LVIII, No. 2. Kiln ware. Dump No. 2.

V1-3. Native bowls derived from Samian forms. This distinctive type of pottery is well known from finds along the Thames Estuary and on the Upchurch Marshes in Kent. Except V3, fine grey ware with bituminous polished surface. V2 imitates Drag. 37. A similar example from Jordan Hill, Weymouth, is figured in *B.M. Guide*, Fig. 128. V3 is a shoulder fragment of a jug with brown mica-dusted surface (May, *Silchester Pottery*, type 163). Late 1st century. All from below Kiln No. 1.

V4-6. Small globular bowls. Fine buff fabric, V6 with traces of dark red coating. Plain, sharply everted rim. Cf. *Jewry Wall*, Fig. 27, type B, A.D. 80-120. Below earlier cobble floor by Kiln No. 2.

V7. Small dish with curved sides and inturned rim. Pinkish buff. An earlier form of the straight-sided type. Cf. *Surrey Arch. Coll., Survey of Prehistory of Farnham District*, Fig. 95, R52, p. 228, A.D. 100-120. Ashy waste from Kiln No. 1.

V8. Pie dish. Hard grey ware. Cf. *Records of Bucks.*, XIII, part vi, Fig. 5, No. 5. Late 3rd-4th century. Brown soil of bank.

V9. Fragment of incised scale decoration. Tile red. See B.M., *Antiquities of Roman Britain*, Fig. 16, No. 2. End of 1st century. Below Kiln No. 1.

V10. Flanged bowl. Rough grey surface. Common 3rd-4th century type. Brown soil of bank.

V11. Small jar with cavetto rim. Grey ware with sandy surface. The fabric suggests that this is not a late example. Cf. *Wroxeter*, II, No. 62. 2nd century. Black soil at kiln level.

V12. "New Forest" rosette stamped bowl, derived from the Samian form, Drag. 29/37. Soft tile red body, much rubbed. The fabric is similar to the products of the Sandford kilns (*Archæologia*, LXXII, pp. 225-42). For the decoration see *Ashley Rails*, Plate VI, No. 13. Mid 4th century. Brown soil of bank.

C. TILES (Fig. 5).

T1-2. Relief-patterned flue tiles. T1 perhaps a variation of Lowther's Group 1, W chevron design. T2 an example of Group 9, die 42, plain chevron. An example (not shown) of Group 5, die 21, diamond and lattice pattern, was also found. (See *Surrey Arch. Coll.*, *Research Paper No. 1*).

S1-2. Two fragments (not illustrated) of flat stamped tiles, each showing the letter N retrograde. Very worn. Perhaps the last letter of the well known P P BR LON stamp. See *London in Roman Times*, Fig. 6, No. 3. S1 from tile platform of Kiln No. 1. S2 from debris in furnace chamber.

D. MEDIEVAL (Fig. 5).

V13. Dish with sloping sides and slightly convex base. Grey body with soft tile red surface. Greenish-yellow glaze on inside. 16-17th century. Resting on grey clay in Section 1.

III. BRONZE.

Circular weight, diameter $\frac{5}{8}$ in. by $\frac{1}{8}$ in. Numeral V incised on one face. Central punch mark both sides. Numeral represents perhaps 5 *scrupula*, i.e. $\frac{5}{24}$ oz. (Not illustrated.)

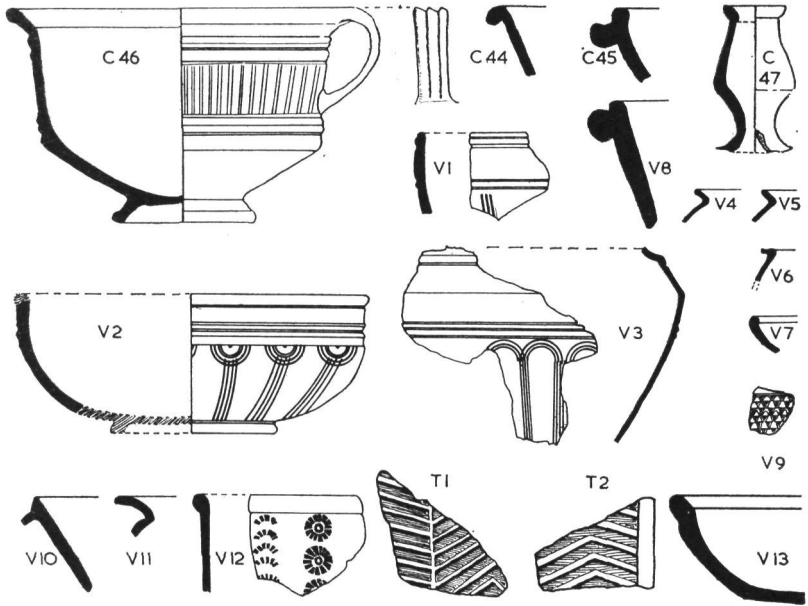


FIG. 5. COARSE POTTERY (*contd.*). C44-47 KILN WARE, VI-12 NON-LOCAL POTTERY, V13 MEDIEVAL, T1-2 RELIEF PATTERNED TILES (Scale $\frac{1}{2}$).

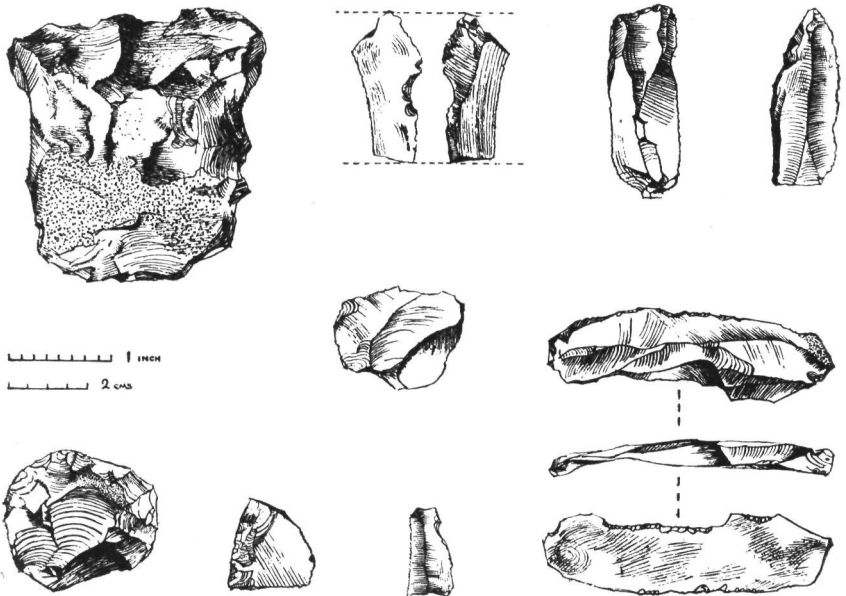


FIG. 6. WORKED FLINTS (Scale $\frac{1}{2}$).

IV. IRON.

Broken pick. Pointed tine 7 in. long, other tine missing. Probably used for grubbing up clay. (Not illustrated.)

V: FLINT.

A number of flint tools, flakes and cores were found in the Roman levels. A selection is shown in Fig. 6. The implements are unpatinated and range in colour from smoky grey to dull yellow. They appear to be of local origin and to be derived from the drift and gravels of the district. It is best to regard them as relics of the Late Iron Age inhabitants of the site.

VI. MISCELLANEOUS.

Patch box lid, diameter 1 5/16 in. Silver-plated on copper; incised foliate design in centre. Latter part of 18th century.

NOTES.

1. Published in the Society's *Transactions*, N.S., X, part III.
2. The Committee wishes to record its gratitude again to Major High, House Governor of the Royal National Orthopaedic Hospital; and to its President, Sir Frederick Handley Page, for his generous loan of a contractor's hut. Particular thanks are due to all who helped on the site: to Mr. I. C. Chalk who took entire charge during the first week when the writer was indisposed; to Mr. M. Biddle who drew some of the sections and made many useful suggestions; to the Misses S. Leech and V. Olyett and Messrs. B. Amies, J. Davison, J. G. Dunbar, L. Douglas, G. F. Cole, W. G. Haynes, T. H. Gould, M. S. Morgans and A. J. Percival who skilfully carried out the majority of the excavating; to Mr. J. C. Burt and Mr. L. A. Probert who were responsible for photography; and to Mr. C. F. Baylis who gave valuable assistance in matters of general organisation. The writer is grateful for the help of Dr. D. B. Harden and Mr. Martyn Jope who reported on the glass and medieval pottery respectively. Mr. John Gillam suggested the identification of the BRVCCIVS stamp. The flints were drawn by Mr. D. H. Allen. A special debt is owed to Mr. Grimes. In his capacity as Chairman he has guided the work of the Committee since 1950, and occasion is here taken to express appreciation of his ungrudging help and constant encouragement. The finds, together with those from the 1947 and 1950 excavations, have been deposited in the Hendon Public Library.
3. For a description of such arrangements see Corder, *The Roman Pottery at Norton* (Roman Malton and District Report No. 7), pp. 20-21.
4. As at Elmswell (Hull Museums Publications No. 207).
5. This conclusion was anticipated, in part, by the results of the 1950 excavation.
6. May, *Silchester Pottery*, p. 192.