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Verulamium, 1949*

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DURING the past decade, field archæology in Great Britain has been conditioned by certain obvious factors. Most of it has been emergency work, the hasty salvage of bombed sites or of sites required urgently by the Armed Services, by factories, by housing schemes, or by related operations such as gravel-digging. Owing to the diversion of talent into fieldwork of another kind, and the temporary cessation of archæological field-training, the demand for skilled supervisors has exceeded the available supply. More trained workers have been needed urgently.

There have indeed been certain encouraging responses to this need. In the north, Professor I. A. Richmond and Mr. Eric Birley, have been conducting an annual school at Corbridge in connection with the University of Durham. The University of Nottingham Department of Adult Education has conducted summer training schools since 1949 under the directorship of Dr. Philip Corder and Mr. M. W. Barley, in which students have been trained on a Roman site of considerable importance. In the south, the Institute of Archæology of the University of London, for five weeks in the summer of 1949, organised a course of training by means of excavation, lectures and classes in surveying, draftsmanship and photography at Verulamium, where an excellent site-museum, then under the active curatorship of Mrs. Audrey Williams, fortified by a traditional local interest in such matters, provided special facilities within reach of London. These three enterprises were planned specifically for the purpose of training and their archæological value is in a sense of secondary importance. Nevertheless, their proper record is a part of their instructional function, and the present report is a statement of the results of the excavation of two small sites undertaken in these circumstances in the heart of the later Roman City of Verulamium, near to St. Michael's Church, St. Albans.

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†The excavation was under the direction of Sir Mortimer Wheeler. This report is largely the work of Mrs. Cotton.

The work was financed from the residue of the old Verulamium Excavation Fund, supplemented by grants from the Society of Antiquaries of London and the Haverfield Bequest Committee. Under the general direction of Dr. Wheeler it was carried out by Mrs. M. Aylwin Cotton, O.B.E., F.S.A., and Miss K. M. Richardson, F.S.A., with much help in administration from Miss Theodora Newbould. Mr. M. B. Cookson was in charge of the photography, and the classes in surveying were conducted by Mr. Huntly S. Gordon, F.S.A., and Mr. G. C. Dunning, F.S.A. Instruction in draftsmanship, and a small field-laboratory for first-aid conservation, were provided by the Institute of Archæology. Students and volunteers came not only from the British Universities, but also from Cyprus, Egypt, the Sudan, Ceylon, and Australia.

Thanks are due to the Rev. M. W. Shewell, then Vicar of St. Michael's, for his ready co-operation in permitting excavation on the glebe lands of the Vicarage which cover the site of the Roman Forum; to the Corporation of the City of St. Albans for permission to excavate the site in the Playing Fields of Verulamium Park, for lending equipment and for providing a hut and working shed; and to Mrs. Audrey Williams, F.S.A., for the many arrangements she made to facilitate the organisation of the school.

Our acknowledgements and thanks are due also to those who have assisted in the preparation of this report: to Dr. D. B. Harden, V.P.S.A., for the report on the glass; to Mr. A. W. G. Lowther, F.S.A., for the report on the patterned flue-tiles; to Miss Joan Liversidge, F.S.A., for the report on the painted plaster; to Mr. Richard V. Melville for the report on the moulded stone fragment; to Mr. Eric Birley, F.S.A., for examining and dating the decorated Samian wares; to Mr. E. N. Jope, F.S.A., for the report on the Roman lead-glazed wares; to Mr. B. W. Pearce, F.S.A., for the report on the coins; to Drs. Henton, Kent and Helbaek for the reports on the cereals; to Dr. Ian Cornwall for the report on the human and animal bones; to Miss M. Maitland Howard for the report on the mollusca; and to Mrs. F. L. Balfour-Browne for the report on the charcoals.

FROM THE BRITISH UNIVERSITIES, BUT ALSO FROM CYPRUS, EGYPT, THE SUDAN, CANADA, AND AUSTRALIA.

The main area chosen for excavation was that covering one of the buildings of the Roman Forum on the glebe land to the south-west of St. Michael's Vicarage. Hereabouts, but exactly where was not recorded,¹ the Rev. C. V. Bicknell and Mr. William Page found, some fifty years ago, certain buildings of unusual interest, indicating that the forum-complex of Verulamium varied from the simple type familiar to us at Silchester, Caerwent and Wroxeter. These buildings are lettered (in order of discovery), from south-east to north-west, Buildings A and B, to which Building C, excavated in 1949, may now be added (Plans 1-2). All three abut upon, or even straddle, a passage 26 feet wide which was evidently a part of the main ambulatory of the forum. Page's plans are inadequate and his description is proportionately difficult to follow, but the main sequence appears to have been this:

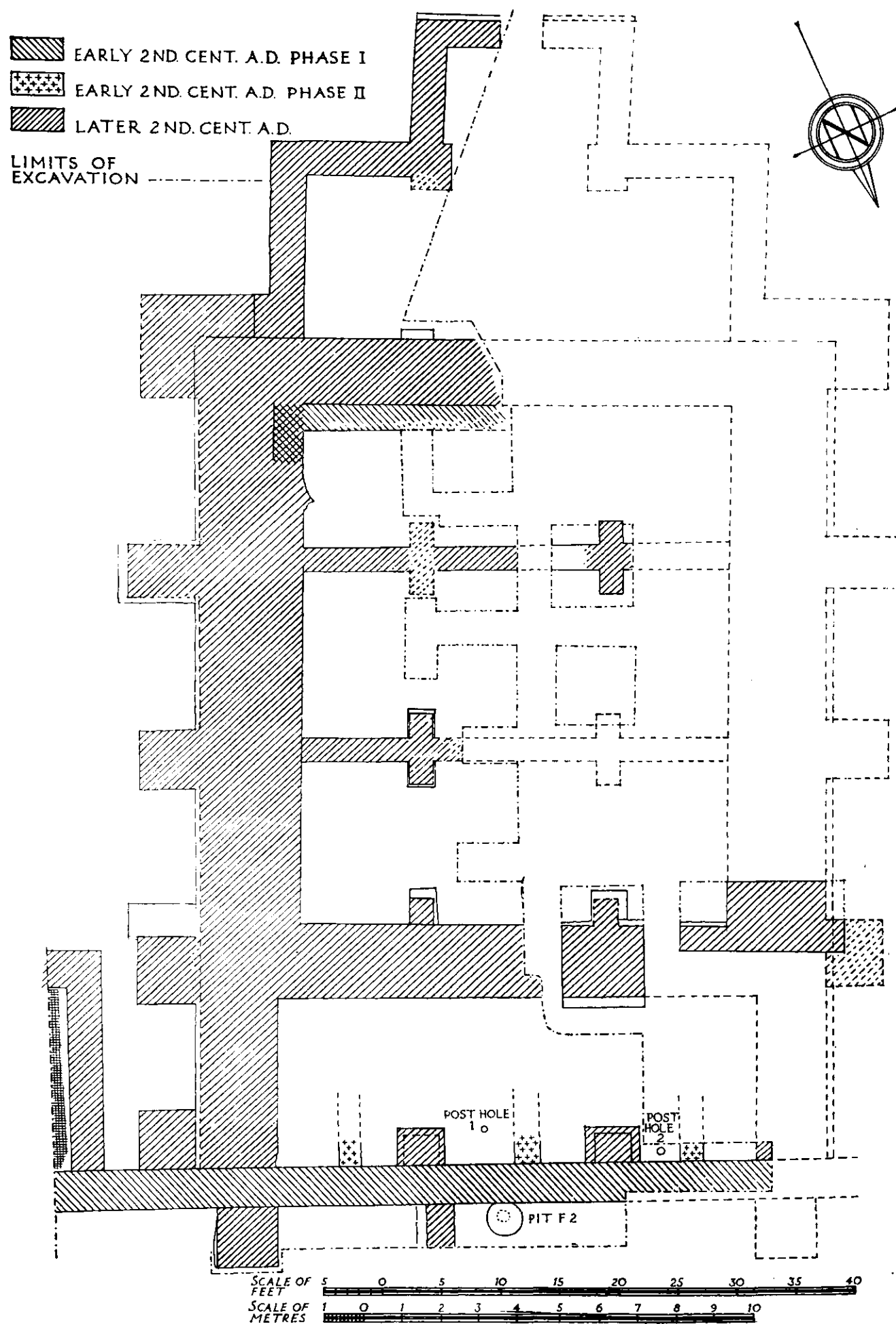
Period I. The earliest structure found lay under and partly at right angles to the front or inner wall of the ambulatory opposite the gap between Buildings B and C, and consisted of part of a room with relatively slight walls and red-painted plaster with a black band on one of them.

Period II. To this period belongs the ambulatory in its original form. Its floor was of *opus signinum*. A length of 373 feet of the inner (north-eastern) wall was uncovered, including the width of the return ambulatories at its south-eastern and north-western ends. This measurement therefore gives the width of the Forum from south-east to north-west, irrespective of any rooms or other buildings which may have opened on to the ambulatories on those two sides. On the south-east side at least the close proximity of the flanking street, as shown by air photographs, seems to preclude the former existence of such rooms here.

The inner or north-western wall of the return ambulatory at the south-eastern end of the long wall

¹ The original plans, *Trans. St. Albans and Hertfordshire Architect. and Arch. Soc.*, n.s., I (1898, etc.), 198 ff. and 396 ff., show no modern features to which the Roman buildings can be anchored. *V.C.H. Herts.* IV, Pl. IV facing p. 132, indicates their general position in relation to the old vicarage; whence A. W. G. Lowther in *Ant. Journ.* XVII (1937), 39. The recent (1949) excavations have amended the plan (see Plan 2).

VERULAMIUM. BUILDING C.



PLAN 1.

"had at intervals, beds for stones 3 ft. 2 in. to 5 ft. in length, evidently for carrying the columns of a colonnade and giving an intercolumniation or distance between the columns of 13 ft. 6 in. centre to centre." Close to the outer wall were found fragments of mouldings and unintelligible scraps of a monumental inscription in Purbeck marble, now in the Verulamium Museum (Plate 4, ii). The outer wall of this ambulatory "had a perfectly smooth and level surface and looked as though it had formed a bed for a continuous course of large blocks of stone." (On the other hand, a stretch of equivalent wall on the south-west side, uncovered in 1949, had been carried up in bricks).

The long (373-foot) inner wall on the south-western side of the Forum was at this period "largely composed of massive blocks of Barnack stone measuring from four to six feet in length, and a foot in thickness." It was interrupted by three massive foundations, between which had been two open spaces, each filled with five columns, again with an intercolumniation of $13\frac{1}{2}$ feet centre to centre. A base in position was of segmental bricks and had a diameter of 2 feet 10 inches. Nearby was a fragment of a fluted column with a diameter of 2 feet 9 inches. The three massive foundations referred to above (see Plan 2) were thought to belong to this period. The published plan is inconsistent on this point but pretty clearly indicates that they were not. It is reasonably certain that they were in fact of Period III. Other fragments of the ambulatory were found on the north-east and south-east sides of the Forum (see Plan 2), indicating "an open courtyard 308 feet by about 205 feet," with an entrance, flanked by five-foot walls, in the middle of the south-eastern side and, in the centre, some "remains of masonry which have not been explored." The courtyard was of rammed gravel. It may be noted that the Watling Street from the south-west points straight at the Forum-gate.

In a corner of the vicarage garden and at various times in St. Michael's churchyard and under the church-tower, walls $4\frac{1}{2}$ -foot wide, mostly running parallel with the north-east side of the Forum and in one case associated with oolite column-drums have been found

and tentatively ascribed to the Basilica²—a likely enough guess. Building B may belong to Period II, but will more conveniently follow Building A.

It was thought that Building A had been destroyed by fire.

Period III. "There was probably an interval between the time of the destruction of the building of the second period and the erection of that of the third, for the accumulation of charcoal and debris upon the floor of the earlier buildings was apparently left undisturbed, and the floor of the new building raised about a foot over it." This new building comprised: (a) the insertion of stone thresholds or screen-foundations at the south-western ends of the two return ambulatories; and (b) the removal of the two colonnades from the 373-foot wall and their replacement (at any rate to the surviving height) by solid walls of rubble. But Page adds: "the walls at this spot are so complicated that it is impossible without further excavations to ascertain of what they formed a part." The ambulatory floor at this period seems to have been paved with "coarse tesserae about an inch square."

To this period must, without doubt, be ascribed Building A, although Page included it in his Period II. To the latter period indeed belongs the smooth-topped north-eastern end wall of this building as planned, since this is actually the back wall of the Period II ambulatory. But Page is careful to note that "the eastern [i.e. south-eastern] side wall [of Building A] passes quite over it," and is thus definitely of later date.

Building A is $63\frac{3}{4}$ feet by $34\frac{1}{2}$ feet internally, with the solid base of an apse, 26 feet wide, at its south-western end. The side walls are $8\frac{1}{2}$ feet thick, doubtless to support a barrel-vault. Olive-green plaster remained on the interior of the walls and fragments of various colours, indicating a floral pattern, lay about. The usual roll masked the junction between walls and floor; the latter had an outer border, $5\frac{1}{2}$ feet or more in width, of coarse drab tesserae, $1-1\frac{1}{4}$ inches square, and within this was a band of "scale-pattern in black and white, within which again was a very pretty braid-work design in black, red, drab and white, then

² *V.C.H. Herts. IV*, 134. The column-drum, built of stone and flint fragments which can be seen in the churchyard, is not in position.

lines in black and white." Further indications were that the main design had been "geometric, made up of a series of bands of a scroll pattern in red, white, yellow, and black." More moulded Purbeck and a fragment of white marble were discovered. Beside the apse and on the adjacent floor of the ambulatory was much burnt wood.

Building B is shown on Page's plan as integral with the back wall of the ambulatory and is ascribed by Page himself to Period II. This may be correct but requires verification. So far as excavated, the structure consists of an oblong chamber, $62\frac{1}{2}$ feet by 40 feet, flanked by two smaller wings, to one at least of which an apse had been added. The floors were tessellated, but were not extensively examined. Two small fragments of inscriptions on Purbeck marble were found (Plate 4ii).

* * * * *

Thus far Mr. Page, slightly modified. I turn now to Building C, which, on the assumption that it related to the third or most south-easterly of the massive foundations on the line of the Forum-colonnade, stood approximately in the same relation to Building B as did Building A.

About two-thirds of Building C were completely cleared in 1949³—sufficient to indicate the plan accurately (Plan 1). I had selected the site as our principal training ground, but when, after three day's work, I discovered that the whole area was covered with five feet or more of barren top-soil, I switched most of my students to a more accessible and more completely stratified building elsewhere (below, pp. 25-38), and removed the uppermost four feet of soil from the Forum building with a mechanical grab. Even so, it was necessary at several points to penetrate to a depth of 9 feet to reach the surviving Roman material—so completely had the medieval builders plundered and lacerated the whole area in their search for brick or freestone.

The natural surface of the ground hereabouts rises from north-east to south-west, and Building C had

³ Involving the removal of upwards of 1,500 tons of soil.

been constructed on a level drift or platform cut into the hillside; so that, at the south-western end, its building level lay seven feet below the ancient surface (Plates 1, i-ii, and Plan 4). This is an important factor in any attempted "reconstruction" of the building. Where it emerged from the cutting its floor-level was artificially raised some five feet above the building level.

Of Page's three periods, Period I was absent. Period II was represented by a stretch of the back wall of the Forum ambulatory (Plate 2, i). As elsewhere (in Mr. Page's excavation, and in Mr. A. W. G. Lowther's at the eastern corner of the Forum in 1934),⁴ this wall was notably well built. It was 3 feet $4\frac{1}{2}$ inches wide, stood on footings driven deeply into the natural clay-with-flints, had a flint facing carefully trimmed flush and further levelled with mortar, and had a smooth, level top whence the brick courses have been removed. Against it on the south-west side, and at right angles with it, had been placed three rough flint footings, which may have carried a timber superstructure. The walls were subsequent to the construction of the Forum wall but prior to Period III, the make-up of which covered them. They appear to represent a line of rooms built against the ambulatory, and may be ascribed to Period IA. Adjoining the ambulatory wall were also three post-holes, two at least of which are intermediary in stratigraphical position between Periods I and IA.

The remaining walls belong to Period III, although the Period II ambulatory-wall was wholly or partially retained in the later complex. The core of Building C is an approximately square structure, $59\frac{3}{4}$ feet by $52\frac{3}{4}$ feet over all, of brick-laced and brick-faced flintwork with lavish use of good yellow mortar.⁵ The side walls, like those of Building A, were based upon a foundation 9 feet thick and can only have been designed to carry a heavy barrel vault. Towards the north-east or Forum front, the side walls are continued, slightly

⁴ *Ant. Journ.* XVII (1937), 38.

⁵ The bricks measure 1 ft. $4\frac{1}{2}$ ins. by 1 ft. by $1\frac{1}{8}$ ins.- $1\frac{1}{2}$ ins. The horizontal mortar-joints between them range from 1 in.-2 ins. (av. $1\frac{1}{2}$ ins.- $1\frac{3}{8}$ ins.). These measurements may be compared with those of the brickwork of the town-walls, c. A.D. 130-140; bricks 1 ft. 4 ins. by $11\frac{1}{2}$ ins. by $1\frac{1}{4}$ ins.- $1\frac{1}{2}$ ins. (av. $1\frac{3}{8}$ ins.); mortar-joints 1 in.-2 ins. (av. $1\frac{1}{4}$ ins.).



PLATE I(i). BUILDING C FROM THE SOUTH-WEST.



PLATE I(ii). BUILDING C FROM THE SOUTH-EAST

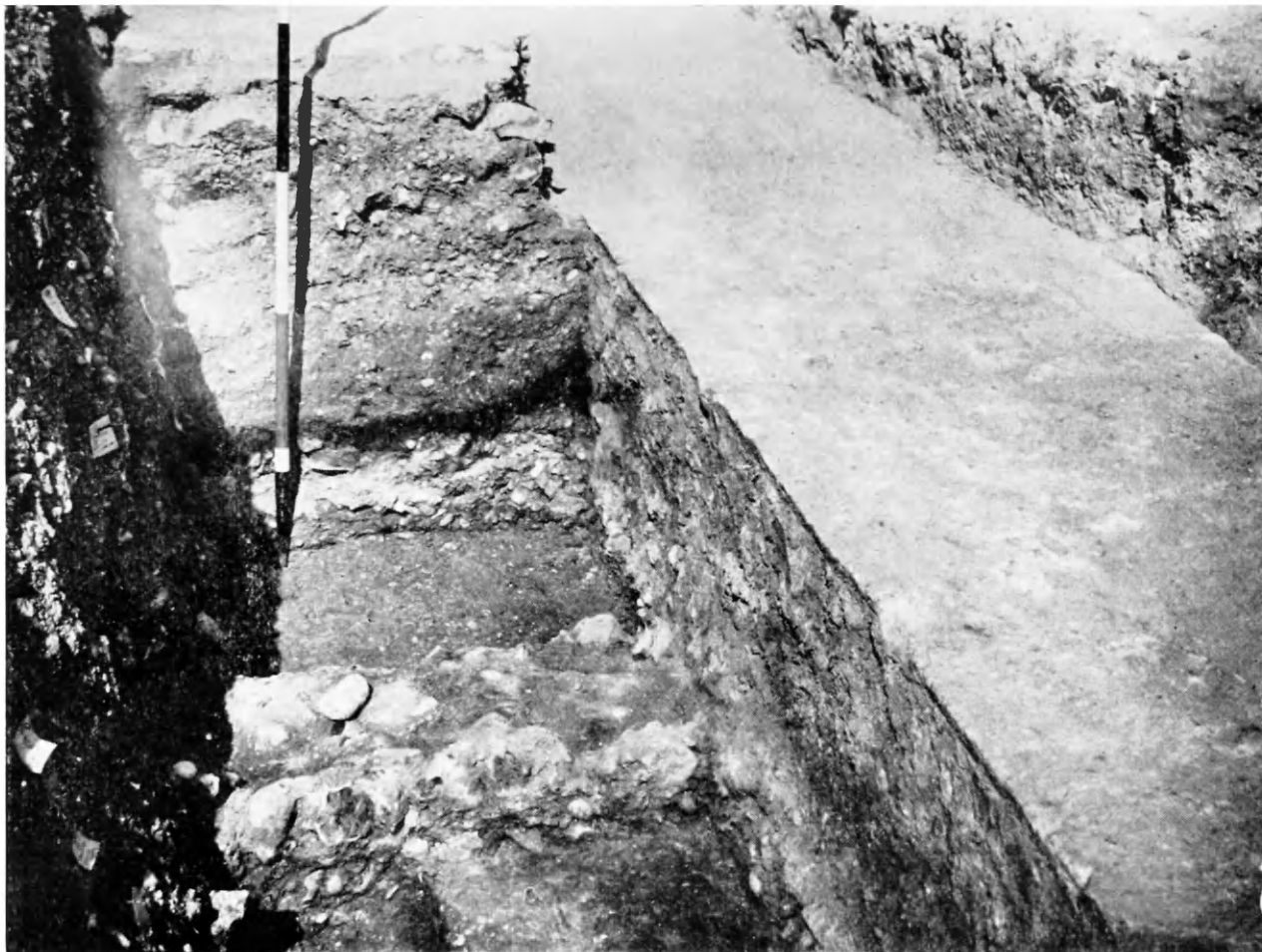


PLATE 2(i). THE BACK WALL OF THE FORUM AMBULATORY AND THE FLINT FOOTINGS OF THE WALL OF A ROOM BUILT AGAINST IT.

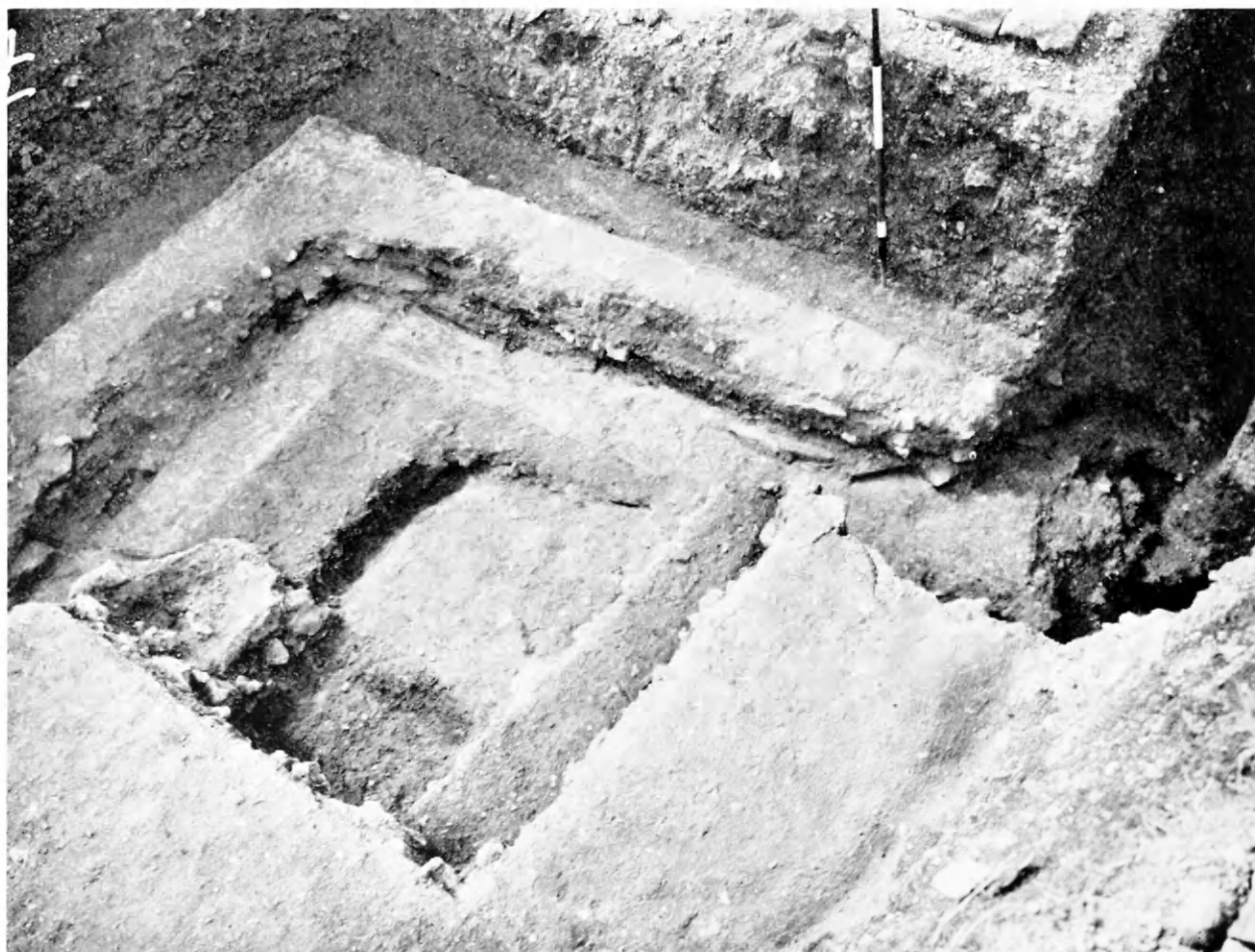


PLATE 2(ii). ONE OF THE PEDESTAL-LIKE PROJECTIONS OF BUILDING C AT THE SOUTH-WESTERN END.

narrower, to the ambulatory-wall, within which they terminate in five-foot square projections corresponding with the projections found opposite to them by Page in the line of the ambulatory colonnade (Plan 1). At the south-western or back end, within the hillside cutting, are two box-like projections with an entrance $3\frac{1}{2}$ feet wide in the outer (Plate 2,ii). The lighter construction of these projections, or at any rate of the larger of them, must be viewed in relation to the fact that they are packed against natural soil. At intervals round the periphery of the main plan were salient square platforms which were built of brick from the footings up but are integral with the building. At the south corner, these projections assume the form of a clasping buttress. Finally, within the main square are two transverse brick walls, of one built with the structure, with nibs or responds implying some sort of aisle-arcade down both sides.

Other details are that at one point within the main square, as shown on the plan (Plan 1), are traces of a small brick-lined alcove. The floor of the main structure had been massively built up, with a layer of re-used building-material (broken bricks, mortar), under layers of flints and tough clay. The surface was of this clay, with no hint of further paving and no vestige of occupation-earth. The larger "box" at the back end, however, had been twice floored with a mortar spread on carefully laid flints and clay inter-mixed with some building material. At one point (see Plan 1) the structure incorporated the base of an angle-wall which *may* have formed part of an earlier building but was not associated with any floor or occupation level. We suspect it to have been a superseded element in the main plan; at any rate, one arm of this earlier wall was entirely overlaid by the later wall above two courses, whilst the other arm was embodied in the make-up of the floor.

* * * * *

What is the meaning of this complex? In considering possibilities, we are indebted to the late Sir Alfred Clapham, who kindly visited the site and discussed them on the spot. Let us marshal the facts.

- (i) The nucleus of the plan is a relatively small square.

(ii) Its construction would appear to have been disproportionately massive. It was clearly designed to carry a barrel-vault.

(iii) The vault must have risen to a minimum height of 20 feet and was probably higher.

(iv) Of that height, some 7 feet must have been masked at the back by the hillside into which the building is cut, and considerably more must have been covered towards the Forum by the ambulatory, unless, as is possible, the latter was destroyed at this point.

(v) There is no trace of a "living" floor, such as exists in adjacent structures. An independent building of the same date, close by on the south-east, has a floor of coarse red tesserae (see Plan 1), and the ambulatory-floor is of *opus signinum*. The floor of the square structure is of clay without evidence of occupation, save for the remains of the small niche referred to.

(vi) The criss-cross of brick walls in the interior, forming a sort of central square within the main square area, are, in Sir Alfred's view, more likely to be strengthening-walls than room-walls. They are nowhere associated with occupation.

(vii) The peripheral square projections, in view of the massiveness of the walls and small size of the building, cannot be interpreted as buttresses. They must have been carried up as column-pedestals; their relief is too bold to imply pilasters. Incidentally, many roughly chipped segmental bricks from built-up column-shafts—too rough to recover an accurate diameter—were found in the debris.

By and large, in spite of the small internal niche, the inference is that the structure represents the base of a colonnaded *podium* upwards of 20 feet high. What building that *podium* carried is less certain. With the aid of the "antennæ" reaching to or even carried across the ambulatory (on arches), it is not impossible to infer a temple. But the square plan of the main structure does not conform with the normal shape of a cella, and the internal "strengthening" walls lose at any rate some part of their meaning if there was no corresponding load above them. Moreover, the frontage overlooking the Forum is obviously a feature

designed to match the frontages of Buildings A and B, to give a uniform façade to three buildings of divergent character, of which the central one at least does not look like a temple. There is perhaps more to be said for Sir Alfred Clapham's suggestion that the *podium* was that of a lofty monument, towering above the buildings of the market-place and indeed those of the city, presumably with a receding upper stage or stages enriched with attached or free-standing orders. The interior of the *podium*, though not normally used, may well have been accessible and may even have contained a small shrine. The frontage on to the Forum was harmonized with those of Buildings A and B, possibly by a salient platform or, more likely, by a roof terminating towards the Forum in a pediment and carried across the ambulatory by arches of which the abutments remain. Further reference will be made to the structural problem below.

If we turn to the question of date, firm evidence is once more lacking, but there are certain considerations of some weight. In the first place, the Forum wall was associated with a fair amount of pottery, both in its building level (immediately overlaying the old turf-line on the natural soil) which contained, amongst other sherds, a fragment of a Samian Form 36, dateable approximately to A.D. 100 or a little earlier (Fig. 3, 1). Immediately above this level lay a burnt layer, 3 to 4 inches thick, which swept up against the face of the wall and indicated a fire soon after construction. In the layer were fragments of Samian Forms 37, 27 and 18, with other sherds of the latter half of the first century A.D. (Fig. 3, 2-7). It has been said that the total bulk of the evidence was not very great, but it is consistent and suggests a building-date not far removed from the end of the first century. This is a matter which will require close attention from future excavators of the Forum.

Secondly, the position of the Forum is significant. The exact line of the defences (the so-called "Fosse") of the post-Boudiccan town has not been determined at this point, but it almost certainly ran under the Forum. The southern angle at the top of Bluehouse Hill was found by excavation, and the south-eastern side probably underlies the Verulamium Museum,

where, at the time of building, a great depth of soil was noted and was reasonably conjectured to represent the Fosse.⁶ At any rate, it can be affirmed that the Forum either overlies or immediately adjoins the early defences; it is peripheral to the earlier Roman town, and clearly belongs to the lay-out of its second century successor. As the central public building, it would naturally be given preference in the new scheme, and may well have antedated the enlarged defences, which have been dated to *c.* A.D. 130-140. There was indeed less military reason for building large-scale defences at Verulamium in the first half of the second century than at any other time, and their construction may easily represent a final rather than an initial phase in the new order. There is nothing inherently improbable in the establishment of the main lines of the new Forum some two or three decades earlier.

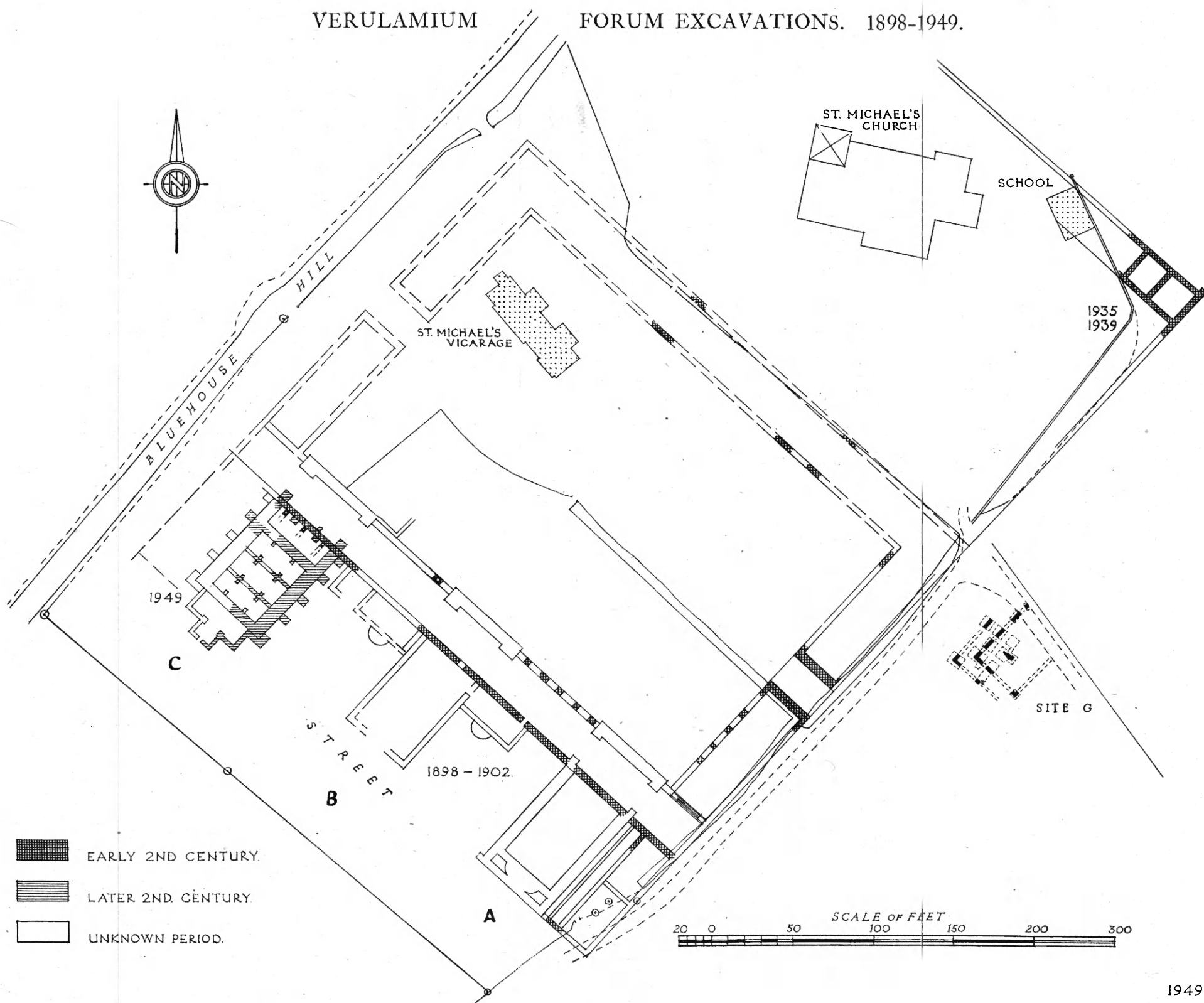
Subject to further evidence, then, which is admittedly required, we may postulate an early second-century date for the framework of the Forum. To this, Buildings A and C, if not also B, are additions in a different style: massive walls, and rough but regularly coursed flints, heavily laced with brick and bonded with lavish yellow mortar. This is precisely the fashion in which the town gateways of the second-century city were constructed, and contrasts with the white mortar and more careless coursing of the late third- or fourth-century walls, such as the outermost wall of the Verulamium Theatre. To those familiar with the building-construction of Verulamium, Building C proclaims a Hadrian-Antonine date.

After the Antonine period and until the time of Constantine there was, it seems, no significant building activity at Verulamium. Indeed, the contrary was the case; by the end of the third century, houses in areas excavated in 1930-33 were in a dishevelled or even ruinous condition. It would appear in the highest degree improbable that any public "luxury" building was put up during that hundred years. And another point is in favour of a second-century date. The inflated currency of the late third or fourth century found its way in great quantity into the soil. It is impossible to imagine a building of that period in

⁶ Philip Corder in *Ant. Journ.* XX (1940), 501.

VERULAMIUM

FORUM EXCAVATIONS. 1898-1949.



PLAN 2.

the centre of Verulamium devoid of associated coin-evidence. Yet not a single coin rewarded our search into the ample make-up of the floors of Building C. The negative evidence in favour of a pre-third-century date is formidable.

On the positive grounds of structural character and monumental conception, therefore, combined with the absence of the evidence normal to late Roman building-activities, we ascribe Building C to the Hadrian-Antonine period—to the heyday of Roman Verulamium. The building represents the culminating enrichment of a Forum built perhaps a quarter of a century previously.

Analogies for a triumphal monument of this form⁷ are well-known in the southern provinces of the Roman Empire, e.g. that found in the Forum of *Lugdunum Convenarum* in the Pyrenees,⁸ and at La Turbie above Monte Carlo.⁹ These monuments are, however, ascribed to the Augustan period.

SITE G

In the dry summer of 1949 there could be seen in the grass of the Playing Fields in Verulamium Park burnt out grass marks which indicated the plan of a building. It showed as a double rectangle, which had been observed in an air survey by O.G.S. Crawford in 1940, and had been charted by P. Corder.¹⁰ The site lies to the south-east of the Forum of the Later Roman City of Verulamium, and is bounded on the north-west by a modern road leading to the Forum entrance and on the north-east a road and hedge divide it from the present car-park.

From the surface plan, which was obscured by the road and hedge, it was suggested that it was a small Romano-Celtic temple about 53 feet square. The partial excavation of this site in 1949 has shown that the building there extends into the car-park and is

⁷ These analogies are structural ones and not functional, the evidence was not available to determine with any certainty the function of Building C.

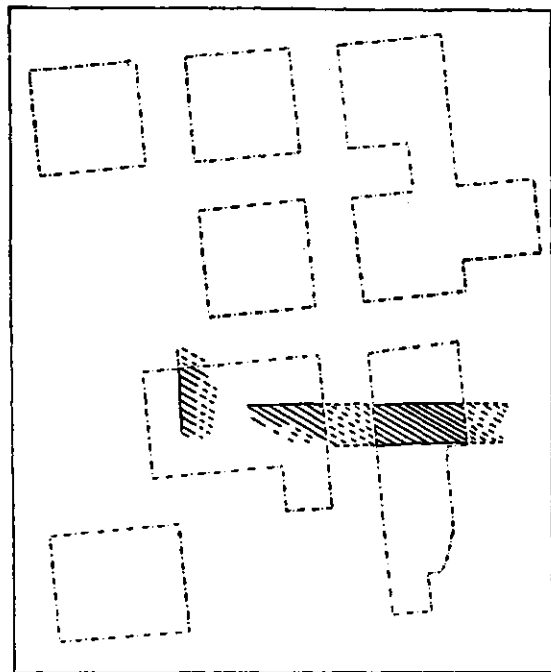
⁸ G.-Ch. Picard, "Trophées d'Auguste à St. Bertrand de Comminges," *Mém. de la Soc. Arch. du Midi de la France* XXI (1947), 16 ff.

⁹ J. Formigé, *Le Trophée des Alpes (La Turbie)*. Supplément II à *Gallia* (1949), which quotes all comparable monuments.

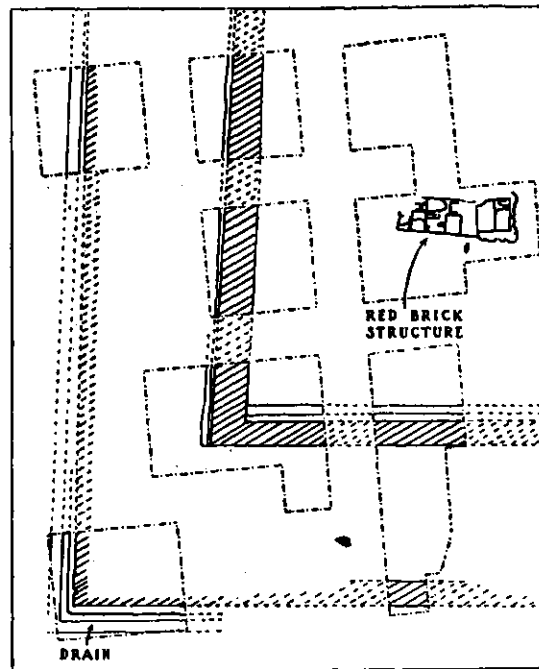
¹⁰ *Antiquity* XV (1941), 121 and Pl. II and Map.

VERULAMIUM. SITE G.

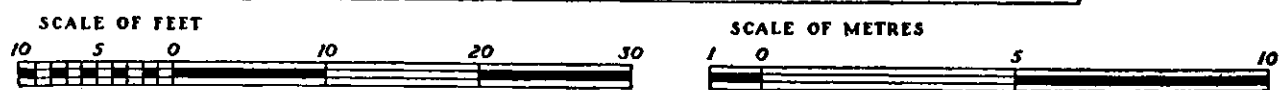
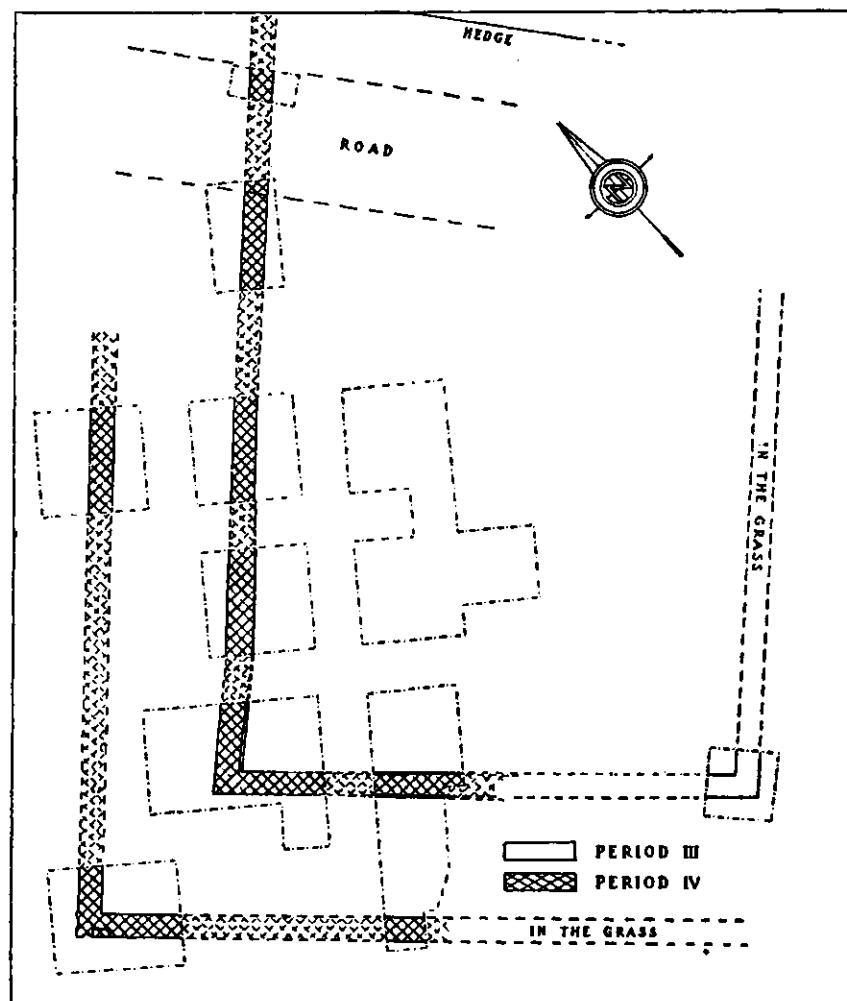
a. PERIODS I & Ia BUILDINGS.



b. PERIOD II BUILDING



c. PERIODS III & IV BUILDINGS



PLAN 3.

longer than was apparent. The structures found showed four separate building periods, of which the first had two phases, and it was only the last three periods that had possessed the double walls.

In the time available, and working with student labour, only a small part of the site was excavated. Because of this, the purpose and type of the buildings found could not be determined. The evidence obtained and the preliminary dating of the pre-building levels and building periods, insofar as the material obtained permits, is described below (pp. 28-38). In summary it shows that:—

1. There was no Belgic occupation of the area, and no Roman building was erected until a date after A.D. 100. A street which appears to have been a tributary of Watling Street and was in use from c. A.D. 50 onwards, crossed the area. By c. A.D. 80 silt had accumulated over this street suggesting a period of disuse.

2. Between c. A.D. 80 and 100 the street was re-metalled twice with no intervening silt, and on the last remetalling some six to nine inches of silt accumulated before the first structure was built.

3. At some point during the first quarter of the second century A.D., and perhaps associated with the building of the Forum of the Later City c. A.D. 100-125, a chalk-walled structure of undetermined form and purpose (Period I building) was built in the area. The occupation material from its one floor is dated tentatively to within the Trajanic period. The building was altered slightly (Period IA building) at the end of Trajanic times or at a point converging on Hadrianic times. Following a slight fire, it was refloored with *opus signinum*, and the chalk walls were possibly then plastered and painted for the first time, a phase which may have equated with the reconstruction of the Later City at Verulamium during Hadrianic and Antonine times c. A.D. 125-150. Before A.D. 150 the building was used as a repository for fine quality threshed grain. This store was burnt at some point between c. A.D. 125-150, and the building may have stood derelict for a time. Before c. A.D. 170, however, a cobbled floor of poor quality was laid down over the wreckage of the earlier painted plaster from the walls.

4. A second building (Period II building) was erected c. A.D. 170-190. This was of rectangular form with an inner flint wall over the Periods I and IA foundations, and an outer flint wall enclosing a corridor. It had a red brick structure, of undetermined purpose, placed asymmetrically inside, and was furnished outside with a timber-lined drain and a ditch.

5. Two successive rebuilds occurred on the same plan as the Period II building (Periods III and IV buildings). The red brick structure and the drain and ditch were not retained in use. Only part of a floor level which might relate to the Period III building remained which contained material of late third century date. This is suggestive of a rebuild during the Constantian "renaissance" at Verulamium c. A.D. 296. There was no dating evidence for the Period IV building, which was represented only by two courses of roughly-built flints over the foundations of the earlier walls, but the destruction level which covered the site contained material of early fourth century date attesting a probable continuation of occupation until that time.

THE EXCAVATION OF THE SITE

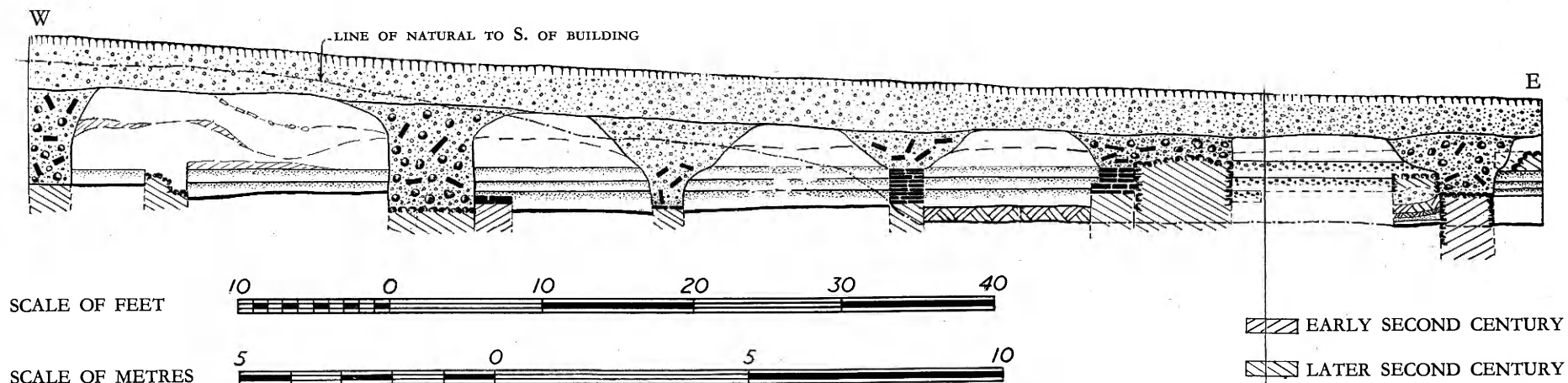
Pre-building Levels

The stratification found on Site G (Plan 5) which preceded the earliest building erected in this area, consisted of:—

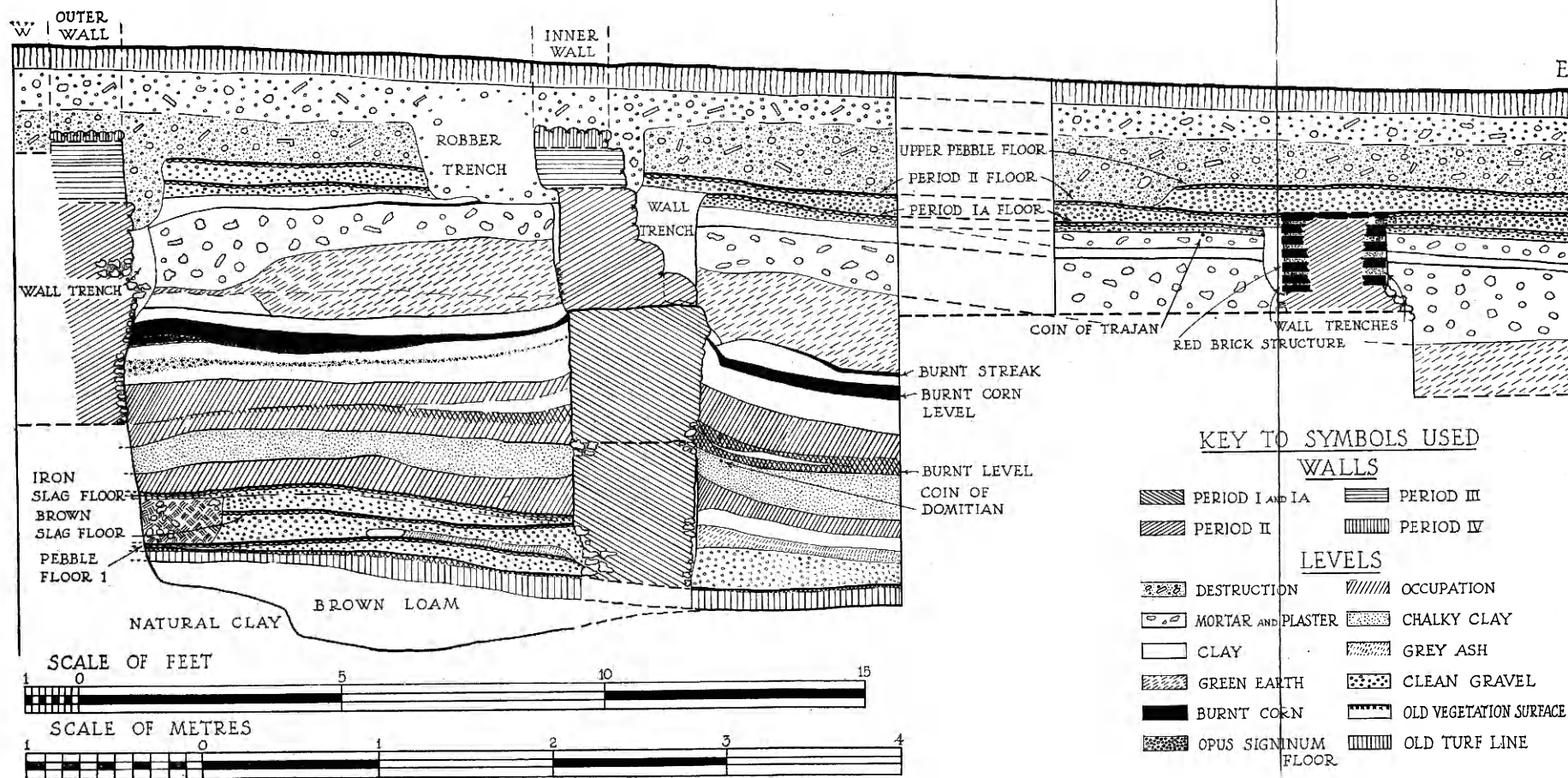
- (a) The original land surface or old turf line with its vegetation surface.
- (b) The first street level described as pebble floor 1.
- (c) Silt lying on this street described as a grey ash layer.
- (d) A second street level (or brown slag floor) flanked to the east of the later wall by a clay level.
- (e) A remetalling of this street described as an iron slag floor.
- (f) The silt over this street, described as the occupation earth on street level 3, and the black occupation level to the east or inside the later wall.
- (g) A small pit, Pit NI, 1, which was cut into the above level and was sealed by the first floor of the first building on the site.

VERULAMIUM

BUILDING C.



SITE G.



Only in the south-western trench was this site explored down to the natural subsoil. In the small area uncovered this was found to consist of a natural brown loam overlying natural clay. A worked flint flake (Fig. 1, 4) was found in the brown loam. The vegetation surface over the old turf line had consisted of brushwood, as remains of twigs and wood imprints were found over the area. One withy hole and the track of a horizontally-lying withy were observed. There was no Belgic occupation of the site in this area. Embodied in the old turf line was part of a Samian vessel of Form 15/17 of pre-Flavian date (Fig. 4, 1) and a few sherds of coarse pottery of Roman ware and Romanised native wares.

On the old vegetation surface there had been laid a street (pebble floor 1) with a gravel and clay make-up and a metallised surface. It ran south and north towards the area to be occupied at a later date by the Forum, and outside and to the east of the Early City. Both this street and the equivalent clean gravel layer to the east of the later building were sterile.

Over this first street, and to the east of the later building, silt had accumulated. Of its content, the significant pottery was a Samian vessel of Form 29 of A.D. 70-90 (p. 54), and a sherd of grey poppyhead beaker. As the latter does not usually occur until after A.D. 80 (see p. 67), this layer would appear to have continued to accumulate until at least that date, and the first street must have been laid down before A.D. 80.

A second street was then laid down (the brown slag floor) with a surface of flint pebbles which contained some iron slag. A re-metalling (the iron slag floor) was added with no intervening silt. It had a basis of clean gravel with a well-metalled surface which contained a large quantity of iron slag. Neither street produced any internal dating evidence. The west edge of these street levels was not uncovered. No ditch was found on the east side but, as the footings of the Period I building occupied this area, it may have been removed when the foundations of this structure were dug. To the east of the later wall a clean clay level equated with these two later re-metallings but it produced no noteworthy finds. This latest street level would

■

appear to have been disused or neglected. On both sides of the later wall a layer of dark occupation earth accumulated to a depth of from 6 to 9 inches (the occupation earth on street level 3 or iron slag floor). This was the first level to yield an appreciable number of finds. The latest Samian wares from it (Fig. 4, 2, 3 and 5) were predominantly of *c.* A.D. 70-85 in date. The coarse pottery (Figs. 6, 21-26 and 7, 1-5 and Plate 6ii, 1-12) was of Flavian date. Nothing was found that need be dated as late as the Trajanic period, so this accumulation may have taken place during the period *c.* A.D. 80-100.

A small pit (Pit NI, 1, not illustrated) had been dug into this level which was sealed by the make-up of the floor of the first building. Its contents (Fig. 7, 6) contained early material which could have been in use up to *c.* A.D. 80, but the pit was probably filled in before, or at the time, the building was started.

In summary, the site was not built on before *c.* A.D. 100 or later. Before *c.* A.D. 80 there had been a street which had been succeeded by a second with a remetalling between *c.* A.D. 80-100, but which appeared to have been neglected towards the end of the period.

The Early City at Verulamium was laid out during the third quarter of the first century, A.D., *c.* A.D. 50-75, and was defended by "The Fosse" which may have been dug after the destruction of the town by Boudicca in A.D. 61.¹¹ The main lines of the Forum of the Later City may have been established *c.* A.D. 100-120 (see above p. 24). Site G lies outside the Early City and Fosse, and is in the vicinity of a possible *place* in front of the south-eastern entrance to the Forum. As, however, these streets were abandoned by the time the Forum was built, and as they would not appear to be part of the street plan of the Early City, they may have been a tributary leading to Watling Street which was in use from *c.* A.D. 50 onwards.

Building Levels

PERIOD I BUILDING

On the eastern edge of the earlier street there was found a chalk raft or clunch wall, 2 feet 4 inches wide,

¹¹ *Verulamium*, p.1.

running in a south-east and north-west direction (Plan 3a), on the line of the inner wall of the structure. Only a 6-foot length of this wall was uncovered in the south-western trench. It was trench-built and was cut through the pre-building levels down to the top of the old turf line. The top was defined by a layer of flints, but any superstructure it may have had had been replaced by the wall of the Period IA building.

The levels associated with this period were:—

- (a) The make-up of its floor level (the chalky clay level of Plan 5).
- (b) A cobbled floor.
- (c) An occupation layer on this floor.

(The last two levels were found only on the south side of the cutting and do not appear on the main section of Plan 5).

Very little material was found in the small area excavated, and the foundation date of the building is at present tentative. The Samian wares and coarse pottery (p. 55 and Fig. 7, 7-8), together with a very corroded *as* of Domitian of A.D. 88-96 (No. 3 of p. 87), favour a date early in the second century. As the start of the succeeding period appears to lie still within Trajanic times, it may perhaps be assigned to an early Trajanic date, or to have been founded at some point comparable with the building of the Forum *c.* A.D. 100-125.

PERIOD IA BUILDING

In the second phase of Period I, the Period I wall was rebuilt or raised from the level of Period I floor over the same width for a height of 2 feet 6 inches. This wall (Plan 3a) was traced along the eastern side for a length of 14 feet where it then turned eastwards. Only some 4 feet of this last wall were uncovered, and it was not traced westwards. This north-western corner, or corners, of the Period IA building is further north than that of the succeeding re-builds. This wall was also a chalk raft or clunch wall. The associated levels, which sloped upwards against the wall, consisted of a succession of floors and occupation levels. It is noteworthy that in both phases of the Period I building the levels found were similar on both sides of the wall. This suggests perhaps that it may

have been a partition wall rather than the outer wall of a building. The associated levels were:—

- (a) The first floor (the occupation earth and burnt level of Plan 5).
- (b) A second floor, consisting of a clay make-up carrying an *opus signinum* floor (the clay level and *opus signinum* floor of Plan 5).
- (c) A level rich in burnt grain lying on the *opus signinum* floor (the burnt corn level of Plan 5).
- (d) A clay and chalk levelling over this burnt layer (the clay, burnt streak and chalk spread of Plan 5).
- (e) A thick occupation or accumulation on the above layer (the green earth debris level of Plan 5).
- (f) A destruction level (the mortar and plaster, clay and upper mortar levels of Plan 5).
- (g) A third or final floor (the Period IA floor of Plan 5).
- (h) The occupation on this floor (which only occurred in patches and is not illustrated in Plan 5).

The occupation earth and burnt level, which rested against the lowest part of the Period IA wall, showed no definite laid floor and may perhaps only represent a continuation of occupation of the Period I building after the alteration of the wall. The level contained much charcoal and perhaps a terminal fire necessitated the next re-flooring. The dating evidence for this level (Fig. 4, 8-10 and Fig. 7, 9) is again scanty and is not closely determinable. It is consistent with a date within the Trajanic period. It would seem therefore that the first building on the site, which may have succeeded closely or been contemporaneous with the build of the Forum, had, by Hadrianic times, been slightly re-modelled and had perhaps suffered a fire although it was not burnt down.

This event was followed by a renovation. A good *opus signinum* floor was laid over a clay basis. At this point the walls were probably plastered and painted. Only in the levels over the *opus signinum* floor did broken fragments of painted wall plaster occur. This second floor and its make-up produced no dateable

material, but immediately on it was a burnt layer which was composed almost entirely of oak charcoal, charred wood and burnt grain (Plate 3b i). The grain was of unusual interest. Examination of samples (see pp. 89 and 91 and Plate 7) showed that it was of fine quality and well-threshed and was mixed with a quantity of oak-timber which may have been derived from wooden containers or from the destroyed roof-timbers. The associated pottery (Fig. 7, 10-12) was nearly all jugs. These could be of Hadrianic date, which suggests that this phase of the Period IA building, its best, was part of the known reconstruction of the Later City at Verulamium during Hadrianic and Antonine times *c.* A.D. 125-150.

After the grain had been burnt, a layer of clean clay was laid over the debris. In one place a burnt streak on this clay was covered with a chalk spread. These "cleaning-up" layers contained some pottery of earlier date (Fig. 4, 11, p. 57), and as *as* of Vespasian of A.D. 71-3 (No. 2, p. 87), but no contemporary material.

The next level, designated the green earth debris level, was a deposit up to 1 foot 6 inches thick. This may represent either the main period of occupation of the Period IA building, or perhaps the building fell into dis-use after the fire occurred and this deposit was laid down before the final re-flooring of this phase. Whether it accumulated as an occupation level, or whether it was laid deliberately prior to the latest renovation, its terminal date is clear. The level provided the richest collection of material obtained. The Samian wares (Fig. 4, 12-19 and Fig. 5, 1) included three sherds dateable to *c.* A.D. 110-140 and two sherds dated as *c.* A.D. 110-150. The coarse pottery (Fig. 7, 13-23) also can be dated as predominantly *c.* A.D. 110/120-140/150. The lead-glazed wares found in this level are of interest as they furnish additional support to the view that these were manufactured more extensively in Britain than had been believed previously. The final re-flooring of this phase did not occur therefore until a date after A.D. 150.

Two small points suggest that the building may have been derelict for some time. The above layer contained fragments of painted plaster which may have fallen from the walls, and, before it was given its final floor,

the remaining plaster appears to have been pulled down. On the surface of the green debris layer was a layer which consisted almost entirely of crumbled mortar with many pieces of painted plaster (Plan 5). Interleaved with a clay layer, this destruction level was up to 1 foot 6 inches thick. The final floor was laid immediately on this destruction level or on the clay. Neither level contained much pottery. In the mortar and plaster level the coarse pottery was derived and was associated with two coins of Trajan (Nos. 6 and 7 of p. 87). The clay level, however, produced a burnt Samian sherd of Form 37 of German ware dated as probably c. A.D. 150-200 (p. 58), which again confirms the date at which the last floor of this phase was laid as certainly after A.D. 150. The final floor of this phase (Period IA floor of Plan 5) was a cobbled floor laid on a gravel basis. It was of poor quality compared with the earlier *opus signinum* floor. In the floor there was a Samian Form 31 of a type common in the Antonine period (p. 59), the only sherd that appeared to be of contemporary date. In the occupation level on this floor there was found another Form 33 of mid-second century date (Fig. 5, 2) but no significant coarse pottery.

Insofar as the present evidence exists, it is suggested tentatively that the history of the Period IA building was:—

(i) An alteration and perhaps a heightening of the Period I wall, with continued use otherwise of the Period I building, at a point within the Trajanic period but possibly verging on Hadrianic times.

(ii) Following a slight fire, the building was refurbished. It was given a good *opus signinum* floor and possibly the walls were then plastered and painted. This finest phase may perhaps be equated with the reconstruction of the Later City at Verulamium during Hadrianic and Antonine times c. A.D. 125-150. Before A.D. 150 the building was used as a repository for fine quality threshed grain which may perhaps have been a special store of seed rather than a crop stored in a barn. This store was burnt, but the point at which the fire occurred between c. A.D. 125 and 150 is not clear. If early in the period, the building stood derelict for some time as no cobbled floor was added,

only a clay "cleaning-up" level. If at the end, it was soon renovated.

(iii) In the final renovation, the plaster was pulled down and a final poor cobbled floor was laid over this and clay. This did not occur until after *c.* A.D. 150 and, on the dating of Period II building, need not have occurred until as late as *c.* A.D. 170.

PERIOD II BUILDING

The second building on this site was of completely different character, and had an inner and outer wall separated by a corridor. The inner wall was traced for 16 feet 6 inches on the west side and for 25 feet 3 inches on the north side. The north-west corner was inside that of the Period IA wall. The footings of these walls were trench-built, the wall-trench being dug through the Period IA levels as far down as the green earth debris level. On the inside a bolster, 7 inches thick, was laid on the top of the chalk raft of Period IA, and the footings of the Period II wall were built up behind it over a width of 2 feet for 7 inches. It was then offset internally and was built up over a width of 1 foot 6 inches for another foot to the basis of its floor level. On the outside it over-rode the Period IA chalk raft. It was built of mortared flints.

The outer wall was traced over a length of 23 feet on the west and 35 feet on the north sides, and was separated from the inner wall by a 9-foot wide corridor, paved with rough cobbling. It was trench-built, the wall trench being dug through the Period IA levels as far down as the first floor of Period IA. The lower 4 feet consisted of natural flint footings, and the upper foot of a roughly mortared flint wall 1 foot 9 inches wide.

The associated levels were:—

- (a) A roughly cobbled floor with a gravel basis.
- (b) An occupation level on this floor.
- (c) The wall trench.

Inside the building there was found a rectangular red brick structure which belonged to this building period (Plan 3*b* and Plate 3*c* ii). This was a flat platform of two contiguous sections, 5 feet long by 2 feet wide and 2 feet square. It was founded on footings of rough flints on which were built up 6 courses of flat

red bricks, which were free built on the north, west and south sides. The longer section projected beyond the shorter on the west face. The floor of Period II building ran up to it and was its contemporary floor. No indication was found of its purpose.

The material found in the Period II building levels was scanty. The significant pieces (Fig. 5, 3, 4 and 6, and Fig. 8, 1-4) were a saucer-mouthed jug of a type in use until the end of the second century A.D., Samian wares dating down to A.D. 190, and the first sherds to be found of Castor ware. As this ware does not come into common use at Verulamium until after the Antonine period, and on most sites not until after A.D. 170-180, Period II building would appear to have been built *c.* A.D. 170-190.

At the north-west corner there was found on the outside of the outer western wall a timber-lined drain (Plan 3*b* and Plate 3*c* i). In this area the outer walls of Periods II-IV stood on a chalk foundation. In this, against the outer face of the outer west wall, were two post holes which had held timbers about $4\frac{1}{2}$ inches in diameter. On the west side of the drain there were found the remains of a $1\frac{3}{4}$ in. by 8 inches timber set on edge with stains of 6 iron nails, 3 on each side. The drain was contemporary with the Period II building. In its silt were found a large reeded-rim bowl and a saucer-mouthed jug-neck (Fig. 8, 2-3) together with two sherds of Castor ware. This drain was sealed by a silted-up ditch which was traced on the northern side of the northern outer wall. In the rapid silt of this ditch there was found a poppyhead beaker of late second century date (Fig. 8, 4) and Samian wares of Forms which were still in use at the end of the second century A.D. (Fig. 5, 3, 4 and 6). The ditch would appear therefore to have been open during the use of the Period II building.

PERIOD III BUILDING

It was in its third re-build that the most comprehensive plan of the building was recovered (Plan 3*c* and Plate 3*a*). The north-west and south-west corners of the inner wall were cleared and the north inner wall was traced as far as a hedge bounding the "car-park" and it still continued eastwards. The outside measurement of the west inner wall was 35 feet 9 inches, and

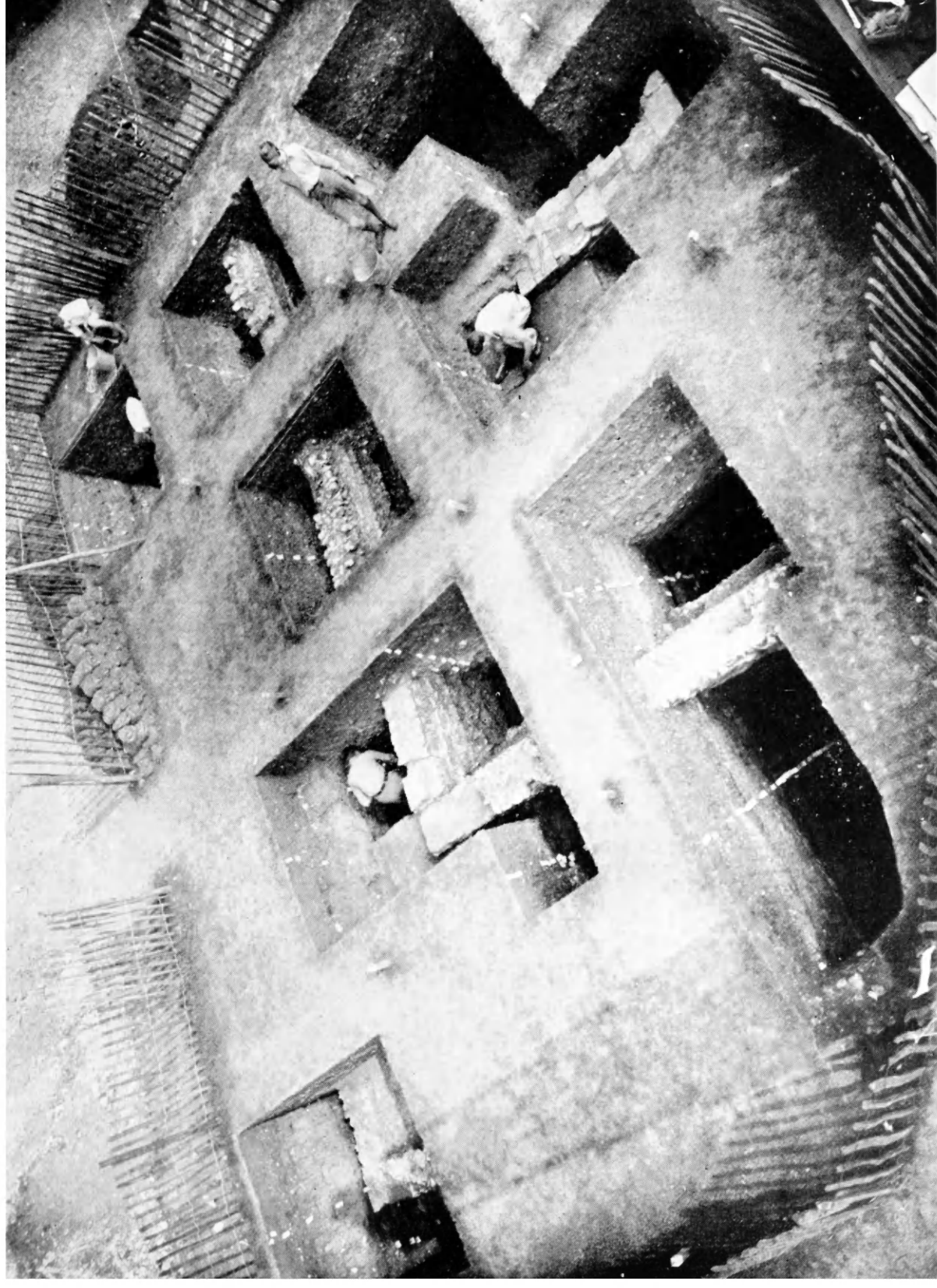


PLATE 3(a). GENERAL VIEW OF SITE G.



PLATE 3(b)ii. INNER FACE OF THE NORTH-WESTERN CORNER OF
THE INNER WALL OF THE BUILDINGS ON SITE G.



PLATE 3(b)i. INNER FACE OF THE WESTERN INNER WALL OF THE BUILDINGS ON SITE G SHOWING THE BUILDING PERIODS AND THE BURNT CORN LEVEL.

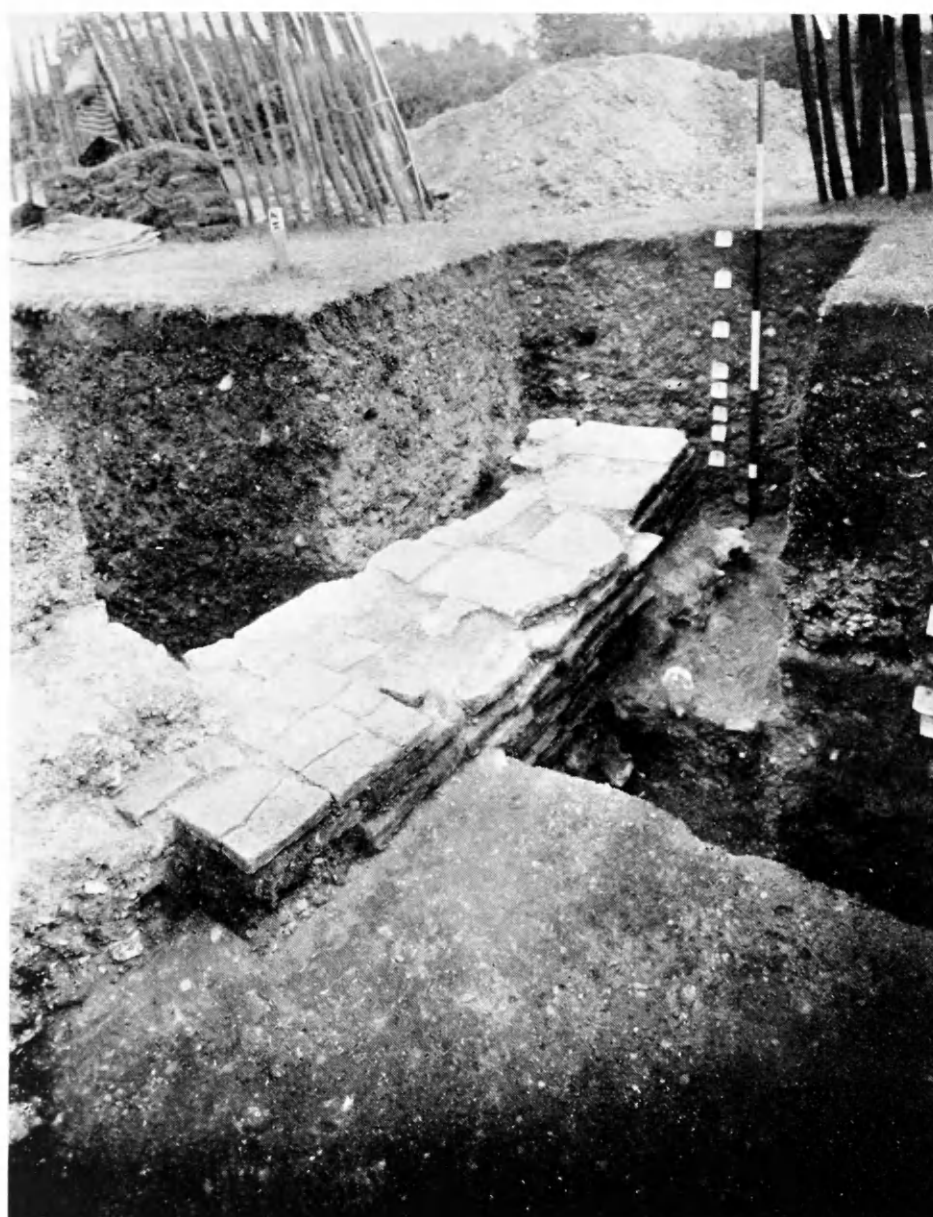


PLATE 3(c)ii. THE RED-BRICK STRUCTURE OF THE PERIOD II BUILDING ON SITE G.



PLATE 3(c)i. TIMBER-LINED DRAIN OUTSIDE THE OUTER WESTERN WALL OF THE PERIOD II BUILDING ON SITE G.



PLATE 4(ii). PURBECK MARBLE MOULDINGS AND MONUMENTAL
INSCRIPTION FROM THE FORUM SITE. (*See pp. 17 and 19.*)

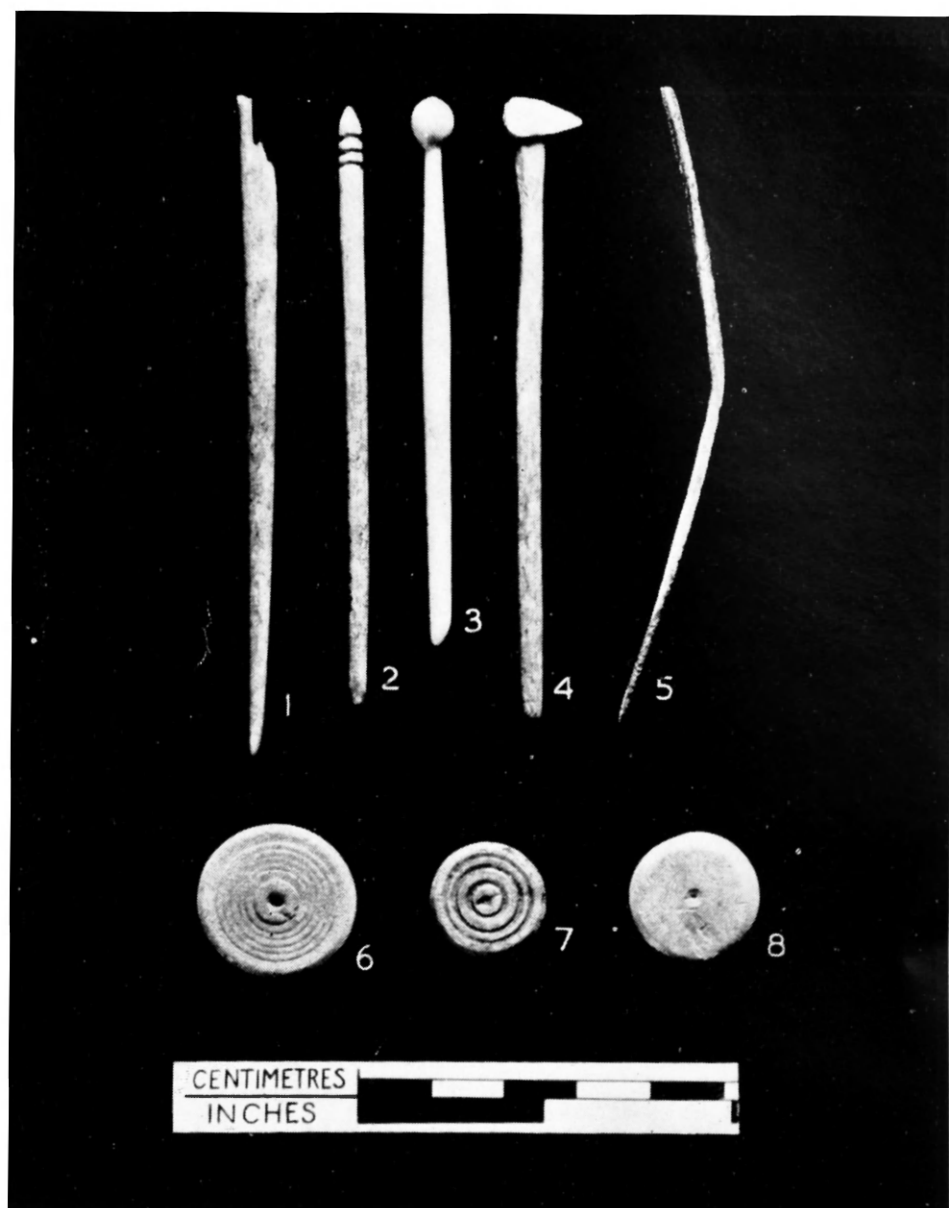


PLATE 4(i). BONE OBJECTS AND BRONZE NEEDLE. NOS. 3-6 FROM THE FORUM SITE. NOS. 1-2 AND 7-8 FROM SITE G. (*See p. 42.*)

the north inner wall was traced for 47 feet 6 inches. The track of the south wall could be seen in the grass. These walls, 1 foot 8 inches wide, were of faced flints built on the top of the remains of the Period II wall and over-riding it on the outside. They stood 9 inches high. The north-west and south-west corners were turned with brick quoins. The north-west corner of the outer wall of this period was uncovered (Plate 3c i) and it also had a brick quoin. The western outer wall was traced for 22 feet 9 inches and the northern outer wall for 34 feet 6 inches. These walls were 1 foot 6 inches thick, stood just over 1 foot high, and were built of mortared flints. They were separated from the inner walls by a 9 foot 9 inches wide corridor which had been paved with rough cobbling. A floor was found inside the area over the red brick structure and sealing it (the upper pebble floor of Plan 5) which may perhaps have belonged to this period, but which could not be related directly to the wall as robber trenches and a destruction level intervened. This floor produced five sherds of Castor ware, one of which had a white painted decoration which was found to be a feature of common occurrence in the Verulamium Theatre in the late third century A.D. If this level can be equated with the Period III building, it would suggest that this re-build occurred during the time of the Constantian "renaissance" at Verulamium *c.* A.D. 296.

Two pits were dug into this level (Pit M II, 1 and Pit N III, 1) and were sealed by the succeeding destruction level. Their contemporaneity with the Period III building cannot therefore be proved. They both contained sherds of Castor ware, and the latter contained a rich deposit of oyster shells.

The drain of the Period II building appears to have silted up during Period III, as the silt levels run up to the Period III wall. The lower silt produced a thumb pot of third century date and a small cup (Fig. 8, 5-6) and Samian wares of second century date (Fig. 5, 7-8). A debris layer over this, full of charcoal, produced a cooking pot (Fig. 8, 7), but the upper silt had no significant material of as late a date as the earlier levels. The drain and ditch do not appear to have been in use and kept clear from Period III times onwards.

PERIOD IV BUILDING AND THE DESTRUCTION LEVEL

All that remained of the final re-build of this structure was a wall of one to two courses of mortared flints placed on top of the remains of the inner and outer walls of the Period III building (Plan 3c and Plate 3a). No levels associated with this building remained, as late robber trenches were found alongside the walls and a destruction level covered the whole area. The material from these later levels (Fig. 5, 10-11 and Fig. 8, 8-10) contained Samian wares of forms in use down to c. A.D. 200 and Castor ware of a type common in the early fourth century and not in use before the last half of the third century. The latest coins from the destruction level were three *antoniniani* of Tetricus I of A.D. 270-273. The date at which the Period IV building was erected or fell into disuse was not determinable, but occupation of the area would appear to have continued into the fourth century A.D.

SMALL FINDS

(a) *Miscellaneous small finds*

Fig. 1.

1. Part of a bronze fitting, possibly a handle, which may have been attached horizontally to the circumference of a vessel or bucket. The lower surface, if in this position, is flat and has a triangular projection at the complete end. This projection is flat below and ridged above. The upper surface of the fitting is convex and has the central moulded knob usual in handles of this form. The complete end terminates in the familiar motive of a stylised goose's or swan's head and neck. Cf. *Wroxeter I*, Pl. X, 8.¹² *From the grey ash level or silt on street level 1 of Site G.*

2. Pair of small bronze tweezers of thin strip metal with straight arms and straight tips inclined inwards. Cf. *Verulamium* 1938, Fig. 4, 7, for an example dated as late second to early third century; *Jewry Wall*, Fig. 86, 1, Type A, from levels dated A.D. 125-30 and mid-fourth century. *From Site G, floor of Period II building, c. A.D. 170-190.*

¹² For a list of abbreviations used, see under Coarse pottery, p. 61.

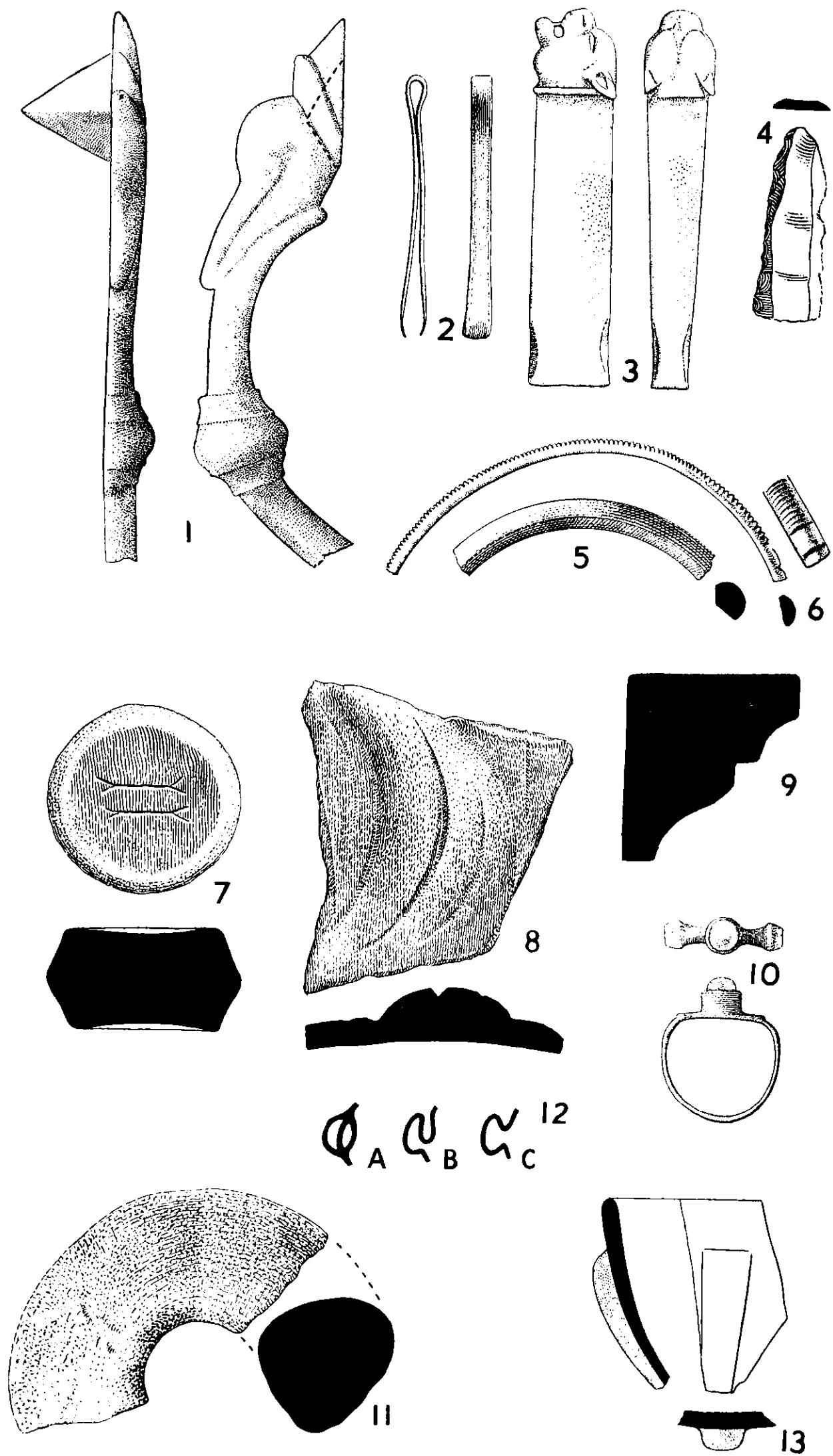


FIG. 1. MISCELLANEOUS SMALL FINDS. NOS. 5 AND 11 FROM THE FORUM SITE; NOS. 1-4 AND 6-13 FROM SITE G. (1/1; NOS. 9 AND 11, 1/2).

3. A carved bone handle with the butt end carved in the form of a tiger's head. Bone handles for clasp knives were commonly carved in the form of a crouching tiger; cf. *Wroxeter II*, Pl. X, 1, dated as before the middle of the second century A.D. *From the same level as No. 1 above.*

4. Worked flint flake. *From the natural brown loam over the natural clay of Site G.*

5. Part of a shale bracelet, bevelled internally and convex externally. *From the Forum Site, in a level posterior to the last building period of Building C.*

6. Part of a bronze bracelet of strip section decorated with incised diagonal lines. Cf. *Silchester*, 1938-39, Fig. 9, 4, for an example (with transverse striations) from a fourth century level; *Jewry Wall*, Fig. 83, 5, Type B, from a disturbed level. *From the destruction level of Site G with material of late third century date.*

7. Lead weight of the ordinary cheese-shaped Roman type inscribed with two punch marks. For a Roman weight of approximately the same weight (693.6 grammes), but inscribed DV (*Dupondius*) cf. *Richborough IV*, Pl. XXXVIII, 136 and pp. 131-2; and for the form cf. *Richborough II*, p. 46, No. 32. Like these weights, the present example is over standard (a Roman *Semis* should be 163.3 grammes, or 653.2 grammes for a two *librae* weight, and the *Dupondius* 654.90 grammes) and was probably a buyer's weight. *Found in the green earth level of Period IA building of Site G dated as c. A.D. 150-170, it may perhaps have been derived from an earlier level.*

8. Part of a cast bronze ornament with a pattern which appears to resemble a lock of hair. *From Site G in Period IA building's third or final floor, c. A.D. 150-170.*

9. Moulded stone. This specimen is identical in shape with the pieces of marble veneer found to the south of the structure in the vicinity of Building IX, 1, in the southern area of Verulamium, cf. *Verulamium*, Pl. XCIIIB, and pp. 77, 122 and 142. These mouldings and flutings were the only non-British building material identified in the earlier excavations and it was considered that they might have been derived from either the superstructure of the Triumphal Arch

near the Theatre or from the Triangular Temple, with the probability being in favour of the former. These marble fragments were then identified as being derived probably from Carrara. They occurred in a well-stratified layer in association with third century pottery and a coin of Gallienus which suggested that by the end of the third century the building from which the veneer was derived was destroyed or in a ruinous condition. The present specimen was submitted to Mr. R. V. Melville of the Geological Survey and Museum. He reports that:—

“I think it is one of the freshwater shell-limestones known as ‘Purbeck Marble’ or ‘Sussex Marble.’ The Purbeck Marble (of Jurassic age) occurs in two beds in the Purbeck beds of Dorset, and can usually be recognised by the red or green colour of the matrix between the shells. This stone, apart from the pinkish weathering, is black in colour and, after comparison with the material in the collections here, I incline to the opinion that it is one of the Sussex Marbles (from the Wealden Beds of Cretaceous age). According to W. J. Arkell,¹³ the use of Purbeck Marble by the Romans is known at Verulamium and Calleva; but I still think this specimen is a Sussex marble, because, apart from the absence of the distinctive red or green colour, one would expect Purbeck Marble to have suffered much more decay from weathering than is apparent here. At all events, there is no reason to suppose that the stone is a non-British one.”

The specimen was derived *from the foundation trench of the red brick structure* and in position is contemporary with it and the final floor of Period II building, dated as c. A.D. 170-190.

10. Small bronze finger-ring with concave shoulders and a circular bezel set with a white glass stone. Cf. *Verulamium Theatre*, Fig. 12, 7, from a late fourth century level; *Silchester* 1938-39, Fig. 9, 5, dated c. A.D. 190-210; and *Lydney*, Fig. 16, 51, a type dated there to the third century A.D. *From the same level as No. 6 above.*

¹³ “Geology of the country around Weymouth, Swanage, Corfe and Lulworth,” *Mem. Geol. Survey* (1947), 134. See also, G. C. Dunning, “The Purbeck Marble Industry in the Roman Period,” *Archæological Newsletter* No. 11, March, 1949, p. 15.

11. Part of a circular Saxon clay loomweight or stand for hot cooking-pots. For an account of these objects, cf. *Ant. Journ. XII* (1932), Pl. LV, 2 and p. 290 on those found in the "weaver's hut" at Bourton-on-the-Water, Gloucestershire. *From a robber trench on the Forum Site.*

Plate 41

1. Bone needle with the head broken off. *From the destruction level of Site G with material of late third century date.*

2. Bone pin with a pointed head with three grooves round it. Cf. *Jewry Wall*, Fig. 90, 3, Type A3 (which has four grooves). *From the green earth debris level of Period IA building of Site G, c. A.D. 150-170.*

3. Bone pin with a spherical head and a shaft swelling in the centre. Cf. *Jewry Wall*, Fig. 90, 8, Type C2; *Verulamium* 1938, Pl. XIXB, 8. *From an unstratified layer on the Forum Site.*

4. Bone spoon, with the bowl broken off. The remnant of the bowl projects slightly above the handle. *From a robber trench on the Forum Site.*

5. Bronze needle with a slit to form the eye. Cf. *London in Roman Times*, Pl. XLII, 2. *From a robber trench on the Forum Site.*

6-8. Three bone counters. For Nos. 6 and 7, cf. *Jewry Wall*, Fig. 91, 13, Type B1; and for No. 8, *ibid.*, Fig. 91, 17, Type C2. No. 6 is from a robber trench on the Forum Site, No. 8 is from the upper plaster and mortar level of the period IA Building of Site G of c. A.D. 170, and No. 7 is from the destruction level of Site G with material of late third century date.

(b) Glass.

Report by Dr. D. B. Harden, V.P.S.A.

Fig. 1.

12. Fragment, probably from the body of a flask or jug, of olive green glass, with part of an S-fold forming a hollow roll horizontally (as in Fig. 1, 12a-b). This is an interesting piece technologically for it shows well one method of manufacturing horizontal rolls; a more normal method is simply to nip the side (as in Fig. 1, 12c). The dating is uncertain, but it is consistent with that ascribed on other evidence to the level from which

it was derived, i.e. *the occupation earth on street level 3 of Site G, c. A.D. 80-100*. In the same level, there were found also:—

(a) A fragment of the body of a flask of olive green glass with a vertical rib formed of an added trail, fired in. Of the same date as No. 12 above.

(b) A fragment of the body of a flask or jug of yellow glass with vertical ribs formed of added trails, fired in. This probably comes from a jug like Thorpe's *English Glass*, Pl. III(c) or IV(a), (b) or (f). None of these is (*pace* Thorpe) later than the earlier second century A.D.

13. *The filling of the timber-lined drain* outside the Period II building of Site G produced a fragment of the rim and side of a pillar-moulded bowl of clear bluish-green glass from a deep bowl with thick ribs. The form is dated to the second half of the first century A.D.

(c) *Patterned flue-tiles*

Report by A. W. G. Lowther, F.S.A.

Fig. 2.

The two pieces of flue-tiles bearing roller-die impressed patterns submitted to me for report, have been patterned with dies whose products have been found at a number of different sites and which are included in my paper on this subject.¹⁴ Both are of considerable interest, chiefly by reason of their distribution, though only one of them (Fig. 2b) has not hitherto been found at Verulamium, or, in fact, at any site nearer than London, where a number of pieces bearing this pattern have been found.

2a. From an unstratified level on the Forum Site—a “W-chevron” pattern of my “Group 1.” This piece, a large fragment bearing most of the complete pattern, consists of the same peculiar clay as that of which all the tiles bearing this pattern so far discovered are seen to consist, *viz.* a buff-coloured clay containing scattered particles of orange-red brick and a white, or grey white, substance (? lime). The particles vary

¹⁴ “A Study of the Patterns on Roman Flue-tiles and their Distribution.” *Research Papers of the Surrey Archaeological Society*, No. 1, Fig. 8, 2 and Fig. 10, 9.

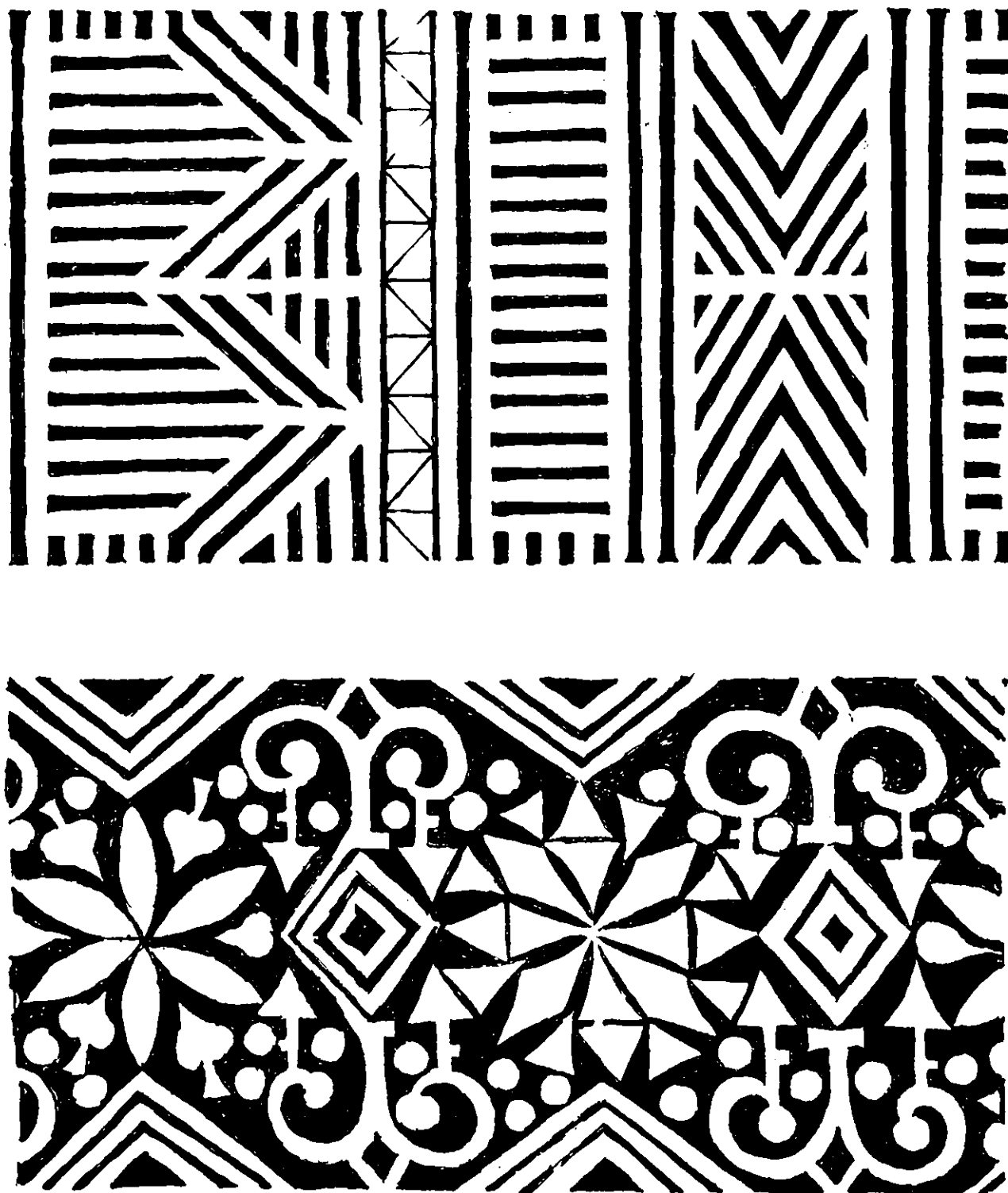


FIG. 2. a-b. RELIEF-PATTERNED FLUE-TILES FROM THE FORUM SITE. (1/2).

in size from minute grains to pieces measuring an eighth of an inch, or more, across. Except for some pieces of plain, combed flue-tile from Verulamium, I have not seen any other flue-tiles composed of this material so that it is fairly certain that these tiles were not only made at the same site, but at a brickworks situated close to Verulamium.

An explanation is given in a note by Reynold Higgins in "Two Campara Reliefs," *The British Museum Quarterly*, June 1953, p. 58. In describing these Roman terracotta reliefs, he states;—"The clay is pink and contains grog (fired clay, ground up; its purpose is to reduce shrinkage in drying and firing)." It is clear that the red and pink clay particles in the buff clay of these flue-tiles is grog, and it is interesting to note that the Campara reliefs are dated to the "first and second centuries A.D.," and are roughly contemporary with the flue-tiles (Fig. 2a), which appear to date to c. A.D. 100.

For this reason, the distribution of the sites at which other tiles from this die have been found is of special importance. These are as follows:—

1. *Verulamium*. Three pieces.¹⁵
2. *Park Street, St. Albans*. *Arch. Journ.* CII (1945), 97 and Fig. 23, 2b. (Verulamium Museum.)
3. *Sutton Courtenay, Berks*. *Arch.* LXXIII (1922-23), 179 and Pl. XXVI, Fig. 2. (Ashmolean Museum.)
4. *Boxmoor, Herts*. *Arch.* XXXV (1853), 62. (British Museum.)

It will be seen that, except for the piece found at Sutton Courtenay (in a Saxon hut) the pieces of these tiles are all from places close to Verulamium. It is therefore, it seems, not improbable that the fragment found in the Saxon hut at Sutton Courtenay was actually obtained at a site in the Verulamium district, and by a Saxon passing that way who may have been intrigued by the pattern on it, or else found it of service for some special purpose or other. If such was the case, this title may well be a pointer as to the direction followed by those Saxons who arrived at

¹⁵ The two earlier pieces were found in 1935 in *Insula II*, Building 2. (Collection of A. W. G. Lowther.)

Sutton Courtenay and whom Mr. E. T. Leeds¹⁶ considers to have come from the north-east, from East Anglia, and who would have passed through the St. Albans area on their way to the Upper Thames region.

Professor Stenton¹⁷ expresses some agreement with the above suggestion that the Saxons who reached the Berkshire district came from the north-east (i.e. through the St. Albans and Boxmoor region) along the Icknield Way. However, he ends with the statement:—"Up to the present, no site between the Middle Thames and the Upper Lea has yielded objects which can definitely be referred to the late fifth or early sixth century, and until this gap has been reduced, the theory that the Saxons of Berkshire descended on the Thames from the north-east will never be established." In view of this, the evidence afforded by this piece of a "Verulamium" flue-tile found in one of the Sutton Courtenay huts is possibly of considerable importance.

As regards the pieces of tile bearing this pattern from these different sites, there is no difference between any of them as regards the sharpness of the impressed design upon them, such as might suggest a long period of use for the die and a difference of date for the manufacture of the tiles found at each or any of these various sites. On the contrary, they are so similar that they could, when mixed together, be taken for fragments of one and the same flue-tile.

2b. From an unstratified level on the Forum Site—a "florid" pattern of my "Group 3." One fragment, bearing only a portion of the complete pattern; on a tile made of bright red clay, similiar to that of the tiles found at other sites and for which this same die has been used, *viz.*:—

- I. *London*. Two sites. (One tile from Baltic House, 1903, in the Guildhall Museum; four pieces in the British Museum).

¹⁶ E. T. Leeds, "A Saxon Village at Sutton Courtenay, Berkshire. Third Report." *Arch.* XCII (1947). On p. 93 he states:—"In the main it would seem that the south-westerly advance from East Anglia, by which I have suggested that the Upper Thames came to be occupied, in the first instance, halted at the Thames. Beyond it certain bridge-head settlements like Long Wittenham and Sutton Courtenay were established."

¹⁷ *Anglo-Saxon England*, p. 26.

2. *Cobham, Surrey*. From the Bath Building at Chatley Farm. *Surrey Arch. Coll.* L (1949), Fig. 9, 9.
3. *Leicester, Jewry Wall*. (1948), p. 276.
4. *Richborough*. One piece (unpublished) in the Richborough Museum.
5. *Baylham, Suffolk*. Found 1935. (Ipswich Museum.)
6. *Lullingstone, Kent*. Found 1949 in the Villa excavated by Lt.-Col. G. W. Meates, F.S.A.

It will be seen that the distribution of tiles bearing this pattern is very extensive. In spite of this, there is little difference between any of them, and it seems evident that all were made at about the same date but at several different, and widely separated, brick-works.

As regards "sharpness of impression," the tile in the Guildhall Museum (from Baltic House) is better than the remainder, and may well be among the first patterned with this particular die.

(d) *Painted wall-plaster*

Report by Joan Liversidge, F.S.A.

Plate 5.

The painted plaster examined was derived from the Period IA building of Site G (see p. 34) dated as *c.* A.D. 125-150, which appears to have been destroyed between *c.* A.D. 150-170. It probably all belongs to the wall on one side of the room, but part of a second wall may be mixed up in it. The pieces may be grouped as follows:—

Group 1. Thin lines and stripes painted in dark red on a white ground, varying in colour from a deep rose to a dark maroon, the lines measuring *c.* 0.1 inches, and the stripes 0.9 inches. Wider bands of this colour 2 inches or more in width also occur, but their total extent could not be determined. A thin black line on a white ground 0.1 inch to 2 inches wide is found occasionally, and there is one example of a broader black band of uncertain width. One or two pieces show the red stripes 0.9 inches wide, meeting at an angle so as to define a corner, and this suggests that

all these fragments probably formed part of a panelled design outlined in red on a white ground. One fragment with part of a red band has a slightly up-turned edge suggesting that it was fitted into the corner of the room, and a plain white piece of plaster also shows this feature.

Group 2. Fragments of a plain deep red, sometimes with faint traces of white spots.

Group 3. A few pieces of painted plaster of a rather coarser texture occur, and these may come from the dado just above floor level, or from the upper part of the wall near the ceiling. One such fragment painted black has the raised edge which may indicate it came from the corner of the room, or perhaps from the angle between wall and ceiling. Another piece shows an arrangement of stripes, red 2 inches wide on one side next to an apple green 1.4 inches, next to the remains of some other colour ? white. A third example has traces of red and white colouring, possibly stripes, divided by a black line 0.2 inches wide.

Group 4. (Plate 5, i, 4 and 7). Remains of various patterns, too indistinct for identification. These include curved red lines c. 1 inch wide on a white or golden yellow ground, in one case enclosing two small red circles measuring 1 inch in diameter. Traces of a peculiar pink motif occur, outlined with a form of cable pattern of dark red lines, and filled in with an amorphous design in shades of red. One such piece shows signs of apple green paint above the mass of pink colour, and on another a foliate green line is painted close by. A third example has the cable pattern coloured orange on a yellow ground, and the small portion of the interior of the design surviving is painted green.

Group 5. (Plate 5, i, 5.) One interesting fragment survives of a black leaf pattern on a white ground, with traces of brownish-yellow near the base of the group of leaves.

Group 6. (Plate 5, i, 1, 3 and 6.) Several pieces depict a scroll design in black on a white ground with black curled leaves or tendrils, and flowers or leaves painted in deep red with darker shading. Traces of bluish green colouring also occur in the design in some

cases. One fragment (Plate 5, i, 3) shows the black scroll with brownish-yellow paint between leaf and curved stalk, the leaf being of similar type to that of Group 5 (Plate 5, i, 5). So possibly all these pieces form part of the same design.

Group 7. (Plate 5, i, 2.) A delightful little bird's head is painted on one fragment in shades of green, dark red, black and brownish-yellow. Unhappily nothing has survived of its body, tail or feet.

Group 8. (Plate 5, ii, 8.) Most important of all are two large pieces which fit together, and depict a broad white band 1.6 inches wide edged by lines 0.2 inches wide, black on one side, and golden yellow on the other. Single black vine leaves spring from the edge of the black line, and above them are faint smudges of green, red and black paint. Below the yellow line is a band of green c. 1.8 inches wide, and this develops into a vague green pattern, separated from a grey motif outlined and shaded in black by c. 0.3 inches of the white ground. Further traces of green suggest that the green design may recur beyond the black.

Remarks

The fact that this plaster was found in a datable context is of great importance, as so little Romano-British plaster is associated with any details of chronological significance. Unfortunately it is not possible to attempt a reconstruction of the design, but the material offers certain indications which agree with tendencies shown by second century Roman wall paintings from other provincial sites. For the dado the evidence is slight, but some of the fragments of Groups 2 and 3 may have belonged to it, and the faint traces of white spots may show some attempt to imitate marbling. The main surface of the wall was probably divided into panels outlined with the lines and stripes of Group 1, and the leaf design of Group 8. Unluckily there is no indication which way up this design should be, but it is possible that the yellow, black and white bands ran round the room horizontally, with the leaves standing up above them, and the green and black pattern painted beneath, perhaps as an extension of the dado. The leaf pattern of Group 5 is not uncommon, and another example of it in green

and white on a red ground was found in London on the site of the G.P.O. in 1915.¹⁸ In Switzerland it occurs at Augst, also painted green on a white ground, and dated to the end of the first century or early in the second.¹⁹ I know of no exact parallels to the scroll pattern, and the evidence is not complete enough to show whether it sprang from the panels edged with leaves (i.e. Group 8), or whether the leaf motif (Group 5) formed part of it. The bird, too, may belong with the scroll, or have formed part of a picture of birds with fruit or flowers. The pieces of Group 4 are difficult to explain, apart from the green foliate line which appears faintly on one piece. This is a familiar motif, found in the Antonine period on several Swiss sites, including Döttingen²⁰ and Herzogenbuchsee,²¹ and also occurring at such British sites as Whittlebury Forest, Northamptonshire,²² but without chronological evidence.

THE SAMIAN POTTERY²³

LIST OF ABBREVIATIONS USED.

- Atkinson* Atkinson, D. "A hoard of Samian ware from Pompeii," *Journal of Roman Studies* IV (1914), 27-64.
- Camulodunum* Hawkes, C. F. C. and Hull, M. R. *Camulodunum. First Report on the Excavation at Colchester, 1930-1939. Report No. XIV* (1947) of the Research Committee of the Society of Antiquaries, London.
- Déch.* Déchelette, Joseph. *Les vases céramiques ornés de la Gaule romaine. Vols. I-II* (1904). Paris.
- Fölzer* Fölzer, E. *Die Bilderschlüssel der ostgallischen Sigillata Manufakturen.* (1913). Bonn.

¹⁸ W. R. Lethaby, *Londinium: Architecture and the Crafts* (1923), Fig. 107. It is now in The Guildhall Museum.

¹⁹ Walter Drack, *Die Römische Wandmalerei der Schweiz* (1950), p. 41, Fig. 2.

²⁰ *Ibid.*, p. 77, Fig. 58.

²¹ *Ibid.*, p. 85, Fig. 69.

²² *Arch. Journ.* VII, p. 172.

²³ Acknowledgment and thanks are due to Mr. Eric Birley, F.S.A., for examining and dating the decorated Samian wares.

- Jewry Wall*.....Kenyon, Kathleen M. *Excavations at the Jewry Wall Site, Leicester*. Report No. XV (1948) of the Research Committee of the Society of Antiquaries, London.
- Knorr, Aislingen*.....Knorr, R., "Die Terra Sigillata Gefässe von Aislingen." *Jahrbuch d. hist. Vereins Dillingen*, 25 Jahrgang. (1912). Dillingen.
- Knorr, Cannstatt*.....Knorr, R. *Die viertzierten Terra Sigillata-Gefässe von Cannstatt*. (1905). Stuttgart.
- Knorr, Rottweil* (1912)...Knorr, R. *Südgallische Terra Sigillata-Gefässe von Rottweil*. (1912). Stuttgart.
- May, Silchester*.....May, Thomas. *The Pottery found at Silchester*. (1916). Reading.
- O. and P.*.....Oswald, F. and Davies Pryce, T. *An Introduction to the Study of Terra Sigillata*. (1920). London.
- Ricken*.....Ricken, Heinrich. *Die Bilderschlüsseln der Römischen Töpfer von Rheinzabern*. (1942). Darmstadt.
- Verulamium, 1938*.....Richardson, K. M. "Report on Excavations at Verulamium: Insula XVII, 1938." *Archaeologia* XC (1944), 81-126.
- Walters, C.R.P.*.....Walters, H. B. *Catalogue of Roman Pottery in the Department of Antiquities in the British Museum*. (1908). London.
- Wroxeter I.*.....Bushe-Fox, J. P. *Excavations on the site of the Roman Town at Wroxeter, Shropshire*. Report No. I (1913) of the Research Committee of the Society of Antiquaries, London.

SAMIAN WARE FROM THE FORUM SITE

Fig. 3.

Earlier than the build of the Forum-Ambulatory Wall.

1. Form 36. South Gaulish ware. Shallow dish with a small flange and elongated barbotine leaves. Cf. *O. and P.*, Pl. LIII, 7 and pp. 192-3. Flavian.

Occupation later than the Forum-Ambulatory Wall but earlier than the walls of the rooms built against it

2. Form 37. The rim profile is early and the ovolo has been almost entirely removed on the attachment of the rim. The decoration consists of S-shaped motives ending in spirals and large rosettes; in the field a goose with head turned backwards over a five-pinnate leaf on a stalk. The decoration is unusual, but suggests a South rather than a Central Gaulish origin. c. A.D. 70-85?

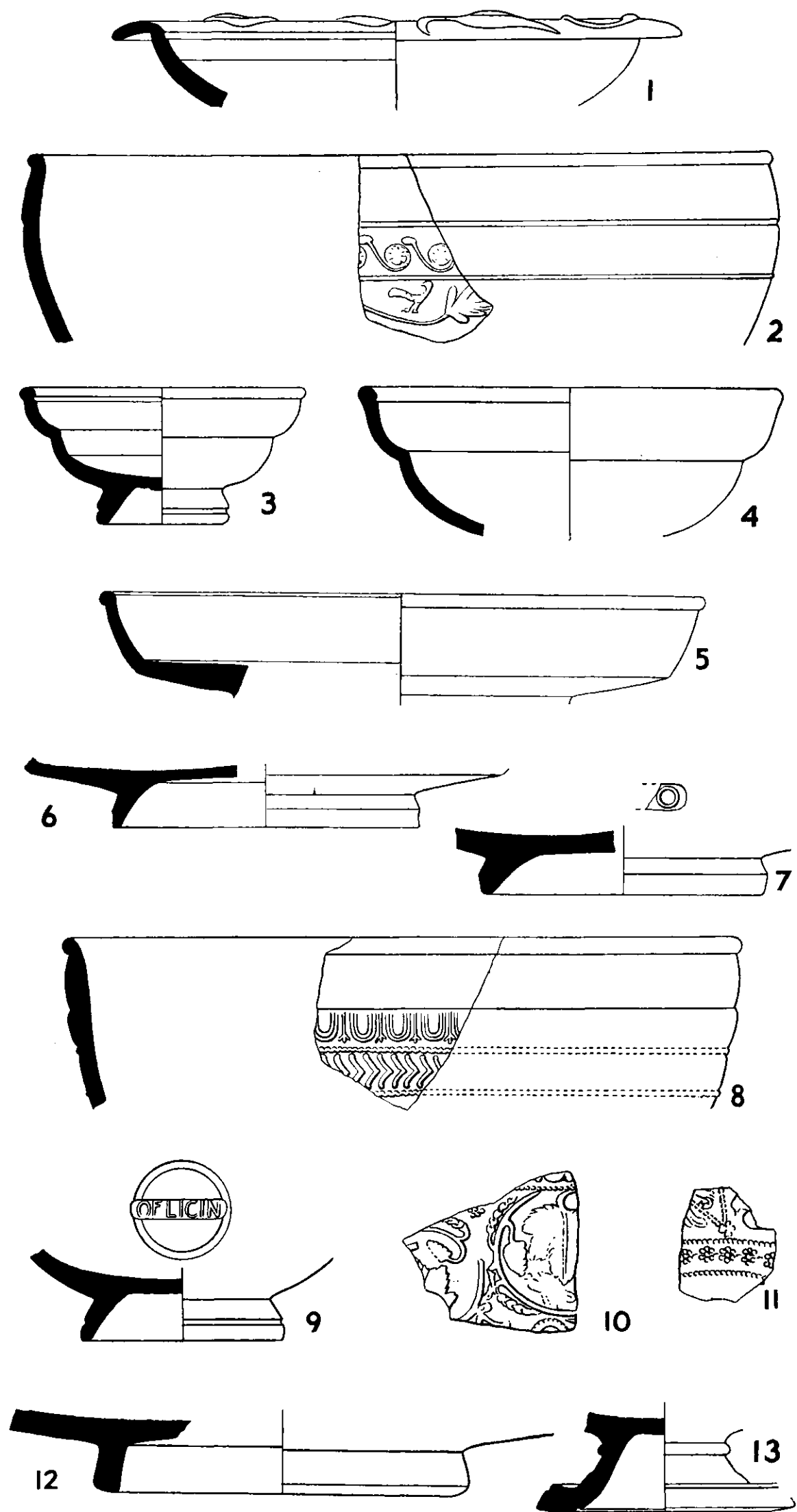


FIG. 3. SAMIAN WARE FROM THE FORUM SITE. (1/2; STAMPS 1/1).

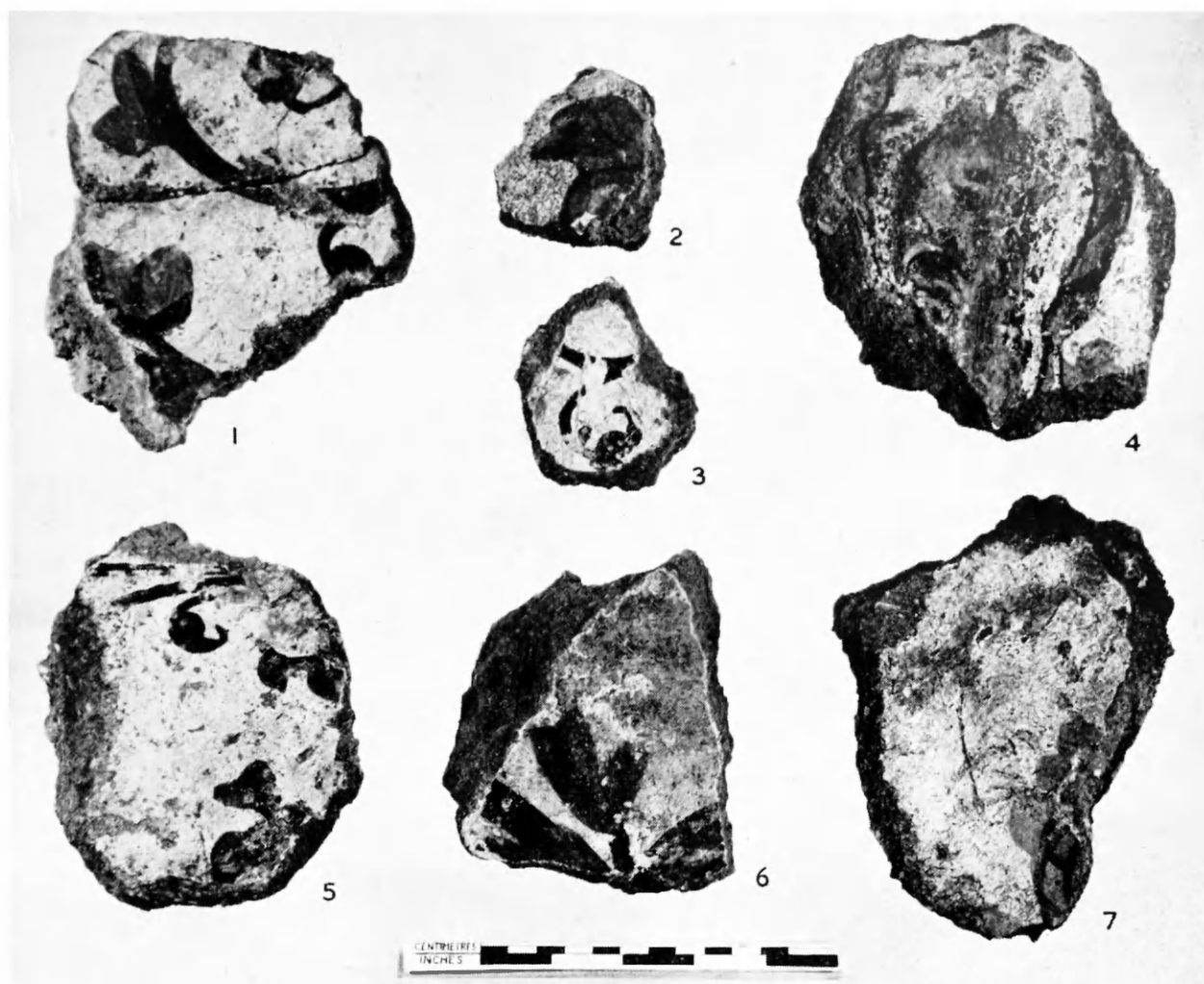


PLATE 5(i). PAINTED PLASTER FROM SITE G, PERIOD IA BUILDING. (*See p. 47.*)

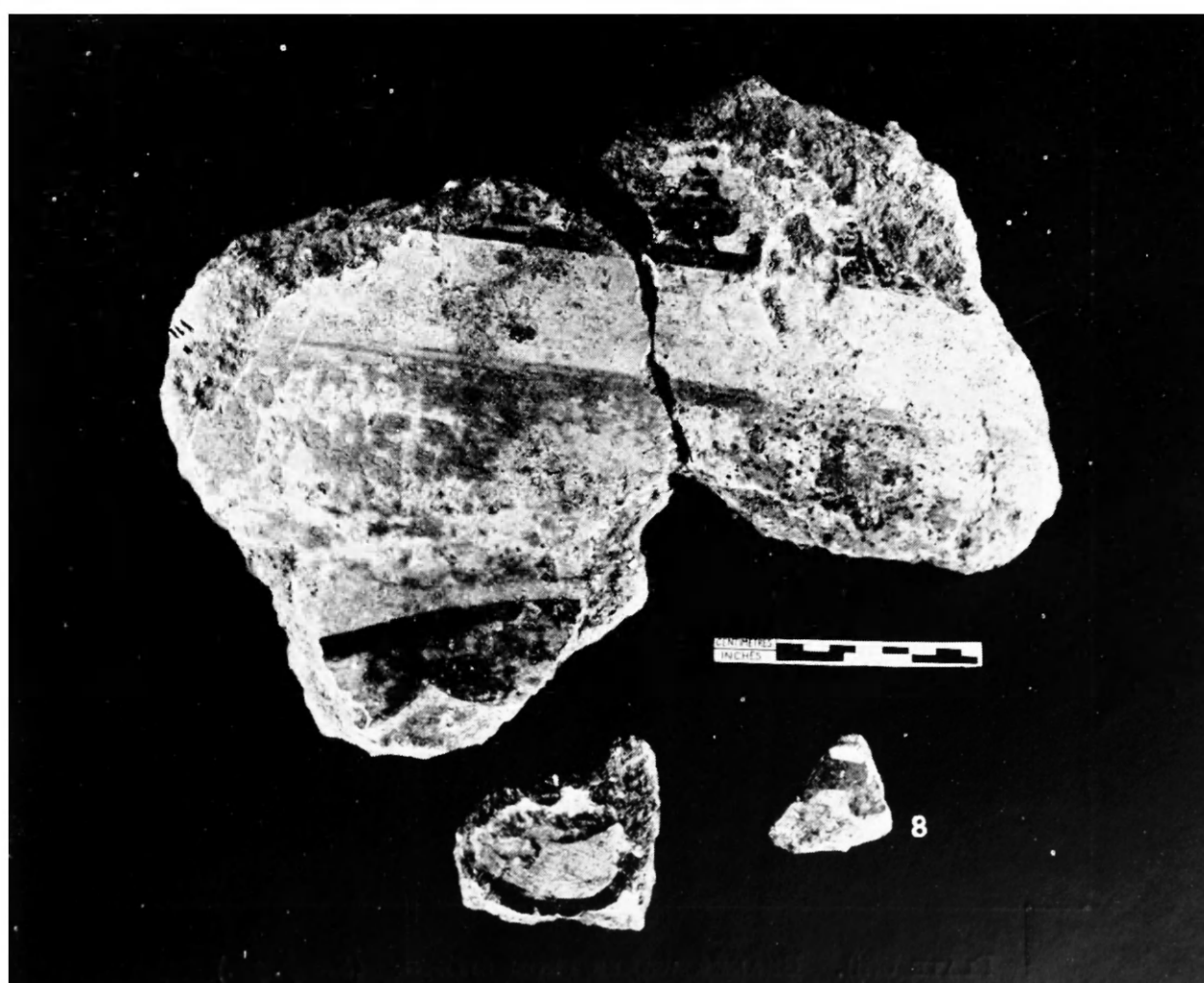


PLATE 5(ii). PAINTED PLASTER FROM SITE G, PERIOD IA BUILDING. (*See p. 47.*)

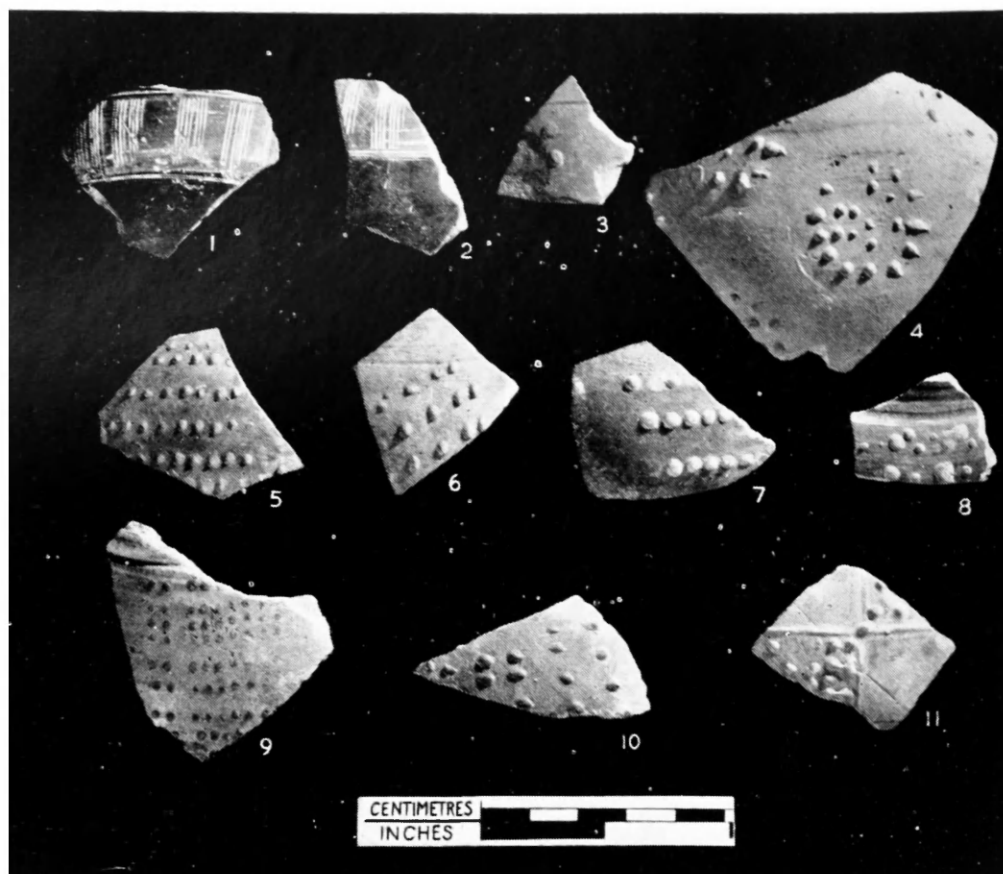


PLATE 6(i). BEAKER WARES FROM THE FORUM SITE. (*See p. 66.*)

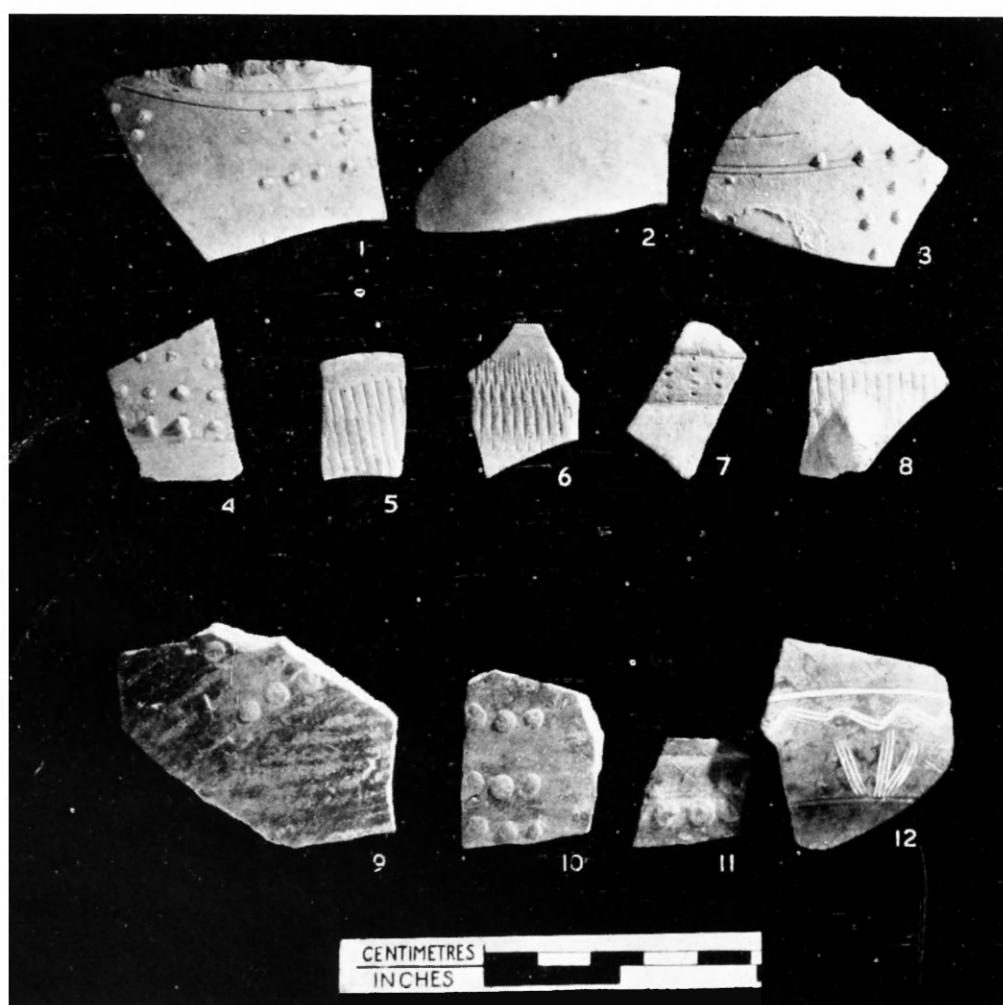


PLATE 6(ii). BEAKER WARES FROM SITE G. (*See p. 72.*)

3. Form 27, small. South Gaulish ware. The bead-rim is full and it is grooved internally. The footring is grooved, and the base has the remains of a stamp IM. Cf. *Camulodunum*, Type 14c, p. 186 and *O. and P.*, Pl. XLIX, 13, for type examples and notes. Flavian.

4. Form 27, large. South Gaulish ware. The rim is scarcely moulded, and the internal groove is shallow. Cf. *Camulodunum*, type 14c, and p. 186. Flavian.

5. Form 18, small platter. South Gaulish ware. There is an external and internal offset at the junction of the wall and base. For notes on the type cf. *O and P.*, pp. 181-3 and *Camulodunum*, p. 185. Claudius-Nero.

6-7. Form 18. Flat bases of two small platters. South Gaulish ware. In both cases the footring is bevelled, and the base has a grooved circle internally. No. 6 has internal and external offsets. No. 7 has the remains of a stamp ending or beginning with O. For notes and dating of the type, see No. 5 above.

Make-up of the final floor of Building C

8. Form 37. Rim of South Gaulish ware. The ovolo has a trifid-tongue placed centrally. Below, a narrow wreath of chevrons between sharp wavy lines. Cf. *May, Silchester*, Pl. XIXB. c. A.D. 75-90.

Make-up of floor 2 of Building C

9. Form 27. Base stamped OF LICIN. LICINVS of La Graufesenque was a pre-Flavian potter whose activities ceased before the reign of Vespasian. c. A.D. 50-70.

Unstratified

10. Form 37. Sherd of Lezoux ware. Ovolo demarcated with a beadrow. Portions of a circular scroll of vine branches with leaves, branches of grapes and tendrils and other leaves on long looped stalks. Possibly a blurred bird on the vine branch. A rosette in the field. For similar vine-branches, cf. *Knorr, Cannstatt*, Pl. V, Nos. 6 and 9 ascribed to SACER, who worked at Lezoux c. A.D. 100-150. Cf. also *May, Silchester*, Pl. XXVII, 70 and *Wroxeter I*, Fig. 12, dated there as A.D. 90-110 or 120. c. A.D. 120-140.

Earlier than the wall south of Building C

11. Form 37. Sherd of Lezoux ware. Lower frieze; divided into metopes with a bead row ending in a rosette. In (1) part of a cruciform ornament divided by bead-row diagonals, in (2)? type. Below, a row of rosettes between bead-rows. In the style of the "potter of the shields and helmet." Cf. *Walters, C. R. P.* M1085 and M1334. *c.* A.D. 110-130 or 115-135.

12. Form 18/31. Base of a large platter.

Earlier than the pink floor to the east of the Forum-Ambulatory wall and anterior to Building C

13. Footstand of Form 11. The form was made in Arretine and South Gaulish ware. This example appears to be south Gaulish. A date of *c.* A.D. 35-50 is suggested, encompassing the time of approximate manufacture and of breakage and deposit.

SAMIAN WARE FROM THE PRE-BUILDING LEVELS OF SITE G

Fig. 4.

Old Turf Line

1. Form 15/17. South Gaulish ware. The deep fluting opposite the quarter round moulding is an early feature. Cf. *Verulamium*, 1938, Fig. 8, 25, pre-Flavian; *Camulodunum*, Pl. XXXIX, S6B', Claudian. Pre-Flavian. This layer contained also two very small fragments of Form 29 of South Gaulish ware, and three sherds of plain forms, all of South Gaulish ware, and of pre-Flavian date.

Grey ash level or silt over street level 1

The Samian wares from this level included a fragment of a Form 29 of *c.* A.D. 70-90; a Form 27 of South Gaulish ware similar to *O. and P.*, Pl. XLIX, 9 (Claudian), and two sherds of Form 18's. The plain forms are not later than Neronian in date.

Occupation on street level 3, or the iron slag floor and the black occupation level inside the later wall

2. Form 29. Upper frieze broken off. Carination with large bead-rows. Lower frieze; (1) narrow leaf of five-pointed ivyleaf ornament, very blurred (cf. *Knorr, Rottweil* (1912), Pl. VI, 16), below a wavy line, (2) a narrow band divided by three wavy lines

into metopes containing a sitting rabbit to right (cf. *ibid.*, Pl. VI, 2) and upright leaf ornaments (cf. *ibid.*, Pl. VI, 11), below a wavy line, (3) a narrow wreath of three-leafed ornament (cf. *Atkinson*, Fig. 4, J). All these motives were used commonly by the Flavian potters at La Graufesenque. *c.* A.D. 70–85.

3. Form 37. Medallion containing a kneeling archer (*Déch.* 171) with a leaf ornament behind him. Cf. *Atkinson*, Pl. XI, 55 on a Form 37 of MOMMO(?) of La Graufesenque. Also illustrated in *O. and P.*, Pl. XV, 5. *c.* A.D. 70–85.

4. Form 30. South Gaulish ware. The rim shows multiple shallow flutings externally and internal horizontal flutings characteristic of early and first century bowls (cf. *O. and P.*, Pl. VII, 2). This sherd does not have the coarser rim and contours of the Form 30's of later Flavian date. *c.* A.D. 60–75.

5. Form 29. Upper frieze. Panel decoration of metopes; (1) upright plant ornament or imbricated leaves separated by six wavy lines from (2) part of a scroll pattern. Below, a beadrow. Cf. *Knorr, Rottweil* (1912), Pl. VI, 16, for the imbricated leaf ornament described as characteristic of the *sigillata* at Rottweil. *c.* A.D. 70–85.

6. Form 18. South Gaulish ware. Base with bevelled footstand and a circle inside. Cf. *Verulamium*, 1938, Fig. 6, 5, dated as pre-Flavian. Pre-Flavian.

7. Form 29. Sherd with a palmette decoration. Cf. *Knorr, Rottweil* (1912), Pl. IX, 7 and 8; *Walters, C. R. P.*, M289 on a bowl of FRONTINVS.? in the style of FRONTINVS of La Graufesenque. *c.* A.D. 60–75.

The remaining Samian wares from this level included a rim of a large Form 27 similar to *Camulodunum*, Pl. XL, S14B (Claudian), and the base and rim of a Form 18 similar to *Camulodunum*, Pl. XL, S8A (A.D. 50–65).

SAMIAN WARE FROM THE BUILDING LEVELS OF SITE G Fig. 4 (8–19) and 5 (1–9).

PERIOD I BUILDING

Occupation on Period I floor

The only Samian sherd from Period I levels was a fragment of the rim of a Form 29, of South Gaulish

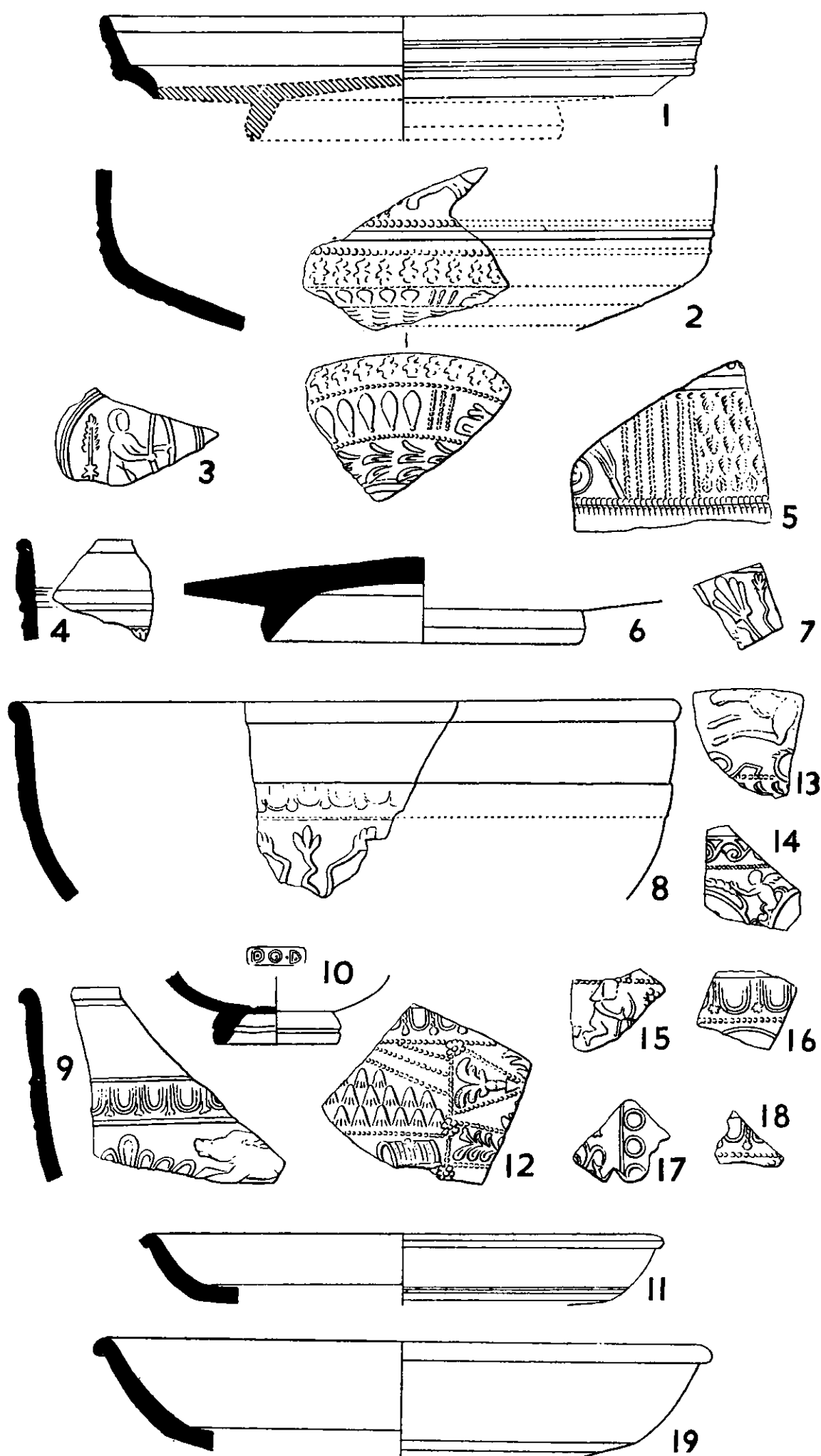


FIG. 4. SAMIAN WARE FROM SITE G. NOS. 1-7 FROM THE PRE-BUILDING LEVELS. *c.* A.D. 50-100. NOS. 8-19 FROM THE PERIOD IA BUILDING. *c.* A.D. 125-170. (1/2; STAMP 1/1).

ware, with two rouletted mouldings and two internal girth grooves. First century A.D.

PERIOD IA BUILDING

Occupation earth and burnt levels or first floor of Period IA

8. Form 37. South Gaulish ware. The ovolo is blurred but has a tongue with a large rosette terminal. Below, a coarse wavy line. Leaves of a ? fig-tree in the field. School of GERMANVS. c. A.D. 85-100.

9. Form 37. South Gaulish ware. The ovolo has a trifid-tongue "pointing S.E." or "turning to right." In the field are parts of a grass plant and a dog (?) or boar (?) running to left. Cf. Knorr, Rottweil (1912), Pl. XIX, 2. c. A.D. 80-95.

10. Form 27. Burnt base stamped G.O.D, ? potter. On form this is a Neronic-Vespasian type. c. A.D. 60-80.

The remaining Samian sherds from the level included a fragment of a Form 37, c. A.D. 80-100; four sherds of Forms 35/36 and a rim of a large Form 27.

Clay level 2

11. Form 18. Small size. South Gaulish ware. The concavity of the wall is still marked, and there is a small offset both internally and externally at the junction of the wall and base. For notes on the occurrence of this form at *Camulodunum*, cf. p. 185 and Pl. XL, S8A, Claudius-Nero. This layer also contained sherds of Form 33 of Flavian date.

Green earth debris level

12. Form 37. Lezoux ware with an ovolo with a two-armed U and a tongue ending in a rosette. Upper frieze; horizontally-divided metopes separated by beaded lines ending in rosettes, (1) three diagonal beaded lines and four-pronged arrowheads above, below, a shield, (2) an elaborate cruciform pattern with beaded diagonals above, and below a straight wreath of chevrons. Cf. Walters, C.R.P., M1334. In the style of the "potter of the shields and helmet." c. A.D. 110-125 or 115-130.

13. Form 37. Lezoux ware decorated with a dog (?) or boar (?) running to left (cf. No. 9 above), below spirals (?) and a narrow wreath of chevrons. c. A.D. 120-140.

14. Form 37. Lezoux ware with a spiral meander ovolo and a Cupid and tendril in the corner of a metope containing a vine-branch. The same ovolo, but with a bead-row above it, which is missing in this example, is figured in *Fölzer*, Pl. I, 20. c. A.D. 110-130.

15. Form 37. Lezoux ware with a bead-row, below a small archer (*Déch.* 169). To the right a rosette. The small archer type occurs on a Form 37 mould at Lezoux. c. A.D. 120-140.

16. Form 37. Lezoux ware. The ovolo has an asymmetrical tongue ending in a rosette. Below, a bead-row. c. A.D. 110-140.

17. Form 37. Central Gaulish ware. Annular decoration dividing metopes. c. A.D. 110-130.

18. Form 37. Lezoux ware. The ovolo has a corded tongue with a rosette terminal demarcated from the design by a bead-row. Cf. *Jewry Wall*, Fig. 6, 4, for a similar sherd dated Trajanic-Hadrianic. c. A.D. 110-140.

19. Form 18/31. Lezoux ware. Cf. *Jewry Wall*, Fig. 6, 2, dated A.D. 110-120. Trajanic.

Fig. 5, 1 Form 27. Base stamped OF SIL. SILVIVS of La Graufesenque was a potter of the Vespasianic-Trajanic period. c. A.D. 70-90.

Other sherds from this level included a Form 37, of Lezoux ware, in the style of the "Anchor potter," c. A.D. 110-130; two fragments of Form 37, one being of Central Gaulish ware of c. A.D. 110-150; three Form 36's, one similar to *O. and P.*, Pl. LIII, 14, from Rheinzabern, of second century date; eleven Form 18/31's, six of which were of Domitian-Trajanic date; one Form 31; four Form 27's, mostly earlier in date; four Form 35/36's and three Form 33's.

Clay level 3 or make-up of floor 3 of Period IA

This level contained a burnt sherd of Form 37 of German ware. Probably c. A.D. 150-200.

Upper Mortar level

A mere scrap of a Form 37 of c. A.D. 80-95 in date was found in this level, but it must have been derived from an earlier level.

Period IA floor or final floor of Period IA

In this floor was the carination of a Form 29 of c. A.D. 70–85 which again must have been derived from an earlier period. The plain forms included the rim of a Form 31 of a type common in the Antonine period, or from A.D. 125–200, and usually later than Domitian (cf. *O. and P.*, p. 183).

Occupation on Period IA final floor

2. Form 33. Lezoux ware. Internal groove on lip and external groove midway down the wall. The external concavity of the wall is not marked. Cf. *O. and P.*, Pl. LI, 11, a mid-century example from Silchester. Mid-second century.

Mortar bank against inner wall

5. Form 67. Lezoux ware. Metopes separated by bead-rows, (1) medallion, (2) St. Andrew's cross, (3) ? type. c. A.D. 110–140.

PERIOD II BUILDING

Period II floor

In the make-up of the floor were two sherds of a Form 29, very worn, and dated as c. A.D. 70–85; rims and bases of Forms 18/31 of early date; the base of a Form 27 of Flavian date and plain sherds of late second century date. With the exception of the latter, this is derived material.

Rapid silt of the ditch

3. Form 37. Lezoux ware with a decoration of a sitting hare in a medallion of two plain circles. c. A.D. 120–140.

4. Form 38. Burnt. Cf. *O. and P.*, Pl. LXXII, 10, of Antonine date.

6. Form 37. East Gaulish ware. In the field a lion running to right. In the style of either Cerialis, Comitalis, IANVS, REFINVS, SEGVNDINAVVS or VERECVNDVS, all of Rheinzabern. Cf. *Ricken*, Taf. 37, 8, for a similar lion of Cerialis III. Above a bird on a cabled festoon or medallion. Cf. *Ricken*, Taf. 51, 14, of Cerialis III. c. A.D. ? 150–190.

This level contained also several Form 31's.

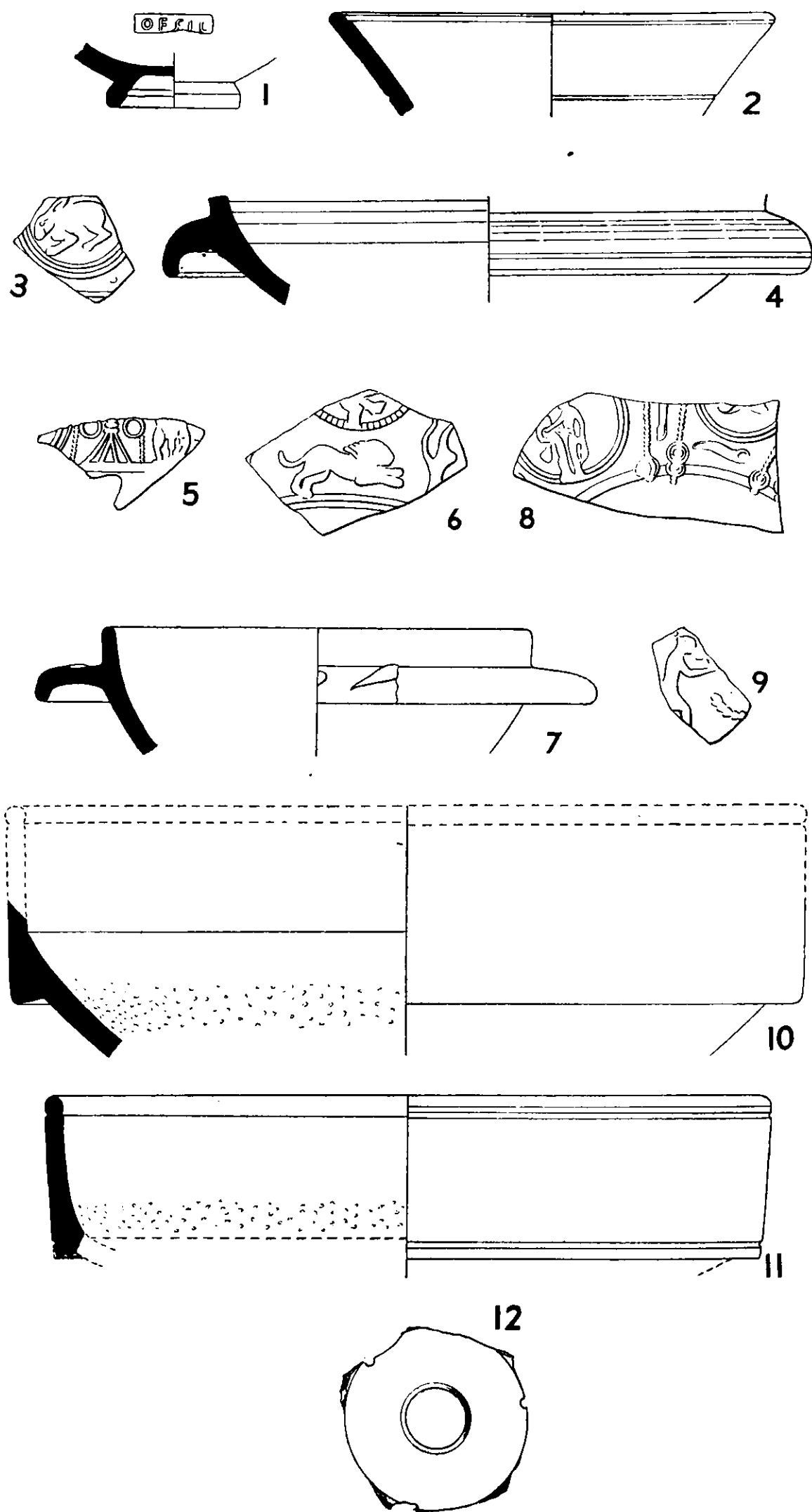


FIG. 5. SAMIAN WARE FROM SITE G. NOS. 1, 2 AND 5, FROM PERIOD IA. C. A.D. 125-170. NOS. 3, 4 AND 6 FROM PERIOD II. C. A.D. 170-190. NOS. 7-9 FROM PERIODS III-IV. NOS. 10-12 FROM THE DESTRUCTION LEVEL AND UNSTRATIFIED. (1/2).

PERIOD III-IV BUILDINGS

Upper pebble floor

This floor contained derived material including a very early Form 37 rim *c.* A.D. 70-80 and Forms 18, 18/31 and 27 of late first to early second century date.

Pit NIII, level 1

From this pit a small sherd of a late Form 37 was obtained.

Lower silt of the ditch

7. Form Curle 11. Burnt. Wide bowl with a high rim and a curved decorated flange. Cf. *O. and P.*, Pl. LXXI, 19, from York of Trajanic-Hadrianic date.

8. Form 37. Lezoux ware. A medallion on the left with an erotic group; the other details are blurred. *c.* A.D. 150-180.

Upper silt in the ditch

9. Form 37. Lezoux ware, with a female figure type. *c.* A.D. 150-180.

SAMIAN WARE FROM THE DESTRUCTION LEVEL AND UNSTRATIFIED LEVELS OF SITE G

Fig. 5 (10-12).

Destruction level

10-11. Form 45. Cf. *O. and P.*, Pl. LXXIV, 1. Late second century. In this level there were also three sherds of Form 37's dated as *c.* A.D. 140-170, 150-200 and 160-190; mortarium sherds and a number of sherds of earlier form and date.

Unstratified

12. Top of an ink-pot. Cf. *O. and P.*, Pl. LXX, 7, third century.

THE COARSE POTTERY

LIST OF ABBREVIATIONS USED

Brockley Hill Richardson, K. M. "Report on the excavations at Brockley Hill, Middlesex." *Transactions of the London and Middlesex Archaeological Society* X.1 (n.s.) (1948), 1-23.

- Calmulodunum* Hawkes, C. F. C. and Hull, M. R. *Camulodunum. First Report on the Excavation at Colchester, 1930-1939.* Report No. XIV (1947) of the Research Committee of the Society of Antiquaries of London.
- Hofheim* Ritterling, E. *Das Frühromische Lager bei Hofheim im Taunus.* (1913). Wiesbaden.
- Jewry Wall* Kenyon, K. M. *Excavations at the Jewry Wall Site, Leicester.* Report No. XV (1948) of the Research Committee of the Society of Antiquaries of London.
- May, Silchester* May, Thomas. *The Pottery found at Silchester.* (1916). Reading.
- O. and P.* Oswald, F. and Davies Pryce, T. *An Introduction to the Study of Terra Sigillata.* (1920). London.
- Park Street* O'Neil, Helen E. "The Roman Villa at Park Street near St. Albans, Hertfordshire: Report on the Excavations of 1943-45." *Archæological Journal CII* (1945), 21-110.
- Richborough I, III, IV.* Bushe-Fox, J. P. *First, Third and Fourth Reports on the Excavations of the Roman Fort at Richborough, Kent.* Reports Nos. VI (1926), X (1932) and XVI (1949) of the Research Committee of the Society of Antiquaries of London.
- Silchester, 1938-39.* Cotton, M. Aylwin. "Excavations at Silchester, 1938-39." *Archæologia XCII* (1947), 121-67.
- Verulamium* Wheeler, R. E. M. and T. V., *Verulamium. A Belgic and Two Roman Cities.* Report No. XI (1936) of the Society of Antiquaries of London.
- Verulamium Kiln* Corder, Philip. "A Roman Pottery of the Hadrian-Antonine Period at Verulamium." *Antiquaries Journal XXI* (1941), 271-98.
- Verulamium, 1938.* Richardson, K. M. "Report on the Excavations at Verulamium: Insula XVII, 1938." *Archæologia XC* (1944), 81-126.
- Verulamium Theatre* Kenyon, K. M. "The Roman Theatre at Verulamium, St. Albans." *Archæologia LXXXIV* (1934), 213-61.
- Wroxeter III* Bushe-Fox, J. P. *Third Report on the Excavation on the Site of the Roman Town at Wroxeter, Shropshire, 1914.* Report No. IV (1916) of the Research Committee of the Society of Antiquaries of London.
- Wroxeter, 1936-37.* Kenyon, K. M. "Excavations at Viroconium, 1936-37." *Archæologia LXXXVIII* (1940), 175-244.

COARSE POTTERY FROM THE FORUM SITE

Although sherds of native wares and early beaker wares were found in the lowest levels of the Forum site, no Belgic level or occupation was found. The Belgic pot (Fig. 6, 1) was found in association with a sherd of poppyhead beaker, and is therefore a survival. Very little material was found in levels earlier than the build of the back wall of the Forum-Ambulatory. The only noteworthy sherd was a Samian Form 36 (Fig. 3, 1) of Flavian date associated with sherds of native wares and amphorae.

The ambulatory wall itself cannot be closely dated on the few sherds found in its building level or in the occupation levels contemporary with its use or immediately after its build. These (Fig. 6, 3-4 and Plate 6i, 1-2) consist of beaker sherds of Claudio-Neronian date and later Roman copies. The jug (Fig. 6, 5) is of a form in use during the first quarter of the second century A.D., and a building date not far removed from the end of the first century is likely.

The succeeding occupation, which was earlier than the flint-footings of the walls of the rooms built against the ambulatory wall, was more prolific in finds. The Samian wares (Fig. 3, 2-7) are of Flavian date. The coarse wares (Fig. 6, 6-12 and Plate 6i, 3-11) can only be dated approximately to an early to mid-second century date.

The pottery associated with Building C is again scanty. The cooking-pot (Fig. 6, 13) which was earlier than the build of the plinth, is not closely dateable. The mica-dusted bowl (Fig. 6, 14) is a type in use throughout the first half of the second century A.D., and the Samian wares in the make-ups of the floors (Fig. 3, 8-9) are derived and of early date.

The pottery found which was earlier than the build of the wall to the south of Building C and the tessalated floor (Fig. 3, 10-11 and Fig. 6, 15-16) is of Hadrian-Antonine date.

Fig. 6 (1-16).

In Pit F1, earlier than the make-up of the floors of Building C

1. Belgic wheel-turned pot of thin grey paste with a brownish-black burnished surface. The bead-rim

mouth is narrow, and the maximum bulge of the body high. The flat base has a well-moulded foot-ring. The form is not common at Verulamium.

Building level of the Forum-Ambulatory wall

2. Rim of a jug of hard red ware with a cream slip externally and internally. The lip is concave internally. Cf. *Verulamium* 1938, Fig. 11, 10, from the group dated as Claudio-Neronian.

Occupation contemporary with the use of the Forum-Ambulatory wall and immediately after its build

3. Butt-beaker of thin ware with a gritty grey core and a smoothed light-brown surface. The rim is everted, the body has one or more rouletted zones below a feeble cordon, and the usual incurving of the wall above the base is present. Although the ware is early, the form is nearer to the developed Romanised versions of the type, and it seems to fall between the *Camulodunum* types of Pl. LVII, 112Cb and Pl. LVIII, 119B, both of which were prevalent there up to A.D. 61. Its rim lacks the sharp profile of the former analogy and the "hook" of the latter, and it is closer to the Folkestone vessel, *Swarling*, Pl. XI, 4.

4. Base of a beaker of thin hard fumed flinty grey ware. The foot-ring is well moulded and the base is convex. For notes see under Plate 6i, 1-2, which may be sherds of the same vessel.

5. Ring-necked jug of hard light buff ware. The lip is flattened and angular, the two upper rings are flattish and the two lower rounded and well-moulded. Cf. *Verulamium*, Fig. 30, 34, ascribed to the first quarter of the second century A.D.

Occupation later than the Forum-Ambulatory wall but earlier than the walls of the rooms built against it

6. Mortarium of buff ware with a flange with a pronounced hook whose top is approximately level with the bead. The depth of the flange is greater than the width. Cf. *Jewry Wall*, Fig. 18, 4, type B2, and *Verulamium Kiln*, Fig. 3, A-D, type 4. The type, in use from the last years of the first century A.D., was common up to A.D. 120, but continued in use throughout the second century.

7. Necked bowl of coarse grey ware with a heavy convex rolled rim, grooved internally and externally. The neck is very short and the wall is convex.

8. Small beaker of fine hard orange ware with a yellow surface. The everted rim is well moulded and is sharply undercut. Cf. *Verulamium*, 1938, Fig. 14, 40 from the "red daub and ash" layer.

9-12. Four reeded-rim bowls. No. 9 is of buff ware, and Nos. 10-12 are of fumed grey ware. In No. 11 the outer edge of the flange forms the actual rim; in Nos. 9 and 10 the inner edge and in No. 12 the centre of the flange is the rim. For discussion of this form cf. *Verulamium Kiln*, pp. 273-6, and *Jewry Wall*, pp. 88-9. Starting to come into use c. A.D. 75-80, they continued in use at Verulamium until A.D. 120-160 but then went out of use.

Earlier than the plinth of Building C

13. Cooking-pot of hard grey ware, charred internally. The upright rim is everted and the shoulder shows the rippling derived from the Wheathamstead Belgic prototype. Cf. *Verulamium*, Pl. XLIX, 2-3, and *Camulodunum*, Pl. LXXVI, type 229A from Billericay.

Building level or immediately earlier than the plinth of Building C

14. Reeded-rim dish of gold-dusted mica ware. The rim is flat and has two faint grooves and the straight side is set obliquely. Cf. May, *Silchester*, Pl. XLVII, 60, for a comparable dish in similar ware which attained its widest distribution in the first half of the second century A.D. and went out of use about the middle of the century.

Earlier than the wall to the south of Building C and the tessellated pavement

15. Carinated or bi-conical urn with a reeded rim, of hard pale buff ware. For a discussion of the form cf. *Verulamium Kiln*, Fig. 4, Type 6, which shows that it is a local type at Verulamium in use there during the first half of the second century A.D.

16. Reeded-rim bowl of dark buff ware. The outer edge of the flange forms the actual rim. For notes on this form see Nos. 9-12 above.

BEAKER WARES FROM THE FORUM SITE

Plate 6i

Occupation contemporary with the use of the Forum Ambulatory Wall or immediately after its build

1-2. Two sherds of a beaker of hard fumed flinty grey ware. The shoulder is decorated with groups of vertical incised lines between two horizontal grooves. The base illustrated at Fig. 6, 4 may perhaps belong to this vessel and is of the same ware. Cf. *Camuoldunum*, Pl. LV, Type 91c and Fig. 50, 4. These are Roman copies in fumed ware of Gallo-Belgic girth- or globular-beakers made there originally in *Terra Rubra* wares. See p. 232 for a note on the occurrence there of Roman copies.

Occupation later than the Forum Ambulatory wall but earlier than the walls of the rooms built against it

3-4. Two sherds of beakers. The first is of hard thin grey ware, and the second of pinkish ware with a dull black flinty coating. The barbotine spot decoration is grouped in rosettes.

5-10. Six sherds of poppyhead beakers. Nos. 5-6 are of thin hard grey ware with a black external burnish; Nos. 7-10 are of thin hard grey ware. All have barbotine spot decoration. Poppyhead beakers do not usually occur until after A.D. 80 or late first to early second century A.D.

11. A sherd of a beaker of hard thin grey ware with a fumed brownish-grey surface. The decoration consists of barbotine spots in the triangle of a lattice-pattern.

SITE G

PRE-BUILDING LEVELS

The coarse pottery from the pre-building levels of Site G is illustrated in Fig. 6 (17-26), Fig. 7 (1-6) and Pl. 6, ii, and the Samian wares in Fig. 4 (1-7). No Belgic occupation was found in the area, and the original ground surface produced trodden-in sherds of Samian wares of pre-Flavian date (Fig. 4, 1). No internal dating evidence was found in the first street level in the area, but its overlying silt contained first century pottery (Fig. 6, 17-18), poppyhead beaker

sherds which should be later in date than A.D. 80, a Samian Form 29 of c. A.D. 70-90 and plain Samian sherds not later than Neronian in date (p. 54). The street was probably laid down therefore before c. A.D. 80.

Neither the second or third streets had any internal dating evidence (cf. Fig. 6, 19-20). Both the coarse pottery and the Samian wares in the occupation earth on street level 3, or the iron slag floor, are predominantly Flavian in date. The latest sherds of decorated Samian (Fig. 4, 2, 3 and 5) are dated as c. A.D. 70-85. Among the beaker wares, Flavian examples are in the majority (Plate 6, ii, 1-4 and 7), and the poppyhead beaker sherds (Plate 6, ii, 9-11) do not usually occur until after A.D. 80. The coarse pottery has sherds in common with those found in the "red daub and ash" layer (Group 2) pottery from *Insula XVII* (Fig. 7, 2) now dated as c. A.D. 75-80, and elsewhere at Verulamium in levels dated as A.D. 70 or later (Fig. 6, 21 and 23-24). As no sherds have been attributed to the Trajanic period, and as the poppyhead beaker in the silt over the first street suggests that the later streets were not laid down until after c. A.D. 80, the earth which accumulated on street level 3, and before any building was erected in the area, may be dated as after A.D. 80 and earlier than the Period I building (q.v.) which is of Trajanic date, i.e. the last two decades of the first century A.D.

COARSE POTTERY FROM PRE-BUILDING LEVELS OF SITE G

Fig. 6 (17-26), and Fig. 7 (1-6).

The old turf line and old vegetation surface

The only sherds of coarse pottery found in the old turf line were of Roman and Romanised native wares of indeterminate forms. The only datable sherds were of Samian wares (Fig. 4, 1) of pre-Flavian date. The old vegetation surface was sterile.

Street level 1 or pebble floor 1 and the gravel layer inside the later wall

Both these layers were sterile.

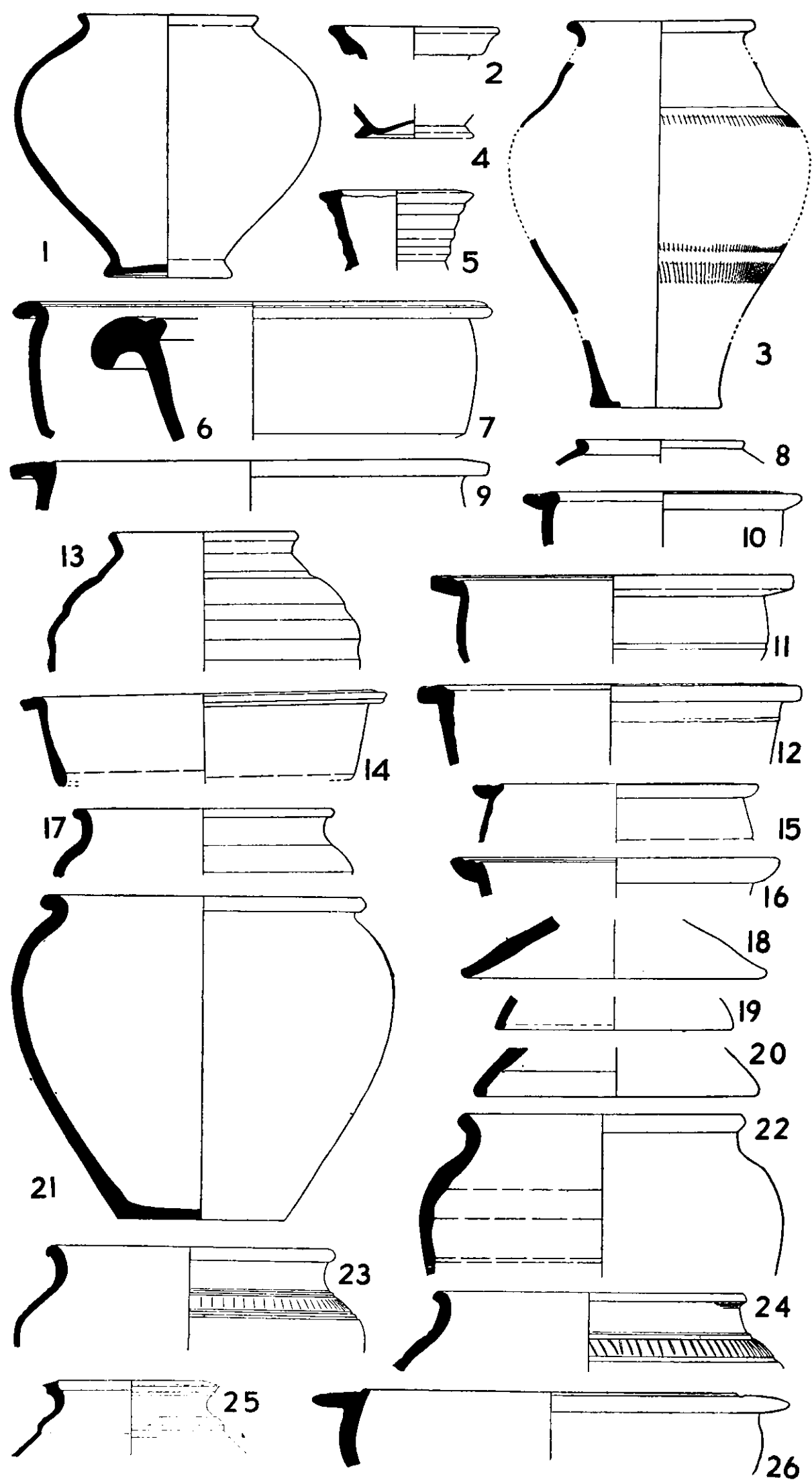
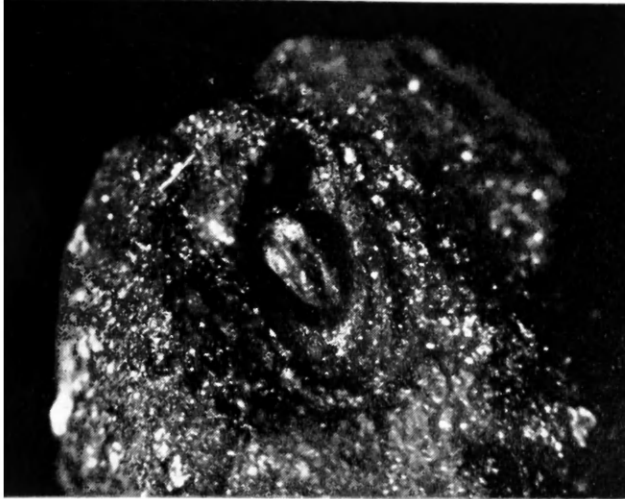


FIG. 6. NOS. 1-16 FROM THE FORUM SITE. NOS. 17-26 FROM THE PRE-BUILDING LEVELS OF SITE G. c. A.D. 50-100. (1/4).



A



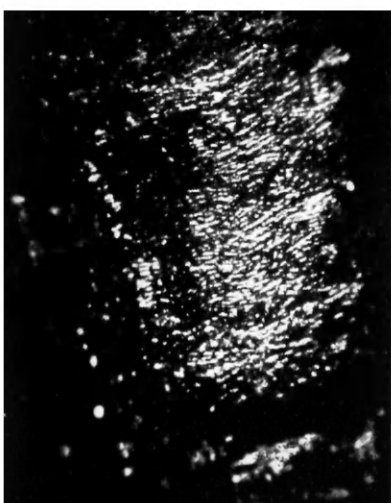
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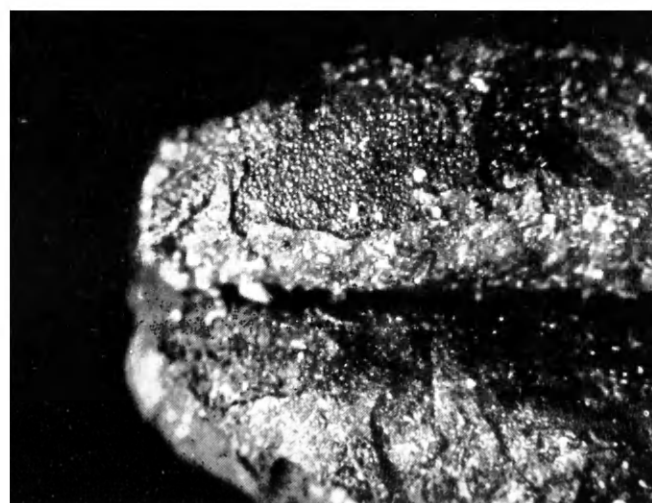
C



D



E



F

PLATE 7. MICROPHOTOGRAPHS OF THE BURNT GRAIN. (The Flour Millers' Research Association). (See p. 89.)

Grey ware level or soil over street 1

17. Small necked bowl with upright neck and rounded rim, grooved at the base of the neck and shoulder. Blackened grey ware. Cf. *Verulamium*, Fig. 28, 18. These bowls, derived from a Belgic prototype, were still found in a group dated as c. A.D. 160–190 and do not therefore provide any close dating evidence for this level. Cf. also *Jewry Wall*, Fig. 24, 10 (Type D) which shows that they occur at the end of the first century.

18. Lid with plain rim and oblique sides. Coarse blackish-grey ware. There would appear to be no particular chronological significance in the form of lids, cf. *Jewry Wall*, p. 119. This example is comparable to Type A at Leicester, *ibid.*, Fig. 31, 1–2 and p. 118 for list of analogies, which date at least from the Flavian period to the end of the second century. A second similar example was found in this level.

The level contained also a sherd of grey poppyhead beaker which does not occur until the late first to early second century A.D., cf. *Jewry Wall*, p. 103.

Street level 2 or brown slag floor and the clay level inside the later wall

19. Lid with the rim folded back and thickened underneath. Thin black ware. Cf. *Jewry Wall*, Fig. 31, 5, Type B dated A.D. 125–30 but, as noted above, there is no special significance in these lid forms. This was the only sherd from this level.

Street level 3 or iron slag floor

20. Lid with a thickened rim and a groove internally. Of the same ware as No. 18 above, and of the same type as No. 19. This was the only sherd from the level.

Occupation earth on street level 3 or iron slag floor and the black occupation level inside the later wall

21. Bead-rim pot of coarse grey ware. Cf. *Camulodunum*, Pl. LXXXII, 259 and the discussion of the type on p. 269. The type is very abundant there in all periods I–VI, i.e. A.D. 10 to c. 65. Cf. also *Verulamium*, Fig. 21, 66a–b which states that these were commoner there in the quarter century following the Claudian invasion than in the earlier levels.

22. Necked bowl with a rolled rim. Coarse grey "native" ware. Cf. *Verulamium*, 1938, Fig. 11, 18, from Group 1 pottery of the building with a terminal date of c. A.D. 50-55. Four other examples of this form were found in this level.

23. Necked jar with a rolled rim and a cordoned shoulder, decorated with impressed vertical lines. Hard grey ware with mica flecks. This bowl belongs to a series common at Verulamium. Derived from a Belgic prototype, cf. *Verulamium*, Fig. 36, 74-5 for two examples of c. A.D. 40-60, it persisted in devolved forms until the Antonine period, cf. *ibid.*, Fig. 35, 66 for an example of the less squat form dated A.D. 110-140 and Fig. 33, 50 for a late Antonine example with a weakened profile. Other examples occurred in *Insula XVII* in Group 3 pottery levels which were mainly Hadrianic but extended down to A.D. 160, cf. *Verulamium*, 1938, Fig. 15, 4; and at the Park Street Roman Villa, cf. *Park Street*, Fig. 17, 10-12, dated as late first century and the second quarter of the second century. The present example has the sharper profile of the late first century types rather than those of the second century.

24. Necked jar with cordons below the neck and shoulder and a decoration of impressed lines on the shoulder. Thin red ware. Cf. No. 23 above. The level contained six other examples of this form.

25. Jar of hard sandy red-brown ware with a rim of angular profile, a concave neck and angular cordons at the base. Three jars of this form are illustrated in Group 1 pottery from *Insula XVII*, cf. *Verulamium*, 1938, Fig. 12, 31-33 dated down to A.D. 50-55. This example has a sharper profile.

26. Flanged bowl. The flange is broad and horizontal and is just below the bead. Hard smooth grey ware. Cf. *Verulamium*, 1938, Fig. 11, 13 of A.D. 50-55.

Fig. 7, 1. Beaker with an upright rim. Of grey ware with mica flecks.

2. Small beaker with an everted rim. Burnished light brown ware. Cf. *Verulamium*, 1938, Fig. 13, 22 from the "red daub and ash layer" which may be as late as A.D. 75-80, cf. *Jewry Wall*, p. 89.

3. Bowl with a cordoned neck and bulbous body. White clay ware. This may perhaps be a Roman copy of a Belgic prototype, cf. *Verulamium*, Fig. 15, 40.

4. Mortarium with bead and roll rim. No grits visible. Spout missing. Hard buff ware. The dating of mortaria on rim-form alone is precarious. Recent work has shown that the potters' stamps, possibly the form of the spout, and the ware, are surer indications, cf. *Camuoldunum*, p. 253. This particular form can be paralleled in levels from Neronian to those of mid-second century date, cf. *ibid.*, Fig. 53, 33 and p. 256 (Form 195B) of Neronian date with analogies down to the second century; *Vermulamium Kiln*, Fig. 3 and p. 280 for examples from the Radlett pottery contemporary with the Hadrian-Antonine "Pit 6" pottery from Verulamium; *Brockley Hill*, Fig. 12, 102 and p. 19 for a Flavian example; *Park Street*, Fig. 17, 4 for an example from the second quarter of the second century A.D.; and *Verulamium*, 1938, Fig. 15, 22 and *Wroxeter III*, Fig. 3, 49 dated as A.D. 80-120, for two examples with the same stamp. On its association with the other pottery in this group it may be cited as a Flavian example. A detached spout which could not be related to this vessel was also found.

5. Amphora handle with part of a potter's stamp—VS. Part of an amphora cover was also found.

This level contained also two lids, one of the same form as that of Fig. 6, 18 above; three small fragments of jug-rims and one two-strap handle; and the base of a very large storage vessel of thick coarse "native" ware, pierced with four holes.

Pit NI, level 1.

6. Necked jar. Grooved hard grey "native" ware. This type of cooking-pot, the commonest form in the Belgic Prae Wood group, cf. *Verulamium*, Fig. 19, 61 a-f, diminished in frequency in post-Conquest levels at Verulamium. In *Insula XVII*, cf. *Verulamium*, 1938, Fig. 12, 34, it was still found in Group 2 levels dated down to A.D. 75-80 (on Dr. Kenyon's revised dating). The only associated finds in this pit were a small sherd of butt-beaker and the base of a large storage vessel of gritty "native" ware. This small collection of early sherds in the pit filling suggests that

the pit was filled up with earth containing Belgic occupation material before, or at the time, when Period I building was started. The pit was sealed by the make-up of the floor of this building.

BEAKER WARES FROM SITE G

Plate 6ii.

Occupation earth on street level 3 or iron slag floor and the black occupation level inside the later wall .

1-4. Four sherds of beakers in thin hard orange-yellow ware with part of a horseshoe or circle and dot decoration in barbotine. No. 2 may be part of one of these beakers from the zone between the applied decoration. Cf. *Verulamium*, 1938, Pl. XIXC, 1 from the "red daub and ash" layer dated as A.D. 75-80 (see No. 6 above); *Hofheim*, Pl. XXXVII, 118 where they were in use down to Flavian and Trajanic times; and *Richborough IV*, Pl. LXXXIX, 398, which classes them as a Flavian type.

5-6. Two sherds of butt-beakers of hard thin brownish ware with vertical rouletted decoration. Cf. *Camulodunum*, Pl. LVII, 112 Ca and 112 Cb. If these sherds are from small beakers with only one decorated zone, nearly always rouletted and bounded by grooves, they were made at Vertault, and occur at other continental sites as listed in *Camulodunum*, p. 238, where they are dated as mainly Tiberian- early Claudian.

7. Sherd from the shoulder of a beaker of hard thin brown ware with mica flecks. It has a decoration of stabbed spots between grooves. It is difficult to quote an analogy for so small a sherd, but it may perhaps belong to the series of globular or ovoid beakers with everted rims and stabbed decoration described in *Camulodunum*, Pl. LVI, 108 Bb, which is the Romanised form of this type universal in Flavian times.

8. Sherd of a butt-beaker of sandy-brown ware with a conical boss on the band of rouletted ornament. For a complete example of this form see *May, Silchester*, Pl. LXX, 150 and p. 167. For a sherd derived from a level at Silchester dated as c. A.D. 45-65, see *Silchester*, 1938-9, Pl. XXXVIIb, 22.

9-11. Three sherds of poppyhead beaker of grey ware with a highly polished black surface. Cf. *Richborough IV*, Pl. XC, 418 dated as mostly A.D. 90-125 and *Richborough III*, Pl. XXXIX, 306 dated from A.D. 80-120.

12. Sherd of hard thin grey ware from a globular beaker with a shoulder decoration of incised lines between grooves.

THE BUILDING LEVELS OF SITE G

The coarse pottery associated with the four building periods of the structures on Site G is illustrated in Fig. 7, 7-23, and Fig. 8, 1-10, the lead-glazed wares in Fig. 8, 11-20, and the Samian wares in Figs. 4, 8-19 and 5, 1-12.

Period I Building

The only dating evidence was a cordoned jar (Fig. 7, 7), possibly of early second century date, a Samian Form 29 (p. 55) of first century A.D. date, and a very corroded *as* of Domitian of A.D. 88-96 (No. 3 of p. 87). On internal evidence therefore it can only be assigned to an indeterminate date early in the second century.

Period IA Building

Material from the first floor (Fig. 7, 9, and Fig. 4, 8-10) was insufficient to provide a secure dating but was not incompatible with an early second century date. In the burnt corn level on the second floor there were found a number of ring-necked jugs (Fig. 7, 10-12) which are at least Trajanic, and may be as late as Hadrian-Antonine in date. If perhaps these jugs were derived from the Verulamium "Pit 6" pottery (cf. notes on Fig. 7, 10), this phase of the building may date to Hadrian-Antonine times. Associated with this floor was the first appearance of sherds of lead-glazed ware and the painted plaster (pp. 47-50), both of which were plentiful in the succeeding green earth debris level. The superior renovation of the building would be in keeping with the reconstruction of the later Roman City at Verulamium in Hadrianic and Antonine times, c. A.D. 125-150. The clay "cleaning-up" levels over this burning contained only earlier derived material

(p. 57, and Fig. 4, 11, and an *as* of Vespasian of A.D. 71-3, No. 2 of p. 87), but these were followed by a thick accumulation, designated the green earth debris level, which was the first level to provide a sufficiency of material for dating purposes. The Samian wares (Fig. 4, 12-19) were dated predominantly as *c.* A.D. 110/120-140/150. The lead-glazed wares are consistent with a late first to early second century date. The remaining coarse pottery (Fig. 7, 13-23) was prolific in forms that were in common use during Hadrian-Antonine times. The level continued to accumulate, or was laid down, certainly until A.D. 150 and possibly was not sealed for another decade or more. The destruction of the plaster wall preceding the final re-flooring, the final floor and the occupation material on it, produced no contemporary coarse pottery or coins, only earlier derived material. The latest dated sherd was a burnt Samian Form 37 (p. 58) of probably *c.* A.D. 150-200.

Period II Building

The associated material (Fig. 5, 3, 4 and 6, and Fig. 8, 1-4) includes the first appearance of Castor wares. But only five small sherds were found scattered in the floor, wall trench and drain filling. As this ware is only found in post-Antonine times at Verulamium, and after A.D. 170-180 on most sites, a *terminus post quem* is given for this building. Four of the coarse pottery vessels are of forms which continued in use until *c.* A.D. 190 (Fig. 8, 1-4). The latest Samian sherd associated with this period is a Form 37 of East Gaulish ware dated as *c.* A.D. ? 150-190 (Fig. 5, 6). Period II building would appear, therefore, to have been built *c.* A.D. 170-190.

Period III Building.

Insofar as the remaining stratified levels can be related to this period, they suggest a building date at the end of the third century A.D. The coarse pottery included Castor ware with white-painted barbotine decoration which is common at that date at Verulamium, but the Samian wares (Fig. 5, 7-9) were not later than A.D. 180.

Period IV Building

No material was found which could be related to this period.

Destruction level

Over all the area excavated the buildings were covered with a destruction level with robber trenches along the walls. The material from these levels (Fig. 5, 10-11, and Fig. 8, 8-10) included Castor wares of mid- or late third century date. The latest dated associated coins were three *antoniniani* of Tetricus I of A.D. 270-273 (Nos. 18-20 of p. 87). This only attests an occupation of the area as late as the last quarter of the third century A.D. but, without any stratified levels of later date than the Period III building, the latest date at which the area was occupied cannot be determined.

COARSE POTTERY FROM THE BUILDING LEVELS OF SITE G

Fig. 7.

PERIOD I BUILDING

Chalky clay level or make-up of Period I floor

7. Cordoned jar of fine hard grey ware. Cf. *Verulamium*, Fig. 34, 60-61, and Fig. 35, 62 for the Belgic prototype and Romanised derivatives of this form. The ware and the degenerate cordons of the present example are closer to the latter form which was found with early second century pottery.

8. Small bead-rim bowl, either hand-made or only roughly wheel-turned, of thin rough black ware with a brown core. Cf. *Verulamium*, Fig. 34, 56-59 for similar bowls of Claudian date. This level contained also a lid of the same form as Fig. 6, 18 above, but of finer hard grey ware.

Period I floor

The only finds were a fragment of a necked jar of grey ware and a roof tile.

Occupation on Period I floor

Only a very small area was cleared, and no coarse pottery was recovered.

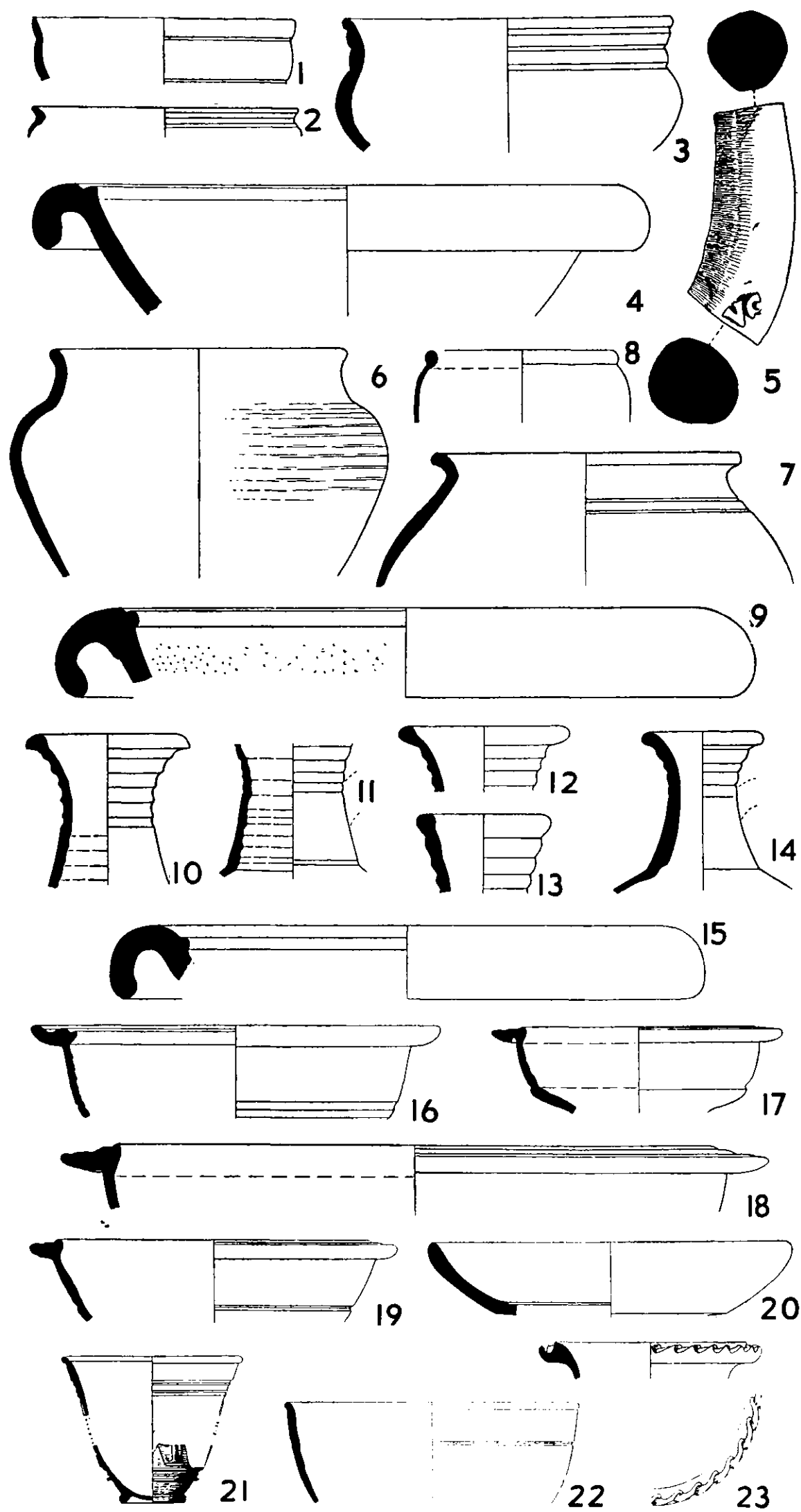


FIG. 7. NOS. 1-6 FROM THE PRE-BUILDING LEVELS OF SITE G. *c.* A.D. 50-100. NOS. 7-8 FROM THE PERIOD I BUILDING LEVELS, *c.* A.D. 100-125. NOS. 9-23, FROM PERIOD IA, *c.* A.D. 125-170. (1/4).

PERIOD IA BUILDING

Occupation earth and burnt level of first floor of Period IA

9. Mortarium of coarse buff ware with internal grits. The rim rises above the bead and the flange is gently curved. The spout is missing. Cf. notes on Fig. 7, 4 above.

Other coarse wares from this level included one rim and eleven sherds of grey poppyhead beakers and one sherd of a black beaker similar to Plate 6ii, 9-11; part of a small amphora cover; two lids, one of which was similar to that of *Jewry Wall*, Fig. 31, 9, Type C, which occurs from the beginning of the Roman occupation until mid-second century A.D.; the rim of a flagon of coarse white ware similar to that of *Jewry Wall*, Fig. 28, 18, Type A, an early type current from the mid-first century to the early second century, a ring-necked jug and a two-strap handle; two rims of jars of rough grey ware; and a bead-rim bowl comparable to but coarser than No. 8 above.

Clay level 1 or make-up of the second floor of period IA

The only pottery found was a sherd of poppyhead beaker and a few indeterminate sherds.

Opus signinum floor or the second floor of Period IA

This was sterile.

Burnt corn level on the second floor of Period IA

10. Part of a six-ringed necked jug of buff ware. The moulding of the lip is pronounced. Cf. *Jewry Wall*, Type B, p. 109 which shows that the type at Leicester was typical in levels dating from A.D. 80, was common in the Trajanic period, but was rare from Hadrianic times onward. Cf. also *Verulamium*, 1938, Fig. 15, 18, for a Hadrianic example. Both this and the present example may have been made at the Verulamium "Pit 6" pottery of Hadrian-Antonine date, cf. *Verulamium Kiln*, Fig. 5, 10 and pp. 289-290, which states that this type of jug is universal in Britain in the middle of the second century A.D.

11. Neck of a ring-necked jug of hard reddish-yellow ware of the same form as Nos. 10 and 12. It shows the angle the conical neck makes with the body. Cf. *Verulamium Kiln*, p. 289.

12. Rim of a ring-necked jug of hard dirty-white ware. The upper moulding is more rounded than that of No. 10 above, but it is of the same general type. Two other examples of this type were found in the layer.

The level produced four other jugs of comparable types and a three-strap handle, and sherds of lead-glazed wares (p. 84) appeared for the first time.

Clay level 2, the burnt streak on its surface and the chalk spread over it

The clay levelling contained a few sherds of poppy-head beakers and roughcast beakers; a sherd of a beaker of smooth hard grey ware with a black surface decorated with concentric incised circles above vertical lines, cf. *Richborough III*, Pl. XXXVIII, 283-4, from Pit 34 dated as A.D. 80-120; and a sherd from an indented beaker of thin ware with a red core and a black metallic slip, cf. *ibid.*, Pl. XXXIX, 305 from the same pit. The burnt streak on this clay levelling produced no noteworthy pottery, and the chalk spread over it a few sherds of lead-glazed wares.

Green earth debris level

This thick accumulation or deposit was rich in coarse pottery.

13. Ring-necked jug of thick soft cream ware with a tall neck and well-marked rings. Cf. *Jewry Wall*, Fig. 43, 9, Type B, from deposits contemporary with the Forum dated A.D. 125-30. Seven other fragments of ring-necked jugs occurred, of which five were probably of the same type as this and No. 14, whilst two were possibly of *Jewry Wall*, Type C, which is common in the second century. One flagon neck was found similar to *Jewry Wall*, Fig. 28, 16, Type A, a mid-first and early second century form. One example was found of a jug with a short concave neck, cf. notes on Fig. 8, 1 below. Handles found had one four-strap, seven three-strap and one two-strap forms.

14. Ring-necked jug of hard cream ware. The top moulding is fairly thick, but the rings are not strongly marked. Cf. *Jewry Wall*, Fig. 28, 8, Type D, which does not occur there until between A.D. 120-140;

Wroxeter 1936-37, Fig. 9, 21 of Hadrianic to early Antonine date and *ibid.*, Fig. 10, 3 of mid-second date; and *Verulamium* 1938, Fig. 15, 20, Hadrianic to A.D. 160.

15. Rim of a mortarium of coarse white ware, with a hooked flange and the bead below the rim, in a lower position than that of No. 9 above. Cf. notes on Fig. 7, 4.

16-19. Four reeded-rim bowls. Nos. 16, 18 and 19 are of hard buff ware and No. 17 is of hard thin grey ware. For a discussion of this form as found in the "Pit 6" series at Verulamium, of Hadrian-Antonine date but continuing until A.D. 190, cf. *Verulamium Kiln*, pp. 273-6. No. 16 has the flange upturned at its outer edge to hold a lid, cf. *ibid.*, Fig. 2B; in Nos. 18 and 19 the inner bead forms the actual rim, cf. *ibid.*, Fig. 2E and 2C. In No. 17 the flange is almost level, but is undercut, cf. *ibid.*, Fig. 2M. There is no chronological significance in the angle of the rim and side at Verulamium. Corder has drawn attention to the caution which must be observed in using this bowl as a criterion of date if divorced from the area in which it is found and its source of manufacture, an observation made also by Dr. Kenyon independently at Leicester, cf. *Jewry Wall*, pp. 88-9 in her discussion of the form. At Verulamium these bowls in Hadrian-Antonine times were of a degenerate type and continue to a later date than those in the north, the final date at Leicester being intermediate between the two. Twenty-one rim fragments of this form were found in this level, in addition to the four illustrated. Their profiles were all within the range illustrated in *Verulamium Kiln*, Fig. 2.

20. Rim of a plain dish of blackened dull orange-red ware glinting with gold mica particles. Cf. *Park Street*, Fig. 17, 26, from Rubbish Pit III which contained wares from Belgic down to Hadrian-Antonine times, but nothing later than mid-second century. Plain dishes in this ware were found at Silchester, cf. *May, Silchester*, Pl. XLVIII, 59. Seven other examples occurred in the level. Other dish forms were one of a *terra rubra* ware and one of a coarse black ware.

21. Rhenish beaker of fine orange ware with an orange-brown glaze. This is a copy of the Samian beaker of Déchelette's Form 64, cf. *Oswald and Pryce*, Pl. XXI, 5, which is decorated in the free-figure style of LIBERTVS. The well-defined expanding footstand is present. The chief incidence of the Samian form was in the reigns of Trajan and Hadrian, c. A.D. 100-140. Other beaker forms found included a base and six sherds of roughcast beakers; a few rims and bases and a number of sherds of black and grey poppyhead beakers; and a few sherds of early beakers of types illustrated in Plate 6ii.

22. Bowl of very fine white pipe-clay ware smoothed externally. Possibly an imitation of a Form 37.

23. Rim of a tazza or incense cup of pink ware with a grey core and a white slip, with traces of burning inside. It has a pie-crust flange round the rim. For notes on this form see *Verulamium*, 1938, Fig. 17, 16. Other Hadrian-Antonine examples were found at Caerleon, cf. *Archæologia*, LXXVIII, Fig. 20, 42, and in the *Verulamium Theatre*, Fig. 20, 42.

Pie-dishes appeared in this level, seven rims being found. In type they were of Leicester Types A and B, cf. *Jewry Wall*, Fig. 19, 1-14, and are a common second century type there. Nineteen sherds of lid rims occurred comparable to Leicester Type C, cf. *Jewry Wall*, Fig. 31, 8, a type which is common until the middle of the second century A.D.; four sherds of lid rims were of the same type as that of Fig. 6, 18 above; three sherds of small amphora covers were found and one of a lid of very fine thin ware with a grey core and a dull black slip which had three rivet holes.

Mortar and plaster layer and upper mortar levels or destruction of phase 2 wall of Period IA

No new pottery forms were found in these levels which contained only a small amount of coarse pottery. They were full of broken pieces of painted plaster, and produced also a *sesterius* of Trajan of A.D. 97-117 (No. 7 of p. 87) and a *dupondius* of Trajan of A.D. 114-117 (No. 6 of p. 87).

Clay level 3 or make-up of floor 3 of Period IA

This level again contained very little coarse pottery and nothing noteworthy.

Period IA floor or final floor of Period IA

The small quantity of coarse pottery in this level was of earlier derived material and was associated with a coin of Domitian of A.D. 86 (No. 4 of p. 87).

Occupation on Period IA floor

No noteworthy coarse pottery was found.

Fig. 8.

PERIOD II BUILDING

Period II floor

1. Saucer-mouthed jug of hard pinkish-yellow ware. Cf. *Verulamium Kiln*, Fig. 5, 11, and p. 290 for a description of this form which was probably made at the "Pit 6" pottery, and which quotes the very large quantities of a similar jug manufactured at Colchester where it occurs commonly in graves dated as A.D. 100–150. Cf. also *Jewry Wall*, Fig. 28, 12 and p. 111 which dates the type from A.D. 110 to the end of the second century A.D. This level, however, contained two sherds of Castor ware, the first occurrence of the ware on Site G. On most sites this ware does not occur until A.D. 170–180, cf. *Jewry Wall*, p. 119. At Verulamium the ware did not come into common use until after the Antonine period, cf. *Verulamium*, p. 182.

Occupation on Period II floor

No significant finds.

Period II wall trench

The only significant find was a small sherd of Castor ware.

Filling of Period II drain

2. Large reeded-rim carinated bowl of buff ware. For notes on this form see Fig. 7, 16–19 above. In the "Pit 6" pottery series, cf. *Verulamium Kiln*, Fig. 2, this falls into the L–S series which admit of great variation. It is of Hadrian-Antonine date or could have been in use down to A.D. 190.

3. Ring-necked jug of hard thin buff ware. It has a saucer-shaped mouth and three rings, and has been restored after *Verulamium Kiln*, Fig. 5, 11, from the "Pit 6" pottery series. Cf. notes on No. 1 above.

Other coarse pottery in the drain included two sherds of Castor ware and a rim of lead-glazed ware.

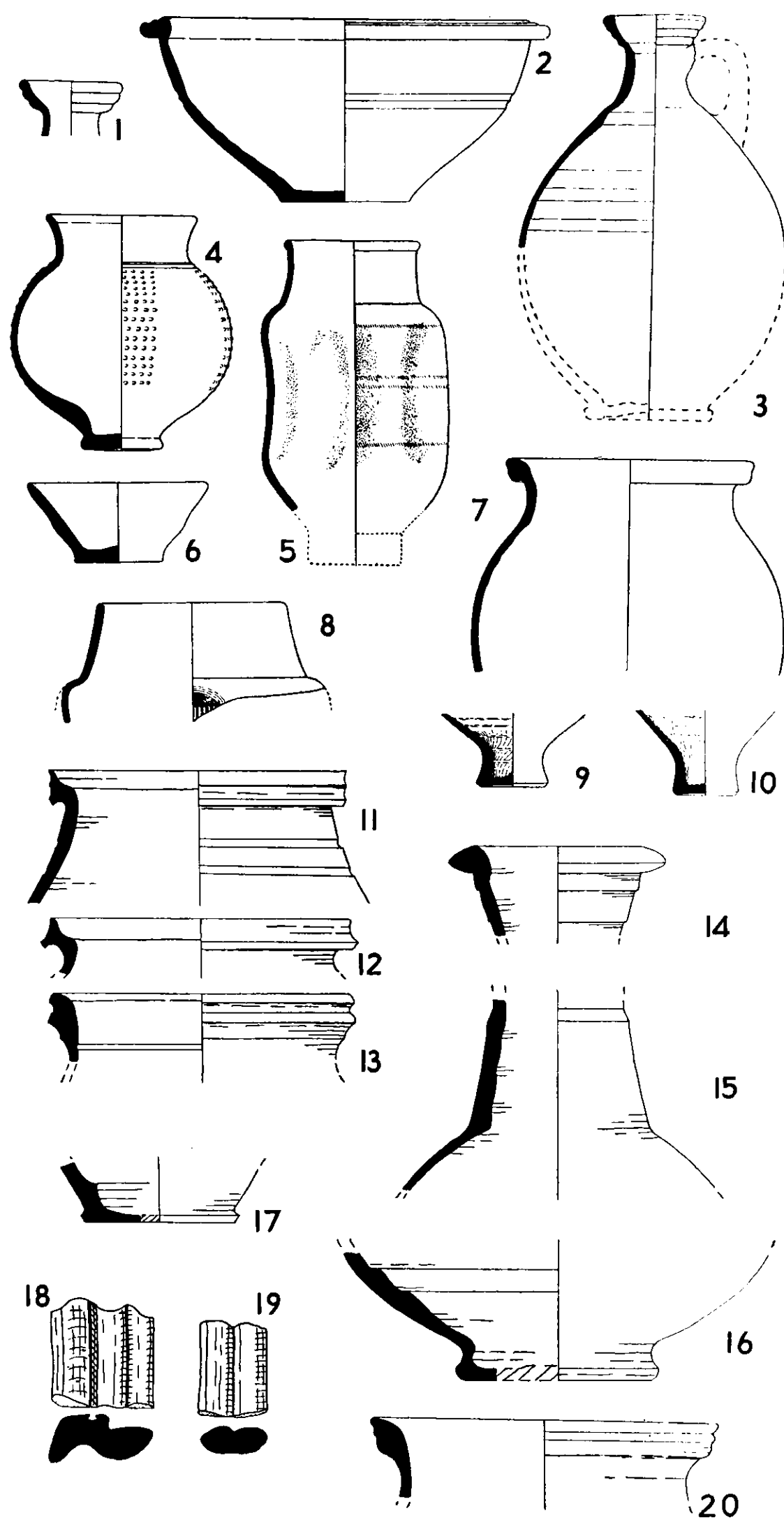


FIG. 8. NOS. 1-4 FROM THE PERIOD II BUILDING OF SITE G, *c.* A.D. 170-190. Nos. 5-7 FROM PERIOD III, *c.* A.D. 296. NOS. 8-10, FROM THE DESTRUCTION LEVEL. NOS. 11-20, LEAD GLAZED WARES FROM PERIOD IA, *c.* A.D. 125-170. (NOS. 1-10, 1/4; NOS. 11-20, 1/2).

Rapid silt of Period II ditch

4. Poppyhead beaker of thin light grey ware decorated on the body with four groups of barbotine dots. The lower part of the body has a darker grey burnish. Cf. *Verulamium*, Fig. 27, 13, for a comparable example in a group from the well in Building IV dated as A.D. 160–190, a group which included only four sherds of Castor ware. The rapid silt produced also the bases of two Castor ware beakers and a few sherds.

PERIODS III–IV BUILDINGS

Upper pebble floor

The only noteworthy coarse pottery was five sherds of Castor ware of which one had a white painted barbotine decoration. In the *Verulamium Theatre*, cf. *Jewry Wall*, p. 119, white painted decoration was common in the late third century.

Pits MI, level 1 and NIII, level 1

Both pits contained sherds of Castor ware, but nothing sufficiently complete to merit illustration.

Lower silt of the ditch

5. Beaker or thumb-pot of thin hard ware with a black metallic slip. It is decorated with three rows of rouletting. The neck is straight and has a thickened rim; the base is small and high. At Leicester, cf. *Jewry Wall*, p. 119, the vertical rim, with or without thickening, only appeared in Period VIII c. A.D. 250–300 and was common from A.D. 300 onwards. Rouletting also only occurred from Period VI c. A.D. 220, and the small high base at *Verulamium* is common in the late third century A.D. There were a number of other sherds of Castor ware in the level.

6. Small cup of thin buff ware. A second example in a hard grey ware was found.

Burnt and debris level in the ditch

7. Rim and shoulder of a cooking-pot of hard dark grey ware, blackened externally. The neck is narrow and the thickened rim curves outwards. Cf. *Jewry Wall*, Fig. 30, 24, Type E, from Period I, c. A.D. 125–130.

Upper silt of ditch

No significant coarse pottery was found. Sherds of Castor ware were still present.

DESTRUCTION LEVEL

8. Castor ware beaker of coarse white ware with a black slip. The rim is vertical and the top of the body is rouletted. Cf. No. 5 above for notes on this form and the rouletting. The coarse white ware appeared at Leicester from A.D. 220 onwards but was only common from A.D. 300, cf. *Jewry Wall*, p. 119. Cf. also *Verulamium*, 1938, Fig. 16, 8, for a similar beaker dated as late second to early third century A.D.

9-10. Two bases of Castor ware beakers. No. 9 is of brown ware with a metallic dark grey slip and has an internal knob. No. 10 is of pinkish ware with a dark grey slip. These small high bases were fairly common at Verulamium in the late third century A.D., and at Leicester appeared first in Period VIII c. A.D. 200-250 and were common by Period IX, c. A.D. 300-355, cf. *Jewry Wall*, p. 119.

ROMAN LEAD-GLAZED WARE FROM THE PERIOD IA
BUILDING OF SITE G

Report by E. M. Jope, M.A., B.Sc., F.S.A., Lecturer in Archaeology, Queen's University, Belfast

A considerable amount of lead-glazed pottery²⁴ came from the green earth debris level of the Period IA building. It is all of a harsh gritty fabric, pale buff to grey in colour, and with a poor blotchy glaze, yellowish to pale green, and poorly fired. The vessels represented appear to be flagons, with usual strap handles and distinctive sharply moulded collared rims, stylistically probably later first to early second century A.D.²⁵ It is at once clear from the fabric that this pottery is not of the more usual imported South Gaulish lead-glazed types, and that their forms were not really being imitated, these flagons being larger than the St. Rémy styles.²⁶ Examination of the Verulamium sherds reveals that a layer of glaze has spread over the broken edges on eighteen of the seventy-eight glazed fragments from this level, and

²⁴ Shown spectrographically to be a lead-glaze.

²⁵ Cf. *Richborough I*, XXVI, Nos. 66, 67, 68, 69, 70, 71.

²⁶ Déchelette, *Les vases céramiques ornés de la Gaule Romaine* (1904), Vol. I.

this, taken in conjunction with the pimply, poorly fixed glaze on most sherds, indicated that this material is derived from the wasteheap of a pottery glazing kiln. The "wasters" are only from the glazing process, however, and not from firing the "biscuit." There is, at any rate, a suggestion of the sort of glazed vessels in production here—flagons and possibly beakers.

Hitherto only one example of a Roman glazing kiln has been recorded in Britain, at Holt, Denbighshire,²⁷ though it is possible that others existed at Castor, Northamptonshire,²⁸ and Caerwent, Monmouthshire.²⁹ The existence in Britain of localised styles of lead-glazed pottery has for some time hinted at a more extensive manufacture of such pottery in the province.³⁰ One such group, five or six vessels of distinctive form and decoration with thick treacly brown glaze, was found not very far from Verulamium on the Villa site at Hambleton, Buckinghamshire (later first century A.D.), where there was also one vessel of this form unglazed.³¹ This find at Verulamium adds more substance to this view that the manufacture of lead-glazed wares was more widespread in Roman Britain during the later first to early second centuries.

Fig. 8 (II-20).

Green earth debris level of the Period IA Building

II. Fairly fine sandy buff ware with a very few poorly-fired blobs of dirty brown glazing material, and a dark brown resinous deposit on the exterior. A thin-walled vessel with an emphatic collared rim; part of a beaker or wide-mouthed flagon. Four other rims of similar section occurred, including one with glaze spread over the broken edges.

²⁷ Grimes, W. F., "The Roman Works Depot of the 20th Legion at Castle Lyons, Holt, Denbighshire." *Y Cymmrodor* XLI (1930).

²⁸ *V.C.H. Northants. I*, 210, though this does not seem to have been used for lead-glazed wares at the time of abandonment.

²⁹ Personal communication from Mr. G. C. Dunning.

³⁰ *Archæological Newsletter* 2 (May, 1950), 199.

³¹ *Archæologia* 71 (1920-21), 175, 177. (Period II floor produced one sherd of brown-glazed ware.)

12. Harsh grey sandy fabric with patches of poorly fired opaque yellow-green glaze, spread slightly over the broken edge in one place. Part of a beaker or wide-mouthed flagon.

13. Two sherds of hard grey ware with better yellowish glaze; the rim of a flagon.

14. Rim of a flagon in hard pale dirty buff ware, and patches of yellowish glaze on the exterior.

15. Neck of a flagon in hard pale grey ware, with very thin-walled body; some yellowish glaze on the exterior.

16. Part of the base of a flagon, of hard grey ware with yellowish glaze on the interior.

17. Part of the base of a flagon of gritty pale grey ware with patchy yellow-green glaze on both the interior and exterior.

18-19. Parts of flagon handles. No. 18 is of hard gritty grey ware with patches of yellowish glaze, and No. 19 is of hard grey buff ware with a little yellowish glaze.

Mortar bank against Inner Wall

20. Part of a wide-necked flagon of hard grey ware with a little poorly-fixed yellowish glaze. A comparable rim came from the green earth debris level.

Burnt corn level on the second floor of Period IA Building.

This contained three rims similar to that of No. 11 above, and five green glazed sherds.

Period IA floor or final floor of Period IA

This level, in the corridor, contained a sherd of thin hard brick red ware with chocolate brown interior surface and a thickish uneven brown glaze on the exterior surface. It might have been part of a conical beaker, as for instance from Knowle Bawdrip, Somerset³² (in brown glazed ware), or Caerwent, Monmouthshire³² (in green glazed ware).

³² *Archæological Newsletter* 2 (May, 1950), 199.

COINS

Report by B. W. Pearce, M.A., F.S.A.

IMPERIAL ROMAN

| No. | Emperor | Denomina- tion | M. & S. ²³ | | Diam. in mm. | Total |
|-----|---------------------------------------|-------------------|-----------------------|--------------------------------------|-----------------|-------|
| 1 | Claudius I (41-54) | As | 66 | Irregular | 24 | 1 |
| 2 | Vespasian (69-79) | " | cf. 497 | Eagle on globe, head r. A.D. 71-3 | 26 | 1 |
| 3 | Domitian (81-96) | " | Indet. | Rev. possibly MONETA | 29½ | 2 |
| 4 | " | " | 335 | | 27½ | |
| 5 | Trajan (98-117) | Dupondius | 674 | | 28½ | 4 |
| 6 | " | " | 674 | | 27½ | |
| 7 | " | Sestertius | Indet. | | 33 | |
| 8 | " | Dupondius | " | | 26½ | |
| 9 | Faustina I (died 141) | Denarius | 370 (A.P.) | | 16½ | 1 |
| 10 | Indetermin- ate | As | — | Rev. Female figure stg. 1. | 25½ | 1 |
| 11 | Severus Alexander (222-35) | Denarius | 226 | | 19 | 1 |
| 12 | Valerian I (253-59) | Antoninianus | 12 | | 19 | 1 |
| 13 | Gallienus (sole reign) (253-68) | " | 163 | MM. $\frac{1}{Z}$ | 20 | 3 |
| 14 | " | " | 283 | MM. $\frac{1}{N}$ | 19 | |
| 15 | " | " | 492 | | 21 | |
| 16 | Postumus (259-68) | " | 75 | | 22 | 1 |
| 17 | Victorinus (268-70) | " | 75/6 | | 19½ | 1 |
| 18 | Tetricus I (270-3) | " | 55 | | 18 | 3 |
| 19 | " | " | 76/7 | | 17½ | |
| 20 | " | " | 58 | | 16½ | |

Continued overleaf.

COINS *continued*

| No. | Emperor | Denomina- tion | M. & S. ³³ | | Diam. in mm. | Total |
|-----|-------------------------|-------------------|-----------------------|--|-----------------|-------|
| 21 | Claudius II (268-70) | " | — | Rev. ? Laetitia | 19½ | 1 |
| 22 | Carausius (287-93) | " | 33 | MM. $\frac{1}{ML}$ R ² . Very rare | 22½ | 2 |
| 23 | " | " | 880 | | 23½ | |
| 24 | Barbarous radiate | " | — | Rev. INVIC- TVS cf. Vic- torinus, 112ff. | Frag- ment | 4 |
| 25 | " | " | — | ? SALVS of Tetricus, 121 ff. | 14 | |
| 26 | " | " | — | Rev. Figure with flower. Cf. SPES, and resting on column ? | 18 | |
| 27 | " | " | — | Rev. Female figure stg. l. | 19 | |

³³ M. & S. Mattingly and Sydenham's *Roman Imperial Coinage*.

| No. | Emperor | Denomina- tion | Cohen ³⁴ | | Diam. in mm. | Total |
|-----|----------------------------|-------------------|---------------------|---|-----------------|-------|
| 28 | Licinius II (317) | Æ 3 | 61 | MM. $\frac{T F}{STR}$ | 18½ | 1 |
| 29 | Constantius II (337-61) | " | 105 | MM. $\frac{1}{SCONST}$ | 17½ | 1 |
| 30 | Constans (337-50) | " | 179 | MM. $\frac{e}{TRS}$ | 15½ | 1 |
| 31 | House of Constantine | " | — | Rev. BEATA TRANQUIL- LITAS type, possibly Crispus (died 326) | 20 | 2 |
| 32 | " | " | — | Rev. CON- STANTIN- OPOLIS | 13½ | |
| 33 | Valens (364-78) | " | 11 | MM. $\frac{OF 1}{[C]ON[]}$ | 18½ | 1 |
| 34 | Honorius (395-423) | Æ 4 | 32 | | 10½ | 1 |
| 35 | ? House of Theodosius | | | Indeterminate | 12½ | 1 |

³⁴ Cohen. Cohen's *Médailles Impériales*.

PROVENANCE OF THE COINS

Forum Site

No coins were found in the stratified layers. The yellow mortar level west of Wall B produced No. 23, an *antoninianus* of Carausius of A.D. 287-93; robber trenches Nos. 5, 14-15 and 31-2, coins dating to A.D. 326; Nos. 16 and 29 were from unstratified levels, the latter dating to A.D. 323-337.

Site G

The pre-building levels produced no coins. Period I building had No. 3, an *as* of Domitian of A.D. 88-96 in the chalky clay level or floor make-up. Of the four coins found in Period IA building levels (Nos. 2, 4, 6 and 7) the *sestertius* of Trajan of A.D. 98-117 (No. 7) from the mortar and plaster layer and the *dupondius* of Trajan (No. 6) of A.D. 114-117 from the upper mortar level were those of latest date. No coins came from Period II building levels, and only one, an *as* of first to second century date (No. 10) from the ditch outside the building. Of nine coins found in the destruction level (Nos. 11-13, 18-21 and 26-27) the latest in date were Nos. 18-20, *antoniniani* of Tetricus I of A.D. 270-273. Coin No. 1, an irregular *as* of Claudius I, from the late robber trench is out of context. The two unstratified top levels produced coins Nos. 8-9, 17, 22, 24-5, 28, 30 and 33-5, the latest in date being No. 34 an *Æ* 4 of Honorius of A.D. 395-423 and No. 35, a coin of the ? House of Theodosius. No. 22, an *antoninianus* of Carausius, is noteworthy as a very rare coin. These two levels produced also two pennies of George III of 1806 and 1807 and a farthing of Queen Victoria of 1900.

THE CEREALS FROM THE BURNT CORN LEVEL

Samples of the charred cereals which occurred so plentifully in the burnt corn level of the Period IA building of Site G, dated as c. A.D. 125-150, were submitted to two authorities for examination.

1. *Report by Dr. V. V. C. Henton and Dr. N. L. Kent of the Research Association of British Flour Millers, Cereals Research Station, St. Albans*

Plate 7.

The material, on examination, was found to consist of charred grains mixed with charcoal and a considerable quantity of dust and soil. The sample was sifted over a No. 11 wire to remove the dust, and the tails were hand sorted.

The grain consisted mostly of wheat but there was a small amount of oats and a few beans (*Vicia faba*, var. *Celtica*).³⁵ The wheat grains were variable in size and shape, some being very large symmetrical grains, some being pear-shaped (wider at the germ end) and dorsally humped, whilst some were small in size. The species represented are probably *Triticum vulgare* and *Triticum turgidum*.³⁶

The grain was in a good state of preservation, though brittle. No husked grains were found and no weed seeds, suggesting that the threshing had been efficient. On the other hand the germ, easily visible in most grains, had in some cases begun to sprout, the plumule lying alongside the dorsal side of the grain or else its position shown by a deep furrow on the dorsal side. Numerous grains had smooth lined cavities suggesting possible insect attack, although no direct evidence of any pest was found. A considerable amount of the grain structure was preserved as the photo-micrographs show (Plate 7). In 7A, the plumule has been exposed by removal of the superficial layers; 7C shows beard hairs; 7B shows the superficial epidermis; this tissue was not generally well preserved except where the outer surface had been protected. In 7D the outer layers of the pericarp have been removed, disclosing the cross-cell layer which was generally very well preserved. In 7E the cross layer has also been removed, showing the testa. This tissue is not easily seen, and is characterised by consisting of two layers of cells which cross each other at an acute angle. The pigment, which is characteristic of the testa in the living grain, has of course disappeared. In 7F all the

³⁵ In the specimen submitted to Dr. Helbaek (see below), no oats or beans (*Vicia faba*) occurred.

³⁶ Dr. Helbaek did not find any evidence of *Triticum turgidum*, which was first known during the fourteenth to sixteenth centuries A.D., and was first described by Bock in 1539, and he regards it as improbable that it was known to the Romans.

bran layers have been removed showing the aleurone layer. The cells of this layer are preserved only as cell walls—the contents have disappeared long ago.

2. *Report by Dr. Hans Helbaek of the Nationalmuseet, Kobenhavn*

With very few exceptions, the grains contained in the specimen submitted are all wheat. The bulk is Spelt (*Triticum spelta*) and Club Wheat (*Triticum compactum*). In addition there seems to be a small quantity of Emmer (*Triticum dicoccum*). Finally, the possibility exists that some very few kernels may be Rye (*Secale cereale*). This last grain is difficult to identify as the specimen is severely charred.

Triticum spelta kernels can be identified and are abundant, and in some the characteristic "spikelet forks" were seen, *Triticum dicoccum* was identified mainly on its "spikelet forks," but some of the many kernels in the specimen seemed to be of this species. *Triticum compactum* was identified on the kernels only, as this species drops its grain from the ear when threshed and the internodes and husks very rarely persist. The identification is, however, secure on the score of the thick, short and bulky kernels.

It is possible the Bread Wheat (*Triticum vulgare*) may also be present. The kernels of this species resemble those of *Triticum compactum* but are somewhat larger and more slender. In a severely "puffed" sample, such as the present one, it is not possible to differentiate with certainty.

The grains are unusually large for early specimens. They must have been grown in very fertile soil or have enjoyed good cultivation. After harvesting, however, their treatment was not so good. The grain, which had been threshed thoroughly, had been stored under moist conditions and as a result a fair proportion of it had germinated.

A number of half kernels were observed which had split longitudinally before carbonisation. The sample was intermingled with an unusually large number of fragments of crushed oak timber. In two grains examined microscopically the fruit wall was preserved and mounted sections showed the shrunken cell structure of the epidermis coloured by tar from the fire.

HUMAN, ANIMAL AND BIRD REMAINS

Report by Dr. I. W. Cornwall, Institute of Archæology.

(a) *Human remains from the Forum Site*

Two individuals were found—an infant and a youth or young adult. The infant burial, from an occupation level later than the Forum-Ambulatory wall but anterior to the walls of the rooms built against it, was represented by fragments of a skull, parts of the trunk and of one arm only. Of the skull, the frontal and facial parts were missing, as was the mandible. Some seven to eight vertebrae, the separate halves without the bodies (also separate in extreme youth), and most of the ribs of one side were complete, the remainder were very fragmentary or missing altogether. The two iliac bones, the two scapulae and clavicles were found and the left humerus and radius and two metacarpals. There was no trace of the right arm or of the legs. The remains were in no respect different from the now quite numerous examples of Roman infants, known from various sites. The age at death was certainly less than six months, more probably the baby was new-born, or even a full-term foetus. In the absence of the mandible and the germs of the teeth it is impossible to judge the age more exactly.

The other human specimen was a fragment of the chin region of a mandible with some teeth, belonging probably to a youth, perhaps a young adult. It was found in a level earlier than the wall to the south of Building C. Only the right lower canine, the first premolar and the first molar were preserved, but the slight wear of all, and especially of the last, at a time when coarse hand-milled flour was the rule, indicate youth. The teeth were perfect in every detail. The well-developed chin and the size of the teeth, though nothing extraordinary, may indicate male sex.

(b) *Animal and bird remains from the Forum Site and Site G*

A total of 344 fragments, determinable with some certainty, was examined from the two sites, besides a large number, probably as many again, too small or fragmentary to be determined. The large majority of the bones belonged to the usual domestic animals, with those of cattle in great preponderance.

From the few horn-cores preserved and from general indications of size given by fairly complete bones, the beasts seemed to be uniformly small in stature. Few were markedly youthful, though a handful of cases indicated that veal was not unknown on the menu. 227 pieces were determined, but from Site G there were two large collections, chiefly of very much broken long bones, and it is likely that at least some of these belonged together. They were, however, counted separately.

The sheep (or goat) came next in order of frequency, both sites taken together, with a total of 43 entire bones or fragments. These comparable bones fell little short of those of a modern breed, in point of length, complete metapodials (cannon-bones) were very much slenderer, suggesting animals, by comparison, of very slight build. Only one undoubted goat could be distinguished, by a good horn-core.

Determinable fragments of pig numbered 36. Particularly in the largest collection from Site G there were many youthful individuals, some instances being probably of sucking pigs, and one, perhaps, even a foetus.

Horse was very infrequent, only two examples being noted. It is possible, however, that some of the numerous fragments of ribs and other undistinguished remains, here attributed to cattle for reasons of size and probability, may have belonged to horses. I do not think, however, that any serious quantitative error has been made. Had horses been more frequent, some other, more characteristic, parts would certainly have been preserved in corresponding numbers.

Several individual dogs were represented. The left half of a mandible with three teeth *in situ* and a loose lower canine probably belonging to it was found in the large collection from the green earth debris level of Site G. A tibia, a rib and a metatarsal may have belonged also to the same individual. The Forum Site yielded a fairly complete skull of a young individual, in a level later than the wall to the south of Building C but earlier than the tessellated floor, lacking, however, the premandible and the incisors. This skull was interesting because of the shortness and narrowness of the muzzle at its base. The third premolars stood

almost transversely to the rest of the tooth-rows at the point of this constriction. The resultant short, but markedly pointed muzzle, is reminiscent of the German Spitz breed, which this animal also resembled in stature. Other Early Iron Age and Roman dogs hitherto seen, a round dozen at least, are of a more generalised "lurcher" type and have nothing of the lap-dog or pet about their appearance. Single ribs and another small mandible fragment complete the list.

A solitary antler of roe deer and the tibia of a young hare, lacking both epiphyses, are the sole evidence for hunting of ground-game by the Verulamium Romans, at least at these two sites.

Birds were represented by a single bone from the Forum Site and by more than 20 examples from Site G. In view of the disproportion in the total numbers of bones found on the two sites, one would expect a preponderance at Site G of perhaps four to one. A disproportion five times as great may be pure chance, but seems to be more likely to be due to the functional differences between the sites. Among the birds was the domestic cock, recognised by the spur. The greater number appear to be wild species (not determinable here).

Analysis of animal and bird remains from the Forum Site

| <i>Ox</i> | <i>Sheep or goat</i> | <i>Pig</i> | <i>Horse</i> | <i>Birds</i> | <i>Others</i> | <i>Total</i> |
|--|--------------------------|------------|--------------|--------------|------------------|--------------|
| <i>In Pit F1, prior to the make-up of the floors of Building C.</i> | | | | | | |
| 3 | 1 | 1 | — | — | 2 (Dog) | 7 |
| <i>Occupation later than the Forum-Ambulatory wall but prior to the walls of the rooms built against it.</i> | | | | | | |
| 1 | — | 1 | — | — | — | 2 |
| <i>Prior to the plinth of Building C.</i> | | | | | | |
| 11 | 1 | — | 1 | — | 1 (Dog) | 14 |
| <i>Building-level or immediately prior to the plinth of Building C.</i> | | | | | | |
| — | — | 4 | — | — | — | 4 |
| <i>Prior to the wall to the south of Building C and the tessellated pavement.</i> | | | | | | |
| 1 | — | — | — | — | — | 1 |
| <i>Later than the wall to the south of Building C but prior to the tessellated pavement.</i> | | | | | | |
| 1 | — | — | — | — | 1 (Dog skull) | 2 |
| <i>Tessellated pavement level.</i> | | | | | | |
| 1 | — | — | — | — | — | 1 |
| <i>Robber trenches.</i> | | | | | | |
| 11 | 6 | 6 | 1 | 1 | 1 (Roedeer) | 26 |
| 29 | 8 | 12 | 2 | 1 | 5 | 57 |

Analysis of animal and bird remains from Site G

| Ox | Sheep or goat | Pig | Birds | Others | Total |
|--|------------------|-----|-------|--------|-------|
| <i>Pre-Building levels. Prior to c. A.D. 100. Occupation earth on street level</i> | | | | | |
| 3 or iron slag floor and the black occupation level inside the later wall. | | | | | |
| 6 | 6 | — | 1 | — | 13 |
| Pit NI, level 1. | | | | | |
| 2 | — | — | — | — | 2 |
| <i>Period I Building. c. A.D. 100-125.</i> | | | | | |
| No significant remains. | | | | | |
| <i>Period IA Building. c. A.D. 125-170.</i> | | | | | |
| First floor. | | | | | |
| 1 | 1 | 1 | 1 | — | 4 |
| Burnt corn level. | | | | | |
| — | 1 | 2 | 1 | — | 4 |
| (Goat, horn-core) | | | | | |
| Green earth debris level. | | | | | |
| 94 | 14 | 14 | 15 | 4 | 141 |
| (Some very young) (Inc. cock) (Dog) | | | | | |
| Mortar and plaster layer or destruction of phase 2 walls. | | | | | |
| 40 | 2 | — | — | — | 42 |
| (Many fragments of long bones and ribs broken in antiquity). | | | | | |
| Clay level 3 or make-up of floor 3. | | | | | |
| — | — | 1 | — | — | 1 |
| Period IA final floor. | | | | | |
| 1 | 1 | — | 1 | — | 3 |
| Occupation on Period IA final floor. | | | | | |
| 1 | 1 | 1 | — | — | 3 |
| <i>Period II Building. c. A.D. 170-190.</i> | | | | | |
| Period II floor. | | | | | |
| 1 | 5 | 1 | — | — | 7 |
| Occupation on Period II floor. | | | | | |
| 1 | 1 | — | 1 | — | 3 |
| Wall trench of Period II Building. | | | | | |
| — | 1 | 1 | — | — | 2 |
| Filling of drain. | | | | | |
| 28 | 1 | 1 | 1 | 1 | 32 |
| (Hare) | | | | | |
| Clay sealing drain. | | | | | |
| 1 | — | — | — | — | 1 |
| Rapid silt of ditch. | | | | | |
| 4 | — | — | — | — | 4 |
| <i>Period III Building. c. A.D. 296.</i> | | | | | |
| Upper pebble floor. | | | | | |
| — | — | 1 | — | — | 1 |
| Lower silt of ditch. | | | | | |
| 14 | 1 | 1 | 1 | — | 17 |
| (Under 6 months) | | | | | |
| Burnt and debris level in ditch. | | | | | |
| — | — | — | 2 | — | 2 |
| Upper silt of ditch. | | | | | |
| 2 | — | — | — | — | 2 |
| Pit NIII, level 1. | | | | | |
| 1 | — | — | — | — | 1 |
| <i>Period IV Building and Unstratified.</i> | | | | | |
| Unstratified. | | | | | |
| 1 | — | — | 1 | — | 2 |
| 198 | 35 | 24 | 25 | 5 | 287 |

THE MOLLUSCA

Report by Miss M. Maitland Howard, Institute of Archæology

The mollusca from stratified levels of the Forum Site and Site G contained, in addition to the land species, the marine forms *Mytilus edulis* (mussel) and *Buccinum undatum* (whelk). These shells, in company with the oyster shells found, must have been imported by human agency, probably as food. With the exception of a single specimen of a freshwater snail, *Limnaea peregra*, from the trench filling of a ghost wall on the Forum Site, all the other shells were of the land species such as one would expect to find on the site at the present time. Other than oyster shells, the mollusca found in stratified levels consisted of:—

The Forum Site

From a level prior to Building C.

1 *Helix aspersa*.

Third floor make-up levels of Building C.

| | |
|------------------------------|---|
| 5 <i>Caeciliodes acicula</i> | 1 <i>Buccinum undatum</i> . |
| 3 <i>Cepaea nemoralis</i> . | 1 <i>Oxychilus cellarius</i> . |
| 3 <i>Helix aspersa</i> . | 1 <i>Hygromia</i> sp. (frag- mentary). |

Prior to the wall and tessellated pavement south of Building C.

1 *Retinella nitidula*. 1 *Buccinum undatum*.

In Pit F2.

1 *Helicella itala* (inside the dog skull).

Later than the wall and tessellated pavement south of Building C.

1 *Discus rotundatus* (inside the ox-skull).

Filling of the trench of a ghost wall.

| | |
|--------------------------------|---|
| 2 <i>Caeciliodes acicula</i> . | 1 <i>Limnaea peregra</i> . |
| 2 <i>Hygromia striolata</i> . | 1 <i>Cepaera hortensis</i> . |
| 1 <i>Hygromia hispida</i> . | 1 <i>Discus rotundatus</i> (im- mature). |

Immature indeterminable fragments.

Site G

Other than oyster shells, the mollusca found in stratified levels were:—

4 *Mytilus edulis*. 3 *Cepaea nemoralis*. 1 *Helix aspersa*
(fragmentary).

THE CHARCOALS

*Report by Mrs. F. L. Balfour-Browne,
Department of Botany, British Museum (Natural History).*

The Forum Site

Oak was found in Pit F1, the occupation levels later than the Forum Ambulatory wall and anterior to the rooms built against it, and in the levels later than the tessellated pavement to the south of Building C. Hazel occurred in the robber trenches.

Site G

Oak charcoal occurred in the street level 3 or iron slag floor of the pre-building levels; the first floor or occupation and burnt level, the burnt corn level, the green earth debris level, and the mortar and plaster level of the Period IA building; and the Period II building's floor. Hazel was found in the green earth debris level of the Period IA building.