



BUILDING NO. 1—VIEW LOOKING SOUTH.



BUILDING NO. 1—VIEW LOOKING SOUTH-EAST.



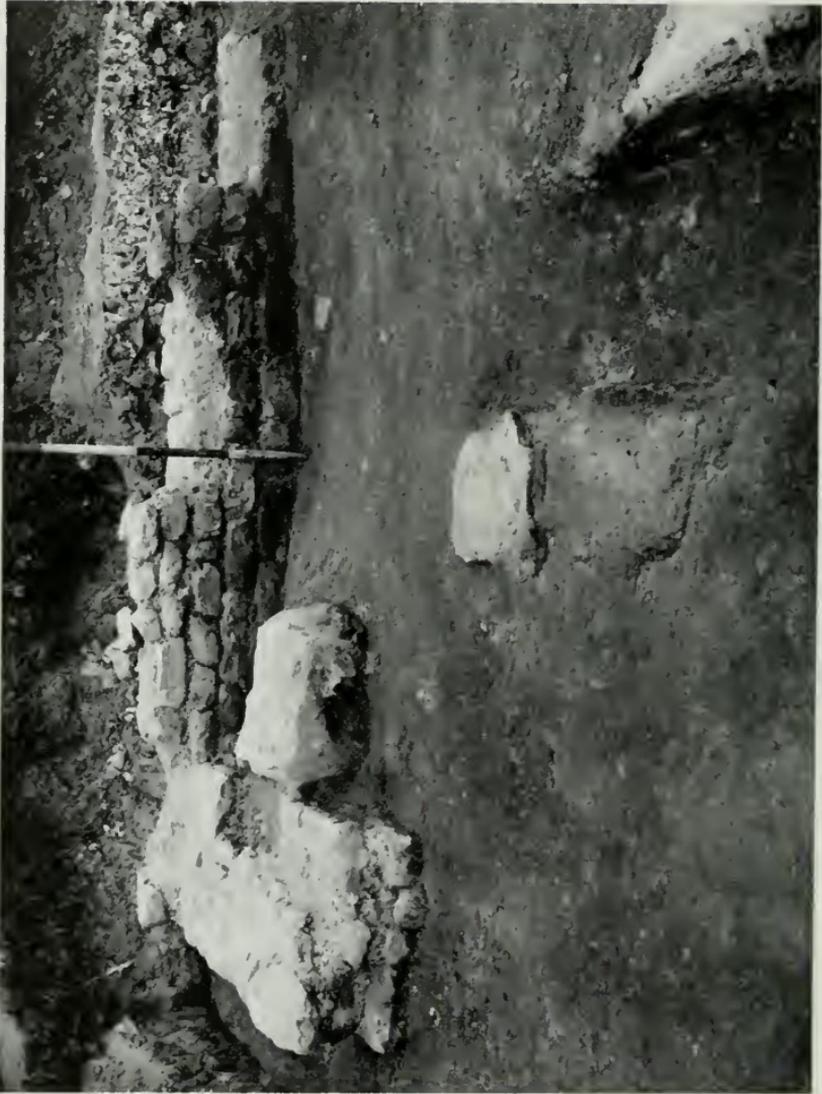
BUILDING NO. 1—REMAINS OF FLUE IN ROOM 1.



BUILDING NO. 1—NORTH END; LOOKING WEST.



BUILDING NO. 2—VIEW FROM NORTH.



BUILDING NO. 2—REMAINS OF STOKE-HOLE AND NORTH WALL.

# REPORT ON THE EXCAVATION, 1946-7, OF A ROMAN SITE AT FARNHAM, SURREY

BY

A. W. G. LOWTHER, F.S.A.

THE site concerned, situated beside the Hale Road towards Aldershot and a short distance out of Farnham on the east side, is now known as that of the "Roman Way Estate" but had previously, from a large and shallow gravel pit covering much of the site and the presence of the Six Bells Inn on the opposite side of the main road, been called the "Six Bells Pit."

It is probable that no excavations, certainly no "official" excavations, would have taken place on this site had it not been for the enterprise and initiative of our former member the late Dr. J. H. Gibson, who did so much for the archaeology of both West Surrey and Hampshire. In 1925, he observed, and had it placed on record,<sup>1</sup> that the gravel working at this site had exposed a pit with a lot of Roman pottery and tiles and mortar of the same date, also that it was fairly certain that a Roman building, a "villa" as he conjectured, had existed in the vicinity. It was on this evidence that, most fortunately, and despite its uncertainty, the site was scheduled for preservation as that of a Roman villa. Therefore it could not be built upon in 1946, as the Farnham U.D.C. intended, without sanction of the Office of Works (Department of Ancient Monuments), and this sanction was only forthcoming on condition that the site should previously be excavated and the full nature of the remains there be determined.

Excavations were therefore carried out, in 1946 and 1947, with labour (German p.o.w.'s) provided by the Office of Works, and the work was supervised jointly by Mr. W. F. Rankine and myself and lasted for several months, much of it during the winter when conditions were very bad for such work. The reason for this was the discovery, after the first season's work had ended, of the two small buildings on the site whose excavation forms the major item in this report and which were able to be explored thoroughly through the kindness and co-operation of the Farnham Council, who afforded every facility for the work and altered their plan for the estate to permit the preservation of one of these buildings, towards the cost of which work the Surrey County Council made a generous contribution.

## THE AQUEDUCT

The first stage of the work consisted of the digging, more or less at random, but designed to cover as much of the site as possible, of a series of trial trenches. It was during this part of the work that

<sup>1</sup> *Sy.A.C.*, Vol. XXXVII, p. 88 and p. 89.

a silted-up Roman ditch, V-shaped and 5-6 feet wide by 4-5 feet deep, came to light in one of the trenches. It was followed up in either direction by a series of spaced-out trenches, and found to run from N.W. to S.E., the direction of the fall of the ground—*i.e.*, from Farnham Park to the Bourne Mill. From what we learnt from the various sections cut across it, we can state with certainty that this ditch had served as an "aqueduct" and had first been dug not earlier than the mid-second century A.D., pottery of this date being found in the "rapid silt" at the bottom of the ditch. Waterborne, sandy clay-silt, containing further pottery in places, had gradually filled the lower two-thirds of the ditch and, particularly at the lower end (where the gravel pit had destroyed it and left a section exposed in the working face of the gravel which Dr. Gibson had observed, and taken to be a rubbish-pit) where a great deal of 3rd- and 4th-century coarse-ware pottery had been thrown into it, completely filling the upper part of the ditch.

It is clear that this ditch once served to bring a supply of water to what we now know to have been a Roman pottery works, which, established in the late-1st or early-2nd century A.D., had continued in use well into the 4th century and possibly until the end of that century—certainly until the disruption of the economic life of the country made the continued existence of such works impossible.

It is apparent that, if continued into the S.E. corner of Farnham Park in the direction in which it is making, this aqueduct must have tapped the Bourne stream at about the point where it is still above ground level and before it disappears into a swallow-hole to reappear at a point several hundred yards distant in the "Bourne Mill" ravine, 20 or 30 feet below ground level. Clearly the Roman potters not only required their water supply to be somewhat east of this ravine, but to be at such a level that it was easily available for their work. One further point about it. The aqueduct was found to follow a somewhat serpentine course in part of its route and it appears probable that this was due to its having been dug so as to avoid certain trees then on the site. Almost certainly in those days the site was well timbered and the plentiful supply of wood required for the potters' kilns or ovens (and for the furnaces of the two buildings described further on) was ready to hand as was essential, most of such potteries (*e.g.*, the Late Roman potteries of the New Forest and the Alice Holt Forest in Hampshire) being on sites that are still forest land and well timbered now or were so a few centuries ago.

#### BUILDING 1—THE DWELLING

The first structure located on this site (termed Building 1) proved to be a small dwelling<sup>1</sup> with a range of bath rooms (3, 4, 5, 5a, 6 and

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<sup>1</sup> Possibly or rather, probably, a dwelling for the "manager" or "overseer" of the potteries, as with the dwelling attached to the Roman brickworks on Ashted Common, and which was conjectured to have been the residence of a "manager": *v. Sy.A.C.*, Vol. XXXVII and Vol. XXXVIII.

7 on plan, Fig. 2) at its southern end, adjacent to a furnace, and with a large, warmed, main apartment at the north end, entered apparently from a verandah or porch at this end of the building.

A narrow compartment (2 on plan) between this "living room" and the bath apartments, probably originally housed a staircase leading to some upper rooms. The lower part of the hypocausts, and some of the supporting "pilae" for the floors still remained, as well as part of the plunge-bath (7 on plan) with its lead outlet pipe. A shorter length of pipe found in the débris filling the compartment, probably served to fill the bath and, from its position, it seems likely that a supply of hot water could be directed into the bath when required from a tank (possibly of the "testudo" type, as used in Pompeii) situated on top of the brick furnace tunnel at the western end of the bath. (Plate XV for illustration of pipes).

This furnace tunnel, which opened into hypocaust 5, beneath the hot room or *Caldarium*, had the stoke-hole from which it was operated at its southern end, and this had a rough flint-faced retaining wall and was entered, presumably by steps, from the west. Its smallness of size must have made the operation of firing or stoking the furnace-tunnel a difficult one, and prohibited use of the usual long-handled iron rakes and shovels.<sup>1</sup> A few tiles which had formed the bottom course of the entrance arch to the tunnel were still *in situ*. The tile courses of the tunnel walls still stood for a height of 7 or 8 courses, and were not vertical but oversailed, narrowing as they went up, but their exposed inner edges were very heavily burnt and blackened and some of the apparent oversailing seems to be due to wear, through scraping and raking, when the furnace was in use. A layer of ash and charcoal, intensely black, sticky and several inches thick, was on the bottom of the furnace and of hypocaust 5.

A small apsidal *Sudatorium* or sweating compartment (5a) opened off the west side of the *Caldarium*. In its wall, used as building material, was the fragment of the rim and upper part of an exceptionally large *dolium* or store jar (Fig. 18) which is of late 3rd century date to judge by its shape of rim and other similar, but smaller, jars from this site. This agrees with a layer of mid- to late-3rd century pottery from a level extending beneath the wall foundations of this building and, in places, cut through by the foundations. Also, the pottery, including a quantity of remains of flanged bowls, some colour-coated ("New Forest" type) red-ware,<sup>2</sup> and part of the base of a purple-coated stoneware beaker,<sup>3</sup> all of 4th century date, was found as "occupation débris" amongst the collapsed material of the building.

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<sup>1</sup> As were found at Wroxeter, *v. Excavation Reports* published by Prof. Atkinson, and *Research Reports* of the Society of Antiquaries of London.

<sup>2</sup> For similar vessels *v. Heywood Sumner's Excavations in New Forest Pottery Sites*, Ashley Rails, Fig. VII, nos. 7 and 10. For others from "Chatley Farm," Cobham, *v. Sy.A.C.*, Vol. L, p. 81.

<sup>3</sup> For similar vessels *v. as last*, Fig. III, Nos. 3, 10, etc.

The free-built portion of the walls (generally consisting of only two or three surviving courses) was of flint-rubble construction, but containing some few blocks of Chert stone (apparently "Bargate" stone) and some blocks of Greensand stone. The mortar used was soft and yellowish, having an excess of sand in it, and, as an appended report on the mortar (Appendix 1) shows, agreed exactly with that used in the construction of additions (buttresses and an apsidal bath) to Building 2, thus reinforcing the 4th century date assigned to the rebuilding of this structure from the rather sparse quantity of stratified pottery found in the latest levels.

The flue-tiles, as also the roof-tiles of this building and of which the broken remains formed much of the overlying débris, were all uniform and of one "make" and not, as usual with *late* 4th century buildings (*e.g.*, the bath building at Chatley Farm, near Cobham)<sup>1</sup> constructed with tiles of many different makes and which had clearly come from (presumably the ruins of) a number of other buildings. This is in keeping with a date early in the century, and of about A.D. 300, as suggested by the pottery. Coin evidence was lacking entirely.

#### BUILDING 2—A BATH BUILDING

While work was in progress on the excavation of Building 1, the construction of a soakaway pit by the builders working a short distance to the south-east, disclosed the wall (the outer north wall as it turned out to be) of another building. This was made the subject of a separate excavation in the summer of 1947, lasting several weeks, and concluding the work on this site.

Both German prisoners-of-war and a small team of voluntary helpers formed the labour force, and, amongst those who assisted, thanks are especially due to Messrs. F. G. Carruthers, B. Hope-Taylor, A. T. Ruby, M.B.E., and others, especially to Mr. J. Lindus-Forge who kindly did all the survey work and prepared the plans illustrating this report.

In brief, Building 2 turned out to have been a "bath-building," of a type normally expected with Roman military "permanent," or "semi-permanent" camp sites, but which (as at the Roman brick-works on Ashted Common) is now realised to have been a feature of Roman civilian industrial sites as well.

As previously stated, and unlike Building 1, it was found to have two periods of construction; the first, dated to the late 3rd century, through a layer of pottery and "kiln wasters" into which and through which its foundation-benches had been dug, some of the pottery being embedded in the foundation mortar. The second, of early 4th century date, had consisted of a repair, rebuilding and buttressing of the original (and, presumably, dilapidated) structure,

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<sup>1</sup> *Sy.A.C.*, Vol. L, "The Excavation of a Late Roman Bathhouse at 'Chatley Farm,' Cobham," by S. Frere, M.A., F.S.A., p. 94.

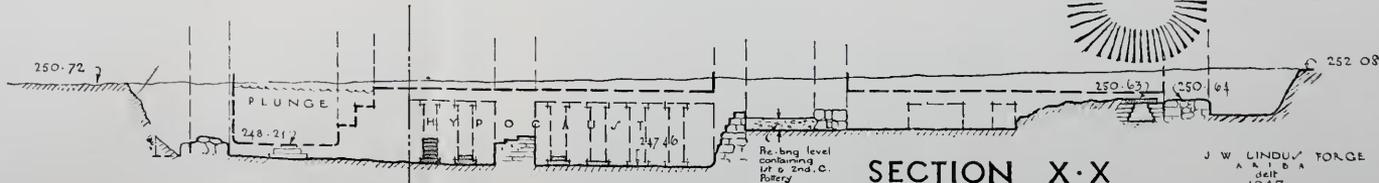
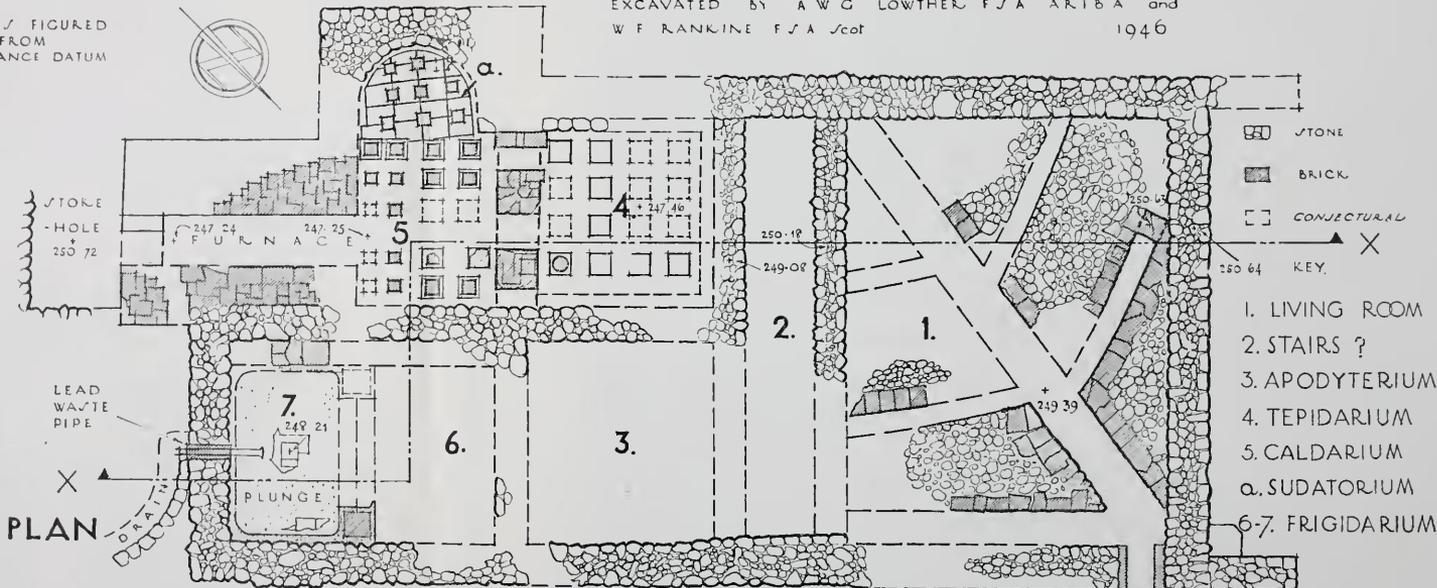
# ROMAN HOUSE

# FARNHAM



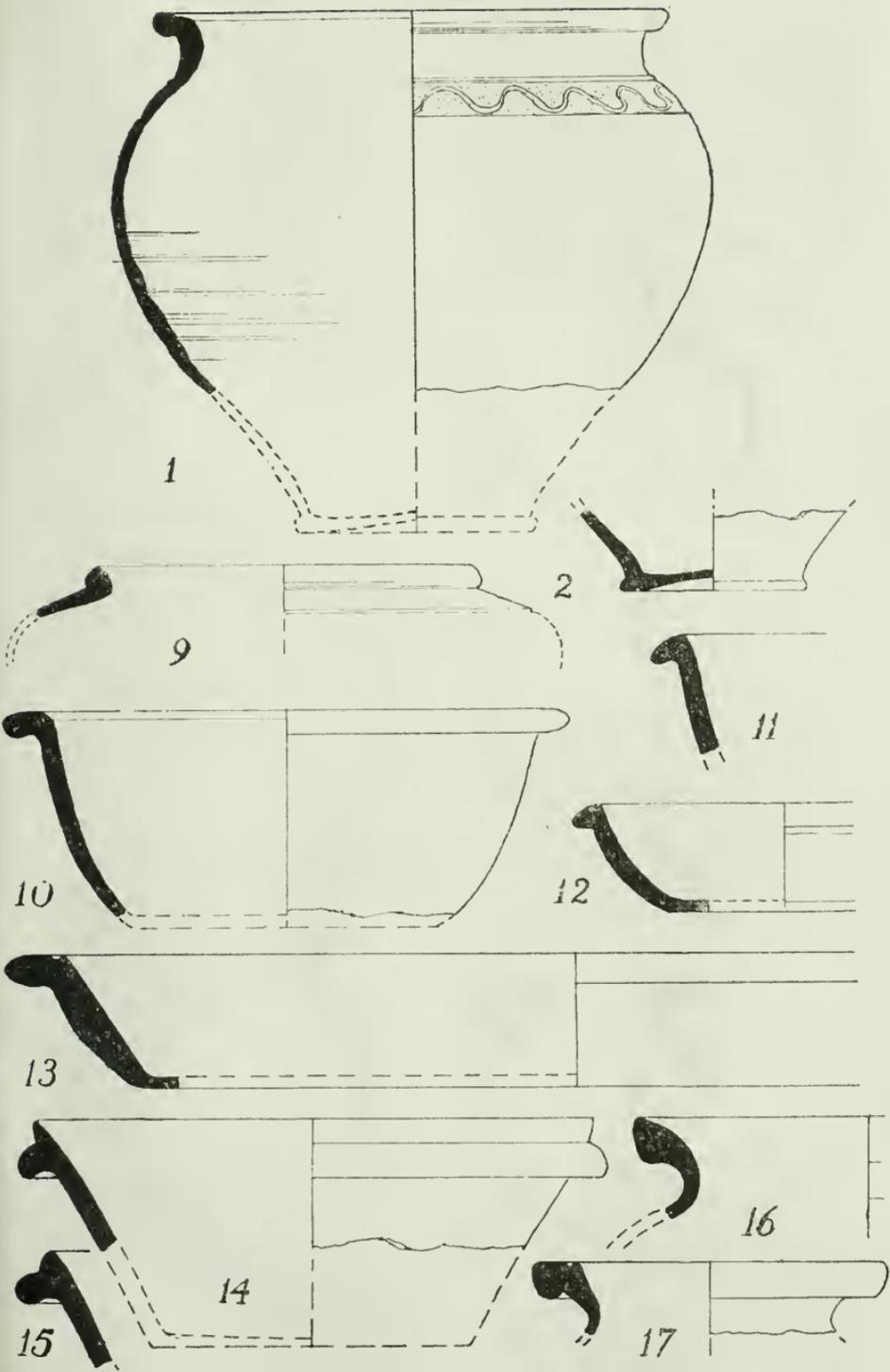
LEVELS FIGURED FROM OADNANCE DATUM

EXCAVATED BY A W G LOWTHER F.S.A. A.R.I.B.A. and W F RANKINE F.S.A. Scot 1946



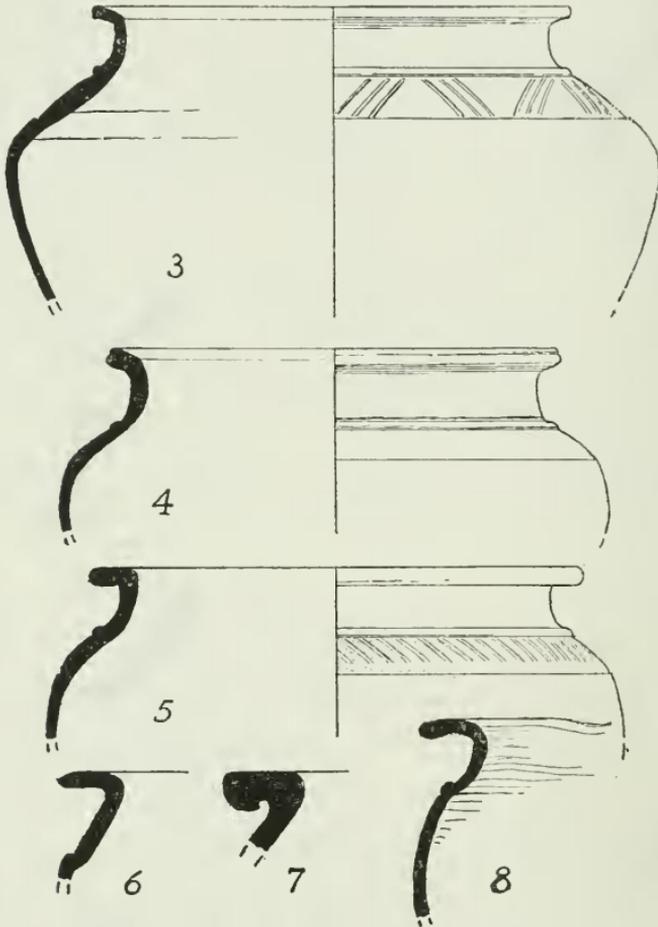
J W LINDSEY FORGE  
A. R. I. B. A.  
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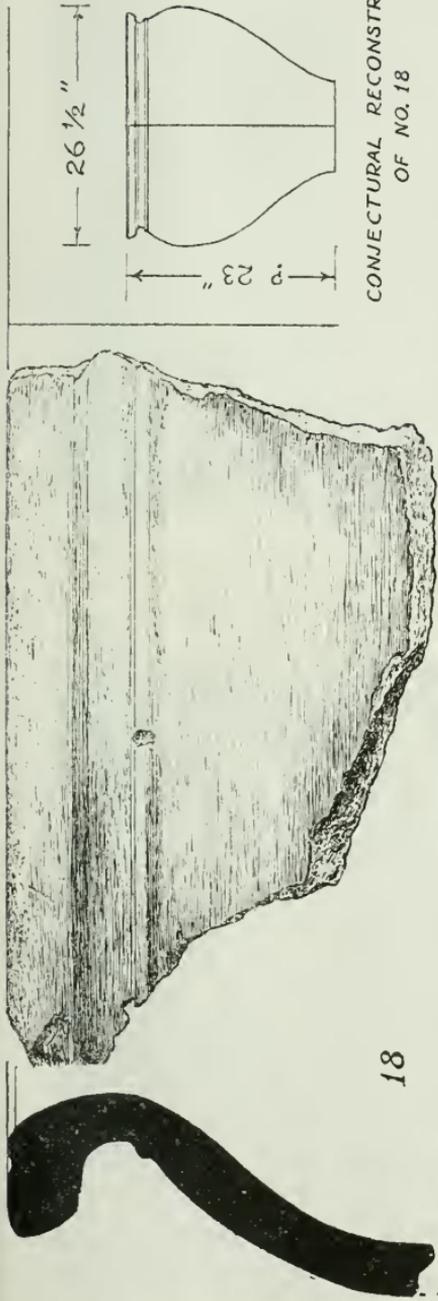
NOTE.—ALL DRAWINGS OF POTTERY ARE REDUCED TO ONE-THIRD.

together with the addition of an apsidal plunge-bath at the southern end, just to the left of the entrance. Remains of the stoke-hole and furnace existed at the opposite end of the building, and the original stone step down into the stoke-hole, a single block of Greensand measuring 2 feet 6 inches by 1 foot 9 inches and 1 foot in depth, the upper surface being worn into a hollow from use. A layer of ash and charcoal, in which a few pieces of pottery of late 3rd or early 4th

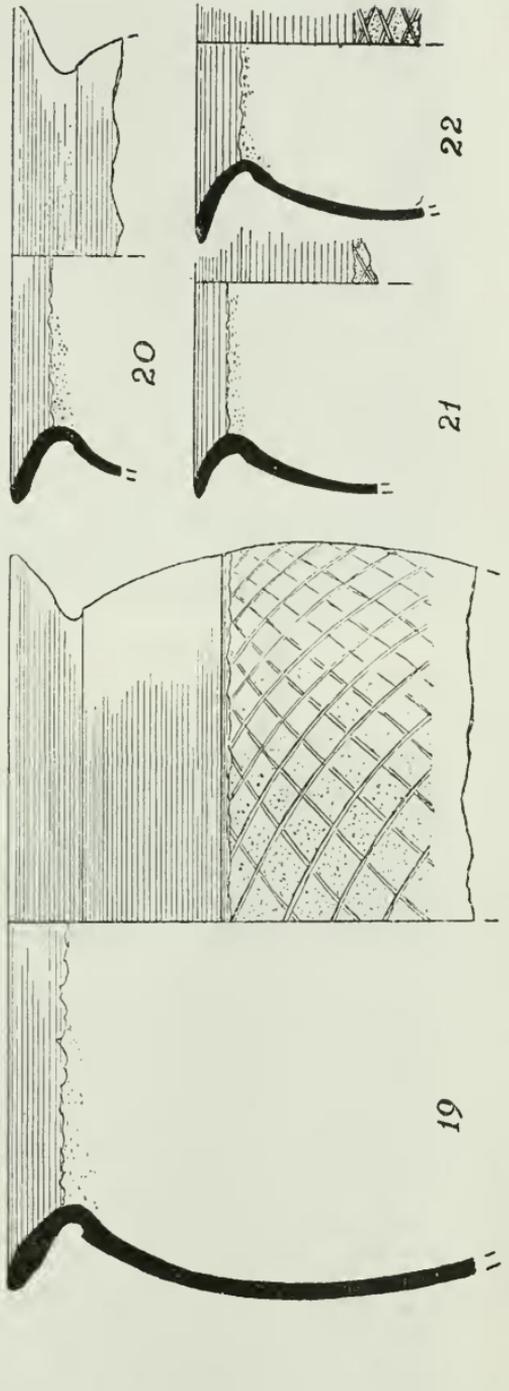


century date were found, lay on the clay floor of the stoke-hole and to a depth of about 6 inches.

A trial trench cut through the clay floor of the hypocaust in the part that had served as the *caldarium* of the bath series, disclosed the fact that the building had been erected on a "raft" of rammed chalk, 1 foot 7 inches in thickness and, that the ground on which it was set had been strengthened by means of timber piling, the piles, 9 inches in diameter and only 6 inches apart in places, had decayed away completely but had left cavities, once occupied by the timbers,

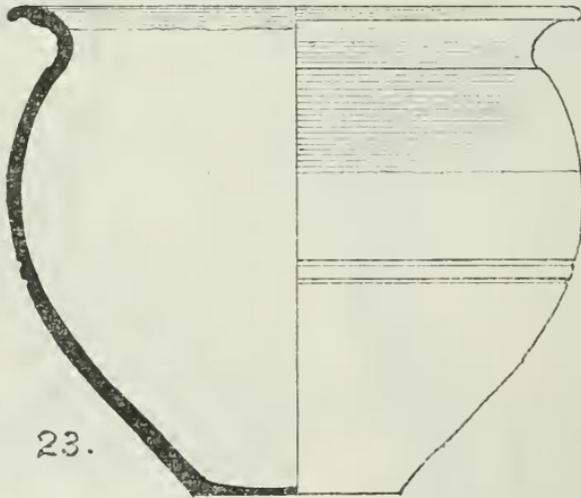


CONJECTURAL RECONSTRUCTION OF NO. 18



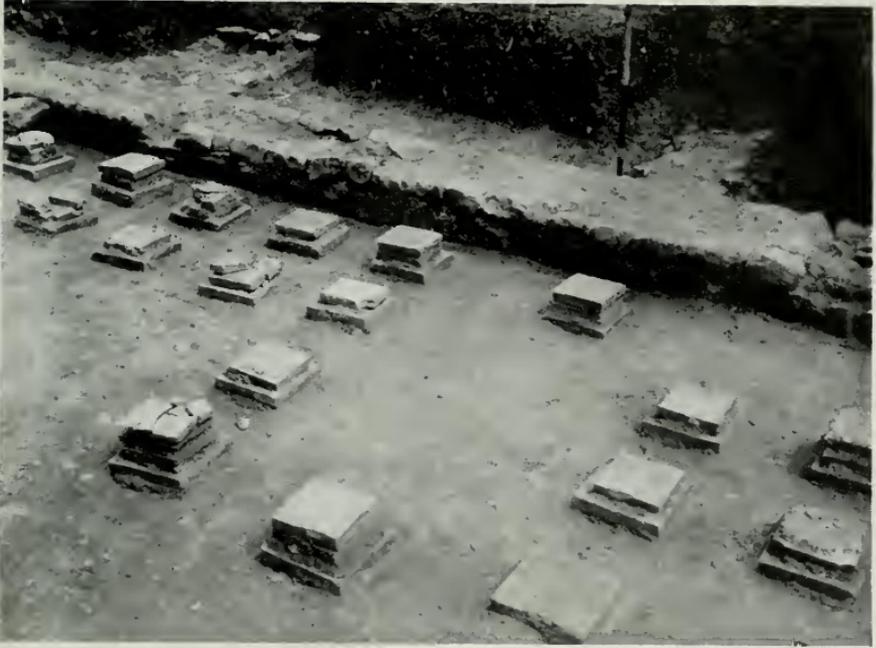
which had remained open through the compact nature of the overlying chalk. (The need for such piling was evident from weak, unstable patches in the underlying sandy-clay and which were a matter of concern to the builders of the present council houses on this site.)

As to the later additions: only three of a probable six, or more, buttresses, which had been built against the outer walls, had any remaining masonry. "Robbing," apparently, from a silver farthing of Edward I which we found on top of the foundation of a robbed wall, of mediæval date, had been extensive and somewhat more so than was the case with Building 1. The apsidal plunge-bath added to the south-west corner, as well as the masonry inserted to take the steps down into this bath, were of the same yellowish mortar as that of the buttresses and of the walls of Building 1. Its foundations had been carried down to a depth of a foot or more below the level of the earlier foundations against which it abutted at either end of its

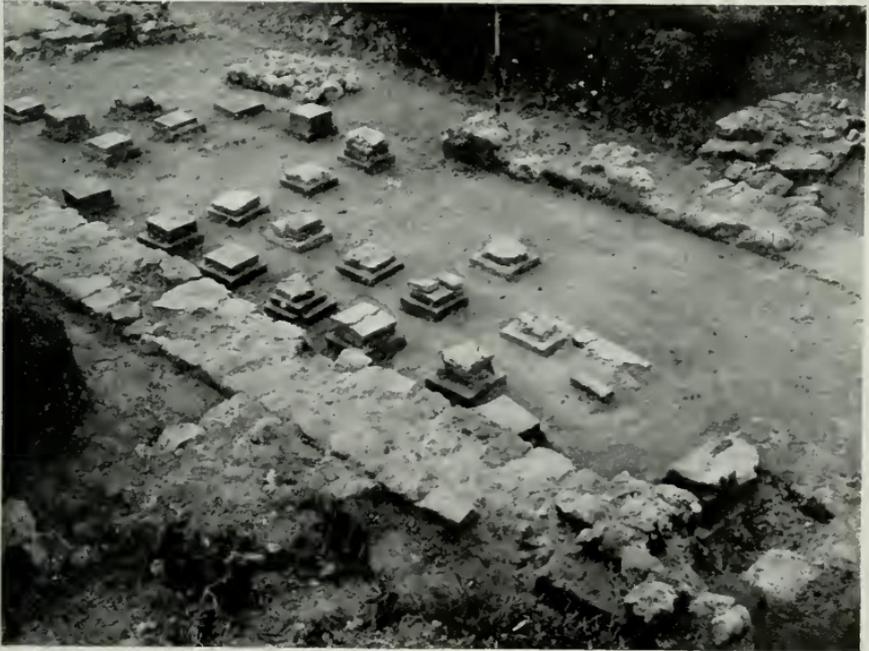


curve, and the 9- to 10-inch space beneath the *opus signinum* (red, brick and mortar concrete) floor of the bath, had been filled with a mass of pieces of painted wall-plaster, clearly that stripped from the earlier walls during the reinstatement and re-decoration of the building. Much of this plaster could be pieced together, revealing panelled designs of red, yellow and green lines on a white ground, of the usual rather crude and garish nature. Some of the bands of colour divide the rectangular (? dado) panels diagonally.

A late-Antonine date for the original bathhouse was deduced not only from the types of pottery in the layer of débris into which its foundation trenches had been dug, but by the imprint of a coin (a "second brass" of which the inscription . . . T O N I N V . . . can be read) on pieces of a large jar and on its inner surface. From other imprints, and those of a thumbnail and forefinger (presumably those of the potter who made the vessel) it can be seen that the



BUILDING NO. 2—CALDARIUM, LOOKING NORTH.



BUILDING NO. 2—CALDARIUM, LOOKING SOUTH.



BUILDING NO. 2—SOUTH-EAST END.



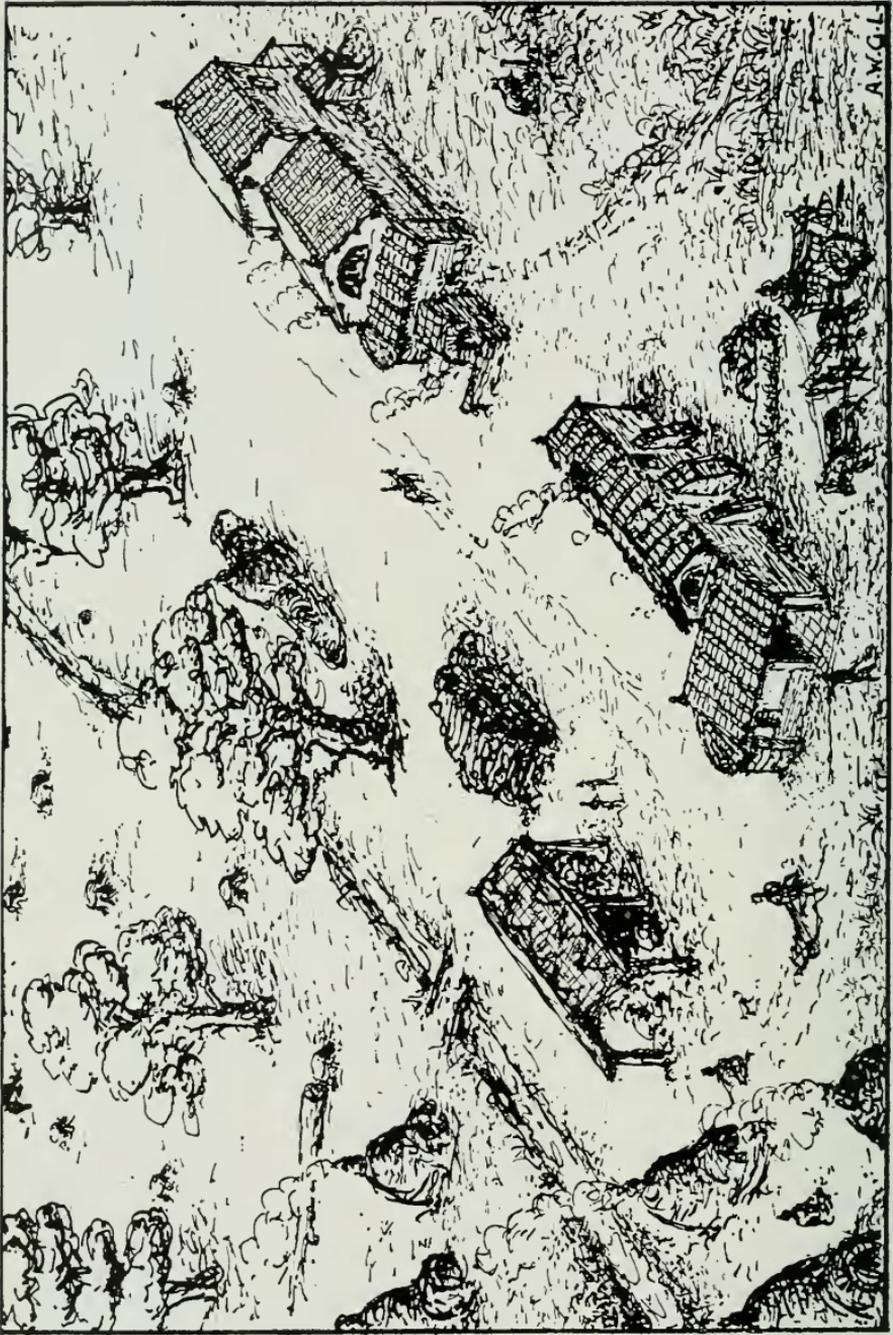
BUILDING NO. 2—OUTER ANGLE OF APSIDAL PLUNGE BATH, SHOWING JUNCTION OF WORK OF PERIODS 1 AND 2.



IMPRINT OF AN ANTONINE COIN (2Æ) ON INNER SURFACE FRAGMENTS OF A JAR.  
Impression of thumb-nail below. Scale:  $1\frac{1}{2} \times$  original.



BUILDING NO. 1—LEAD PIPES FROM PLUNGE BATH.  
(Note the iron ring round end of lower pipe.) Six inch scale below.



SUGGESTED APPEARANCE OF THE SITE *circa* 350 A.D.

coin had fallen on the sloping surface within the vessel (a wide-mouthed jar of hard, light-grey ware) and that the first efforts to retrieve it had only sent it further down the slope. Eventually it was recovered by the forefinger pressing the coin into the clay at one edge while the thumbnail (a fairly long one) was inserted into the clay under the opposite edge of the coin, levering it upwards (*v. illustration, Plate XIV.*)

#### THE SMALL FINDS AND POTTERY

Apart from iron nails, some iron hold-fasts (T-shaped and measuring 3 inches by  $11\frac{1}{2}$  inches, used to secure the flue-tiles to the walls) some pieces of window glass and the pottery, finds were almost absent. No coins (apart from the silver farthing of Edward I mentioned above) were found and, apparently owing to the nature of the soil, nothing of bronze had survived, though the green staining produced by corroded bronze coins or small objects was observed at several places during the excavations.

The pottery found was considerable and only a selection from it is here figured.

Nos. 1-13 were found in the lower silt in the aqueduct, in the lowest or "rapid-silt" level of which was found the only piece of Samian ware from the site, a fragment of a late (and rather poorly made) dish of form 18-31. They are mostly of grey or blackish-grey coarse ware. No. 8 is a much distorted "waster."

The pieces 14-17 were found in the upper material in the ditch or aqueduct.

No. 18 is the fragment of a very large jar, or *dolium*, which was found built into the apse wall of Building 1. It is of hard, grey-coloured ware. Conjecturally, it is from a vessel of wide-mouthed type of 2 feet  $2\frac{1}{2}$  inches maximum diameter, and of 3rd century date.

The 4th century cooking pots represented by 19-22 were found in the latest levels of Building 1, and similar ones in the charcoal layer in the furnace of Building 2.

No. 23, of red-brown ware with white slip-coating to its upper part, is typical of a number of pots and wasters, from the late-Antonine levels, and to which group (though a much larger version) the jar previously mentioned as bearing the imprint of a coin had belonged.

#### ANIMAL REMAINS

Bones of sheep, ox and pig and the antlers of red deer and roe deer were found during the work. The mollusca, besides oyster shells and whelks, included a number of mussel shells. No human remains were found.

#### SUMMARY AND CONCLUSIONS

The site had, from about A.D. 100 to 400, been occupied by a pottery works, to supply which with water, an open ditch, or aque-

duct, was dug from the upper waters of the Bourne stream to the site. Between A.D. 250 and 300 a bath house, apparently for the use of the pottery workers, was erected, but this by (or just after) the latter date had become dilapidated and required buttressing (possibly owing to outward thrust exerted by the pressure on the walls of a "barrel-vault," although this is conjectural). At the same time (about A.D. 300 or just after this date) a plunge-bath, of apsidal form, was added close to the southern or entrance end of this building. A small dwelling, built early in the 4th century, and just north of the bath house, probably was occupied by a "manager" of the pottery works. It had its own bath quarters and apparently, some upstairs rooms. As to the final date, when the buildings were abandoned, of this there was no evidence, largely owing to the absence of coins from among the objects found at this site, but the pottery suggests a date about A.D. 400.

#### A NOTE ON THE MEDIÆVAL COIN

BY THE LATE MR. J. ALLAN, C.B., F.S.A.

"This is a farthing of Edward I. The 'LONDONIENSIS' is quite clear which points to E. I, and there are sufficient traces of the obverse legend to show it reads: 'E. R. ANGLLÆ' not 'EDWARDUS REX', so it can be dated very closely to A.D. 1280-81."

ANALYSIS OF MORTARS TAKEN FROM BUILDINGS No. 1 AND No. 2

Sample No.	Location	Analysis of aggregate. Sieve analysis—% by weight retained on British Standard Sieve						*Fineness modulus	% Clay and silt through No. 100 sieve	Admixture	Approx. proportions of aggregate to 1 vol. lime putty	Remarks		
		$\frac{3}{8}$ in.	$\frac{3}{16}$ in.	$\frac{3}{32}$ in.	No. 14	No. 25	No. 52						No. 100	
F1	Wall of Building No. 2 Period I (c. A.D. 250-280)	10.4	20.4	35.5	48.1	57.8	67.1	75.2	80.6	3.95	19.3	No tile	1.1	Aggregate composed of hard chalk and crushed black flint probably derived from chalk.
F2	Wall of Building No. 2 Period II (c. A.D. 300-350)	0	38.2	49.8	56.5	59.4	66.0	75.3	80.1	4.25	19.0	†3% crushed tile	1.8	Aggregate composed of natural siliceous gravel, some chalk and re-used material (tile and tile mortar).
F3	Wall of Building No. 1 Period III (A.D. c. 300-350)  (Only one period to Building No. 1)	0	28.7	42.3	54.8	61.3	69.6	79.4	83.9	4.20	15.8	2% crushed tile	1.5	Aggregate composed of natural siliceous gravel with some crushed tile and chalk lumps.

\* The "Fineness Modulus" is a convenient way of comparing the relative fineness of various sands. It is obtained by adding the percentages, by weight, of material retained on a range of nine selected sieves and dividing the result by 100. The British Standard sieves used are  $1\frac{1}{2}$  in.,  $\frac{3}{4}$  in.,  $\frac{3}{8}$  in.,  $\frac{3}{16}$  in., No. 7, 14, 25, 52 and 100.

† The sample submitted also contained one large piece of tile which represented 11% by weight of the sample.

NORMAN DAVEY.

October 4, 1947.