

EXCAVATIONS AT ASHTEAD, SURREY.

Third Report (1929)

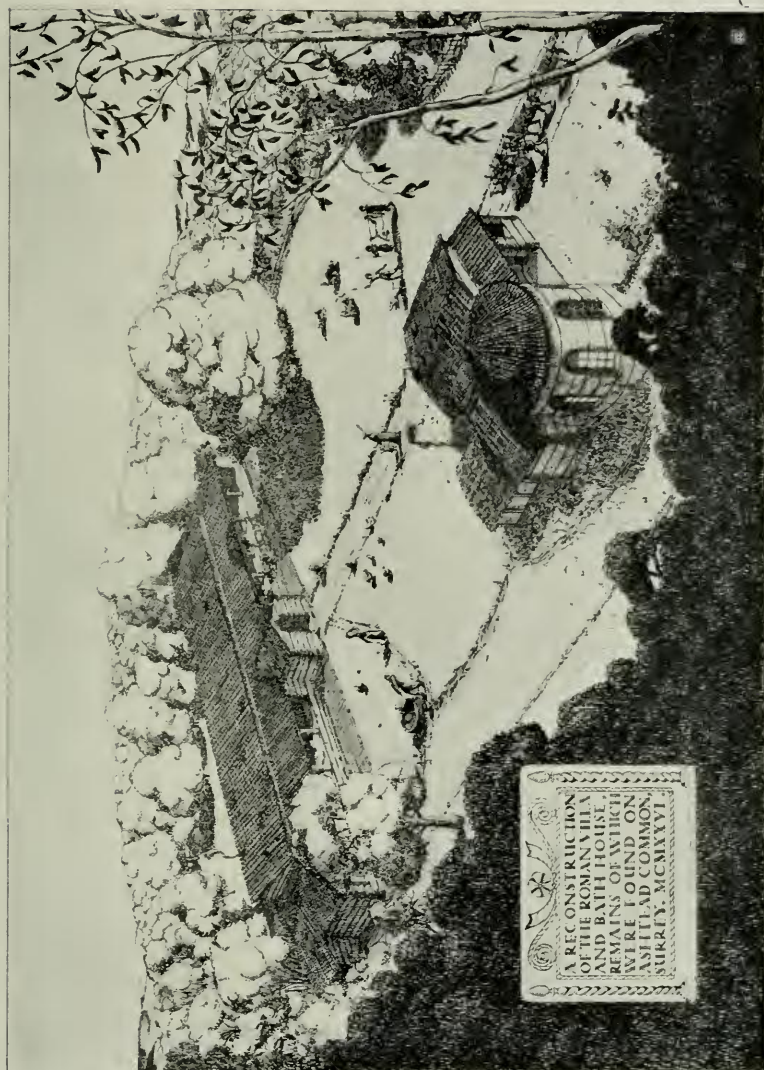
BY

A. W. G. LOWTHER, A.R.I.B.A.

IN writing this third, and final, report on the results achieved during the last of four successive years of excavation on Ashtead Common, I wish to express the thanks of the Committee to all those who have helped, both financially and physically. It is largely due to the latter, often only too few in number, that the work has now been completed as regards those structural remains of which we can find any traces. In addition, a large area of the ground has been explored by trial holes carried down to undisturbed subsoil, which holes reveal a wide distribution of first-century potsherds and tile "wasters," and indicate extensive occupation at this early date.

Work at the beginning of 1929 started with further digging round the Bath House Building in an attempt, which proved successful, to settle the plan and sequence of its rooms more definitely, and to determine its relationship to the main building. At the same time the surrounding soil was dug over in search of datable material.

Sufficiently defined traces of wall-foundation, consisting of about two courses of large flints in mortar, established the fact that the room nearest the road was divided into two compartments (E and F on plan) by a wall which was carried through on the line of the two breaks in the opposing side walls of Room B. As stated in the previous Report, Room B was originally bisected in a similar manner to the hypocaust A-B in the Bath annexe to the main building. This discovery enables the doorways to be indicated on plan with some certainty, and suggests that the main entrance was not



SUGGESTED APPEARANCE OF THE BUILDINGS IN THE SECOND CENTURY.

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directly off the road, as originally supposed, but from a lobby at the north end, thus affording a reason for the short section of gravel path which was found in this position.

The shallow foundations adjoining the earlier furnace pit were traced for a further distance of 8 feet, and part of the return at the north corner established. It is now possible to affirm that this must have formed a timber-built outhouse, with the foundations alone constructed of tile and flint courses, laid without mortar. On the rough clay floor, which was covered by a layer of charcoal several inches thick, were found several iron implements, a sickle and two knives; and it seems likely that this erection was used as a fuel store in connection with the furnaces, and also that the various tools were kept here. In the first season, two coins of Hadrian were found on the part of the floor nearest to Room C.

Further clearance of the ground immediately south of the Circular Hypocaust (A) produced more first-century pottery, including the small flagon of unusual type (Fig. 5), but no more pieces of the chimney pot (*S.A.C.*, Vol. 38, Part 1, Fig. 2), a considerable part of which had already been found in this neighbourhood.

Next we investigated the ground between the two buildings and on the west side of the road. Here a series of trial trenches drew a blank. The subsoil clay was struck at a depth of about 1 foot only, with very little débris in the overlying soil. Apart from fragments of pottery, an annular blue glass bead, of normal type, was the sole find.

Drains and Water Supply.

No well or other source of water-supply has been discovered. Recent digging in London (in connection with the rebuilding of the Bank of England) has produced several wooden water-pipes, still retaining their iron connecting bands, identical with those found on the north side of Room C. These pipes were bored in rough-hewn, rectangular oak beams measuring about 9×6 inches, bends apparently being formed by splay cutting their ends (as in one example of those from the Bank of England site, now in the London Museum).

The drain leading down from the west gutter of the main building towards the Bath House must have been carried

past the latter in piping formed of flue tiles, of which the three originally found set end to end were probably a part. No more of these flue tiles have been found *in situ*, though part of a trench, in which they may have been set, led down to and joined the open ditch south of the Circular Room. It is possible that the different alignment of the furnace, which was added later, was intentionally planned to avoid interference with this drain.

Main Building.

A small part still remained to be excavated at the west end of the corridor, and though this work was completed in time to be recorded on the plan in the last Report it, and

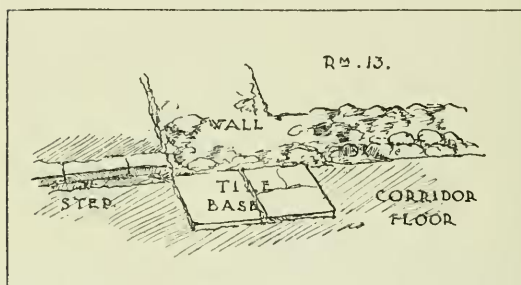


FIG. 10.

the resulting finds, have still to be described. What appears to be the tile-built base for one of the engaged half-columns that are known to have been used along this corridor, was found in position.

Close to it, lying on the rough brick flooring, was a small bronze bell, less than $\frac{1}{2}$ inch in diameter, and with an iron clapper. It has a shaped suspension loop and three grooves round the sides as decoration (Pl. II). Possibly it was worn by the cat whose footprints we found on a roof tile in a previous season!

The wall at the south end of the corridor was found to be nearer the centre of the building than we had imagined would be the case, and there was no indication that it ever ran otherwise in the original building. From the corridor, a narrow passage was found leading northwards, and with a 4-inch step where it joined the corridor. This is the first indication of any point where there may have been a staircase leading to an upper floor. All this part was very badly preserved, but sufficient remained to complete this gap in

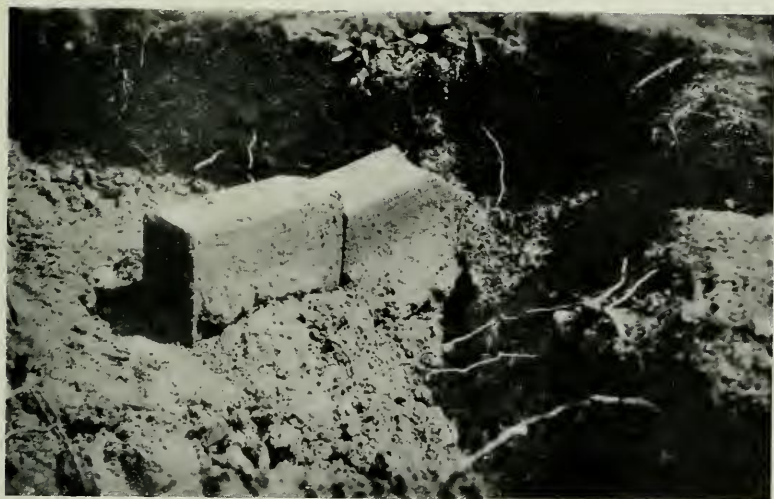


NO. 2.—SMALL BRONZE BELL.



NO. 3.—FLAGONS.

Scale $\frac{1}{4}$.



NO. 1.—FLUE TILES *IN SITU* BELOW FLOOR OF ROOM 4.

the plan of the final building save for the extreme west corner. The only find of any consequence in this area was the wide-mouthed store-jar (Fig. 3, No. 1) which was found below foundation level. This deposit is similar to that, consisting of an olla (with cover, and containing a 2nd brass of Domitian), which was found below the floor of Room 12. It appears to be of the same date, viz. c. A.D. 90.

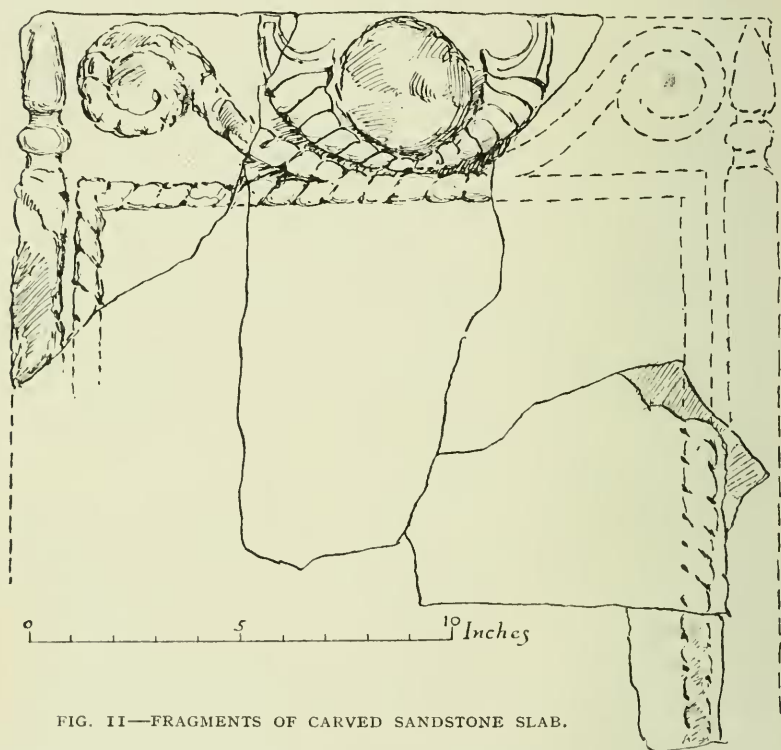
Part of the gutter in front of the corridor still remained to be cleared, and it was found possible to trace it almost up to the point where the porch caused it to make a right-angled turn. This was also the case on the other side of the porch, where part of the foundations of the porch-wall still remained. In the bottom of the gutter was found the large first-century vessel (Fig. 8)—yet another proof that the gutter was built with the first building on the site. In the other direction, this gutter was cleared through to where it met the end gutter in the south corner. Here, most of the tiles with which it had been paved were missing and the sides broken in, while among the débris was found another piece of carved sandstone, a corner of the slab previously found. It is now possible to form some idea of the carving (Fig. 11), and as all the pieces have been used as building material for the gutter it must be of first-century date.

The first-period Bath annexe was finally cleared, and the position of the west wall of Room D established as having lined up with the end wall of Room C. The wall itself was found to have been overturned completely and its foundation tiles removed, apparently when this part was dismantled: but the exact line of the wall was quite definitely marked by the undisturbed clay rising higher, on the side further from the room, by some twelve inches. Several thousand more small tesserae, averaging $\frac{1}{4}$ inch cubed, and of various colours (mainly white), were found among the débris. There is little doubt that this room originally held a shallow water bath, and that the Bath annexe is contemporary with the separate Bath Building.

The final week's work was employed in making further investigation of part already excavated, but left undisturbed until the end for the benefit of those visiting the site. The herring-bone brick floor to Room 7 was cut through and a

trial hole sunk down to undisturbed ground with the following results :

The section showed that the original floor, of which some 4 inches of brick concrete, on a foundation of large flints, still remained, had been slightly lower than the later herring-bone floor. A thin band of the original frescoed wall plaster was thus found still *in situ* level with the bricks forming the



later floor. At a depth of approximately 2 feet was the thin "humus" layer, resting on the sub-soil and containing a few fragments of Claudian pottery.

Another hole was dug through the rough tessellated floor of Room 2. This was found to rest on layers of soil and débris used to level up the ground. There were no signs of there having been a hypocaust here, as had previously seemed likely from the small hypocaust next to it (Room 1). Room 1

still remains somewhat of a puzzle, as no furnace feeding it has been found, though this may lie on the line of the earlier ditch to the north. As there is a large oak growing here, too fine a tree to be cut down, excavation at this point is impossible. The wall between Rooms 1 and 2 is first-period work in its lower part, the upper part being later and of the same period as the wall between Rooms 2 and 3.

In conclusion I will summarize the history of the site as it appears to me.

Pre-Roman. Some occupation represented by stray fragments of coarse, gritted ware. Possibly the triangular earth-work, a short distance to the west, belongs to this period. (A section through the fosse and vallum on the side nearest the Villa might settle this question.)

Claudius (A.D. 41-54). Considerable occupation. Typical pottery of this date found below buildings. The road probably made at this date. 1 coin.

Vespasian (A.D. 69-79). Coin and pottery. Tile works begun and first-period buildings erected. Carinated foundation beaker not later than this.

Domitian (A.D. 81-96). Urns deposited below floors, one containing coin of this period.

Trajan (A.D. 98-117). Coin (from before corridor of main building).

Hadrian (A.D. 117-138). Main period of industry. Most of the pottery of this date. Alterations to Bath Building at end of this period. 3 coins.

Antoninus Pius (A.D. 138-161). One coin (broken).

c. A.D. 150. Buildings dismantled.

c. A.D. 180. Main building partly rebuilt in poorer workmanship and materials. Floors and walls mainly of this period. Bath house and Bath annexe not rebuilt. Some pottery and small objects of this date.

c. A.D. 200 (at latest). Site finally ceased to be occupied.

Note on the different kinds of stone employed in the building.

Since writing the previous reports, samples of the various kinds of stone have been examined at the Geological Museum, Jermyn Street, and one correction is necessary. The stone reported as being Purbeck marble is apparently Petworth

marble,¹ from the Wealden beds of Sussex: this would point to its having been conveyed to this site along Stane Street. This stone was found in two forms: (a) small tesserae among those in Room D of the Bath annexe, and (b) part of a slab, 1 inch thick and polished on one face, found by the porch in front of the corridor. Probably a piece of the bath lining (in Room D) removed when this bath annexe was demolished and used again in the final building.

Section drawings across building.

1. Section on line A-A' (folder at end). This section from south-west to north-east, running the length of the main building, shows the relation between hypocausts 1 and 6. Both were carried down to the same level with a 4-inch flooring of brick concrete. The horizontal flues in Room 4 were probably carried through the wall between Rooms 4 and 6, connecting with the vertical flues in the latter; but it will be seen that the wall and flues were destroyed to too low a level to settle this definitely.

2. Gutters. The gutters were of uniform construction all round the building. The roof tiles forming the bottom of the gutter were set lengthwise across it, and with their flanges bedded downwards. By being laid alternately "top to bottom" allowance was made for the splay on these tiles which are wider at the top than at the bottom. Roughly squared blocks of chalk were largely used in the sides, bonded with courses of pieces of tile.

3. Cross-section on line B-B'. This section, together with the detail (No. 4), shows the arrangement of the row of flue tiles between the piers dividing Rooms A and B, and now known to have been similarly formed (as a division to hypocaust B) in the separate Bath House. The partial blocking

¹ An extract from the Assistant Curator's letter reads as follows:—

SIR,—

I have shown the fossil-bearing rocks to the Palæontological Department; all the materials belong to well-defined types as follows:

"Firestone" Upper Greensand (near Guildford).

Kimmeridge shale (Kimmeridge).

"Marble" (2 pieces), Wealden, similar to Petworth Marble.

Oolitic limestone, Great Oolite, similar to Bath Oolite.

Shelly limestone (2 pieces), probably Great Oolite.

of the openings to every alternate flue, by means of pieces of tile set in mortar, was evidently intended to lessen the amount of heat passing between the two parts of the hypocaust. There is no suggestion that this partition was carried up above floor level ; the piers, probably with curtains hung between them, formed the only division between the two.

The flooring shown to Rooms 12 and 13 and to the corridor is of broken brick 3 to 4 inches thick, and belonging to the final building.

4. Section through the Bath Building on line C-C'. The material forming the road, approximately 1 foot thick, consists of gravel on top, smaller graded "land picked" flints below, and large "quarried" flints as a foundation.

A trace of the brick concrete, underlying the flooring to F, was found still *in situ*, and affords support to the theory that the small pieces of flue tile set horizontally in the corners of Room B were made when the walls were built, as a guide for the level at which the floor was to be constructed.

It is now clear that the circular room (A) was in use as a hypocaust from the first ; though how it was heated, before the later furnace was added, remains a puzzle. Most probably, it had a separate furnace of which no trace exists—most of its wall being destroyed to within a few inches of the bottom of the foundation.

The irregular hole in the end wall of B, and the break in the flooring, were evidently made when this hypocaust was filled in and solid flooring constructed. This suggests that the alteration was carried out owing to both furnace and hypocaust tending to become flooded in periods of excessive rain, as they do at the present time.

The buildings excavated have now been covered again with a protecting layer of soil, and there is little doubt that they, and the ground immediately surrounding them, have yielded all the archæological material that excavation can hope to obtain from them. Further digging is unlikely to be profitable in that it is improbable that it would do more than repeat the results already obtained.

COARSE WARE POTTERY

Fig. 1. Nos. 1-7. Fragments of bowls with level, twice-grooved rims; a wide, shallow girth groove near the middle of the side, just above the angle. Clay, hard sandy buff, showing pale grey to drab in parts. Internal rim diameters (approx.), 1 foot 10 inches, 3 feet 6½ inches, 4 feet 5 inches, 5 feet 6 inches. For detailed history of the development of this type of bowl, see May, *York Pottery*, p. 95, Pl. XXII, No. 19. Also May, *Silchester*, p. 194, Type 11. "It reached its widest distribution in the Flavian period, A.D. 69-96." This type is well represented in the Guildhall Museum from various sites in London. Cf. "The Roman Fort at Mumrills," p. 538, Group (1). "... the type survived into Antonine times."

Nos. 8-10. Pot lids or covers. No. 8, Dark grey ware, normal type. No. 9, Light buff ware, normal type. No. 10, Domed form, upper part missing. Diameter, 7 inches. Clay, smooth black. May, *Silchester*, p. 183, Type 11. "Two fragments of domed covers with conical recess in centre of handle found in a Late Celtic refuse heap at Oare, Kent, and shown to be pre-Roman by associated fragments of Arretine pottery." The fragment figured is more probably Flavian and a survival of the earlier form, though it is the only lid of "domed" type found at Ashtead.

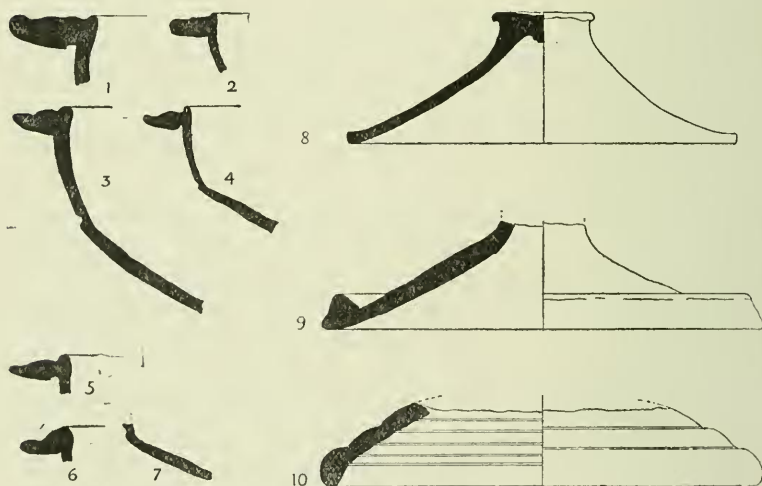


FIG. 1.—NOS. 1-10.

Scale ½

Fig. 2. Small "ollae" of soft dark grey ware, with white slip coating externally and to inside of rim, and ornamented with five rows of raised, applied clay dots, in rows of eight. So called "Upchurch" ware, this form merges into the "poppy-necked" type as Nos. 15-19 (Ashtead, 1st Report, Fig. 3, No. 16). First century.

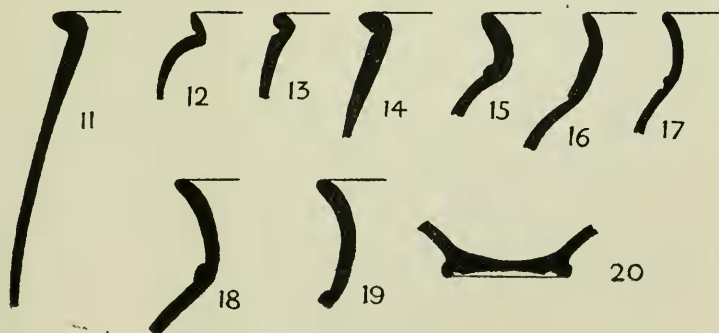
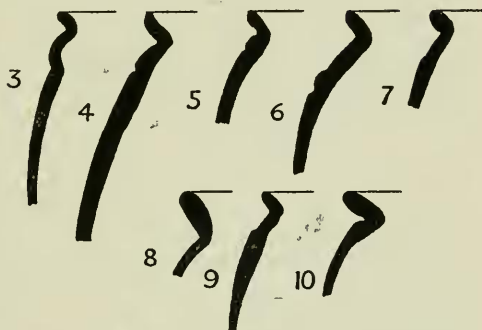
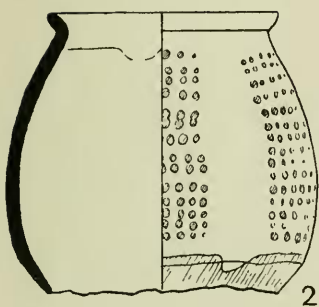
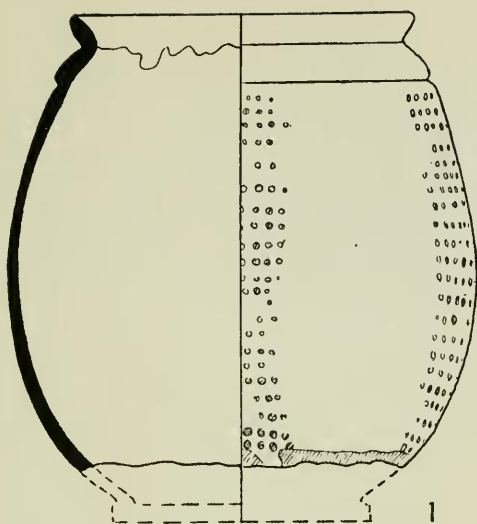


FIG. 2.—SLIP-COATED OLLAE.

Scale $\frac{1}{2}$.

Fig. 3. Store vessels with plain, out-turned rims.

No. 1. Light grey, sandy ware. Height, $7\frac{3}{4}$ inches. Diameters, neck, 5 inches; base, $2\frac{3}{4}$ inches; bulge, $7\frac{3}{4}$ inches. Found below floor level inside building and near another containing a coin of Domitian and apparently of this date.

No. 2. The upper part of two vessels, identical in form and decoration though varying in size and material, found together in the filled-in furnace pit to Bath Building. The larger, dark grey ware; diameter of bulge, $7\frac{1}{2}$ inches. The smaller, lighter grey ware; diameter of bulge, $5\frac{1}{2}$ inches. Groove below rim ornamented with a row of impressed diagonal dots. *c.* A.D. 100.

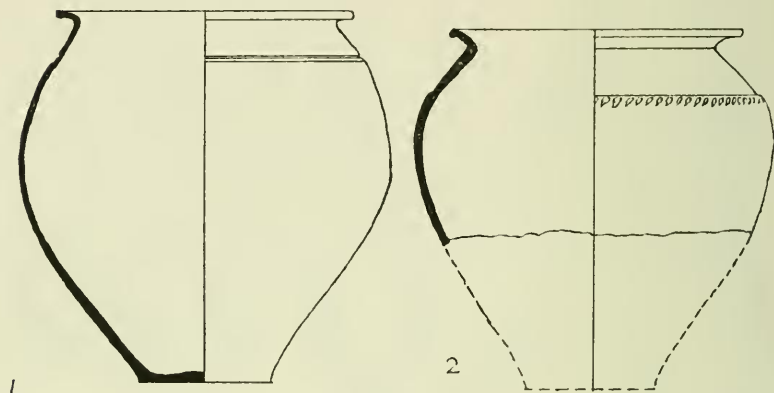


FIG. 3.

Scale $\frac{1}{2}$

Fig. 4. Bottles. Fragments of neck of various types.

No. 1. Reddish ware, with grey surface to inside and out.

Nos. 2, 4 and 5. Dark grey ware.

No. 3. Light grey ware.

Several examples of Type

No. 5 were found.

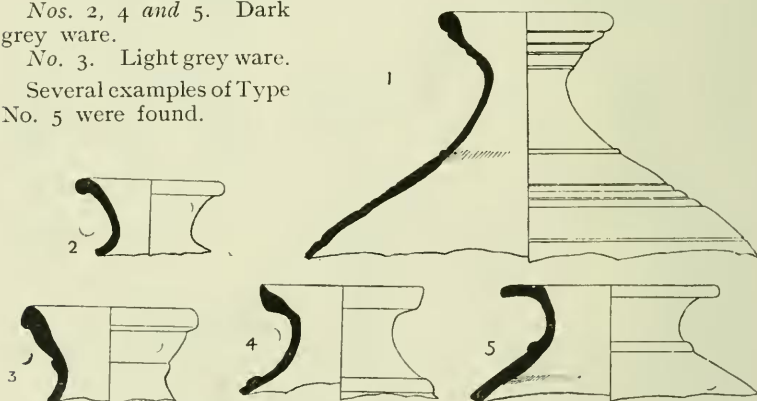


FIG. 4.

Scale $\frac{1}{2}$

Fig. 5. Flagon.

Flagon of ovoid form, with unusually small foot. Very similar in form, and of the same soft, buff clay as the amphora figured in 1st Report. Height, about 8 inches. Diameters, neck, $1\frac{1}{4}$ inches; bulge, *c.* $4\frac{3}{4}$ inches; base, $1\frac{1}{8}$ inches. Handle, vertical and two-reeded. The wide rim, with down-bent lower flange, and deeply undercut rim, are similar to May, *Silchester*, p. 145, Type 113, Pl. LXII. The very small size of the base is an unusual feature and, at present, without parallel. Not later than Claudius, A.D. 41-54. Lon. Ass. Co.'s Coll., King William House, contains flagons with similar rims.

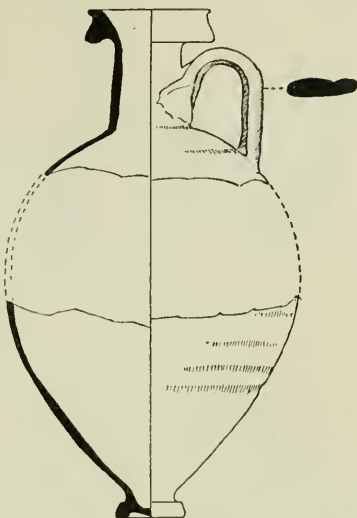


FIG. 5.

Scale $\frac{1}{2}$

Fig. 6. Pieces of flagons of normal second-century types, with external coating of soft, white slip.

No. 1. Hard red ware.

No. 2. Pale buff ware.

No. 3. Reddish buff ware.

No. 4. Red ware.

Nos. 5 and 9. Soft red ware.

Nos. 6, 7, 8, 10, 11 and 13. Buff ware.

No. 12. Hard red ware.

Fig. 7. No. 1. Small bowl, of unusual form, sharply keeled, and decorated above angle with six rows of diagonal combed lines. Deep cordon below, forming part of rounded lip. Clay, dark grey. Height, about $3\frac{3}{4}$ inches; foot missing. Form apparently unrecorded from any other sites.

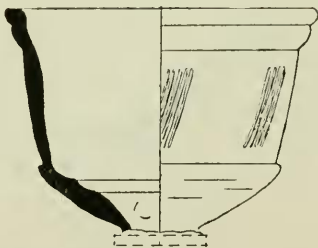


FIG. 7. NO. 1.

Scale $\frac{1}{2}$

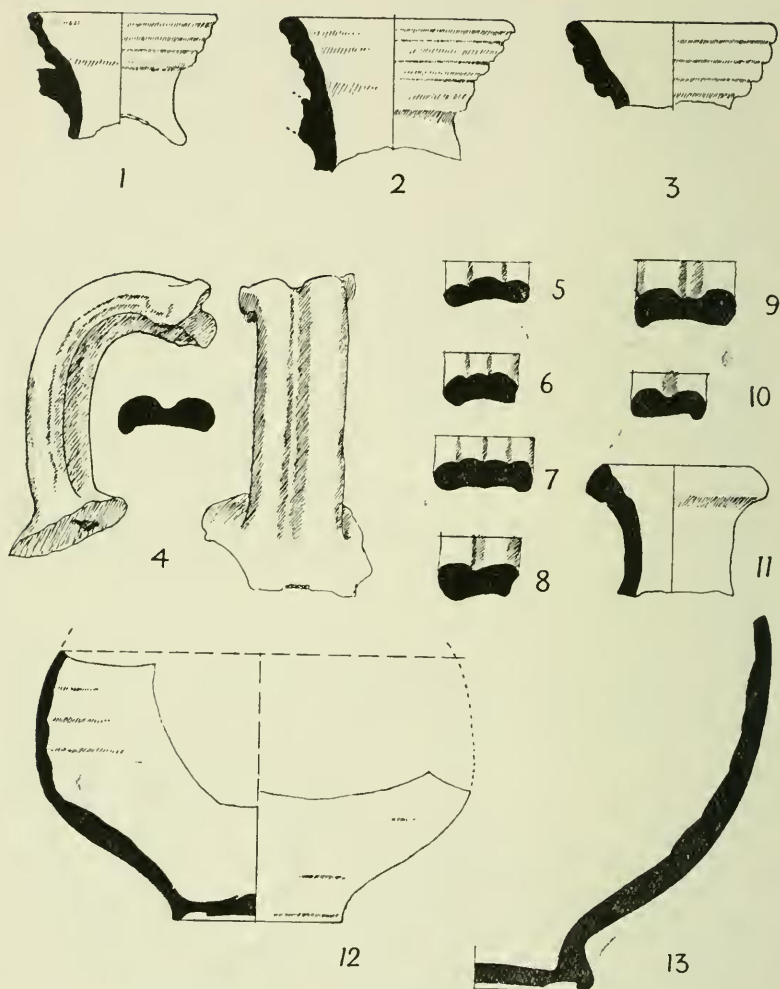


FIG. 6.—FLAGONS.

Scale $\frac{1}{2}$

No. 2. Bell-mouthed cup, base missing, of coarse reddish ware with black surfacing inside and out. Diameter at rim, 5 inches. Cf. May, *York Pottery*, Pl. XXII, No. 17.

No. 3. Fragment of "Incense Cup" of rouletted soft red ware, probably originally surfaced with white slip. Diameter at rim, about 6 inches. Dated *c.* A.D. 200 at earliest, it is paralleled by a fragment in the Guildhall Museum from the Old G.P.O. site (N. sector), 1926. Pedestal base probable but missing in both cases.

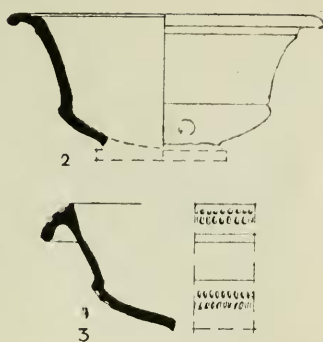


FIG. 7.

Scale $\frac{1}{2}$

Fig. 8. Large, deep jar or wide-mouthed olla, with boldly out-curved rim, flattish above, and bulged shoulder; the foot slightly moulded, and under base hollowed; ornamented above shoulder with band of diagonal lines shallow scratched on surface. Clay; firm, grey, containing chalky particles. Height, $6\frac{3}{8}$ inches. Diameters, rim, $6\frac{1}{2}$ inches; bulge, $7\frac{2}{3}$ inches; base, $2\frac{3}{4}$ inches. This type, dated A.D. 50-100, was plentiful at this site, the main variation being in the size and the decoration used, the latter mainly consisting of groups of diagonal lines inclined alternately in different directions.

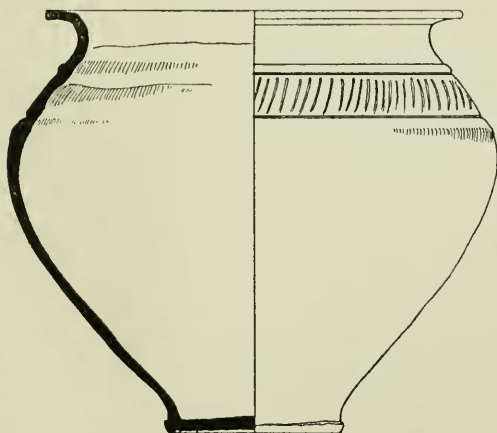


FIG. 8.

Fig. 9. GRAFFITI ON POTTERY AND TILE FRAGMENTS.

On Plain "Terra Sigillata" Ware

No. 1. On Dr. form 18.

No. 2. On base of Dr. form 38.

No. 3. P. L.(or A.) T. On side of Dr. 33.

On Coarse Ware, etc.

No. 4. On grey ware olla.

Nos. 6 and 7. On base and side of small black ware bowl.

Nos. 8 and 9. On the sides of grey ware ollae.

No. 5. On fragment of roof tile.

No. 10. On fragment of 2-foot square hypocaust flooring tile.

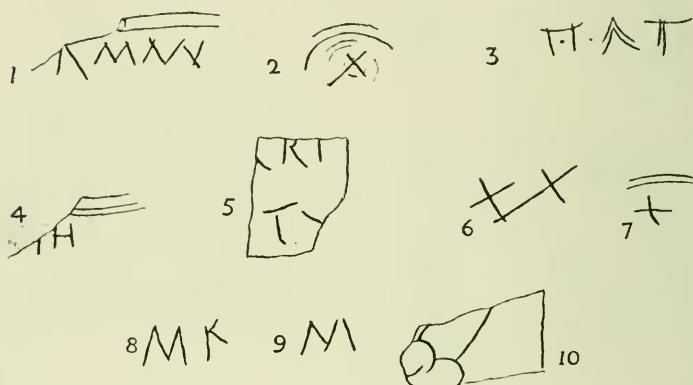


FIG. 9.

A certain make of box flue-tile, strikingly different from anything of the kind found at other sites, occurred among the débris of the hypocausts of both the Bath House and the Bath Annexe. It is fairly certain that they were used as shown in the above sketch. These tiles had V-shaped cuts at each end which, when they were placed end-to-end, formed diamond-shaped openings, the elliptical holes occurring alternately. Thus a series of openings would be formed exactly spacing with the vertical flues, while the tiles themselves were of the same thickness as the large, 3 inches to $3\frac{1}{4}$ inches thick, hypocaust flooring tiles. The latter were cramped together at the corners with iron cramps. In the sketch, part of the wall is shown as being cut away down to the bottom of the hypocaust, so as to show its construction.

An alternative method of construction was found in the hypocaust to room 6, where the flues were carried down to the bottom of the hypocaust and had openings in alternate tiles of the two rows below floor level. They were also cramped to the walls with splayed projections formed on the tiles, instead of with T-shaped iron cramps as in this case. (See former reports.)

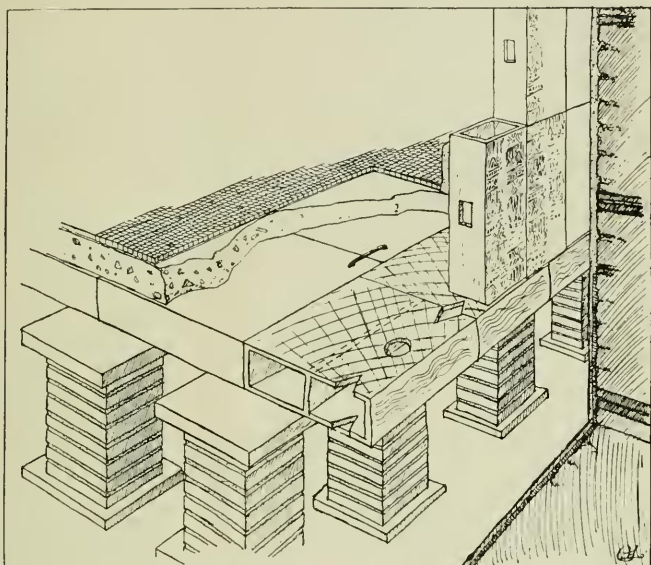


FIG. 12.—SUGGESTED USE OF THE "DOUBLE" BOX-TILES.

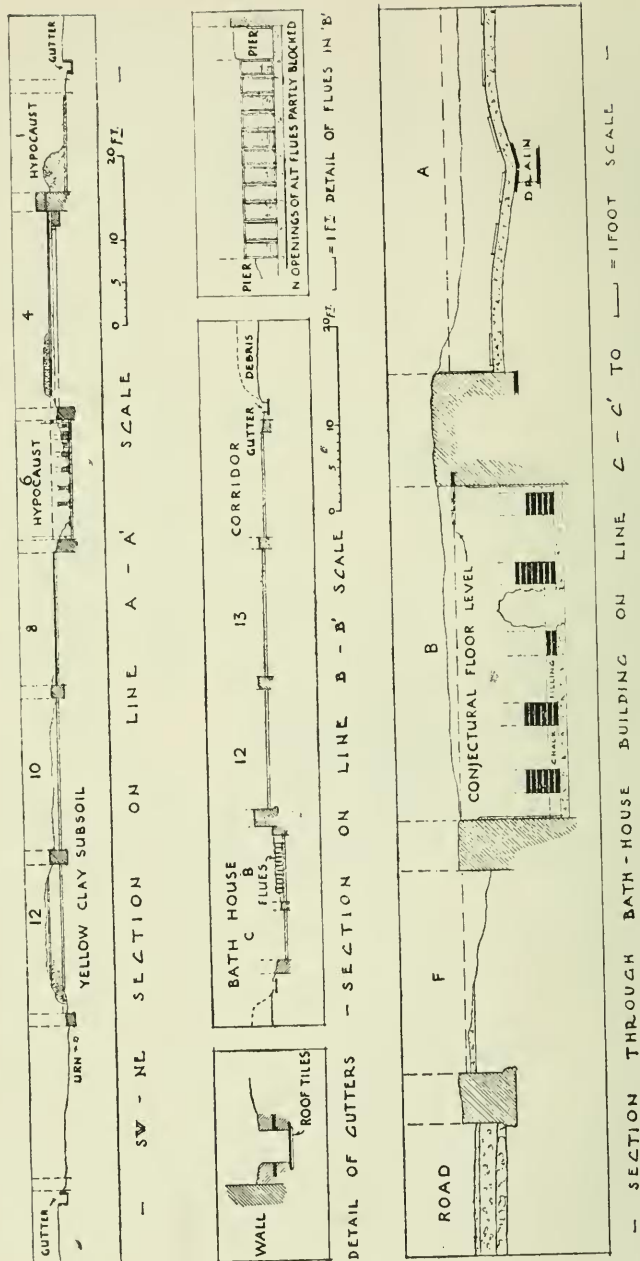


FIG. 13.

