

VERULAMIUM EXCAVATIONS

Volume II

SHEPPARD FRERE



PUBLISHED BY THE SOCIETY OF ANTIQUARIES
DISTRIBUTED BY THAMES AND HUDSON, LONDON

Reports of the Research Committee
of the
Society of Antiquaries of London

No. XLI

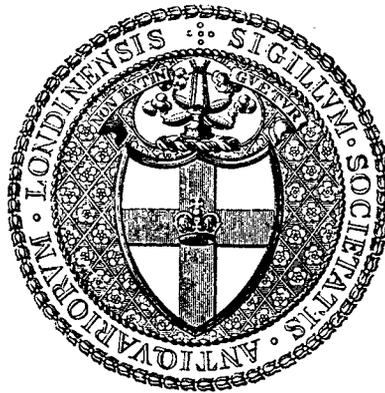
Verulamium Excavations

Vol. II

By

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With a section by
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Published by
The Society of Antiquaries of London

Distributed by
Thames and Hudson Ltd.

1983

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ISBN 0 500 99034 4

PRINTED IN GREAT BRITAIN BY
THE EASTERN PRESS LIMITED
OF LONDON AND READING

P R E F A C E

The excavations at Verulamium between 1955 and 1961 were a research project of the Society of Antiquaries of London. The context of the excavations was explained in the Introduction to Volume I of this report and need not be repeated. There, too, will be found my acknowledgements to the many people who contributed in time and work to the organisation of the project. Volume I contained a report on the sequence of timber-framed, and finally stone-built, structures found along the north-east side of Insula XIV. Priority of publication was given to that site partly because of the intrinsic interest of the structures, but mainly because the close stratification associated with them enabled the publication, for the first time at Verulamium, of a really large dated sequence of pottery. Besides being of potential value to other workers, the compilation of the sequence was an essential preliminary to study of the buildings and archaeological deposits excavated elsewhere in the city during the campaign, since for many an accurate date depended on the evidence of coarse pottery.

The present volume contains reports on all the work done between 1955 and 1961 (save that already published in Volume I), together with the pottery which is crucial for its dating. There remains a quantity of pottery which on present evidence cannot be used with any precision to date the contexts in which it occurs, but which is dated by them. This pottery, together with specialist reports upon the samian, the coins, the objects of bronze, iron and bone, the wall-plaster, etc., will appear in Volume III. In the Tables of dating evidence contained in the present volume the samian and coins are listed as they were listed in Volume I, and the pottery published later in the present volume is cited as 'No. 1562', etc. (continuing the numbered sequence of vessels begun in Volume I). To save too frequent repetition of drawings of similar vessels, those similar to any published in Volume I are quoted as 'Type 986', etc. Less close resemblances are indicated by the formula 'cf. Type 986', etc. In a few instances reference is also made to Types which will appear in Volume III. In the samian lists reference to *e.g.* **S3** or **D4** indicates stamps or decorated sherds of which drawings will be published in Volume III.

The drawings and classification of the pottery in this volume are the work of Miss M. G. Wilson. During the excavation, the field-plans were drawn by me and the field-sections by the supervisors responsible for each site. The final drawings of the plans for publication and those of many of the sections were made by me; of many other sections the major part of the published drawings is by Miss Wilson, who left only the final editing and labelling to me. A few other drawings are individually attributed to other draughtsmen. All the samian has been examined by Mr. B. R. Hartley, who with Miss Brenda Dickinson is responsible for the dates given in the Tables. The majority of the coins were identified by the late Dr. C. M. Kraay; more recently Dr. R. Reece has undertaken responsibility for the numismatic finds and his full report will appear in Volume III.

It remains to acknowledge the work of the supervisors, without whose skill the detailed record of the excavations would have been impossible to achieve. They were: Mr. R. B. Adams, Dr. and Mrs. R. Allchin, Dr. J. Alexander, Dr. A. ApSimon, Dr. Ann Birchall, Mr. G. H. Brown, Dr. J. J. Butler, Mr. D. Corbet, Mrs. M. A. Cotton, Dr. W. A. Cummins,

Mr. G. B. Dannell, Mr. G. C. Duncan, Mr. J. A. Ellison, Professor W. H. C. Frend, Mr. T. Harman, Mr. M. W. C. Hassall, Mrs. S. C. Hawkes, Dr. R. Hope-Simpson, Dr. F. Jenkins, Dr. W. H. Manning, Mr. J. C. McCulloch, Mr. A. D. McWhirr, Mr. M. Needham, Mrs. A. Ravetz, Miss D. M. Rennie, Miss G. Talbot, Mr. J. S. Wachter, and Miss M. G. Wilson. In 1955 the photography was the work of Miss N. Lord and in that season Miss C. Western supervised the finds-room. Photography in 1956–61 was undertaken by Mr. M. B. Cookson; Mrs. J. Birmingham and later Mrs. H. J. M. Petty supervised the finds-room. Catering for the excavation-camp was variously undertaken by Mrs. C. M. Bennett, Miss E. Callow, Miss J. Field, Miss A. Low, Miss P. Keddie and Miss S. Pearce. Gratitude is also due to Mr. G. H. Allard, Mr. W. T. Anthony, Mrs. A. B. Frere and Mrs. N. Vinson for supervising the sale of literature. Dr. M. Aitken was responsible for the geophysical survey which traced the course of the buried '1955 Ditch', a major discovery. Without the help of Dr. N. Davey it would have been impossible to salvage the panels of fallen wall-plaster which are an important feature of the site. Acknowledgement must be made to Dr. Ilid Anthony for much practical help as Director of the Verulamium Museum and to the present Director, Mr. Gareth Davies, and his staff for help later on. I am grateful to Mr. N. Clayton and Professor J. K. St. Joseph for plotting the position of buildings known from air-photography on to fig. 156, thus making the town-plan as complete as possible. Other air-photographs were made available to me by Mr. C. Saunders. Finally my thanks are due to Mrs. Angela Ambrose and to Mrs. Lynda Smithson for their skilled and accurate typing and retyping of my drafts.

The ranging-rods used as scales in the photographs are marked in feet. The excavation was recorded in feet and inches, but in the text metric equivalents have been provided for significant dimensions. Others may be obtained by the following conversion: 1 foot = 0.3048 m.; 1 inch = 2.54 cm.

During the seven seasons the total cost of excavation amounted to £18,524.

Although the manuscript of this book was completed in November, 1978, other Research Report manuscripts previously accepted by the Society for publication naturally received priority.

Sheppard Frere
November, 1978

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ABBREVIATIONS AND BIBLIOGRAPHY

- Antiq. Journ.* *The Antiquaries Journal* (Society of Antiquaries of London).
- Arch. Ael.*⁴ *Archaeologia Aeliana*, fourth series (Society of Antiquaries of Newcastle upon Tyne).
- Arch. Cant.* *Archaeologia Cantiana* (Kent Archaeological Society).
- Arch. Journ.* *The Archaeological Journal* (Royal Archaeological Institute).
- Bagendon* Clifford, Elsie M., *Bagendon, a Belgic Oppidum, Excavations 1954-6* (Cambridge, 1961).
- B.A.R.* *British Archaeological Reports*.
- Callender Callender, M. H., *Roman Amphorae* (London, 1965).
- CIL* *Corpus Inscriptionum Latinarum*
- Davey and Ling, Davey, N., and Ling, R., *Wall-Painting in Roman Britain* (*Britannia* Monograph No. 3, 1981).
- Wall-Painting*
- Gillam Gillam, J., *Types of Roman Coarse Pottery Vessels in Northern Britain* (Newcastle, 3rd edn. 1970)
- Grenier, *Manuel* Grenier, A., *Manuel d'Archéologie Gallo-Romaine* (Paris, 1931—).
- ILS* Dessau, H., *Inscriptiones Latinae Selectae*.
- J.R.S.* *The Journal of Roman Studies* (Society for the Promotion of Roman Studies).
- LRBC* Carson, R. A. G., Hill, P. V., and Kent, J. P. C. (eds.), *Late Roman Bronze Coinage* (London, 1960—).
- Mack Mack, R. P., *The Coinage of Ancient Britain* (London, 1953).
- Revue arch.* *Revue archéologique*.
- RIC* Mattingly, H., *et al.* (eds.), *Roman Imperial Coinage* (London, 1923—).
- Sydenham Sydenham, E. A., *The Coinage of the Roman Republic* (London, 1952).
- Trans. St. Albans &* St. Albans and Hertfordshire Architectural and Archaeological Society, *Transactions*.
- Herts. Archit. and*
- Arch. Soc.*
- V.C.H.* *The Victoria County History*.
- Verulamium* Wheeler, R. E. M and T. V., *Verulamium, a Belgic and Two Roman Cities* (Reports of the Research Committee of the Society of Antiquaries of London No. XI, Oxford, 1936).
- Wheeler, *Verulamium* See *Verulamium*.

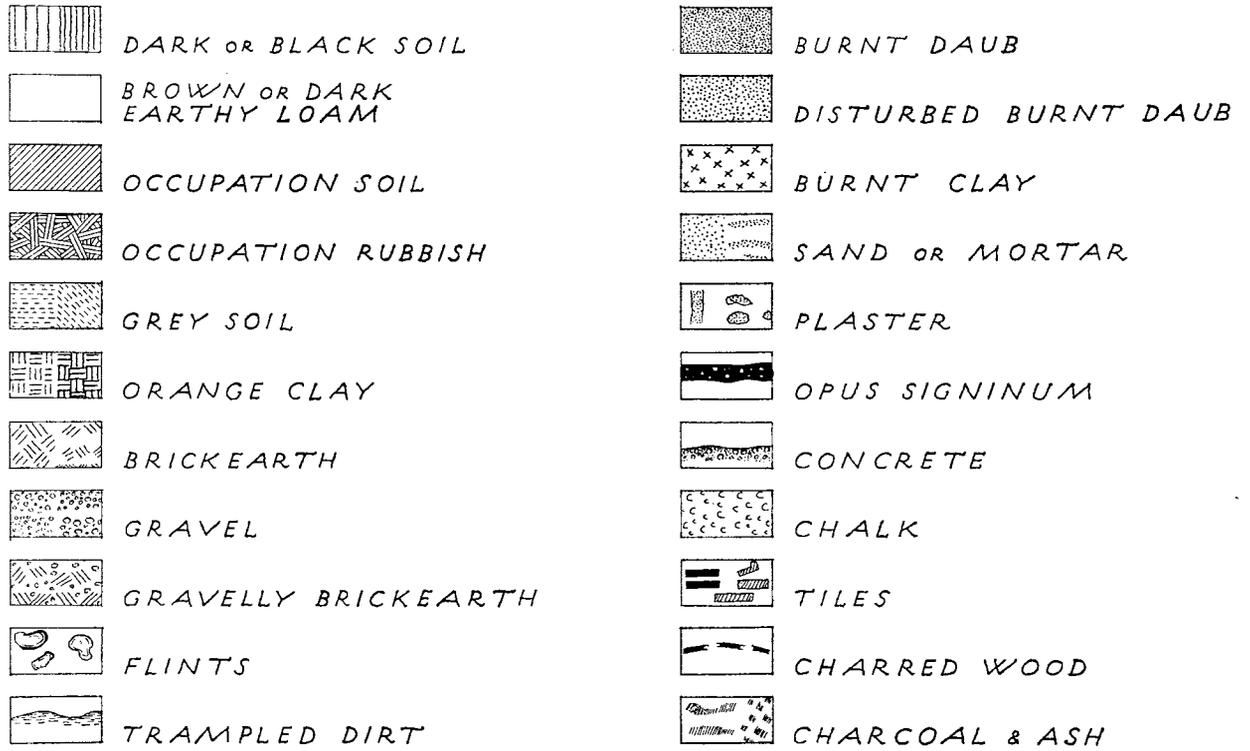


FIG. 1. Key to Sections.

INTRODUCTION

VERULAMIUM holds a special place in the study of Roman Britain. Not only was it one of the largest cities of the province and perhaps one of the highest-ranking, but also its excavation by R. E. M. and T. V. Wheeler in 1930–4 was amongst the first of scientific explorations of Roman towns in this country, just as their report was certainly the first to interpret results in the wider context of the history of the Roman Empire. The deductions made in the Wheelers' report were utilized by R. G. Collingwood as a framework for the history of urban civilization in Roman Britain and have coloured interpretation ever since.

Yet the results were based on a sample which was small—11 acres out of 200—and their interpretations suffered from *celeritas Wheeleriana*; the chronology adopted was based very largely on the samian finds and coins, which could be easily and quickly assessed, and very little on the coarse pottery which would have involved time-consuming basic research. Experience in the present excavations has shown that in the first and early second centuries—provided it occurs in sufficient quantities—samian gives an accurate indication of date; thereafter there is increasing residuality, and sound dating depends upon accurate assessment of the coarse pottery as well as of the samian. After the late second century, samian is almost useless (although often still present in quantity);¹ assessment of date now depends on more difficult criteria and in particular upon the occurrence of various types of colour-coated wares. A clear picture of the life-span of these types can only be pieced together by noting the dates of individual contexts in which sherds appear, until a pattern emerges.

The effects of Wheeler's dependence on samian-dating became apparent in the attribution of so many buildings to the Antonine period, when a proper assessment of the other pottery—to judge by present experience—might well have placed some of them in the first half of the third century. To a lesser extent Wheeler's 'Constantian renaissance' at the beginning of the fourth century should probably be expanded to cover the period down to *c.* 320 when contemporary coin-losses once again became appreciable.

The importance of accurate dating has been emphasized because, although its contribution to a proper historical picture is axiomatic, its achievement is a laborious process and is responsible for the long delay in the appearance of this report. Every layer and its contents has had to be carefully considered and linked with others in neighbouring trenches. When the excavations began in 1955 the grid of squares—a method developed by Wheeler—was thought to be the proper design for exploring an area. It will be apparent in this volume how often walls and other significant features were concealed under intervening balks which time or convenience prevented cutting through. In 1958 a more open system of excavation was developed for the exploration of half-timbered buildings in Insula XIV. This not only provided a fuller plan of the structures but considerably reduced the amount of later co-ordination of layers. Provided sufficient sections are drawn for control, this system has many advantages over the grid of small squares, and is today widely in use. But many of the sites reported in this volume were dug on the old method before the new was invented. Ultimate

¹ Coins can be just as residual as samian. See, e.g., R. Reece in J. Casey and R. Reece (eds.), *Coins and the Archaeologist* (British Archaeological Reports, No. 4 (1974)), 86 ff.

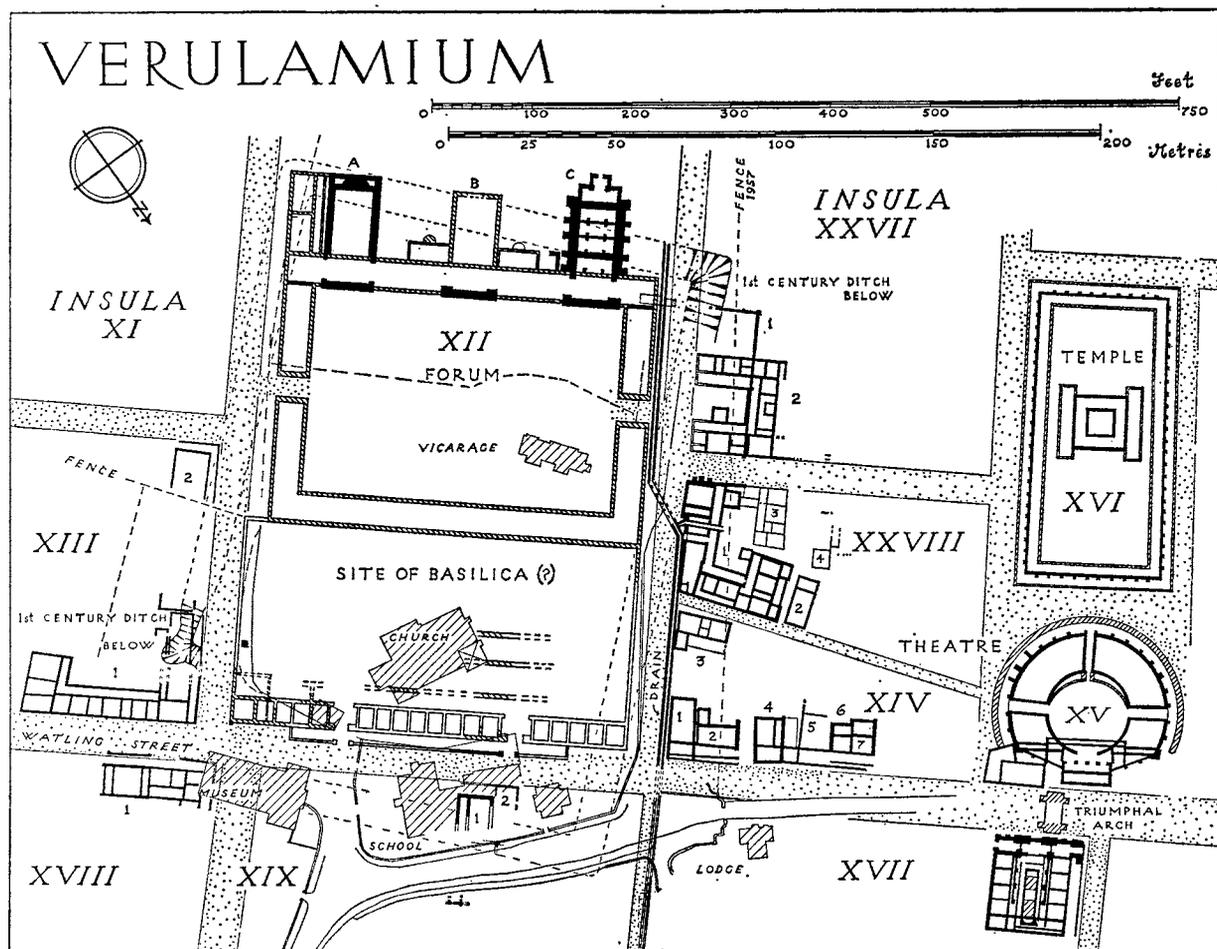


FIG. 2. Verulamium: plan of central area.

re-assessments of results will, it is hoped, have been facilitated by the consistent record of excavation-codes on the published drawings.

The excavations of 1955-61 were concerned with a different and in part more central portion of the city than that examined in 1930-4, and they have increased the area sampled to 20 acres. A re-assessment of the history of the city in the light of these results and of modern knowledge of Roman Britain is required and is here offered.

One of the most stimulating achievements of Wheeler's imaginative campaign was the identification and partial examination of Wheathampstead and Prae Wood as Belgic *oppida*, and their linking with Verulamium to give an archaeological context to the sparse facts of the immediately pre-Roman Iron Age known to us from such writers as Caesar and Suetonius or from the Belgic coinage. Some modern reactions to this have gone unacceptably far in attempting to claim that Cassivellaunus and the Catuvellauni had no connection or that neither were of Belgic stock. Caesar's invasions found the Belgic settlement of Britain in an intermediate stage; the historical *civitas* of the Catuvellauni centred on Verulamium was a

formation of the post-Caesarian period, when the Roman alliance with the Trinovantes of Essex had given the latter greatly increased power, wealth and stability, diverting the war-like ambitions of other chieftains, and the expansion of settlement, towards the interior.

Prae Wood was the nucleus of Belgic *Verlamion* which is first attested on the coins of Tasciovanus. The mint of this king has yet to be discovered, but in 1956 a mass of broken coin-moulds was found below the later defences in Insula XVII, and subsequently further groups of moulds were found in Insula XXVII and in Insula XIX (pp. 30 f.). Spectrographic analysis showed that those from Insula XVII contained traces mainly of copper, those from Insula XXVII mainly of silver and gold. All three groups, however, belong to the period of Cunobelin (A.D. 5-40), under whom it is now known that the Verulamium mint continued to play an important role. All these deposits of mint-debris are situated close to the valley floor, the nearest lying little short of half a mile from the Prae Wood defences on the plateau above; but individually they are widely separated and probably represent a long period of activity. Hitherto no tools and only part of one structure which can be associated with minting have been found; but the discovery emphasizes the fact that Belgic *Verlamion*, at least in its last half-century, comprised more than the settlement at Prae Wood. Although the Prae Wood earthworks face towards the valley, they are comparatively slight works, boundaries rather than major defences; clearly important parts of the *oppidum* lay outside them, though these are still ill-explored. The suggestion of Crummy,¹ however, that the Fosse Earthwork is Belgic has nothing to recommend it: amongst other things it ignores Wheeler's record of samian pottery in the turf-line below the primary rampart. Rodwell² has published a generalized map of the area in a recent study of the site; a more detailed picture of Belgic remains at Verulamium is seen on fig. 3.

Beneath the Roman city a substantial ditched enclosure (p. 193) seems to underlie the forum. Discrete portions of apparently pre-Roman ditch have been found in this area, which when linked seem to indicate an enclosure of *c.* 5.5 acres (2.2 ha.), conceivably marking the limits of a palace area or royal kraal: the areas of mint debris in its neighbourhood are possibly significant. Alternatively a sacred site, resembling the ditched pre-Roman temenos at Gosbecks³ may be suggested. Other indications of pre-Roman settlement have been found beneath Insulae XVII, XIX, XXI, XXVII and XXVIII; these include part of a rectilinear building, founded in wall-trenches, in Insula XVII (p. 102). A comparatively early group of Belgic pottery was published by Corder⁴ from Salisbury Avenue, on the east side of modern St. Albans, and sherds found near St. Stephens in 1936⁵ suggest scattered occupation south of the Roman city also. An important cremation-cemetery (with a few inhumations) was examined in 1966-8 by Stead at King Harry Lane, in the area between the Roman city wall and the plateau earthworks.⁶ Another cremation-cemetery was excavated in Verulam Hills Field in 1963-4 outside the London Gate;⁷ this cemetery lies *c.* 600 m. east of the plateau earthworks and suggests settlement in its vicinity—possibly that mentioned near St. Stephens. A small group of cremations comes from below Insula XXVIII (p. 273). It seems probable

¹ P. Crummy, *Not Only a Matter of Time* (Colchester Excavation Committee, 1975).

² In B. Cunliffe and T. Rowley (eds.), *Oppida: the Beginnings of Urbanisation in Barbarian Europe* (B.A.R.: Supplementary Series, No. 11 (1976)), 334 ff.

³ M. R. Hull, *Roman Colchester* (Oxford, 1958), 259 ff.

⁴ *Antiq. Journ.* xxi (1941), 338 ff.

⁵ *Ibid.*, 152, 156-7.

⁶ *Antiquity*, xliii (1969), 45-52.

⁷ *Hertfordshire Archaeology*, i (1968), 9-17.

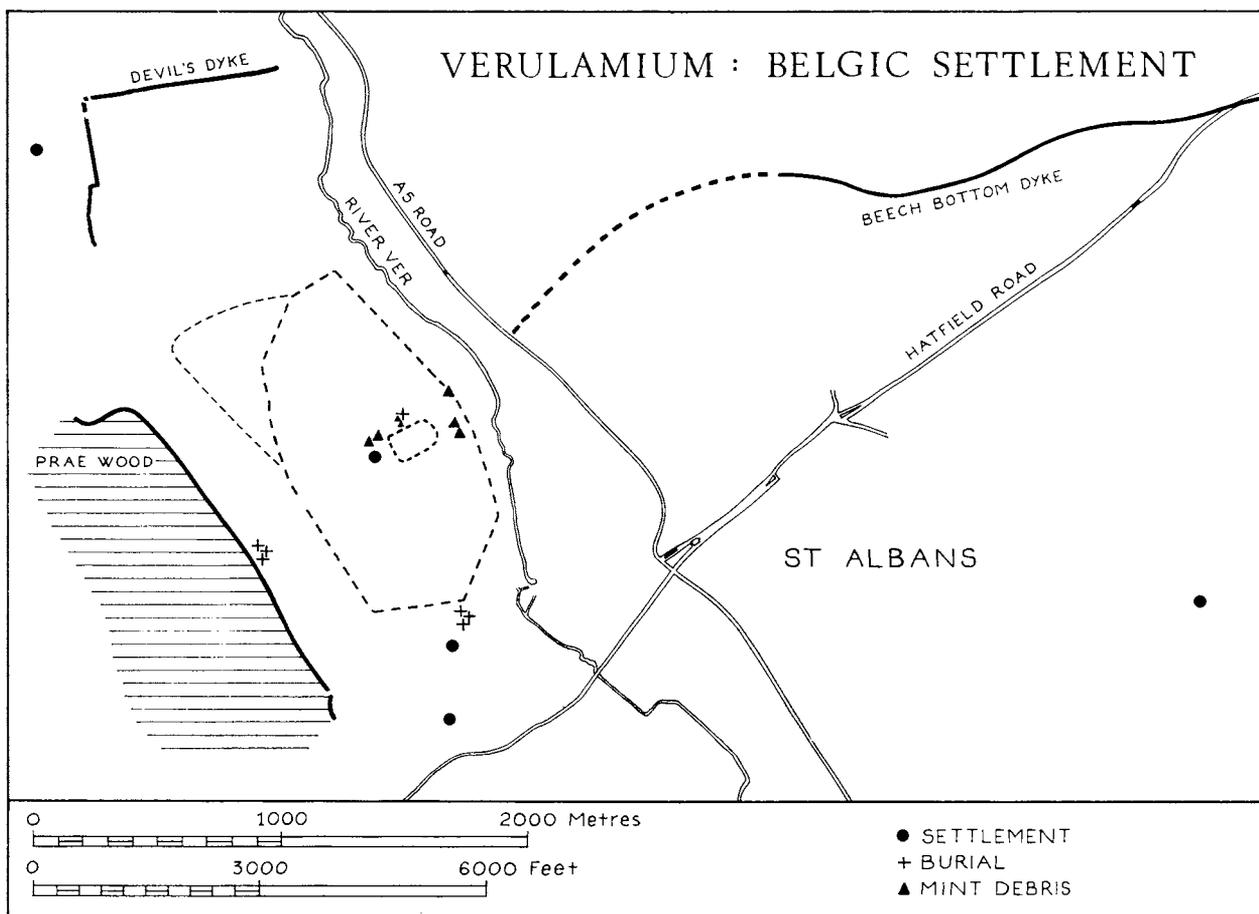


FIG. 3. Belgic Verulamium
(drawn by A. Wilkins).

that the main expansion down into the valley bottom took place during the reign of Cunobelin.

Soon after the Roman conquest a military post was established on the floor of the valley, presumably to keep observation on the native *oppidum* and to command the crossing of the River Ver, where important routes converged. These were the newly constructed Watling Street running from London to the north-west and another new road now superseding an ancient route linking Colchester with Verulamium and ultimately with Silchester; the road to Cirencester (Akeman Street) presumably also started here. Although its rampart and north-east gate have been found on the edge of Insula XVII, the size and character of the military post is unfortunately not yet established. No internal buildings have been found, and it is probable that the rampart found in Insula XVII is that of an annexe.

Forts are now known or suspected at so many Romano-British urban sites that they can be seen to be a major factor in their foundation, affecting choice of site and attraction of population. At Verulamium, however, the fort appears to have been so short-lived and other factors

favouring urbanization so strong that, exceptionally, its importance in this respect must be considered minimal. Its main contribution to the later city can be seen in the street-plan, for its presence near the later forum accounts for the oblique line taken by Watling Street through the southern half of the later city, for both fort and road date before the latter's foundation. In later periods, however, Watling Street was diverted round the border of Insula XIII. The line of the military rampart on the north-east, hard against the marshy floor of the valley, was followed by the third-century city wall; but this is the result of topography rather than of continuity. On two previous occasions when the city received defences in earthwork (the '1955 Ditch' and the Fosse Earthwork), the marshes had apparently been considered sufficient defence, for no fortifications were provided on either occasion along the river's flank. It is true that the evident unfinished state of the Fosse Earthwork elsewhere on its circuit (p. 34) prevents our being sure that the omission here was intended to be final; but the absence of the 1955 Ditch circuit gives unexpected and interesting support—even perhaps emphasis—to one of the philological interpretations of the place name *Verulamium* as 'above the pool' or 'marsh'.¹

Despite the absence of evidence for barracks etc., military equipment has been found in Insula XVII (p. 104) and also in Insula XIV. Some of the latter, published in Volume I, was found in contexts as late as the second century (e.g., two pieces of sword); the probability of residual material being carried upward in successive rebuildings of clay-packed walls has been explained in Volume I, pp. 9–10.

Excavation in Insula XIV showed that the foundation of the city is to be placed *c.* A.D. 50. The fort was evacuated by that date at the latest, but probably some years earlier (p. 39). The scarcity of Claudian coins at Verulamium, pointed out by Dr. Reece in his coin report (Volume III), strongly suggests that the military phase was very brief. The date *c.* 50 for the city's foundation was reached on archaeological grounds, partly because of the scarcity of *early* Claudian samian and partly by reckoning back from the disaster of A.D. 61. However, if Verulamium was a *municipium* founded under Claudius, it is not likely to have been established earlier than the *colonia* of Camulodunum which was planted in 49. That it was a *municipium* is argued on p. 26, though there is still a possibility that the charter was awarded by Vespasian.

Whatever the truth of this, the city was certainly a regular, and in some sense an official, foundation rather than a mere natural unorganized development, or synoekism by native Catuvellauni moving down from Prae Wood; for, apart from the new architecture and multiple blocks of shops illustrated by the buildings of Period I in Insula XIV (Vol. I), and inferred also on the Watling Street frontage of Insula XVII,² which certainly imply official help, much of the nucleus of the street-grid can be shown to have a pre-Boudiccan origin (fig. 4). Another sign of an official foundation is the provision of defences. These were soon if not at the beginning supplied in earthwork, and enclose 119 acres (47·6 ha.). The history and in part even the extent of the defences of Verulamium have been reassessed in this volume, not least because of the discovery of the previously unknown circuit known as the 1955 Ditch. First-century defences are rare in Romano-British cities and have only been found either at cities which on other grounds are known or suspected to have possessed colonial or municipal

¹ *Archaeologia*, xciii (1949), 49. In *Britannia*, i (1970), 80, Kenneth Jackson amends this, with some disapproval, to

'The Great Pool'.
² *Archaeologia*, xc (1944), pl. xxi.

rank, or else can be assigned on geographical grounds to the client-kingdom of Cogidubnus. The system represented by the 1955 Ditch has not yet been dated with complete precision; but it is shown below to have been constructed either just before or just after 61 and thus within a very short time of the foundation. It would have been impossible to create these defences in the few short weeks of the Boudiccan emergency itself; while the fact that the city was sacked does not mean that the defences did not yet exist, for the panic caused by Boudicca's approach and the retreat northwards of the governor may well have caused many of the defenders to flee. Tacitus' remark¹ that the rebels sought booty *omissis castellis praesidiisque militarium* is clearly irrelevant to this context, though the fact that they attacked *quod . . . defendentibus intutum* is not.

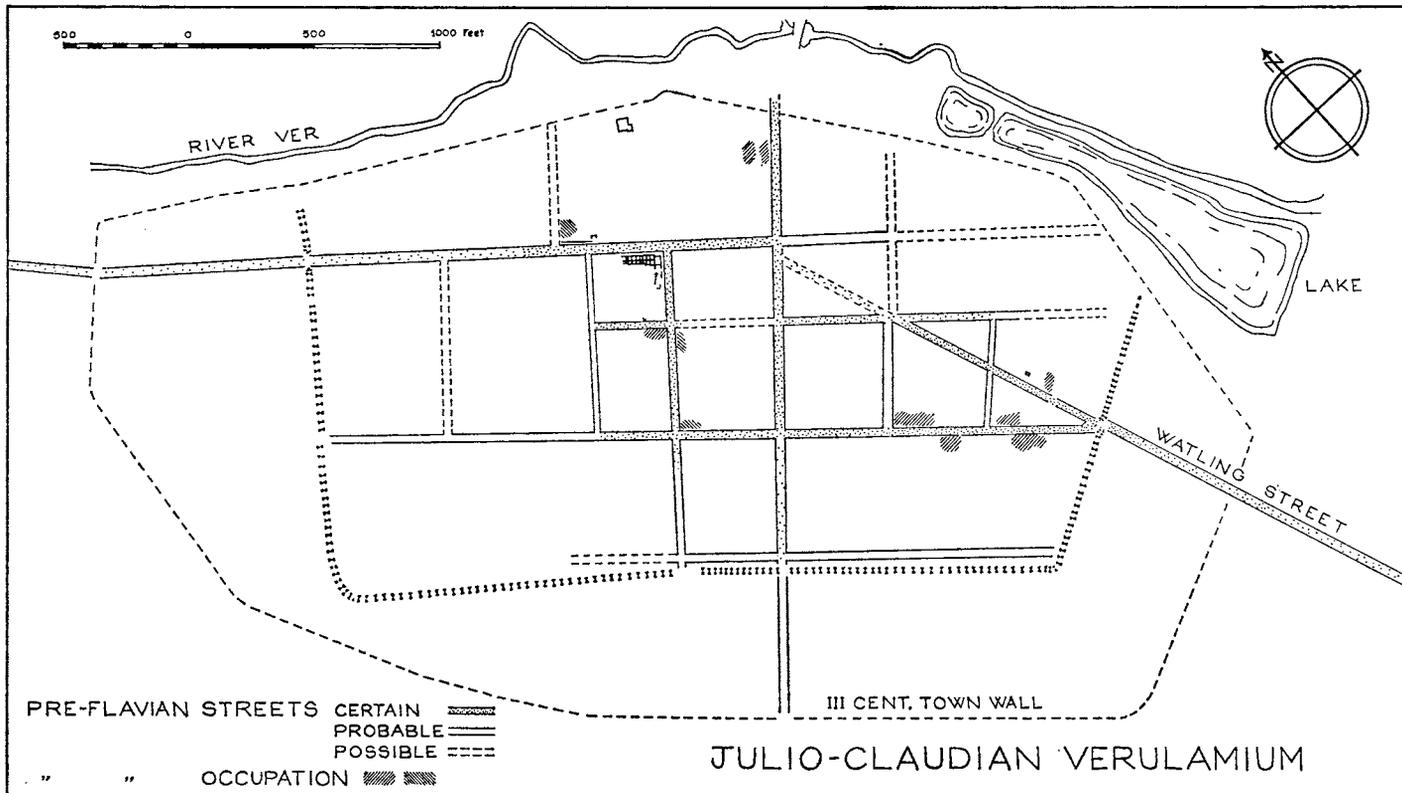


FIG. 4.

Fig. 4 shows what is known of the city in the reigns of Claudius and of Nero. In the present excavations traces of buildings of this period have been found in Insulae XIV, XVII, XXVII and XXVIII. From the 1930-4 excavations no actual structures were published in detail, but occupation-levels recorded by Wheeler have been used to indicate the extent of habitation. It is clear that the development is no mere ribbon-development along Watling Street: the nucleus of a proper street-grid was already in existence.

¹ Tacitus, *Annales*, xiv, 33.

The earliest Roman settlement seems to be confined to the lower part of the valley; but it is possible that Street XX/XXI already existed or was planned, since the south half of the south-west side of the 1955 Ditch circuit is aligned to respect the street. The great majority of buildings were of sleeper-beam construction, a type of architecture introduced by the Roman army. In Britain itself the army did not often employ sleeper-beams in its own buildings, but at Verulamium this method of construction, once learnt by local builders, remained very popular for over a century. During this period building-construction was closely allied with carpentry, and the influence of tradition was very strong. All the more interesting is the building in Insula XVII (p. 105) which seems to be a large hall of native tradition. The survival of native forms of housing is also illustrated by the *Grubenhäuser* of Neronian date mentioned by Wheeler.¹

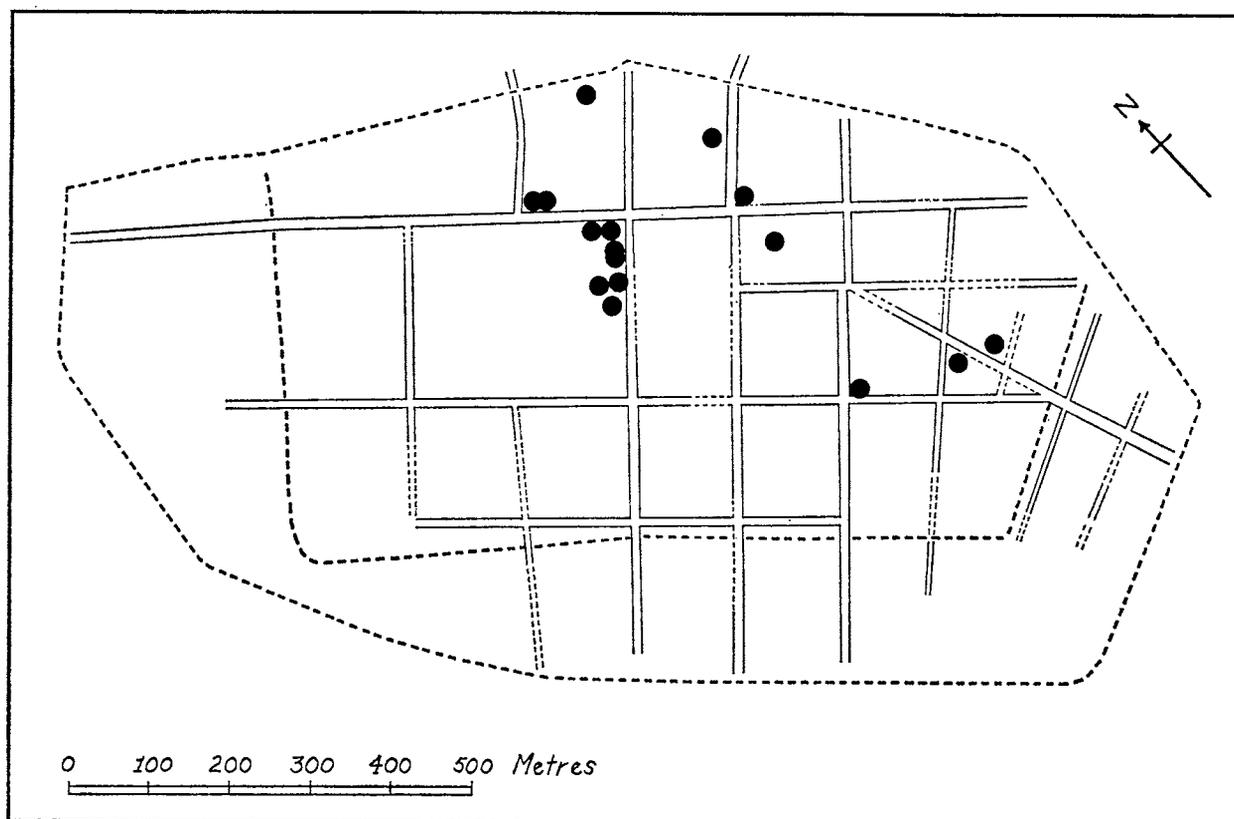


FIG. 5. Distribution of Boudiccan fire-deposits
(drawn by A. Wilkins).

It is clear that considerable progress in urbanization had been made within ten years of foundation, although virtually nothing is known as yet of public buildings. An angle of a masonry building was found by W. Page below the forum.² The use of masonry at this early date surely implies a public building, but its character is obscure. Any forum which may

¹ Wheeler, *Verulamium*, 86. For a Belgic example of this type of building at Canterbury see below, p. 104, n. 1. Another (Roman) example is recorded at the Gorhambury

villa, *Britannia*, vii (1976), 340.

² *V.C.H., Hertfordshire*, iv (1914), 130, and pl. iv.

have been planned or built must have been much smaller than the Flavian one, for it seems probable that Street XI/XIII was formerly continuous with Street XXVII/XXVIII: if so Mr. Page's building lies south-west of the street and presumably outside the forum. It could be a temple. A second fragment of what is claimed as a pre-Boudiccan masonry building was excavated in Insula XIX.¹ Despite areas of ignorance, however, the progress made before 61 is of considerable interest since the majority of cities in Roman Britain were founded up to a generation or more later, in Flavian or Flavio-Trajanic times. Julio-Claudian cities, indeed, existed at Colchester, London, Canterbury and Silchester, but this is still a little-known phase, the more so since except at Silchester it ended in disaster. At Verulamium there is good evidence for the Boudiccan fire (fig. 5), but it is clear that tidying up—and perhaps also the flight of the inhabitants—has removed or prevented traces of the slaughter. The burnt deposits were thin and yielded little of value: probably little had been left to be destroyed since there was ample warning of the approaching holocaust. A few hasty scattered inhumations—unusual at this date—may perhaps be related.²

The seriousness of the setback created by the disaster may be gauged by the time taken by recovery. The shops in Insula XIV were not rebuilt before 75–7, and a similar interval has been noted in Insulae XVII (p. 110) and XXVII (p. 197). An even longer delay was apparent on the south-east frontage of Insula XXVIII, where the destroyed building was not replaced before *c.* 120. The new stone forum, too, was dedicated in 79; and since, as already mentioned, the forum-insula crosses and blocks an earlier street, some replanning can be deduced which suggests that there may have been an earlier smaller forum destroyed in the rebellion. Delay of the order of fifteen to twenty years before reconstruction was also noted by Wheeler³ in Insulae I and II. Boudicca's sack was a knockout blow, only less than lethal because of the belated aid and encouragement afforded by the Flavian governors Frontinus and Agricola.

Once recovery started, however, it was swift and thorough (fig. 6). Not that the whole area of the city now or at any time became wholly built up: open spaces were still being taken up for private building on the south-east frontage of Insula XIV *c.* 130 and in Insula XXVII *c.* 140, while after the Antonine fire other plots remained vacant for a century or more. But by the end of the Flavian period (A.D. 96), in addition to its new forum and basilica extending over 4.6 acres (1.9 ha.), and surpassed in size only by that of London which was built some twenty years later, Verulamium possessed a *macellum*⁴ or 'Pedestrian Shopping Precinct' in Insula XVII, and a masonry temple in Insula XVI which was built in a precinct which had probably been reserved for the purpose since the foundation of the city. Two other temples, also of Romano-Celtic plan, are known in Insula XVII from air photographs; they too are likely to belong to approximately this time. The Triangular Temple of Insula VII was built soon after 100. The forum inscription, carved on Purbeck marble, is dated to the autumn of 79, the second year of Agricola's governorship.⁵ Can it be a coincidence that

¹ This excavation by the Verulamium Museum is recorded in *Britannia*, vi (1975), 258.

² One was found by Wheeler in the edge of a street-ditch below Insula VII. Others have been found in Verulam Hills Field, south of the city: *Hertfordshire Archaeology*, i (1968), 18.

³ Insula I: Wheeler, *Verulamium*, 83; Insula II, *ibid.*, 86.

⁴ Strictly speaking *macellum* means a meat- or provision-

market; there is no evidence to show what precisely was sold in the Verulamium market.

⁵ Although the year of his arrival is not completely certain, most authorities date it to 78 and are supported by the consideration mentioned here. On the date of the inscription, see also p. 69, n. 2.

this same autumn is the context of Tacitus' well-known summary of his father-in-law's policy *hortari privatim adiuuare publice ut templa fora domos exstruerent*?¹ In one sense the coincidence is too close, since at Verulamium this was the year not of inception but of dedication. So large a building was not built within a year or even two,² and it was certainly begun under Frontinus.³ But whatever the details, the dedication-ceremony of this great building, surely attended by the governor in person, may well have fixed a context for this part of his policy in Agricola's and thus ultimately in Tacitus' mind. The text of the inscription is unfortunately incomplete, but its general sense can be restored with confidence save for important details in the last line. The problem is discussed on p. 71.

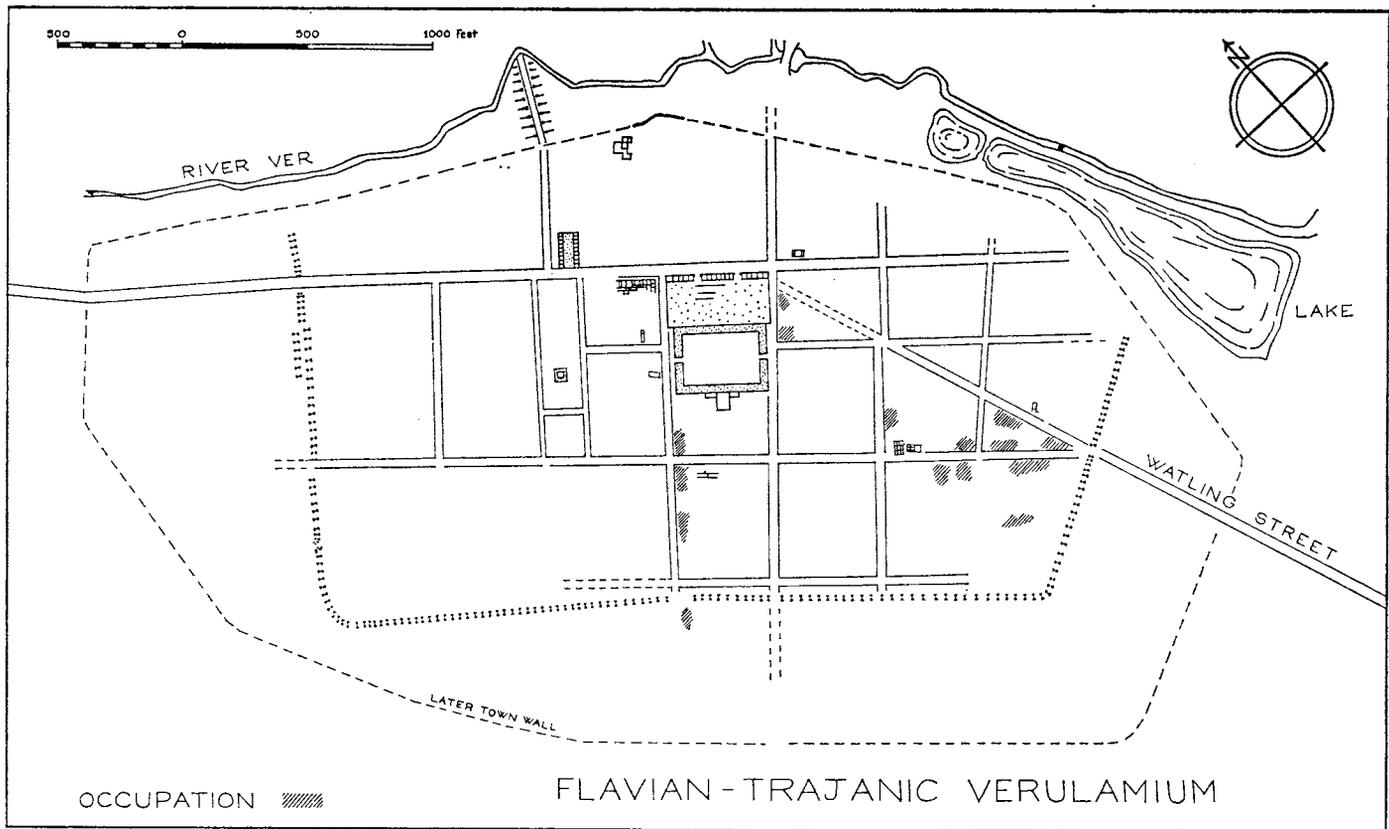


FIG. 6.

The Flavian public buildings mentioned above were of masonry: those in the private sector were still being built in half-timber. The blocks of shops on the Watling Street frontage of Insula XIV were rebuilt on much the same plan for much the same trades. Elsewhere individual strip-buildings (e.g., XXVIII, 3 B) and small private houses (III, 2 A-C) are

¹ Tacitus, *Agricola*, 21.

² The forum of Lepcis Magna was at least six years (A.D. 210-16) in building (J. M. Reynolds and J. B. Ward Perkins, *Inscriptions of Roman Tripolitania*, Nos. 427, 428) and possibly longer (*ibid.*, No. 530, dated between A.D. 202 and

205).

³ There is little evidence for reconstruction at Verulamium before c. A.D. 75, so that it would be unwise to invoke Petillius Cerialis. The task would doubtless require masons from Gaul or Italy.

found with traces of painted plaster and occasional *opus signinum* floors. Building XXVIII, 3 A shows the conversion of a half-timbered strip-building into such a house *c.* 130. In Insula XVII the native-style half-timbered hall-house was rebuilt *c.* 75–80 on an ampler scale and with probably two projecting wings. The use of masonry for walls in domestic buildings is rare before *c.* 140. Two early examples are Wheeler's Building B under House III, 2, which was probably not put up before *c.* 100–20, and a building found in 1949 in Insula XIII, whose chalk footings were assigned to a similar date.¹ A small masonry building which may be contemporary has been excavated by the staff of the Museum² in Insula XVIII. In the 1955–61 excavations, however, the earliest use of masonry for a domestic building is in Building XXI, 2 B, erected *c.* 145. Half-timbering continued in use through most of the second century (fig. 7): Building XXI, 1 A was put up *c.* 145 and stood until *c.* 190, and Building XXII, 1 A (which had one sleeper-wall of masonry, the rest being entirely half-timbered) had a life from *c.* 165–210. Masonry first comes into general private use from *c.* 180.

The early second century was a period of development, expansion and change. In Insula XXI, for instance, a Flavian half-timbered building was taken down *c.* 100 and its site cultivated for about forty years before being redeveloped as Building XXI, 2 B; a lynchet *c.* 1 ft. thick accumulated along the upper edge of Street XXI/XXII. About 130 or soon afterwards a street was cut obliquely through Insula XIV, creating a new Insula XXVIII and leading from the forum to the site of the theatre. The latter has been attributed to the years 140–50; the date should perhaps be placed a year or two earlier. The theatre lies in a small insula (XV) which had previously been devoid of buildings, even in the pre-Boudiccan period, and it may be suggested that the area, together with Insula XVI, had been reserved for a temple and its precinct from the beginning. The temple was eventually provided in the late first century. Part at any rate of the site of the theatre was found to be cobbled (p. 73), as if for the accommodation of crowds. The axial relationship which exists between theatre and temple demonstrates a unified architectural and thus possibly functional connection of a sort which is well known in Continental shrines. It is safe to assume that the main purpose of the theatre was for the better regulation of crowds assembled for religious festivals.

The first-century defences did not inhibit extramural building activity. A Neronian-Flavian building probably existed just outside them under Building XX, 1, and a similar situation existed in Wheeler's Insula IX. Moreover, Stead's excavations in 1966–8 showed that Flavian if not earlier occupation extended for 450 m. outside the 1955 Ditch along the road to Silchester and flourished until the mid third century. By the end of Hadrian's reign the 1955 Ditch had been everywhere slighted; by 160–70 it was completely levelled enabling streets and houses to be extended across its line. Building XX, 1, which straddles the old ditch, was erected *c.* 240, but it was probably not the first building on its site since the area explored in 1955 lay well behind the frontage of Street XX–XXV. Indications of Neronian-Flavian occupation at this site have just been mentioned, while in the layers (dated *c.* 150–70) which levelled the top of the ditch white mosaic tesserae were found. A timber-framed house with cement floors was found by Wheeler lying partly below the London Gate. The house is not dated, but is likely to belong to the second century.

Nor was expansion restricted by the river Ver. The main *thermae* or baths of the city have yet to be located. About the middle of the second century, however, a large extra-

¹ *Trans. St. Albans and Herts. Archit. and Arch. Soc.*, 1953, 30–2.

² *Britannia*, viii (1977), 401.

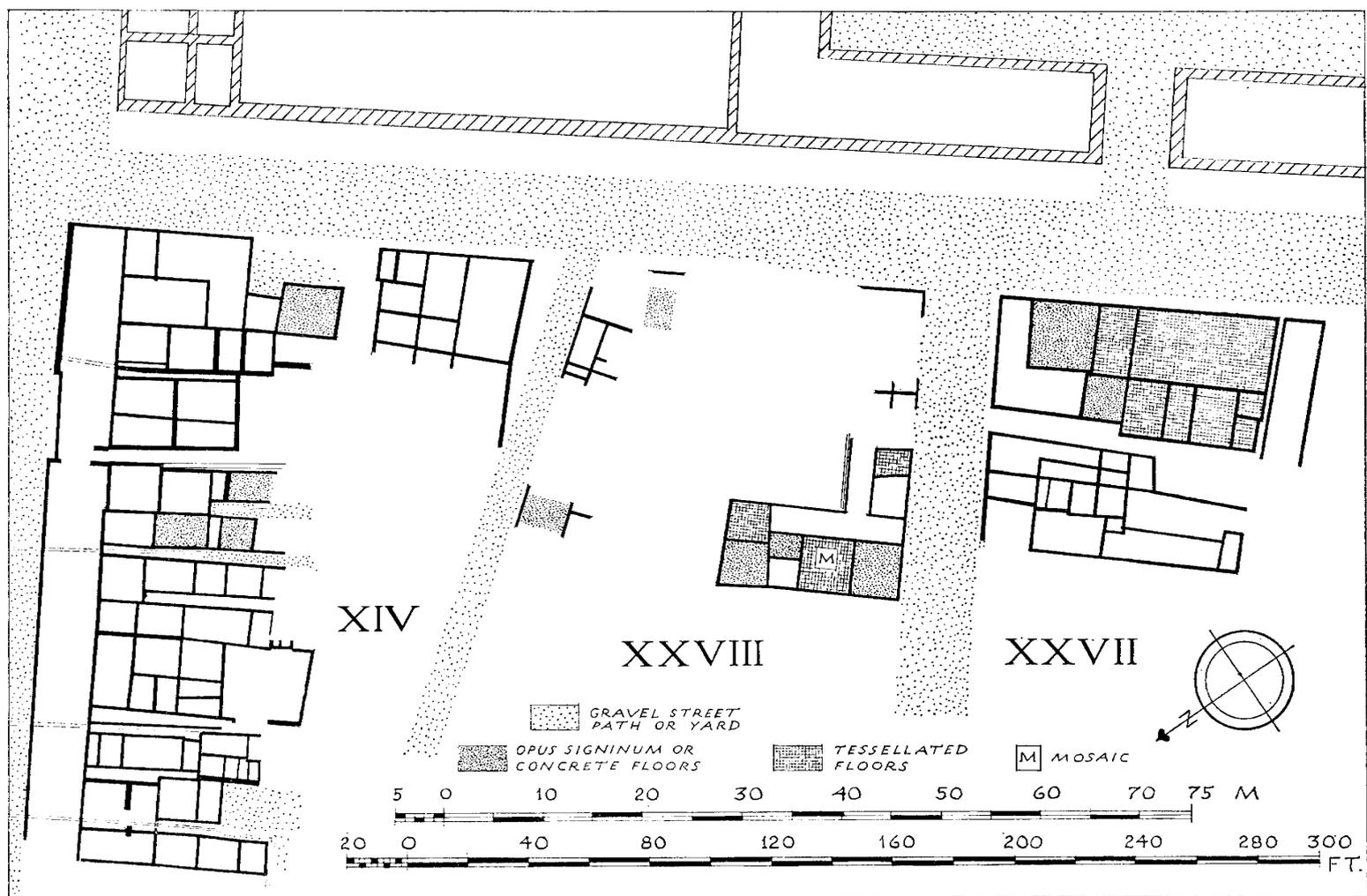


FIG. 7. Verulamium c. A.D. 150: timber-framed buildings in Insulae XIV, XXVII and XXVIII, partly restored.

mural bath-building was put up beyond the river. The site lies at the north end of Branch Road (fig. 124), *c.* 365 m. outside the gate, and covers approximately the area of the public baths at Silchester or Caistor by Norwich. It is difficult at present to understand the logic of so large a baths in this position, which if not inaccessible is at least not conveniently placed for public access; it is hardly likely to be the main baths at Verulamium, which perhaps should be sought in Insula XVIII. Moreover, it appears to have become disused as early as *c.* 225. At present its context is obscure, but it well illustrates the expansion of the city in Antonine times. One possibility is that it represents private enterprise taking advantage of the destruction of the main baths in the Antonine fire; if so the abandonment of the building *c.* 225 will mark the restoration of the other *thermae* to full use by the early third century. Another very large building, with elaborate cellars, was built on this side of the river in the early third century (fig. 119, Site S); it may be an inn (*praetorium*) or perhaps the headquarters of a guild.

The principal cause of all this prosperity must have been the city's position as a market-centre for agricultural produce and its capital status in one of the largest *civitates* of Roman Britain. The villas at Park Street, Gorhambury, Gadebridge Park and Boxmoor all lie within six miles of the city. Apart from small-scale retail metal-working and kindred trades, no important industry has so far been traced inside the walls except a potter's factory of Antonine date in Insula V. A group of four more kilns, also active in the mid and later second century, has, however, been excavated in Verulam Hills Field, south of the London Gate,¹ and there must also be a close connection with the enormous pottery industry centred round Radlett and Elstree. The products of this industry were very largely distributed by road, and Verulamium would be a convenient centre for the offices of the guilds responsible for both manufacture and distribution.

There are not yet sufficient data to warrant more than a guess at the total population of Verulamium at any time in its history, nor is there any evidence as yet for its anthropological composition. The present writer estimated a population of possibly 15,000 for the first-century city, rising to perhaps 20,000 in its heyday.² More interesting, perhaps, is the record of personal names preserved on graffiti. Of these there are sixteen of males, one of them pre-Roman, and three of females.

PERSONAL NAMES

(a) *Males*

Andoc (*J.R.S.* lix (1969), 244)
 Bonus (Vol. I, 364)
 Celer (*ibid.*)
 Iulius Primus (*J.R.S.* xxvi (1936), 267)
 Karinus (*Britannia*, ii (1971), 296)³
 Lupinus (*J.R.S.* xlvi (1958), 153)
 Macus (*J.R.S.* lii (1962), 198)
 Marinus (*Britannia*, viii (1977), 442)³
 Martialis (*J.R.S.* xlvi (1957), 233)
 Maurusius (Wheeler, *Verulamium*, 138)

Maviloduus (*Britannia*, viii (1977), 442)
 Octobrianus (*Britannia*, ii (1971), 296)
 Paternus (Wheeler, *Verulamium*, 199)
 Regillinus (*Britannia*, xi (1980), 406)
 Sacer (Wheeler, *Verulamium*, 199)
 Similis (*J.R.S.* xxvi (1936), 267)
 Victoricus (*J.R.S.* xlvi (1957), 232)

(b) *Females*

Sabina (Vol. I, 364)
 Tacita (*ibid.*)
 Viventia (*J.R.S.* xlvi (1957), 232)

¹ *Hertfordshire Archaeology*, i (1968), 22 ff.

² *Britannia, a History of Roman Britain* (1974 ed.), 296 ff.

³ Karinus and Marinus are differing readings of the same graffito.

Andoc occurred on a Belgic vessel in a pre-Roman cremation-cemetery and recalls the Andoco of the Catuvellaunian coinage (Mack 200). Of the remainder only Maviloduus and Macus are not of Latin stem though Maurusius and Octobrianus are unparalleled in detail as names. A number, such as Bonus, Celer, Sacer and Similis are commonplace and may reflect servile origins, but the collection as a whole bears testimony to the Romanization of the population. The connection of Regillinus with a *collegium dendrophorum* is noteworthy.

The major event of the second century was the great fire of *c.* 155. The dramatic destruction caused by this conflagration in the still largely half-timbered city is well exemplified in Insula XIV (Vol. I). Debris of this fire has been found all over the valley floor from beyond the northern Monumental Arch southwards to Insula III, a distance of 760 m. In all at least 50 acres (20 ha.) were laid waste including parts of the forum and probably also the *macellum*; but the fire did not spread up the hill into Insulae XXII, XXI, or XX (fig. 8). To judge by the amount of property destroyed in the buildings, the fire was unexpected and presumably, therefore, accidental. Verulamium lies too far south for the disturbances on the frontier at about this time to have been felt, and we have no reason to suspect a concurrent rebellion anywhere in the south. There is no sign of contemporary disaster at any of the neighbouring villas. The truth is that catastrophic urban fires were not uncommon in the

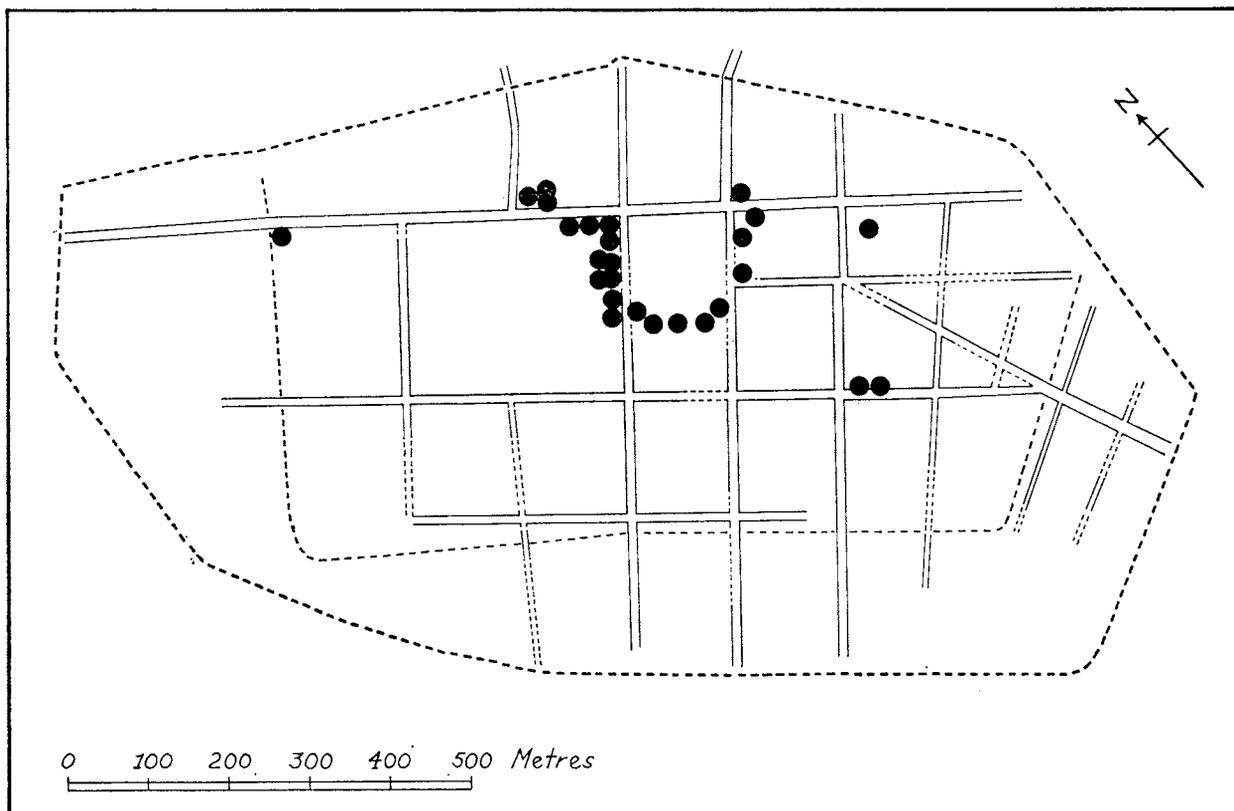


FIG. 8. Distribution of Antonine fire-deposits
(drawn by A. Wilkins).

Roman world; in Britain itself much of London was thus destroyed *c.* 125–30 and the forum of Wroxeter *c.* 165–70.

In more than one way the fire marked a turning-point in Verulamium's history. Recovery naturally was not immediate: a delay of sixty years occurred before Insula XXVIII was rebuilt, but elsewhere recovery may have been speedier, e.g., in Insula XIII Building 1 and Insula III Building 2: such evidence as is published from these buildings is consistent with an Antonine date. One result of the fire was the clearance of a great deal of ground for new buildings. Another was to encourage the use of fire-proof materials such as masonry walls and tiles for roofs. It is only in its aftermath that large or reasonably commodious masonry town-houses, of the type usually attributed to the decurion class, appear in any number. This indicates a new confidence and commitment to urban life on the part of the rich, whatever the reason for their earlier reticence. These houses are now found spreading into outlying parts of the city unaffected by the Antonine fire, and they not infrequently cover over eight times the area of the earlier small houses and contain perhaps three times as many rooms. The introduction of the cellar is another innovation; nine cellars are now known at Verulamium;¹ none is earlier than *c.* 150 and the majority belong to the third century. Cellars also occur at the nearby villas of Gorhambury and Park Street. They are rare in other areas of Britain and seem to represent influence from northern Gaul. An interesting alternative to the wall carried up to the roof in flint and mortar—the method perhaps most normally employed—was the provision of sleeper-walls in masonry to support walls carried up in beaten clay probably tamped between timber shuttering. Having no timber frame, these walls were equally fire-proof; examples were found in Buildings XXI, 1, XXI, 2 and XXVII, 2. There is some evidence that in Building XXI, 1 the structure was strong enough to support tessellated pavements on the first floor.

This great redevelopment naturally took time. Close study of the stratified coarse pottery has shown that some of the large new houses, e.g., XX, 1, XXII, 1 and XXVIII, 1 were built in the first half of the third century rather than in the late second (fig. 9); it is not possible to check the dates of the comparable large houses published by Wheeler. Some building-plots, too, remained vacant for a surprisingly long time—one or even two centuries. The masonry shops along the Watling Street frontage of Insula XIV, replacing those burnt in the Antonine fire, were dated *c.* 275 in Volume I. In a review of that report² Mr. J. S. Wachter suggested that Buildings XIV, 1 and XIV, 4 should be more properly placed in the period 200–20. The argument is neat and skilful but, although it is satisfactory that the data presented are sufficient for a re-interpretation, his view is hard to reconcile with the evidence, not least because there was a coin of Victorinus stratified in a primary level of make-up.³

The east corner of Insula XXVII was left vacant even longer than Insula XIV; the large

¹ In the following buildings: I, 1; VIII, 2; XIV, 5; XIX, 1; XIX, 3 (with additional semi-basement); XXI, 1; XXII, 1; XXVIII, 1; and extramural Site S.

² *Britannia*, iv (1973), 347–52.

³ This is the coin in T III 8. Apart from the presence of this coin below the hard surface of the 'floor', the possibility that these layers were really floors is diminished by their surface-irregularity, by the relationship of, e.g., T II 7

with a wall-offset, and by the fact that they occur at differing levels in the two rooms. The alternative suggestion that the original floors were wooden, through which the coins fell, does not account for the coin of Victorinus below the hard trampled surface of T III 7; nor is the existence of wooden floors likely in a building whose walls had no ledges or sockets for the support of joists.

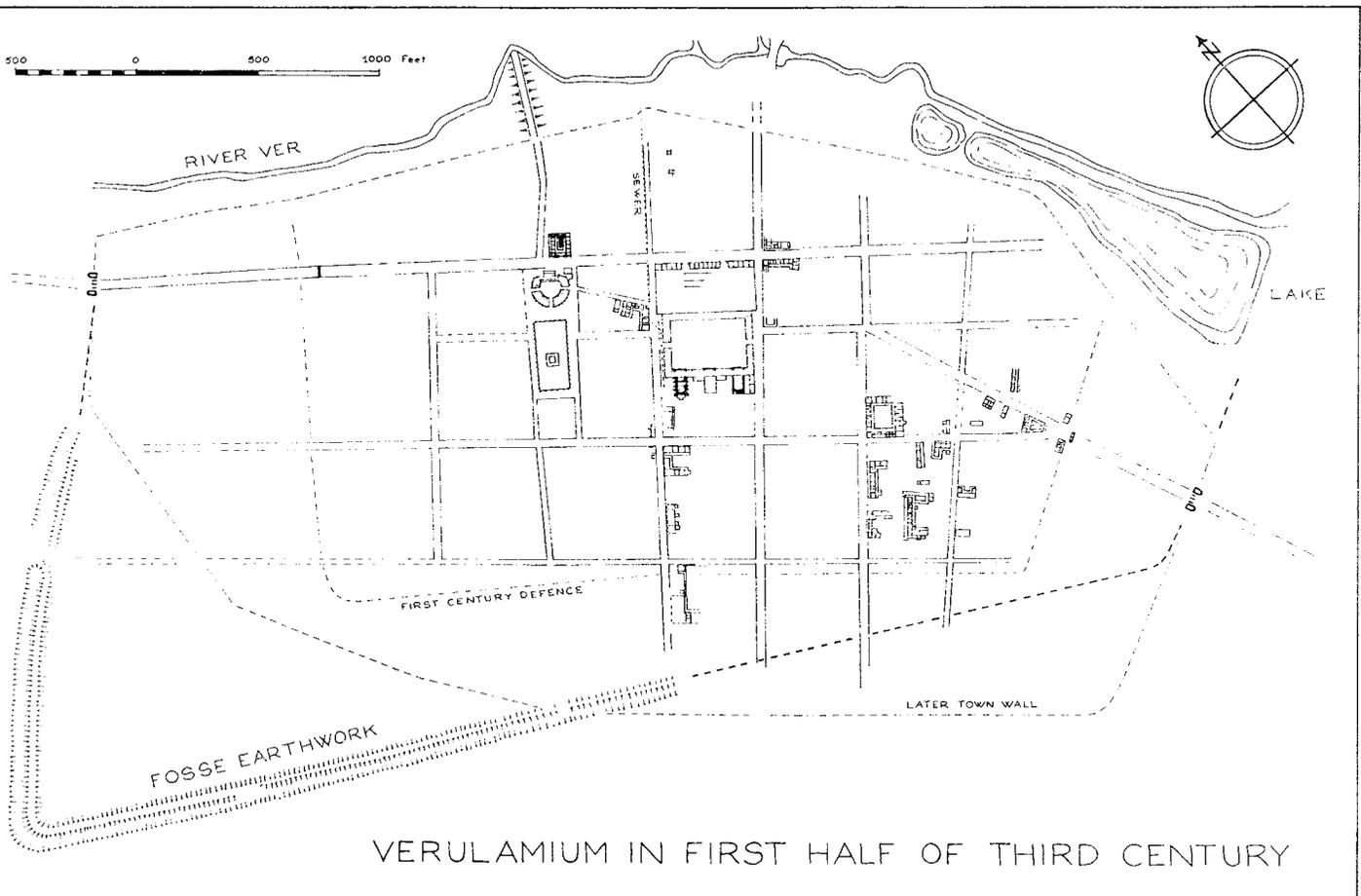


FIG. 9. Verulamium *c.* A.D. 240
(drawn by A. Wilkins).

courtyard-house XXVII, 2 was not built there until *c.* 380. Evidently there was no overwhelming pressure upon urban space.

These facts must cause us to examine critically the effects of the economic crisis of the third century which have been recognized so dramatically here ('Verulamium must at this time [270-90] have borne some resemblance to a bombarded city', Wheeler, *Verulamium*, 28). In the first place it is clear that masonry buildings with tiled roofs and concrete or tessellated floors last much longer than half-timbered ones, if properly maintained. The rapid build-up of floor-levels caused by frequent demolition of clay walls ceased: the stratification of layers slowed down. The ground-level in Insula XIV rose 1 m. in the century 50-150: during the two-and-a-half centuries from 160 to 410 it rose only 0.5 m. To obtain an idea of the state of a masonry building just prior to its demolition is not always easy. But in Building XXI, 2, which was built *c.* 180, the painted wall-plaster and mosaic were quite unspoiled by damp or decay when, *c.* 300, part of the house was demolished. Even more significant, however, is the knowledge that quite a number of very large town-houses were being erected in the

period 215–40, only shortly before the ‘crisis’, and that the shops in Insula XIV were built *c.* 275, at its height. It seems that there was no suspension of building-activity in the third century, which also saw the enormous programme of fortification which constructed the city wall, with its new bank and ditch, 2.22 miles (3.58 km.) long. Today we have clearer insight into the effects of inflation upon urban prosperity than was available in the thirties. In his report on the coins (Vol. III), Dr. R. Reece shows that there was above-average coin-loss in the period 259–94.

Nevertheless the new Verulamium was rather different from the old. In the period before the Antonine fire we get the impression of bursting energy, and quickly increasing rewards for commercial activity; the successive periods of the timber shops in Insula XIV show many small businesses needing ever greater expansion on a limited street-frontage, and elsewhere small houses were quickly enlarged, though still on a small scale. In the third century in Insula XIV a frontage of six large masonry shops occupied the space where twelve tightly packed shops had stood in the early Antonine period and a century and a quarter had elapsed before this development took place. Private dwellings had been small and plentiful: now they were large but correspondingly fewer. It appears that the curial class had at last come to town, but in doing so had changed the city’s character to that of a residential, slightly sleepy, country town. Of course there may have been shops along the street-frontages of some of these residences, just as there were at Cologne, for instance,¹ or Pompeii. The early thriving commercial character of the city had here been cut off prematurely by the Antonine fire, so that we see the contrast more clearly at Verulamium than in other cities of Roman Britain, where the same changes occurred more gradually.

Not long after the middle of the second century Verulamium had been re-fortified. This is the true context of the Fosse Earthwork (fig. 9). It cannot be dated at all closely by evidence at present available, but the facts established by Wheeler can be interpreted to suggest a *terminus post quem* of 140–50. Since it was just at this period that the first-century circuit of the 1955 Ditch was becoming obsolete and filled with rubbish, the two events are probably to be related. Verulamium, if it was a *municipium*, would probably have been entitled to defences and in any case had had them for a century, so that no special emergency need be sought as cause. The new earthwork was designed to enclose some 231 acres (93.6 ha.), almost twice the area enclosed by the earlier defences (119 acres: 47.6 ha.)—an impressive expansion even if there is little evidence that all the new ground was fully utilized. The programme also included provision of two monumental gateways, the London and Chester Gates, at the principal exits from the city. But the circuit of bank and ditch was never completed. A gap of *c.* 600 m. was left between Insula XXV and the southern corner. It seems probable that the disaster occasioned by the great fire of *c.* 155 caused the diversion of construction-parties to more urgent tasks and, as often happens once momentum has been interrupted, the work was never resumed.²

During the third century many cities in Britain converted their late second-century earthwork defences to stone by facing them with walls. This solved the problem of maintenance and gave the defences a permanent form which in some places lasted (with

¹ F. Fremersdorf, *Das römische Haus mit dem Dionysiosmosaik . . .* (Berlin, 1956), 119.

² I am grateful to Mr. B. R. Hartley for discussing this

point with me. Note the association of a thick deposit of burnt material with the bank (see p. 35, below).

appropriate repair) through the middle ages. At Verulamium, no doubt partly because the earthwork had never been finished and in any case was earlier than most, the city wall took a diverging course, abandoning a salient in the north-west but enclosing much new ground on the south-west—taking care, however, to link with the existing monumental gates (fig. 10). The result was a slight reduction in area, from 231 to 201 acres (93.6 to 81.3 ha.). Excavation is needed to explain why the north-west salient was enclosed by the Fosse but excluded by the wall: air-photographs give no clue, but it must be assumed that an important building or group of buildings lay within it in the middle of the second century. The enclosure of extra ground in the south-west can be explained by the fact that the Fosse had never been built to exclude this area into which meanwhile buildings such as XX, 1 were expanding in the third century.

Careful assessment of the evidence suggests that the city wall of Verulamium dates to the period *c.* 265–70. More work is needed to establish this suggestion more firmly, but the date is consistent both with that of the general provision of city walls in Britain and with the abandonment of settlement at about this time in the extramural area along the Silchester road excavated by Stead;¹ it also goes some way to provide an acceptable context for what has long been an anomaly—the existence of external U-shaped towers on the Verulamium circuit which have every appearance of being of one build with the city wall. When the wall was dated to the reign of Hadrian (as Wheeler dated it), and even when it was placed at *c.* 196 (as Corder² and the present writer³ have previously dated it) only special pleading could account for these bastions, which elsewhere in Britain do not appear before the late third century, and in most towns were additions of the middle or late fourth century. The new context places them among the earliest projecting towers in Britain, but not before they could have been conceived;⁴ it also goes far to explain the ineptitude, no doubt due to inexperience, of the small bastion at the south corner of the circuit, where the sweeping rounded corner of the wall is so totally out of proportion to the puny size and small projection of the bastion as to deprive it of most of its potential for providing covering fire. Their linkage with internal towers is another sign of transition.

At a date which cannot be greatly earlier than that proposed for the city wall a monumental arch was erected across Watling Street at the original city-boundary in the north; another arch was found by Wheeler at the corresponding position in the south. This latter arch was dated at the time to the late Antonine period, but it seems possible that the two arches were in fact contemporary. Their context was probably to commemorate the foundation and status of the original city at its original boundary at a moment of officially recognized expansion to new limits further out. The *pomerium* of a city had legal and religious connotations; shift to a new one is likely to have been an act of some ceremony. This interpretation of the arches is reinforced by the discovery that a monumental arch was built at Colchester in a similar position and apparently at a moment when the area of the city was being extended in the late first century.⁵ At Verulamium the commemoration of the move came in

¹ *Antiquity*, xliii (1969), 45–52.

² *Arch. Journ.* cxii (1955), 24.

³ London University Institute of Archaeology *Bulletin* No. 4 (1964), 71.

⁴ Nevertheless further investigation of the city's defences is very desirable, to examine closely the relationship of a

bastion and of its foundations with the city wall and to see whether the great ditch is really contemporary with the wall or superseded an earlier ditch-system. There are inconclusive hints of the latter possibility in Wheeler's sections.

⁵ *Britannia*, viii (1977), 92 ff., 96 ff.

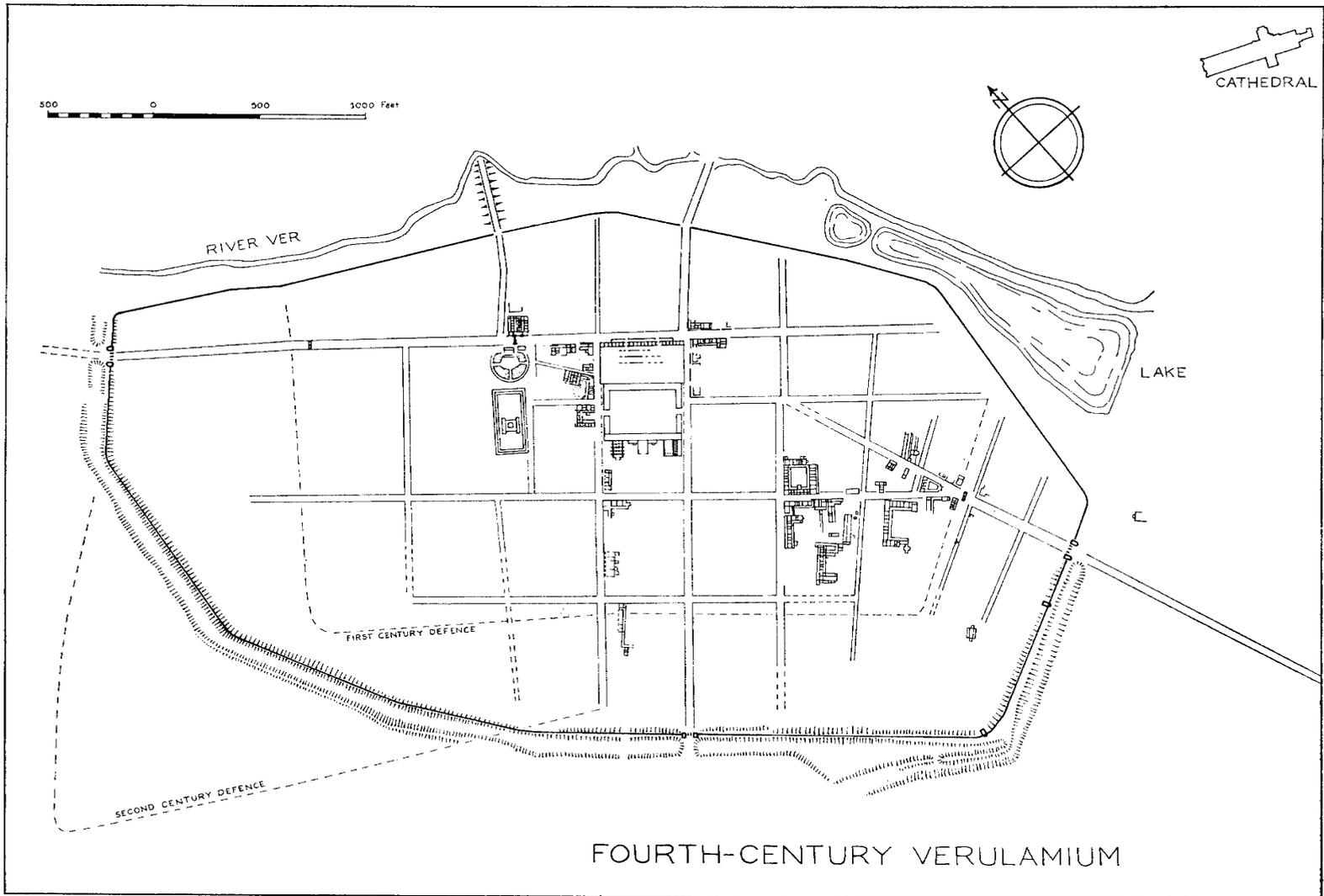


FIG. 10. The position of the present Cathedral marks the site of St. Alban's shrine
(drawn by A. Wilkins).

the third century and is therefore likely to be associated with the new city wall rather than with the Fosse Earthwork. A third monumental arch at Verulamium, which differs slightly in plan, spans Watling Street, but was erected slightly later outside the theatre, perhaps *c.* 300. It perhaps commemorated an act of private or imperial benefaction in the restoration of the theatre. Two Roman emperors were in Britain at about this time, but such monuments were often erected by wealthy private citizens.

The canalization of the river Ver by means of an embankment which had the effect of draining the valley floor (p. 279) is another event which probably belongs to the third century, and may have been undertaken when the city wall for the first time relieved the settlement of dependence on the marshy character of the valley for defence on this side.

Thus by the last quarter of the third century Verulamium possessed all the physical attributes of a first-class classical city. The majority of streets, in so far as they have been tested, go back to the pre-Flavian period and were regularly maintained by periodic deposits of new metalling, which over the centuries built up to a great overall thickness. In the late Roman period Watling Street at Insula XIV was at least 5 ft. (1.52 m.) thick and Street XXVII/XXVIII was only 6 in. less, while Street XII/XXVII had risen to the exceptional thickness of 7 ft. (2.13 m.). Watling Street widens from 27 ft. (8.23 m.) at Insula I to 30 ft. (9.14 m.) at the Forum and to 37 ft. (11.28 m.) at the northern Monumental Arch. The other main street, XII/XIII, leading to the Silchester Gate, is *c.* 30 ft. wide. Secondary streets are normally *c.* 20 ft. (6 m.) wide, but two minor and later additions to the network, Streets XVII/XIX and XIV/XXVIII, had a width of only *c.* 10 ft. (3 m.).

In the earliest phases streets sometimes had side-ditches; examples were found by Wheeler on the west side of Watling Street, and in the present excavations each side of Street XXI/XXII and on the south-east edge of Street XII/XXVII. Whether or not at first the ditches were kept clean, they had certainly been allowed to fill with silt by the 80s. The inconvenience of them must have been considerable. At a later date street-drainage was provided where necessary by means of plank-lined conduits, which were also used to drain the space between buildings, e.g., in Insula XIV. Late examples of plank-lined street-drains were found beside Street XII/XXVII (fig. 21); Lowther found examples each side of Street XXI/XIII and ascribed them to the late third century: the timbers may, however, only have been renewed at this date. Another drain of this type ran close beside the north-west forum ambulatory (fig. 21); it seems to have been laid in the late first or early second century, and to have been renewed in time to be burnt in the Antonine fire.

Much larger sewers in masonry are known beside Street XII/XXVII and along Watling Street. The former ran from the forum to the river, draining a public latrine on its way, and was built early in the third century. A sewer existed under Watling Street at least from the Flavian period, since the drain from the *macellum* of this date in Insula XVII must have run into it as did the plank drains which first appear in Insula XIV *c.* 130. At this early period the sewer was timber-lined; traces of it were found below the northern Monumental Arch. By the late third century a masonry sewer had been supplied to replace it; this ran through the foundation of the Arch and is probably contemporary with it.

An aqueduct supplying Verulamium has not yet been identified, but its existence is implied by a number of wooden water-mains (the wooden pipes being joined together with iron collars); examples have been traced beside or below some of the streets and elsewhere. These

carried a gravity-fed pressure supply. The earliest pipe-lines yet found are one running outside the theatre and another beside Street XXVII/XXVIII in front of Building XXVIII, 3 A; both are Hadrianic in date. Later examples have been found in the same street; also at the northern Monumental Arch and by Wheeler at the Chester Gate; and possibly below Building XVIII, 1. Two similar pipe-lines ran from the area of the theatre to flush the third-century latrine in Building XXVIII, 1, and, as will be seen, the aqueduct was still apparently functioning late in the fifth century when a pipe was laid in Insula XXVII. Between the iron collars the lengths of individual sections of wooden pipe vary, measurements of 6 ft. 6 in., 4 ft. 3 in. (two) and 5 ft. 8 in. (1.98, 1.29 and 1.79 m.) being noted. In internal diameter there is also variation, the sizes being 3.2 in. (two), 3.6 in., 4 in. and 4.5 in. (81, 91, 102 and 114 mm.): the diameters of the pipes themselves would have been at least 0.5 in. (12 mm.) smaller.

It is uncertain to what extent individual householders had water laid on, but absence among finds of bronze taps (such as are not infrequently found in Roman Germany) suggests that generally the destination of the supply was public fountains rather than private houses. As yet however, no fountain has been located. Verulamium also contained a number of wells, e.g., in Insulae IV, XIV and XXVIII. The majority appear to belong to the first and second centuries and to have been soon abandoned.

The present excavations have encountered few indications of Wheeler's 'Constantian renaissance'. At the beginning of the fourth century Building XXI, 2 was reduced in size and partly rebuilt, and at Buildings XXI, 1 and XXII, 1 there were minor additions. In the southern part of the city excavated by Wheeler the dating evidence showed that a much larger number of residential buildings had been built or reconstructed early in the fourth century. The shortage of contemporary coinage until *c.* 320 should perhaps suggest caution in attributing the reconstruction too closely to the years immediately following 296, for it may have been a process prolonged over two decades.

The main contribution of the present excavations to the history of Verulamium in the fourth century is to modify the picture of rapid urban decay during the earlier part of that period presented by Wheeler, and exaggerated by Collingwood in a purple passage: 'By the middle of the fourth century the effects [of the Constantian revival] had worn off. The greater part of Verulam was uninhabited, a waste of empty land and ruined houses. Here and there squatters lived among the ruins. The theatre had become a rubbish tip and its orchestra and auditorium were silted up beneath foot upon foot of domestic refuse. Close round it a shrunken and impoverished population lived in slum conditions.'

Wheeler's conclusions were based partly upon the results of the excavation of the theatre, but very largely also upon the relatively small number of fourth-century coins found in his excavations, though he contrasted the situation in his main area with that around the theatre, where 'coinage of the fourth century was as abundant as it had been scarce in the southern part of the town'. Tables published by Reece (*Britannia*, iii (1972), 272-3) show that nowhere at Verulamium do the percentages of late fourth-century coins in relation to the rest (1.8 per cent in Wheeler's excavations, 2.2 per cent in the present ones) approach anything like the 21 per cent at Cirencester or the 5 per cent at Canterbury.¹ When we discount the effect on the figures of methods of excavation (much of the deep topsoil in

¹ Reece's lists show that this is as true of Lord Verulam's Collection, a random collection of surface-finds, as it is of the excavated coins.

Insulae XIV, XXVII and XXVIII was removed mechanically), it seems clear that cities in fourth-century Britain had access to very varying quantities of coin: and at Verulamium it was low. Wheeler admitted that much of his 11 acres had been heavily ploughed for centuries, but claimed that though the plough can destroy structures 'it cannot remove the soil and its contents bodily from the scene'. Yet this is just what occurs on a slope,¹ and his excavations did not extend south-east onto the flatter ground where the bulk of the eroded soil will have settled; nor is it to be supposed that, even if not removed mechanically, the plough-soil was as carefully excavated for coins as the archaeological layers below it. Thus it is dangerous to interpret shortage of coin-finds as an indication of early decline in the fourth century, particularly in one part of the city rather than in another. Over great areas the latest levels and the coins that were in them are simply not present. It would require specially designed methods of collection, such as meticulous excavation of field-banks and topsoil, to give even a relatively true picture; and, even then, these methods should not be divorced from equally meticulous study of the distribution of fourth-century pottery within the city. The indications are, however, that fluctuations in coin-supply in the fourth century, both at provincial and at local levels, are not a direct reflection of prosperity.

Collingwood dated the abandonment of the theatre too early. The latest structural alterations (Period IV A) occurred after the loss of a coin of *c.* 345–61. At some stage later still the cavea was used as a rubbish-dump, but the coins contained in the earliest level of the rubbish-deposit, which itself must represent the accumulation of some decades, include Theodosian issues; the disuse of the structure as a theatre cannot safely be placed earlier than *c.* 380–90 and may be later still. Formerly the theatre's fate was taken to illustrate urban collapse, although the origin of the organic rubbish and its content of over 2,300 coins was puzzling. But the later discovery of the adjacent Market Hall in Insula XVII—which, though much disturbed in its upper levels, yielded two coins of Magnus Maximus (383–88)—led Richmond to suggest that the rubbish tipped in the theatre was the periodic sweepings of the hall. However this may be, once it is accepted that the theatre was an adjunct of the nearby temple, it is possible to conjecture a religious rather than an economic reason for the theatre's disuse, since the last decades of the fourth century saw a rapid spread of Christianity in Britain.² It was both official and intolerant. Less than two generations later, on the occasion of St. Germanus' visit in 429, there is no hint of any pagans left.

Lowther's excavation of the temple³ in Insula XVI showed that *c.* 390–400 a reorganization took place involving the reversal of the entrance, which was now moved to the other end of the temenos to face away from the theatre. It may be suggested that this was the occasion for the latter's closure, and we may envisage a great reduction in the public manifestations of the cult, although intolerance did not, it seems, extend to total closure of the temple itself within its walled enclosure, despite the insistence of recent imperial edicts.⁴

¹ Fig. 57, Section E–F shows clearly that in Insula XX, high up on the valley slope, at least 2 ft. (0.6 m.) has been ploughed away completely once the protection of the hedge, which lies beyond the right-hand end of the Section, ceases to operate.

² The evidence is almost entirely literary. See N. K. Chadwick, *Studies in Early British History* (1954), 199 ff.; J. N. L. Myres, 'Pelagius and the end of Roman rule in Britain', *J.R.S.* 1 (1960), 21–36; M. W. Barley and R. P. C.

Hanson (eds.), *Christianity in Britain, 300–700* (Leicester, 1968), *passim*.

³ *Antiq. Journ.* xvii (1937), 28–38.

⁴ e.g., *Codex Theodosianus* xvi, 10.13, 'We decree that no person shall have the right to approach any shrine or temple whatever or to perform abominable sacrifices at any place or time whatever . . .', dated 7 August 395, and other earlier and later edicts in this section.

The latest levels in any city are those most prone to disturbance. Because of plough-erosion it is not possible to state exactly when Buildings XX, 1 and 3 ceased to be occupied; a date *c.* 360 seems probable, but the excavations were able to examine only the rear parts of these buildings and they may have been rebuilt to a smaller size in the second half of the century. Certainly continued occupation of a sort nearby is indicated by a rubbish pit of that date dug into the former corridor of Building XX, 3. A date of *c.* 360 can also be suggested, with some hesitation, for the demolition of Building XXI, 1, or rather of that part of it which could be examined. The half of Building XXI, 2 which was rebuilt early in the fourth century yielded virtually no evidence bearing on its date of destruction. All these buildings lay on the sloping side of the valley and had heavily suffered from the effects of cultivation.

That changes and reductions in size did take place in and after the middle of the fourth century is confirmed at Building XXII, 1, where much of the previous house was demolished *c.* 350 and a new building was constructed, containing a cellar and at least three other rooms. Once again, only the rear parts of this house were available for examination, but it could be shown that at a still later date, possibly *c.* 370–80, the cellar was filled in and superseded by another building of which parts of two substantial walls were all that was found. No contemporary coins were recovered from layers associated with these alterations; the latest coins on the site were two issues of Constantius II and two barbarous *Fel. Temp. Reparatio* copies.

About 368–69 the basement in Building XXVIII, 1 was filled with great quantities of building debris, which probably implies either extensive alterations or the demolition of the front part at least of the building. The debris yielded a surprising quantity of coins, which do not appear to be a scattered hoard because they were uniformly distributed through the rubble over a very large area in both arms of the basement. Ten coins were found in the latest occupation-layer below the demolition-deposits, so the presence of unusual quantities of coinage was a characteristic of its latest phases. It is noticeable that over half those present in the occupation-layer were obsolete issues; by contrast, of the 107 coins in the rubble only four were issued before the reign of Constantine I. In the fourth century the building may have been the place of business of a money-changer or banker, for whom the basement—suitably secured—could have made a useful strong-room. The uppermost deposits in the building as a whole were extensively disturbed and there is no indication that occupation continued after 368.

Yet the fact that within a decade or so of this date other buildings were going up for the first time should be a warning not to ascribe the demolition of even so large a building as XXVIII, 1 to other than purely personal, structural or incidental reasons. Just next door in Insula XIV, Building 3 overlay a moderately worn coin of Valentinian I issued between 367 and 375, and so was probably constructed no earlier than 375–85. It was essentially a utilitarian strip-building in its first phase, with a corridor on one side and with a large bread-oven in its largest room. At a considerably later date a substantial hypocausted room was added, and alterations to the original structure included demolition of some party-walls to allow for a large area of tessellation around a new mosaic. Occupation clearly continued well into the fifth century, and certainly long enough for almost all the tesserae of the mosaic to come loose and disappear. It is suggested that the building remained in use at least until *c.* 430–40.

Slightly further south-west in Insula XXVII Buildings 1 and 2 demonstrate even better the vitality of Verulamium in its last decades and its long survival. Building 2 (fig. 82) was a large courtyard house of twenty-two ground-floor rooms and the possibility of an upper floor at least in the north-west wing. Its walls were at least mainly of clay raised on flint-and-mortar sleeper-walls, and illustrate the strength of local building-tradition: this was the technique used in the late second century at Building XXI, 2. The house overlay a slightly worn coin of Valens minted in 375–78; as both the first two phases of the building saw the provision of mosaics (which are unlikely to have been laid after *c.* 410) it can be concluded that the house was first erected *c.* 380. The site had lain empty since the Antonine fire, 220 years earlier, and meanwhile the street surfaces around this corner of the Insula had been raised considerably with successive remetallings. Accordingly a substantial layer of make-up, mainly consisting of burnt debris from Antonine fire-deposits was collected and laid between the walls to equate the floor-levels with the surface outside; the process had apparently involved excavating the underlying Antonine buildings in order to salvage tesserae.

Later, at a date not closely established but presumably in the final decade of the fourth century, the house was extended at its north-east and north-west ends, and substantial mosaics laid down in the rooms so enlarged. One at least of these new mosaics survived sufficiently long to require patching when the tesserae became loose, and later still a very large corn-drying oven was inserted through it. This in turn remained in use long enough to require a reconstruction of its stoke-pit. In the fifth century normal dating-aids are lacking; dead reckoning has to be employed and suggests that the corn-drier should be assigned to the period *c.* 420–30.

The size and appointments of the house were such as to suggest that it was the residence of a wealthy man and probably the town-house of a landed proprietor; thus the corn-drier is more likely to be indicative of disturbed conditions in the countryside (whether by Bacaudic bands of escaped *coloni* and the like or by bands of Saxon invaders), necessitating treatment of the harvest within the security of the walls, than to carry the implication of mere local cultivation of plots within the city. There was little sign of the outbuildings which an actual *villa in urbe* might be expected to require, and the capacity of the corn-drier itself (which, at 361.4 sq. ft. (33.57 sq. m.), is four-fifths of that of the exceptionally large circular corn-drier at the Great Casterton villa but over three times the area of the normal run of such furnaces) is obviously much larger than comparatively small-scale intra-mural cultivation would seem to need.

The date of the demolition of Building XXVII, 2 is a matter of guess-work; it cannot reasonably be placed before *c.* 440 and might be up to two decades later. Its site was next used for a large rectangular building (XXVII, 1) which was 147 ft. 6 in. (44.95 m.) long by perhaps as much as 50 ft. (15 m.) wide and lacked internal subdivision (fig. 89). Though this was built in Roman style with flint-and-mortar walls carried on wooden piles and supported by buttresses, the imprints of the lowest tile-course (which had itself been robbed away) showed that only broken tiles had been employed. This might suggest that by the date of erection tile-manufacture had ceased, and that tiles had to be acquired from the robbing of derelict buildings; we are reminded of the layer of robbed tile-fragments overlying the latest floor of the adjacent forum ambulatory (p. 57).

In Building XXVII, 1 no floor-levels had survived modern cultivation, and the purpose of

the structure is unknown. It may well have been residential, a reversion to a more communal, less Romanized form of habitation such as existed at Verulamium itself in the first century in Insula XVII and which had never entirely disappeared from Britain.¹ However, it could equally well have served as a large barn or granary; provision for storing corn within the city walls would have been more than ever necessary in the fifth century.

How long this building stood is again unknown. It may not have been for more than *c.* twenty years, for the south-west wall had fractured where passing over a buried first-century ditch; on the other hand this damage may have been caused by heavy agricultural machinery in more recent times. Dead reckoning thus brings us to *c.* 450–75, at which stage there was dug through the foundations of the building (destroying one of its buttresses, which had thus already been reduced to ground-level), and through those of Building XXVII, 2 below it, the trench for a wooden water-main; some of the iron collars used to join the pipes were found *in situ*.

The implications of this discovery are considerable for the survival of Roman engineering techniques and the continuance of the urban way of life into and beyond the middle of the fifth century. Even if new tiles were no longer obtainable, skilled carpenters were still at work. The pipe-line is running downhill from the south and must be assumed to have been fed from a still-functioning aqueduct; this, if of the normal Romano-British type, would have required continual maintenance. Furthermore, the need for a perpetual flow of clean water, illustrated by the pipe-line, shows that civilized habits had not yet died away; there is surely significance in the fact that the last glimpse we have of ancient Verulamium should so clearly illustrate its continued commitment to the classical tradition which it had fostered over four centuries. It should be stated, however, that the sequences of structures in Insula XXVII could be traced by a fortunate survival of evidence—in particular of the coin which gives a *terminus post quem*; there is no means of knowing how typical it is of the city as a whole. Yet ability to build in masonry, and the construction of the pipe-line, both support the inference of a reasonable population surviving to *c.* 450–70.

Life at Verulamium in the first half of the fifth century is attested not only by these archaeological discoveries but also by the well-known visit to the shrine of Alban by St. Germanus of Auxerre in 429. Whatever the date of the martyrdom itself,² it is clear that a martyrium, or cemetery-shrine, existed in the fifth century, no doubt in a location now covered by the present Abbey (fig. 10). It is implicit in the account of the visit, written within fifty years of the event by Germanus' biographer Constantius, that Pelagian Christianity had obtained a powerful hold on the population of Verulamium during the fifth century. Hitherto no archaeological indication of Christianity has been found within the Roman city. However, excavations directed in 1963–4 by Dr. Ilid Anthony in Verulam Hills Field in a cemetery area, just outside the London Gate, revealed the very degraded traces of a small apsed building which strongly recalls the form of a martyrium.³ Unfortunately no graves were found within it nor did anything to indicate its function survive the plough. There is a possibility that this building is a second cemetery chapel; but equally it may only be a mausoleum which once contained a sarcophagus.

¹ See J. T. Smith's discussion of hall-villas in *Britannia*, ix (1978), 349–56.

² The year 209 was convincingly argued by J. Morris in *Hertfordshire Archaeology*, i (1968), 1–8, but it cannot be

regarded as certain: see M. Biddle in R. Runcie (ed.), *Cathedral and City: St. Albans Ancient and Modern* (1977), 25 ff.

³ *Hertfordshire Archaeology*, i (1968), 49 f.

It has often been noted that the survival of some form of sub-Roman power in the Verulamium region during the fifth century is suggested by the absence there of early Anglo-Saxon settlements or cemeteries, and by the somewhat enigmatic entry in the Anglo-Saxon Chronicle under 571 relating to battles in the neighbourhood of the Icknield Way. The nearest fifth-century Saxon pottery is one *Buckelurne* from Stevenage¹ and another from Luton.² Thus there is no hindrance to a belief that the Roman city died slowly. Its demise appears to be the result of economic forces rather than direct attack, of which there is no evidence. It must be presumed that the breakdown of long-distance trade, the disruption of the market-economy on which the city's life depended, the growing insecurity of the countryside leading in its turn to a disruption of the food-supply, and the increasing difficulty in obtaining labour and materials with which to keep buildings in repair, eventually outweighed the security offered by the city's walls as inducement for the dwindling population to remain. There would come a critical moment when the city's defences could no longer be effectively manned and when internal buildings could no longer be kept in repair. The speed with which ruined buildings become colonized by bushes was well illustrated in the bombed areas of Canterbury in the late 1940s. Under such conditions the ruined city would soon become a place to be avoided except by such 'robbers, body-snatchers and evil women' as are recorded there later on by Matthew Paris.³ By the end of the sixth century or the beginning of the seventh a small Anglo-Saxon cemetery was in use just outside the Silchester Gate.⁴ There is no hint that the people buried there lived within the walls.

¹ J. N. L. Myres, *A Corpus of Anglo-Saxon Pottery of the Pagan Period* (Cambridge, 1977), No. 1091.

² *Ibid.*, No. 2944. A bowl of Saxon or sub-Roman coarse ware found in a flue of the Park Street villa (*Arch. Journ.* cii

(1945), 73; Myres, *Corpus*, No. 2429) is not likely to represent independent settlement.

³ Wheeler, *Verulamium*, 35 ff.

⁴ *Antiquity*, xliii (1969), 46.

THE STATUS OF VERULAMIUM

WAS Verulamium a *municipium*? The primary evidence that it was is supplied by Tacitus (*Annales*, xiv, 33) who, when describing the events of 61, tells us that Boudicca sacked Camulodunum (a Roman *colonia* since 49), then London—*cognomento quidem coloniae non insigne*—and finally Verulamium: *eadem clades municipio Verulamio fuit*. Accepted by Haverfield, the validity of this description has later been undermined by the observation that Tacitus is often inaccurate in his use of constitutional and similar technical terms,¹ and may have used *municipium* here as a synonym for ‘town’. Many scholars, however, believe that, in the general context of the destruction of one *colonia*, and in the particular context of this paragraph, where London’s lack of colonial status is emphasized, the use of the term *municipium* for Verulamium cannot be other than intentional and contrasting. The historian thus carefully gives us the status of each place attacked; Syme² describes the information as ‘a precious fact’.

The problem can be decisively settled only by epigraphic evidence. Unfortunately the forum inscription is ambiguous in this respect (fig. 28), for its last line can be restored to read either *municipium Verulamium* or *civitas Catuwellanorum* with equal ease. Some support can be gained for the view that the city was a *municipium* from the words of Dio who, in his description of the Boudiccan rebellion, tells us of the sack of *two* cities (δύο πόλεις);³ later⁴ he calls them Πόλεις δύο Ῥωμαϊκάς. But Tacitus describes the sack of *three* places, Colchester, Verulamium and London; the last he tells us was not a *colonia*. In the context it cannot have been a *municipium* either; with no higher status it must have ranked at the time as a *vicus*, not as a πόλις. The two Roman cities of Dio are, therefore, Colchester and Verulamium. They are Roman because one was a *colonia*, the other a *municipium*.

The force of this argument is reduced if, as is possible, Dio was here using Tacitus as his source; but even if so, Dio did not doubt the status attributed to Verulamium, in spite of the much greater emphasis laid by Tacitus upon the destruction of London. The same insistence on the destruction of *two* cities, though he uses the neutral term *oppida*, is found in Suetonius’ brief account of these events.⁵ Suetonius, as an officer in the imperial secretariat, was well placed for sources, and did not depend heavily, if at all, on Tacitus.⁶ Some distinction, significant at least to Roman eyes, between two of the places destroyed by Boudicca and the third to suffer the same fate seems to be emerging.

Other evidence for Verulamium’s status is circumstantial. (i) The Antonine Itinerary and the Ravenna Cosmography naming British cities give the tribal capitals their formal double names (*Calleva Atrebatum*, *Ratae Coritanorum*, etc.). Verulamium appears as plain *Verulamium*, as it would do if it possessed a status of its own. (ii) Verulamium is exceptional among British *civitas*-capitals both in its early foundation and development and also in its destruction

¹ Cf. Bogaers, *J.R.S.* lvii (1967), 233. But not always; cf. the use of *constitutum* (*Annales*, xiv, 31) in connection with the temple of Claudius at Colchester; D. Fishwick, *Britannia*, iii (1972), 171 ff.

² *Tacitus*, ii (Oxford, 1958), 764.

³ Dio, lxii, 1.

⁴ Dio, lxii, 7.

⁵ Suetonius, *Nero*, 39: *clades Britannica qua duo praecipua oppida magna civium sociorumque caede direpta sunt*.

⁶ Syme, *Tacitus*, ii (1958), 502.

by Boudicca. It had evidently come to be regarded as in some sense representative of Roman imperialism rather than as a settlement of enslaved Britons awaiting liberation. (iii) Verulamium is also exceptional in Britain in possessing both first- and second-century defences. Apart from Winchester and Silchester, which may both have belonged to the client realm of Cogidubnus, defences of comparable date are known only at *coloniae*. (iv) Verulamium is the only city in Britain, apart from Colchester, where monumental arches are known at the *pomerium* of the early settlement; they seem to have been supplied when this was later enlarged.

The cumulative effect of this evidence points strongly to something exceptional in the standing of Verulamium, as do the early date and unusual size and form of its forum.

The final link in the chain of evidence is found in Nennius. There was a tradition known to Gildas in the sixth century¹ and repeated by Bede² and by Nennius³ that the Roman province of Britain possessed twenty-eight cities; Gildas, however, does not name them. A list of twenty-eight cities is provided by Nennius;⁴ their names are given in Old Welsh of about the eighth or ninth century. Another list, slightly later in date and giving thirty-three names, is also attached. These lists, as Haverfield⁵ and Jackson⁶ have shown, are not genuine old lists handed down from Roman times or even translations of such, nor are they a Dark-Age fabrication. They have all the characteristics of a genuine collection of contemporary place-names, compiled in an attempt to identify the twenty-eight cities of the tradition. Jackson has suggested that there were two methods by which the names could have been selected: either by choosing twenty-eight of the chief contemporary centres, whether Saxon or British, or else by picking twenty-eight names from tradition and legend even though some of these places no longer had contemporary importance. He concludes that Nennius worked with both methods.

Prominent Romano-British places certainly identifiable in the first list are Caerleon, Caernarvon, Caerwent, Canterbury, Carlisle, Chester, *Letocetium* (Wall-Lichfield), London, Wroxeter and York; while probably identifiable are Cambridge, Colchester (*Cair Colun*), Doncaster and Winchester. The supplementary list adds Carmarthen, Cirencester and Gloucester.⁷ There is also in the original list the entry *Cair Mincip* (= *Cair Mincipit* in the supplementary list); of this entry Jackson writes 'British-Latin Municipium would give Mincip in Old Welsh . . .'. Thus in the eighth or ninth century there was still knowledge of a Romano-British city called Municipium.

It is, of course, quite possible that by the third century several cities of Britain had been promoted to municipal status, although we have no certain evidence.⁸ But just as *Cair Colun* translates *Colne-ceaster* and must refer to the primary *colonia* of Colchester, so it can hardly be doubted that *Cair Mincip* refers to the primary *municipium*. Of places which *might* have achieved municipal rank, Carlisle, Cirencester, London and Wroxeter are already listed. The choice really lies only between Leicester (whose municipal status is theoretical) and Verulamium (where there is solid supporting evidence). Moreover, although the latter had

¹ *De Excidio*, 3.

² *H.E.* I, i.

³ *Historia Brittonum*: Mommsen (ed.), *Mon. Germaniae Historica*, iii (1898, reprinted 1961), 147.

⁴ *Historia Brittonum*, Section VI; *ibid.*, 210 ff.

⁵ *Roman Occupation of Britain* (Oxford, 1924), 289.

⁶ *Antiquity*, xii (1938), 52.

⁷ Cities not listed are Aldborough, Caistor-by-Norwich, Chichester, Dorchester, Exeter, Ilchester, Leicester, Lincoln, Silchester (and Verulamium at least by that name).

⁸ See discussion in S. S. Frere, *Britannia, a History of Roman Britain* (1974 ed.), 236; (1967 ed.), 205-6.

ceased to exist by the time the lists were compiled, its association with the cult of St. Alban would have ensured survival of its fame.

Formal proof of the municipal status of Verulamium will have to await the discovery of an inscription; but the circumstantial evidence makes its claim strong. There is a final point for discussion—the date of the grant. If Tacitus is accurate, the grant must surely have been made by Claudius rather than by Nero, and it is not hard to see that the Catuvellauni of Verulamium may have won themselves favour by abandoning the cause of Togodubnus and Caratacus at a critical moment; and this would help to account for the antipathy shown to the early city by the rebels of 61. There remains the possibility, however, that Tacitus, though correct in his use of *municipium*, is using it anachronistically: that Verulamium was a *municipium* by the early second century when the historian was writing, but not yet in 61. In that case an obvious context would be during the reign of Vespasian when the city was rising again from its ashes. In favour of this context is the evidence of increasing urban maturity at Verulamium itself during the Flavian period, and Vespasian's own interest in provincial cities. Against it is the certainty that the city had been fortified well before Vespasian's reign, and the clear evidence for favoured treatment at the city's foundation. On balance a Claudian grant seems slightly more likely.

PROPERTY DIVISIONS

THERE is a point of interest about the timber-framed buildings of Insula XIV reported in Volume I, which was not recorded then. Between Period I and Period II A there is no continuity of property-boundaries as defined by the positions of walls. The destruction of 61, and the delay of fifteen years before reconstruction, resulted in a completely new lay-out, in which no walls lie on the lines of predecessors. But very different is the situation in Period II. Despite three major reconstructions and the great expansion towards the rear which is visible on successive plans, many of the wall-lines in the front part of the buildings lie in almost exactly the same place as their successors. In fig. 11 the walls shown in solid black existed in Period II A and were rebuilt in the same position in all three later reconstructions. Others were rebuilt in two reconstructions (II A-II C or II B-II D), and others are found on the same line in Periods II C and II D. All this implies the keeping of careful records, or at the least measurement from some fixed point or base-line; for the debris created by the demolition of half-timbered walls infilled with clay would have effectively prevented the preservation of actual building-lines visible in the ground itself.

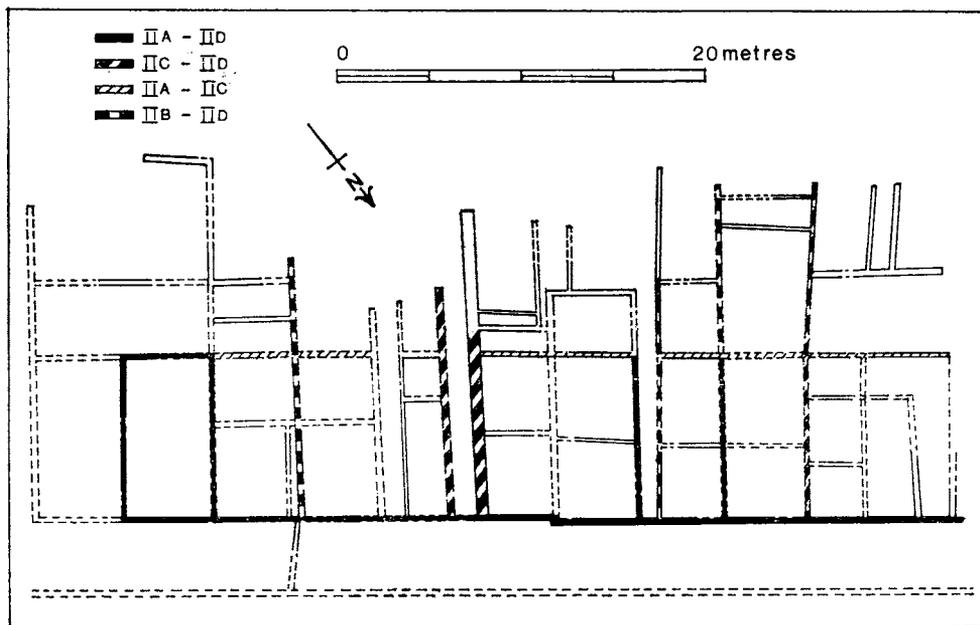


FIG. 11. Insula XIV: continuity of wall-lines
(drawn by M. Allden).

THE BELGIC MINT

IN 1956 many fragments of baked-clay moulds (pl. Ia; fig. 12) were found beneath the rampart of the city wall in Insula XVII (p. 37). This type of mould is now widely recognized as having been used in Celtic mints for the casting of blanks from which coins were ultimately struck. In his definitive study of the moulds from Bagendon,¹ D. F. Allen showed that striking did not follow the casting immediately: some further preparation of the blanks was undertaken, which removed traces of the moulding. Coin-moulds have been found at a number of Celtic *oppida* on the Continent such as Mont-Beuvray and Manching, and in Britain at Bagendon, Colchester,² Gatesbury (Herts), Needham (Norfolk),³ Old Sleaford (Lincs), Rochester, Scotton (Lincs), Silchester,⁴ Winchester, Canterbury, and possibly Haverhill (Suffolk),⁵ as well as at Verulamium.

Near the position of the 1956 discovery, and almost certainly associated with it, lay the remains of a rectangular building of the Belgic period (fig. 43), in one of the wall-trenches of which was found a further mould-fragment. The occupation-layer in this building yielded a butt beaker of the period of Cunobelin and a great many heat-crackled flints and pebbles (p. 102). The moulds had been broken into small pieces, some of which showed straight edges. The fragments illustrated, and perhaps an equal quantity of more damaged pieces, were found scattered within a small area, part of which extended out beyond the excavation

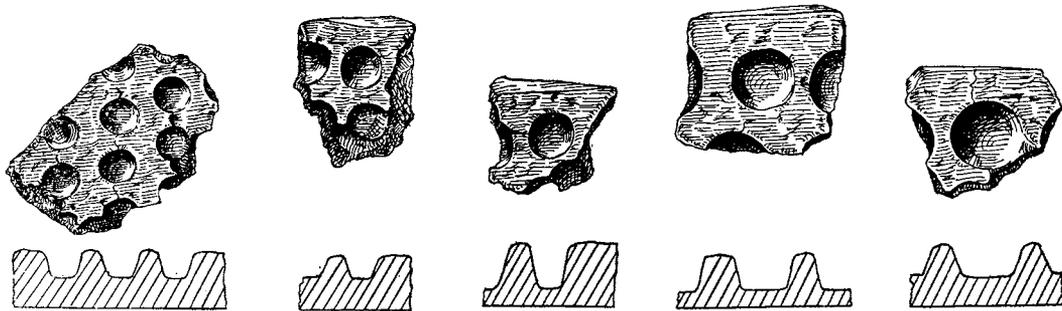


FIG. 12. Belgic coin-moulds from Insula XVII ($\frac{1}{2}$).

(fig. 13), and they were accompanied by sherds of coarse Belgic ware, some of them damaged by heat, three fragmentary crucibles or ladles and some pieces of imported amphora. The quantity of mould-fragments was sufficient to suggest that they had not travelled far from their place of use. In the moulds two sizes of cup are apparent (fig. 12): one has a mouth-diameter of *c.* 0.4 in. (1 cm.), the other 0.65 in. (1.65 cm.): the depth varies from 0.2 to 0.45 in. (5–11 mm.), but only the difference in diameter seems to be significant.

In 1956 another, single, fragment of coin-mould was found at the site of Insula XXVII,

¹ In E. M. Clifford, *Bagendon, A Celtic Oppidum* (Cambridge, 1961), 144–7.

² C. F. C. Hawkes and M. R. Hull, *Camulodunum* (Oxford 1947), 129–33, and pl. xvi.

³ *Antiq. Journ.* xxi (1941), 51.

⁴ *Antiq. Journ.* xxxiv (1954), 68–70, and pl. xvi.

⁵ *Archaeologia*, xiv (1803), 72; cf. Allen, *Bagendon*, 145.

Building 3, and in 1957, during road-contractors' work nearby, a shallow pit containing many more pieces was found under the hedge which previously bordered the north side of the old lane of Bluehouse Hill. The site is shown on fig. 91. The contents of this and several other shallow pits were rescued by the staff of the Verulamium Museum and members of the archaeological group of the St. Albans Archaeological Society.¹ The site lies 380 m. from the 1956 mint-deposit. At the bottom of the pit, beneath a large group of broken mould-fragments with cups of dimensions similar to those just described, lay one mould which could be partially reconstituted (pl. Ib). It measures 6 by 6.5 in. (15.2 by 16.5 cm.) by 0.5 in. (12 mm.) thick, and shows that there were seven rows of seven cups with an additional one in the low pedimental extension, a total of 50. One of the other fragments still retained a circular pellet of bronze where it had been cast (pl. Ic). No pottery was found in this pit, but in others close by Belgic pottery, including butt beakers and terra nigra plates, five of them stamped,² was recovered, and this pottery was associated with a few further mould-fragments. It is clear that this deposit also dates from the period of Cunobelin.

In 1958 or 1959 the local Society carried out a small excavation at the site of St. Michael's Bakery, on the south-east side of St. Michael's village street. The site lies at the south-west edge of Insula XIX. Here the lowest level³ consisted of black silt of pre-Roman date: it yielded three fragments of coin-mould together with a coin of Cunobelin (Mack 244) and contemporary pottery. Further moulds were recovered in 1974 on the opposite side of the village street during excavations in the car-park of the Six Bells Inn.⁴

In 1959 a single fragment of coin-mould was found unstratified at Insula XXVIII, Building 3; and in 1960 two more fragments were found close by in a Belgic level below Building 4 in the same Insula.

Thus groups of mint-debris have been found at five sites and individual pieces at two more (fig. 3), over an area covering *c.* 7½ acres (3 ha.). It seems likely that workshops for the preparation of blanks must have existed in several different, fairly widely separated, places, though not necessarily contemporaneously. As Allen⁵ has observed, however, coins do not have to be struck between the dies at exactly the same place as the blanks or flans are cast from molten metal; the part of the mint of Verulamium concerned with striking has so far left no recognizable trace; but it is unlikely to have been far off. One probability is that it lay within the earthwork-enclosure which has been found below the later forum (p. 193).

None of the three deposits of debris can be assigned to a period earlier than that of Cunobelin. In his study of the British coins from the temple at Harlow, Allen⁶ was able to

¹ See *Trans. St. Albans and Herts. Architect. and Arch. Soc.* 1961, 31-4.

² The stamps were misread in the original report. They have been examined by Miss Valery Rigby who has kindly provided the following details:

(i) $\frac{\text{ATESATI}}{\text{IVLIOAV}}$ Central stamp on large plate, Camulodunum form 12 in T.N. One other stamp known from this die, from Colchester, 1970. There are at least two potters of the name Jul(1)io(s) and this one is probably the later, Julius II, who was still at work in the Claudian period. *c.* A.D. 20-50.

(ii) COTTIVSV Central stamp on plate, Camulodunum

form 13, T.N. No other stamps known from this die. Three of his plates occur at Trier in graves thought to be Tiberian at latest. *c.* A.D. 10/15-35.

(iii) ACVTII Radial stamp on large plate, probably form 3 or 5, in T.N. The die belongs to Acut(i)os II, who worked *c.* A.D. 20-50.

³ This lay at a depth of *c.* 10.8 ft. (3.3 m.) from the surface as far as can be worked out from the erroneous scale on the published drawing. *Ibid.* (note 1), 36-43.

⁴ *Britannia*, vi (1975), 258.

⁵ *Bagendon*, 144.

⁶ *British Numismatic Journal*, xxxvi (1967), 4.

show the continued importance during the reign of Cunobelin of the Verulamium mint, which issued types different from those of the Colchester mint. The Verulamium mint was also active earlier, during the reign of Tasciovanus. No physical trace of the mint of this king has yet been found, and it may well lie in quite a different area, for the expansion of Belgic activity down the valley-side under and around the area of the Roman city appears to be a late phenomenon on present evidence.

There was a white incrustation on many of the cups of the moulds found in 1956. This was determined by Dr. I. W. Cornwall as calcium carbonate, probably powdered chalk (Appendix below), the purpose of which was to prevent the casts adhering to the moulds.

Quantitative analysis of scrapings from some of the moulds from the 1956 and 1957 sites was undertaken at the Oxford Research Laboratory for Archaeology by Dr. M. J. Aitken and Mrs. E. E. Richards.¹ All the samples contained copper together with varied amounts of silver, gold, tin, lead and zinc, but the results suggested that the moulds from Insula XXVII had been used mainly for silver and gold, whereas those from Insula XVII had been used mainly for bronze (although one piece yielded a silver-gold result). Measurement of remanent magnetism suggested that the moulds had been last baked in the horizontal position with the holes uppermost. This is consistent either with the use of the moulds for melting solid portions placed in each individual cup, or with the pouring of already molten metal into each hole from a ladle. (The heating of the previously baked moulds by the molten metal is assumed to have been sufficient to erase the previous magnetic direction.) The vitrification observable on the bottom surface of some moulds favours the former hypothesis, while the discovery of a ladle at Bagendon—and perhaps also at Verulamium—favours the latter.

APPENDIX

Report on white incrustation in depressions

By Dr. I. W. Cornwall

A small sample of the incrustation was detached from the specimen with a needle-point for chemical tests. Found present were: calcium, carbonate. Both sulphate and phosphate were absent.

The material appears to be calcium carbonate, probably powdered chalk, without either gypsum (calcium sulphate) or bone-ash (calcium phosphate), the other materials possibly used to prevent the casts sticking in the moulds. Almost any infusible powdered substance would serve for this purpose, and, at Verulamium, chalk would be the most readily obtainable and most easily prepared.

¹ The full report in *Archaeometry*, ii (1959), 53-7 is summarized here.

THE DEFENCES

THE defences of Verulamium were first examined by Wheeler. He was able to show that the circuit represented by the Fosse Earthwork was earlier than the city wall, under which it passed, enclosing a somewhat different area. But being unable to trace the Fosse south of the line of Bluehouse Hill he concluded that the ditch had turned north-east and must lie below the line of the medieval lane; the 'early Roman city' enclosed by it was accordingly centred on the area north-west of the Theatre, and it followed that the Forum, then considered to be of Hadrianic date, lay over and just outside the original defences. The Fosse Earthwork was assigned to *c.* A.D. 70, after which date it was claimed that the city underwent a great expansion southwards before the new city wall itself was built to enclose it—an event placed at 'a date not later than the second quarter of the second century—with a strong indication that the work occurred rather in the reign of Hadrian than in that of Pius'. This was the accepted historical framework at the beginning of the present series of excavations.

The first hints that all was not well with this reconstruction of events came in the first season. The discovery of the inscription dating the forum to 79 carried the implication that the contemporary defence could not lie below it, while the discovery of the '1955 Ditch' introduced an entirely new element. This ditch was shown to belong to an earthwork used in the first century and becoming obsolete in the reign of Hadrian; moreover, it was not of pre-Roman date since Roman pottery occurred in its primary silt. Next, Dr. M. J. Aitken demonstrated by geophysical survey (later confirmed by excavation) that the 1955 Ditch enclosed an 'early Roman city' centred (as it should be) on the forum. This raised the problem of the date and purpose of the Fosse Earthwork, which could not be accepted as contemporary with the 1955 Ditch. Meanwhile excavation in 1955 had also shown that the city wall was considerably later than the reign of Hadrian. In 1956 came the discovery at the north-east edge of Insula XVII of a first-century rampart of earth and timber sealed beneath the bank which accompanies the city wall (pl. III). Could this have been the rampart of a fort of the conquest period, or was it the rampart, elsewhere missing, which accompanied the 1955 Ditch? The fort-hypothesis received support from the nineteenth-century find of a 'legionary' helmet at Verulamium¹ and from part of a dagger-chape and a bronze apron-terminal found near the rampart in the 1956 excavations. It also neatly accounted for the oblique line taken by Watling Street across the southern insulae of the city: the road had been laid out to the vicinity of the fort before any city had been founded. If a fort existed with its north-east side lying below the later city defences in Insula XVII, it seemed probable that the 21-degree angle in the city wall at the north corner of Insula XIX marked the spot where that wall left the underlying fort, and that here the rampart of the fort would have turned south-eastwards. If, on the other hand, the earthwork was a first-century rampart defending the city, it should run on beyond the corner.

Accordingly, in 1959, a trench was cut in Insula XVIII across the line of the city wall, at a point some distance beyond the angle, to see whether the early bank was still present. No

¹ *V.C.H., Hertfordshire*, iv (1914), 122 and pl. 1.

early bank was found (fig. 19). Its absence strengthened the fort-hypothesis; but when in 1960 trenching was undertaken in Insula XIX (p. 126) to find the defences of the supposed fort after they had turned south-westwards as predicted, they could not be located. Was the earth-and-timber rampart after all the bank going with the 1955 Ditch? If so, its non-appearance in the 1959 trench might have been due to its taking a rather more forward line (which the topography makes possible at this point).

Accordingly a further trench was cut in 1961 in the vicinity of the northern Monumental Arch, 343.5 m. north of the 1956 section but still within the area enclosed by the 1955 Ditch, being situated *c.* 61 m. south-east of the point where the line of the Ditch reaches the flood-plain. A fort was unlikely to have extended so far, but the topography of the water-meadows hereabouts indicated that if a first-century bank had been built it would have taken approximately this position. Once again no earlier defence was found (fig. 20) below the rampart associated with the city wall.

The results of all this work showed that the first-century rampart in Insula XVII had no connection with the 1955 Ditch. It must surely be associated with a conquest-period fort, whatever size and anatomy that fort might prove to have. On that question excavation undertaken by the Museum in 1966 threw confusing light (p. 39). In the period when the city was defended by the 1955 Ditch no earthwork was provided along the river's flood-plain. Possibly the marshy terrain had been considered sufficient defence. The same conclusion holds good for the period of the Fosse Earthwork.

But what was that period? The discovery of the date and purpose of the 1955 Ditch necessitated a re-appraisal of the date and purpose of the Fosse. It can hardly be of the date suggested by Wheeler, for that would mean that Verulamium had two earthwork circuits of different areas and alignments at the same time. Nor did the Fosse Ditch turn north-east down Bluehouse Hill:¹ as we have shown, the true date of the forum renders this impossible, nor was any trace found in our excavations up and down this route. But Wheeler had been unable to trace its further continuance on its north-west-south-east course beyond the top of Bluehouse Hill. In 1955 and 1956 further trenching at Site E, and in 1960 at Site M, confirmed this absence, nor did extensive geophysical survey give any hint of its continuation. We must conclude that the Fosse Earthwork was unfinished. However, there are indications that another part of the earthwork may have been under separate construction in the area each side of the London Gate. This is a possible explanation for the otherwise unexplained subsidence or hollow under the wall-tower which was excavated by Wheeler 69.5 m. south-west of the London Gate²—a hollow which was later traced inside the city during tree-planting in the park.³

Certainly the London Gate, like its twin the Chester Gate, is not of one build with the city wall, which makes a butt-joint with it;⁴ this in itself might be of little but structural significance, but photographs also show that the levels from which both gates were built are lower than that from which the adjacent curtain-wall is built (pl. II). Moreover, these two gates (which both lie on the possible course of the Fosse Earthwork) with their U-shaped towers and dual carriageways are of a different and altogether more grandiose plan than that

¹ Wheeler's Section Q-R (*Verulamium*, 50 and pl. cxix) is briefly claimed to have located the corner; just possibly this is one side of an inturned entrance.

² Wheeler, *Verulamium*, pl. xxi.

³ *Ibid.*, 122.

⁴ *Ibid.*, pl. xxii.

of the Silchester Gate (which by its position must certainly be contemporary with the curtain-wall, lying as it does off the line of the Fosse). These facts all strongly suggest that the London and Chester Gates were built for the Fosse Earthwork (fig. 9) and were only later incorporated in the mural defences. A parallel for this state of affairs exists at Cirencester, where the Verulamium and Bath Gates there are structurally earlier than the city wall and were built for the earthwork phase of defence. Further evidence which may indicate an outlying section of the Fosse Earthwork at the south edge of the city is a length of ditch discovered in 1963-4 in Verulam Hills Field in excavations conducted by Dr. Ilid Anthony and Mr. B. F. Rawlins. This ditch ('Ditch IV') is shown on the published plan as extending the line of the south-east defences well beyond the point where the city wall turns north again: unfortunately no other reference is made to it in the report,¹ but reference to Museum records shows that it was 18-25 ft. (5.5-7.6 m.) wide, and 8 ft. 6 in. (2.6 m.) deep from the surface, and possessed a counterscarp bank.

The Fosse Earthwork, which encloses some 231 acres (93.6 ha.), is therefore best taken as marking an enlargement of the original city of 119 acres (47.6 ha.) enclosed by the 1955 Ditch. As to date, its Roman age is established by the discovery of Roman pottery in the old ground-surface beneath the rampart (Wheeler, *Verulamium*, 51) and, within the period, a second-century context should be sought.² Some support for a second-century date can be found in Wheeler's Section I-J (his pl. XVIII). Here a 'primary' rampart 33 ft. (10 m.) wide of orange gravel was found, having behind it further deposits interpreted as 'Additions 1-5'. Of these, no. 5 may represent the ploughing-down of the monument. The primary gravel bank had a turf revetment at its rear. This need not be thought of as at any time free-standing, but rather as a structural device revetting the gravel and itself supported in position by Addition 1. The remaining 'additions' make no structural or tactical sense as later defensive measures, for (i) they do nothing to strengthen and little to heighten the rampart; (ii) now that the earthwork is known to be unfinished it cannot be imagined that part of it should be enlarged. The gravel core of the rampart yielded residual material dated by Wheeler to A.D. 20-60. The presence of this material in a context close to Prae Wood need not surprise us. The 'additions', however, yielded Roman pottery down to the Antonine period, and a thick deposit of burnt material may even be thought to derive from the Antonine fire. The Fosse Earthwork accordingly cannot be earlier than 140-60.

Many urban earthworks in Britain are currently attributed to Albinus (193-6). This is, of course, a hypothesis impossible to prove in the absence of epigraphic evidence; it was designed to explain the very unusual phenomenon, unique to Britain, of numerous late second-century urban earthwork defences.³ The failure at Verulamium to complete its earthwork could be taken, however, to strengthen the theory, since an earthwork built under local initiative is less likely to have been abandoned incomplete than one inspired by a governor

¹ *Hertfordshire Archaeology*, i (1968), 11, fig. 1. The short notice in 'Roman Britain in 1964' (*J.R.S.* lv (1965), 211) states that it was 8 ft. 6 in. deep and at least 25 ft. wide and 'was dug in the middle, and deliberately filled at about the close, of the second century'. It is difficult to see how quite such precision was reached.

² I am glad to acknowledge the inspiration of discussion with Mr. B. R. Hartley about the date of the Fosse.

³ S. S. Frere, *Britannia, a History of Roman Britain* (1974), 285. To the objection that Albinus' emergency defensive programme would not provide for grandiose monumental gateways, it may be replied that these gates were no doubt built after the crisis was over, to make the most of the new defences; but they are nonetheless attributes of the earthwork defences and pre-date the stone walls.

soon to meet defeat and death; if work was still unfinished in February 197, it might well have been abandoned on the grounds that the crisis was over.

Yet a date as late as 196 is unsupported by specific evidence; Wheeler found only one sherd of samian datable as late as the beginning of the Antonine period. If his Addition 2 really consists of debris from the Antonine Fire, it suggests that the rampart in the vicinity of Section I–J was already standing *c.* 155–60. It will be shown below that the 1955 Ditch was becoming obsolete during the reign of Hadrian and that its systematic filling-in was taking place in the period 150–70. If we are correct in believing that Verulamium was a municipium and that its status entitled it to defences, this releases us from any obligation to search for an exceptional context for the Fosse in any measures taken by Albinus. The erection of the Fosse defences can now be seen as directly related to the abandonment of the 1955 Ditch circuit; and the unfinished character of the new defensive work can be attributed to the disastrous fire of *c.* 155, which would have called for the redeployment of working parties to more immediate duties. Clearance of burnt buildings may perhaps be recognized in Addition 2. Moreover, the two monumental gateways—the London and Chester Gates—can be seen as part of the same programme, and the dating evidence for them which was adduced by Wheeler can be seen to be relevant. The two flagon-necks shown in his *Verulamium*, fig. 35, nos. 67, 68 (described as ‘the latest types of jug-necks found beneath the gateway’) are of types which on present evidence scarcely appear at Verulamium before 135 and are common in the period 140–80.

Like the 1955 Ditch, the Fosse Earthwork seems to have been designed to enclose only three sides of the city. If its omission along the river side is not merely further evidence of incompleteness, we may assume that the fourth side was once again adjudged to be sufficiently protected by the marshes of the river Ver; neither bank nor ditch was there provided.

At a later date the defences of Verulamium were replanned with an altered circuit fortified with bank, wall and ditch. The Hadrianic date proposed by Wheeler was disproved in 1955 with the discovery of later pottery in the bank, but even this gives a *terminus post quem* of only *c.* 210–30. Today a second-century date for a city wall is claimed only at Colchester, Lincoln and Gloucester; at all other circuits where modern work has been undertaken, contexts in the third century, varying between *c.* 210–20 at London to *c.* 270–90 at Canterbury, have been demonstrated, save at a few places where the date is even later. Wheeler’s failure to publish the coarse pottery associated with the defences prevents a re-assessment of that evidence, but his excavations also yielded a small coin-hoard from a secondary floor-patch in a wall-tower. The latest coin is one of Severus Alexander of 227–9; however, the hoard is so small and its composition so irregular that the date of deposition cannot be gauged with any accuracy. The same tower produced a much larger coin-hoard of *c.* 273 in the robbed debris over the building. This was taken by Wheeler to indicate the date of robbing, but the argument is not cogent. The hoard might equally well have been concealed somewhere in the tower itself and have reached its final position during demolition a long time later. Yet this hoard does at least show that the tower existed by 273, even if the first hoard cannot be used to prove that it already existed up to forty years earlier.¹ On p. 46 reference is made to sherds of two flanged bowls recovered from the ruins of a building which it is reasonable to suppose was demolished to make way for the wall. These sherds cannot date

¹ For these hoards see Wheeler, *Verulamium*, 62.

VERULAMIUM 1956: SECTION THROUGH NORTH-EAST DEFENCES

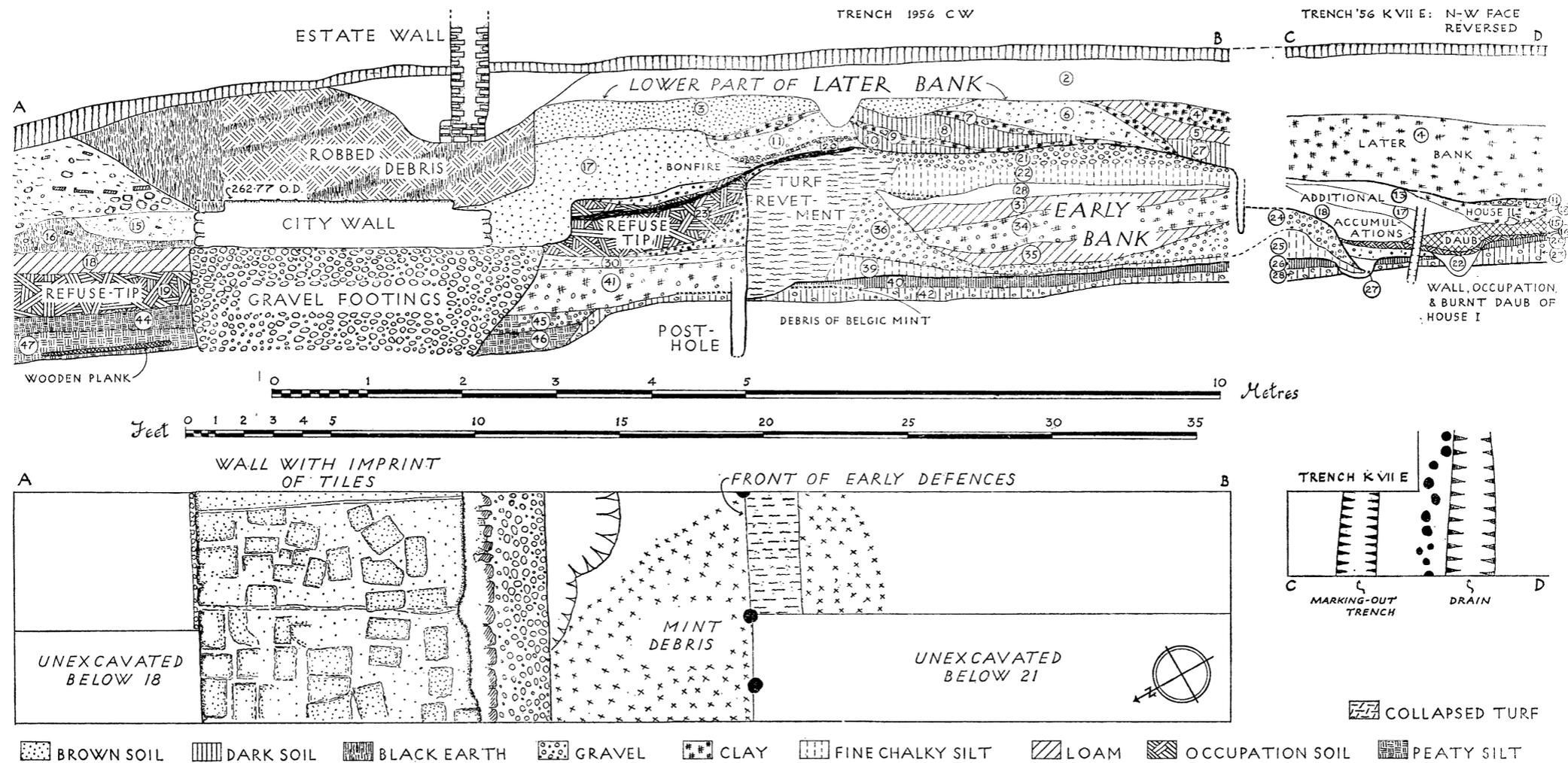


FIG. 13. The 1956 defences section, Insula XVII (scale 1:60).

much, if at all, before 270. Taking all the evidence into account, a date of *c.* 260–70, and probably *c.* 265–70, may be suggested for the city wall.

I. THE FORT

(a) *The rampart* (figs. 13–15)

Reasons for supposing the early rampart in the 1956 Section (fig. 13) to be that of a fort have already been given (p. 34). An 8-ft. trench was excavated close to Site 1956 K. Below the rampart, sealed by a layer of silty earth (40) containing charcoal, was a scatter of many broken mould-fragments from the Belgic mint (figs. 12, 43; pl. Ia), lying on a stony surface above natural gravel. No structural traces of the pre-Roman period, however, occurred in this trench, though they did occur close by (p. 102). The rampart was erected directly on Layer 40, into the surface of which a shallow gully had been cut out and filled with turf from the front revetment of the rampart. This seems to have been a marking-out trench since no structural purpose is served by making the revetment earth-fast; a second, similar, trench marked the rear line of the rampart (see below). Behind the turf revetment the rampart consisted of tips of loamy gravel and of fine chalky silt derived from the valley floor. One of the tips (22) contained the remains of a discarded 9-in. plank. The turf revetment had a timber facing. Three 6-in. (15-cm.) post-holes were found irregularly spaced 27 and 48 in. (0.69 and 1.2 m.) apart; these had retained a horizontally laid wall of logs *c.* 4 in. (10 cm.) in diameter, the imprints of which could be traced in the face of the turf revetment (pl. IVa). The stack of turves, being reasonably stable, took much of the pressure off the timber front; the timber front in turn enabled the rampart to stand vertically. Most later forts of the first century in Britain used turf alone for the front. This could stand at an angle of almost 70 degrees, which was found satisfactory, and saved much preparation of timber. A contemporary parallel for the present arrangements is seen at Valkenburg.¹

The rampart also had a timber revetment at the rear, consisting of a row of posts 7–8 in. (18–20 cm.) in diameter at 4-ft. (1.2-m.) intervals, with *c.* four intermediate posts 3–4 in. (7.6–10 cm.) in diameter (fig. 43). This revetment was missed in the main section because a balk was not cut through; but it was found in Trench 57 K VII C nearby (p. 104, figs. 14, 43). That trench encountered a point where it seems that two construction-parties had met. There was a slight irregularity in the marking-out trench, and tips of two different materials were side by side. The more southerly one had slipped, obscuring the post-holes, which were shallow. The rear-revetment had been supported by a small additional ramp of gravel (figs. 13, 14, 48).

The rampart proper was 17 ft. (6.18 m.) wide, but the tail extended it to 21 ft. (6.40 m.); the bank had gradually been engulfed in later deposits and when buried beneath the rampart of the city wall, *c.* 260–70, still stood 5 ft. (1.52 m.) high. There was no proper ditch in front; Layers 46 and 47 (fig. 13) were dark, evil-smelling waterlogged deposits occupying a shallow hollow which was possibly artificial. In 47 were the remains of a wooden plank together with occupation-material such as bones, mussel shells and a walnut.

Date of the rampart

In the main section, fig. 13, the rampart yielded no pottery except for one coarse-ware jar

¹ A. E. van Giffen, *29e–32e Jaarverslag van de Vereniging voor Terpenonderzoek* (1944–48), pl. 7.

of early form in the 'tail' (No. 1294). The bank lay directly on the pre-Roman surface, and its tail could be seen to be earlier than the Boudiccan fire of A.D. 61. Closer dating was obtained in Trench 57 K VII C. The sequence there is discussed in detail on p. 102; here it is sufficient to say that the rampart sealed three pieces of samian: an inkwell, and forms 15/17 and 18 R, both pre-Flavian. The inkwell came from a gravel floor (fig. 14, 25) sealing a Belgic structure, and the other two sherds came from Layer 22, a thin occupation-layer lying on this floor beneath the rampart. There is evidence that Layer 22 was connected with the builders of the rampart, for it stepped up where one working-party had levelled the underlying layer less deeply than the other. Layer 19, also stratigraphically earlier than the rampart, yielded a dupondius of Claudius. The tail of the rampart was sealed by Layer 18, which yielded an As of Claudius and much Claudian samian, ending with two vessels of form 24, Claudian-Neronian in date. Layer 18 was a dark occupation-soil which had been spread over the area after the erection of the rampart; it had no relation with the floor below it, the post-holes in which had been filled with clean material before its deposition. The very large quantity of samian recovered in a relatively small area is suggestive of military rather than civilian occupation. Above Layer 18 were floors (12 and 17 containing Claudian and Neronian

VERULAMIUM 1957: KVII C: TAIL OF EARLY BANK

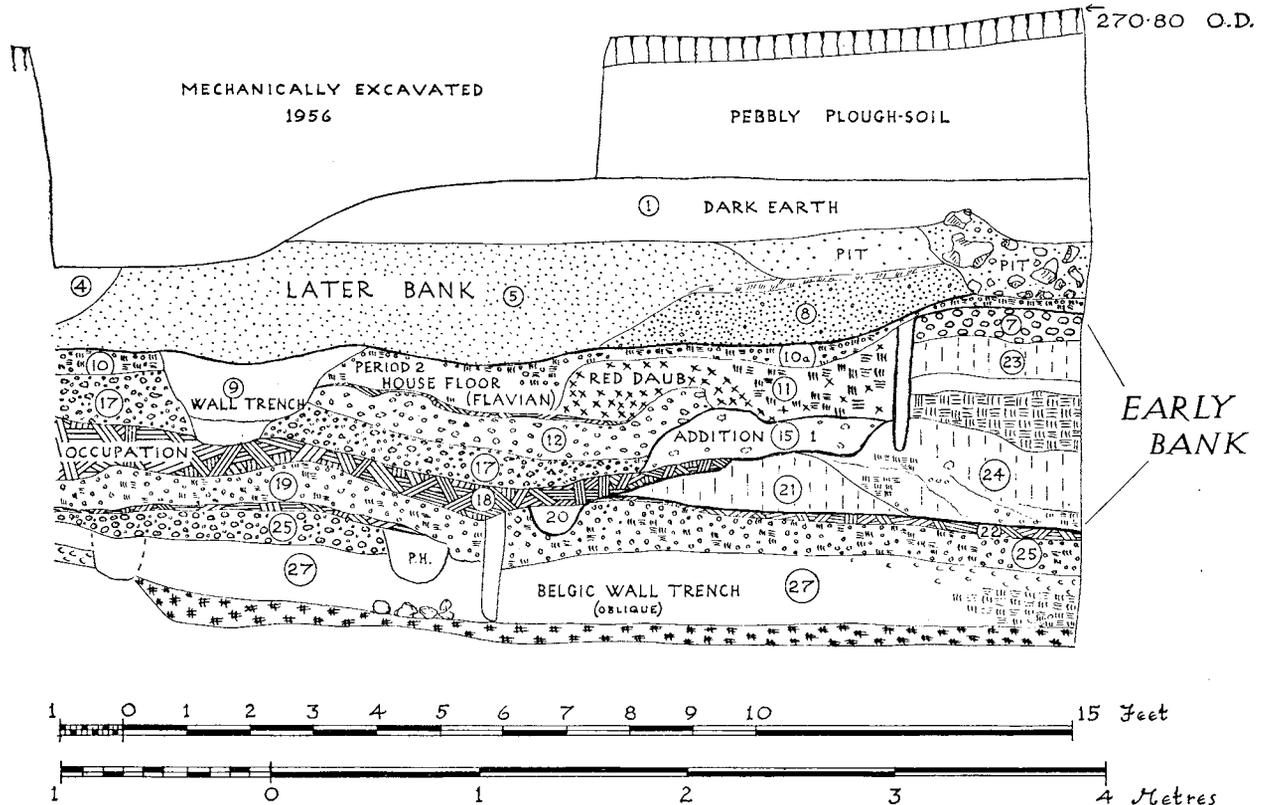


FIG. 14. Section P-Q, Trench 1957 K VII C, Insula XVII (scale 1: 36).

samian) associated with a timber building which itself was destroyed in the Boudiccan fire.

It is clear from this sequence that the rampart was not the first feature of post-conquest date on the site: it was preceded by the levelling of a Belgic building which was sealed by a gravel floor (25) containing a fence of close-set posts (fig. 43). The association of this floor with a samian inkwell suggests that it was laid by the military. Thus, erection of the rampart on this side of the enclosure, which was already well protected by the marsh, may have had a low priority, especially if (as the absence of military structures may suggest) the area was an annexe. The dating evidence suggests that the rampart belongs to the reign of Claudius; by the middle fifties a civilian building was encroaching on its rear. Other arguments such as the absence of evidence for long military activity, together with the positive evidence for urban settlement from *c.* 50, combine to suggest a short-lived military post established *c.* 44 and evacuated by *c.* 47. The dating-evidence is listed in detail on pp. 41-4.

Subsequent history of the rampart

The somewhat slight timbers of the front revetment cannot have had a long life. Eventually there was a collapse (fig. 13, layers 30, 41). Layer 30 yielded two sherds of Flavian samian. No effort had been made to maintain the rampart; this makes better sense for a redundant military work than for an urban defence. Layers 23 and 19 represent a large dump of rubbish, tipped from the settlement within, over the reduced bank and tailing down into the marsh. They contained building-debris such as painted plaster and fragments of *opus signinum* floor, together with much burnt wood, large numbers of oyster shells, charcoal and sherds. At the top of Layer 23 were many large pieces of burnt plank; the dump seems to have smouldered over a considerable area: the scene must have been both smelly and unpleasant. To judge by the large quantity of pottery it contained, this rubbish tip was in use from *c.* 90 to *c.* 150. By the time it ceased to be used, only a gentle rise marked the site of the old rampart.¹ There was little further accumulation until the erection of the city wall and its accompanying bank, *c.* 260-70 (see p. 50).

(b) *The fort gate* (fig. 15)

In 1966 a small excavation was carried out by Dr. Ilid Anthony and Mr. V. R. Christophers for the Verulamium Museum, to trace the course of the city wall before building-development.² At the 21-degree angle the wall-line was found to curve outwards rather in the manner of a bastion. At a low level within the arc were found well-preserved timber remains. Below a 'raft' of horizontally laid branches, which had been remarkably preserved by the damp conditions, were found three rows of substantial timber posts 1 ft. (0.30 m.) square and still standing up to 4 ft. (1.20 m.) high. The rows were 12 ft. (3.66 m.) apart. The northernmost row was spaced at 4-ft. intervals and retained horizontal planks on edge, which in turn revetted the chalk bank. The southernmost row, also at 4-ft. intervals, is not recorded as supporting planks; instead, subsidiary intermediate vertical timbers had been employed (possibly in a secondary phase?). Behind the line, the chalk bank reappeared; but it extended

¹ The dates of the rubbish tip correspond very closely with those of the Flavian building close by on Site KV II (p. 110); the two can be assumed to be connected.

ii (1970), 51-61. It does not record three of the trenches which traced the wall; these are, however, marked on fig. 15 here.

² A short account is published in *Hertfordshire Archaeology*,

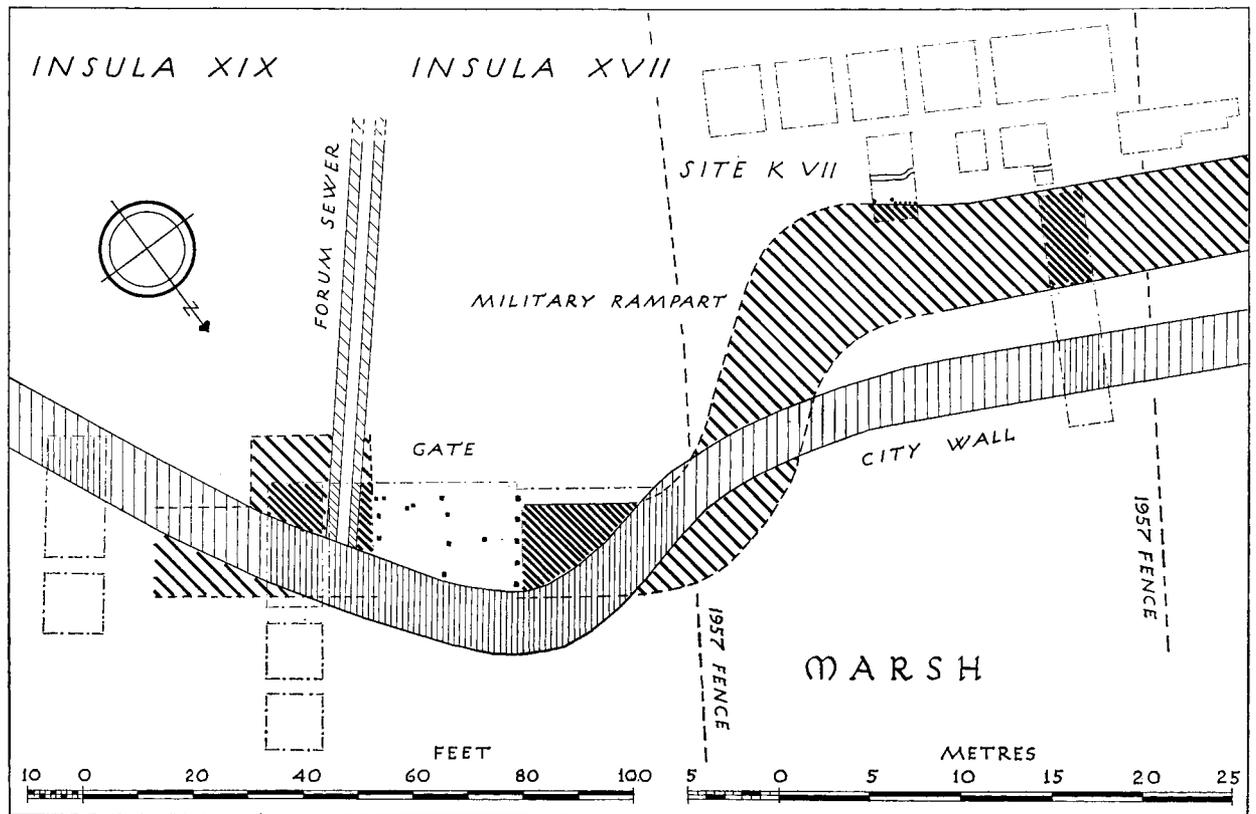


FIG. 15. The fort gate and rampart and the city wall in Insula XVII.

further south-west (towards the interior) than on the north side as if for an *ascensus*. A single post stood in the middle of the space dividing the northern and central rows, *c.* 8 ft. from the inner end; in the middle of the other space stood two posts much nearer the inner end. The first-mentioned post could have acted as a door-stop; the group of two posts, however, were not opposite posts capable of hanging doors, and can hardly have been door-stops.

The remains at first sight suggest a gateway with two carriageways; but in view of the difficulty just mentioned in the southern 'carriageway' it may be wiser to interpret the latter as a guard-chamber.

The timbers were remarkably well preserved because they had been driven into the dark blue-grey alluvial mud of the valley floor. At this point, therefore, the defences had been pushed forward from firm ground onto the edge of the bog. The gate lies *c.* 35 ft. (10.66 m.) forward of the front of the rampart in the 1956 Trench, which is situated only *c.* 110 ft. away.

It is clear from this discovery that the fort is of irregular shape. No parallel exists at present for a salient gateway, or for a gate placed just beyond a salient. The Flavian I fort at Newstead has salients, but the gates are protected by the salients; here that advantage has been lost. It also follows from the irregular shape of the fort that the location of its perimeter cannot be predicted with any confidence.

The interior of the fort

No structures can be associated at present with the occupation of the fort. In 1938 Miss K. M. Richardson, in her excavation of the *macellum*,¹ recorded a layer of 'green gravel' underlying the timber-framed buildings destroyed in A.D. 61; but the only associated features were two flat-bottomed drains or gullies respectively 7 ft. wide by 4 ft. deep and 4 ft. wide by 2 ft. deep. They lay 62 ft. (18.90 m.) apart. Similar pre-building deposits were recorded in Insula XIV.²

DATING EVIDENCE: FORT DEFENCES

(a) *Trench 1957 K VIIIC* (fig. 14)

(For the Belgic occupation see p. 112)

DEPOSIT	SAMIAN (All South Gaulish unless otherwise stated)	COINS	COARSE POTTERY
25 gravel floor	inkwell first century		
22 occupation layer below rampart	15/17, 18R pre-Flavian		
24 rampart tip			Butt-beaker sherd
19 gravel floor over 25		Claudius I, dupondius (<i>RIC</i> 67)	
18 occupation soil	29 (two) (D 1), 24, Ritt. 8 probably Claudian 18 (two), 15/17 (four), 27 (five) Claudian Ritt. 12 variant, 18 (four), 15/17 (five), 27 (seven) pre-Flavian 24 (two) Claudio-Neronian 18(?) stamp]VLLVS·F 18 stamp OF VITA[27 stamp O]PASEN (S 1) pre-Flavian 27 stamp OF P[RIM (S 2) pre-Flavian	Claudius I, As (<i>RIC</i> 66)	Nos. 1295-8
17 dirty gravel yard floor over 18		Claudius I, As (<i>RIC</i> 66)	

¹ *Archaeologia*, xciii (1944), 82 ff.² S. S. Frere, *Verulamium Excavations*, i (1972), 13.

DEPOSIT	SAMIAN (All South Gaulish unless otherwise stated)	COINS	COARSE POTTERY
15 gravel addition to rampart tail	27 Claudian 15/17 probably Claudian 15/17, 18 (three), 27 (two) pre-Flavian 24 Neronian		
12 upper floor of yard (pre- Boudiccan)	29 A.D. 55-70 15/17, 24 pre-Flavian Ritt. 12 probably pre- Flavian 27 Neronian		
11 burnt daub from Boudiccan fire	29, Ritt. 8 probably Claudian 15/17 pre-Flavian 27 Claudian 18 probably Neronian		
10 floor of Flavian building	29, 15/17 pre-Flavian 30 (also in K VII E 18) (D 2) pre-Flavian 24 Neronian-Flavian		
9 c lower stony packing of Flavian wall-trench	37 Flavian 27 (two) Neronian- Flavian 15/17 pre-Flavian 15/17 probably Flavian		
9 filling of wall-trench	37 C.G. Antonine 30 C.G. second century 18 first century		
8 brown tip of bank	38, 31 C.G. Antonine	Antonia, barbarous dupondius (<i>RIC</i> (Claudius I) 82)	

(b) 1956 Section including Trench 1956 K VII E (figs. 13, 48.)

K VII E 24
tail of rampart

No. 1294

K VII E 22
drain trench

27 pre-Flavian
18, 27 first century
15/18R stamp
OF-CRESTIO (S 3)
A.D. 55-70. Sherd also in
K VII O 7 (p. 116)

Nos. 1299-1300

DEPOSIT	SAMIAN (All South Gaulish unless otherwise stated)	COINS	COARSE POTTERY
K VII E 20 grey clay floor of Neronian building	Ritt. 12 Claudio-Neronian 15/17 probably Neronian 27 stamp PAVLLVS F (S 4) A.D. 50-65		No. 1301
K VII E 16 occupation on floor 20	24 pre-Flavian 15/17 probably pre-Flavian Ritt. 9 probably before c. A.D. 55		
K VII E 14 and 15 burnt daub	15/17, 24 pre-Flavian		Nos. 1302-3
K VII E 18 addition to rampart	11 Claudian 30 (also in K VII E 10) (D 2) pre-Flavian 35 or 36 (five) probably pre-Flavian 18, 27 probably Flavian		
K VII E 13 addition to rampart	27 illiterate stamp IACOXI (S 5) pre-Flavian 15/17 probably Neronian 18 pre-Flavian stamp AQVITANI (S 6) A.D. 45-65		mortarium stamped by Matugenus (c. A.D. 85-120)
K VII E 5 demolished clay walls of house	18/31 C.G. Trajanic- Hadrianic		Nos. 1322-4 Type 741 (A.D. 130-80)
K VII E 12 demolition fill of Flavian wall-trench	29/37 pre-Flavian 37 Flavian		No. 1325 Type 676 (A.D. 140-90)
56 CW 30 collapse of rampart face	18 (two) Flavian		No. 1304
56 CW 23 rubbish tip over slighted rampart	29, 37 (two), 15/17 (two), 18 (four), Curle 11, 27 (five) Flavian Curle 11, Curle 15, 18 (three), 27 (two), 33, 42 C.G. Trajanic-Hadrianic	Tiberius, As (RIC 18)	Nos. 1305-18 Types 837, 843, 2244

DEPOSIT	SAMIAN (All South Gaulish unless otherwise stated)	COINS	COARSE POTTERY
	37 (three) (D 3) C.G. A.D. 125-40 18/31 C.G. Hadrianic- Antonine 64 C.G. A.D. 115-35 (D 4)		
56 CW 19 (the same)	29, 18, 27 Flavian 27 C.G. stamp EPAPR[AF] (S 7) Trajanic 27 C.G. stamp DON[NAVCI] (S 8) A.D. 100-20 18/31 C.G. stamp DRAVC·VSF (S 9) A.D. 100-25		Nos. 1319-21 and mortarium- stamp ROA (A.D. 110-50)
56 CW 20 occupation soil overlying 23			No. 1326 cf. Type 1348 (A.D. 150-200)

II. THE '1955 DITCH'

The inner—and first-century—defence of the city was first found quite unexpectedly in 1955 below Building XX, 1 (p. 132), and was traced by superficial trenches for 61 m. in a south-easterly direction. In 1959¹ and 1960² Dr. M. J. Aitken carried out geophysical surveys which traced the course of the ditch as indicated on fig. 156, and thus revealed its function.³ To check the results of the magnetometer survey and to obtain further evidence of date and character, in 1960 two more sections were dug across the ditch, one (Site A) in Insula VIII⁴ and the other (Site M) near the south corner of Insula V.⁵ There was no surface indication of the ditch, nor did any substantial trace of the former rampart survive at either of these sites or in the trench in Insula XX. At the latter there were traces of what can now be recognized as a counterscarp bank (fig. 55, Layers B I 8 and 10) on the uphill side of the ditch; what may be the same feature was found at Site A.

¹ *Antiq. Journ.* xl (1960), 2, 21 ff.

² *Ibid.* xli (1961), 82-5.

³ The ditch seems to have passed through the area of Wheeler's excavations without being detected. It is probable that the collapse of the south wall of the cellar of Building VIII 2, attributed (Wheeler, *Verulamium*, 121) to a 'geological weakness' was really due to its siting in the ditch-filling.

⁴ The trench was 20 ft. (6.1 m.) north-east of the hedge which accompanies the modern metalled trackway leading from the churchyard towards the London Gate at a point

300 ft. (91.5 m.) west of the north end of a surviving piece of the city wall and 245 ft. (74.7 m.) south of the junction of the hedge with an old field-boundary running south-west and now marked by a bank and large trees; this is marked as 'centre line of hedge' near the Triangular Temple in Wheeler, *Verulamium*, pl. cxx.

⁵ Not far from the building which today protects the hypocaust of House IV, 8, Room 7, and 60 ft. (18.3 m.) north-west of the old field-boundary mentioned in the previous note, at a point c. 210 ft. (64 m.) north-west of the angle of the earthwork itself.

Insula XX

The trench in *Insula XX* is described at pp. 139 ff. The ditch there (pl. XII*b*) was 9 ft. 6 in. (2.90 m.) deep from the old surface and *c.* 19 ft. (5.79 m.) wide; it had begun to receive deposits of rubbish *c.* 135–45 and the rampart had been redeposited *c.* 150–70.

Site M

In *Insula V* the ditch was found to be 11 ft. 9 in. (3.58 m.) deep and again 19 ft. wide. It had been excavated through drift deposits of stiff clay into the solid chalk below, and retained much of its original profile (fig. 16). About 2 ft. of silt had accumulated before Layers 31A–35, which were probably derived from the rampart, were pushed in from the downhill side. Thereafter there are signs of renewed silting (31) and growth of vegetation (29) before more bank-material was replaced. When the filling was almost level, a pit *c.* 9 ft. in diameter and 7 ft. deep was dug partly in the filling and partly into the solid chalk on the inner side of the ditch; it did not reach the south-east side of the cutting shown in fig. 16, but was sealed

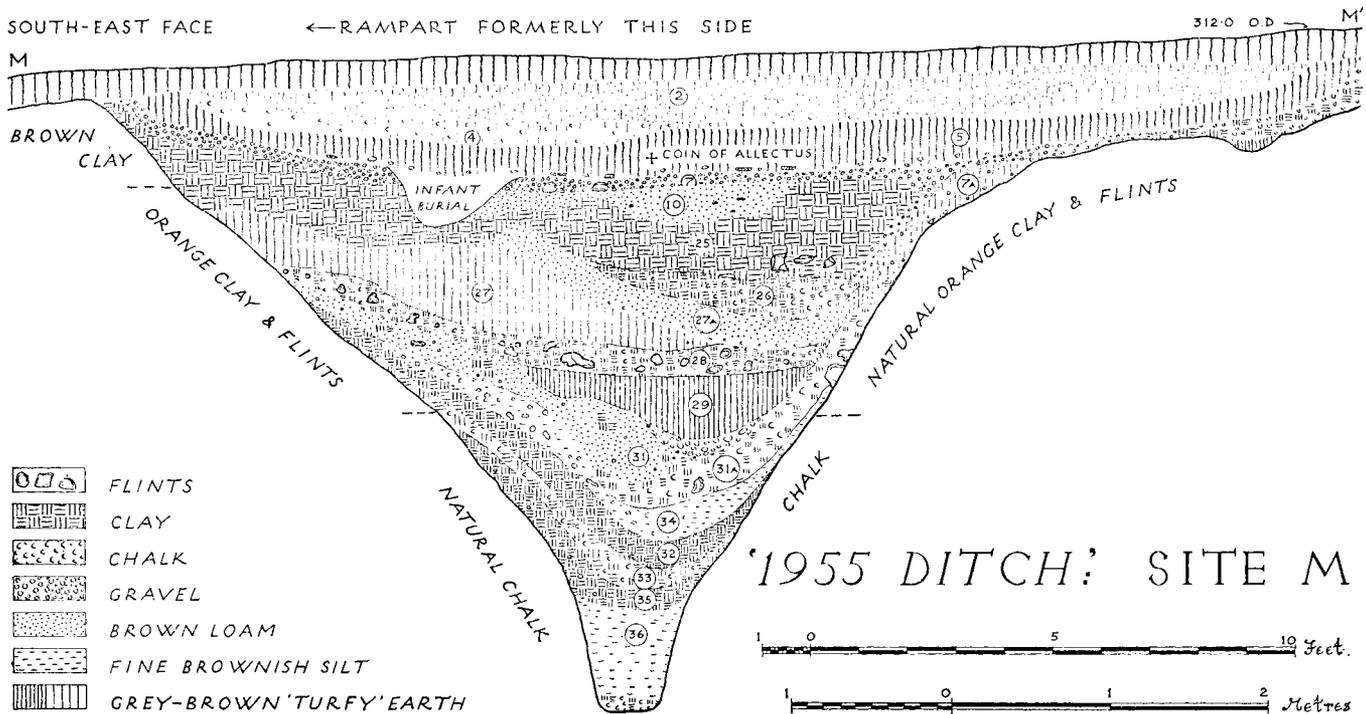


FIG. 16. (Scale 1:48).

by the gravel spread (7) above Layer 10. The lowest two feet of its filling consisted of clean red and yellow clay (pl. V*b*); and above some rubbish-deposits sealing this was more fine clay full of voids from organic tempering. It is possible that this pit was connected with the nearby potters' establishment vouched for by the wasters found in 'Pit 6' at the south-west end of *Insula V* in Wheeler's excavations.¹ The middle filling of the present pit yielded a sherd of castor-box lid which cannot date before the very end of the second century. The

¹ Wheeler, *Verulamium*, 111 ff., 186–90 and pl. cxx; Corder, *Antiq. Journ.* xxi (1941), 271–98.

pottery of 'Pit 6' itself is datable *c.* 130–60, so the activity represented by the present pit must be placed several decades later. The pit appears to have been intended for the storage of potters' clay.

At a somewhat later date, after the site of ditch and pit had been sealed with gravel, an infant-burial was deposited; it was orientated with head to the north-west, but only the skull projected into the trench. This burial was sealed by (5), an old surface-soil which contained a coin of Allectus and a red colour-coated bowl of the late third or fourth century. The date of the filling of the ditch and the context of the ditch itself are discussed on pp. 5–6, 47–9, 139.

Site A

In Insula VIII the ditch was *c.* 22 ft. (6.70 m.) wide and *c.* 10 ft. 6 in. (3.20 m.) deep. It is probable that Layer 24 (fig. 17) represents the last vestige of the rampart and Layer 5 the counterscarp bank; if so the latter was disturbed, for it yielded second-century pottery. Although the base of the ditch is cut into the solid chalk, this occurs lower than in the section at Site M and the drift deposits are more gravelly; the sides of the ditch are more weathered than at Site M. In the inner slope just on the surface of the chalk a substantial step was left (pl. Va) and a smaller one occurred near the top. These resembled working-platforms and may imply that the ditch was not properly finished at this point. The deposit of gravel (18) may derive from a collapse of the side above the step, or the step itself may be a secondary feature. Very little rampart-material was returned to this section of the ditch, although Layer 8 represents a substantial tip from the counterscarp. Below this, Layer 19, containing first-century pottery, represents rubbish thrown in while the ditch was still open; and above it further rubbish was tipped (15). It seems improbable that the rampart was left standing long after this to create an obstacle so close to Watling Street; but a possible destination for the bank material missing from the ditch-filling may have been the new rampart of the city wall, which here passes only 91.5 m. away.

On the north side, cutting into the remains of the counterscarp bank and sagging into the edge of the ditch, were the fragmentary remains of a chalk footing. It was only *c.* 18 in. (0.46 m.) wide and probably supported a timber-framed building datable to the end of the second century.

Trench A III

A small sounding was made on the projected line of the 1955 Ditch 600 ft. north-east of Trench A I, close behind the projected line of the city wall. It failed to find the Ditch on the expected line. The T-junction of two flint-and-mortar walls of an Antonine building with red plaster *in situ* was examined. The destruction-level of this building yielded a flanged bowl (Type 2475) and two sherds of a colour-coated beaker, all of late third-century date. As the building lies within 5 ft. of the estimated position of the city wall its remains must have been sealed by the bank behind that wall although only a slight deposit of gravel, badly disturbed by the plough (and yielding a coin of Tetricus and an uncertain radiate), survived to represent it. The flanged bowl in the destruction-deposit below it is of a type not attested at Verulamium before *c.* 270, and is potentially important as evidence of the date of the masonry defences. Another piece of flanged bowl came from beneath the destruction-deposit. No doubt the building was demolished to make way for the defences.

DATING EVIDENCE: THE 1955 DITCH

(a) *The erection of the defences*

The date of the first-century defences cannot be closely established as yet. The context is presumably either in the decade 50–60 or else shortly after the Boudiccan rebellion. The rampart and counterscarp bank, where recognizable, appear to lie directly on the natural subsoil without even a turf-line below them. This suggests both careful construction and also an early date. The primary silt at Site A yielded virtually a whole vessel of the Belgic period (No. 1327). Layer 34 at Site M, which is clearly derived from the rampart, yielded a sherd of probably pre-Flavian samian, form 18, and contemporary sherds of coarse ware.

If the unremoved steps in the ditch at Site A imply incompleteness, this could suggest a context in 61. But if Verulamium was of municipal rank it might well have been provided with defences from its foundation. In Britain first-century defences have been found only at chartered cities and at those presumed to lie within the client-kingdom of Cogidubnus. Certainly at Site A rubbish was allowed to accumulate in the ditch towards the end of the first century; whether the defences date before 61 or not will only be settled when they can be stratigraphically connected with burnt deposits from the fire of that year.

Of the alternative possibilities, a date before Boudicca seems the more probable. The reasons may be briefly stated. (i) A belated fortification immediately after the sack would have been pointless; and little work seems to have been done to reconstitute Verulamium for about fifteen years. But the defences would have had a surprisingly short life of little over a generation if not first built before Vespasian's reign. (ii) On the grounds of what Tacitus¹ tells us, it has been suggested² that Verulamium was an open city at the time of Boudicca's attack; but in fact he tells us only that her men avoided forts and military posts (*omissis castellis praesidiisque militarium*) and there is no historical consideration forbidding a bank and ditch at Verulamium except the fact that nothing comparable had yet been provided at Colchester.³ But Colchester had its veterans. (iii) The position of the boundary was subsequently marked by the erection of two monumental arches (pp. 17, 75), and this was done at least a century after the earthwork had been demolished, when its line can have been visible, if at all, only in a faint undulation of the ground. These arches are best explained as commemorating the original foundation of the city at its original boundary at a time when the *pomerium* was to be advanced to a new line—possibly that of the Fosse Earthwork, and the London and Chester Gates which were provided for it, but more probably that of the third-century city wall—in what amounted to a refoundation. If this is so, it implies that the 1955 Ditch had a constitutional significance which accords better with original foundation-rituals than with an emergency measure taken in connection with Boudicca.

(b) *The date of infilling*

1. Insula XX

The evidence from this trench is listed on p. 136 under Building XX, 1. The primary silt yielded two sherds of Flavian-Trajanic date, which implies that the system was kept in order

¹ Tacitus, *Annales*, xiv, 33.

³ For the situation at this time at Colchester see *Britannia*,

² Wheeler, *Verulamium*, 25 f., arguing for a post-Boudiccan date for the Fosse Earthwork. viii (1977), 87.

until towards A.D. 100 at the earliest. The ditch was receiving deposits of rubbish in this area at the end of Hadrian's reign (*c.* 135-45), and the main bulk of rampart-material was re-deposited *c.* 150-70.

2. Site M (Insula V) (fig. 16)

DEPOSIT	SAMIAN	COINS	COARSE POTTERY
60 M II 34 primary silt	18 S.G. prob. pre-Flavian		No. 1328
60 M II 31 A tip of orange clay and chalk lumps			No. 1338
60 M II 29 grey-brown earth	37 S.G. <i>c.</i> A.D. 85-110 18 S.G. Flavian-Trajanic		Nos. 1348-51
60 M II 10	31, 31R C.G. Antonine 33 C.G. Hadrianic- Antonine		(sherds of flagon 1348 present)
60 M II 7 and 9 gravel	37 C.G. <i>c.</i> A.D. 160-90 31 (two) C.G. Antonine		No. 1358
60 M II 5 old humus over ditch		Allectus (<i>RIC</i> 128)	No. 1360
60 M II 18 and 30 Potters' pit sealed by 7	31 C.G. stamped C·VCC·I[LL·IM] (S 10) <i>c.</i> A.D. 150-80		Castor 'box' lid sherd and No. 1359 cf. Type 989

This evidence, admittedly sparse, is consistent with a date of *c.* 130-40 for the slighting of the rampart in this area and of *c.* 140-60 for Layer 29, the growth of vegetation over it. The ditch had probably been completely levelled up to Layer 7 by 220.

3. Site A (Insula VIII) (fig. 17)

DEPOSIT	SAMIAN	COINS	COARSE POTTERY
60 A I 22 primary silt	?18 S.G. first century		No. 1327
60 A I 20 gravel tip			Nos. 1329-32
60 A I 19 dark occupation soil			Nos. 1333-4

VERULAMIUM 1955: SECTION THROUGH LATER ROMAN DEFENCES

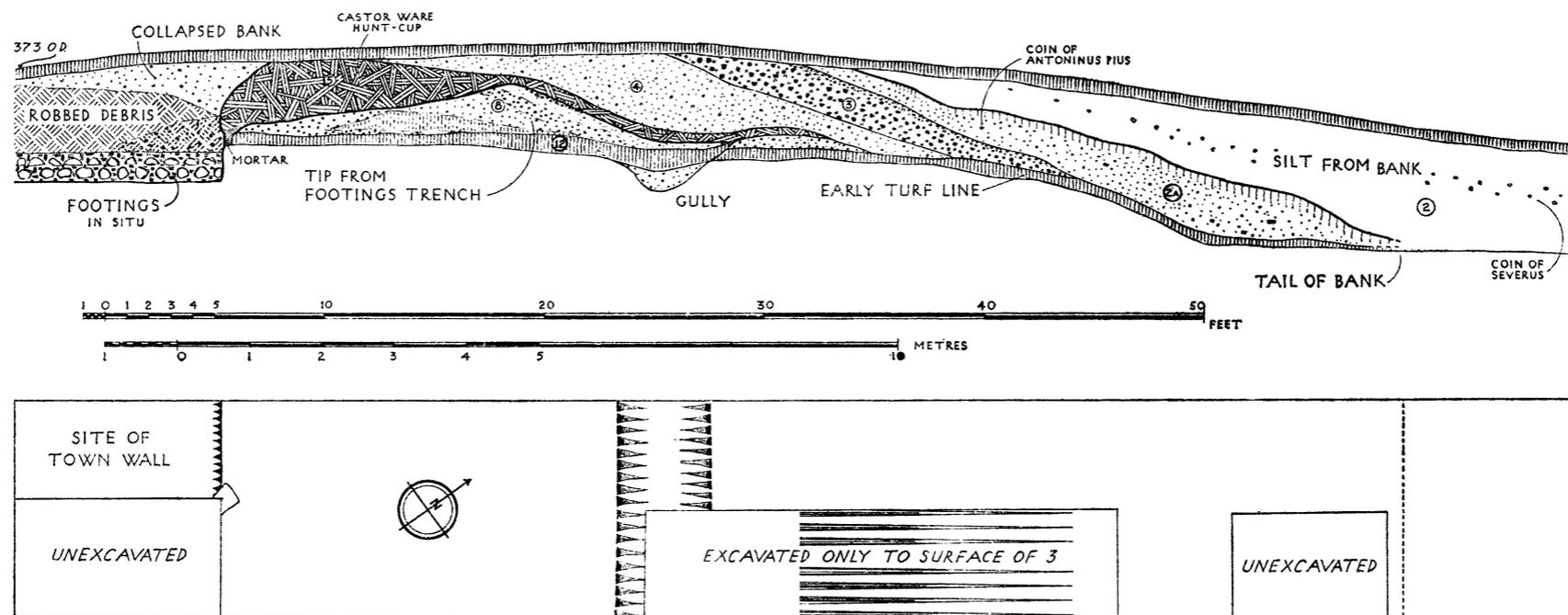


FIG. 18.

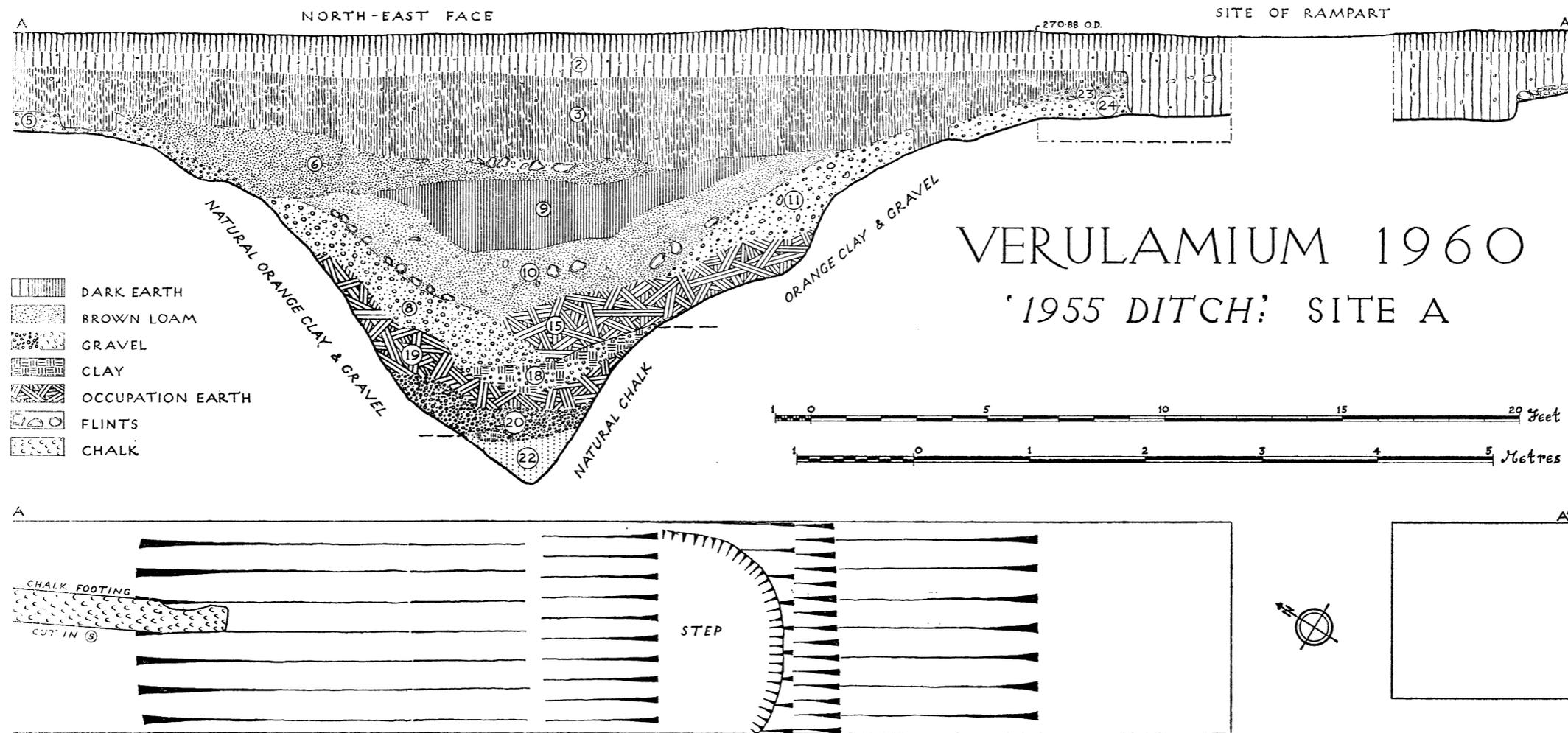


FIG. 17. (Scale 1:48).

DEPOSIT	SAMIAN	COINS	COARSE POTTERY
60 A I 15 (as 19)	29 S.G. stamp NATALI·F (S 11) <i>c.</i> A.D. 70-85 29 (three), 37, 27 (three), 18 S.G. Flavian 27 S.G. stamp DONTIOIIICI (S 12) A.D. 65-95 29 or 37 C.G. A.D. 70-90 (D 5)		Mortarium flange <i>c.</i> 100-50 Nos. 1335-7
60 A I 11 gravelly tip	37 C.G. <i>c.</i> A.D. 100-25 (D 6)		
60 A I 10 loamy earth	37 S.G. <i>c.</i> A.D. 85-105 37 C.G. <i>c.</i> A.D. 110-25 (D 7) 30 C.G. <i>c.</i> A.D. 100-25 33 C.G. Trajanic or Hadrianic	Domitian A.D. 86 (RIC 333)	Nos. 1339-47
60 A I 6 and 7 brown loam silting	37 C.G. <i>c.</i> A.D. 135-65 (D 8) 37 C.G. Hadrianic or Antonine 31R C.G. Antonine and many residual sherds		Nos. 1352-7 Types 672, 1352, 1828, 1832

On this evidence the ditch at Site A was already receiving rubbish at the end of the first century (19) and, after a collapse of the counterscarp bank, again *c.* 115-30 (Layer 15); after this, in the period *c.* 130-60, silting occurred (10) and vegetation took hold (9). The shallow hollow left by the old ditch received further weathered silting (6) in the period *c.* 160-90; Layer 3 across its top is dated by a coin of Allectus (RIC 272).

In all three sections the ditch had ceased to have defensive significance at or very soon after the end of Hadrian's reign.

III. THE CITY WALL

(a) *The 1955 Section* (fig. 18)

A trench 10 ft. wide was cut at the top of Bluehouse Hill where the defences lie on a reverse slope. Below the bank was a turf-line which in addition to Tiberio-Claudian samian yielded sherds of Antonine coarse pottery. Cut through this was a small gully 2 ft. 2 in. wide by 2 ft. deep (0.78 by 0.61 m.) with its upcast on the downhill side. Whether this was a 'marking-out trench' or the beginning of a foundation-trench for the wall cut in the wrong place, it is impossible to decide. The gully has not been observed elsewhere on the circuit, which argues against the first, and in any case the course of such large-scale defences could more easily and effectively be marked with rods. The gully appeared to be partly filled with upcast humus and sand from the wall's foundation-trench, and so was a contemporary feature.

The foundation-trench for the city wall was about 2 ft. deep and cut through natural sand and gravel layers to the top of a bed of orange clay. Upcast from this operation (8) formed the primary core of the rampart, consisting of humus, leached sandy gravel and orange clayey gravel piled in the reverse of their natural order. This observation shows that the wall and bank are contemporary (as indeed Wheeler's sections indicate), despite the removal here of their physical relationship by stone-robbing. The foundation-trench was next filled with flint nodules set in sand; above them, from the old ground-level, the wall was built, as a mortar-spread over the tip of the bank's primary core survives to show. The trench did not reveal the width of the wall. The next tip in the rampart (5) consisted of dark occupation-soil containing a good deal of pottery, oyster shells, bone, charcoal, etc., derived from the settlement. The upper levels of the rampart were of leached or clayey gravel, no doubt derived from the ditch, and were practically sterile.

Layer 5 contained much pottery of the period 150–200 +, including Antonine samian and five sherds which must be placed in the third century (p. 53). The uppermost tip of the rampart yielded an As of Antoninus Pius (A.D. 154–5) which had seen some circulation before loss. In the layer above this (a plain earthy gravel which was clearly the product of erosion—which had been severe on this reverse slope) was found a denarius of Septimius Severus of A.D. 200–1 in mint condition. There is every likelihood short of certainty that this coin was formerly incorporated in the rampart.

The evidence of this section therefore shows that the wall cannot have been built before c. 210–30; the actual date of c. 265–70 has been suggested above (pp. 17, 36–7).

(b) *The 1956 Section* (fig. 13, pl. IV)

Here the city wall rested on footings of gravel filling a trench cut through deposits which had accumulated in front of the fort rampart giving a *terminus post quem* of c. 150–200. The wall itself survived four courses high, the topmost of which was offset 11 in. at the back to a width of 9 ft. (2.74 m.). On this surface the first tile bonding-course was laid; subsequent robbing had revealed the imprints. The section exposed a joint in the mortar where slight differences of colour and composition showed where two building-parties had met (fig. 13). The dimensions of the wall correspond to those recorded by Wheeler in the southern sector; there the wall had been reduced from 9 ft. 9 in. (2.97 m.) to a width of 7 ft. (2.13 m.) by a single offset behind and by a triple offset in front over the triple tile-course at ground level.

The truncated remains of the contemporary bank were found overlying the early rampart; they yielded nothing later than Antonine pottery. Layer 16, which sealed a mortar spread in front of the base of the wall and underlay the robbed deposits, yielded two third- to early fourth-century beakers of Types 1059 and 1130.

(c) *The 1959 Section* (fig. 19)

This trench, 5 ft. wide, was dug at the edge of a paddock behind the gardens of the houses on the south-east side of the village street. It lies in Insula XVIII. Here again the city wall had been built upon a foundation of gravel thrown into a trench. Only a footing of large flints set in mortar remained of the wall itself. The bank, here mainly composed of chalky silts with a turf front up against the wall, contained no pottery certainly later than c. 200.

The robber-trench of the wall yielded a green-glazed sherd probably of the fourteenth century.

It can be seen on fig. 19 that the foundation-trench of the wall has been sunk from Layer 15 through the lower part of the bank which was already in position. There is nothing among the finds which is obviously so late as to disprove the theory that here is a remnant of the Fosse Earthwork with the city wall later inserted into its front; it would have to be assumed that the firm turf of Layer 12 had obviated any need felt by the wall's builders for a wide construction-trench. However, the error of such theorizing is seen from the facts disclosed in the 1961 section, where only one bank is present and is certainly contemporary with the wall even though its foundations are once again dug through the lower tips. It is easy to see how bank-material might accumulate on the line of the wall if, as here, it was being brought across from the field before the masons started work.

VERULAMIUM : SECTION THROUGH EAST DEFENCES 1959

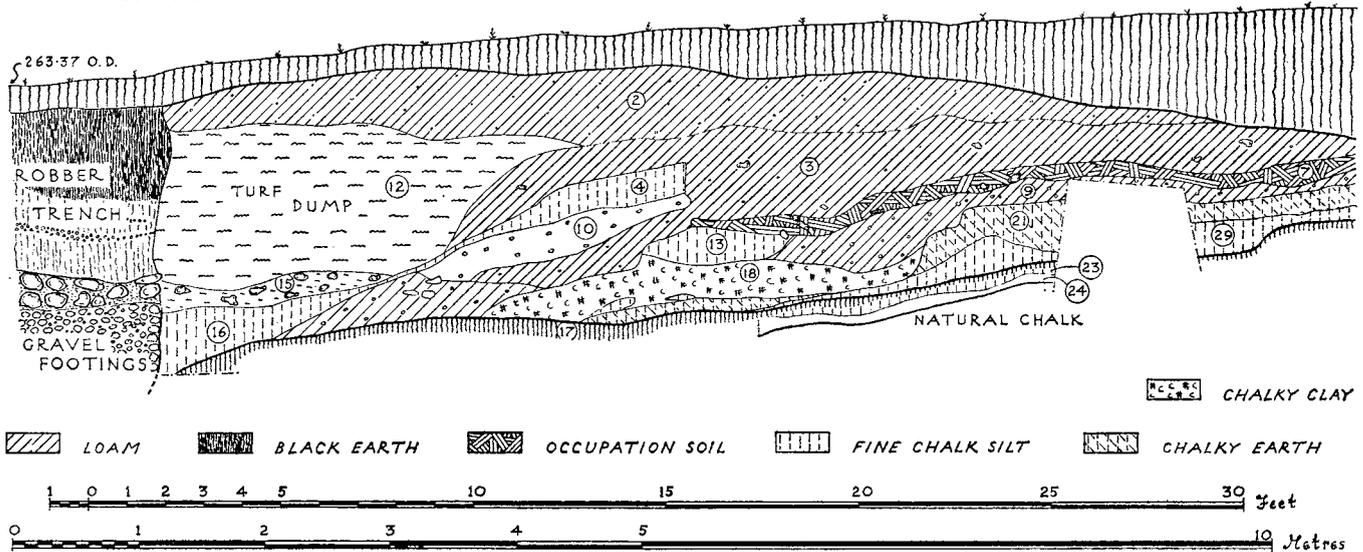


FIG. 19. (Scale 1: 60).

(d) *The 1961 Section* (fig. 20)

A 4-ft. trench was dug across the line of the wall at a point 320 m. south-east of the north angle of the defences near the Chester Gate and 343.5 m. north of the section cut in 1956. The wall here lies under a steep field-bank dropping to the water-meadows. It has been robbed down to the top of its gravel foundation which once again filled a trench cut into the silts of the valley floor. The robber-trench yielded a jug-handle of the fourteenth century. It was clear that the wall had encroached at this point some 15-20 ft. (4.6-6.1 m.) on to the marshy valley floor. Layer 10, for instance, was a black compressed bog-deposit which, however, contained oyster shells, *imbrex* fragments and a little pottery flung in from nearby

VERULAMIUM 1961

SECTION THROUGH NORTH-EAST DEFENCES

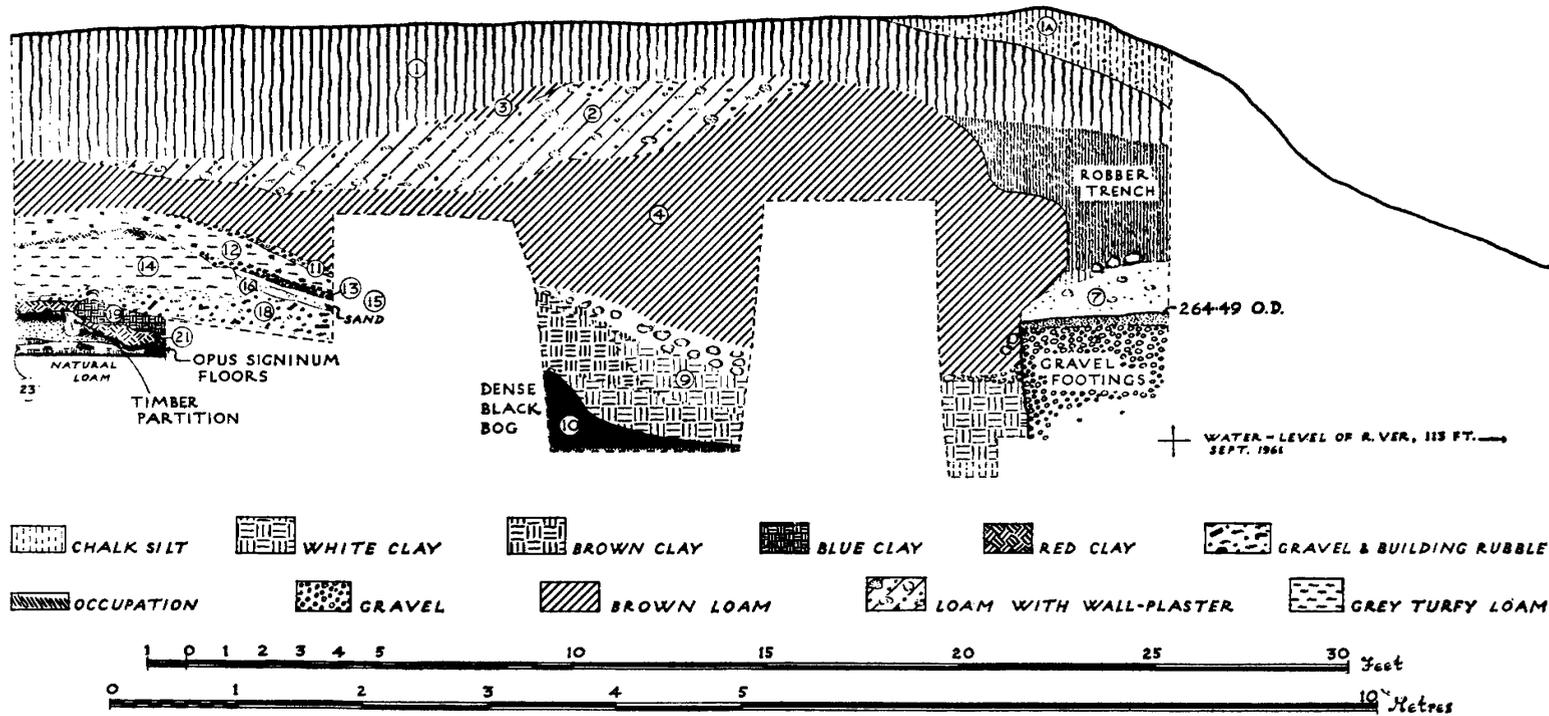


FIG. 20. (Scale 1:60).

settlement. Even so the line of the wall is not straight in this sector but makes a slight re-entrant (fig. 156) as it follows the approximate edge of the terrace.

As in the 1959 section, the lower part of the bank (4) had been deposited before the foundation-trench had been cut—unless indeed compression of bog-deposits below have caused Layer 4 to subside while the adjacent footings stood firm. Here, however, there is clear evidence that bank and wall were contemporary, since, although the wall has been robbed away, the front profile of (4) still retains the imprint of the foundation-offset of the wall, which it oversailed.

At the rear of the trench the eastern end of a second-century building was encountered below the bank. Two rather worn *opus signinum* floors were divided by a timber-framed wall, clay from the demolition of which sealed an occupation layer (22 A) containing oyster shells lying flat. The floor of the more westerly room lay 5 in. higher than the other; it was partially burnt and yielded a 'probably Hadrianic' sherd of samian; Layer 23, below, contained a Hadrianic-Antonine samian sherd and three coarse pots of the period 130–70. The building can have extended only *c.* 8 ft. at maximum towards the river, so presumably its main extent is in the opposite direction. The presence of the building makes it certain that no first-century rampart lies just west of the end of the trench, and at any greater distance it would lose the advantage of fronting the marshy ground. We may conclude that no first-century rampart exists in this sector. The demolished building was covered by (18), a layer of gravelly occupation-earth and building-debris, and then by (14) which consisted largely of turf. These layers appear to be the primary tips of the rampart, the main body of which consisted of brown loam with some gravel flints (4); the tip above this (2) contained much wall-plaster, mainly white with red lines or green with white lines. Presumably buildings had to be demolished to make way for the defences. The latest pottery from the rampart in this section was a dish of third-century type (No. 1384).

DATING EVIDENCE: CITY WALL

DEPOSIT	SAMIAN	COINS	COARSE POTTERY
(a) 1955 Section (fig. 18)			
55 C 12 pre-bank surface	Cam. S 4b Tiberio-Claudian 18R S.G. pre-Flavian		Nos. 1363–5
55 C 5 tip of occupation material	31 C.G. stamp MACCIRRA·FE (S 13) A.D. 150–80		Nos. 1366–77
55 C 2 A uppermost layer of bank		Antoninus Pius, As (<i>RIC</i> 934)	Nos. 1382–3
55 C 2 silt from bank		Nero, As (<i>RIC</i> 329 r) Septimius Severus, denarius (<i>RIC</i> 366)	

DEPOSIT	SAMIAN	COINS	COARSE POTTERY
(b) 1956 Trench			
Only residual material			
(c) 1959 Trench (fig. 19)			
59 CW 2, 7, 11 bank material			Nos. 1378-81
(d) 1961 Trench (fig. 20)			
61 CW 23 sandy layer below building	27 G.G. Hadrianic-Antonine		No. 1361, Type 2019 and cf. Type 601 (A.D. 130-70)
22 <i>opus signinum</i> floor	33 C.G. probably Hadrianic		
19 blue-grey mud over building			No. 1362
8 (lower part of 4)	31 C.G. Antonine samian mortar C.G. after 170		
4 body of bank			Type 1265 (A.D. 150-third century)
2 top of bank	31, 38, Jar C.G. Antonine 33 C.G. stamp MARCIM (S 14) A.D. 160-200		No. 1384

INSULA XII: THE FORUM

THE forum, which covers almost 5 acres (2 ha.), is dated by its dedication-inscription set up in the autumn of 79 (p. 69).¹ Its general outline is known from the excavations undertaken in 1898–1902 by the Revd. C. W. Bicknell and Mr. W. Page, whose plan,² however, is inadequately tied in to the modern landscape and did not reach the basilica. The east corner of the insula and part of a range of chambers apparently bordering the north-east and perhaps the south-east sides of the basilica were identified in 1934,³ and further elucidated in 1939.⁴ The basilica itself underlies the church and churchyard of St. Michael; what little is known is summarized by Page⁵ and has been incorporated in fig. 2. In 1949 Sir Mortimer Wheeler explored Building C, the temple at the west corner, and published a plan of the whole insula for the first time,⁶ omitting, however, the remnants of the basilica described by Page. In 1955 the more northerly entrance on the north-east side was examined by Mr. Andrew Saunders after the discovery there, in construction-work, of the Agricolan dedicatory inscription, and in the following season a small trench was dug adjacent to this work in the churchyard (pl. VI *a*) on the site of a fuel tank. Finally in 1956 an 8-ft. trench (Site G) was excavated by the present writer to determine the position of the north-west side of the forum and to examine its relationship with the adjacent street (XII/XXVII). The position of the trench is shown on fig. 2 and in more detail on fig. 89 (see p. 226): the details of the excavation are recorded on fig. 21.

Trenches G I, G III C (fig. 21)

According to Page the portico or ambulatory on the north-west side of the forum is 26 ft. (7.92 m.) wide; our trench located its external wall and part of the portico floor within, but it did not extend over the full width of the ambulatory. It did, however, also encounter the later blocking-wall mentioned by Page, which was found running behind the north-east face of the cutting and thus provided a fixed point on the plan.

The foundation of the wall of the Flavian forum cut through an earlier chalk floor (35), which was found each side of it. Any wall associated with the floor had been removed by the footings of a large sewer (fig. 21). The floor could not be closely dated, but as it contained fragments of *opus signinum* and tile it was not pre-conquest; a deposit of wood-ash here and there on its surface suggested that the associated structure might have been destroyed in A.D. 61. Below the floor was a deposit of up to 6 in. (15 cm.) of wood-ash and charcoal lying on a cobbled area (48) which appeared to abut a clay floor; a segment of the latter occupied the eastern corner of the trench. Nothing was found to date these deposits. The ash may be thought a better candidate to represent the Boudiccan fire than the small burnt deposits on

¹ It should be noted that the two coins of Hadrian recorded in Wheeler, *Verulamium*, 131, as being sealed beneath the building-level of the forum were in reality one of Hadrian and one of Faustina I, and were found *above* this level. *Antiq. Journ.* xvii (1937), 41 and fig. 5. For the date 79, see p. 69, n. 2.

² *V.C.H., Hertfordshire*, iv (1914), pl. iv.

³ *Antiq. Journ.* xvii (1937), 38 ff.

⁴ *Ibid.*, xx (1940), 500–3.

⁵ *V.C.H., Hertfordshire*, iv (1914), 134.

⁶ *Trans. St. Albans Archit. and Arch. Soc.* 1949, 13–25.

SITE G: NORTH EDGE OF FORUM

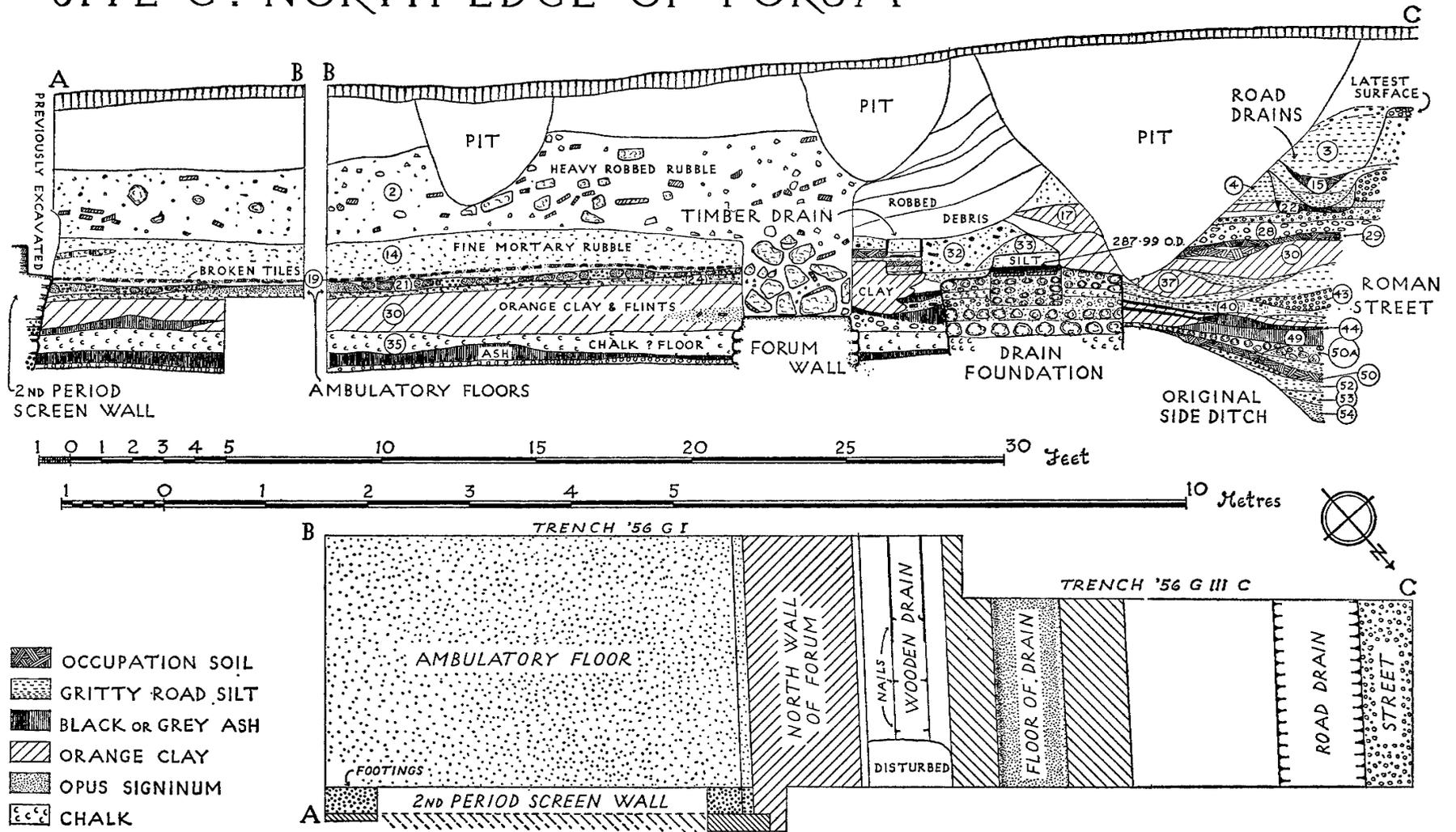


FIG. 21. Section near the west corner of the forum ambulatory, 1956 Site G (scale 1: 60).

(35); alternatively the thick bed of ash may perhaps be connected with the mint of Cunobelin, debris from which was found not far off (pp. 30 f.).

The external wall of the forum of flint and mortar, 3 ft. 5 in. (1.04 m.) wide on a footing 4 ft. 1 in. (1.24 m.) wide, had been robbed down to its lowest tile bonding-course, the imprint of which remained (pl. VII *a*). There was evidence (fig. 21) of a second offset, reducing the wall by a further 6 in. on its inner face, just below floor-level at 1 ft. 2 in. above the surviving top. The floor of the ambulatory lay *c.* 1 ft. 6 in. (0.46 m.) above the foundation offset, the level having been raised by a make-up (30) of clay and flints presumably derived from the foundation-trenches. The floor itself (24) was of *opus signinum* on a chalk basis, resting on a thin hard-packed layer of sand and pebbles (26) on a white mortar spread. The *opus signinum* had seen much use and areas of it were worn away to the chalk.

The forum was badly damaged in what may be recognized as the Antonine Fire of 155–60. This is evident from Page's account: 'at an uncertain date . . . the whole or nearly the whole of the corridors . . . were burnt and ruined. Over the corridors . . . was a layer of charcoal and at one spot was a considerable quantity of molten lead. . . . Over the layer of charcoal is an accumulation of rubbish a foot deep, on the top of which a fresh floor level was made and the corridors were patched and altered. At this time apparently the south-east and north-west corridors were cut off by low walls 1 ft. 2 in. above the old level.' In the present trench the foot-deep accumulation of burning and debris was missing,¹ but a secondary floor (21) of reused blocks of *opus signinum* patched with rounded river-cobbles was found overlying a thin layer of soil on the original worn floor (24); the new floor appeared to be contemporary² with the secondary screen-wall which was now inserted across the ambulatory. This rested on a trench-built foundation projecting 11 in.; the width of the wall was not recovered, but Page's excavation-trench was seen (fig. 21). The foundation-trench was cut down into (35) at the north-west end but went deeper as it ran south-east, reaching subsoil level at the end of the trench. Page says that the wall 'sags 5 in. in the middle'. Although the external wall of the forum was robbed, three flint courses of the screen-wall could be seen to oversail it by 6 in. (15 cm.), ending vertically against the former wall-face and indicating an offset in it at floor-level.³

The secondary floor was sealed by (20), *c.* 2 in. (5 cm.) of earth and powdered mortar containing small pieces of painted plaster; this would appear to represent a phase of decay with weathering of walls and accumulation of wind-blown dirt in the ambulatory at the end of the building's life. It was sealed by (19), a continuous layer of broken roofing tiles (pl. VI *b*). These did not appear to be a roof-fall *in situ*, but rather an area where tiles destined for reuse had been stripped of their mortar and the broken fragments rejected. The process could have occurred in the fifth century,⁴ in which case Layer 14, a foot-thick deposit of light brown earth with fine mortary rubble, will represent further dilapidation before the

¹ It is just possible that Page mistook Layer 35 for the original floor; it does have burning on it, and here lies 1 ft. 6 in. below the foundation-offset of the screen-wall. Against this view is the absence of any *opus signinum* surface to Layer 35. More probably there is a change of secondary floor-level the other side of the screen-wall. It is a pity that the O.D. level of the ambulatory floor outside Building C was not recorded in 1949.

² In fact it lay 2 in. (5 cm.) below the top of the foundation-offset; but this is probably to be accounted for by compression and subsidence of the layers below.

³ This offset would be hard to account for if Layer 35 was in fact the primary floor of the ambulatory.

⁴ Compare the reuse of tiles in Building XXVII, 1 at this time (p. 225).

robbing of the structure represented by (2), probably in late Saxon or Norman times. There is a possibility, however, that the sorting of the tiles represented by (19) was an earlier event, during a fourth-century reconstruction, and that (14) was laid as make-up for a floor now vanished. The evidence is inconclusive and datable objects were absent.

Street XII/XXVII

At the north-west end of the trench the edge of a street was encountered. It had been built up by successive remetallings to the remarkable thickness of 7 ft. (2.13 m.) above natural subsoil. At the base of the section lay the side-ditch of an early phase of the street; it was 3 ft. deep and originally was probably *c.* 6 ft. wide; by A.D. 78 it had silted up and was levelled off with a layer of large flints and building-debris, evidently from the construction-level of the forum (50 A). There were two layers (49) and (44) of burnt wood-ash above this construction-level, possibly connected with the building process (e.g., with the melting of lead); but Wheeler also found a burnt layer 3-4 in. thick in this stratigraphical position¹ below Building C, and there may have been a minor fire. Soon afterwards a remetalling of the street (43) extended over the former ditch. Layer 29 appears to be the horizon of the Antonine Fire: it was a deposit of occupation-earth and burnt debris, and yielded a burnt mortarium fragment (No. 1385). Later remetallings were accompanied by side-drains (3, 15, and 22 which had presumably been plank-lined.

The sewer

Between the forum and the street a large solidly constructed masonry sewer had been provided (pl. VIIa). Robbing had left only its substructure, 5 ft. 10 in. (1.78 m.) wide. Above a chalk foundation cut into the subsoil lay a footing of two courses of flints, the lower course set in earth, the upper in mortar. From this point upwards the bed of the drain and its walls had been differently constructed, the wall-footings having alternating courses of mortary gravel, chalk, and irregular flints set in mortar; the drain itself had a substructure of flints in mortar carrying a tile-course on which lay a 2-in. bed of *opus signinum* 2 ft. 3 in. (0.69 m.) wide. The walls had been robbed, but between them survived 5 in. of greenish drain-silt which yielded a piece of hard white concrete jacketing carrying the imprint of a pipe *c.* 6 in. in diameter.

A trench 58 ft. further south-west (fig. 89, Trench G II E) revealed a mass of robbed debris of the width, and on the line, of the sewer. At this point the sewer had passed over a large pit some of whose filling consisted of road-silt. The pit was perhaps the soakaway for an earlier street-drain; its filling yielded a group of pottery for which a date of *c.* 160-90 may be suggested (Nos. 1386-92). The sewer is, therefore, unlikely to be earlier than late Antonine. In fact it can be identified with the sewer which reappears in Insula XXVIII after crossing the street (figs. 98, 123); both structural details and the levels support the recognition. It was there found to be integral in construction with Building XXVIII, 1 whose erection was dated *c.* 210-25 (p. 224). The sewer is, therefore, a feature of the early third century. The fall of 3.84 ft. over *c.* 295 ft. represents a gradient of 1 in 77, less than half that (1 in 32) observed between Insula XXVIII and Insula XIX (p. 126). The difference is clearly controlled by the natural valley-slope.

¹ *Trans St. Albans Archit. and Arch. Soc.* 1949, 23.

Between the masonry sewer and the forum wall a timber-lined drain was observed (pl. VIIa). It possesses two structural periods, having been rebuilt at a higher level after becoming choked and overflowing. In the interim report¹ this drain was taken to be later than the sewer; this was because its north-west side appears to be supported by Layer 32, a deposit of mortary debris derived from the robbing of the sewer. This is still a difficulty, but there are nevertheless good reasons for reversing the order. (a) The primary silt of the first wooden drain yielded a sherd of samian form 27, Trajanic or Hadrianic. This admittedly could be residual. (b) The plank sides of the rebuilt drain had been burnt, however, and it is thought unlikely that such a thing could have occurred except in the unusual circumstances of the Antonine Fire of c. 155 when the forum itself was burnt. (c) Finally, the masonry sewer clearly lasted until the end of the Roman period; there is no context for a timber successor, nor is the timber drain likely to be a surface-water duct leading into the sewer: they are too close and parallel. It seems more probable that the sewer replaced the drain and that the latter's relationship with Layer (32) is the fortuitous result of robbing the former.

The timber drain is clearly somewhat later than the construction of the forum, but its original channel lies at almost exactly the level of the ambulatory floor inside; a large deposit of orange clay was laid between the drain and the wall, no doubt for waterproofing purposes. The rebuilt drain exhibited three pairs of opposed nails (fig. 21), 18 and 24 in. (0.45 and 0.61 m.) apart; they had fixed the side-planks to the floor-board.

It is clear that there was a rapid build-up of soil and road-silt between the forum and the rising levels of the street, a state of affairs to which, because of medieval robbing, Layer 4 is now the sole testimony surviving; the sewer itself, doubtless once at least 3 ft. deep, will have been completely subterranean. The site lies at the bottom of the Bluehouse Hill lane, which in medieval and later times had been eroded deep into the hillside: the same processes had doubtless been at work in Roman times, washing soil and silt downhill to the vicinity of the forum. It may have been appreciation of the changes resulting from this build-up which led to the construction of the large sewer in Severan times. Unfortunately we do not know how far up the hill the sewer continued.

THE ANATOMY OF THE FORUM

Problems of detail still remain to impede full reconstruction of the arrangements of the forum. Page's plan² annotates the overall width (north-west to south-east) of courtyard and ambulatories as 373 ft. (113.69 m.), and it also fixes the positions of Buildings A and B in relation to them. Wheeler's 1949 plan³ was the first to depict the overall shape in any further detail; it was drawn after he had fixed the position and shape of Building C and with the advantage of Lowther's planning of parts of three rooms at the east corner of the basilica complex.⁴ The building, however, is depicted by Wheeler with angles of not quite 90 degrees: only in this way could the south-east side be made a straight line.⁵ But Lowther's plan shows the east corner to be a right-angle; and if we accept that the building was indeed rectangular, which should surely be assumed until disproved of an early public building erected on virtually

¹ *Antiq. Journ.* xxxvii (1957), 9.

² *V.C.H., Hertfordshire*, iv (1914), pl. iv.

³ *J.R.S.* xl (1950), 105, *Trans. St. Albans Archit. and Arch.*

Soc., 1953, fig. 2.

⁴ *Antiq. Journ.* xvii (1937), 38-42, pl. xxvi.

⁵ The east corner has an angle of 88.5 on Wheeler's plan.

virgin ground, then the south-east corner of the basilica-complex is seen to project *c.* 23 ft. (7 m.) beyond the outer wall of the forum ambulatory (figs. 2, 22). Whether by coincidence or not, this is exactly the width (inclusive of its outer wall) of Lowther's Room 1 at the east corner.

Did the north-west side also project? There is only space at maximum for a 15-ft. (4.5-m.), not 23-ft. (7-m.), projection before the street on this side is reached. In 1956 it was assumed that the sewer on Site G ran the whole length of the forum on its way to the river, a course which would have been precluded by a projection of the basilica on this side; but when in 1957 evidence was found that the sewer avoided the basilica by crossing the street to Insula XXVIII, it seemed possible to suppose that one of the reasons it did so might be that the basilica, projecting as far as the street, left no room for the sewer. Alternative plans of the basilican area are seen on figs. 2 and 123 (pp. 2, 292).

With projections at both ends, the basilican block would measure *c.* 410 ft. (124.97 m.), a figure which has the attraction of being very nearly the equivalent of 375 *pedes Drusiani*.¹ But without the projection on the north-west side, the basilican block measures *c.* 398 ft., which is almost exactly 410 *pedes monetales* (but no significant figure in *pedes Drusiani*²). Either dimension is accordingly convenient on grounds of probability. Persuasive for the shorter figure is Page's observation³ that Bicknell found 'a length of 10 ft. of the north-west wall [of the basilican block] . . . at a depth of 8 or 9 ft. . . in the north-west corner of the Vicarage garden which slightly projects into the churchyard. Here was found a carefully laid wall . . . 4 ft. 6 in. wide . . .'. The wall probably continues the line of the outer wall of the ambulatory (figs. 2, 22) but is 13 in. (33 cm.) wider; it cannot be the wall of a projection, which would lie outside the garden; nor does it seem likely that the building possessed two large walls here, only *c.* 12 ft. apart. The thickness of the one described suggests an external wall.

The basilican block, therefore, measured *c.* 398 ft. (121.31 m.) from north-west to south-east; the other dimension, from the back wall of the ambulatory, is 200 ft. (60.96 m.).⁴ Page records three walls 4.5–5 ft. thick within the churchyard (fig. 2). The central and more westerly walls were *c.* 23 ft. (7 m.) apart and the central and more easterly were *c.* 28 ft. (8.5 m.). Five detached column-drums were found lying on the remains of the middle wall. The most westerly wall lies *c.* 94 ft. (28.65 m.) from the wall of the piazza ambulatory, and the most easterly *c.* 38 ft. (11.58 m.) from the external north-east wall. It is clear that these walls are associated with the basilica, and that one or more must have been sleeper-walls for its columns.

Along the north-east side of the complex lay a range of rooms or offices. Lowther⁵ found parts of three at the east corner. Room 1 was 20 ft. (6.1 m.) and Room 2 was 16 ft. (4.88 m.) wide; he did not establish the length (north-east–south-west), but Corder⁶ later showed Room 1 to be 20 ft. 3 in. (6.17 m.) long and established that it had had a hypocaust with flue connecting with the area south-west. It will be suggested shortly that this latter area was originally an ambulatory or portico, but there is nothing in Corder's observations to forbid interpretation of the hypocaust as a secondary insertion, associated with a later division of

¹ 375 *pedes Drusiani* = 409 ft. 4.5 in. = 124.78 m. In *pedes monetales* it is no such significant figure—422 *pedes monetales*.

² 398 ft. = 364.6 *pedes Drusiani*.

³ *V.C.H., Hertfordshire*, iv (1914), 134.

⁴ This is the equivalent of 206 *pedes monetales* or 183.2 *pedes Drusiani*.

⁵ *Antiq. Journ.* xvii (1937), 38–42.

⁶ *Ibid.*, xx (1940), 500–3.

the ambulatory into rooms. A very similar alteration is attested at Silchester.¹ In what would then be a third phase, Rooms 1 and 2 were abolished, the flue blocked, and a new, much larger, room measuring 43 ft. 9 in. by 33 ft. (13.33 by 10.05 m.) was formed at the corner.

Page's north-east wall under the Church did not extend as far as the south-west wall of the basilican block; this possibility is excluded by Corder's observations² in 1939. It seems probable, therefore, that the basilica itself was shorter than the length of the block and was flanked on its south-east side by an ambulatory or portico, to which a small patch of tessellation, recorded further south-west, probably belongs.

The dimensions of the walls found by Lowther at the east corner are relevant to this possibility. The front (north-east) wall of the range, facing Watling Street, was only 2 ft. (0.61 m.) wide. Room 1 at the corner had side walls 3 ft. 6 in. (1.07 m.) wide, although the inner one was reduced to 2 ft. 6 in. (0.76 m.) by an offset each side about 1 ft. above the floor. Room 2 was divided from Room 3 by a wall only 1 ft. 9 in. (0.53 m.) wide above its foundation offset. The dividing wall below the parish hall was 2 ft. 6 in. (0.76 m.) wide below offset level. Thus Room 1 had substantially stronger walls, intended, perhaps, to bear more weight than those of the rest of the range, which will not have been designed to stand more than one storey high. Room 1, and the ambulatory beyond it, may have carried an upper floor.

In 1972 during reconstruction of the parish hall which lies close to the Museum, it was seen that the range of offices continued as far as the more southerly entrance on the north-east side of the forum;³ and in 1955-6 return-walls 15 ft. (4.57 m.) apart had suggested the same thing on the south side of the more northerly entrance. Ranges of five or six offices are known behind certain urban basilicas,⁴ and they occur also in a similar position in military *principia*. The great length of the Verulamium basilica has clearly permitted a much larger number of rooms.⁵ Moreover, the range may have been two rooms deep. Beneath the parish hall in 1972 it was seen that the wall dividing the last two rooms south-east of the more southerly entrance to the basilican block extended inwards beyond them to a distance of at least 34 ft. 6 in. (10.52 m.) from the outside face of the north-east wall. Its junction with Page's wall can have lain only a short distance beyond the area examined. The wall suggests that there may have been a double range of offices, 40 ft. (12.2 m.) wide overall, arranged back to back (though not extending as far as Room 1), but some perhaps undivided, on this side of the basilica. The arrangement is exactly paralleled in the London forum, built only *c.* 20-30 years later, and is illustrated in restored form on fig. 22.

It will be observed that offices are lacking around the ambulatories of the Verulamium forum piazza, although with walls 3 ft. 6 in. (1.07 m.) wide these ambulatories probably carried an upper storey. The need, however, for municipal record- and tax-offices, rooms for the magistrates, *scholae*, etc., certainly existed. In a range 40 ft. deep (as now proposed along the north-east side of the basilica) even an *aedes* and a *curia* could both be incorporated. The range of offices behind the basilica at Silchester, which probably includes the *aedes* and *curia* there, is 30 ft. deep; 40 ft. here is not extravagant.

The Agricolan inscription of 79 had fallen from over an entrance, which was probably

¹ *Britannia*, ix (1978), 464 f.

² *Antiq. Journ.* xx (1940), 500-3.

³ This excavation is unpublished. I am indebted to Mr. Gareth Davies for access to the results. For the entrance,

see below.

⁴ At Caerwent, Silchester, Wroxeter, and probably Leicester.

⁵ The same is probably true at Cirencester.

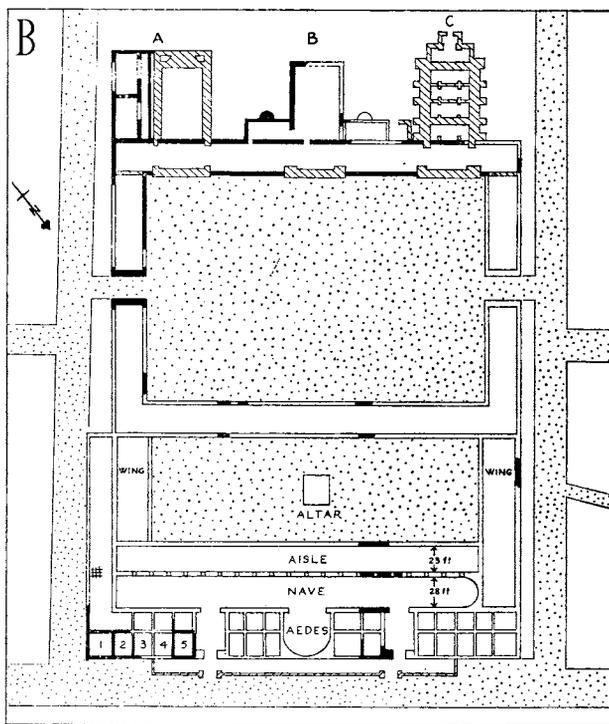


FIG. 22. First-period walls actually known in black.

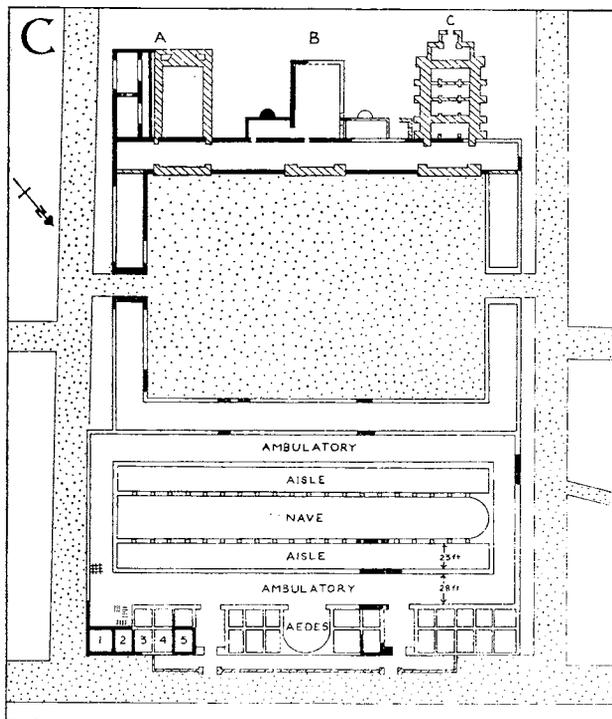


FIG. 23. First-period walls actually known in black.

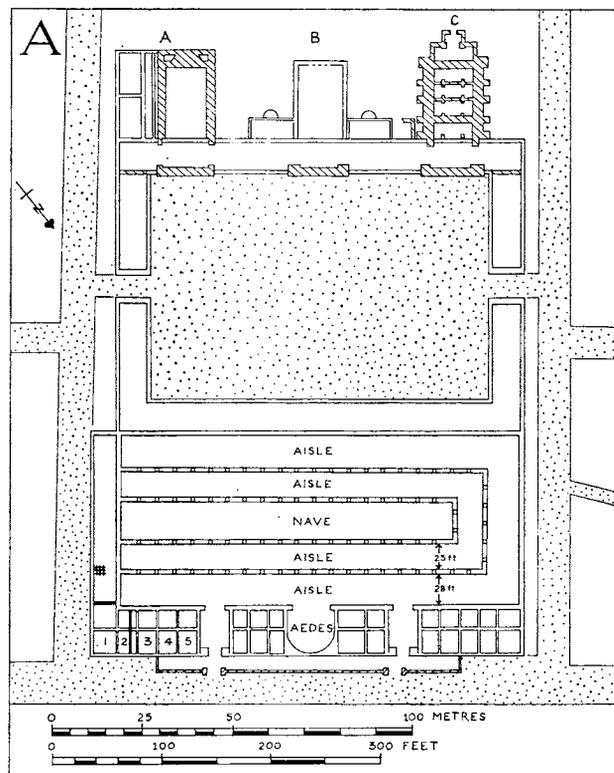


FIG. 24. Secondary alterations of rooms 1 and 2 shown.

FIGS. 22-4. Forum reconstructions A, B and C
(drawn by A. Wilkins).

c. 12 ft. wide. Its position at one-third the length of the basilican block implies a second entrance symmetrically disposed further south-east, c. 145 ft. (44 m.) away, one angle of which was seen in 1972. There is room for both *curia* and *aedes* in this 145-ft. space; but on the whole it is more likely that the *aedes* (the shrine which housed the patron goddess (*tutela*) and possibly also the Emperor's image) would lie symmetrical to the central cross-axis of the basilica, or at any rate in the centre of the 145-ft. space, and the *curia* should be sought elsewhere. It may have lain at the other end of the forum. Building B there measured 62 ft. 9 in. by 40 ft. (19.13 by 12.19 m.) internally and had a tessellated floor. Since it had a door only 5 ft. wide, off axis, in its front wall, it is unlikely to have been a temple; but its character would suit the *curia*.¹ In fig. 22 an *aedes* has been restored on the axis of the 145-ft. space; its internal depth is 39 ft. and its width perhaps c. 43 ft. (13 m.).

If Verulamium was in fact a *municipium*, a *Capitolium* for the worship of the Capitoline Triad (Jupiter, Juno and Minerva, the chief deities of Rome) and an altar or temple of the Imperial Cult would also be expected, but might not have been provided in the original early Flavian plans.

In later times additions were made. Buildings A and C were added and a matching new facade provided for Building B. This work is not closely dated, but a context after the Antonine Fire is perhaps implied by the new screen-walls of that period in the ambulatories. We may consider the temples to be late Antonine or Severan.² Later still, probably at the end of the third century, an outer portico was added to the north-east face of the basilican block: it was 10 ft. 9 in. (3.28 m.) wide and extended at least 50 ft. south-east from the entrance. As it did not appear in Lowther's excavation of the east corner, it is restored on the plans as covering only the central portion and the two entrances. Its presence shows that the offices behind it stood at least 30 ft. high: otherwise they would have been deprived of light.

Any restoration of the plan of the basilica must begin with a consideration of the position and width of the nave. The nearest of Page's 'basilica' walls in the churchyard is only c. 15 ft. (4.57 m.) from the front range of offices and this 15-ft. space almost certainly contained a second row of offices, as already explained. In any case, it could hardly be an aisle on the north-east side of a 28-ft. (8.53-m.) nave, for the other aisle at 23 ft. (7 m.) would not be symmetrical.

The least likely reconstruction is the one which uses only the walls of which we have evidence (fig. 22 (Plan B)). In this, the nave of the basilica will be the 28-ft. space with the double row of offices directly behind it and a single 23-ft. aisle on the other side. Single-aisled basilicas are not unknown in Britain; there is one at Caistor by Norwich, another at Silchester, and the London basilica also has been thought to have possessed only one aisle, which lay on the north side of the basilica, between it and the offices.³ But even the small basilica at Caistor had a nave which was 30 ft. wide; 28 ft. here for a basilica which was over

¹ The hall behind the basilica at Silchester, which was probably the *curia*, was 62 ft. (18.9 m.) long and the apsed *aedes* was 38 ft. (11.6 m.) long. Both were 30 ft. (9.1 m.) wide.

² For their identification as temples see M. J. T. Lewis, *Temples in Roman Britain* (Cambridge, 1966). It is unlikely that a municipal temple for the Imperial Cult would have been considered necessary as early as 79. Probably Buildings A and C represent more grandiose provision for this cult

and for the Capitoline Triad respectively under the Severi. Wheeler found very little dating evidence for Building C, which he assigned to the Hadrianic-Antonine period (*Trans. St. Albans Archit. and Arch. Soc.* 1953, 23-5).

³ For recent discoveries which may suggest that the London basilica did have a second aisle, on the south side of the basilica, see *Current Archaeology*, No. 59 (Vol. V, No. 12, 1977), 370 f.

twice as long seems distinctly inadequate.¹ This arrangement leaves an area 94 ft. (28.65 m.) wide to be accounted for between the front of the basilica and the back of Page's ambulatory. It is hard to see why this area, if an open space, should be cut off from the forum piazza by the ambulatory; fora are sometimes divided between civil and religious precincts with a temple in the latter; but, since the temples at the other end of the Verulamium forum were added only in the late second century, there is no question of this being the arrangement here unless the inner court enclosed an altar, e.g., for the Imperial Cult, as suggested on fig. 22. And even so, religious and civil precincts become inextricably confused.

That this area was at least partly built up is shown by the thick wall found at its north-west edge by Bicknell in the projecting corner of the Vicarage garden (p. 60). The width of 4 ft. 6 in. (1.37 m.) indicates that this wall was structural and 'the immense amount of Roman building-rubbish above the foundations indicates a big masonry building' (Page). One

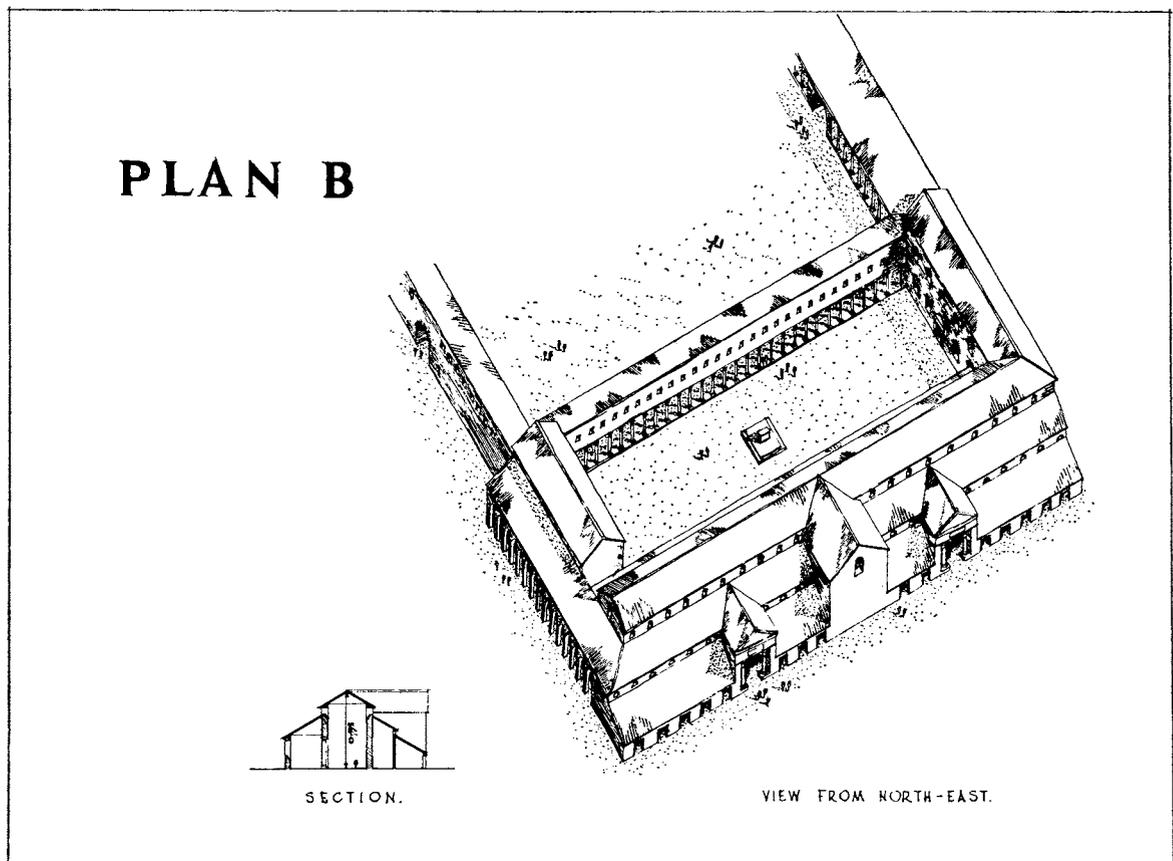


FIG. 25. Restoration of the basilica after Plan B (fig. 22)
(drawn by J. C. Frere).

¹ The proportion of width to length would be 1 : 13; this could be reduced to 1 : 11.8 or 1 : 10.7 by extending the wings, which will be suggested shortly, across the width of

the basilica. But even these reduced proportions are unduly high.

explanation might be that large wings returned south-westwards from each end of the basilica as far as the turn of the ambulatories (fig. 22 (Plan B)). This would be more acceptable if the ambulatories had ended with the ends of the wings, or had turned north-eastwards along their inner faces; but it was precisely in the central area between these hypothetical wings that Page's plan attests the presence of the north-east ambulatory, so that once again the forum is cut off from the basilica. An advantage of a solution with wings is that the basilica can be shortened (as is necessary if the nave is only 28 ft. wide) by extending one or both wings across the basilica's axis. But too many assumptions (e.g., altar, wings) have to be made for this reconstruction to be acceptable on present evidence.

The second possibility (fig. 23 (Plan C)) is that the basilica, as at Silchester or Paris, was surrounded by an ambulatory. If so, it did not run outside the offices in the usual way, but could have divided them from the basilica. If the 28-ft. space is this ambulatory, fronting an office range 40 ft. deep, then the 23-ft. space will be the north-east aisle of the basilica. Restoring a nave 42 ft. (12.8 m.) wide and another 23-ft. aisle (and making allowance for the two further 4½-ft. walls required), we are left with a space of 20 ft. (6.10 m.) between the front of the basilica and the piazza portico as attested by Page; this is probably too great a width to be absorbed in a broader nave, but can be assigned to the circulating ambulatory. The reconstruction is in some ways attractive since it accounts for the available space better than the first solution, but it produces a curious irregularity at the east corner of the suggested ambulatory¹ as well as offering an unnecessary complication in two ambulatories back to back along the south-west front of the basilica. Problems of roofing this complex are considerable, especially on the north-east side. Moreover, it presents an unnecessarily awkward problem of connecting the suggested *aedes* with the basilica across the ambulatory; furthermore, it was precisely on the remains of what has here become the ambulatory wall, which should be solid, that Page records (fallen) column-drums.

These and other difficulties still to be described, together with the necessity of leading the ambulatory between the offices and the basilica, are enough to condemn this design.

The third solution avoids all these difficulties by restoring a quinquepartite basilica (fig. 24 (Plan A)), with a nave of 34 ft. (10.36 m.) flanked by inner aisles 23 ft. (7 m.) wide and outer aisles 28 ft. (8.53 m.) wide, in this way completely filling the available space with a symmetrical and comprehensible building.²

A nave 34 ft. wide is narrower than that of the London basilica, which has a width of 48 ft. (14.60 m.); but it is 1 ft. wider than the nave at Cirencester which, at 33 ft. (10.05 m.) wide and with a length of 275 ft. (83.82 m.) to the chord of its apse, possesses a proportion of width to length of 1 : 8.3; and this seems to be almost exactly the proportion at the London basilica also. This proportion applied to a 34-ft. nave at Verulamium would suggest a length of 283 ft. (86.26 m.), whereas we have a length of 365 ft. (111.25 m.) available, making the nave unduly long and narrow. A possible solution to this difficulty, shown on fig. 24, is to shorten the nave by returning the aisles at the north-west end, as was done, e.g., at Pompeii or in the basilica of Trajan's Forum at Rome. This would result in a proportion of 1 : 9.1. If a nave-apse was introduced as well, the proportion would fall to 1 : 8.5, which is not very different from the 1 : 8.3 at Cirencester.

¹ On fig. 23, this is partly taken up by stairs to the hypothetical first floor (p. 61).

² 34 ft. (nave) + 4.5 ft. (sleeper-wall) + 28 ft. (aisle) + 4.5 ft. (sleeper-wall) + 23 ft. (aisle) = 94 ft.

In the absence of control by further data provided by excavation, the validity of these three reconstructed ground-plans can be tested against restored drawings of their elevations and cross-sections (figs. 25–27). These drawings have been made by Mrs. J. C. Frere. Relevant to their consideration is the recovery in 1957 in Insula XXVIII (p. 247 (fig. 100)) of part of an Attic column-base in white limestone which had been cut through by the foundations of Building 1 and lay in an early second-century context. It was not *in situ*, nor was there any masonry building on that side of the street of sufficiently early date to accommodate it. It can be assumed to have been rejected after breakage, and its size virtually rules out any source other than the basilica, for a column-height of between 31 and 40 ft. (9.45–12.2 m.) is implied by its diameter.

In the elevation of Plan B (fig. 25), the first possible restoration discussed above, the roofs are pitched at 30 degrees and the height is kept to the minimum necessary to give the nave the best possible proportion of width to height. The height to apex of the nave roof is only 56 ft. (17.07 m.), and the columns between nave and aisle are only 24 ft. (7.32 m.) high. This arrangement has the advantage of near-agreement with Vitruvius' advice¹ that

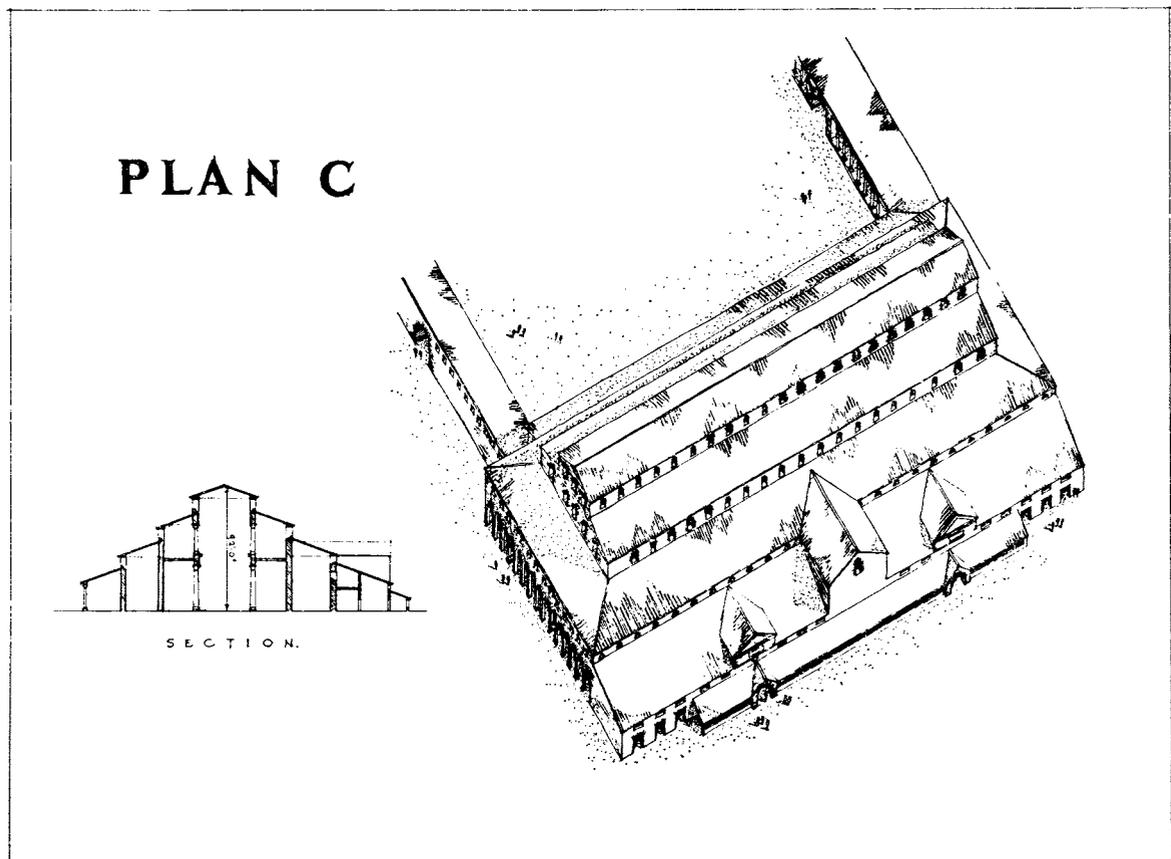


FIG. 26. Restoration of the basilica after Plan C (fig. 23)
(drawn by J. C. Frere).

¹ Vitruvius, v, 5.

basilica-columns should be as high as the width of the aisles; but the height is considerably less than that suggested by the fragment found. If the columns were heightened to suit the latter, this result would spoil the proportions of the nave, making it at least twice as high as it is wide. In any case for a basilica which at the minimum was almost 300 ft. (91.5 m.) long, both height and width are unsuitable.

In designing Plan C (fig. 23), the second alternative discussed above, the ambulatory, which was 28 ft. (8.53 m.) wide on the north-east side, was reduced to 23 ft. (7 m.) on the south-west side in order to permit a maximum nave-width of 43 ft. (13.1 m.), and to 20 ft. (6.1 m.) on the south-east side to conform with the line of the forum on this side (and with that of Room 1); but it was found on reconstructing the elevation that these divergent widths created great difficulties in roof-pitch and height; and in fig. 26 the 20-ft. south-east ambulatory has had to be widened again to 28 ft. to match the return; but this forces the south-east end of the basilica into an illogical position out of line with the piazza ambulatory and with Room 1. Thus Plan C cannot be easily implemented, quite apart from its other disadvantages already mentioned. In the restoration (fig. 26), the roof-pitches have been reduced to an angle of 20 degrees in order to save height; this is rather a low pitch for the British climate. Even so the distance from floor to apex in the nave (now 42 ft. or 12.8 m. wide), is 92 ft. (28.04 m.); the height of the lower columns is 33 ft. (10.05 m.); that of the upper ones is 21 ft. (6.4 m.). The inner row of offices has been given two storeys.

In the reconstruction of Plan A (the preferred solution) the roof-pitches (fig. 27) are again at the minimum—20 degrees—to reduce height, and a single roof spans both aisles to give more space for windows above the roof of the offices. This, however, creates difficulties over providing a tie-beam for the roof of the outer aisle: possibly pillars with engaged columns were used above the colonnade which divides the aisles. Two cross-sections are drawn. In the lower one the height from floor to apex of the nave is 85 ft. (25.9 m.); but this allows ground-floor columns of only 23 ft. (7 m.). The upper drawing has columns of 35 ft. (10.67 m.) to conform better with the fragment found, and these increase the nave height to 95 ft. (28.96 m.).

Is such a height likely? The much smaller basilica at Silchester yielded architectural evidence for a height of *c.* 72 ft. (22 m.).¹ The vast size of the Verulamium building suggests a rather greater height than this, which is supported by the evidence, such as it is, of the surviving base. Yet it must be admitted that for a basilica over 90 ft. (27.4 m.) high and *c.* 300 ft. (91 m.) long a width of only 34 ft. (10.36 m.) for its nave is narrow; but the effect of this would be reduced, as Boon remarked in connection with the Silchester basilica,² if the principal entrance was central, on the side facing the piazza, and thus emphasized the cross-axis leading to the *aedes*.

If, nevertheless, so narrow a nave is felt to be unlikely, a possible easement could be created by suggesting that the 28-ft. space was an ambulatory continuous round the north-east, north-west and south-east sides of the basilica, which would then possess two single aisles each 23 ft. (7 m.) wide (one of them adjoining the piazza ambulatory), together with a nave of 71 ft. (21.64 m.). This width of nave may be thought excessive, however; it would not be

¹ G. C. Boon, *Silchester, The Roman Town of Calleva* (Newton Abbot, 1974), 114. ² *Ibid.*, 112 f.

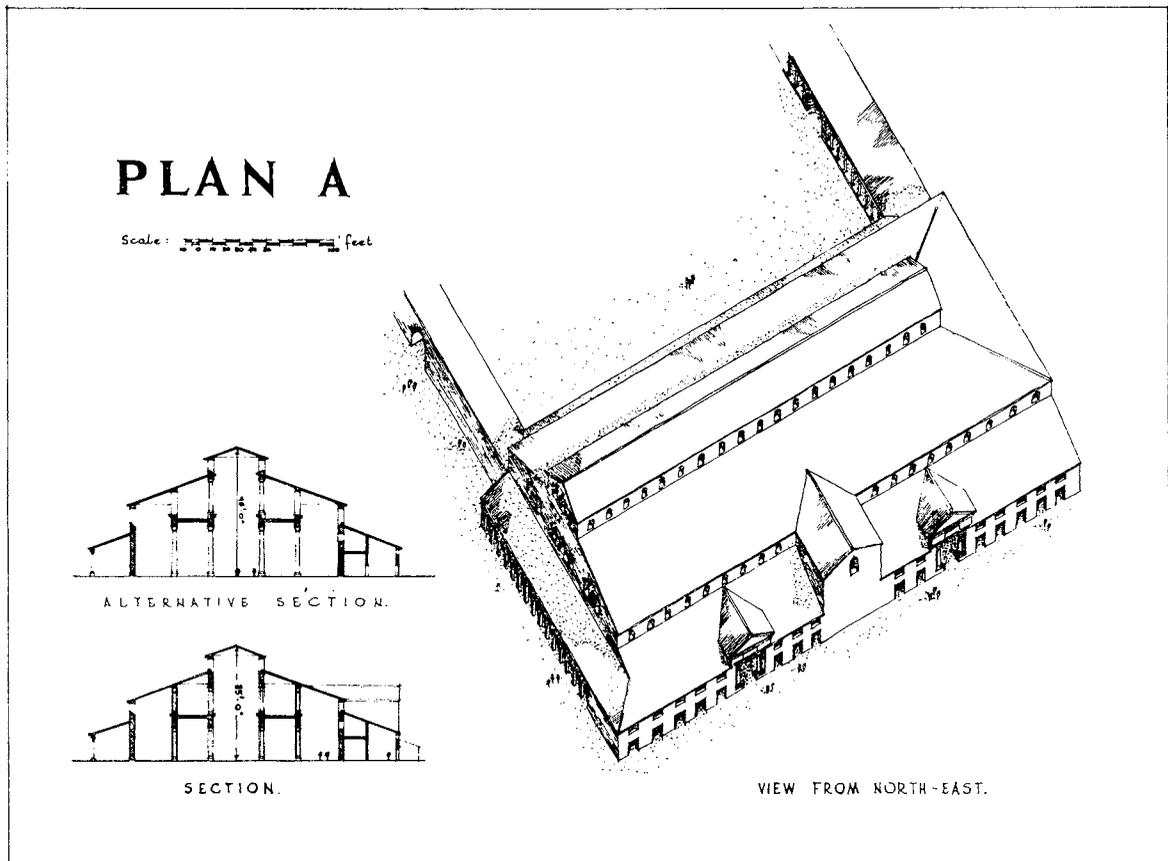


FIG. 27. Restoration of the basilica after Plan A (fig. 24)
(drawn by J. C. Frere).

easy to find timbers—and in sufficient quantity—to span it.¹ Moreover, the suggested position of the *aedes* would call for special treatment of the cross axis of the ambulatory at that point; and, once again, Page's record of column-drums on what should now be remains of a solid wall seems to argue against this solution.

The Verulamium forum does not belong to the *principia*-type of forum normal in Roman Britain. Instead it bears resemblances to the Continental type of 'double forum' found at Trier, Paris, Augst, St. Bertrand, Conimbriga, Iader and Virunum, and is earlier in date than all save those at Iader and possibly Virunum. The Verulamium forum may thus be considered as an experimental prototype in forum-design in the north-west provinces, not only in respect of its overall design but also, if we are correct, for its double-aisled basilica. A basilica with two aisles each side of the nave is not paralleled at present in the provinces,

¹ G. C. Boon, *Silchester, The Roman Town of Calleva*, 112 (with 322, n. 20) offers interesting figures suggesting that oak beams longer than 21 ft. (6.4 m.) were hard to obtain, though Diocletian's Price Edict attests beams of fir up to 75 ft. (22.8 m.) (*J.R.S.* lx (1970), 124-5; Marta Giacchero,

Edictum Diocletiani et Collegarum (Genoa, 1974), ch. 12 (p. 160)). Boon notes that the *aula palatina* at Trier required timbers some 27 m. (88½ ft.) long. The gate posts of Longthorpe I (*Britannia*, v (1974), 12) were thought to be 26 ft. 6 in. (8.08 m.) long.

of course, although at Rome itself the Basilica Julia affords a prototype; yet few really large urban basilicas in the western provinces have so far been adequately explored.¹ More data, both here and elsewhere, are required.

THE FORUM INSCRIPTION²

In the autumn of 1955 five pieces of Purbeck marble panel (pl. IX), four of them inscribed, were found during construction-work in the yard of St. Michael's School; they lay in robbed debris covering the remains of the original external north-east wall of the forum just south-east of an entrance *c.* 12 ft. wide, over which the inscription had presumably been set. Emergency excavation revealed no further pieces of inscription but showed that, probably in the late third century, a portico had been added to this side of the forum. Two lines of the inscription were very efficiently erased upon the *damnatio memoriae* of Domitian in 96 and are difficult to read. The inscription was promptly published by Mr. R. P. Wright³ whose reading is:

[Imp. Titus Caesar divi] VESPA[siani] F VES[pasianus Aug.]
 [P.m. Tr. p. viiii imp. xv Cos. vii] DESI[gn. viii Censor Pater Patriae]
 [et Caesar divi Vespas]IAN[i f. Do]MI[tianus Cos. vi design. vii]
 [Princeps Iuventu]TI[s Collegiorum omnium Sacerdos]
 [Cn. Iulio A]GRIC [ola Leg. Aug. pro] PR
 ...]VEI [...]NATA[...]

In 1957 the late Professor Donald Atkinson, apparently without autopsy of the stones themselves, published another reading based on the transposition of the two upper fragments:⁴

[Imp. T. Caesar]E VE[spasiani f.] VESPA[siano Aug. Pont.]
 [Max. Trip. Pot. viiii Imp. xv Cos. vii] DESI[gn. viii P. P. Censore]
 [Et Caesare Vespas]IAN[i f. Do]MI[tiano Cos. vi design. vii]
 [Principe Iuventu]TI[s Collegiorum omnium Saerdote]
 [Per Cn. Iulium A]GRIC[olam Legatum Augusti pr.] PR
 [Respublica Catu]VEL[launa Civitate Romana do]NATA

He justified the omission of *divus* on the ground of the early date after Vespasian's death. The reading was contested by Wright⁵ mainly on the ground that the F of fragment (b) could not be the E suggested by Atkinson.

It might be thought that the last line was a curious way of recording promotion to the rank of *municipium*, which involved only the city magistrates in the prospect of Roman

¹ That this one owed unusual features in its design to Frontinus' interest in technical matters is a possibility incapable of proof.

² In this report the date of the inscription is taken as 79. W. Eck, 'Senatoren von Vespasian bis Hadrian', *Vestigia*, 13 (1970), 48 f. and 127, has suggested that a date in 81 is possible since Titus is known to have been *consul designatus viiii* in that year. In line 2 the reading would have to be changed to *tr. p. xi imp. xvii cos. viii desig. viiii*, and in line 3 to *cos. vii desig. viii*. From the archaeological viewpoint there is little to choose between 79 and 81. For the reasons given

on p. 9 I prefer 79. Here it is sufficient to add that the alternative reading in line 2 would make it project by one letter at each end, an appearance which may be thought improbable. The change in line 3 from *cos. vi desig. vii* to *cos. vii desig. viii* would upset the balance of that line by two letters.

³ *Antiq. Journ.* xxxvi (1956), 8-10; cf. *J.R.S.* xlvi (1956), 146.

⁴ *Antiq. Journ.* xxvii (1957), 216 f.

⁵ *Antiq. Journ.* xxvii (1957), 217 f.

IMP·TITO·CAESAR·DIVI·VESPASIANI·F·VESPASIANO·AVG
PM·TR·P·VIII·IMP·XV·COS·VII·DES·IG·VIII·CENSORI·PATRI·PATRIAE
ET·CAESAR·DIVI·VESPASIANI·F·DOMITIANO·COS·VI·DES·IG·VII·PRINCIPI
IVVENTVTIS·ET·OMNIVM·COLLEGIORVM·SACERDOTI
CN·IVLIO·AGRICOLA·LEGATO·AVG·PRO·PR
MVNICIPIVM·VERVLAMIVM·BASILICA·ORNA

a

IMP·TITO·CAESAR·DIVI·VESPASIANI·F·VESPASIANO·AVG
PM·TR·P·VIII·IMP·XV·COS·VII·DES·IG·VIII·CENSORI·PATRI·PATRIAE
ET·CAESAR·DIVI·VESPASIANI·F·DOMITIANO·COS·VI·DES·IG·VII·PRINCIPI
IVVENTVTIS·ET·OMNIVM·COLLEGIORVM·SACERDOTI
CN·IVLIO·AGRICOLA·LEGATO·AVG·PRO·PR
CIVITAS·CATV·VELLAVNORVM·FORO·EXORNATA

b

IMP·TITO·CAESAR·DIVI·VESPASIANI·F·VESPASIANO·AVG
PM·TR·P·VIII·IMP·XV·COS·VII·DES·IG·VIII·CENSORI·PATRI·PATRIAE
ET·CAESAR·DIVI·VESPASIANI·F·DOMITIANO·COS·VI·DES·IG·VII·PRINCIPI
IVVENTVTIS·ET·OMNIVM·COLLEGIORVM·SACERDOTI
CN·IVLIO·AGRICOLA·LEGATO·AVG·PRO·PR
RESPVBLICA·VERVLAMIVM·LATI·DO

c

FIG. 28. The forum inscription: possible reconstructions of the text (scale 1:20).

citizenship. Another objection to Atkinson's version is the ablative case used for the emperor's name without a preposition. On so prominent an inscription, imperial names would be expected either in the nominative, as donor (in which event the preposition *per* would be in order at the start of line 5), or else in the dative, as recipient of the gratitude or structure offered by the dedicator in line 6. In the first alternative either Verulamium or the Catuvelauni would appear in line 6 in the dative case, quite possibly without a verb; but a difficulty is that although . . . *nata* is clearly part of a verb, no suitable active verb to signify the emperor's action can be found to incorporate it. These letters, for which likely expansions other than *donata*, *ornata* or *exornata* are to seek, virtually demands a formulation with the emperor in the dative, and, therefore, the governor's name in an ablative absolute. The participle . . . *nata* will be either part of an ablative absolute explaining the nature of the benefit (as in fig. 28, *a*) or else in the nominative case agreeing with a suitable noun (e.g., *civitas* or *respublica*) as in fig. 28, *b*. Agricola's name in the ablative involves omitting *per*, and so limits the possible length of the first half of line 5—and with it the length of line 6, which is no more than two letters longer at each end. The second half of line 5 could be lengthened by writing *legato Augusti* in full, as Atkinson saw; this provides more space in line 6 between *vei* and . . . *nata*. Unless, however, three or four letters are supplied after . . . *nata*, *Respublica Catuwellaua* for the start of line 6 is ruled out, since it projects by five letters beyond *Cn. Iulio* in the line above. These extra letters are not easy to envisage.

Since line 6 is the final line, and the only one not concerned with the imperial house and governor, it seems unlikely that it contains merely names of city magistrates such as Ti. Claudius]Ver[ica and T. Flavius]Nata[lis. Far more probably the letters *vei* conceal either *Verulamium* or some case of *Catuwellauus*. For the remainder, the choice lies between a formula containing a building dedicated to the emperor (e.g., *basilica* or *forum*), or else one expressing gratitude for a benefit received. Fig. 28, *a* and *b* show that the inscription could have related to the new basilica or to the forum on which it was set up. Atkinson's *civitate Romana donata* is a formula of the second kind; but it seems unlikely that Verulamium had received this particular benefit. Some other phrase, relating perhaps to the *ius Latinum* is to be sought. Fig. 28, *c* shows a possibility.¹ Its adoption would involve assuming that the promotion of Verulamium to the rank of *municipium iuris Latini* was a recent event, the gift of Vespasian.² The possibility is discussed on p. 28. If this is accepted, there would be no particular difficulty in the substitution of Titus' for Vespasian's name in line 1. Reasons exist, however, for believing that the promotion was the work of Claudius rather than of Vespasian and, if it was, it would be unlikely to be mentioned in this form on an inscription set up in 79.

In 1965 a new study was made of the stones by the late Lt. Col. M. A. Lloyd, who produced a fresh reading of the erasures in line 4 and made a measured drawing at $\frac{1}{2}$ -scale. This is shown in fig. 28, *a*. It provides a yardstick for the length of lines, that shows that *municipium* could have figured in line 6. Col. Lloyd confirmed by means of a tracing that the F of fragment (b) could not be E, as supposed by Atkinson, for the bottom serif of an

¹ Inscriptions with a *ius Latinum* formula are rare. Two may be cited.

(i) *ILS* 6780: . . . *legationem . . . ad Latium maius petendum*.

(ii) *ILS* 6848: . . . *Gemellens(es) . . . Latio . . . impetrat(o) . . .*

² B. Galsterer-Kroll (*Chiron*, iii (1973), 277–306) has shown that the *ius Latinum* could be granted to a *civitas*

peregrina without a concurrent grant of municipal rank. The formula on fig. 28, *c* would accord with this conception; but since the question of Verulamium's status is bound up with Tacitus' description of the city as *municipium* (p. 26), the point is really irrelevant here.

E would have reached the extant part of the stone. He also re-calculated the height of the erased letters in line 3 as $3\frac{11}{16}$ in. (94 mm.) rather than the $3\frac{1}{4}$ in. (82 mm.) reported by Wright. The lines and intervals between them have the following heights: line 1: $4\frac{19}{16}$ in. (117 mm.) + 1 in. (25.4 mm.); line 2: $4\frac{3}{8}$ in. (106 mm.) + $1\frac{2}{8}$ in. (28.5 mm.); line 3: $3\frac{11}{16}$ in. (94 mm.) + $1\frac{4}{16}$ in. (32 mm.); line 4: $3\frac{6}{16}$ in. (85.5 mm.) + $1\frac{6}{16}$ in. (35 mm.); line 5: $3\frac{3}{8}$ in. (81 mm.) + $1\frac{2}{8}$ in. (28.5 mm.); line 6: $3\frac{2}{8}$ in. (79.5 mm.). The letters thus show a reduction in height in each line, but the intervals increase until that between lines 5 and 6, which is reduced.

Col. Lloyd died before he could make drawings of alternative versions; these (figs. 28 *b, c*), have been drawn by Mrs. A. Wilkins. It is clear that no firm conclusions about the status of Verulamium can be based on the inscription as we have it, but the possibilities of line 6 seem to be confined to these three formulae. The lengthening of the second half of line 5 by using *Augusti* provides insufficient space for useful alternatives.

Fragments (a) and (b) both have the straight edge of an original component slab on their left side. The width of slab as restored is 38.75 in. (98.4 cm.). Two more slabs of similar width reach exactly to the left margin of the inscription. At the right-hand end a slab exactly three-quarters of this length was used, if the inscription is correctly restored. If PONT, as in the Atkinson version, is added to line 1, one-and-a-quarter slabs would be required at this end instead of a three-quarter length one. The only way of employing exactly four slabs of equal length would be to transfer PM to line 1; but since this would disrupt the spacing of line 2 it has no advantage.

INSULA XV: THE THEATRE

THE theatre was excavated by Dame Kathleen Kenyon in 1933-4 and was shown to have been built *c.* 140-50.¹ Her account makes it clear that few earlier deposits underlay the *cavea*. It seemed possible, therefore, that the site of the theatre had been in some way associated as an open space with the temple in Insula XVI which lies axially to the south-west of it. However, Lowther's excavation of the temple² showed that this was not built before *c.* 90, whereas the excavations of 1957-8 in the adjacent part of Insula XIV proved that the frontage of Watling Street was already closely built up even before the Boudiccan rebellion. Thus questions arose concerning the Watling Street frontage of the theatre-insula in the periods before the theatre itself, and before the temple behind it, were built. Did Claudian buildings continue along the Watling Street frontage of Insula XV? Was it possible that the theatre was built only after the area had been cleared of previous structures by the great Antonine fire of *c.* A.D. 155? The date given (*c.* 140-50) for its construction was sufficiently close to make this a suggestive possibility. On these problems Dr. Kenyon's report was not fully informative. Accordingly, with the kind permission of Lord Verulam, it was decided in 1959 to dig a trial trench 7 ft. square through the seating-ramp of the theatre to examine the underlying deposits. The trench was cut in the most south-westerly segment of the ramp (fig. 29) close to the 3 ft. passage-way which terminated the seating-ramp on its north-east side in the theatre's first period, but which was incorporated in the ramp in the second. The site lay *c.* 42 ft. (12.8 m.) from the frontage of Watling Street.

Although part of the area of the trench encountered previous excavation-trenches, it was possible to examine an undisturbed section through the seating-bank. This consisted mainly of stiff orange clay with many flints, and overlay a spread of mortar and the robbed remains of the wall of the first-period staircase-passage. The wall had no foundations, but lay on a 2-in. layer of grey silty soil which yielded a sherd of samian form 27, C.G., Trajanic or Hadrianic in date. This silt rested on a 3-in. layer of cobbling which lay on a 4-in. layer of yellow brick-earth. Excavation, continued to a depth of 2 ft. below this brick-earth, revealed only natural deposits of gravel, over which a deposit of brick-earth occurs in this part of the city. The surface of the natural brick-earth lay at 287.19 ft. above O.D., which is almost 3 ft. (0.89 m.) higher than at the nearest point excavated in Insula XIV some 220 ft. (67 m.) south-east; but it is 1.27 ft. *below* the level of natural at Building 4 in Insula XXVIII some 300 ft. (90 m.) to the south; the rise in level is, therefore, not anomalous.

It seems clear that at no stage did timber-framed buildings exist in Insula XV; had any been destroyed, for instance in the Boudiccan fire, some traces of burnt daub must have appeared. The implications are interesting. At some early date the area was cobbled and remained an open space; until the *temenos* of the temple was surrounded by a wall early in the second century, the area would enjoy unrestricted access to the temple. But the temple itself was no earlier than 90; no trace of any earlier temple was found by Lowther, and the soil below the temple itself was thought to have been cultivated. It may be suggested that the

¹ *Archaeologia*, lxxxiv (1934), 213-61.

² *Antiq. Journ.* xvii (1937), 28-38.

VERULAMIUM EXCAVATIONS

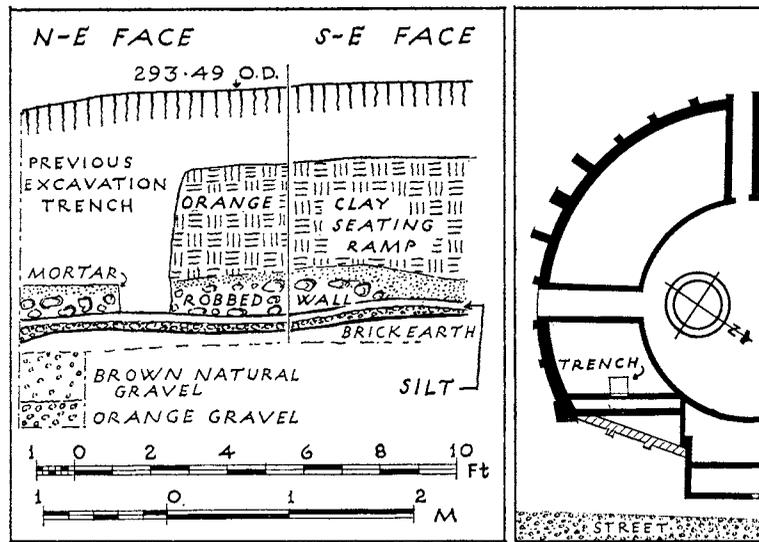


FIG. 29. The theatre: plan and section of exploratory trench, 1959 (scale 1:60).

area between Watling Street and the south-west end of the temple precinct (Insula XVI) had been reserved for a temple from the foundation of the city, whether or not an earlier timber-built shrine, yet to be discovered, was actually built. The lower end of the site (Insula XV) was cobbled, presumably for the use of congregations assembled on festival days, and shortly before the middle of the second century the theatre itself was put up, no doubt partly to provide for the better management of festivals. Association of temples with Romano-Celtic theatres, often in an axial relationship as at Verulamium, is a common phenomenon in Roman Gaul¹ and is found in Britain also at Gosbecks Farm near Camulodunum. These observations involve a reassessment of the purpose of the theatre, which can now be seen more clearly as at least partly a cult-structure, as well as throwing interesting light on the question of long-term town-planning and the development of urbanization at Verulamium. There is no proof that the theatre was built after the fire of 155. Indeed, the dating of the oblique street XIV/XXVIII which is shown below (p. 88) to have been laid down *c.* 130 or soon after, and whose purpose seems to be to lead directly to the theatre, strongly suggests that the theatre was planned late in the reign of Hadrian, even if actual construction was delayed till after 140.

¹ E.g., Sanxay. A notable urban example is at Augst.

THE NORTHERN MONUMENTAL ARCH

THE northern Arch was examined in 1961 because of plough damage. An aerial photograph by Professor J. K. St. Joseph (pl. VIIIa) shows part of the course of Watling Street. In the middle of the field north of the Gorhambury Drive it makes a slight bend towards the west (*c.* 0.5°); this happens at the point where it emerges from the 1955 Ditch (which is not itself visible on the photograph). The position of this ditch, with what appeared to be a solid causeway for the street, was determined with the magnetometer by Dr. M. J. Aitken (fig. 31). Just south of the bend three parch-marks can be seen. Excavation showed that the north and south marks are those of an exceptionally high surviving level of road-metal: it lies within 6 in. of the surface of the field. Elsewhere ploughing and robbing has removed the metalling to a lower level. The central rectangular parch-mark is caused by the foundation of a monumental arch. It measures 42 ft. 5 in. (12.93 m.) by 9 ft. 9 in. (2.97 m.), but the width is reduced by two offsets to 7 ft. 9 in. (2.36 m.) at the top (pl. VIIb).¹ Except at the ends it survives to within 6 in. or 1 ft. of the present surface and is scraped at each ploughing; no certain indication of the form taken by the superstructure remains.

The foundation was a solid block of coursed flints and mortar. A trench had been cut through the street at a date when the metalling was already 4 ft. (1.22 m.) thick; there were at least five superimposed road-surfaces, all earlier than the monument. Into this trench the foundation was laid; the builders had put it up against the south face of their excavation, but on the north side had widened the top of the trench to a depth of just over 2 ft. (0.61 m.) to provide work-space, from which level they provided a built face; later this construction-trench was filled back with large flints.

At the south-west end the foundation was traversed by two conduits, formerly tile-floored, which had been extensively robbed (pl. VIIb). The inner one showed by tile-imprints that its floor had been 2 ft. wide. The tile bedding lay 10 in. (25.4 cm.) lower than that of the other conduit, and had a fall towards the north-west of 3.90 in. across the 8-ft. surviving width, i.e. about 1 in 25. The dimensions of this channel are very similar to those of the sewers found in Insulae XII and XXVIII (pp. 58, 248); and it can be accepted as another, which reached its outfall through the Chester Gate. It was not found there by Wheeler because the north-east carriageway, over which the modern Drive passes, could not be examined. Part of the course of the robbed sewer can be observed on the air-photograph.

The narrower conduit, 16 in. (40.6 cm.) wide, had had a floor of 8 *tegulae* laid with flanges downward. It had a fall towards the north-west of 0.36 in. in 8 ft. (i.e., 1 in 266). These levels were necessarily measured on the mortar seating from which the tiles had been robbed. The fall in this conduit could easily be reversed by tiles *in situ*. As a second sewer would seem to be unnecessary, this conduit is taken to be the passage for a water-main of wooden pipes joined with iron collars. The remains of several such mains have been found in the city (p. 20). At the Chester Gate what is probably the continuation of this one was noted by Wheeler (*Verulamium*, 70 and pl. XXIII).

¹ The foundation of the southern arch (Wheeler, *Verulamium*, 76) was *c.* 47 ft. (14.33 m.) long by 14-15 ft. (4.27-4.57 m.) wide.

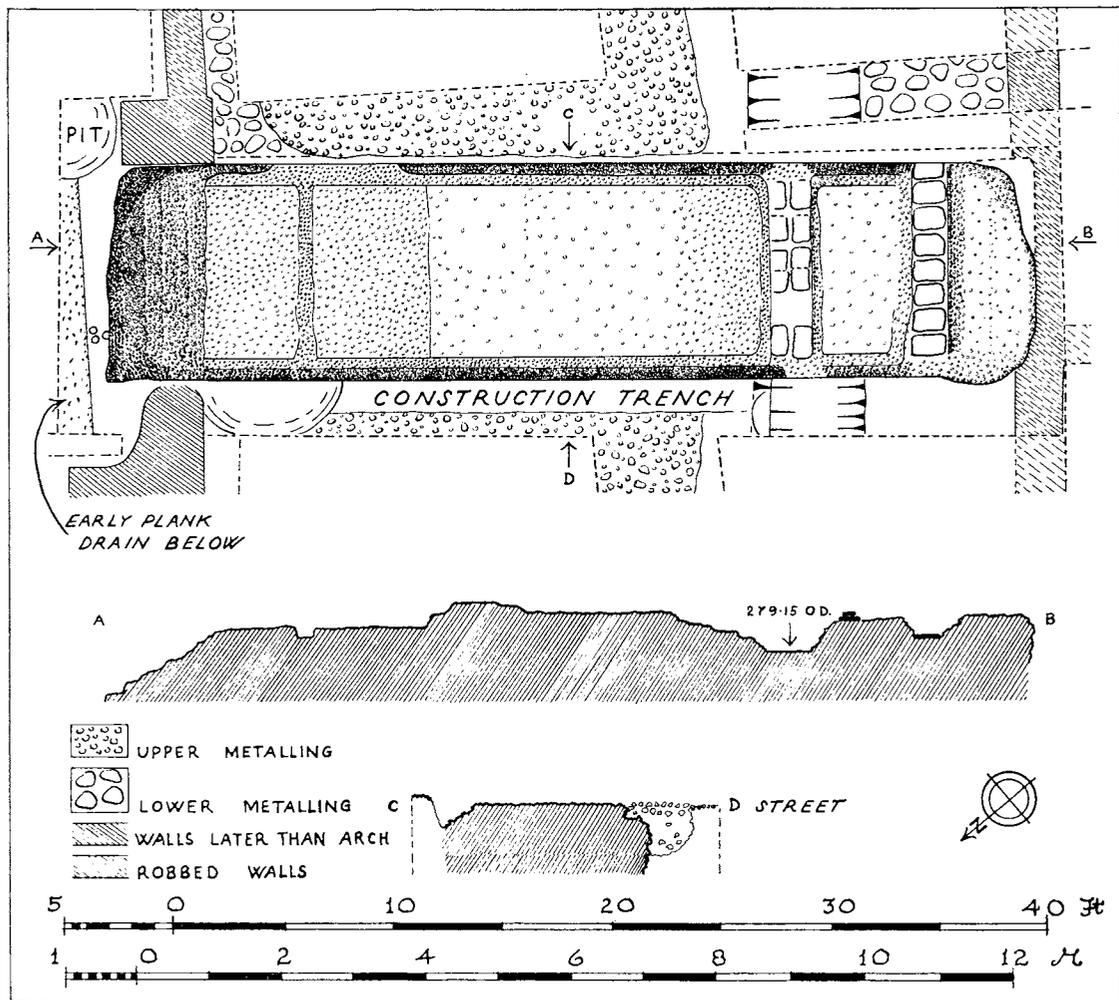


FIG. 30. The northern Monumental Arch

A patch of mortar on an earlier road-surface showed the continuation of the pipe-line's course just north of the monument; in a corresponding position, sealing the construction-trench, another patch of mortar lay at the base of the robber-trench of the sewer. Below this robber-trench on the north side of the arch was a band of fine sandy silt 6 in. thick still *in situ*. This must represent an earlier timber-lined sewer superseded by the masonry one, probably when the monument was built. Its floor lay 1 ft. below that of the tile-imprints of the latter.

Towards the north-east end of the monument its surface is crossed by a narrow channel 8 in. (20.3 cm.) wide, but narrowing towards the south-west and with a number of flints stuck in it (pl. VIII*b*). This channel did not appear to be functional and may have been the result merely of solution of a weak mix of mortar. The reconstruction-drawings (fig. 33) show, however, that it can hardly be the result of seepage down the face of the north-east pier, for it lies too close to the north-east end. A little further south-west the topmost course of flints

ended on a straight edge right across the monument. This had a purposeful look, and if caused by the robbing of a pier it favours Reconstruction no. 1. No corresponding line occurs at the other end where the robbing is more extensive.

The contemporary surface of the foundation has been ploughed away, as has the contemporary street-level which must have been laid over the packed construction-trench. Thus no direct evidence remains, in the form of piers or metallated areas, for the appearance of the superstructure. The proportions would be consistent with either a single or a double arch. The problem is discussed below.

Date of the Arch (see Table, p. 82)

The evidence for placing the Arch in the third century is small in quantity but convincing. At the level of the base of the construction-trench, 2 ft. below the surviving street-surface, was a layer of road-silt (Layer Z I 14) which yielded a sherd of samian of form 45, later than 170, together with two coarse-ware Antonine dishes. Into this silt was cut the timber-lined drain which preceded the masonry one. The silt (15) in this drain yielded a sherd of plain-lipped colour-coated beaker of a type which probably did not make its appearance until some years after 200. Above the level of this drain came over 2 ft. (0.62 m.) of road-metalling, through which the construction-trench had been cut. The construction-trench itself (8) yielded only residual samian and two second-century coarse-ware vessels.

Below the north-east side of the Arch there was a useful sequence of deposits. A layer of road-silt (9) yielded Neronian-Flavian samian and two coarse-ware vessels datable to the period *c.* 50–80. Resting on this silt was a timber-lined drain (fig. 30) whose silt (7) yielded Flavian samian. The drain was sealed by a dark layer of occupation-soil (6) yielding Neronian and Flavian samian together with four sherds of coarse pottery not later than *c.* 60–85. This was covered by a layer of dark road-silt (5) containing a sherd of samian bowl in the style of *Advocisus* (*c.* 160–90). Above this came robbing-levels, but Layer 5 was earlier than the monument.

It is evident that the deposit of late Antonine sherds and even a third-century beaker-herd took place some considerable time before the Arch was built, for the 2-ft. thickness of road-metalling which succeeded them probably represents more than one re-surfacing. A date of *c.* 250–75 for the monument should not be unreasonable.

Purpose of the Arch

No scrap of inscription or of architectural decoration was found; to assess the purpose of the Arch we must rely on deductions from its date and position. It lies just behind the point where the first-century defences (as traced by magnetometer survey) cross Watling Street. At a corresponding position at the south end of the city—though there apparently just *outside* the line of the 1955 Ditch—lies the arch discovered by Wheeler. Was this arch also of the third century? Wheeler dated it to the late Antonine period (*Verulamium*, 77) on grounds of pottery contained within a street-layer said to be contemporary. The pottery is not listed or published and cannot be checked; but Wheeler also compared the lavish use of yellow mortar in the arch-foundation with that of the city gates. The question must obviously be left open; but the probability that the two arches are roughly contemporary is obvious.

The 1955 Ditch was substantially filled in during the period 150–70 and after 200 there

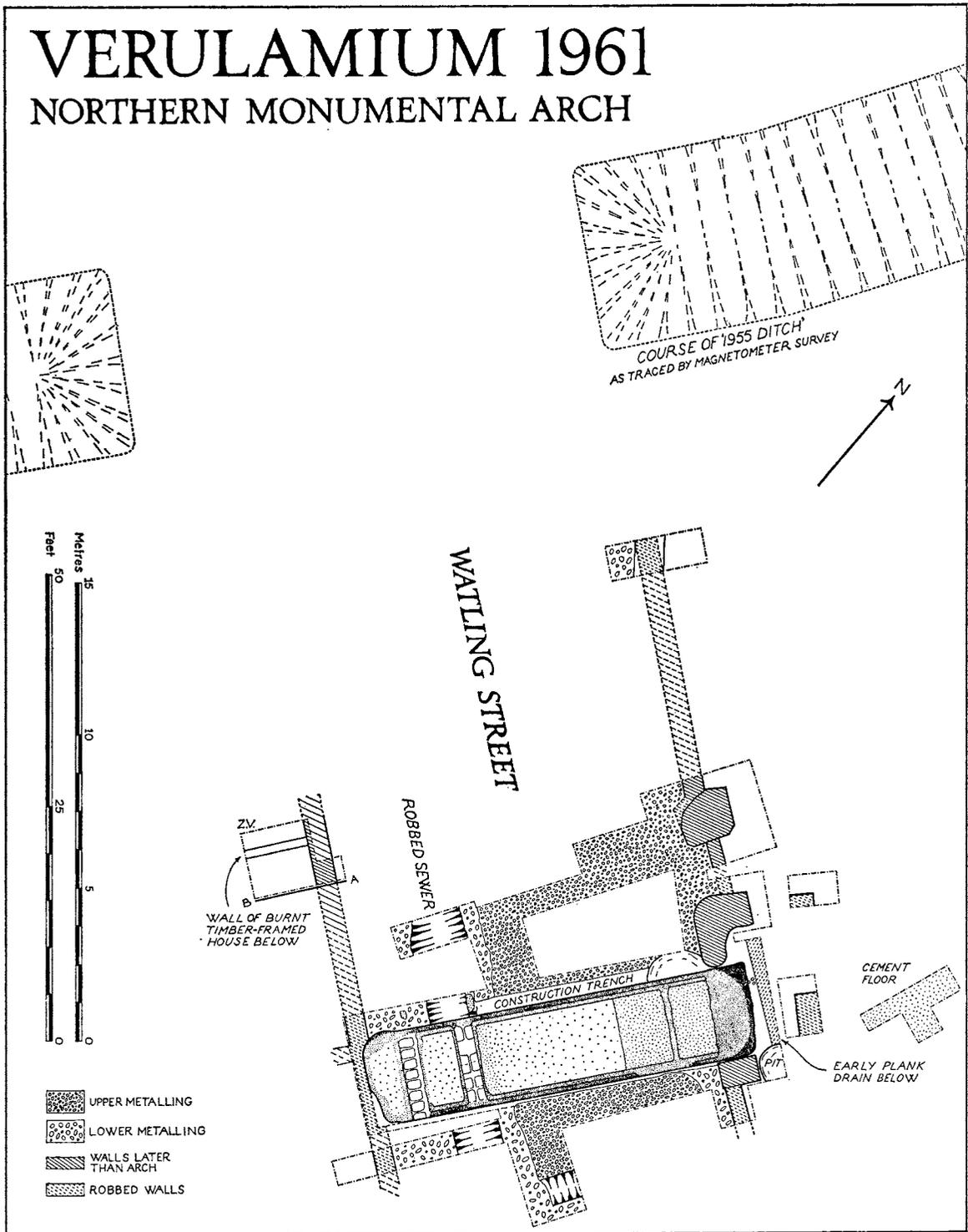


FIG. 31.

can have been little but tradition to mark its course. Yet that course is likely to have possessed both legal and religious significance if the earthwork represented the *pomerium* of the original foundation. About the middle of the second century and probably *c.* 150–60 the area of the city was enlarged to almost twice its previous size (119 to 225 acres: 48 to 91 ha.) by the abortive circuit of the Fosse Earthwork. Then, or soon afterwards, monumental stone gateways were provided at the north and south exits of Watling Street. The date of the north Arch is certainly too late to coincide with these events. It appears to link better with that of the third-century city wall of *c.* 265–70 which gave Verulamium a new definition and regularized the enlargement at *c.* 200 acres (81 ha.).

It may be suggested that during the third century, and perhaps *c.* 270, the opportunity was taken to build commemorative arches at the ancient boundary of the *municipium*. There is often a close connection between a monumental arch and a city gate.¹ At Verulamium it is certain that the arches are neither gates themselves nor connected with gates which still existed at the points in question. The 1955 Ditch doubtless possessed gates of timber; these have not been found, and their location and excavation would call for a large-scale investigation; but at least it is clear that there was no masonry gate at either place. Among the many motives for erecting monumental arches which may be seen on surviving inscriptions² one which recurs is that of creating a symbol of urban status and a statement of municipal privilege.³ This is well exemplified at Kasserine, *Colonia Flavia Cillium*, in Africa Proconsularis, where an arch bears the original inscription *Coloniae Cillitanae Q. Manlius Felix C. filius Papiria Receptus post alia arcum quoque cum insignibus coloniae . . . erexit . . .*; and a later addition of Constantinian date refers to *ornamenta liberta(tis) restituta et vetera civitatis insignia*.⁴ In sum, such an arch might be expected to carry statues and inscriptions illustrative of the status and history of the city in question. At Verulamium the arches erected at the boundary of the original Claudian *municipium* appear to have a public urban rather than a private commemorative context and might be expected to commemorate that emperor's benefactions to the city and the privileges granted by later rulers.

The environs of the Arch (fig. 31)

Resources to excavate widely round the Arch were lacking. In Trench Z V, west of the monument, excavation encountered part of two rooms of a timber-framed building destroyed in the Antonine Fire. In the north room was an occupation-layer containing slag on a floor of clean gravelly earth; the south room (fig. 32) had a floor of yellow gravelly clay (10) with an occupation-layer on it (9); the eastern part had a spread of chalk of later date inserted over this with no indication of a partition; the chalk may be a spread from the chalk footing of the later flint wall. Layer 8 was of clean red burnt daub; Layer 7 was more earthy, perhaps because weathered for a period or perhaps disturbed during rebuilding. Layer 5 was a levelling of brick-earth, make-up for (4), a layer of gravelly earth which may be the original floor of the flint-and-mortar building. The floor yielded a mortarium-herd of 150–200, and was covered by a second floor (3) which yielded slag and a herd of third-century colour-

¹ See I. A. Richmond, *J.R.S.* xxiii (1933), 149–74.

² See Kähler, 'Triumphbogen', Pauly-Wissowa *RE* VII A.

³ See Frothingham, *Revue Arch.*⁴ vi (1905), 219 ff.

⁴ *CIL* viii, 210; cf. also, e.g., the Djemila inscription, *ibid.*, 8313, 20141, etc.; Uchi Maius, *ibid.*, 26264; Althiburos, *ibid.*, 1825, 27775.

1961 TRENCH Z V: S-E FACE

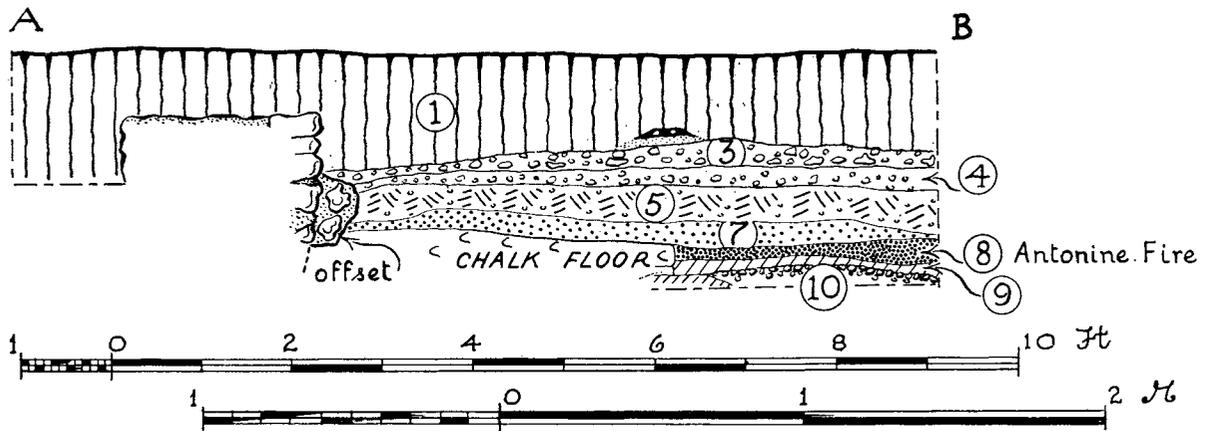


FIG. 32. (Scale 1:25).

coated beaker. Above this the plough, bouncing over the wall, had bitten deep; but two small patches of *opus signinum* floor on yellow mortar testified to the former existence of a third level of floor which may date to the late third or early fourth century.

Although the scanty finds can prove no more than a late second-century date for the masonry building, in fact the chalk footings of the wall ran past the Arch, where they could be seen to be later than it. The foundations of the Arch encroached a little upon the line of the wall but did not cut it; instead, the chalk foundation narrowed slightly to respect the monument, and a fillet of clay intervened between the two. The building is not likely to date before *c.* 260–80.

On the opposite side of Watling Street some foundations, very largely robbed, indicated that the fourth-century building-line had encroached some 4–5 ft. on the faces of the Arch, narrowing the street to a width of 37 ft. (11.30 m.).

The restoration of the Arch

The foundation is notably narrow for its length.¹ Wheeler's arch measured *c.* 47 by 15 ft. (14.30 by 4.55 m.); but that arch was free-standing in an open junction of streets. The northern Arch seems to have been fitted to a street which was already built up: its flanks, being concealed, did not call for width and its two faces were all that mattered. Moreover the outer 4–5 ft. at the north-east and *c.* 1 ft. at the south-west were later encroached upon by buildings. These facts, together with the position of the conduits and the other surface marks, afford some control in any attempt at restoration. There is insufficient space to allow for a triple arch. Arches with two passages are rare, but known at Saintes (A.D. 17)² and Langres (late second century)³ in Gaul and in Italy, for instance at Verona.⁴ Their form is dictated by their association with twin-portalled city gates or, at Saintes, by position on the bridge.

¹ Cf. the arch of the Sergii at Pola which measures 30 ft. by 8 ft. in plan; but this arch is only 'a thin facade or ornamental screen' behind the city gate. *J.R.S.* xxiii (1933), 151 and plan, fig. 2.

² Grenier, *Manuel*, i, 569, fig. 223; *CIL* xii, 1036.

³ *Ibid.*, 555–7 and fig. 216; cf. *J.R.S.* xxiii (1933), 168, n. 84.

⁴ *J.R.S.* xxiii (1933), 165, fig. 9 and pl. xviii, 2.

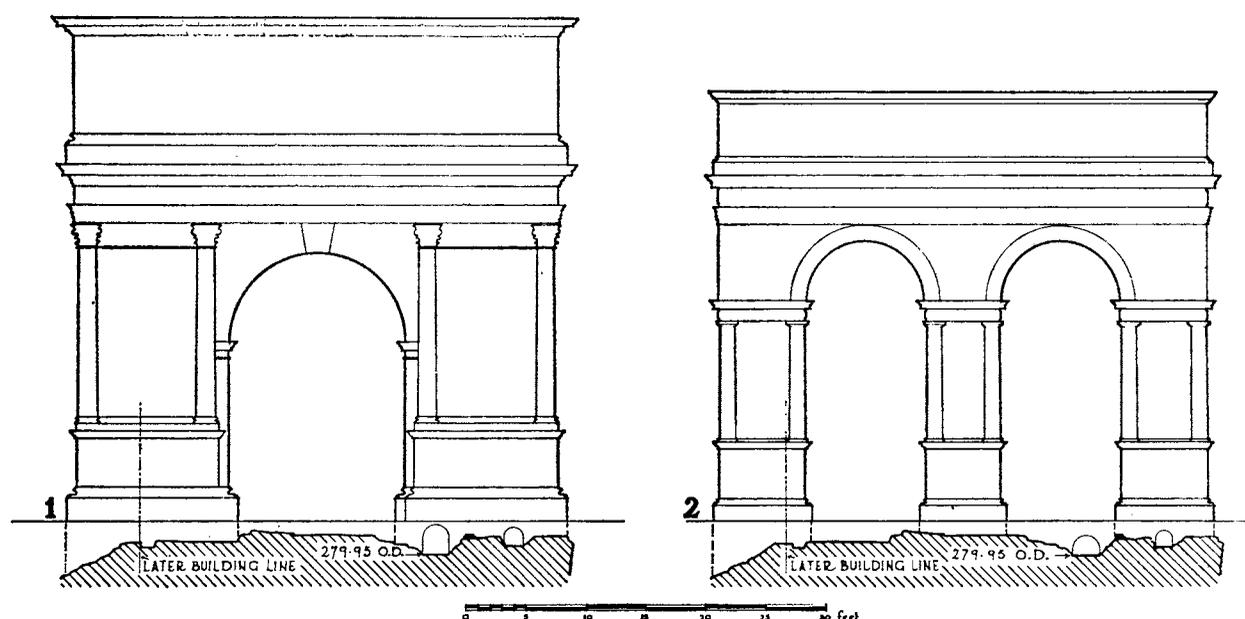


FIG. 33. Reconstructions of the Arch
(drawn by J. C. Frere).

Though association with a nearby gate is absent at Verulamium, similar planning for the movement of traffic may have affected the form at least of the north Arch. At the south arch the survival of what may have been part of a pier hints also at a two-archway form. The arch at the theatre, also bestriding Watling Street, had a single arch with a span of only 14–18 ft.

Fig. 33, 1 shows a reconstruction based on the style and proportions of the Arch of Titus at Rome, with one archway 13 ft. wide. This model has the merit of allowing the conduits to pass below the mass of the south-west pier where there is no restriction on the height of the sewer (which was doubtless vaulted at this point). However, the piers are somewhat wide in proportion to their height and the arch is massive in relation to the width of the foundation. Fig. 33, 2 is based on the arch at Saintes. A very simple version of the Tuscan order has been used in order to reduce the overall height as much as possible. This has been done in view of the exceptionally narrow width of the foundation, which suggests a relatively light structure above. The overall length of the monument has been taken as the length of the foundation less 12 in., which allows a 6-in. offset below ground-level. The road-level has been assumed. This reconstruction allows the sewer to run below the street (which the air-photograph suggests it swings out to do); and though it is shown as vaulted it may well in this case have been roofed with slabs. Attractive as this second reconstruction is, it allows for passage-ways of only 7-ft. width. Moreover, Reconstruction 1 has two other advantages over it: (i) the straight line across the surface of the foundation 14 ft. 9 in. (4.50 m.) from the north-east end, which looks like the edge of a robbed pier (pl. VIII*b*), here falls exactly into place; (ii) the encroaching building-line obscures almost totally the north-east pier of Reconstruction 2, but does not so disastrously affect Reconstruction 1, which in any case might rise above the roof-line. Reconstruction 1, therefore, on balance is the more satisfactory.

DATING EVIDENCE: NORTHERN ARCH AND ENVIRONS

DEPOSIT	SAMIAN	OTHER POTTERY
6I Z I 9 road silt below north-east end of arch	18 S.G. Neronian-Flavian	Type 100, <i>c.</i> A.D. 50-80
6I Z I 7 silt in timber drain	15/17 S.G. probably pre-Flavian	
6I Z I 6 occupation-soil over 7	18, 67, S.G. Flavian 35/36 first-cent. Lezoux ware, Neronian to early Flavian	Nos. 1393-5
6I Z I 5 road silt over 6	37 C.G. style of Advocisus A.D. 160-90	
6I Z I 14 road silt below north side of arch	15/17 S.G. Neronian 18, 27, 35 S.G. Flavian 45 C.G. after A.D. 170	No. 1396 Type 720
6I Z I 15 silt of drain cut in 14	15/17, 27 S.G. Neronian-Flavian	No. 1398
6I Z I 8 construction-trench of arch	27, 30(?) S.G. Neronian-Flavian	No. 1397 cf. Types 2052, 680
Z V 10 floor of half- timbered building burnt in Antonine fire	36 S.G. first cent. 18/31 or 18R S.G. probably pre-Flavian	
Z V 7 earthy burnt daub	27 S.G. Flavian-Trajanic 31 C.G. Antonine	cf. Type 1940
Z V 6 make-up over 7	18/31, 33 C.G. Hadrianic	Type 2591
Z V 5 make-up	33, 37 C.G. Hadrianic-Antonine	Types 843, 1005 and cf. 976
Z V 4 gravelly floor of masonry building		cf. Type 1464
Z V 3 gravel floor over 4		cf. Type 1812

INSULA XIV

THE striking succession of timber-framed and then masonry-based buildings which were found along the north-east side of this insula, facing Watling Street, has been described in Volume I. What remains for publication here is the work undertaken in 1957 along the south-east side of Insula XIV, which resulted in the discovery of Building 3 and a series of half-timbered structures in its vicinity (XIV, 3 A, 3 B, 3 C). The excavation of the north-west end of Building XIV, 3 was completed in 1959, but the ground in its vicinity was found to be so disturbed that little was learnt of lower levels.

Building XIV, 3 was important because of its date. The discovery that it overlay a coin of Valentinian first introduced us to the possibility that theories about the decline of Verulamium and the towns of Britain in general during the second half of the fourth century, which had gained wide currency through the support of Collingwood, might be mistaken. In the area surrounding the building almost 5 ft. of stratification survived, in which three successive periods of timber-framed buildings could be identified. It was unfortunate that this part of Insula XIV, together with a wide strip in Insulae XXVII and XXVIII, all had to be explored within a single season. They all lay in a field of allotment gardens, whose cultivators could not be dispossessed until very shortly before work started on the new road. Thus excavations could not begin before the summer of 1957; by 1958 road-construction was in full swing. This combination of shortage of time with extra depth meant that despite a concentration of effort on the area, and the presence of a work force of almost 120 people for just over seven weeks, the lower levels were explored on an inadequate scale. At this stage we had not yet developed the open system of excavation which was successfully used in 1958 to trace half-timbered buildings on the Watling Street frontage as described in Volume I; indeed, it was dissatisfaction with the results obtained by conventional methods—the grid system—in 1957 which suggested a new approach. It must be admitted that the plans obtained of the second- and first-century buildings in 1957 are by no means satisfactory. Walls between rooms seem very often to have lain under balks left between trenches; their presence can be deduced from changes in the nature of floors from trench to trench; but the resulting plans (figs. 34–36) are unavoidably subjective.

Enough was found to establish that the area was fully covered by buildings in Period I, which ended in A.D. 61. Layers of burnt daub in Trenches V V and V XV were identified as traces of the Boudiccan destruction of that year; elsewhere the buildings had not been burnt, but they can be assigned to Period I partly because of the level at which they appear and partly because, without exception, they are succeeded by a layer *c.* 1 ft. thick containing pottery from Flavian down to Trajanic-Hadrianic times. Only *c.* A.D. 130 was this end of the insula rebuilt. The thick layer of mixed earth which separated the new floors from those of Period I contained no buildings, and, even where no burnt deposit proved the point, it seems certain that the lowermost buildings ceased to be occupied in 61, and that for over half a century the area was used only for garden cultivation behind the flourishing commercial premises of Periods II A and II B, which are described in Volume I.

Associated with this somewhat belated reconstruction was Street XIV/XXVIII, which

was now laid out on an oblique course from the forum to the area soon to be occupied by the theatre. This had the effect of reducing the size of Insula XIV, which had previously included the whole area now formed by XXVIII. In earlier interim reports¹ the construction of this street was placed after the Antonine fire, but it is now clear that it was laid down sooner (p. 88). Yet it was not until the period 145–50 that the greatest density of building was reached (fig. 36). By that time the somewhat narrow range of buildings erected along Street XII/XIV *c.* A.D. 130 had been replaced by others extending much further back towards the north-west. Greater utilization of available space had already been noticeable along the north-east frontage of the insula, and no doubt reflects increased commercial prosperity. The present Period III buildings (fig. 36) should be associated with the reconstruction described as Period II D in Volume I, and dated *c.* A.D. 150.

Sometime between 155 and 160 occurred the second great fire of Verulamium. Traces of it were not wanting here, but the burnt deposits were neither so deep nor so widespread as along the north-east frontage. All the Period III buildings were indeed destroyed, but some of them may have been pulled down either to prevent the fire spreading or as the result of only partial damage. After this disaster there is little trace of building-activity in the insula for over a century. A thick deposit of occupation rubbish containing many oysters (Trenches V XIII 7, V XV 6) was allowed to accumulate. But at length, *c.* 270–75, when the new masonry shops described in Volume I were built along the insula's north-east side, although no actual buildings were encountered in the present area, spreads of mortar and gravel, sometimes associated with hearths (e.g., fig. 40, Section L¹–M, Layer 6) indicate a tidying up associated with the reconstruction. Finally Building XIV, 3 itself was built in the south corner of the insula *c.* 375–85, and survived sufficiently long to show a second period of construction, during which extensive alterations were undertaken. It clearly lasted well into the fifth century before eventual collapse.

PERIOD I: BUILDING XIV, 3C, CLAUDIAN

On fig. 34, Wall 1/2 is shown entering the site below the back wall of Building XIV, 1, as described in Volume I. Room 1 was thought to be a street portico. The edge of the street is marked by the wall² in Trench V XI, but little of the street-metalling survived in this trench because of the deep robbing of a third-century masonry sewer which runs down the side of the insula. The presence of a tile hearth in Trench V VIII suggests, however, that by that point the portico had given place to a normal frontage of buildings; yet this is not certain, for a similar hearth was found in the portico of Volume I Period II A (*ibid.*, fig. 10): and it may merely be that facilities were being misused. The structures in Trench V XV were accompanied by a layer of burnt ash; they are notably oblique to the street-line. The floors here and in Trench V XIII were of clay and pebbles, between which the foundation-trenches were of irregular outline and round-bottomed, as if for independent uprights rather than sleeper-beams. This was true of all the foundation-trenches on fig. 34. Similar floors were found in Trenches V II and V X: the structure represented here is differently aligned and probably separate. A little burnt daub was found in Layer II 19 which sealed it. In the

¹ *Antiquity*, xxxviii (1964), 107 f.; *Bulletin of the London University Institute of Archaeology*, iv (1964), 67.

² The wall in Trench V XI was erroneously assigned to

Period II B (A.D. 105–30) in Vol. I, fig. 11. But it is sealed by the thick Flavian-Hadrianic layer (fig. 40, Section L¹–M, Layer 11).

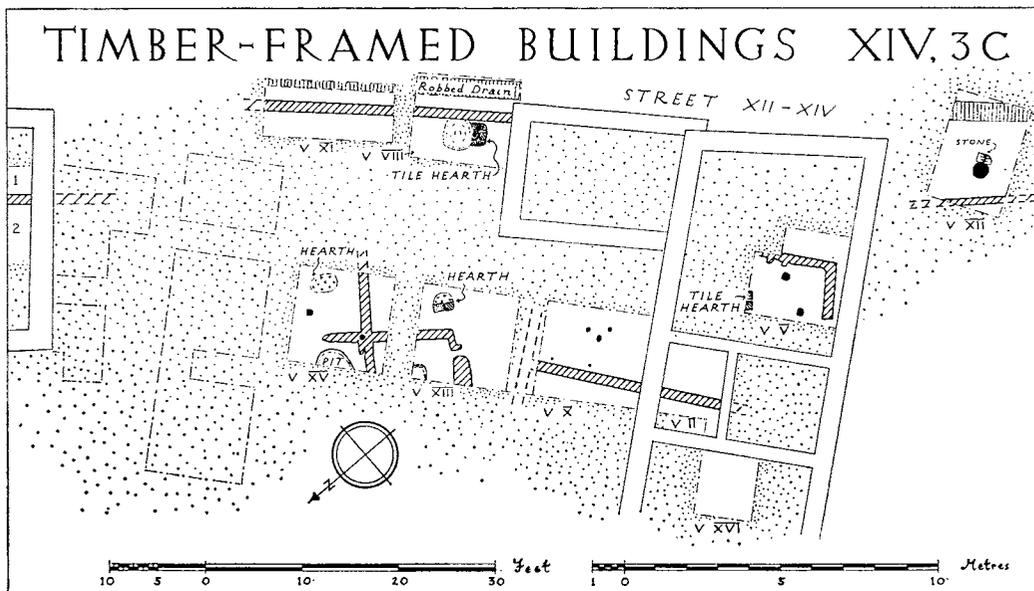


FIG. 34. c. A.D. 50-61 (scale 1:240).

corner of Trench V XII a foundation-trench of this period ran under the line of the later street: south of it was a large post-hole, beside which stood a large block of limestone of roughly triangular shape and 18 in. high.

The dating evidence for Period I can be tabulated as follows:

TRENCH	SAMIAN (All South Gaulish)
57 V V 20 burnt daub	30, 24, 27 pre-Flavian 78 probably pre-Flavian
57 V VIII 21 burnt filling of wall trench	29 A.D. 55-70
57 V VIII 22 primary floor	27 pre-Flavian 18 first century
57 V VIII 19 occupation below secondary floor 18	24 pre-Flavian 29 A.D. 55-70
57 V XI 21 street metalling	18 burnt pre-Flavian
57 V XI 20 primary floor below 14	29, 18 pre-Flavian
57 V XI 19 hollow in 14	29 pre-Flavian
57 V XV 15 hearth under burnt daub	15/17 Neronian 15/17 pre-Flavian
57 V XVI 14 burnt daub	Ritt. 12 probably Claudian

PERIOD II, BUILDING XIV, 3 B, HADRIANIC

As already explained, this part of the insula lay open for a long time after the Boudiccan destruction. A deposit of occupation-earth *c.* 1 ft. thick accumulated to the rear of the shops assigned in Volume I to Periods II A and II B there. At length, *c.* A.D. 130, some timber-framed buildings made their appearance along the south-east frontage of the insula. They have been assigned room-numbers on fig. 35.

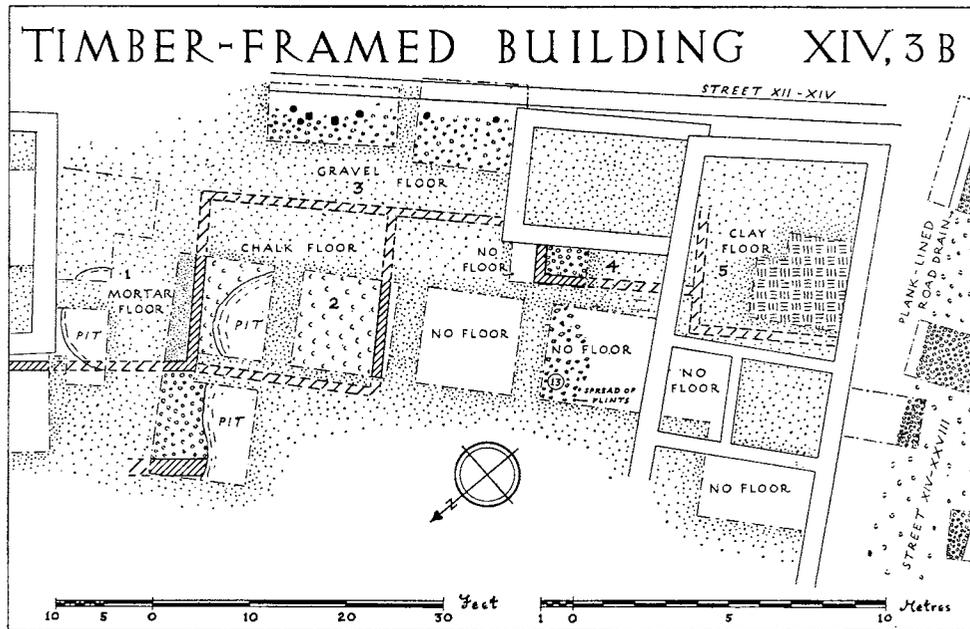


FIG. 35. *c.* A.D. 130-45 (scale 1:240).

Room 1 had a floor of mortar,¹ Room 2 of chalk (fig. 40, Section N-O, Trench V XV 12). Their walls appeared to be built on sleeper-beams set in wall-trenches, but the front of Room 3, which had a gravel floor (fig. 40, Section K-M, V VIII 14, V XI 9), was marked by a somewhat irregular line of post-holes flanking the street. The absence of contemporary floors in Trenches V XIII, V X and V XII shows that the premises were not extensive. Room 5 had a floor of clay (fig. 39, Section F-G, V V 18).

The dating evidence for Period II depends primarily on the contents of the thick layer below and of the floors above it, and can be tabulated as follows:

ROOM	TRENCH	COINS	SAMIAN (All South Gaulish unless otherwise stated)
I	57 T III 20 floor		Already listed, Vol. I, p. 60, including 30, 18/31, Trajanic- Hadrianic

¹ This room is also figured in Vol. I, fig. 15, the plan of *ibid.*, Period II C (A.D. 130-50).

ROOM	TRENCH	COINS	SAMIAN (All South Gaulish unless otherwise stated)
2	57 V XV 13 soil below building	Republican plated denarius, <i>c.</i> 90 B.C. Claudius, small barbarous copy First-century As	Only pre-Flavian and Flavian sherds
3	57 V VIII 17 soil below building 57 V VIII 14 gravel floor 57 V VIII 13 deposit on 14 57 V VIII 9 occupation on 14 57 V XI 11 soil below building 57 V XI 13 soil below building 57 V XI 9 gravel floor		only pre-Flavian and Flavian sherds 33 C.G. Trajanic or Hadrianic 27 A.D. 70-85 18, 27 (two), Curle 11 Flavian 18/31, 27 C.G. Trajanic or Hadrianic 15/17 Flavian 18/31 C.G. Hadrianic 29 Claudian 30, stamp MCTO (in mould) and M[CRESTIO] (S 14A, D 9) A.D. 75-95 37 (three) A.D. 75-95 18 (three) Flavian 18/31 ?C.G. Trajanic 37 A.D. 80-100 30 A.D. 75-95 33 C.G. Rosette stamp second century
4	57 V XVIII 9 occupation on clay floor		18/31 C.G. Trajanic or Hadrianic
Space behind 3-4	57 V XIII 14 soil below level of building 57 V X 14 soil below level of building 57 V X 13 spread of flints on surface of 14, contemporary with building		only pre-Flavian and Flavian sherds 29 Claudian 37 (several), 78 Flavian 29 A.D. 70-85 30 A.D. 75-95 Curle 15, 27, 18/31 C.G. Trajanic and many residual sherds 37 A.D. 85-105 33 C.G. Trajanic 37 C.G. ?Hadrianic 31 C.G. pre-Antonine

ROOM	TRENCH	COINS	SAMIAN (All South Gaulish unless otherwise stated)
	57 V II 19 soil below level of building		37 A.D. 75-90 27, 33, 18/31 C.G. Trajanic or Hadrianic and five residual sherds
	57 V II 15 above 18		27, 33 C.G. Trajanic
	57 V II 14 occupation on 15, contemporary with building		27 C.G. Trajanic 33, 46 C.G. Trajanic or Hadrianic
	57 V XVI 12 soil below level of building		only Flavian sherds
	57 V XVI 11 occupation on 12, contemporary with building		37 A.D. 85-105 18, 33 Flavian 18/31 C.G. Hadrianic ?E.G. Antonine
5	57 V V 19 soil below building	Nero, As, <i>RIC</i> 329 1 Julio-Claudian As (?Claudius I)	many pre-Flavian and Flavian sherds
	57 V V 18 clay floor		37 C.G. Hadrianic Curle 15, 27 C.G. Trajanic or Hadrianic
	57 V V 17 occupation on 18		37 C.G. probably pre-Antonine and two Flavian sherds

It will be seen that the layer of soil below the building of Period II yielded five Trajanic sherds and three classed as Trajanic or Hadrianic. The floors themselves yielded two Trajanic-Hadrianic, three Trajanic or Hadrianic sherds, and one of Hadrianic date; levels on or contemporary with the floors yielded three Hadrianic or probably Hadrianic pieces, two classed as probably pre-Antonine, and one scrap of East Gaulish ware of Antonine date. It would be unsafe to date the building earlier than *c.* A.D. 125-30, and it is likely to be contemporary with Period II C of Volume I, namely *c.* 130.

The date of Street XIV/XXVIII

The street was not part of the original network of Verulamium, for a Claudian building exists beneath it (fig. 41, Section U-V). That building was not replaced. Instead, a deposit of dark greenish occupation-soil (Section U-V, Layer V XII 10), which yielded Flavian samian, was found. Above this came Layer 11, a deposit of building debris including mortared tiles, flints and many unworked lumps of oolite. It seems reasonable to connect this deposit with the clearance and construction of the adjacent forum (*c.* A.D. 75-8). Layer XII 9, dark

soil and stones containing charcoal and oyster shells, yielded Flavian samian and a coin of Vespasian. The accumulation resembles that beneath the buildings of Period II, just described. Above this came the first street-metalling (XII 8), which had an uncambered surface and may have been only a foundation for the succeeding street surface (XII 6). In trench V XXI (fig. 41, Section R-S) Layer 5, containing three sherds of Antonine samian, can be equated with the dislocation caused by the Antonine fire; in the south face of the trench it merged with a burnt deposit. A correlation of levels shows that the street-surface below XXI 5 at 288.85 O.D. must equate with the surface of XII 4 (288.76 O.D.). Thus by A.D. 155-60 the street already exhibits three levels of metalling, and this might seem excessive if, as has been suggested, the street itself did not exist before *c.* 130. However, to judge by the section revealed some 300 ft. to the south-west in Trench 56 G (p. 58), the main street to which it leads (Street XII/XXVIII) had been given a rapid build-up of surfaces, and accordingly thick metalling may have been needed at the junction to bring Street XIV/XXVIII to the right level. A Hadrianic date for this street is confirmed by the fact that silt from it was washed across the empty site of the north-west range of the later Building XXVIII, 1, sealing a layer with pottery down to *c.* 130 (fig. 106, Section Q¹-Q², Trench E IV 9) and itself sealed by a building destroyed in the Antonine fire.

The dating evidence for the street can be tabulated as follows:

LAYER	COINS	SAMIAN (All South Gaulish unless otherwise stated)
57 V XII 10 soil below street		37 (two) 29, 18, 27 (two) Flavian
57 V XII 9 soil below street	Vespasian, dupondius A.D. 78-9, <i>RIC</i> 753 b	37 Flavian 29, 18 (two), 15/17 Flavian
57 V XII 6 metalling		18 Flavian
57 V XII 4 metalling	Tiberius, As, probably <i>RIC</i> 370 ?Nero, As Vespasian, As ?Plated denarius	18 Flavian
57 V XII 3 metalling	Victorinus, <i>RIC</i> 61? Constans, A.D. 341-6, <i>LRBC</i> 152 (worn)	
57 V XXI 5 clay on road		36, 33, 79 C.G. Antonine

It will be shown below (p. 248) that the masonry sewer running beside Street XII/XIV is contemporary with Building XXVIII, 1, dated *c.* A.D. 215.¹ It seems probable that the lowest surface of Street XIV/XXVIII which was sufficiently high to cross the sewer is

¹ It was the north-west wall of this sewer which was encountered in Mr. A. W. G. Lowther's trial trench in 1934 and taken to be probably the north-west wall of the forum (Wheeler, *Verulamium*, 131). The 'street' which ac-

companied its external side (Wheeler, *op. cit.*, pl. cxix) is seen in fig. 40, Section K-L to be a small local patch of gravel of the third century.

Layer XII 4. From an indication in Section U-V it would appear that the drain was vaulted, but a segmental arch here would take it below the surface of Layer 4, through which a trench must have been dug to insert it. The succeeding metalling (3) contained a coin of Constans embedded in it and accordingly is approximately contemporary with Building XIV, 3.

PERIOD III: BUILDING XIV, 3 A, EARLY ANTONINE

The buildings of Period II were demolished *c.* 145-50, and replaced by new ones, still half-timbered but covering much more ground and built to quite a different plan: in the new building only Wall 4/5 and the north walls of Room 1 and of the corridor beyond it were in the same places as their predecessors. These structures had but a short existence, being destroyed in the Antonine fire of *c.* 155-60; only Room 7 showed evidence of re-flooring (fig. 39, Section B-C, Layers 8 (clay) and 7 (gravel)). Burnt deposits were found covering Rooms 1-3, 5, and 7. In Rooms 6 and 9 traces only of burning were present (V XIII 9, V XVI 9) and the fire had evidently been less intense. A gap in the buildings existed between Room 1 and the structures to its south-west. Trench V XV contained no floor of this period; Layers 7 and 9 (fig. 40, Section N-O) represented a wall fallen outwards across it. Access

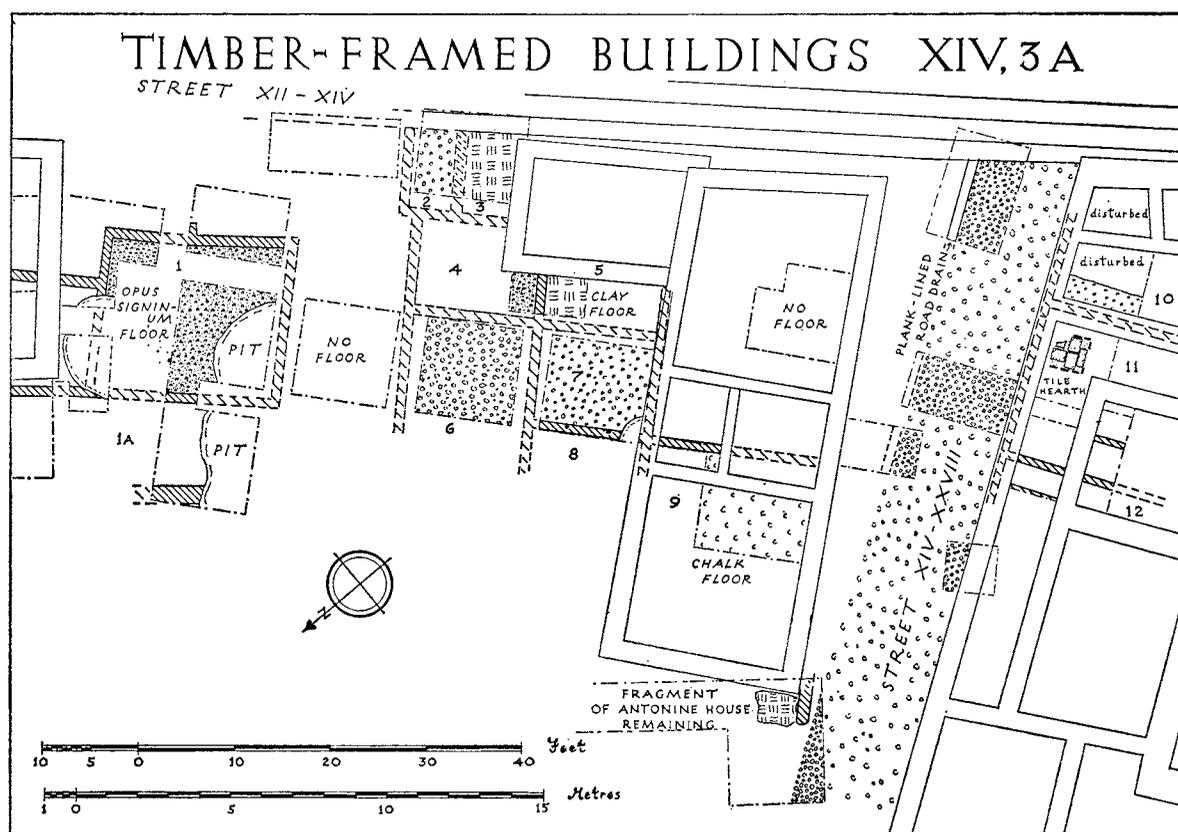


FIG. 36. Antonine, *c.* A.D. 145-55 (scale 1:240).

through the gap was gained north-west of Room 2, in the area of Trench V XI; in this trench no front wall replaced the post-holes of Period II; Layer 8 (fig. 40, Section L¹-M) ran straight across the trench, but on its surface lay traces of fallen burnt debris. Similarly, south-west of Rooms 5 and 7 Trench V V yielded no trace of floor or burnt debris, and must have represented an open space at this period. Fig. 39, Section F-G might at first suggest that Layer 15, the contemporary deposit, had been truncated by later floors and the Antonine fire-deposit removed; but the appearance is due to subsidence by compression under Building XIV, 3; beside the walls Layer 15 rises sufficiently (Section G¹-F¹) to show that no Antonine floors have disappeared.

The Antonine buildings south-west of Street XIV/XXVIII are described under Insula XXVIII.

The dating evidence for Period III can be tabulated as follows:¹

ROOM	LAYER	COINS	SAMIAN (All Central Gaulish unless otherwise stated)
Interspace 1-6	57 V XV 9 collapsed debris		37 A.D. 100-20 Curle 15, 18/31, 27 Trajanic or Hadrianic
	57 V XV 7 collapsed clay wall		37 S.G. A.D. 85-105 31 (?) Hadrianic
	57 V XI 8		18/31, 27 (two), 35/36 Trajanic or Hadrianic 31 (?) Antonine
	57 V XI 7 burnt debris		37 by Drusus (cursive signature) (D 10, S 15) c. A.D. 125-45 31R, 31 Antonine 37 A.D. 100-20 18/31R illegible stamp probably Hadrianic 31 stamp SEVERV·S· (S 16) A.D. 140-60 31 (Sb) burnt Antonine
2	57 V VIII 9 make-up		18/31 Hadrianic
3	57 V VIII 10 make-up		29 S.G. stamp OF M[ODESTI] (D 11, S 17) pre-Flavian 18/31 Trajanic or Hadrianic 18/31 Hadrianic
	57 V VIII 7 clay floor		18/31 Trajanic or Hadrianic 27 Trajanic
	57 V VIII 6 burnt daub		18/31 same vessel as in Layer 7

¹ For Rooms 1 and 1 A see Vol. I, 82, 89 (there labelled Rooms 2, 2 A).

VERULAMIUM EXCAVATIONS

ROOM	LAYER	COINS	SAMIAN (All South Gaulish unless otherwise stated)
5	57 V XVIII 10 clay floor		31 Hadrianic-Antonine
	57 V XVIII 6 burnt daub		30 probably Antonine
6	57 V XIII 9 collapsed debris	Vespasian, denarius, A.D. 74, <i>RIC</i> 76	37 E.G. Antonine Curle 22 Hadrianic 33 Hadrianic-Antonine 33(?) stamp ARC·[OF] (S 18) A.D. 125-45
	57 V XIII 8 fallen clay wall	Nero, As, <i>RIC</i> 329 b	37 S.G. A.D. 85-105 37 E.G.(?) Antonine 31 (two) Hadrianic-Antonine 31 Antonine
7	57 V X 12 make-up		27, 33, 42 Hadrianic 27 Hadrianic-Antonine
	57 V X 11 make-up below 9		27, 18/31 Hadrianic-Antonine 33 stamp SACIANTR (S 19) A.D. 140-65
	57 V X 9 primary clay floor		37 S.G. A.D. 70-85 37 (two) S.G. A.D. 85-105 33 Trajanic or Hadrianic 18/31 stamp PVTRIMY (S 20) c. A.D. 125-50
	57 V X 8 occupation on 9		31 Hadrianic-Antonine 37 S.G. A.D. 80-100 27 (three), 33 Trajanic or Hadrianic 81, 31 Hadrianic-Antonine 18/31 (two) Hadrianic and three first-century sherds 18/31 probably Hadrianic
9	57 V X 5 burnt daub		
	57 V II 12 clay of south-east wall	Nerva, dupondius	
	57 V XVI 10 gravel make-up of floor		37 Trajanic and four first-century sherds
Layers outside (south-east of) Room 9	57 V II 13		42 Trajanic or Hadrianic
	57 V II 11	Domitian, dupondius	37 S.G. A.D. 85-105 36, 15/17, 27 S.G. Flavian 33 Trajanic 27 (several), Curle 15 Trajanic or Hadrianic

ROOM	LAYER	COINS	SAMIAN (All South Gaulish unless otherwise stated)
	57 V V 16		67, 27 (two) S.G. Flavian 37 A.D. 120-40 37 A.D. 130-50 27 Hadrianic 18/31R, 42, 18/31 Trajanic or Hadrianic
	57 V V 15	Trajan, dupondius before A.D. 103	37 A.D. 120-40 37 A.D. 130-50 18/31 (several) Trajanic or Hadrianic 31 Hadrianic-Antonine 27 Hadrianic 81 probably Antonine

BUILDING XIV, 3: LATE FOURTH CENTURY

The only masonry structure in this part of the insula was Building XIV, 3, which lay somewhat obliquely to Street XII/XIV, since its site had been accommodated to the line of Street XIV/XXVIII. The house was built *c.* 375-85, at about the same time as Building XXVII, 2. Unlike the latter, however, it was not a luxurious mansion, but simple and small. Two structural phases were evident.

Phase A (fig. 37)

As first constructed the building was a simple trapezoid in plan, 84 ft. 6 in. long by 21 ft. (25.75 by 6.4 m.) wide, containing four rooms to which a corridor or verandah 9 ft. 6 in. (2.9 m.) wide was attached on the north-east side. The footings of mortared flints rested on foundations of gravel flung into trenches which had probably been dug down to natural soil (fig. 39, Sections B-C, F-G); the point was not fully investigated. The footings of the external walls were 2 ft. (0.60 m.) wide, but offsets at ground-level reduced the width to 1 ft. 6 in. (0.46 m.). Surviving fallen debris suggested that these walls had been carried up at least some distance in flint and mortar. But the internal partition walls, which were only 1 ft.—1 ft. 4 in. wide, had very possibly been carried up in clay, for the surviving upper surfaces were seatings of smoothed mortar.

Room 2 was floored with puddled chalk (fig. 39, Sections F-G, G¹-F¹, V V 13) on a clay make-up (V V 14) and contained a fine circular bread-oven carefully built of tiles (pl. Xa). Near the north-west wall was the stoke-hole for the hypocaust in Room 4. Room 3, measuring 6 ft. 6 in. by 8 ft. 10 in. (1.98 by 2.69 m.), had possessed a tessellated floor of buff brick cubes set in white mortar (fig. 39, Section B-C, V II 9). Only very few tesserae remained *in situ*—about ten incomplete rows along the south-east side: the remainder had probably been salvaged for reuse in Phase B. Room 4 (9 ft. 9 in. by 8 ft. 10 in. = 2.97 by 2.69 m.), contained a shallow irregular channelled hypocaust fired from Room 2, together with a floor of

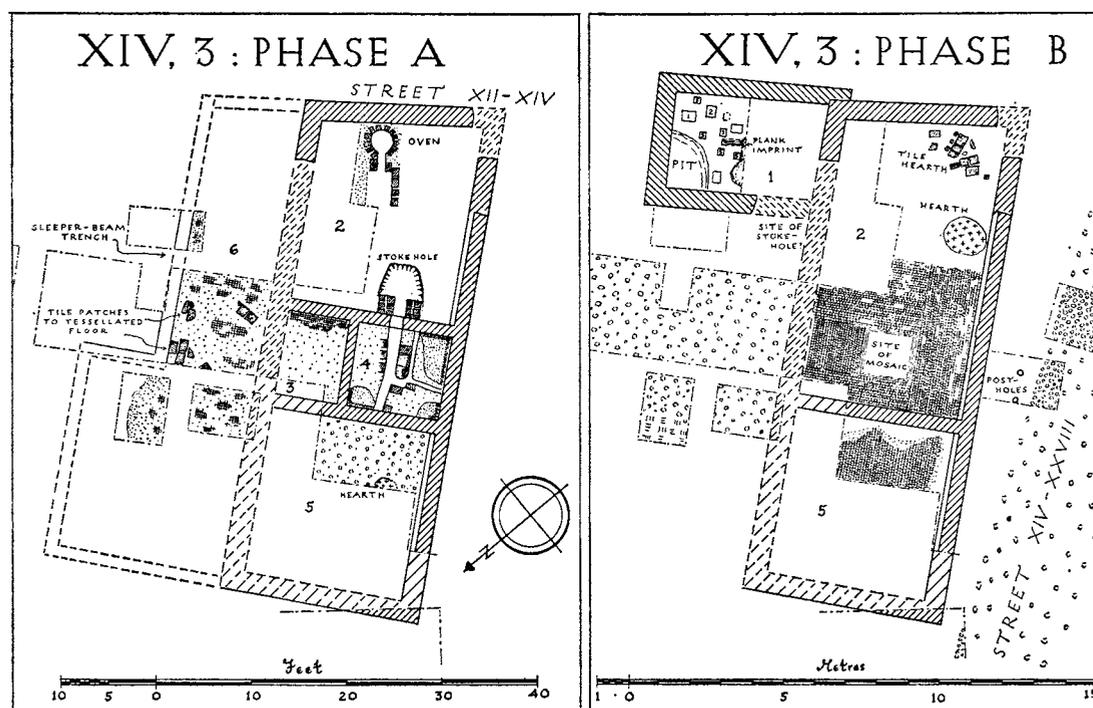


FIG. 37.

FIG. 38.

FIGS. 37, 38. The two phases of Building 3 (late fourth- to fifth-century) (scale 1:240).

coarse *opus signinum* with quarter-round moulding along the walls (pl. XI*b*). Wall-plaster surviving 6 in. (15 cm.) high on the north-west wall was painted white and had been decorated before the moulding was applied. The hypocaust channels were floored, walled—and presumably bridged—with tiles; but the sides were only two tile-courses high and the channels can never have been more than 4–6 in. (10–15 cm.) deep; they contained very little soot (fig. 39, Section A–B). Moreover, even if we discount these indications of the difficulty of drawing heat into the system, the pattern of channels itself suggests inefficiency in heat-distribution.

Room 5 in this period had a gravel floor (fig. 39, Section D–E, V XVI 5 A), with a hearth towards its south-east end. Room 6 was a corridor or verandah. Originally it had been floored with coarse tesserae of red tile (with a few greyish-white stone ones), set in white mortar on a gravel make-up (fig. 39, Section B–C, V X 4). After extensive wear it had been crudely patched with tiles, *opus signinum* and chalk. The demolition layer over this floor, dating to the end of Phase A (Section B–C, V X 3), yielded some ornate painted plaster which probably came from Wall 6/3: the painting is discussed in Volume III; the plaster had a coarse surface lacking finer finishing layers, but is noteworthy for its late date. The corridor was bordered externally by a shallow trench 1 ft. 3 in. (0.38 m.) wide (Section B–C, V X 6). This had probably contained a sleeper-beam supporting the wooden posts which held up the roof. Towards the north-west this verandah became wider, for a short return of the

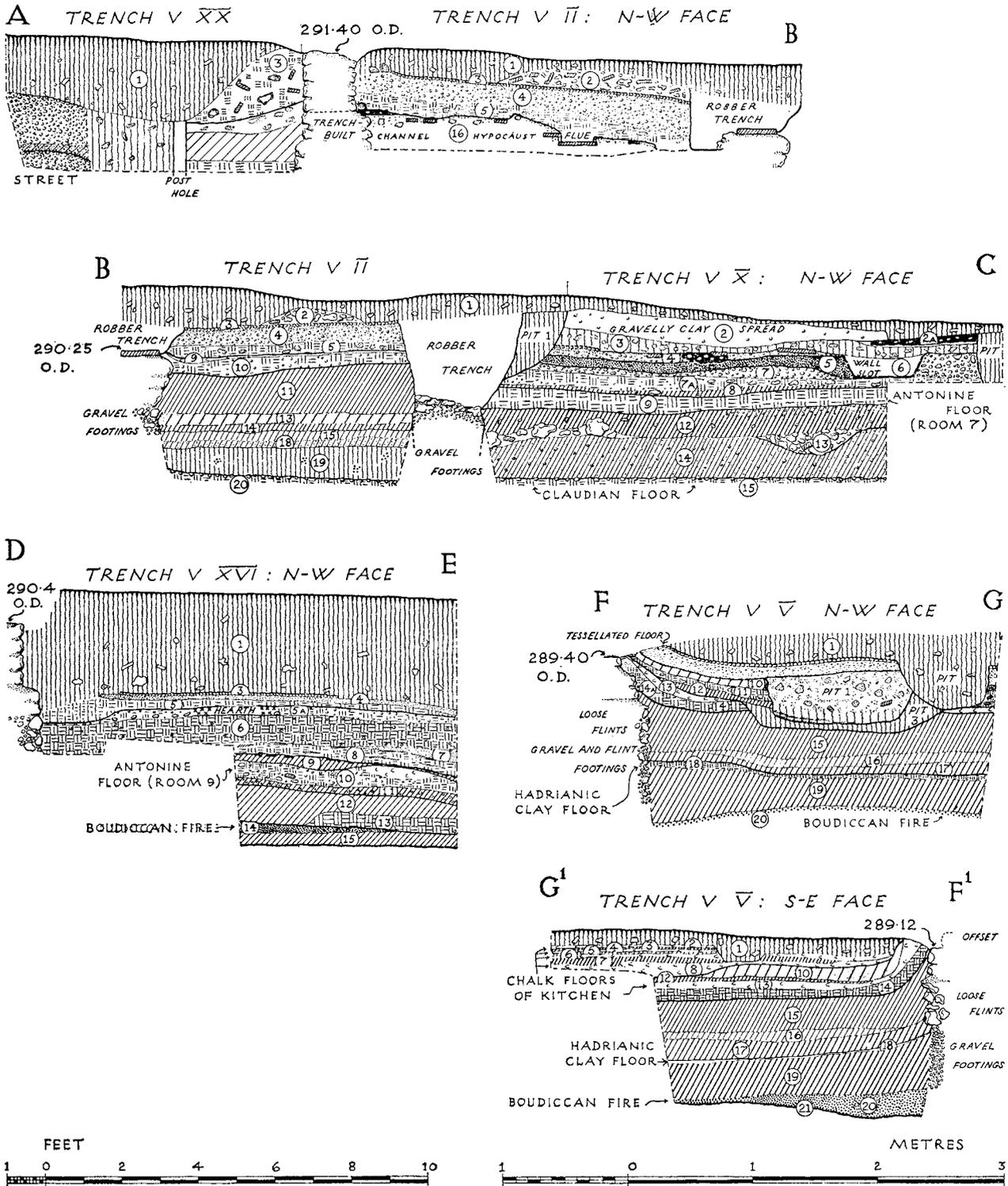


FIG. 39. Insula XIV, 3: Sections (scale 1:48). For position of Sections, see fig. 43.

foundation trench was found in Trench V XIII ending in a disturbed area, and it was not found in Trench V XXII. This change in direction might suggest that the house itself had been L-shaped, with a short return wing at the north-west end. This cannot be ruled out, but the wing would have been surprisingly narrow (less than 13 ft. externally); nor is there a cross-wall in Room 5 to indicate its position. It has seemed best to restore merely a widening of the verandah. It was certain that the return wall in Trench V XIII did not cross the passage itself (in Trench V X) so as to form a separate room at the north end of the building.

The dating evidence for Phase A depends primarily on a coin of Valentinian I which was found sealed in the tiles and mortar of one of the blocks of the channelled hypocaust of Room 4, and may be tabulated as follows:

ROOM	LAYER	COINS	POTTERY
2	V V Pit 1 stoke-hole		No. 1399
4	V II 17 hypocaust make-up	Valentinian I, A.D. 367-75, LRBC 521	

The coin had seen some, though not excessive, wear before loss; the context of the building may be placed *c.* 375-85.

There are indications that Phase A lasted some considerable time. The tessellated floor in Room 6 was worn away and extensively if crudely patched. The stoke-hole for the hypocaust had two phases (fig. 39, Section F-G, Pits 1 and 3) and the floor of Room 2 had also been renewed once (*ibid.*, Layers 10-14); similarly the bread-oven had been rebuilt with a crude re-lining of tiles, seriously reducing its capacity (pl. X*b*) before the end of Phase A.

Phase B

Subsequent alterations were extensive (fig. 38). The walls between Rooms 2, 3, and 4 were demolished and a new tessellated floor containing a mosaic was laid over part of the area (pl. XI*a*). Surviving wall-plaster of this phase *in situ* on the north-west wall of the room was pink. The underlying levels were not properly consolidated and serious subsidence occurred in the floor each side of the underlying wall (pl. XI*a*); this sinkage may, of course, have reached its climax in post-Roman times. The tessellation consisted of large coarse pieces of red tile measuring $1\frac{3}{4}$ by $1\frac{1}{4}$ by $1\frac{1}{2}$ inches, but some were laid on their sides so that their dark centres were exposed. A number of sandstone tesserae were also mixed in; these were of 1-in. cube. The mosaic panel itself, once perhaps *c.* 4 ft. by 3 ft., had been completely worn away. This damage was not due to later disturbance, for its site was sealed by the rubble of demolition: rather, its loss is to be ascribed to a combination of thin tesserae, poor fixative and the lack of craftsmen to make repairs as the fifth century advanced.¹ The mosaic had been set in a border of at least four rows of $\frac{3}{4}$ -in. grey sandstone tesserae, then three rows of $\frac{3}{4}$ -in. red-brick tesserae, and finally by three rows of 1-in. grey sandstone ones, outside which the normal coarse tessellation began.

Along the north-east wall, in the area of the former Room 3, the tessellated floor carried a

¹ Cf. Vol. I, 103.

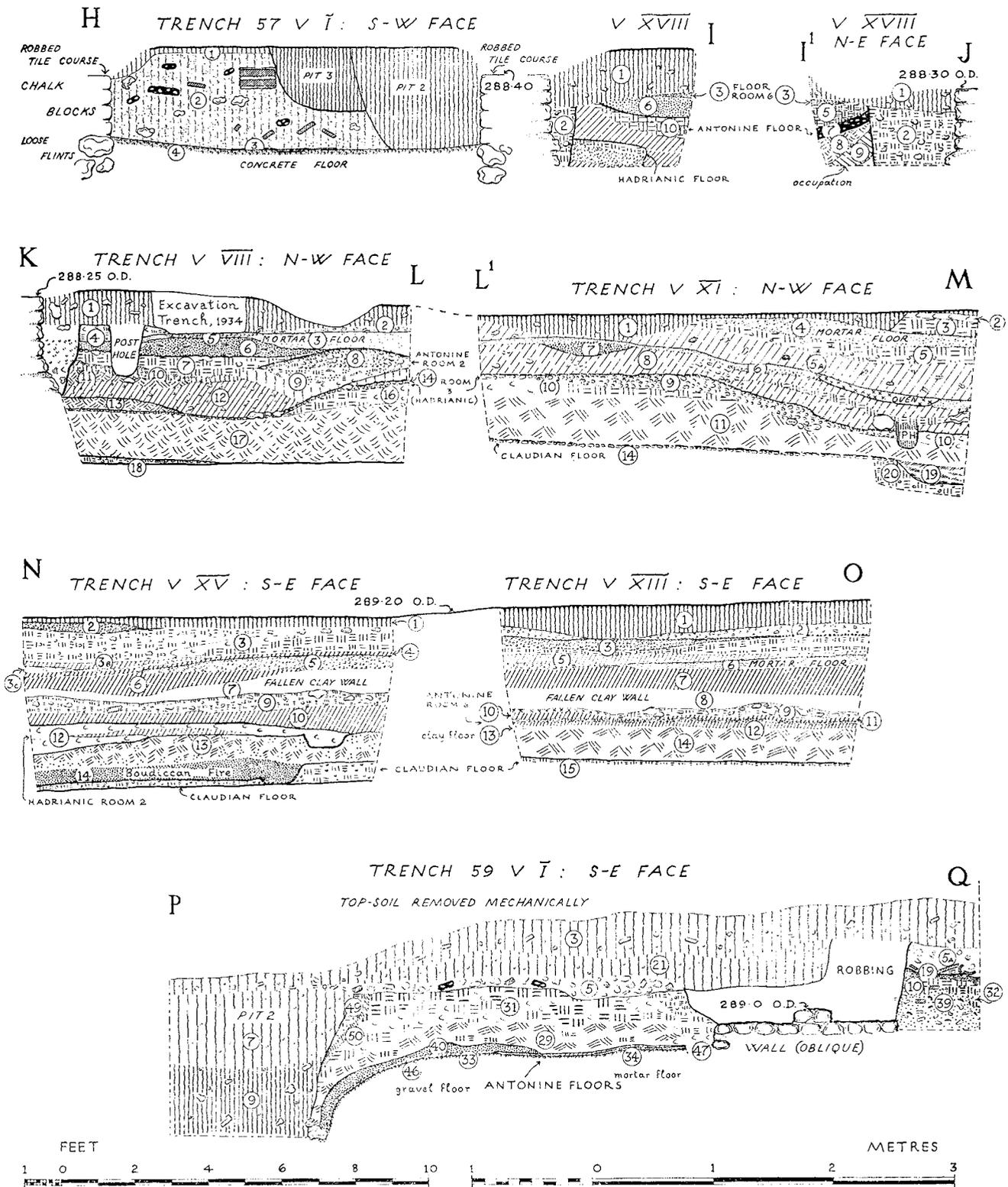


FIG. 40. Insula XIV, 3: Sections (scale 1:48).

crude patch of mortar containing pebbles and a tile. The patch rested directly on the tessellation, to which it adhered; but it was not a repair to the floor, for this remained in good condition below. The patch was *c.* 2½ in. thick with an uneven surface. A comparable patch of chalk and mortar was found in the area of the former Room 2. The purpose of these patches is hard to discover; they must relate to a very late period when the pavement was no longer respected, and are possibly to be connected with repairs to the wall above. Also resting on the pavement was a block of masonry *c.* 2 ft. by 2 ft. by 9 in. with two original adjacent faces. As there is no external corner hereabouts from which it could have fallen, it probably represents the jamb of a door (presumably) leading outside over the former Room 6 (see below).

The south-east end of the room was still used as a kitchen, and was re-floored four times with successive layers of puddled chalk separated by thin occupation-layers (fig. 39, Section G¹-F¹, Layers 2-8). Modern disturbance had obscured the relationship of the tessellated pavement with these floors, but no indication was observed of any kind of partition between the two. The rebuilt bread-oven of Phase A was disused and sealed by the lowest chalk floor of Phase B (Section G¹-F¹, Layer 8). It was replaced by a tile hearth contemporary with Floors 4 and 2, and an oval hearth of clay was also used on Chalk Floor 4 and reused with its successor (2).

Room 5 was re-floored with coarse red-tile tessellation similar to that in Room 2; it showed an area of burning in the north-east area of Trench V XVI. Wall 2/5 had been robbed well below the floor-level of Room 2. A problem consequently remains unsolved about access to Room 5, for its tessellated floor was 1 ft. 5 in. below that in Room 2; steps would have been needed in addition to a door, and of these there was no sign. Yet the corridor, Room 6, was demolished in this phase, and its place taken by an open area of gravel metalling (V XII 2, V X 2).

The loss of the heated Room 4 of Phase A was made good by adding a new room (1) at the east corner; it contained a pillared hypocaust, the *pilae* being variously composed of 8 by 8 in. and 12 by 10 in. tiles. The stoke-hole was probably near the angle of walls in the area of the former corridor, but its site was badly disturbed by robbing. The inner faces of the walls were lined with chalk blocks (pl. XIIa), which suggests either ignorance on the part of the builders or else the intention to keep the heat very low. The centre of the basement floor of concrete carried a shallow depression, *c.* 1 in. deep and at least 2 ft. 9 in. long (fig. 40, Section H-I), which appeared to have contained a plank: possibly this is an indication of timber shuttering during construction. None of the *pilae* was more than five courses high, and some only one or two: the system had been robbed before Layer 2 (Section H-I) was deposited, but this contained only Roman sherds (Nos. 1400-5) and was cut through by two large medieval pits of the thirteenth or fourteenth century.

A triangular area existed between Building XIV, 3 and the street to its south-west. Two post-holes were found here in Trench V XX which appeared to be contemporary with the building (fig. 39, Section A-B). Layer 3, consisting of clay with many flints and fallen tiles, especially towards the south-east side of the trench, appears to be collapsed debris from the building: in a pocket of dark soil cut into its surface was found an early third-century hoard of eight coins ending with two of Elagabalus (see list below). Its burial in a fifth-century context is difficult to explain.

The western corner of the house was found in 1959. The ground hereabouts was greatly disturbed by pits and subsidence (fig. 40, Section P-Q), but a small area of gravel metalling was found to be overlying the collapsed debris of the wall. It must have been laid down in the middle decades of the fifth century, if not later still.

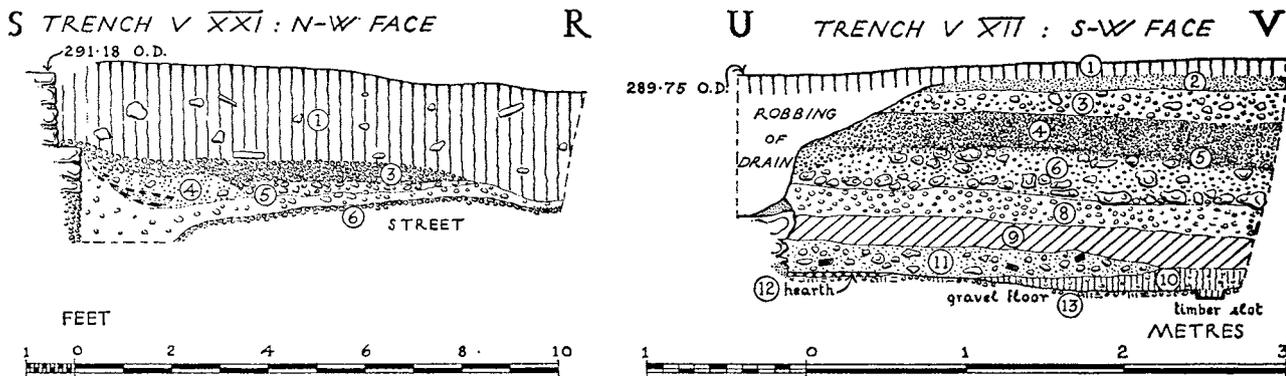


FIG. 41. Insula XIV, 3: Sections (scale 1:48).

The dating evidence for Phase B of Building XIV, 3 is disappointingly exiguous. It can be tabulated as follows:

ROOM	LAYER	COINS	POTTERY
1	V VIII 2 foundation trench of Phase B wall	(?) Constantine II Caesar	
	V I 2 hypocaust filling	Tetricus I, <i>RIC</i> 56 Barbarous hybrid: obv. <i>Constantino-</i> <i>polis</i> ; rev. <i>Gloria</i> <i>Exercitus</i> (1 standard) Constantine I Constantine II Caesar <i>Constantinopolis</i> Theodora <i>Urbs Roma</i>	Nos. 1400-5
2	V V 8 Phase B floor	Carus	
	V V 2 and 5 Phase B floor and occupation V V 1 topsoil and rubble	Victorinus, <i>RIC</i> 61 Constantine II (two)	Nos. 1406-7

ROOM	LAYER	COINS	POTTERY
2	V XVII 1 topsoil over kitchen	Antoninus Pius, sestertius, <i>RIC</i> 965 Uncertain radiate Gallienus or Claudius II Tetricus I or Victorinus Claudius II, posthumous Quintillus Barbarous radiate Carausius Carausius, <i>RIC</i> 101 Constantine I (three) Constans (two) Theodosius Arcadius, <i>RIC</i> ix, p. 70, no. 30 e	
3	V II 5 clay make-up for Phase B tessellation V II 2 rubble over building	Tetricus I, <i>RIC</i> 90 Constantius II	No. 1408
4	V III 1 topsoil and rubble	Tetricus I Gratian and <i>Salus Reipublicae</i>	
6	V X 1 topsoil	Hadrian, sestertius, <i>RIC</i> 759 (e 3) Salonina, <i>RIC</i> 30 Gallienus (two) Minim Carausius, <i>RIC</i> 165 Arcadius, <i>RIC</i> ix, p. 52, no. 44 d	
Outside the building	V XX 2	Hoard, all denarii except last: Antoninus Pius <i>RIC</i> 288 Septimius Severus <i>RIC</i> 68 or 71, 81 a, 112 a, 176, 211 Elagabalus (base denarius) <i>RIC</i> 87 antoninianus <i>RIC</i> 122 f.	

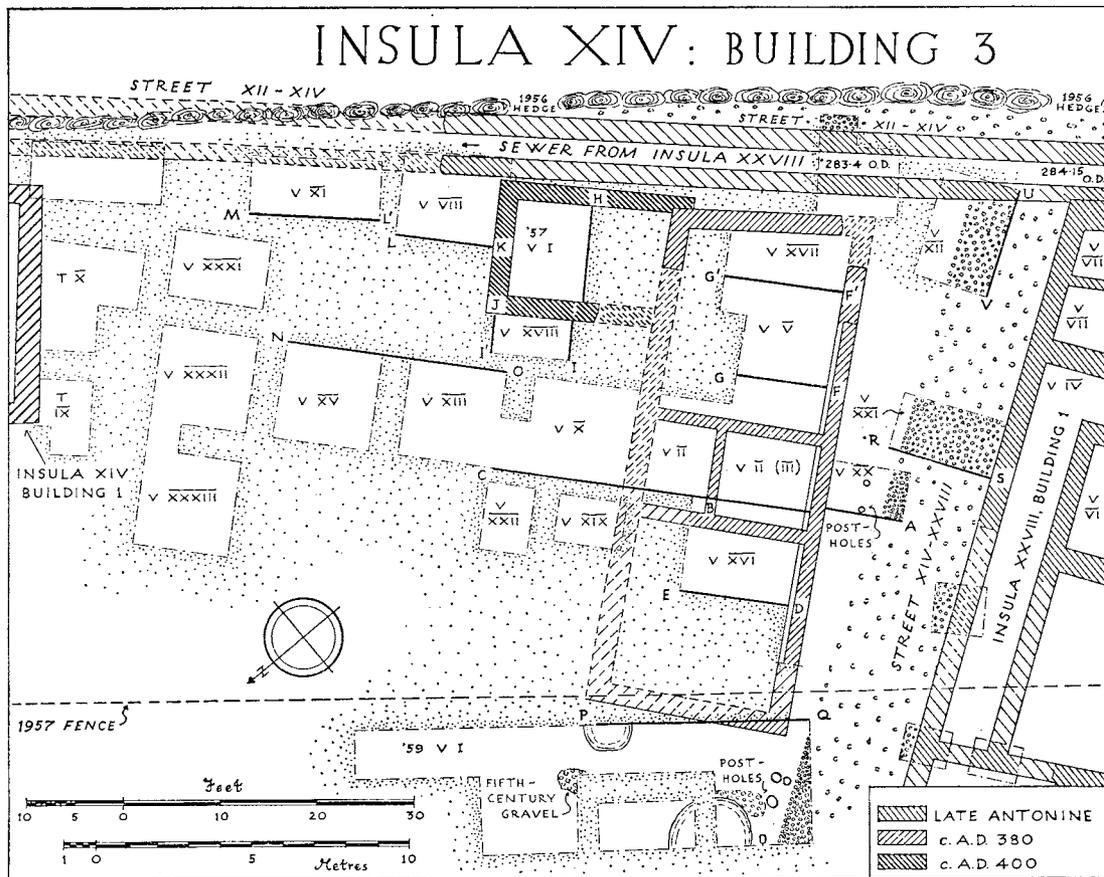


FIG. 42. Insula XIV, 3: location of Trenches and Sections.

The absence of coins and datable pottery-types is noteworthy, but is paralleled in Building XXVII, 2 and appears to be typical of fifth-century deposits. It has been shown that Phase A lasted a considerable period, but since Phase B involved the construction of a mosaic and two tessellated floors, it should probably not be dated later than *c.* A.D. 400. Time has then to be allowed for the disappearance through wear of the mosaic, and for the succession of four chalk floors in the kitchen. It would appear that the house will have lasted at least until *c.* 430-40.

INSULA XVII

PART of the extensive area explored during the 1956 season was a meadow lying north of the entrance to the Gorhambury Drive and embracing the south-east side of Insula XVII (fig. 123, Site K). A system of trial-trenches revealed little trace of Roman occupation over most of the meadow; natural gravel was found at a depth of *c.* 2 ft. and the soil above was disturbed by the plough. Only in Trench K I A, at the south end of the site, was a small fourth-century ditch found; it was 2 ft. 10 in. deep and *c.* 8 ft. wide and lay beside Street XVII/XIX. Apart from this the only features of interest occurred near the north-east edge of the meadow, where some stratification was preserved in the lee of the city rampart, protected by an accumulation of plough-soil. Even here, however, apart from the third-century rampart, the latest intact level was a gravel surface of the mid second century.

Nevertheless, the features discovered were of unusual interest, and the finds of samian and of small objects were unusually rich. Further limited work was accordingly undertaken in 1957. Resources were greatly stretched in both 1956 and 1957 because of the imminence of road-works, and it is to be regretted that more work could not be done.

A. EARLY FEATURES

The section through the defences, which revealed a fort-rampart stratified below the rampart of the city wall, has already been described (p. 37), together with the remains of the Belgic mint (p. 30). Nearby in Trench K VII C the earliest feature was part of a Belgic building of the period of Cunobelin; two wall-trenches met at right-angles (fig. 43). The trench running north-west-south-east was 8 in. (20 cm.) deep and 8 in. wide at the bottom. The other was more substantial, being 16 in. (40 cm.) wide at the bottom and deepening to 13 in. (33 cm.) as it ran north-east; it was 2 ft. (60 cm.) wide and was cut into a marsh-deposit of dark woody clay (fig. 14). The floor (28) of the room was of chalk with a good trodden surface near the north-west-south-east wall; elsewhere it had been worn and patched at least twice with grey clay. In two places the floor had subsided into what appeared to be two small natural swallow-holes; these subsidences had been patched with clay. There was a 3-in. layer (26) of grey clayey occupation over the floor. Very little pottery was associated (Nos. 1409-10) but many fire-cracked flints and pebbles were present; the longer wall-trench yielded a piece of coin-mould and a fragment of human skull.

The interest of this small piece of building is considerable, not only because of its probable association with the mint but also because of its method of construction. It is to be regretted that because of the great depth at which it lay and its discovery late in the season of 1957 no more could be cleared; by 1958 road-works had engulfed the site. The building did not extend to Trenches J or K (fig. 43), but Belgic sherds occurred in Trench H, Layer 11. The chalk floor, but not the wall-trench, were found in Trench D, but had ended short of Trench E.

Buildings of the Belgic period are not plentiful as yet in Britain, but at least three types are known. At Park Street¹ part of a rectilinear hut was found with a chalk floor; its wall was

¹ *Arch. Journ.* cii (1945), 24.

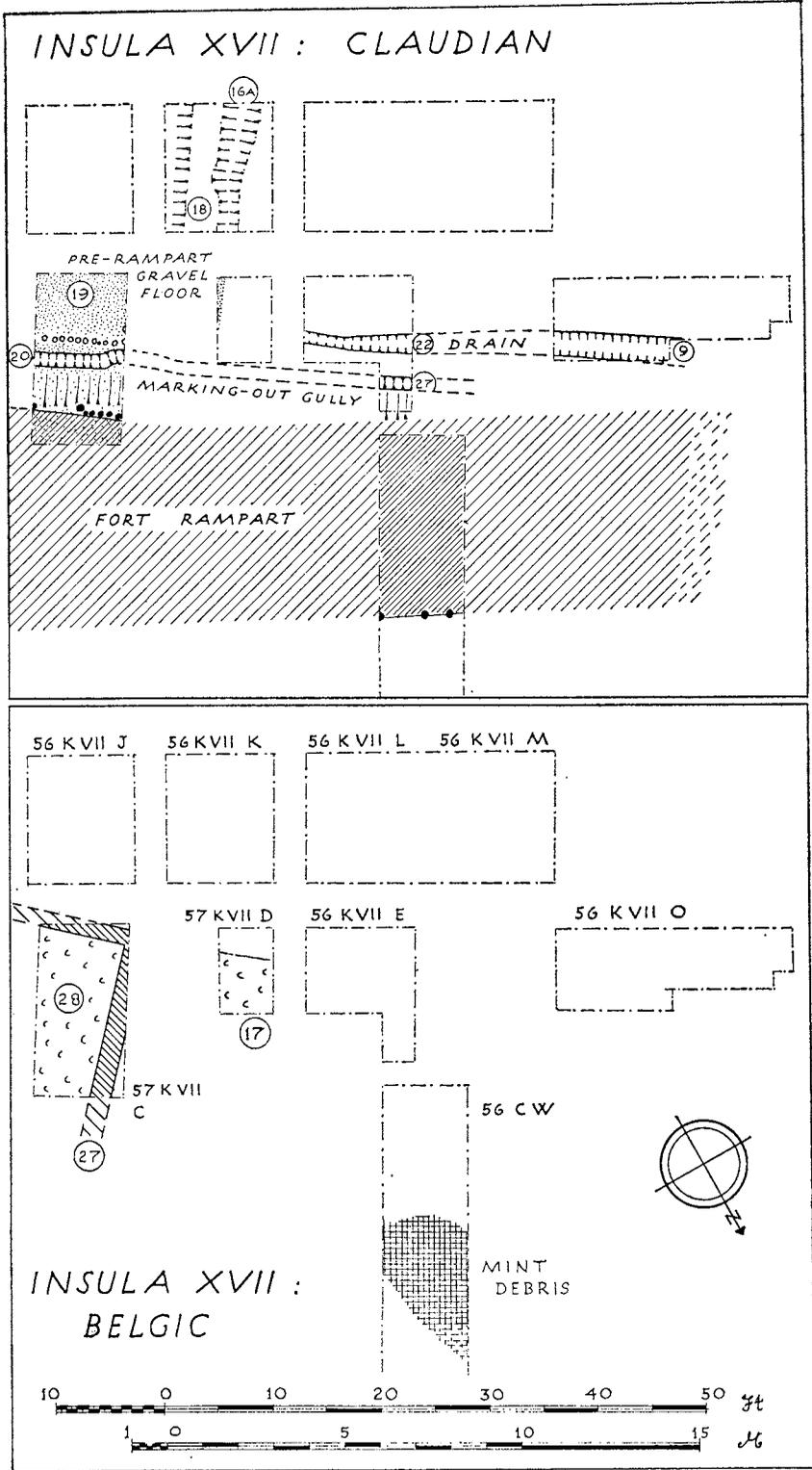


FIG. 43. Site K VII: plans of pre-Roman Belgic and Claudian military phases.

carried on posts in post-holes. At Canterbury a *Grubenhäus* of this period is published.¹ Thirdly, at Canterbury and also at Wickford parts of Belgic rectilinear buildings are known with walls set in continuous wall-trenches,² just as in the present instance.

Immediately above the Belgic building lay the remains of the first Roman structures, apparently directly succeeding it. The earliest of these (fig. 43), also in Trench K VII C, antedated the fort rampart. It consisted of two superimposed gravel floors (fig. 14, Section P-Q, Layers 25 and 19); the lower (25) yielded a sherd of a samian inkwell and had one associated post-hole. The upper (19), which yielded a dupondius of Claudius, was divided by a line of close-set posts normally 6 in. (15 cm.) in diameter and 12 in. (30 cm.) deep (fig. 43). The edge of the upper floor appeared in Trench D, possibly filling a wall-trench. This appears to be a structure of the military period, antedating the rampart, under which Layer 19 continues. Although the partition-wall in Trench C is almost in line with the wall of the Neronian building in Trenches D and E the stratigraphy shows that this is coincidental; in Trench C the posts were firmly stratified below the yard of the Neronian building.

After a short interval this structure was demolished, a marking-out gully (20) was dug and the rampart constructed; for this episode see p. 37. In Trench K two parallel gullies, 16 A and B (fig. 43), were cut in the surface of Layer 18, the otherwise undisturbed stony soil. Gully 16 A yielded a bronze stud, a piece of glass and half a quern; both gullies were sealed by 16, part of the general Claudian rubbish deposit. This rubbish layer was found spread over the tail of the rampart in Trench C (fig. 14, Layer 18); it consisted of black occupation-earth containing many oyster shells and much charcoal. The deposit was found also in Trenches H (10) and G (12). It did not belong directly to Floor 19 in Trench C, for the post-holes were filled with clean gravel; the black soil did not enter them. Layer 18 yielded an As of Claudius and a large group of mainly Claudian samian, the latest of which were two examples of form 24 dated Claudio-Neronian. Elsewhere the samian in this deposit included several examples of form 29 and other vessels of Neronian date; one form 29 is dated *c.* 60-75. As the deposit is sealed by a building itself destroyed in A.D. 61, we must believe either that the style started *c.* 58 or else that the yard-metalling which sealed it was a secondary feature of the early Neronian house, laid only shortly before the Boudiccan sack. The same layer in Trench D (12) yielded a coin of Antonia.

Shortly after the rampart had been built and after the marking-out gully had been covered by the tail of the bank, a shallow drain (fig. 43) was dug in Trenches E and O. The drain did not extend into Trench D, which showed only the deposit of rubbish (12); but it became gradually wider and deeper as it ran north-west: at the end of Trench O it was 30 in. (0.76 m.) wide and 16 in. (0.40 m.) deep.

The black deposit of rubbish appears to cover the period from the building of the rampart, which is assumed to be *c.* 44, to some time after the death of Claudius in 54. In Trench H (10) was found the bronze scabbard-chape terminal of a military dagger.³ The large amount of associated samian suggests that the context of the rubbish is mainly military, but it continued to form after the military phase was over and it was not sealed by the floors of the

¹ S. S. Frere, *Roman Canterbury* (3rd ed., 1962), 25; *idem* in H. Temporini (ed.), *Aufstieg und Niedergang der römischen Welt*, ii, part 3 (1975), 296-9.

² I am indebted to Dr. Warwick Rodwell for knowledge of the Wickford building. It was 15 m. long by at least

3.5 m. wide.

³ Two other pieces of military metal-work were found in residual contexts on the site: (i) a bronze apron-mount in M (5) (Flavian demolition layer), and (ii) part of a tinned bronze buckle in E (14) (disturbed Boudiccan burning).

succeeding building before the arrival of several sherds of Neronian samian. The building in turn was destroyed in the Boudiccan fire of A.D. 61 and must be presumed to have been built *c.* 56–8.

B. THE EARLY NERONIAN BUILDING (fig. 44)

Eventually, and probably *c.* 56–8, the accumulation of black soil was sealed by layers associated with a building. Its south-east external wall ran through Trenches D, K and P. South-east of this wall in Trenches G–K was a uniform spread of clayey gravel containing no features; this appeared to be an associated yard. The south-west wall ran through Trench P; this trench was sufficiently far from the protection of the bank for plough-disturbance to have removed most of the stratification, and it was, therefore, opened up by machine. Fortunately the lowest levels were still intact. A row of post-holes mostly filled with burnt daub was found, against which the floor of gravelly clay terminated. The north-west wall of close-set posts lay just behind the rampart, by now disused. In Trench E the wall ran just north-east of the site of the earlier drain. In Trench O the line of the wall was continued by some post-holes at least 2 ft. deep, which were found to be cut through the filling of the drain which here converged to underlie the wall. The north-west wall of this building lay beyond the area investigated but may have entered Trench O, the south-west side of which was later disturbed by the Flavian wall-trench. A partition 16 ft. (4.88 m.) from the south-east wall ran through Trenches L and T. Except in Trench K, where there was a floor of gravel, the floors inside the building were of grey or yellow clay; the grey clay in Trenches L and M gave the appearance of being the old turf-line.

The building was thus *c.* 56 ft. long by 40 ft. (17.07 by 12.2 m.) wide, with a bay projecting *c.* 10 ft. (3.05 m.) at the south-west end. The main chamber contained post-holes in a rather irregular line, some of which may have held roof-ridge supports. The building is of unusual interest in that its form of construction with close-set posts (the majority ranging from 2 to 6 in., but some up to 1 ft. in diameter) is not otherwise found at Verulamium, where the early timber-framed buildings are normally built on sleeper-beams. In building-technique, though not in size, it seems to represent a native Belgic rather than a Roman tradition; and in character also it may well reflect a native or north European element—the hall—and the semi-communal way of life which that type of building implies.

The structure was certainly a building and not merely an enclosure; among the burnt daub fragments were pieces with plaster attached to the face, though no trace of a painted surface remained; and in Trench T was a small piece of window-glass. Elsewhere a few pieces of roofing-tile were found, as well as three fragments of painted plaster.

The building was destroyed in the Boudiccan fire, and soon afterwards the stumps of its north-east wall were buried under additional material thrown up onto the tail of the disused rampart. These are Layers 13, 17 and 18 (fig. 48, Section N–O), which yielded a group of samian of consistently Claudian or Neronian date; Layer 13, the latest, yielded a mortarium-stamp of Matugenus who is normally dated *c.* 90–120. His production may have started as early as 85; but this layer was in part unsealed by the succeeding Flavian building, so the possibility that the stamp was trodden into the layer rather later cannot be dismissed. These layers contained dark occupation-earth, oyster shells, etc., and appear to be tips of rubbish. The stumps of the wall, once buried, survived as voids; they had been driven up to 2 ft.

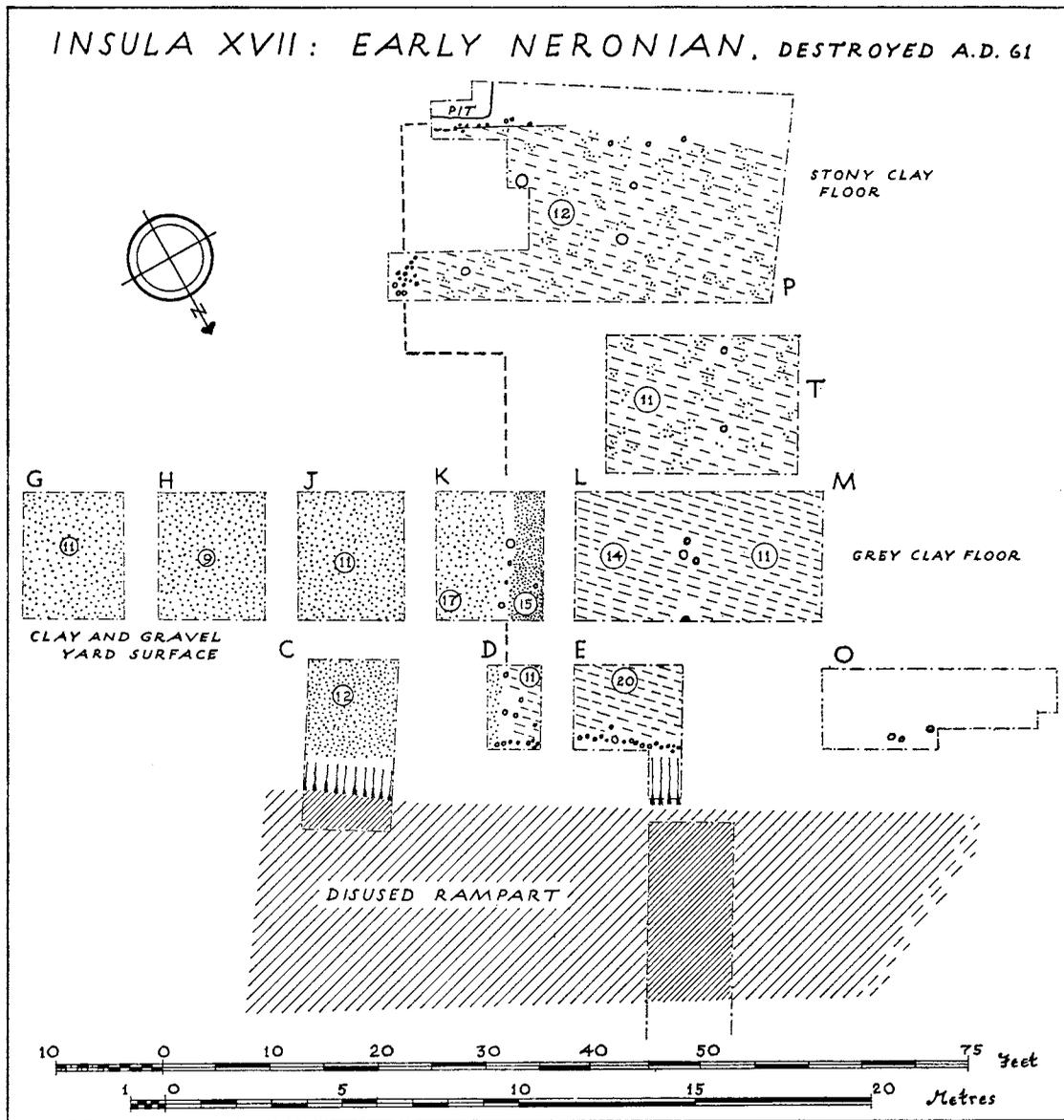


FIG. 44. Site K VII: early Neronian timber-framed building.

(60 cm.) deep into underlying deposits (fig. 48, Section N-O). Into the top of 18 was cut a shallow pit *c.* 3 ft. by 2 ft., dug up against the row of stumps on their south-west side; into it had been flung a good deal of charcoal and a collection of animal bones, some lengths of vertebral column being still articulated and many of the bones being extensively burnt. Although the remains appeared to be those of a more or less complete animal, subsequent examination (by Professor B. J. Marples) showed that there were portions of at least three sheep together with a few bones of other species, including two of a Mallard or domestic duck. The report on the bones will be included in Volume III.

The site of the building, though not of the yard, was sealed by a layer of burnt daub. The occupation-layer in the yard was not sealed until the yard of the Flavian building was laid down *c.* A.D. 80. Thus it is not surprising to find that the latest samian in this area extends down to the Flavian period. Indeed, the edge of the occupation-layer itself in Trench K (fig. 47, Section C-D, 11) can be seen to overlap the burnt-daub deposit.

C. THE FLAVIAN BUILDING (fig. 45)

After a gap of *c.* 20 years a new building was put up over the site of the previous one. The fairly close coincidence of site and house-type after such an interval is interesting to note. The principal walls, still of timber framing, were now founded in wall-trenches, some at least of which probably contained sleeper-beams. The south-east wall lay some 14 ft. (4.27 m.) south-east of its Neronian predecessor, approximately on the line of the south wing of that

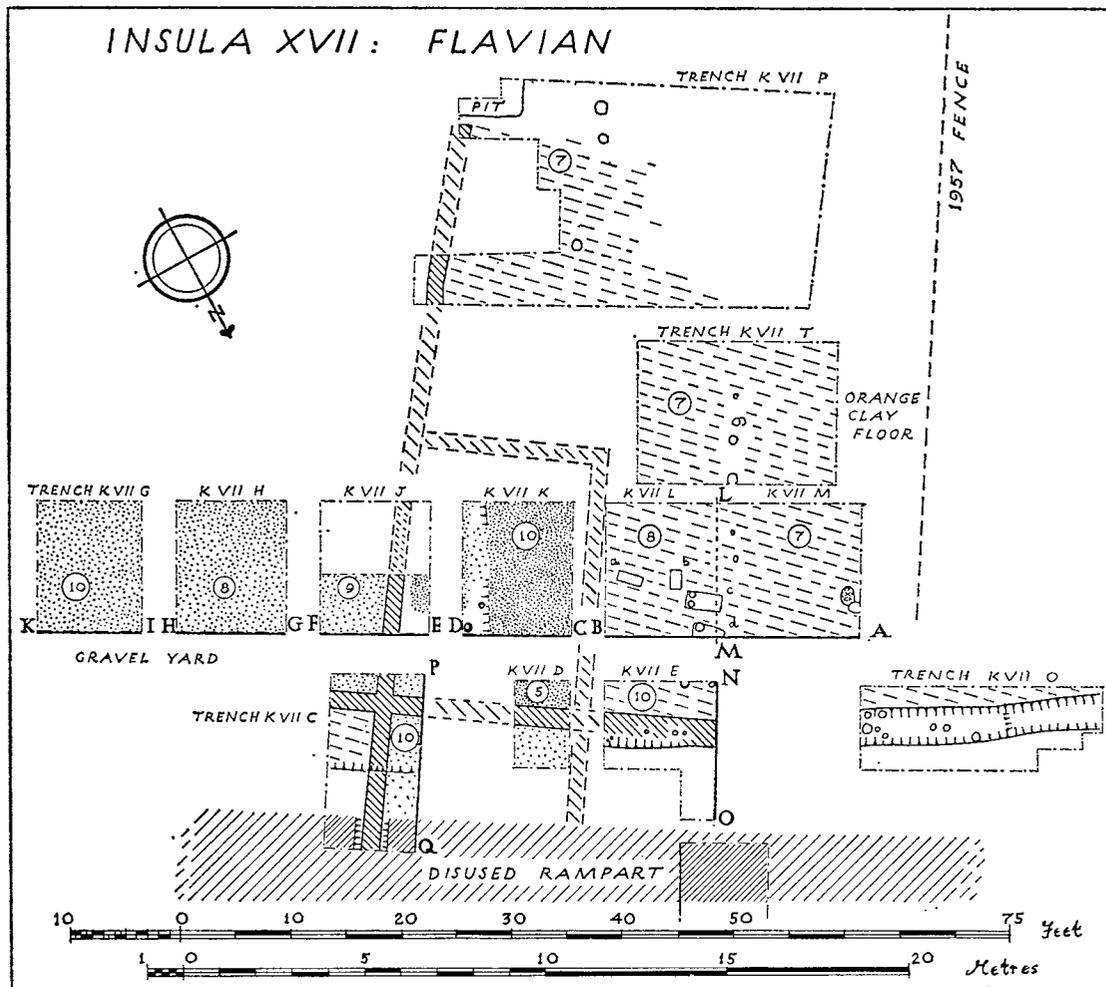


FIG. 45. Site K VII: Flavian timber-framed building with position of drawn sections.

building, and stopped or turned just short of the late pit at its south-west end. The south-west wall was probably on the same line as that of the earlier building, but ploughing had removed the floor in the south-west half of Trench P; any wall-trench as shallow as those of this building would also have disappeared without trace. The most southerly post-hole in Trench P lies 1 ft. outside the line of the Neronian wall; it may mark the line of the vanished Flavian south-west wall, but on fig. 46 has been utilized for the suggested south-east wing, as discussed below.

Unlike the Neronian building the Flavian one was extended over part of the disused rampart. In Trench K VII C the south-west-north-east wall-trench may have held a sleeper-beam. It was 18 in. (45 cm.) wide and 6 in. (15 cm.) deep; the bottom was horizontal until it reached the tail of the bank, where it was raised by 5 in.—evidently at a junction of beams—and continued horizontal at the new level to the end of the Trench. There it was 9 in. (23 cm.) deep, cut through the top layers of the old rampart; this part of it had been filled with flints (some with mortar still attached from a previous employment) and a few tile-fragments. This was presumably as part of the demolition process, for there was no sign of sockets for uprights among the flints. The south-east section of the other wall-trench in Trench C does not return south-west through Trenches G–J, which were occupied by a uniform metalling taken to be the yard. Probably, therefore, it returned north-east to enclose a room projecting east from the main body of the building. A gravelly clay floor in the north-east quarter of Trench C (fig. 14, Section P–Q, 10 A) appeared again in Trench D but was absent in Trench E (fig. 48, Section N–O). Probably the projecting wing on this side of the main building returned between Trenches D and E, and the suggested wall will have continued between Trenches K and L to separate the gravel floor in K from the clay floor in L, and will have turned south-east before reaching Trench P.

The north-west section of the south-east-north-west wall-trench in Trench C was cut deeper than the trench just described. It continued through Trenches D and E on the same alignment, but in Trench E it was becoming saucer-shaped in profile (Section N–O, 12). Here and in Trench O the wall, in fact, seemed to be running over the filling of a gully or drain which had been dug after the Boudiccan fire. In Trench O this was as much as 3 ft. 2 in. (0.97 m.) wide, U-shaped and 18 in. (46 cm.) deep. Post-holes up to 2 ft. deep (one of them 1 ft. in diameter) were traced in the filling of its eastern section. Beyond the most westerly post-hole the trench curved off alignment; the impression that it was a drain was strengthened by a sudden 2-in. drop in its floor. It is possible, therefore, that the north corner of the building is marked by the last post-hole in Trench O.

This would give the building a width of 54 ft. (16.46 m.); the main chamber would have a length of *c.* 52 ft. (15.8 m.) divided by an almost-central line of posts. Other rooms of uncertain width extending over the rampart increase the length of the façade. The Flavian building follows the Neronian one so closely in siting, size and general shape as to suggest identity of function and ownership despite the 15- to 20-year interval between them. Granted that plough-disturbance has destroyed all trace of the Flavian building beyond Trench P, it would be possible to use the ending of the south-west wall and the position of the outlying post-hole in the restoration of a projecting wing at the south-east end to balance that at the north-east (fig. 46). The plan would then have much in common with, e.g., the approximately contemporary villa at Mayen in its fourth period—a hall villa with

Eckrisaliten, or projecting pavilions, at the corners—providing communal living- and working-space for a large household in the hall, and rooms for private accommodation, storage, etc., in the wings. But the hypothetical nature of the restoration must be stressed. The Neronian building had only one wing, possibly because the rampart blocked the possibility of the other.

In Trench L the yellow clay floor contained four features. The first (a) was a rectangular

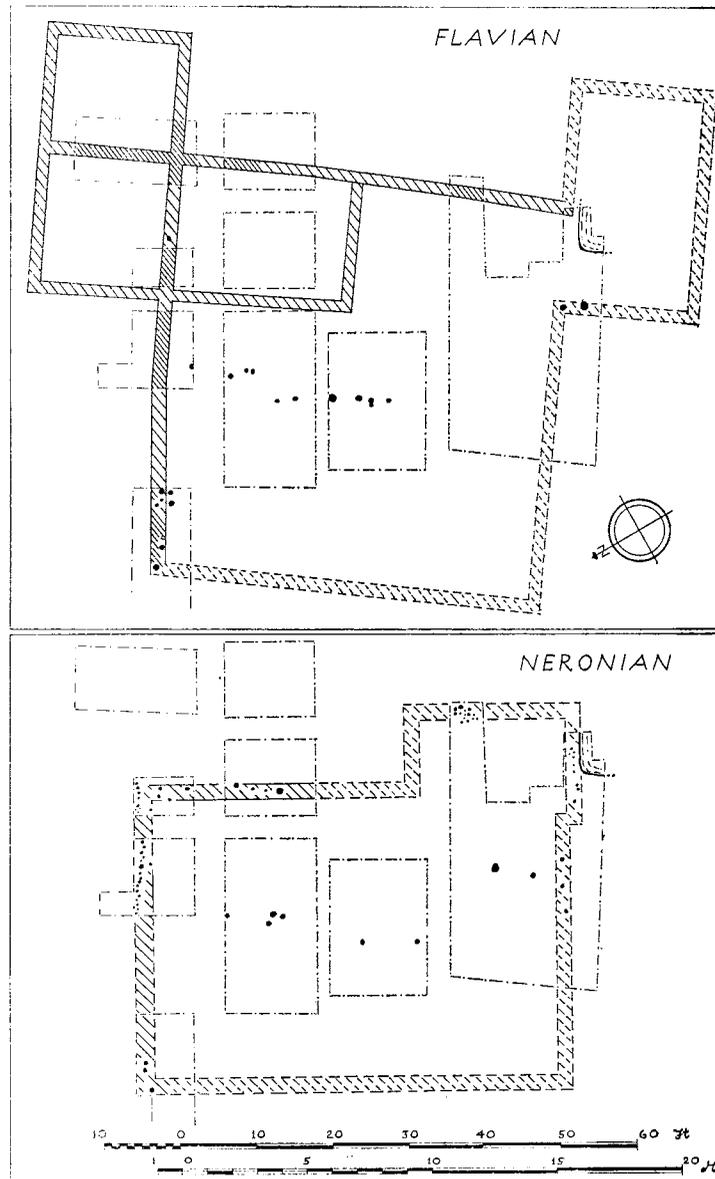


FIG. 46. Insula XVII: hypothetical reconstructed plan of the Neronian and Flavian buildings (scale 1:300).

recess *c.* 2 in. (5 cm.) deep, measuring 2 ft. 2 in. by 10 in. (66 by 25 cm.), apparently for something like a small chest; it had a smooth flat floor. Feature (*b*) was a similar recess measuring 20 by 10 in. (50 by 25 cm.) but was only 1 in. deep; it was filled with charred wood and sealed by a patch of gravel. It may, therefore, have been the predecessor of (*a*). Feature (*c*) was a rectangular recess measuring 3 ft. 4 in. by 1 ft. 6 in. (1.01 by 0.46 m.) and 5–6 in. deep (fig. 48, Section L–M, 8 B). Like (*a*) it had a filling of grey soil, but the bottom was irregular because of the large flints which in this part of the trench sealed the underlying Neronian post-hole line. The flints had been piled up to four deep over the line of the earlier partition after the Flavian posts had been driven in. Two post-holes showing as 8-in. voids were driven through Feature (*c*). A more irregular recess (*d*) was 6 in. deep (Section A–B, 8 E) and had been disturbed by a post-hole 8 in. in diameter showing as a void at least 3 ft. 3 in. (1 m.) deep. These features are reminiscent of some emplacements for furniture in the half-timbered buildings of Insula XIV.¹

The building had in places up to three layers of floor separated by occupation-layers. In Trench M, Layer 6 was a large deposit of almost solid oyster shell 4–6 in. thick; at a rough estimate *c.* 10,000 shells were present. These, if not an indication of commercial feeding, strengthen the hypothesis of a large household in the hall. In Trench L the demolished clay-wall deposit yielded small pieces of wall-plaster painted white, and there were enough *imbrex*-fragments to suggest a tiled roof; the majority of roofing-tiles had no doubt been salvaged for reuse.

The date of the Flavian building

The building's earliest levels contained or overlay much samian of Neronian-Flavian date as well as an As of Nero (A.D. 64 or later). The latest sherds were a form 37, *c.* A.D. 85–100, and a contemporary piece of coarse-ware in the gravel floor of the wing in Trench D. The building was thus perhaps erected *c.* A.D. 85–90; but, if we bear in mind the possibility of sherds being trodden into a gravel floor, it would be possible to support a date of 75–80 as on general grounds being more reasonable. The same explanation would have to account for the mortarium-stamp of Matugenus in Trench E, Layer 13; the sherd cannot be earlier than *c.* 85. It is strange that, although the occupation-layers contain several samian sherds dated 80–100, there is no samian to fill the gap between A.D. 100 and the Antonine sherds found in the demolition-deposits. There are several coarse-ware vessels of this period, but the absence of samian may suggest a lack of prosperity in the later phases of occupation; an alternative explanation is suggested below.

The demolition of the Flavian building probably occurred *c.* 150. A sherd of Antonine form 37 was found in the wall-trench in Trench C; several coarse-ware vessels of *c.* 130–80 occurred in the demolished wall-material in Trench E and in the fill of the wall-trench in the same area were vessels of *c.* 140–90. A sherd of Antonine form 31 occurred in the occupation-layer M 6 B and another probably Antonine sherd was found in the demolition-layer above it. The life of the building (*c.* 80–150) thus corresponds very closely with the duration of the large rubbish-tip which spread outwards over the front of the adjacent rampart; this deposit (p. 39, fig. 13, Trench 56 CW, Layers 23 and 19) is dated *c.* 90–150. There was no shortage

¹ See Vol. I, 17, 26 ff.

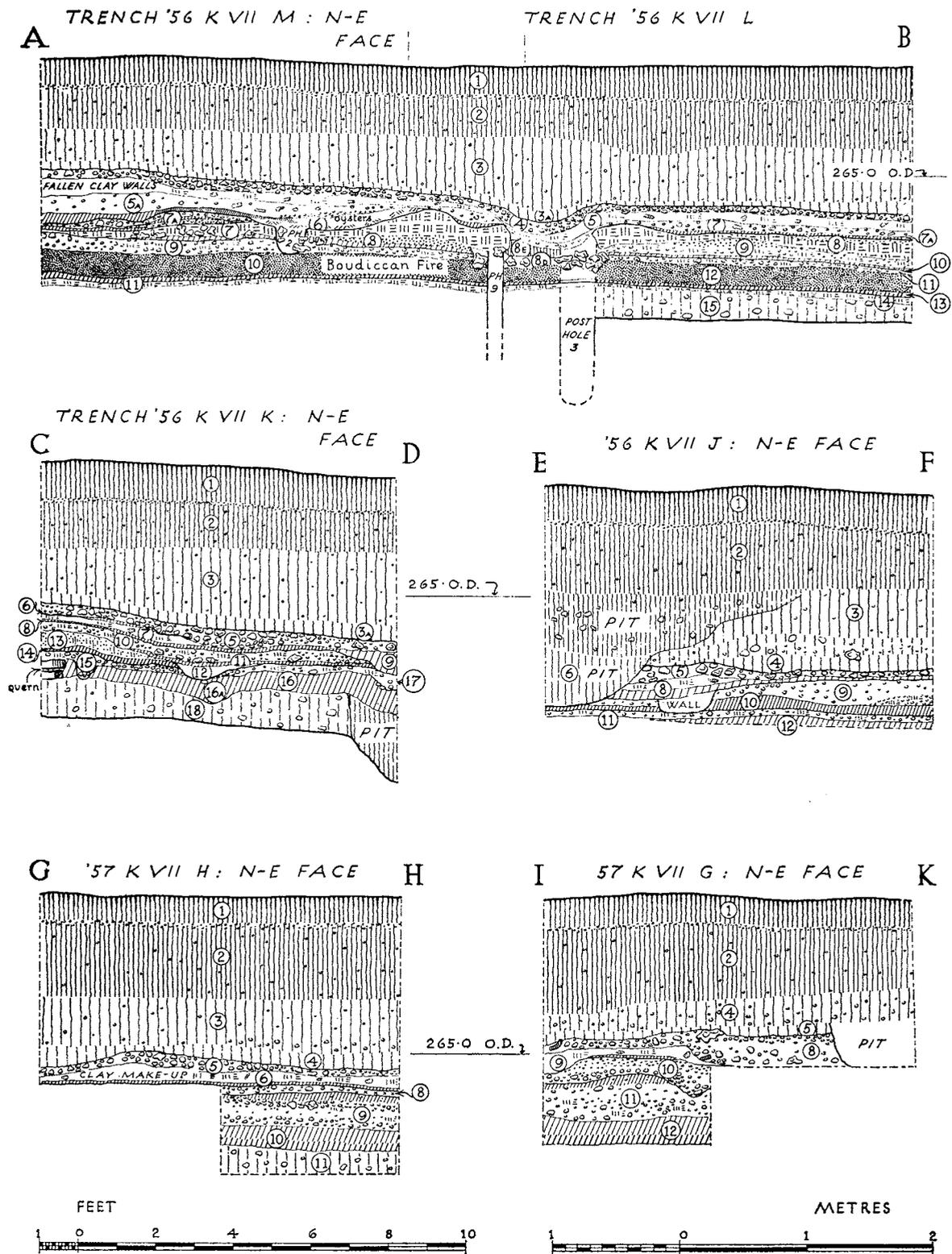


FIG. 47. Insula XVII, Site K VII: Sections (scale 1:48).

of second-century samian in this tip, so perhaps its absence within the building is due to efficient rubbish-disposal rather than to poverty.

Shortly after the demolition of the Flavian building, the whole area was covered with a substantial gravel metalling; it yielded a few Antonine sherds, and perhaps dates to *c.* 150–60. The layers above this metalling are all considerably disturbed by cultivation; third-century pottery occurred immediately above the gravel.

DATING EVIDENCE, SITE 1956 and 1957 K VII

DEPOSIT	SAMIAN (All South Gaulish unless otherwise stated)	COINS	COARSE POTTERY
		<i>A. Belgic</i>	
K VII C 26 grey occupation- layer on chalk floor 28			Nos. 1409–10
K VII H 11 stony soil on natural			Belgic sherds and imported flagon sherds
		<i>B. Claudian</i>	
For layers in K VII C and K VII E see pp. 41–3			
K VII D 12 rubbish deposit underlying Neronian building (=K VII C 18)	29, 15 probably Claudian	Antonia, barbarous dupondius (<i>RIC</i> (Claudius 82))	
K VII G 12 the same	29 Neronian 29, Ritt. 9 Claudian Ritt. 12 pre-Flavian 15/17 (eight), 18 (seven), 24 (four), 27 (four) Claudio-Neronian		
K VII H 10 the same	29 A.D. 60–75 29 A.D. 45–60 (D 12) 27 (six+) stamp [L]ICINI (S 21) A.D. 45–65 15/17 (eight) pre-Flavian 18 (six+) stamps of VITA[LIS] (S 22) A.D. 50–65 [OF·] MODE (S 23) A.D. 45–65		No. 1411, amphora stamp VAL. FAVS (Callender, no. 1758)

DEPOSIT	SAMIAN (All South Gaulish unless otherwise stated)	COINS	COARSE POTTERY
	24 (three) Neronian Ritt. 1 Claudian Ritt. 8 (two) Claudio- Neronian		
K VII H 10A the same	29 A.D. 45-65 (D 13) 29 A.D. 50-65 (D 14)		
K VII J 12 the same	29 stamp OF MODESTI A.D. 45-60 (D 15, S 24) 29 rim (burnt) (?) Flavian 18 pre-Flavian 27 Claudio-Neronian		
<i>Note:</i> there has been some contamination of this layer during excavation from the adjacent pit: a third-cent. flanged bowl is also among the finds.			
K VII K 16 the same	29 A.D. 40-55 (D 16) 29 A.D. 45-60 (D 17) 30 A.D. 45-60 (D 18) 15/17, 18 (two) probably Claudian 27 (four) pre-Flavian		No. 1412
K VII P 13 the same	29 (three) A.D. 50-65 (D 19-21) 18 (four) Neronian		

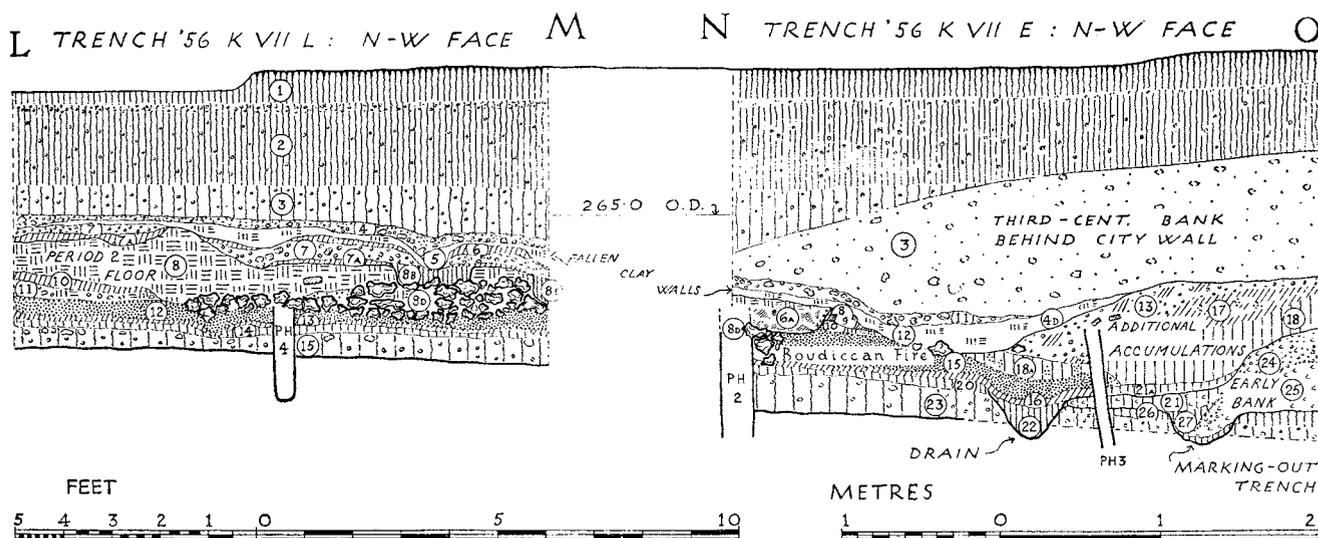


FIG. 48. Insula XVII, Site K VII: Sections (scale 1:48). See also fig. 13.

DEPOSIT	SAMIAN (All South Gaulish unless otherwise stated)	COINS	COARSE POTTERY
	18R stamp OF·MOD[ESTI] (S 25) A.D. 50-65		
	27 (two), 15/17 Neronian- Flavian		
	18 Claudian		
	15/17, 24 probably Claudian		
	24 pre-Flavian		
	<i>C. Early Neronian Building</i>		
K VII C 17 and 12 yard floors	see pp. 41-2		
K VII D 11 clay floor over 12	29 probably pre-Flavian 30 no decoration 18R stamp SENTRVS·FE (S 26) A.D. 45-65 18 (burnt) (?)Flavian 24 Neronian		
K VII D 9 occupation on 11	29 A.D. 55-70 (D 22) 27, Ritt. 12 Neronian- Flavian 18/31 Flavian		
K VII D 8 burnt daub over 9	15/17, 18 Neronian-Flavian		
<i>Note: D 9 and D 8 may have been contaminated from the Flavian wall-trench.</i>			
K VII G 11 occupation layer on gravel yard sealed only by Flavian yard	29 A.D. 45-60 (D 23) 29 A.D. 45-65 (D 24) Ritt. 8 Neronian 15/17 (two), 18 (five) Neronian-Flavian 27 probably Flavian		
K VII H 9 the same	29 A.D. 45-60 (D 25) 15/17, 27 Claudian 29 (two) A.D. 55-70 (D 26) Ritt. 8 Neronian 15/17 (three), 24 (two), 27 (two), Ritt. 12 pre- Flavian samian counter probably pre-Flavian		

DEPOSIT	SAMIAN (All South Gaulish unless otherwise stated)	COINS	COARSE POTTERY
K VII J 10 the same	29 A.D. 50-65 (D 27) 18 (?)pre-Flavian four sherds all Claudian or early Neronian		
K VII K 17 floor of yard	15/17 (two) probably Claudian 27 (?)pre-Flavian 18 probably Neronian		
K VII K 11 occupation on yard floor	29 A.D. 45-65 (D 28) 29, Ritt. 9, 27 (two) Claudian 29, 15/17 (two) Claudio- Neronian 29 Claudian or Neronian 29 A.D. 55-65 (D 29) 24 probably Neronian 27(?) (?)Neronian 18 pre-Flavian, probably Claudian 15/17 probably Claudian 27 probably pre-Flavian 27 (two) (?)pre-Flavian		
For K VII E 20, 16, 15 and 14 see p. 43			
K VII L 14 grey clay floor	18 probably Claudian 24 pre-Flavian 27 (?)Neronian		
K VII L 13 occupation on 14	29 A.D. 45-55 (D 30) 29 A.D. 45-60 (D 31) 29 probably pre-Flavian 15/17 Claudian 27, 18 (two) probably Claudian 24, 27 pre-Flavian 18 (two) probably pre-Flavian 13 unusual form with strap-handle, possibly pre-Flavian		
K VII L 12 burnt daub	29 pre-Flavian 15/17, 18 pre-Flavian, probably Claudian		

DEPOSIT	SAMIAN (All South Gaulish unless otherwise stated)	COINS	COARSE POTTERY
K VII M 11 black occupa- tion-layer on grey clay floor	27 stamp OF PRIM (S 26A) A.D. 55-75		
K VII M 10 burnt daub	29 probably Claudian 27 Claudian or early Neronian 18 probably Claudian		
K VII O 10 burnt daub	15/17(?) Neronian- Flavian 18 stamp [CR]S P I· M A I (S 27) A.D. 60-75		
K VII O 5 fallen wall- material	35 probably Neronian		
K VII O 7 accumulation over tail of bank after the fire (= E 13)	15/18R unusual form (illustrated in Vol. III) stamp OF CRESTIO (S 3) c. A.D. 55-70; sherds also in K VII E 22 (p. 42)		
K VII P 10, 11 occupation on gravelly clay floor	37 Flavian 18, 24 probably Flavian 27 Ritt. 1 Claudian Ritt. 1 Claudian or early Neronian 18 (two) probably Neronian 15/17 Neronian-Flavian		
<i>Note:</i> some of these sherds are intrusive: the stratification in this trench was partly disturbed by cultivation.			
K VII P 9 burnt daub over 10	29 first cent. 27 Claudio-Neronian 18 stamp OF PRIM (S 28) A.D. 50-65 18 (two), 15/17 (two) Neronian-Flavian		
K VII T 10 grey occupa- tion earth on yellow gravelly clay floor	29 (three) A.D. 45-60 (D 32 , D 33) Ritt. 8 (two), 15/17 Claudian 29 (three) Neronian 30, Ritt. 12, 24 (burnt), 18 (burnt) pre-Flavian		

DEPOSIT	SAMIAN (All South Gaulish unless otherwise stated)	COINS	COARSE POTTERY
	27 stamp OF·PASSIENI retro. (S 29) A.D. 50-70		
	27 (six) Claudio-Neronian		
	15/17 (five), 24 (three) Claudio-Neronian		
	24 stamp OF NIGRI (S 30) A.D. 55-70		
	18 (four) Claudian, 18 (five) Claudio-Neronian		
	18 stamp OF M̄ATV (S 31) A.D. 50-70		
	18 stamp PRIMI M̄A (S 32) A.D. 55-70		
	18 stamp LVP[I M̄A] (S 33) A.D. 50-70		
K VII T 9 undisturbed burnt daub	29 pre-Flavian 18 Claudio-Neronian 18R (burnt) pre-Flavian	Claudius I, As (<i>RIC</i> 66)	
K VII T 8 disturbed upper layer of burnt daub	30, Ritt. 8, 15/17, 18 Claudian 15/17, 18 Claudio- Neronian 27 probably Claudian 30 A.D. 60-75 15/17 (two), 18 (two), 27 (two) Neronian 18R probably Neronian 29 (two), 24/25 pre-Flavian	Republican denarius 78/77 B.C. (Sydenham 772) Claudius I, As	

D. *Flavian Building*

For K VII C 10, 9 and 9 c see p. 42

K VII D 5 27 Neronian-Flavian
gravel floor

K VII D 3 37 A.D. 85-110 (**D 34**)
gravel floor
over tail of
rampart

Type 381 (A.D. 75-105)

For K VII E 5 and 12 see p. 43

K VII H 8 29 A.D. 50-65 (**D 35**)
yard metalling 29 Neronian

DEPOSIT	SAMIAN (All South Gaulish unless otherwise stated)	COINS	COARSE POTTERY
	24 Neronian		
	29, 15/17 (three), 18, 27 pre-Flavian		
	15/17 Claudian		
	15/17 Claudio-Neronian		
K VII J 8 occupation on yard floor	15/17 or 18 stamp OPAJSSIEW (S 34) A.D. 50-65		
K VII K 10 gravel floor		Nero, As (<i>RIC</i> 328 r)	
K VII K 10A in post-hole 5		Claudius I, dupondius (<i>RIC</i> 67 d)	
K VII L 10 occupation on primary floor	29 A.D. 55-70 (D 36) 15/17 (two), 24 Neronian- Vespasianic 27 probably pre-Flavian 18 pre-Flavian		
K VII L 9 redeposited burnt-daub make-up	29 A.D. 55-70 (D 36A) 29 A.D. 55-70 15/17 (two) pre-Flavian 27 Claudian	Claudius I, As	
K VII L 8 secondary clay floor	36 probably Flavian		No. 1414
K VII L 6 occupation on tertiary floor (7)	37 (three) c. A.D. 80-110 (D 37, D 38) 15/17 Vespasianic 35 (two) first cent. 18 (five), 18/31, 33 Flavian		Nos. 1418, 1420
K VII L 5 demolished clay wall	37 A.D. 80-100 27 Flavian 33 probably Flavian		No. 1423
K VII M 9 gravelly clay primary floor	15/17 Claudio-Neronian 27 Neronian-Flavian Ritt. 12 probably pre- Flavian 30 pre-Flavian		No. 1413
K VII M 8 redeposited burnt daub make-up over 9	30 style of Masclus Claudian or early Neronian 15/17 pre-Flavian, probably Claudian		

VERULAMIUM EXCAVATIONS

DEPOSIT	SAMIAN (All South Gaulish unless otherwise stated)	COINS	COARSE POTTERY
K VII H 6	38 C.G. Antonine		
clay make-up	15/17 (two) Flavian		
below gravel	18/31 probably Flavian		
K VII K 6	31 C.G. mid second cent.		
thin occupation-			
layer on 7			
below			
metalling			
K VII K 5	31 C.G. second cent.		
gravel	37 A.D. 85-100		
metalling			
over 6			
K VII L 4			No. 1426
K VII M 4	31 C.G. Antonine		
the same	18 (two) Flavian		

INSULA XVIII

PROPOSALS to enlarge the Museum by extending its rear led to a short rescue-excavation in January 1961.¹ It was not possible in the time and with the resources available to excavate down to natural sub-soil, but only to examine those layers due for removal in constructing the new semi-basement. When the original Museum was built in 1938, the north-west edge of Street XVIII/XIX was found running across the middle of the site *c.* 40–47 ft. from the front of the building. The present excavations found the south-east side of this street together with the north-east edge of Street XIII/XVIII, though their junction lay below the Museum. The excavation well illustrated the way in which street-surfaces were successively made up to levels much higher than the interior of adjacent buildings.

The west corner of Insula XVIII was occupied, in the lowest levels reached in the excavation, by a timber-framed building which had been burnt down. Considerable quantities of collapsed clay walling and roofing-tiles were found, as well as much burnt daub and charcoal. The destruction-deposits yielded little datable evidence; in N II 14 and 14 c there were samian sherds of Trajanic or Hadrianic date, but three coarse-ware vessels in N IV 4 were of types found elsewhere in the fire deposits of A.D. 155. There can be little doubt that this is the date of the disaster. A sleeper-beam trench cut 2 in. deep into road-silt was found running north-west–south-east below Room 3; it was associated with a post-hole on its west side. This may have been the external wall of the Antonine building, for layers of greenish gritty road-silt (N II 9 and 30) had washed off the street to its west. Burnt daub from the destruction spread upwards over these (fig. 50, Section A–B) to the west, though the possibility cannot be excluded that some of it, e.g. Layer N IV 4, has been redeposited when later foundation-trenches were dug. The contemporary street-level is probably higher than N II 6 which itself lies almost 2 ft. above the interior of the building. Layers N II 17–21, consisting of clay and road-silt, which seal it, also appear to be earlier than the fire; they yielded no useful dating-evidence. Conceivably they were placed there to hold back further spreads of road-silt (e.g. N IV 5) from coming down against the building.

The lowest street-metalling encountered was Layer N II 26. This sealed a small trench which probably once contained a wooden water-pipe; its precise date is uncertain, but it must be Trajanic-Hadrianic if not late Flavian. The surface of Layer 26 at 275·85 ft. above O.D. is *c.* 5·7 ft. lower than the surface of the earliest metalling of the same street as recorded by Corder below the north-east corner of the forum, 80 ft. away.² Thus there must be a sharp rise in the street as it runs north-west, and the figures suggest that the lowest metalling should not be far below Layer 26. However, in a builders' shaft 9 ft. 7 in. deep, sunk through Room 1 near Trench N I (fig. 49, 'X') a 4-in. layer of burnt daub, doubtless representing the Boudiccan fire, was found at *c.* 273 ft. (83·2 m.) above O.D., that is 2 ft. 11 in. (0·89 m.) below the top of Layer 26. Below it was at least 18 in. (0·45 m.) of sticky greenish gravelly loam: this, since it is too far south to be filling of the ditch (p. 194), is probably natural.

¹ Supervised by Mr. J. A. Ellison.

² *Antiq. Journ.* xx (1940), 502.

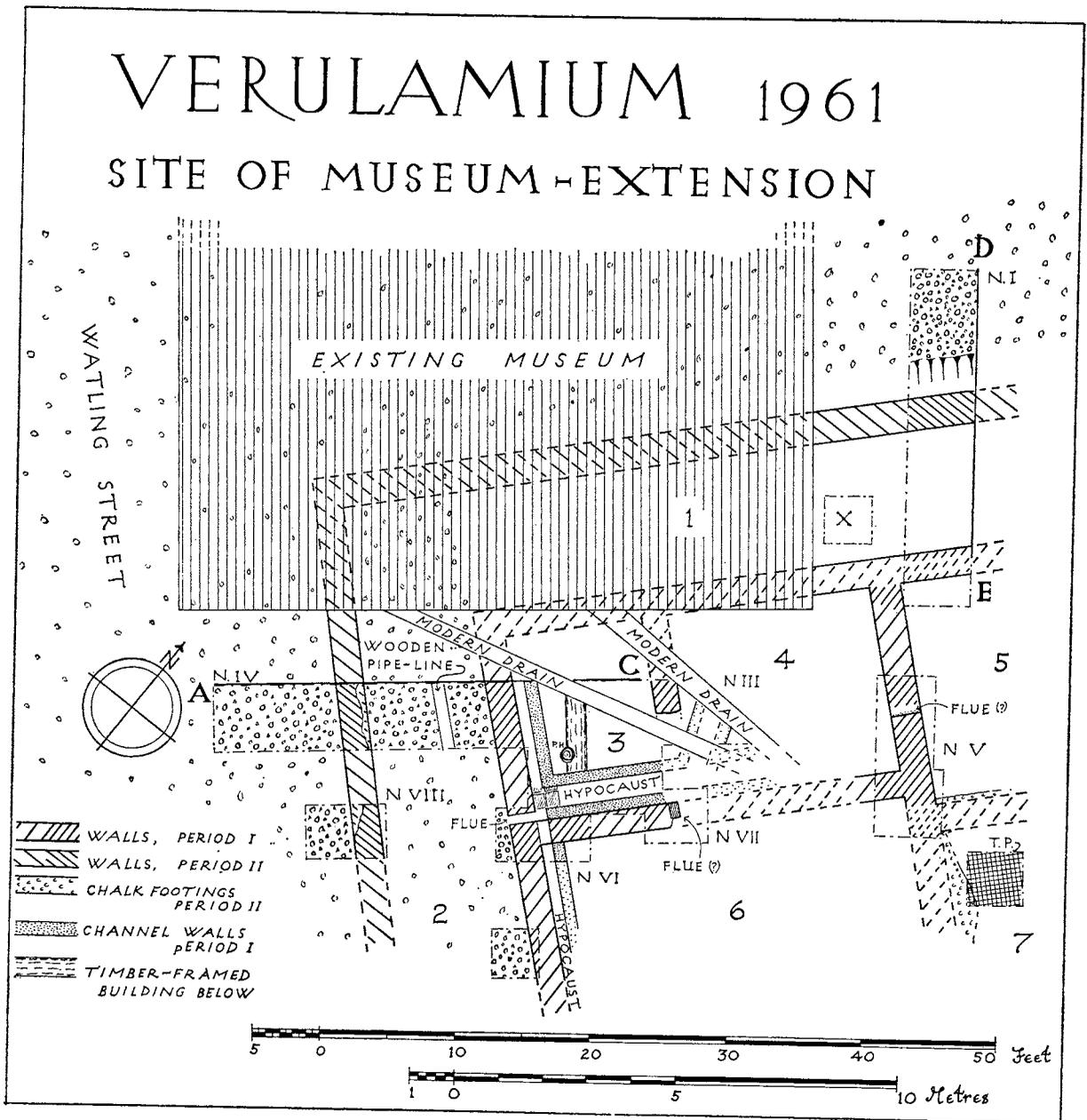


FIG. 49. Insula XVIII, Building 1: plan (scale 1:150).

The Masonry Building, XVIII, 1 (fig. 49)

After the Antonine fire, Building XVIII, 1 was constructed,¹ and at a later date (Phase 2)

¹ Excavations further south-east in 1976 by the Verulamium Museum, in advance of extensions to some changing-rooms, showed that Building XVIII, 1 had started as a small masonry house built c. 100-20 (figs. 2, 123); the parts of the building recorded in this report represented an

extension north-westwards probably in the second or third quarters of the third century over the site of a timber-framed structure destroyed in the Antonine fire. I am indebted to Mr. C. Saunders for this information.

was extended by means of a corridor (Rooms 1 and 2) to north-west and south-west. The original building had walls of flint and mortar resting on chalk footings and was heated by channel-hypocausts in Rooms 3 and 4; flues were found connecting with Rooms 5 and 6. The channels were constructed with side-walls of masonry lacking foundations; no trace of the floor above them survived. The main stoke-hole was probably in or beyond Room 6, but an area of burning was found in the small part of Room 5 which was examined, and a subsidiary flue with a patch of burning outside it showed that another furnace lay at the edge of the street. Room 7 contained a plain red tessellated floor revealed in a builders' trench; the floor oversailed chalk footings which could be equated in level with those of the wall further north.

Very little evidence was found for the date of the building: a mortar floor in Room 5 yielded two Antonine samian sherds. Excavations further south-east in 1976, however, found evidence which suggests that it should be placed in the second or third quarters of the third century.

Phase 2. At a later stage the hypocausts were dismantled and filled in, and the wall between Rooms 3 and 4 was reduced. A thick *opus signinum* floor (N II 12) was laid over both former rooms. The only dating evidence for this event were two pieces of third- or early fourth-century colour-coated sherds, one a rouletted shouldered beaker (No. 1428) perhaps of Type 1118, found in the make-up below it, and the other of Type 1807 from the filling of one of the heating-channels. Later still, doubtless in the mid fourth century, a second *opus signinum* floor was laid over the first. Occupation certainly continued until after the middle of the century, for a red colour-coated bowl (No. 1430) was found in a layer of dark soil abutting the outside wall of Room 3 and sealed by the demolition-deposit. Two coins of Valentinian I and one each of Valens and of Gratian occurred in dark soil overlying the building, though they are not of course conclusive evidence that it had been demolished by *c.* 380.

In Room 3, fragments of fallen wall-plaster were found on the *opus signinum* floor. They were painted (i) red; (ii) red with blue bands; (iii) a black floral pattern on red; (iv) light green leaves on dark blue; (v) brown dots on dark blue. One piece of (iv) showed evidence of a later re-plastering.

The external wall of Corridor 1 (fig. 49; fig. 50, Section D-E) extended the building to the edge of Street XVIII/XIX. Its foundations were sunk into layers of road-silt, and they partly destroyed an earlier street-drain. The corridor had a floor of close-set pebbles in a matrix of mortar and gravel. Corridor 2 encroached over earlier levels of street; its floor had disappeared and its wall had been partially robbed in modern times. The new external wall rested like the others on chalk footings; its mortar, however, was of a deep orange colour characteristic of some fourth-century buildings at Verulamium. There was no pottery or coin-evidence to date it closely. Layer N II 4, which must represent make-up for the floor of Room 2, yielded two colour-coated vessels, one a beaker of Type 1117 of the late third or early fourth century, and the other a dish probably of the same period.

DATING EVIDENCE, SITE 1961 N

DEPOSIT	SAMIAN	COINS	COARSE POTTERY
N I 15 road silt below	35 S.G. pre-Flavian		No. 1427
11 A			

DEPOSIT	SAMIAN	COINS	COARSE POTTERY
N I 9 loamy road- silt below building	38 C.G. Antonine 37 C.G. A.D. 135-60 (D 43) 29, 18, 36 S.G. Flavian	Vespasian, As	
N II 30 road silt below burnt timber building			Type 1907
N II 29 Antonine sleeper-beam trench	18, 36 S.G. Neronian		Type 2500
N II 22			cf. Type 282 (A.D. 70-120)
N II 14 c burnt daub	18R S.G. stamp GERMAN [I OF] (S 36) A.D. 65-85 18/31 C.G. Trajanic- Hadrianic		
N II 14 upper burnt daub	Ritt. 12, 18 S.G. pre- Flavian 18/31R C.G.? probably Hadrianic		Type 10 (A.D. 65-160)
N IV 4 burnt daub as N II 5			Type 800 (A.D. 140-90) Type 1940 (A.D. 140-90) Type 2498 (A.D. 140-200)
N V 6 mortar floor Room 5	32, etc., E.G. stamp [QVIN]TILIANV2 retro. late second or early third cent. (S 37) 31 C.G. Antonine		
N IX 7 make-up of phase 2 (=N II 13)			No. 1428
N IX 9 filling of hypo- caust channel			Type 1807
N II 4 disturbed road metalling= make-up for Room 2 floor			No. 1429 and cf. Type 1728 (A.D. 280-350)

DEPOSIT	SAMIAN	COINS	COARSE POTTERY
N IX 3 upper <i>opus signinum</i> floor			cf. Type 1564
N VI 3 dark soil sealed by demolition-deposit			No. 1430

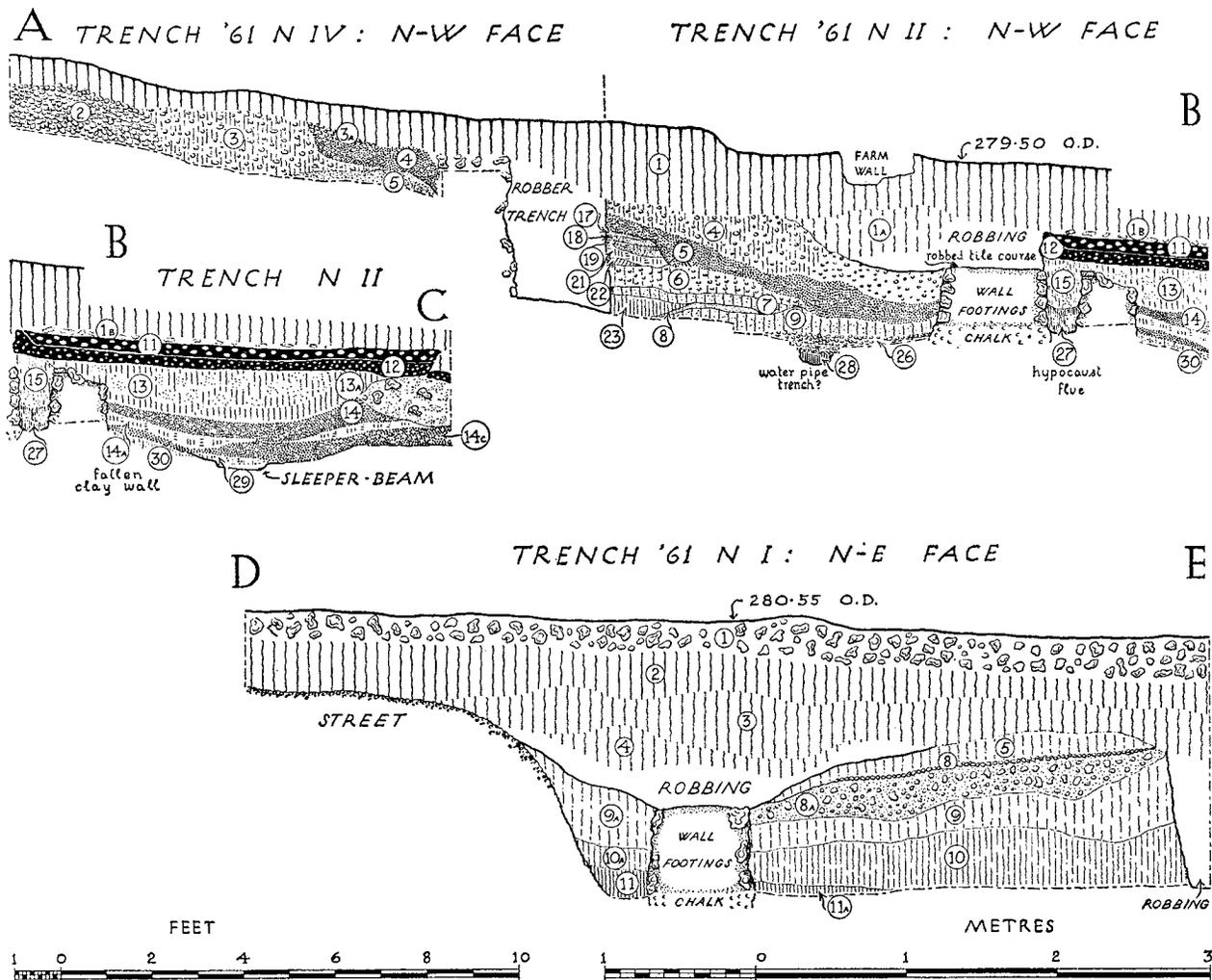


FIG. 50. Insula XVIII, Building 1: Sections (scale 1:48).

INSULA XIX

BUILDINGS XIX, 1 and XIX, 2, which lie immediately opposite the north-east side of the forum, were partly explored by Mr. A. D. Saunders for the then Ministry of Works in 1955. The only other excavations in this Insula¹ were undertaken in 1960 in an attempt to find the south-east defences of the Claudian fort whose north-east rampart had been identified below the city defences during 1957 in Insula XVII (p. 37). As the fort rampart did not appear in a trench cut through the city defences in Insula XVIII (p. 50) it was assumed that it had turned before reaching that point, and a likely position for the corner was thought to be at the place where the city wall makes an angle of 21 degrees near the north corner of Insula XIX. In the event no military defences were encountered in our trenches. The problem of the fort is further discussed on p. 34.

INSULA XIX, BUILDING 3, STREET AND SEWER (figs. 51, 52)

The results of the work were the discovery of (a) the sewer which had previously been identified on the south-east side of Insulae XIV and XXVIII (pp. 84, 248), together with a narrow street beside it (Trenches K VIII and K IX); (b) two rooms of Building XIX, 3, one of them a cellar (Trench K XIII), the other a semi-basement (Trench K XII); (c) a small ditch or gully (Trench K X). This ditch was of early date but is too slight for a military ditch and runs on an alignment unlikely for the expected defences.

Since these trenches were outside the threatened area and were dug for a specific purpose, no further work was undertaken on Building XIX, 3, and insufficient trenching was done to determine the lines of the Roman building; the two rooms did not appear to lie on the same axis (fig. 51).

Trenches K VIII-IX. Street XVII|XIX and the sewer (figs. 51, 52)

The south-east wall of the sewer was robbed to its foundation; the north-west wall retained six courses of tile (Section A-A¹). The tile floor, 2 ft. 1 in. (0.63 m.) wide, was 16.93 ft. lower than at the east corner of Insula XXVIII; this represents a fall of almost 1 in 32. No evidence dating the construction was found in Insula XIX; but since the sewer is of one build with Building XXVIII, 1, it can be dated to c. 210-25. A thick layer of dark silt lay on the floor and yielded two sherds of colour-coated beaker; above this were destruction-deposits left by tile-robbers; they produced only Roman pottery, but in so small an excavation this does not rule out a medieval date.

South of the sewer lay a narrow band of street-metalling (Section A-A¹ (18)). The sequence in this trench (K VIII) was as follows. At the base, cut into natural subsoil, was a trench 2 ft. (0.61 m.) wide and 1 ft. 3 in. (0.38 m.) deep, filled with dark brown loam (25) sealing a thin deposit of burnt daub and charcoal (26). This appeared to be a rather wide foundation-trench; Layer 26 yielded a jar (No. 1431) which is probably pre-Flavian, but the evidence of burning is not sufficiently extensive to warrant suggesting a building destroyed

¹ Apart from a small, as yet unpublished, excavation by the Museum authorities in 1974 in the car-park of the Six Bells Inn.

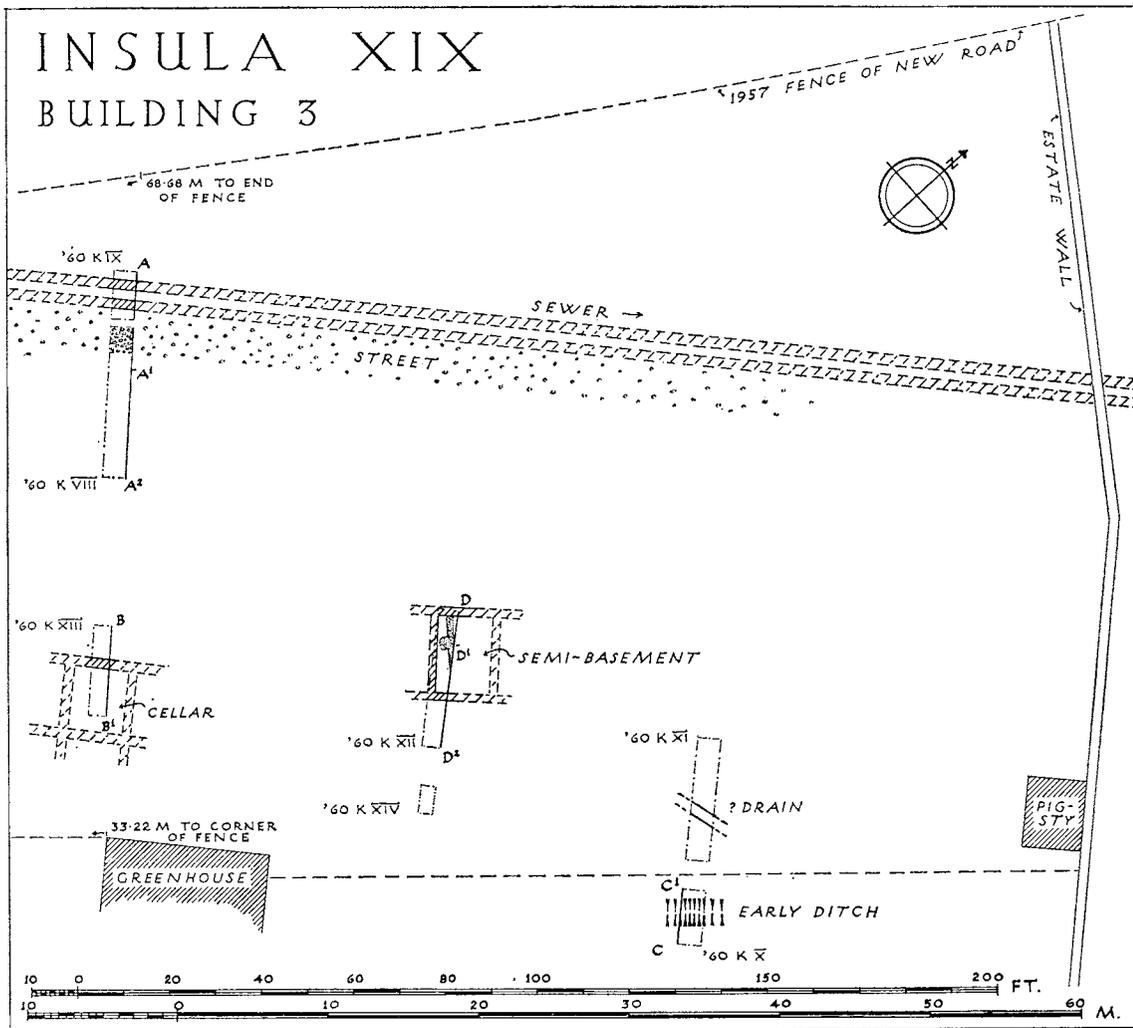


FIG. 51 (scale 1:5000).

by Boudicca. Layer 24, reddish-brown loam, contained a mortarium (No. 1432) of the period 60–95 and a Flavian samian sherd of form 27. It is probable that Layers 23, 13 and 14 represent the earliest street: Layer 23 contained a sherd of form 37, S.G. *c.* A.D. 75–90, and so this part of the street was not laid down much if at all before the end of the first century.

The south end of the metalling (Section A¹–A²) was overlaid by traces of occupation including a hearth (10) containing a Hadrianic or Antonine samian sherd of (?) form 18/31, and the whole area was sealed by (8), a spread of gravel containing sherds of two bowls of form 37, C.G. *c.* A.D. 125–60, and a sherd of hunt-cup. This layer is contemporary with the latest street-surface (18). At this stage the street had narrowed to a lane extending only 5 ft. (1.52 m.) into Trench K VIII; however, the metalling may once have extended further to

the north towards the sewer, whose nearer edge lies 9 ft. 6 in. (2.90 m.) from the south edge of the street.

Trench K XIII. Building XIX, 3, cellar (figs. 51, 52)

This trench encountered a cellar filled with robbed debris (Section B-B¹) and excavation was accordingly discontinued. The destruction of the cellar appears to fall in the early or mid third century. The pottery included, among many types attributable to the period 150–200, a sherd of tall plain-rimmed colour-coated beaker (cf. Type 1059 or 1060) which belongs to the third century; but there were no black-burnished flanged bowls or other unmistakably fourth-century types. A date as early as 220–240 is possible; but it must be remembered that the evidence is not extensive because excavation was minimal.

Trench K XII. Building XIX, 3, semi-basement (fig. 53)

Another room was encountered in Trench K XII; as its walls did not appear to conform in alignment with those in Trench K XIII it is possible that two distinct buildings are present. Although sunk into the ground (Section D-D²) this room had its floor only *c.* 2 ft. (0.60 m.) below the surface of natural subsoil and so was not a true cellar. There is no slope here, cutting back into which could account for this situation, and it may be assumed that the room was used for cool storage but did not carry a storey above; the broken levels would have necessitated an inconvenient mezzanine, and in any case the walls (which were built of flints and yellow mortar) were only 1 ft. 6 in. (0.46 m.) thick. Trench K XII ran along the western side of the room. Cut in the subsoil below the room and not quite parallel with the western wall (fig. 51) was a gully 1 ft. (305 mm.) wide and *c.* 6 in. (152 mm.) deep; *c.* 6 ft. (1.83 m.) from the north end a wider gully (2 ft. 10 in. = 0.64 m. wide) ran at right-angles. The fillings of both (Section D-D² (16)) were greyish brown loam. The gullies are not suitable in size or position for the seating of floor-joists and they probably represent some form of furnishing.

The only evidence for date of construction came from the layers outside the building (Section D¹-D²). The foundation-trench (12) yielded nothing but a sherd of samian of form 37, C.G. *c.* A.D. 100–20; this was sealed by (9 A) which accordingly post-dates the construction, but perhaps formed part of the process of making good the site since it in turn was sealed by (7), a hard-packed gravel surface which had been ploughed away beyond 2 ft. from the wall. Layer 9 A yielded No. 1433, a plain Castor-ware cup resembling Gillam's type 86 (dated 180–230), as well as the following samian:

Curle 21	E.G. late Antonine
31, 33	C.G. Antonine

Layer 7, in addition to three pieces of Antonine samian, yielded (i) a dish (No. 1435) of third- to fourth-century type and unlikely to be earlier than 200; (ii) a calcite-gritted jar (No. 1436) which is paralleled by one from Insula XXVIII from a layer dated *c.* 200–25 (57 Y XII 3/2). The building may thus have been put up in the late Antonine or Severan periods, *c.* A.D. 180–220, a conclusion supported by a piece of poppy-head beaker and the neck of a pinch-mouthed flagon in the 'furniture' trench (16). This type of flagon (Type 1977) occurs commonly in the second century, and the beaker belongs to the mid second century (Type 2051).

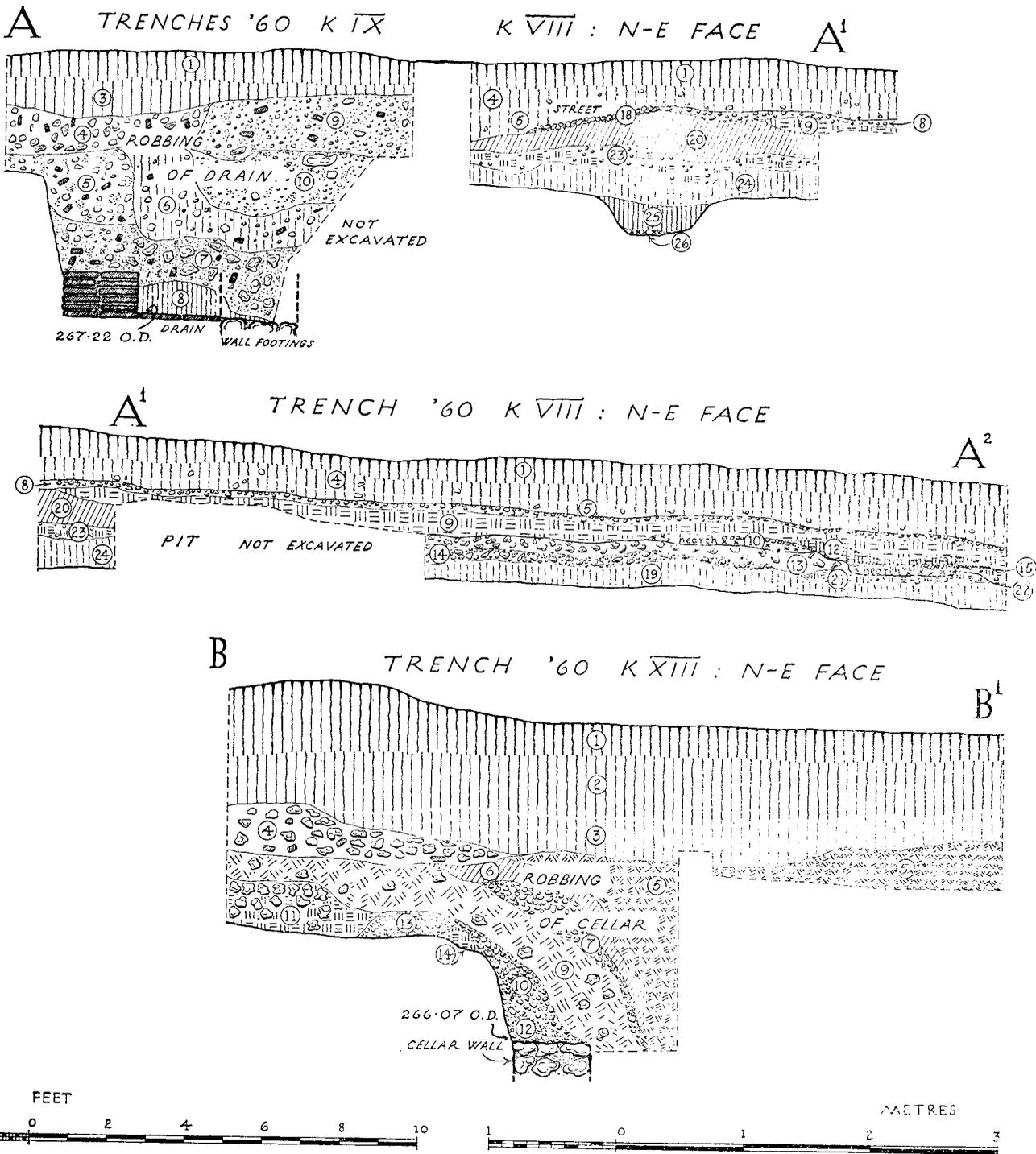


FIG. 52. Insula XIX: Sections (scale 1:48).

There are signs that occupation was ended by fire, for Layer 15 (Section D–D²) was of burnt daub and charcoal lying directly on the bottom: the burning did not extend into the gullies below, and it would seem that the original wooden furnishing had previously been removed. Layer 14 A was a similar deposit of burnt material. Above this was a filling of flint-and-mortar debris and clay (5, 10), the latter containing quantities of red tesserae and pieces of painted wall-plaster in the following colours: (i) crimson; (ii) green; (iii) bright blue; (iv) a thin red band on yellow; (v) double red bands on white; (vi) red, blue and white bands; (vii) red and white panels; (viii) as (vii) with the addition of green foliage and a black diagonal stripe.

The date of destruction is indicated (a) by a barbarous radiate coin in Layer 15 and (b) by a hoard of 90 radiates of the period 270–90. This hoard has been published by Professor H. Mattingly in *Britannia*, ii (1971), 196–9; he dates it ‘fairly early in Probus’ reign and certainly before 280’. It must be remembered, however, that this date marks the original closing and concealment of the hoard; its position as found was secondary, for there was no sign that it had been buried by its owner in the rubble filling the room. Rather, we must assume that it was originally concealed in the wall or roof of the building and reached its find-spot during demolitions. The assumption is strengthened by Nos. 1437–8, large pieces of two flanged bowls of types which are very rare at Verulamium before 280 and not common before 300. The useful group of pottery found in the destruction-deposit can accordingly be dated *c.* 290–310.

Trench K XIV

The stratification in this trench was similar to that in the south end of K XII.

Trench K X. Early ditch (figs. 51, 53)

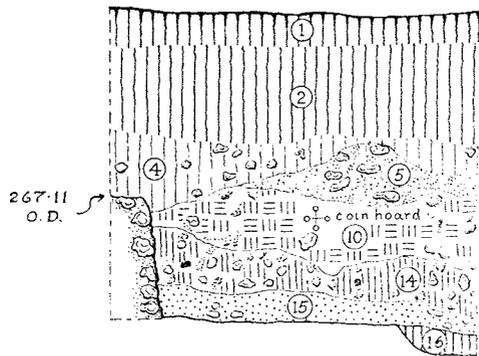
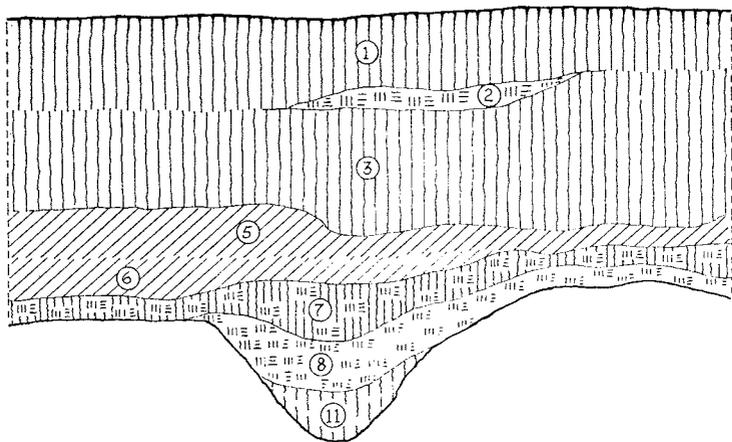
A small ditch, 6 ft. (1.83 m.) wide and 2 ft. 6 in. (0.76 m.) deep was found. Its filling (Section C–C¹ (11)) of greyish-brown loam yielded some Belgic sherds including a jar of Type 1843; part of a similar jar accompanied by two Roman sherds came from Layer 8, a deposit of fairly clean yellow loam which may represent the redeposited upcast from the ditch. It is clear that the ditch is too slight to be military; it is likely to be a property-boundary which was levelled at the construction of the fort. Layer 7 may represent cultivation; it yielded two sherds of Flavian samian and a jar resembling Type 153 of comparable date.

Trench K XI

Stratification was similar to that in K X. The trench was crossed diagonally by a shallow gully whose lower filling of fine gravelly silt suggested use as a drain. The loam filling (8) above this silt contained—in addition to a good deal of charcoal—a coin of M. Aurelius as Caesar (*RIC* (Antoninus Pius) 1322) and two vessels of the mid second century.

C TR. '60 K X̄: S-W FACE C¹

D '60 K XII D¹



D¹ TRENCH '60 K XII: N-E FACE D²

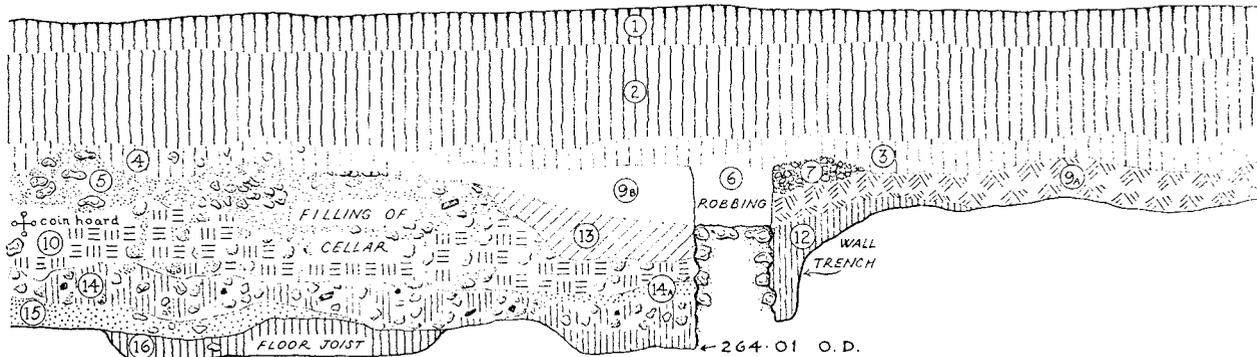


FIG. 53. Insula XIX: Sections (scale 1:48).

INSULA XX

BUILDINGS 1-3

INSULA XX was divided from XXI by a street 19 ft. (5.79 m.) wide, running parallel to and just behind the 1955 Ditch in this area of the city (figs. 122, 156). The earthwork respects the planned line of the street, whether or not the street itself had yet been laid. Three main levels of metalling were found, the first being earlier than Building XX, 1. On the site as a whole two dupondii (Vespasian, Domitian) together with not infrequent sherds of samian dating to Flavian and even Neronian times attest occupation in the first century,¹ and slight traces of structures were found which were a little earlier than the Antonine and third-century Buildings 1-3. The 1955 Ditch was functional from the reign of Nero to that of Hadrian, but this was no bar to activity in its immediate front from Flavian times. The filling of the Ditch was finally levelled off here *c.* 160-70 (p. 139), and soon afterwards masonry Building XX, 2 was put up. Other contemporary structures may have existed nearer Street XX/XXV. The large town-houses XX, 1 and 3 replaced these *c.* 240.

Building XX, 1 (fig. 54)

This building crossed the site of the 1955 Ditch (pl. XII *b*). No trace was found of the rampart on the north-east side of the Ditch, but almost 3 ft. survived of the counterscarp bank (fig. 55), through which had been cut a recent excavation-trench running north-west-south-east. This can be identified with 'Section W-X' of Wheeler's excavations,² dug in the search for a northward turn of the Fosse Earthwork.

Building XX, 1 was built *c.* 240; its flint-and-mortar walls, 2 ft. thick, rested on foundations of chalk-filled trenches; traces of tile bonding survived at the corners. Its south-west end had been damaged by the erosion of the medieval lane, and its position near the crest of the valley's slope resulted in much damage by cultivation: many of the walls, especially in the south-east wing, survived only as chalk footings. The building was 132 ft. (40.23 m.) long and of one build with XX, 3, which adjoined it. There was a small gravel courtyard on the north-west side in the angle of Corridor 4; this must have been entered from Street XX/XXV, the course of which lies some 65 ft. to the north-west. A plank-lined drain 9 in. wide and 6 in. deep ran round two sides of the courtyard, at least in the area overlying the Ditch; there was no trace of it over the counterscarp bank. The drain is seen in figs. 55, 56, Sections A-B, C-D; it is omitted from the plan (fig. 54) because of the ditch below. The north-west wall of the corridor ended abruptly at the counterscarp bank. The chalk footings ceased first and the flint wall 2 ft. further on; possibly there was an entrance at this point, but more probably the wall was merely stepped up over the bank. Where the line of the wall could be found again further south-west, it had become a timber-framed clay partition (pl. XIII*a*). It must be assumed that the masonry wall was once continuous over the bank and that it turned

¹ Chalk mosaic tesserae were found in B VII 11 and B III 20, the top red gravel packing of the Ditch.

² Wheeler, *Verulamium*, 50 and pl. cxix.

Room 6 contained the disturbed remains of a tessellated floor of brick tesserae $1\frac{1}{2}$ in. square; the two surviving areas were aligned at right-angles to surround a mosaic panel at the centre, but only one fragmentary line of white tesserae survived of this. Overlying the floor was fallen plaster in red; in red with a yellow border; and red with a green stripe. The plaster covered extensive areas of the floor from which the tesserae had already disappeared. The three surviving walls of this room were of (timber-framed?) clay construction only 9 in. (0.23 m.) wide. The south-west wall had been re-plastered twice; its latest surface was red with vertical white stripes, and the penultimate one was also red. A setting of tile fragments in cement in this wall was perhaps the threshold of a door. Cut through the tessellated floor was a small furnace 5 ft. 3 in. (1.6 m.) long, 1 ft. 11 in. (0.58 m.) across its rounded termination, and 1 ft. 9 in. to 2 ft. (0.53–0.61 m.) deep (fig. 58). The edges were intensely reddened by considerable heat and there was a deposit of fine black soot on its floor. The filling yielded loose tesserae from the floor, but the oven was disused and filled with clay before the demolition of the room; in the filling was a sherd of Colchester mortarium of the period 170–250. Below Room 5 was an earlier gravel floor on which was a thin occupation layer yielding second-century pottery.

Room 7 also contained fragmentary remains of a red tessellated floor as well as a loose fragment showing a blue band, two tesserae wide, turning a right-angle on a white background. Across the middle of the room ran a masonry wall, with a flue through it lined with tiles set in *opus signinum* (pl. XIII*b*). Although the base of the flue was below the level of the pavement, the wall still survived too high to allow of the latter having formerly passed over it and the wall is certainly a later insertion. It made a butt joint with the wall of Building XX, 3, did not continue beyond it, nor was it found in Room 6. Presumably, therefore, it turned north-west before reaching this room, and a disturbance in the west corner of Trench F III outside the clay wall of Room 6 may represent its robbing. With its suggestion of heating-arrangements, it indicates some major alteration in the building, of which denudation has deprived us of other evidence, and illustrates the unsoundness of supposing that occupation of the site necessarily ended at the point to which surviving datable evidence takes us. Below Room 7 once again traces were found of an earlier gravel floor, but lacking datable evidence.

Owing to extreme denudation by the plough, it is uncertain when the building was demolished. There were two successive rubbish-pits in the courtyard area in Trench B I containing late third- and fourth-century pottery respectively, and a coin of 330–35 was stratified below the latest courtyard metalling; this, together with a coin of Constans and an illegible minim, were the latest coins on the site. A coin of Constantine I (*Constantinopolis*) was the latest coin at Building XX, 3. Occupation certainly extended, therefore, at least until *c.* 360 (see p. 22).

north-west along the side of Room 5, where all is ploughed away. Rooms 5, 6, and 7 could be lit from the north-west if this wing ended flush with the other.

Room 1 had a floor (B V 4, fig. 55) of clay set among large flints; overlying this was (3), a layer of earth containing much building-rubble including fallen plaster and a large number of chalk and white limestone tesserae (12 mm. square and smaller) from a mosaic. No trace remained of its bedding. The north-west wall crossed a rubbish pit over which a relieving arch in tiles had been constructed. The pit yielded pottery datable *c.* 220–40.

Little survived of Rooms 2 and 3. Over the area of the ditch the corridor, Room 4, had a tessellated floor of red-brick cubes $\frac{3}{4}$ in. square, with occasional yellow ones. This floor had been badly disturbed, partly by subsidence but also partly by wear, and had later been replaced by a gravel floor *c.* 5 in. higher (fig. 56, B VI 5 B), which could not be dated. About the middle of the fourth century the courtyard had been re-metalled; this latest surface, which overlay a coin of Constantine II as Caesar (330–35), survived only near the modern hedge-line (B VII). It was *c.* 1 ft. 3 in. above the original metalling, and on it, at the angle of the wall, was lying a piece of burnt beam (2 ft. wide and projecting 4 ft. 6 in. into the trench) with some large nails hammered into its sides. In the make-up (B VII 7) below the first gravel surface of the courtyard was found the substantial part of a carved table-leg of Kimmeridge shale. The date of this context is *c.* 210–40; the item was broken when deposited. This is the earliest example of this product and thus offers important evidence for the history of the industry.

Where examined near its south-west corner, the corridor's tessellation was bedded in white mortar on a thin make-up of pebbly loam. Below this was a 2-in. spread of yellow cement (F V 7) lying on a 6-in. gravel make-up (F V 8) (fig. 57, Section E–F). Since the painted face of the accompanying clay wall descended to this lower cement, it might be considered to be an earlier phase of corridor floor; but it is normal for painted walls to be set up and decorated before the tessellation is laid down,¹ and here it is likely that the white cement was merely a building episode. It yielded a sherd of samian form 37 (?Antonine). Sealed by the lowest gravel make-up which yielded much of a Flavian-Trajanic pot (No. 1441) was a plaster-mixing pit² cut through an orange gravel floor (10). The pit (fig. 58) measured 4 ft. by at least 2 ft. 6 in. (it was probably roughly square) and was 1 ft. 6 in. deep. There was a skin of plaster $\frac{1}{8}$ -in. thick adhering to the sides, round the clay sealing the pit's top; in the bottom a bed of 6–7 in. of plaster still remained. The filling yielded sherds of the period 150–70, so the pit was probably used during the construction of Building XX, 2.

Room 5. There was no clear evidence in Trench F I that the area was a room, for it was very badly disturbed by tree-roots; the evidence is indirect, namely the probability that the masonry wall had once bounded it on the north-west. Below a layer of debris containing wall-plaster fragments, a jar (No. 1475) had been buried with its lip at the level of the tessellated floor in Room 6. The clay wall between Rooms 4 and 5 survived in places 6 in. high; it had been re-plastered twice and had a white surface. The tessellated floor beyond it in Corridor 4 sealed two sherds of third-century pottery.

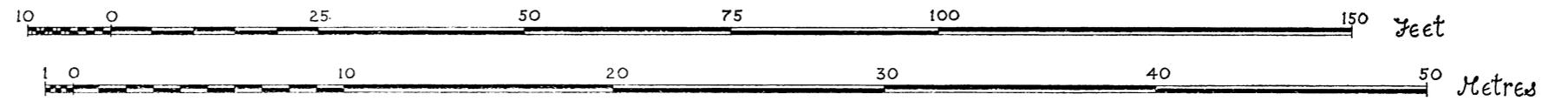
¹ Cf., e.g., Building XXI, 2 (p. 162).

² Shallow pits in which builders mixed mortar or plaster are not uncommon on Roman sites though not often recognized for what they are. Examples can be quoted from the

Hayling Island temple, villas at Walton-on-the-Hill and Cobham, Surrey, and from Verulamium itself (see below pp. 152, 238, 269 and *Antiq. Journ.* xvii (1937), 32).

VERULAMIUM 1955 - 6

BUILDINGS XX, 1-3



- PERIOD 1. FLINT & CLAY SILL
- PERIOD 2 WALL
- PERIOD 3 WALL
- PERIOD 3 CHALK FOOTING
- PERIOD 4 WALL

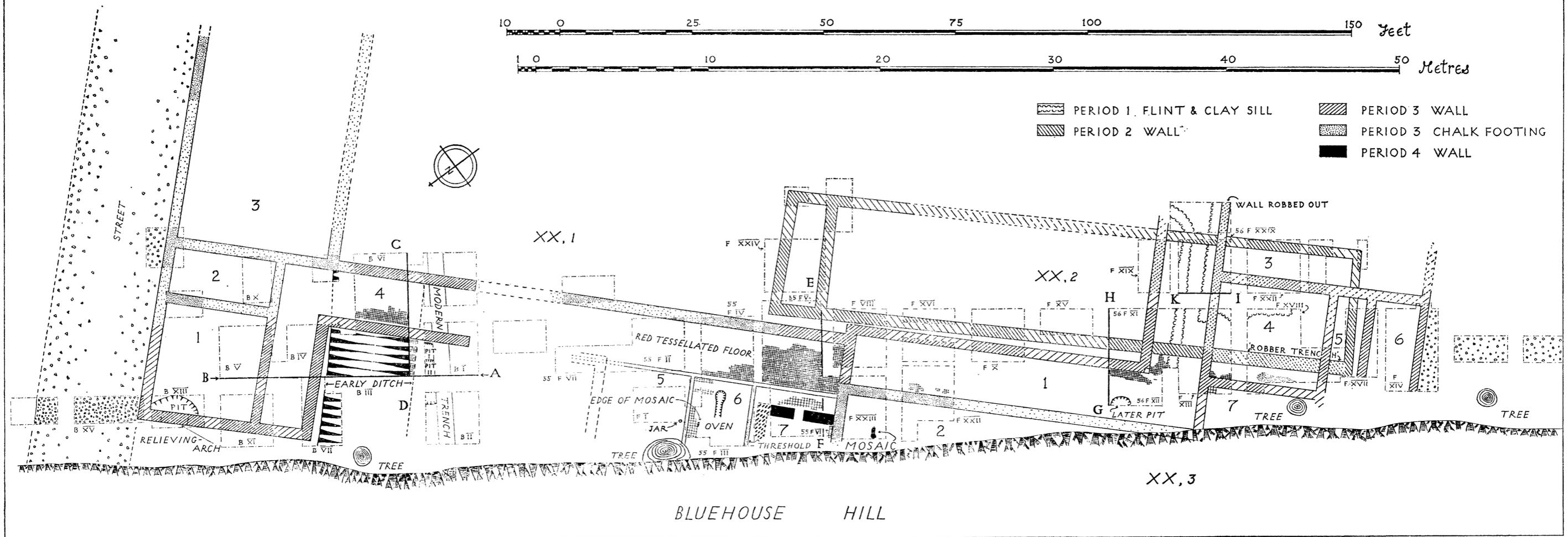


FIG. 54 (scale 1:240).

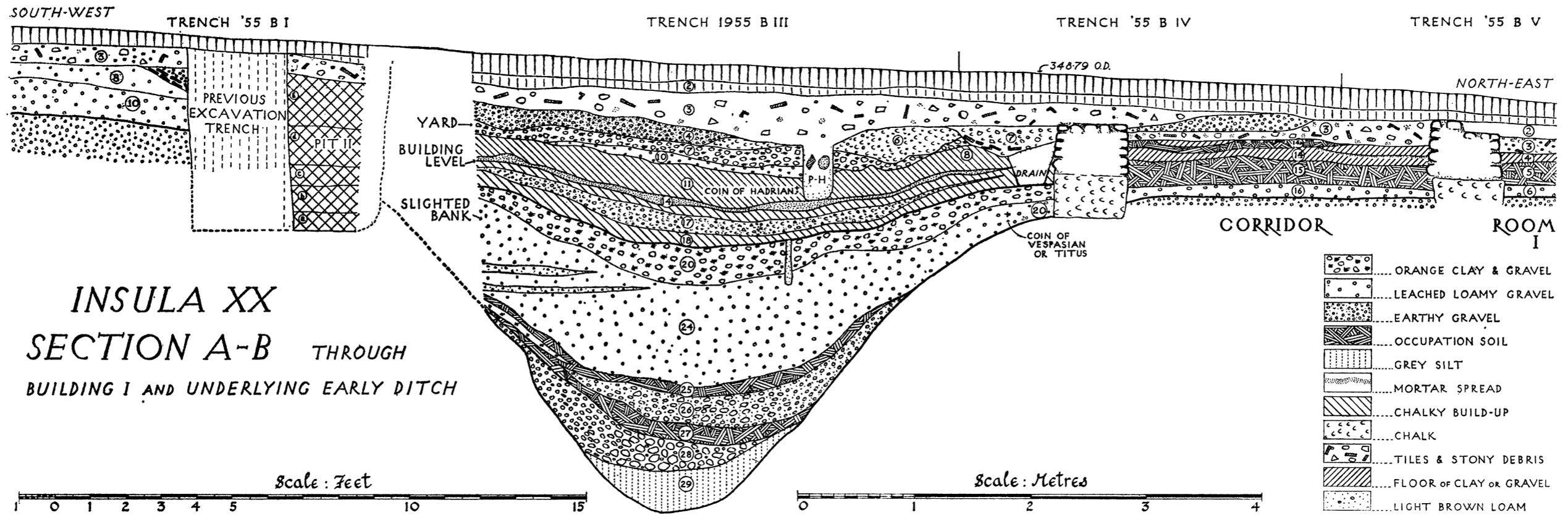


FIG. 55 (scale 1:40).

DATING EVIDENCE: BUILDING XX, I

DEPOSIT	SAMIAN (All Central Gaulish unless otherwise stated)	COINS	COARSE POTTERY
<i>(a) The 1955 Ditch</i>			
55 B III 29 primary silt			Nos. 1439-40
55 B III 27 dark occupa- tion soil	37 (three) A.D. 80-110 (D 44-46) 18 (three), 27 S.G. Flavian 30 S.G. prob. Vespasianic 18 S.G. Flavian or Flavian- Trajanic		Nos. 1445-52, 2438
55 B III 26 grey and orange clay and gravel	18/31 C.G.? prob. Trajanic 18 Flavian		No. 1453
55 B III 25 dark occupa- tion soil	residual samian		Nos. 1442-4
55 B VI 12 (=B III 24) gravel of rampart	30 c. A.D. 130-50 (D 47) 31 (Sb), 33, 31 Antonine Curle 11 Trajanic- Hadrianic		Nos. 1457-8 Types 683, 878, 1093, 1940 (A.D. 135-90); Type 2308; Type 2246 (A.D. 140-80); cf. Type 2251
55 B IV 20 (the same)		Vespasian (dupondius <i>RIC</i> 753b)	No. 1459
55 B III 18	37 see Layer 17 below 27 (two) Hadrianic 46 prob. Hadrianic 18/31 Trajanic-Hadrianic		No. 1455 and cf. Type 2092
<i>(b) Building XX, I</i>			
55 B III 17 chalk, earth and stones, make-up	37 c. A.D. 150-80 (D 48) 33, 31 (two) Antonine 31 Hadrianic-Antonine		Castor 'box' sherd
55 B III 13 chalky earth at level of 14 make-up	residual sherds		Nos. 1462-3
55 B III 12 make-up	33 prob. Antonine 27 Hadrianic-Antonine 35 second century		No. 1465

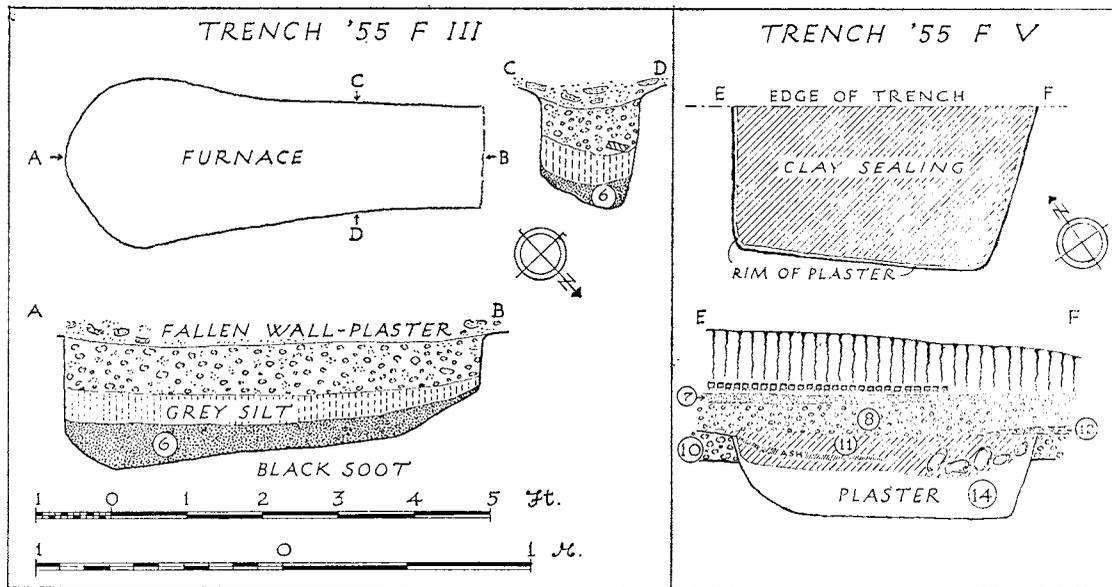


FIG. 58. Insula XX, Building 1: the furnace and the plaster-mixing pit (scale 1:30).

DEPOSIT	SAMIAN (All Central Gaulish unless otherwise stated)	COINS	COARSE POTTERY
55 B III 11 make-up	37 see Layer 17 above 33 (two) Antonine 42 second century 27 Hadrianic-Antonine	Hadrian (dupondius <i>RIC</i> 795a)	No. 1461
55 B VI 11 (the same)		Faustina II (<i>RIC</i> (Antoninus Pius) 1409a)	
55 B VI 9 make-up over ditch			Nos. 1472-4
55 B III 8 foundation- trench of building	31, 33, 38 Antonine		
55 B XIII 7, 8 and 11 pit under wall of Room 1			Nos. 1468-71 and cf. Types 1060, 1812
55 F IV 4 make-up, Room 4			c.c. sherd, Castor 'box' (third- century)

DEPOSIT	SAMIAN (All Central Gaulish unless otherwise stated)	COINS	COARSE POTTERY
55 F IV 3 tessellated floor Room 4			No. 1467
55 F V 12 gravel floor below corridor			No. 1441
55 F V 14 plaster in mixing pit			No. 1456
55 F V 11 clay seal of pit			No. 1460
55 F V 5 brown occupa- tion-soil outside and earlier than corridor wall	31, 33, 36 Antonine		
55 F V 7 mortar bedding below corridor tessellation	37 Antonine(?)		
55 F XIX 5 make-up, Room 4	33 prob. Antonine		
56 F XXIII 3 E clay make-up, Room 7			No. 1464
55 F III 5 clay packing of furnace			No. 1481
55 B I 12 Pit I			Nos. 1479-80 and fourth-cent. c.c. sherds
55 F I 4 Jar in floor, Room 5			No. 1475
55 B VII 5 make-up for secondary floor of courtyard		Constantine II Caesar	Nos. 1476-8 and cf. Type 1812

DEPOSIT	SAMIAN (All Central Gaulish unless otherwise stated)	COINS	COARSE POTTERY
55 B I 14 Pit II (cut into Pit I)			No. 1482 and cf. Type 1605
55 B II 6 (the same)			cf. Type 1808
55 F VII 1 ploughsoil over Room 4		Constans	
55 B I 7 rubble over courtyard		Carausius	
55 B IV 4 rubble over Room 4		minim	

On this evidence the 1955 Ditch on this site began to be filled with rubbish (III 27), after a small collapse of the side (28), *c.* 135-45. (No. 1449 is dated *c.* 130-50 and the only two other examples of No. 1452 are dated between 140-45 and 140-50; the type may have appeared slightly earlier.) After a deposit of bank material, more occupation-rubbish (25) was thrown in containing pottery of the same date. Then followed the demolition of the rampart (20, 24). In Trench III these layers yielded nothing, but in Trench VI there was a large group of pottery of which the date of deposit is *c.* 150-70. After this followed a long period during which the ditch-filling settled and consolidated. The surface of III 20 was at first taken to be that of the natural subsoil. Layers 17 and 18 are best interpreted as make-up for the building, and Layer 14 as the builders' spread of mortar on which more make-up (11) was laid. The date of the building cannot be earlier than *c.* 210-30; since, however, the contents of the Pit below the wall of Room 1 in particular are of developed third-century type it is to be placed with greater safety *c.* 240.

Building XX, 2

South-west of XX, 1 lay two successive buildings. The first, XX, 2, was a strip-building 111 ft. (33.83 m.) long and 24 ft. (7.32 m.) wide; save for a small room 5.5-6.5 ft. (1.7-1.98 m.) wide at its north end it was apparently undivided. There was a gravel floor on a clay make-up (fig. 56, Section G-H, F XI 8 and 10). Little dating evidence was recovered, but the building was not erected before *c.* 160-70 and had been demolished before *c.* 240 when Building XX, 3 was built across part of it.

DATING EVIDENCE: BUILDING XX, 2

DEPOSIT	SAMIAN (All Central Gaulish)	COARSE POTTERY
56 F XI 11 loamy gravel below 8	33 Hadrianic-Antonine	
56 F XI 10 loam on 11		No. 1454 and cf. Type 929
56 F XI 8	37 (two) Hadrianic or early Antonine	Type 720
56 F XV 3 occupation on gravel floor of building	33 stamp GRA[CCHI•M] (S 38) A.D. 150-90	
56 F XXIX 8 occupation below building		Type 666 and cf. Type 2308 (A.D. 135-90), and Type 2250 (A.D. 130-60)

Flint wall-sills below Building XX, 2

Building XX, 2 overlay some lines of footings or sills of flint nodules set in clay (fig. 54), of which too little was recovered to make sense of the plan. The stratification was also so shallow that little can be said of their date except that they too belong to the second century, being inserted through a layer (F XXIX 8, fig. 56, Section I-K) containing pottery dated *c.* 130-60. Thus, they represent a short-lived structure built *c.* 140 and demolished to make way for Building XX, 2, *c.* 160-70.

Building XX, 3

House XX, 3 was of one build with XX, 1, sharing a party wall; its corridor was bonded with and continued the general alignment of Room 4 of the latter but was offset by 2 ft. and was laid out not quite parallel. The house was 108 ft. 6 in. (33.07 m.) long. The south-east wing was badly robbed and was not traced outside the area under threat.

There appeared to be a butt-joint between the wall of the corridor (1) and that of Room 2, which had been robbed to its chalk footing; the flint coursing of the corridor wall began below the level of the chalk footing of the latter. This, however, may merely have been the result of stepping down to follow the surface slope. The corridor had a floor of red-brick tesserae $\frac{3}{4}$ -1 in. square; the alignment of the tesserae followed the axis of the external wall in each arm.

Room 2 was much disturbed, but contained a small fragment of mosaic in dark blue, red, and white, and there were indications of a secondary floor of gravel sealing this, possibly as the bedding for a new mosaic. The dimensions of the room were not established. In Room 4 fragments of a red tessellated floor survived at one point near the wall and elsewhere some of its white mortar basis. Nothing survived in Rooms 3, 5, and 6, but a small piece of tessellation was found in Room 7.

Cut through the corridor in Trench F XII was the truncated base of a pit filled with black earth containing pottery, bones, oyster shells and tile-fragments. What remained was very

shallow, and it seemed clear that the pit had originally been dug from a level several feet higher and that erosion caused by cultivation had lowered the surface considerably. The pottery was not of closely datable types but must belong to the second half of the fourth century.

DATING EVIDENCE: BUILDING XX, 3

DEPOSIT	SAMIAN	COINS	COARSE POTTERY
56 F XII 14 make-up for tessellation, Room 1			No. 1466, cf. Type 1057 (A.D. 200-50)
56 F XIV 3 make-up, Room 6	31R C.G. stamp CAR[Antonine		
56 F XII Pit I dug through corridor			Nos. 1483-4 and third-cent. c.c. sherds
55 F III 2 debris over Room 6		Tetricus I (<i>RIC</i> 100 ff.)	
55 F VIII 2 rubble over Room 2		Domitian (dupondius)	
56 F XIV 2 ploughsoil over Room 6		Constantine I (<i>Constantinopolis</i>)	

The building is contemporary with House XX, 1 as both structural and dating evidence show, and was therefore built *c.* 240. Disturbance and erosion, with resulting loss of layers, make it difficult to assess the length of its life, but there is nothing to contradict the view that like its neighbour it stood until *c.* 360. Later in the fourth century a pit was dug in its ruins.

INSULA XXI

BUILDING I

ON this site once again the structures lay close under the hedge and the greater part had been lost to the medieval lane. Two successive timber or half-timbered buildings preceded the masonry house and spanned most of the second century. Building XXI, 1 itself was built *c.* A.D. 190 and survived until about 345 when part of it seems to have stood empty for a few years before the whole was demolished.

(a) *Period I. Building XXI, 1 B* (fig. 59)

The first building was slight and was only partly excavated. Five post-holes forming the north angle of a rectangular structure were found in Trenches D X–XIII.¹ There were no sealed levels associated and it may have been only a shed.

(b) *Period II. Building XXI, 1 A* (fig. 59)

The same part of the site was next occupied by a building with clay walls supported by a timber frame resting on sleeper-beams in trenches; the south-east wall of Room 3, however, had a foundation of flints and yellow mortar. This lay directly below, but was narrower than,

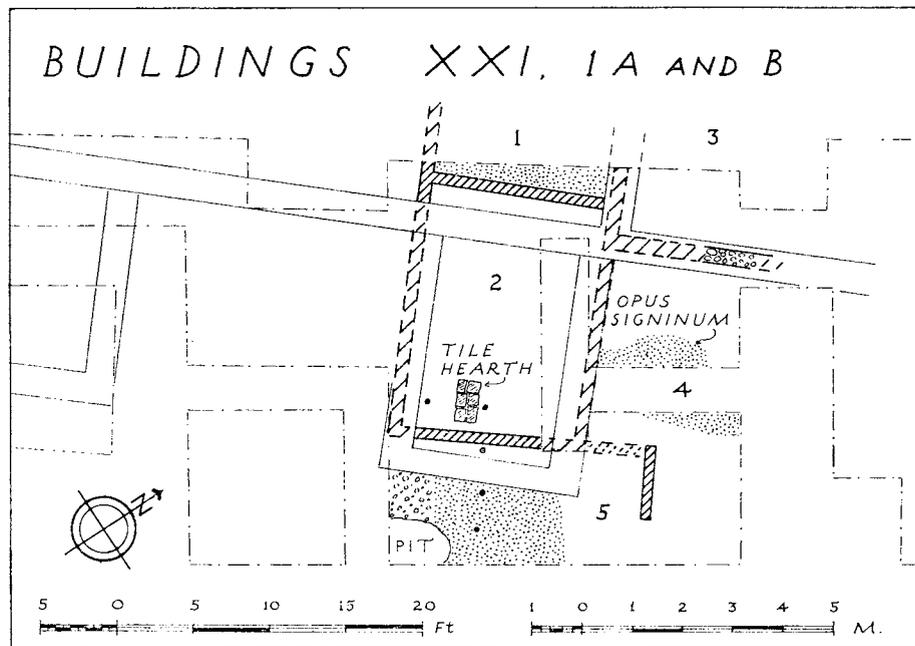


FIG. 59. Insula XXI: timber-framed buildings 1 B (Hadrianic) and 1 A (Antonine) (scale 1:150).

¹ For the trench-plan, see fig. 65.

the robbed remains of the south-east wall of Room 2 in Building XXI, 1 which succeeded it, and little survived. In D X were found an external wall of clay, plastered on the outside (fig. 62, Section E-F), and the partition between Rooms 1 and 2; Room 1 had a floor of rather rough *opus signinum*; quarter-round mouldings survived, though partly collapsed into the wall, as if the sleeper-beam had suffered from decay.

Though Wall 1/3 had been removed by the masonry Wall 1/2 above it, Room 3 had evidently been terraced into the hillside; its floor, of cobbles set on natural clay, lay just over 1 ft. lower than that of Room 1 (fig. 62, Section E-F). The south-east wall-trench of Room 2 survived below the later masonry Room 9, but the construction of the latter had involved the removal of all floor-levels except for a hearth of tiles, which was sealed below the mortar spread marking the building-level of the flint walls (fig. 62, Sections G-H and J-K, Trench D X Layer 13). Patches of rough *opus signinum* floor survived in Rooms 4 and 5: in the former they overlay an earlier thin floor of gravel and yielded a sherd of samian form 31, Antonine: in the latter they overlay pottery of c. 140-50. Room 5 appeared to be bounded on the north-east by a short length of wall-trench whose north-west end aligned with the wall-trench of Room 2; its south-east end was clearly defined, and possibly marked a doorway. The *opus signinum* floor of this room ended against a gravel floor to the south-west, but there was no indication of a partition on this line.

The dating of Building 1 A

There is no large group of pottery sealed by the early buildings. It can, however, be said that, setting aside a few Flavian survivals, the material associated with Building 1 A indicates occupation beginning in the first half of the second century, perhaps towards the end of the reign of Hadrian, but probably slightly later. In the collapsed wall-plaster on the floor of Room 1 was a samian form 33, probably Antonine: if this was originally built into the wall it could bring the date down to after 140. Similarly, D XII 13, the old turf-line outside the building, produced as its latest sherd a form 27, Hadrianic-Antonine. Neither of these two, however, was certainly sealed by the building itself. Some of the coarse pottery, though, seems certainly Antonine. It will be safest to suggest that Building 1 A was built between c. 135 and 150, probably c. 140, and Building 1 B, therefore, between 100 and 130, probably c. 115. In other words it was not until about the time that the nearby stretch of '1955 Ditch' had become obsolete that this part of Verulamium was built up. Building 1 A does not appear to have had a long life: only in Room 4 were traces found of two superimposed floors, and here the upper one, D XIV 13, yielded a piece of form 31, Antonine. A life of c. 40-50 years may be considered amply sufficient. This suggested span is confirmed by the fact that the only specifically *late* Antonine samian from the site was associated with Building XXI, 1 above it. The occupation of Building 1 B is, therefore, dated 115-45,¹ and that of Building 1 A 145-180/90.

¹ The earliest coins from the site as a whole are a denarius of Vespasian and two bronzes of Trajan.

DATING EVIDENCE: BUILDING XXI, I A

ROOM	DEPOSIT	SAMIAN (All Central Gaulish unless otherwise stated)	COARSE POTTERY
Outside Rooms 1-2	D X 23 contemporary soil outside clay wall	37 A.D. 125-45 (D 49) 18/31 Trajanic- Hadrianic	Type 1325 (Hadrianic-Antonine)
Room 1	D X 18 fallen plaster	33 Trajanic- Hadrianic 33 prob. Antonine 18 S.G. Flavian	Type 969 (A.D. 140-90)
	D X 17 collapsed wall	37 S.G. Flavian 37 Hadrianic 33 (two), 18/31 Tq Trajanic- Hadrianic	
Room 2	D X 13 sealed by mortar-spread of succeeding flint wall	37 style of Geminus A.D. 120-40 37 (?source), prob. early second cent.	Type 963 (A.D. 145-65) Type 608 (A.D. 100-55) Type 1930 (Hadrianic-Antonine)
	D XIII 13 hearth	18/31 prob. Trajanic- Hadrianic	
Room 4	D XIV 15 primary gravel floor		No. 1486 (Antonine)
	D XIV 12 occupation on primary floor		No. 1488 (Antonine)
	D XIV 13 <i>opus signinum</i> floor	31 Antonine	
Room 5	D XIII 11 occupation below <i>opus signinum</i> floor		No. 1487, Type 655 (A.D. 130-80)
	D XIII 6 <i>opus signinum</i> floor		Type 2308 (A.D. 125-90)
	D XIII 10 occupation below <i>opus signinum</i> floor	33 prob. Antonine	Nos. 1489, 1503
	<i>Pottery earlier than Building XXI, 1 and thus related to Building 1 A</i>		
	D XII 13 old surface-soil	27 Hadrianic- Antonine	Nos. 1490-5

ROOM	DEPOSIT	SAMIAN (All Central Gaulish unless otherwise stated)	COARSE POTTERY
		33 Trajanic- Hadrianic Inkwell S.G. first century	
	D XIX 11 old surface-soil		Type 565 (Hadrianic- Antonine)
	P I 14 old surface-soil	18 (two) S.G. Flavian	cf. Type 856 (A.D. 145-210) cf. Type 985 (A.D. 140-200)

Period III. Building XXI, 1. (fig. 60) c. A.D. 190-360

There is little reason to suppose that the masonry Building XXI, 1 did not immediately succeed the demolition of its predecessor. Some of the evidence associated with its construction, as will be seen (p. 155), suggests a date after 200; on the other hand, the absence of late Antonine samian in earlier levels suggests that it would be wiser to advance the date to 180-90.

In its first phase (*Period III*) Building XXI, 1 was 85 ft. 8 in. (26.11 m.) long; Room 9 (*Period IV A*) was added and soon demolished, and later (*Period IV B*) the building was extended 34 ft. 6 in. (10.52 m.) to the south-west, and additional rooms, one with a cellar below it, were added on the south-east front. Later still (fig. 60, *Period V*) the walls separating Rooms 1 A, 5, and 6 were pulled down and a tessellated floor was laid across them, presumably to form a corridor.

All that remained of the original structure comprised Rooms 1-4. It seems very probable that, as indicated on fig. 60, Room 1 was sub-divided into 1 and 1 A; but the point could not be proved since a large tree prevented examination of the suspected wall. The original floor of Room 1 in D X (fig. 62, Section E-F) was of orange clay (9) overlying make-up levels over the demolished remains of Building 1 A. Room 1 A showed similar clay in D XIX (fig. 62, Section N-O, Layer 10) though there sealed by an *opus signinum* floor; this suggests that two rooms are in question since the *opus signinum* did not appear over (9) in D X. What seems conclusive is that the floor in D XIX was almost 3 ft. higher than in D X owing to the slope of the hill: the difference must surely be accounted for by the terracing possible in two adjacent rooms.

The floor-level of Room 2 was 2 ft. 8 in. lower than that of Room 1, and consisted of a very ruined tessellated floor overlying rubble. The robbed remains of this floor were sealed by more rubble (fig. 62, Section E-F, D XIV 10) above which a new floor of orange clay was laid down (6): it contained pottery of the second half of the third century and a coin of Postumus. In the south corner of this room were the remains of a window set low in the wall with a splayed jamb of tiles and splayed sill (pl. XIVa). It probably adjoined a doorway, now robbed away, into the yard.

Room 3 was evidently a principal room and had an intact tessellated floor of brick cubes

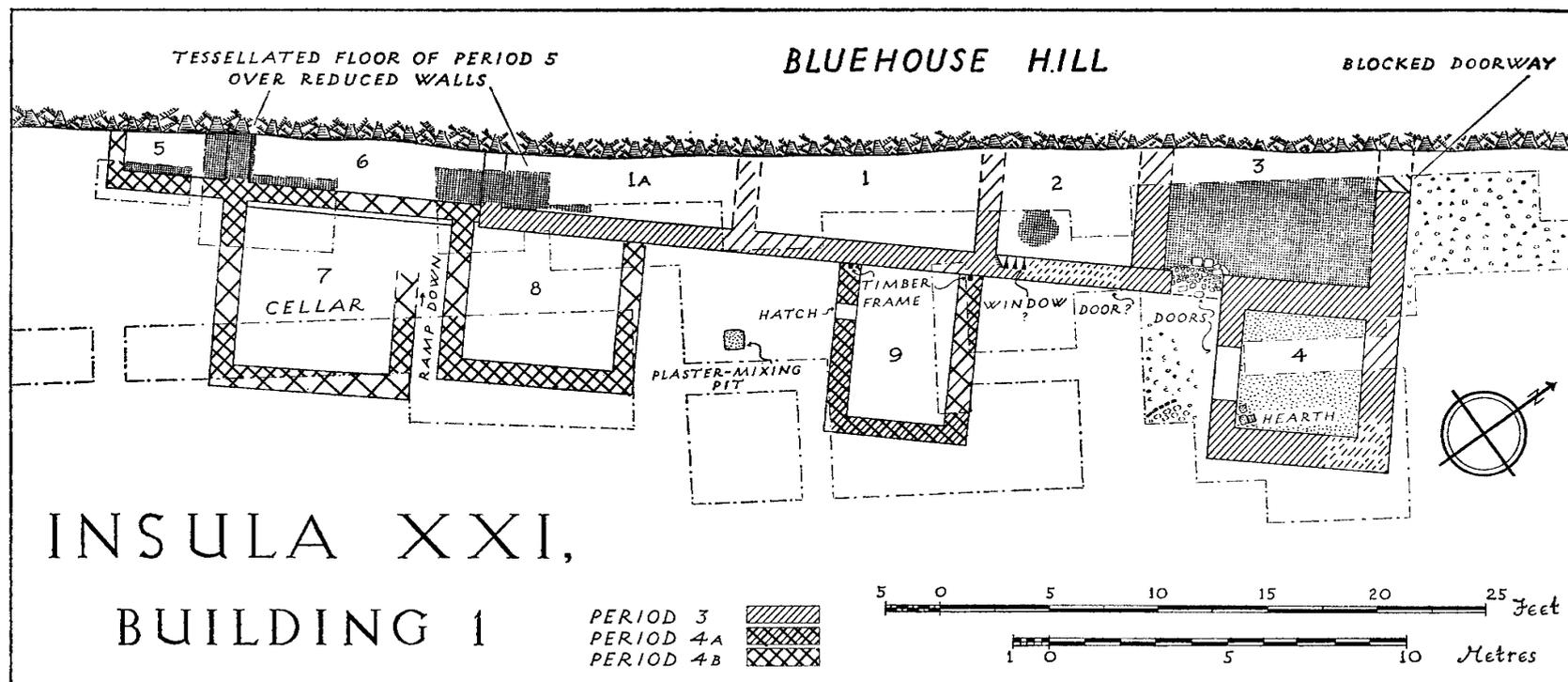


FIG. 60. (Scale 1:200). Note: the foot scale should read from left to right, 5, 0, 10, 20, 30, 40, 50.

(pl. XV*a*). Its walls were 3 ft. (0.9 m.) wide with foundations dug down to natural gravel; they survived in flint and mortar to a height of almost 2 ft. 6 in. (0.76 m.) above the floor. The higher parts, however, must have been carried up in clay, for the filling of the room (fig. 63, Section P-Q) was almost devoid of flints, but consisted of yellow clay and plaster (pl. XV*a*). Wall 2/3 appeared to be bonded to the external wall at foundation level and for a course or two higher: above this it presented a straight joint. Walls so thick probably carried an upper storey, a suggestion which is supported by the large number of red and yellow tesserae found among the collapsed wall-material: these certainly did not derive from the floor of Room 3 itself, which was intact. The viability of a first-floor tessellated pavement would depend on the strength and spacing of the joists which supported it, for any liability to movement would soon result in the loosening of tesserae.

There was a doorway 4 ft. 9 in. (1.48 m.) wide leading from Room 3 to the courtyard: its threshold had been patched with tile-fragments, and a small surviving piece showed that the plaster on the inner angle of the door-reveal had a 45-degree bevel. A second door originally led out north-east, but had been blocked (pl. XV*b*). The walls were thickly rendered internally with mortar some 3 in. thick to which the wall-plaster was applied. The decoration was a simpler version of that in the cellar of Building XXII, 1 (p. 191, fig. 76). On a white background a 1-in. purplish-red band ran horizontally *c.* 1 ft. 6 in. (50 cm.) above the floor round the three walls exposed. In the south-west corner enough survived to show that in the angles above the horizontal band a vertical red line was carried up the contiguous faces. Below it the white surface was splashed with red and yellow to form a dado: above it the white was plain. Among the plaster tumbled from the upper part of the building were pieces decorated with 1½-in. bands on white: they consisted of red outlined each side by black lines which themselves had yellow margins. There were slight remains of other designs in blue and cream.

Outside the blocked door of Room 3 was a metallated area. The original metallating (fig. 63, Section P-Q, P III 11), a layer of red gravel, had been laid up to the north-east wall and also through the doorway in a thin tongue leading into the room; presumably this was for the convenience of the builders. After a layer of dirt (10) containing several hundred oyster shells had accumulated, a fresh metallating (8) was laid down: a coin of Victorinus lay on this surface, and the gravel itself yielded a sherd of third-century colour-coated beaker. On it had accumulated (4), a thick layer of black earth with some rubble and fourth-century pottery, before the collapse of the wall occurred, represented by (5).

The blocking of the doorway must have taken place quite early: the mortar closely resembled that of the adjoining wall, and the painted-plaster face was continuous across it. It had certainly been blocked by the time Layer 8 was deposited, for this surface ended off all along the wall *c.* 6 in. from its edge, and the gap continued across the face of the blocking.

Over the floor of Room 3 and through its south doorway had accumulated Layer 6. This consisted of a fine brown sandy matrix with very small fragments of plaster, flint dust and small pebbles, but very little charcoal. It was not the product of occupation, but appeared rather to represent rain-washed silt accumulating in an abandoned building before the walls collapsed.¹ The ruined state of the bottom of the wall-plaster on the north-east wall at this

¹ A sample was examined by Dr. I. W. Cornwall who noted that 93.14 per cent was in the sand grade and only 6.86 per cent was silt and clay; a wind-blown deposit

would contain only 10-15 per cent sand and much higher quantities of silt and clay.

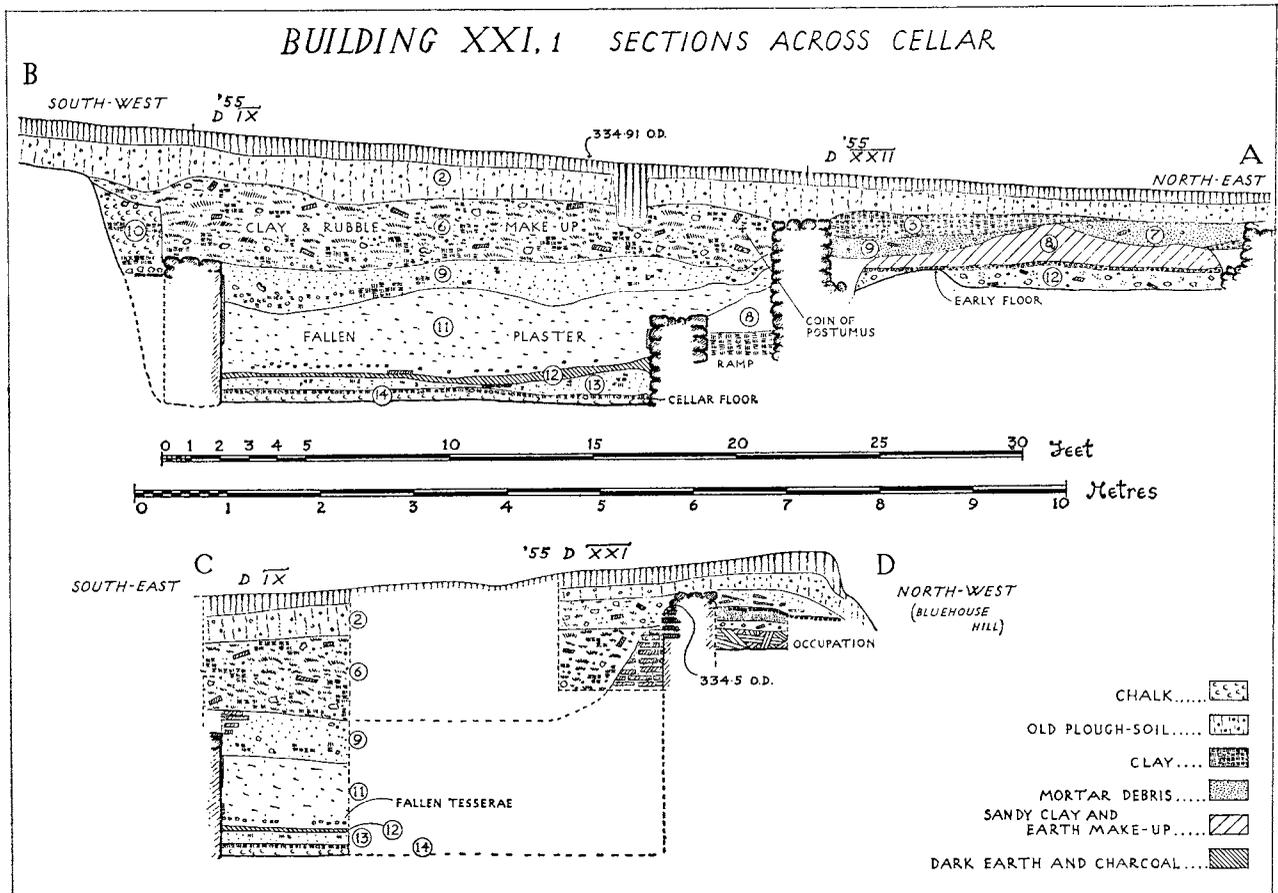


FIG. 61 (Scale 1:80). For location of Sections, see fig. 65.

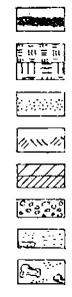
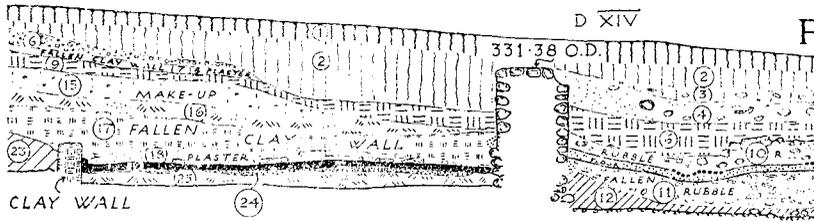
level (pl. XVa) strongly suggests damage by damp. A fire had been lit against the south-west wall at this stage, before the collapse of the walls. This layer (6) yielded quite a large group of broken pottery (Nos. 1527-40); it appears to date to the period 330-60 (pp. 156 f.). Even the fallen wall-clay (4) yielded a large group of pottery (Nos. 154-64) which is too late in date to have been built into the wall itself: it is clear, therefore, that rubbish from occupation nearby, possibly in some other part of the house, was being thrown out onto the ruin.

Room 4 had a doorway 4 ft. 9 in. (1.48 m.) wide leading into the courtyard near that of Room 3. Its north-east wall was continuous with that of Room 3 but lacked the latter's deep foundations (fig. 64, Section R-S); the wall itself was very poorly built; its inner face was plastered white, at the bottom at least. The south-east wall similarly lacked foundations though these were present below the south-west wall. The external face of the latter carried plaster painted pink, as did the outside face of the wall bounding the yard to the north-west.

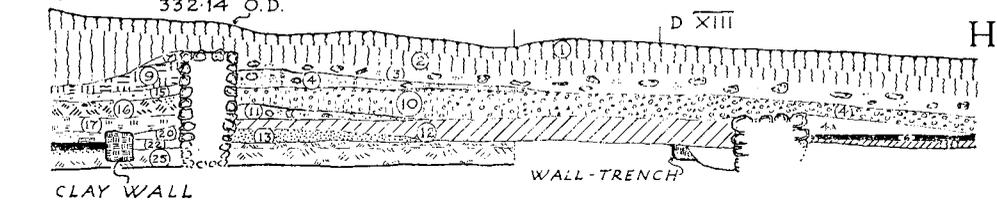
The north-east and south-east walls had been laid on Layer P VIII 11 (fig. 64, Section R-S) which corresponds with (14) in fig. 63, Section P-Q. Within the room at this level was a thin spread of charcoal (10) and three stake-holes: over this, next, was laid (7), an *opus*

E D^X '55 TRENCHES D^X-XIV: N.W. FACE

OPUS SIGNINUM



G D^X '55 TRENCHES D^X-XIII: N.E. FACE



'55 TRENCHES D^{XIV}-X-XII: S.E. FACE

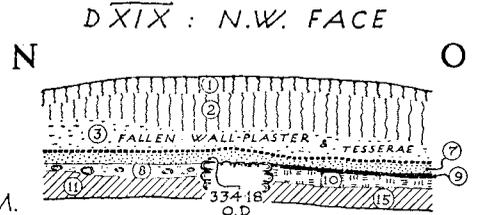
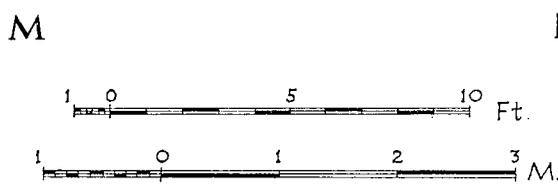
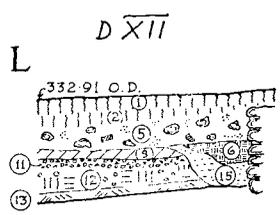
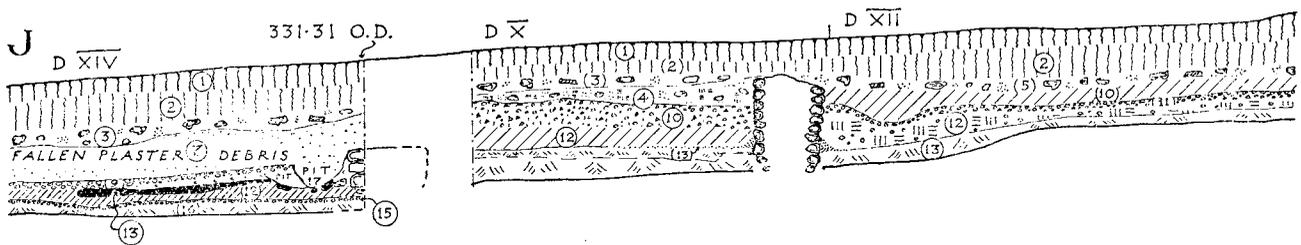


FIG. 62. Insula XXI, 1: Sections (scale 1:64).

signinum floor which was to see very heavy wear, sufficient to remove it completely in places: a second and thicker layer of charcoal (6) then accumulated all over it, and on this a small hearth of tiles (fig. 60) was laid in the south corner, the fire on which had burnt the wall-plaster in the angle and the flints of the wall behind it. Layer 6 yielded three coins of the period 253-73. It seems probable that Room 4 was the kitchen, and Room 3, therefore, the *triclinium*.

Period IV A. Room 9 (c. A.D. 200-20)

This small room, projecting south-east into the yard, was clearly an addition to the main

VERULAMIUM EXCAVATIONS

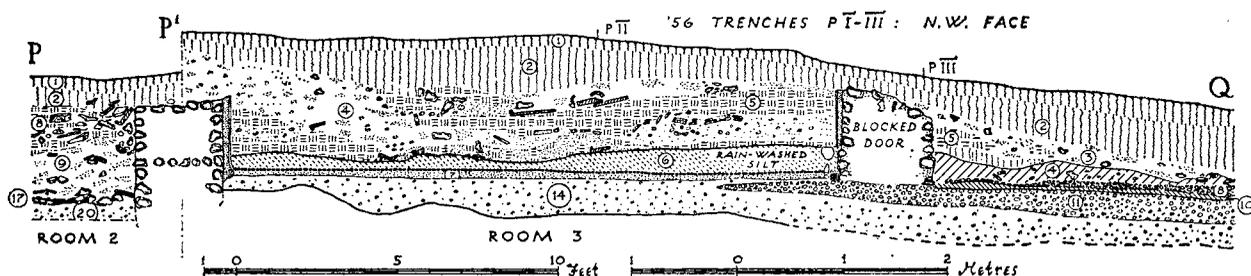


FIG. 63. Insula XXI, I: Section P-Q (scale 1:72).

structure, against whose wall its own walls abut (pl. XIV*b*): the evidence suggests, however, that it was an early addition and enjoyed only a brief existence. Where best preserved, the walls stood *c.* 2 ft. 4 in. (0.71 m.) high, and where they joined the outside wall of the house the top of each revealed a small void measuring 5 by 4 in. by *c.* 20 in. deep, evidently for a timber-framed upper portion.

The most remarkable feature of Room 9, however, was the small hatch in its south-west wall (pl. XIV*b*). This was a rectangular opening 18 in. wide by 17 in. high (0.46 by 0.43 m.) through the base of the wall. Voids showed that there had been a wooden sill 3 in. thick running back *c.* 5 in. into the wall, and that the wooden lintel was 1½ in. thick, recessed only 1 in.; additional support for it had probably been provided by wooden jambs, to judge by the smooth mortar faces of the sides.

No parallel for this hatch has been noted: it would seem to serve best for the entry of hens, or perhaps small dogs or cats; it is rather low for the delivery of sawn logs, as was suggested in the interim report.¹ The entry for humans probably lay somewhere in the north-east wall, the greater part of which was reduced to its foundations; certainly no door existed in the other three walls. A hen-house with a door conveniently facing that of the kitchen and a hatch giving exit to poultry on the far side is thus an attractive interpretation.

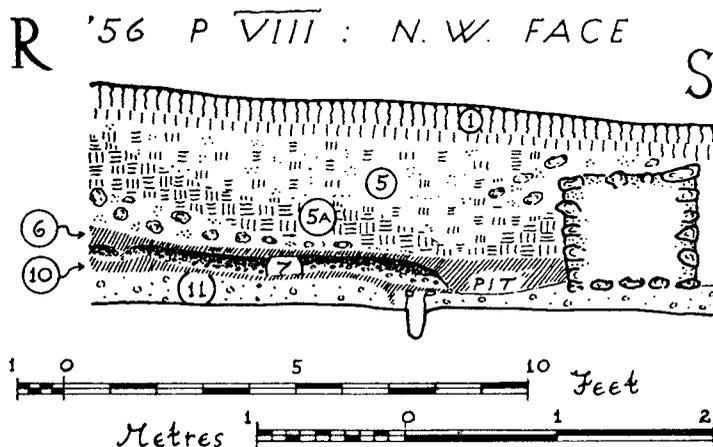


FIG. 64. Insula XXI, I: Section R-S (scale 1:50).

¹ *Antiq. Journ.* xxxvi (1956), 4.

In course of time the hatch became choked with earth (D XII 12), and a gravel metalling (D XII 11, fig. 62, Section J–K) effectively sealed it. Indeed Room 9 had been demolished by the time (11) was laid, since the gravel passed over the reduced south-east wall in D XIII (Section G–H (4)).

Where the gravel floor approached the outer wall of Rooms 1–1 A (fig. 62, Section L–M) the appearances suggested that it had been cut by the foundation-trench of this wall, for parallel with the wall-face ran a trench containing plaster-debris sealed by clay. But it is an impossibility for the same gravel floor to be at once earlier than a wall of Period III and later than one of Period IV A; nor can we resolve the impasse by reversing the sequence of Rooms 1 and 9 since, as pl. XIV*b* will show, there can be no doubt that the wall of Room 9 is later than that of Room 1. The trench along the outside of Rooms 1–1 A in the area between Rooms 8 and 9 must accordingly be interpreted as a gutter.

Period IV B. Rooms 5–8 (c. A.D. 300–60)

Rooms 5–8, all of one build, were added, as will be shown below, after the demolition of Room 9 and it was at about the same period that Room 2 was refloored. The original floors of Rooms 5 and 6 were apparently removed when later on (*Period V*) Walls 5/6 and 1 A/6 were reduced and a red tessellated floor laid across their remains. In the demolition-debris on this floor in Room 5 pieces of wall-plaster were found with red, green, and yellow vertical stripes on a white background. The fallen-plaster layer (fig. 62, Section N–O, D XIX 3) also yielded a very large number of red tesserae which cannot be derived from the floor on which they were resting, for it was intact; nor were they sufficiently decorative to have formed a wall-mosaic, and in any case the walls were painted. The evidence suggests a tessellated floor in a room on the first floor above. Very similar evidence was forthcoming in Room 3.

Room 7 was a cellar about 9 ft. (2.75 m.) deep from the present surface and entered by a sloping ramp from the south-east. The building-trench outside its south-west wall (fig. 61, Section A–B) had been packed with rammed chalk, at the base of which, just below the surviving top of the wall, were tiles laid horizontally, presumably to prevent the percolation of water. The corners were carefully turned in tile but the rest of the walls were of flint and mortar. Wall-plaster painted yellow with purplish-red 1-in. bands at the corners still partly adhered to the walls. The original floor was of clay and flints (14) over a make-up of chalk. On this lay a thin and irregular deposit of clay and painted fragments of plaster, above which was a thin layer of black occupation-earth on whose surface were lying separately two large tiles measuring 16 by 12 by 1½ in. (40.6 × 30.5 × 3.8 cm.). Above this was a deep soft filling of collapsed and fragmentary wall-plaster (11) and mortary rubble and plaster (9). These had evidently come from a room at ground-level over the cellar, for not only was there a spread of tesserae low down in (11) but the painted plaster was delicately decorated in a fashion unsuitable for a cellar and, in fact, quite different from the plain yellow facing still adhering to the cellar walls. The plaster is discussed by Miss Liversidge in Volume III. After the collapse the walls of the cellar were robbed, (6) being the debris of clay and rubble thus generated. It yielded some large fragments of green window-glass. The pottery from this layer suggested that the robbing took place virtually at once; it included nothing that need be later than 350, which as will be seen is approximately the date of abandonment.

Room 8 adjoined the cellar to the north-east. As Section A–B shows, its walls (and that of

the cellar) cut through a gravel floor (D XXII 11) and the layer of sandy earth and occupation-material (10) over it. The gravel floor is the same as extends north-east across the area towards the site of Room 9 (fig. 62, Section J-K, D XXII 11) where, as has been shown above (p. 150), it actually overlay the demolished corner of Room 9. Period IV B and the construction of Rooms 5-8 can be placed, on the evidence of the associated finds, in the first half of the fourth century, perhaps *c.* 300-20.

Room 8 had a clay floor laid over a make-up of mortar (9) and plaster rubble (7). Outside to the north-east there was a rectangular plaster-mixing pit 7 in. (17.8 cm.) deep, cut into the gravel floor D XII 11; presumably this was used during the construction of Room 8.

DATING EVIDENCE: BUILDING XXI, 1
PERIOD III: ERECTION OF BUILDING

ROOM	DEPOSIT	SAMIAN (All Central Gaulish unless otherwise stated)	COINS	COARSE POTTERY
1	D X 9 clay floor	31 (two), 36 Antonine		cf. Type 526 (A.D. 105-60)
2	D XIV 11 make-up of primary floor		Trajan, sestertius (worn)	Type 1858 (late Antonine)
3	P I 14 old soil below: see p. 145 P I 14 A top of foundation- trench sealed by floor			Nos. 1496-8 cf. Type 1120
Outside	P III 10			cf. Type 904 (Antonine)
3	occupation on yard metalling			
4	P VIII 11 old soil below			No. 1485 and cf. Type 972 (A.D. 140-220) and Type 2570
	P VIII 10 primary occupation	31 Antonine		

ROOM	DEPOSIT	SAMIAN (All Central Gaulish unless otherwise stated)	COINS	COARSE POTTERY
	P VIII 7 <i>opus signinum</i> secondary floor			No. 1504 + two colour-coated sherds, one cf. Type 1399, one barbotined cf. Type 1056 (third-century)
PERIOD IV A: ROOM 9				
9	D X 14 shallow pit below floor (13)	37 A.D. 115-35 (D97) (one sherd in 11)		
	D X 12 occupation in room	37 S.G. Flavian 37 style of Cerialis-Cinnamus A.D. 140-70 Inkwell S.G. first century 18/31, 33 Trajanic-Hadrianic 31 Antonine		Type 1047 (A.D. 160-75)
	D X 11 demolition	18 S.G. prob. Flavian 38 Antonine 37 sherd of D97 above		Types 967, 969 Bowl, cf. Type 936 cf. Type 881 (Antonine)
	D XII 12 clay make-up SW of room	Inkwell S.G. first century 37 S.G. Flavian 18/31, 33 Trajanic- Hadrianic 31 Antonine		Nos. 1499-1502
PERIOD IV B: ROOMS 5-8 ETC.				
2	D XIV 10 make-up of secondary floor			Nos. 1505-6
	D XIV 5 (as 10)			No. 1508
	D XIV 6 secondary floor		Postumus (<i>RIC</i> 89)	Nos. 1510-13
4	P VIII 6 latest occupation		Gallienus, joint reign (<i>RIC</i> V (1) 104-452) Postumus (<i>RIC</i> 64) Tetricus I (<i>RIC</i> 100 ff.)	

VERULAMIUM EXCAVATIONS

ROOM	DEPOSIT	SAMIAN (All Central Gaulish unless otherwise stated)	COINS	COARSE POTTERY
7	D IX 12 occupation			No. 1526
Yard	D XVI 10 in filling of slot sealed by yard			Colour-coated beaker sherd cf. Type 1134 (third- to fourth-century) Rhenish-ware sherd
	D XXII 7 make-up			
	D XVI 7 metalling	Curle 21(?)	Antonine	Rhenish rouletted beaker sherd
	D XII 11 metalling	38	Antonine	No. 1509
	D XIV 9 metalling	31	Antonine(?)	colour-coated beaker base
	D XIII 4 metalling	33	prob. Antonine	No. 1507 and Type 1005
	D XV 3 metalling	31, 33	Antonine	
	D XXII 10 occupation on yard			Castor 'box' sherd: c.c. beaker sherd
	D XII 10 (as last)			Nos. 1516-20
	D XVI 5 (as last)		Philip (<i>RIC</i> 24 c)	No. 1515
	D XIV 17 pit in yard			Nos. 1521-2 and Type 881
	D XIV 8 secondary floor of yard	31, 45, 79	late Antonine	Castor 'box' sherd Castor lid sherd c.c. beaker sherd
	P VII 5 secondary metalling			Nos. 1524-5
	P VII 6 secondary metalling			No. 1523
	P III 4 occupation on secondary metalling	37 E.G. late Antonine 31R, 38, 79 late Antonine	Victorinus (<i>RIC</i> 118)	No. 1514 and Type 2489

DESTRUCTION-LEVELS

ROOM	DEPOSIT	SAMIAN (All Central Gaulish unless otherwise stated)	COINS	COARSE POTTERY
2	D XIV 3 rubble			No. 1560 Types 2492, 2477, 1120
3	D XIV 4 P I 6 (=P II 5) wind-blown silt P I 4, P II 4 collapse of walls P I 10 collapse of walls P III 5 collapse of walls P I 2 plough soil over house P III 2 plough soil over house		Tetricus I (<i>RIC</i> 100 ff.) House of Constantine House of Constantine (330-5) Gordian III Constantine II Caesar Vespasian, denarius (<i>RIC</i> 92 d) M. Antonius, denarius Tetricus I (<i>RIC</i> 56 ff.) Constantine I Constans Constans Caesar	Nos. 1561-2 Nos. 1527-40 Nos. 1541-54, 1564 Nos. 1555-9 Nos. 1563, 1565-6
7	D IX 9 cellar filling D XX 4 (=D IX 6) rubble make-up over cellar		Postumus (<i>RIC</i> 78)	Nos. 1567-8 and c.c. beaker cf. Type 1808
Yard	D XIV 7 debris in yard P IV 2 plough soil 12-25 ft. NE of building		Titus under Vespasian dupondius A.D. 77-8 Gratian (<i>RIC</i> ix, pp. 66, 15)	No. 1569 and c.c. beaker cf. Types 1806, 2495

The dating of Building XXI, 1
Period III. Erection of Building

No specifically late Antonine samian is associated with the construction-levels of the building, and much of the coarse pottery seems to be at home in the mid or later second

century. In P I 14 A, however, which seemed to be the top packing of the foundation-trench in Room 3 and was sealed by the floor, were a few sherds which might well be dated after 200. They can hardly be much earlier than 190, and this is taken to be the date of construction.

Period IV A

Room 9 is certainly later than Period III on structural grounds, but the pottery associated both with its construction and with its decoration seems hardly later than the second half of the second century. It is clear that the room did not survive long, and it is here dated 200–20.

Period IV B

The stumps of the walls of Room 9 were partly sealed by the gravel metalling of a yard which also sealed a sherd of white-barbotined Rhenish beaker which is not likely to be earlier than 270–80.

After occupation-material had accumulated on this to the depth of about 1 ft., the walls of Rooms 7–8 were erected. It is clear that they date to the early fourth century (Wheeler's 'Constantian renaissance', see p. 20). Here the erection of Rooms 5–8 is dated *c.* 300–20.

Period V

There were no finds from which to date the unification of Rooms 1 A, 5 and 6. It can be assumed to have occurred *c.* 320–40.

Date of destruction

It is not possible at present to give a close date to the groups of fourth-century pottery which bear on the abandonment and collapse of the building. Account must, however, be taken of the coins from the site. The only fourth-century coins stratified in destruction-levels are two issued during the lifetime of Constantine I; but in the plough-soil over Room 3, associated with a large group of pottery in quite large sherds and thus not gravely disturbed,

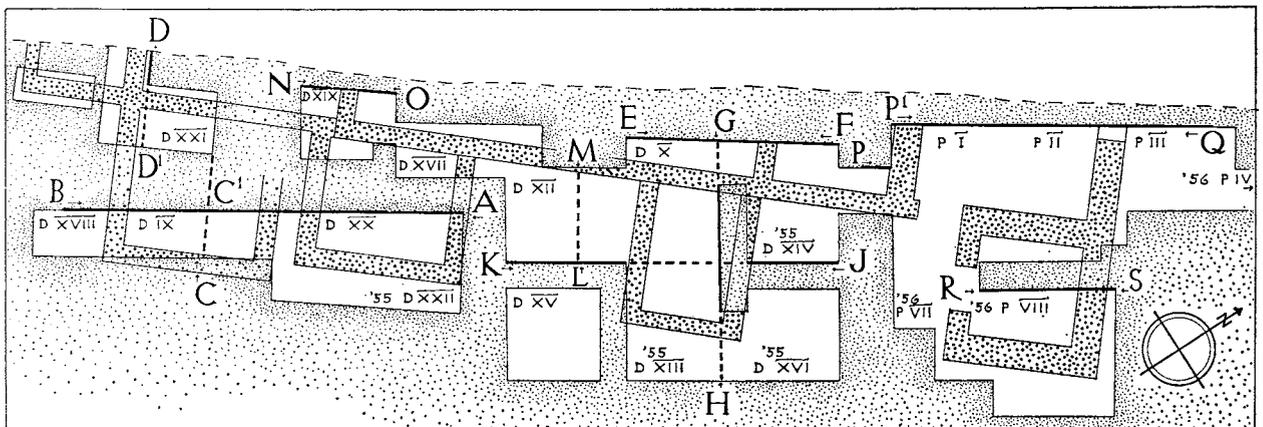


FIG. 65. Insula XXI, 1: location of Trenches and Sections (Sites 1955 D and 1956 P).

were two coins of Constantinian date and one issue of Constans as Emperor (died 350). This last was comparatively unworn. Some 6 m. downhill from the building a coin of Gratian was recovered in old plough-soil, but this clearly cannot certainly be associated with the building. These facts show that coins are present, though not in any number; and it is notable that there are no examples of the numerous *Fel. Temp. Reparatio* issue of the late fifties or its copies. It is, therefore, suggested that Room 3 was abandoned by *c.* 345–55, and the rest of the building (from which the large group of pottery in and above the ruins of this room were presumably derived, together with the coin of Constans) soon afterwards, *c.* 350–60.

BUILDING XXI, 2

The house lay at the north corner of Insula XXI, on the other side of the street from Building XXII, 1. It was built *c.* 180 and extended round three sides of a courtyard; its principal or north-west wing had been almost entirely destroyed by the medieval lane (fig. 67). At the beginning of the fourth century the house had been reduced in size with the demolition of the south-west wing. The north-east wing was also partly or wholly demolished but was rebuilt beside the street, and a porch was added to the north-west wing on the courtyard side.

Although pottery of second-century date, several deposits containing fragments of painted plaster, and in one place a length of gravel path, indicated that there had been earlier occupation in the area of the south-west wing, it was only beneath the north-east wing that traces of earlier structures were found. These comprised a small Belgic ditch and parts of a half-timbered building (XXI, 2 C) of the Flavian period (fig. 66). The latter had been demolished *c.* 110–15 and the area apparently cultivated. About 145 the site of the north-east wing was re-occupied with the first phase of a masonry building with chalk foundations: at one point (fig. 68, Section C¹–D) these foundations could be seen to be inserted into the fill of a former side-ditch of Street XXI/XXII, the silting of which yielded a group of pottery consistently datable to the period *c.* 60–80 (Nos. 1572–3 and Type 129). After a partial reorganization this building was demolished *c.* 180, the date of the first phase of the main house XXI, 2.

Excavation of the part affected by road-widening took place in 1956. Further work was done in 1959 and 1960 on parts of the building south of the road-line in order to complete the plan.

A. *Early structures: Building XXI, 2 C*

Below the north-east wing in Trench 60 L VI (fig. 66 (plan) and fig. 69, section L–M) a small ditch was found: it was *c.* 30 in. wide and 12 in. deep (0.76 by 0.31 m.) and yielded sherds of three pre-Roman vessels (Nos. 1570–71). Across its fill ran a wall-trench (belonging to a half-timbered house) whose filling (13) contained a piece of Flavian samian. Over the remains of the building lay a thick level of dark cultivated soil (7) which here and elsewhere underlies the north-east wing of Building XXI, 2. Two timber-framed walls at right-angles, belonging to a room in the same building, were found in Trench 59 L IV (fig. 66). A secondary floor (11) yielded a group of Flavian samian, and again the remains were sealed by buried cultivation-soil (Section F–G, 7). The floor overlay (12) but did not extend to the

VERULAMIUM EXCAVATIONS

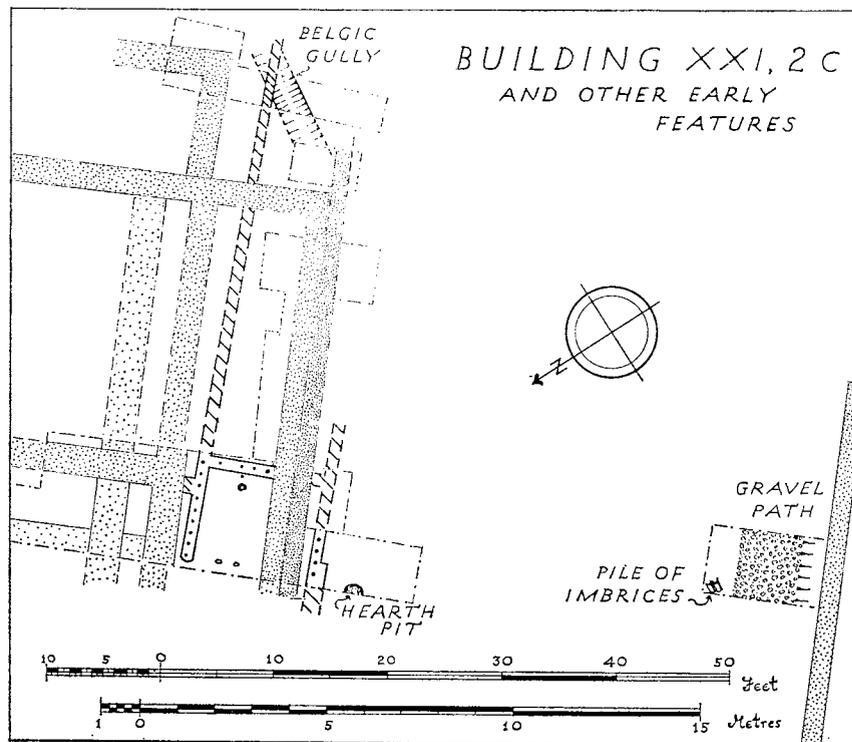


FIG. 66.

north-west face of the section. The third wall was found in Trench 59 L VIII (Section F-G). Near it lay a small hearth-pit. These remains, too, were sealed by buried cultivation-soil (7).

Except in one trench, the buried soil yielded mainly Trajanic and Hadrianic samian down to *c.* 140; the latest coarse-ware sherd (Trench 59 L VIII 7, No. 1588) is of a type not recorded at Verulamium before 145 (Vol. I, Type 968), but could perhaps have begun manufacture by *c.* 140. In Trench 60 L VI 7 (Section L-M), however, there were five Antonine plain samian sherds and a form 37 datable *c.* 150-80. If the construction of Building 2 B, the first masonry house, did not take place until *c.* 160, there is little time left before its replacement *c.* 180 by Building XXI, 2. Moreover, the pottery associated with Building 2 B itself suggests a date of construction *c.* 145-50. It seems preferable, therefore, to suppose that in the area of Trench 60 L VI (fig. 71), which lies well outside the confines of Building 2 B-2 A, cultivation continued during the occupation of this building, for in this trench the old soil was not sealed before the deposition of make-up for the courtyard of Building XXI, 2 *c.* 180. The destruction of the original Flavian building cannot be closely dated; but as its timbers were not renewed, it probably stood only until *c.* 110-15. This chronology allows *c.* 30-35 years for the accumulation above it of up to 1 ft. of cultivated soil at the lower end of the Insula before Building 2 B was erected.

Further north-west, below Room 14 in Trench 56 L V (fig. 68, Section C¹-D) there was no indication of the Flavian building, but the buried soil (14) contained a large contemporary group of pottery of the period 60-100, although the layer itself was not sealed for another

45–50 years and did also produce a mortarium-stamp of the period *c.* 110–50. The same layer nearby (in Trench 56 L IV) yielded a sherd of poppy-head beaker of *c.* 105–40.

B. Period I A: *The first masonry building, XXI, 2 B*

The chalk foundations of Building 2 B (fig. 67) were cut into the lynchet which had accumulated at the lower end of the Insula. Below Building XXI, 2 Room 13, an east–west chalk-filled foundation-trench was found. It ran through to the robbed inner corridor wall of XXI, 2, beyond which its line was continued by a timber partition as far as the outer wall of the later corridor. Clearly, walls of Building 2 B here preceded both walls of XXI, 2. The inner one has been robbed entirely (fig. 69, Section F–G), but in Trench 56 L V it was seen to have a chalk footing (fig. 68, Section C¹–D). The outer wall has been completely rebuilt. It had a construction-trench down to the top of its own footing, which must have replaced the hypothetical original chalk one.

Evidence for the date of Building 2 B consists of a group of pottery from Trench 59 L IV 6, a sandy floor south-east of the timber partition and corresponding with Layer 6 A to the north-west of it (Section F–G). The latest samian sherd is dated *c.* 120–45; thus the building is likely to have been put up *c.* 145–50. There was a large number of loose tesserae on top of the sandy floor, which may really have been merely the basis for a pavement later removed.

C. Period I B: *Building XXI, 2 A*

The wall of Building 2 B which preceded the inner corridor wall of XXI, 2 was replaced by one *c.* 2 ft. further north-east, for here a chalk foundation at a rather higher level crossed the original north-east–south-west chalk foundation (Section F–G), and now or later the wall on the latter was removed. Layer 59 L VI 11 (Section G–H) which sealed the original chalk foundation yielded only residual pottery of the Trajanic-Hadrianic period, as did a contemporary fragment of chalk floor (Trench 56 L V Layer 11 A, fig. 68, Section C¹–D). Few other traces of floor survived; the one just mentioned rested on a gravel basis, and part of another floor of gravel is seen in the same section in Trench 59 L V, sealing the early road-ditch.

Below the south-west side of the courtyard in Trench 59 L VII (fig. 69, Section I–K) buried plough-soil (6) contained pottery down to *c.* 140–50; it was partly sealed by an area of gravel metalling 5 ft. 6 in. (1.68 m.) wide which appeared to be a path (fig. 66), and was cut by the foundation-trench of Building XXI, 2. Beside it on the surface of (6) lay two piles, each of three *imbrices*, placed ready for reuse. This path, if such it is, did not appear in Trench 56 L VI (fig. 68, Section B–C), but the ‘peopled scroll’ there is lying at approximately the same level (314.4 O.D.) as the courtyard metalling (4) which lies above the path in Trench 59 L VII. A layer of make-up (5) has been laid over the path to make the courtyard level. The path, therefore, belongs to the period of Building 2 A although no structures were found in its vicinity. The make-up of clay and building-debris (5) above the path contained fragments of wall-plaster with a pink face and sherds of Antonine coarse pottery.

Also pre-dating Building XXI, 2 was an area of metalling in Trench 59 L XIII, south-west of Room 1; partly beneath this ran a small gully (7) which contained a samian sherd of form 79 stamped RANV[, Antonine; the foundation-trench of Room 2 cut this gully.

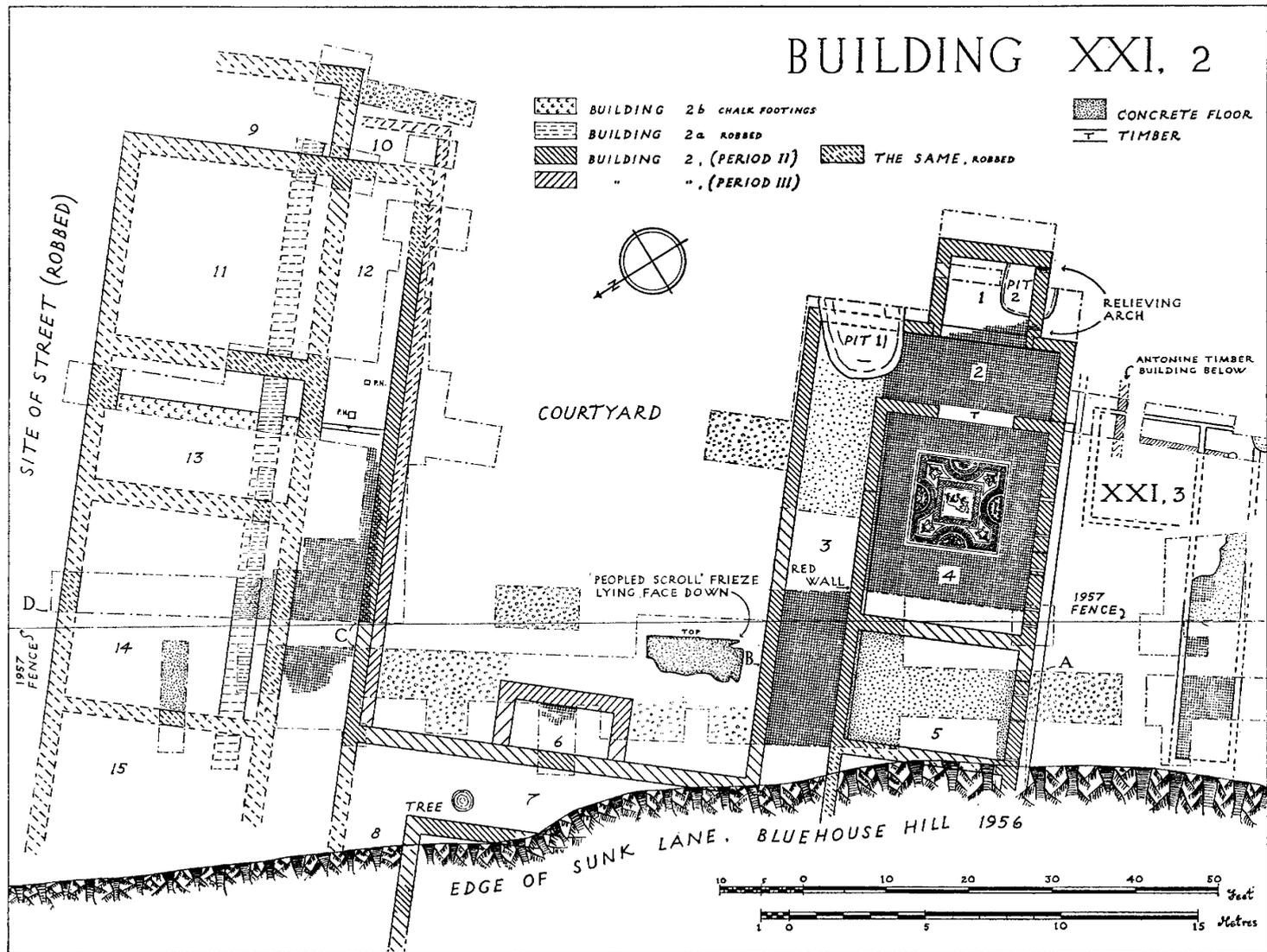


FIG. 67. (Scale 1:240).

Nearby in Trench 60 L VII (fig. 70, Section S-T) there was a succession of layers yielding Antonine pottery, all earlier than the south-west wing. The topmost, Layer 12, contained fragments of decayed wall-plaster, but once again no structure was found.

D. Period II: *Building XXI, 2, first phase* (fig. 67)

Building 2 B-2 A was probably demolished *c.* 180, which will be shown to be the date of the large courtyard house, Building XXI, 2, built over its site. All the new walls had foundations of flint and mortar except some in the north-east wing. There the external (street) wall of 2 B was reused or rebuilt on its chalk foundation, which was found *in situ* at the base of the robber-trench (fig. 68, Section C¹-D). The inner wall of Corridor 12 also stood on chalk foundations, possibly belonging to a wall of Building 2 B. A third exception was the use of chalk foundations for the porches at the south-east end of the two wings. The walls of one of these, Room 9, had been robbed, but those of Room 1 were not bonded to the main wall of the house but clasped the gap left for the entrance; the tessellated floor, however, ran through without a break and the mortar in the two sets of walls was identical, so little chronological significance need be attached to this fact.

The south-west wing

This wing, 57 ft. 6 in. (17.53 m.) long, had rooms 19 ft. 6 in. (5.94 m.) wide bounded by a corridor 7 ft. 9 in. (2.36 m.) wide. The building was of very unusual construction. Low masonry sleeper-walls of flint and hard white mortar were built, never more than 3 ft. above floor-level and sometimes half as high; they varied in width between 1 ft. 7 in. and 1 ft. 10 in. (0.48-0.56 m.), resting on somewhat wider foundations (pls. XVI, XVII). The external south-west wall had an offset at foundation level as much as 13 in. (33 cm.) wide, doubtless to withstand the thrust of the hillside into which Rooms 4 and 5 had been partially terraced. This offset ended with Room 4 and the wall of Room 2 made a butt-joint with it, although the construction-trench was continuous. Presumably the wall of Room 2 was built separately because it had less weight to bear. The tops of these plinths were carefully smoothed and they carried a superstructure of clay (fig. 68, Section A-B). No sign of sockets to support a timber framing were encountered, but there was a series of small horizontal transverse slots set at somewhat irregular intervals of *c.* 4 ft. into the top surface of the masonry. They occurred most numerous in the south-west wall of Rooms 4 and 5; the smoothed mortar of the wall-top occasionally still bridged the apertures (pl. XXb). They fell into two groups: the majority had held squared battens of *c.* 4 by 3 in. (10 by 7.6 cm.), but occasionally much smaller grooves of cane-size were seen. The battens are assumed to have been used to retain plank shuttering during building, within which the clay body of the upper wall was tamped into position in a plastic state. No trace was observed of unfired clay blocks bound with sand such as were used in a wall of similar construction at Leicester: the clay was uniform.¹ That it was still plastic when laid can be seen from the chevron-patterns impressed on its surface as keying for plaster.² The casts of these chevrons were retained by the back of the sheets of

¹ This method of construction was in origin military. It has been observed in the early Claudian fortress at Colchester (*Britannia*, viii (1977), 71). The Leicester building was of the second century (*J.R.S.* xlix (1959), 113). Another building in similar construction is the late first-century

Farningham II villa; here the sleeper-walls did contain sockets for timber uprights (*Arch. Cant.* lxxxviii (1973), 3-5).

² R. Goodburn in S. S. Frere, *Verulamium Excavations*, Vol. I, 160-2. P. Crummy (*Britannia*, viii (1977), 80 ff.) has suggested the use of actual carved shuttering.

plaster and were found during excavation (pl. XVIIa); they were clearly not the result of trowel-cuts, having a regular pattern and rounded profiles.

Walls built in this manner would be comparatively easy to demolish by pushing the clay superstructure from the sleeper-wall, when it might well descend in almost unbroken form or at least in large lumps. The result can be seen in pl. XVIIa in Corridor 3 and in pl. XVIIIa where the filling of Room 4 is virtually all clay and sheets of plaster; in this room the plaster was more disorganized by its fall than in Corridor 3.

Rooms 2 and 3. In these rooms the first sheet to fall (face downward) turned out to be the ceiling (pl. XXa), painted in purple-red with yellow wheat-stalks enclosing panels in an interlocking coffer-design, each with a dove or feline mask at its centre. The fall of this plaster directly onto the tessellated floor caused greater fragmentation to the painted surface than occurred when the wall between the corridor and Rooms 4-5 was pushed over onto it (pl. XVIIa), for this fall was cushioned by the ceiling plaster; the wall was found almost intact save for the decay of its upper painted surface (the wall of Room 5) by weathering.

The corridor was 7 ft. 9 in. (2.36 m.) wide, but its south-west wall had been higher than this; as the wall fell across the corridor its top 3 ft. hit the opposite wall and doubled back over itself, becoming badly broken in the process. Thus, of the decoration of the corridor the bottom of the dado still adhered to the masonry sleeper-wall; the rest of the dado and the main panels lay in the corridor face down; and the frieze had doubled back. The dado was painted to simulate marble panels; the main panels were a repetitive series in red, each bearing a frame of slender yellow candelabra supporting floral swags in blue or yellow and portraying a green dove on a perch in the centre; the frieze was red, possibly carrying a spiral scroll of dark tendrils, but the surface, from lying face up, had badly perished. The wall had been *c.* 11 ft. (3.35 m.) high.

The painted surface had been applied over two plaster renderings of the wall, the first comparatively coarse and $1\frac{1}{2}$ in. (38 mm.) thick and the second *c.* $\frac{1}{2}$ in. (12.5 mm.) thick of finer yellow sandy plaster; on this a thin white skin had been laid to take the paint. On the south-west wall of Room 3 and in Room 5 the plaster and painting had been applied before the floors had been laid, and they descended to the surface of the levelling layer below (pl. XVIIb), on which the remains of plaster-mixing were found. Once the floors had been laid, themselves obscuring some of the dado, a quarter-round moulding of *opus signinum* was applied, obscuring more. There was, however, no lower level of floor to suggest that the main floors were secondary: the phenomenon was caused by the order of construction and perhaps by a desire not to stain the floor with wet plaster and paint. The contemporaneity of wall-decoration and floor is confirmed by the fact that on the north-east wall of Room 3 the plaster did not go below the quarter-round moulding. An interesting point of design was revealed by plaster still *in situ*. The panels on either side of the corridor were not axially disposed opposite each other, but were displaced by some 2 ft. 2 in. (0.66 m.). This is probably due to the differing lengths of the walls.

The corridor floor in Rooms 2 and 3 was of plain red tessellation, but in Room 2 had been extensively patched, sometimes with somewhat larger tesserae, no doubt because of heavier traffic in the vicinity of the entrance. In one part of the passage (Trench 60 L III) an area of tessellation had been removed before the demolition. The doorway into Room 4 had possessed a timber threshold, the beam of which had been embedded 1 ft. into the wall on

either side; its decay had led to a fracture of the walls above, but this may have been caused by heavy agricultural appliances in post-Roman times. Nevertheless, the threshold may have had to be replaced during the life of the house: a patch in the tessellation each side of the east jamb suggested a hole dug for this purpose. The threshold had been slightly raised, since part of a small quarter-round moulding survived on the passage side of it (pl. XIX*a*). There were traces of a timber door-frame (p. 164).

The purple ceiling and red wall of Corridor 3 have already been described. Corridor 2 had a ceiling of the same design but on a red background. One piece which was recovered near the angle of the corridor showed the junction: here the purple paint was overlapped by the red. Fragments of birds and a winged human mask probably also came from the ceiling of Room 2. The end or south-west wall of Room 2 was differently decorated, being painted with a dado of three panels of reddish-brown marbling (pl. XVI*c*) above which was a slight offset or moulding (which in the restoration of this wall in the Verulamium Museum has been erroneously flattened out).¹

Room 1 had a tessellated floor continuous with that of Room 2, but it was badly worn and patched; part had subsided into Pit 2, over which the builders had constructed a tile relieving-arch in the wall-foundations. Traces of wall-plaster painted dark green were found, which may have come from the ceiling. Still adhering to the base of the south-west wall were remains of a dado in three symmetrical panels above a cream-coloured border at the base. From the south-east, these consisted of (i) a pink panel with grey border; (ii) a pink border; (iii) a pink panel and grey border.

Room 4, measuring 24.5 by 19.5 ft. (7.47 by 4.42 m.), was one of the principal living-rooms and had a fine mosaic (pl. XVIII), 11 ft. 9 in. (3.58 m.) square, with a central panel of a lion carrying off a stag's head from which blood drips. Scenes with lions are very rare in Roman Britain,² and the details of the face of this one are obscured by insufficient differentiation of colouring, although the overall effect is competent and the body well proportioned. Part of the mosaic behind the lion is darkened by heat; it seems probable that this marks the presence of a brazier. The mosaic was not centrally placed but lies nearer the doorway, which is faced by the central panel. In a *triclinium* the expected arrangement would be the reverse, with the mosaic facing the diners who face the door through which service arrives. Thus the room would appear designed for some other purpose.

The whole floor was excellently preserved, although a patch occurred as described near the door. The floor was covered by a deep bed of clay containing sheets of wall-plaster (pl. XVIII*a*) from the overthrow of the superstructure; the absence of flints was noticeable. Some plaster was still *in situ* on the base of the walls: a fine plaster rendering was laid over a coating of coarser plaster in which occasional tiles stood upright against the masonry, presumably for keying. The plaster recovered had come principally from the south-west wall. Above a dark red dado, continuous for at least 4 ft., still *in situ* and probably capped by a painted cornice, it was painted a rich dark emerald-green divided into panels by red bands; at the top was a further painted cornice (which in the restoration in the Verulamium Museum has been erroneously carried down the side!).³

¹ This piece of restoration was not carried out by Dr. Davey nor under my control.

² A second lion scene occurs on a fourth-century mosaic in Insula XIV (Vol. I, pl. xxxiv and pp. 102-3); a

somewhat similar lion and stag's head occurs at Orbe in Switzerland in an early third-century floor (V. von Gonzenbach, *Die römischen Mosaiken der Schweiz*, pl. 55).

³ See n. 1.

Fallen plaster in the vicinity of the north-west wall suggested that below the main green panelling—here surrounded by concentric red rectangular bands—the decoration of the dado had changed. Traces of yellow panelling divided by red lines and the corner of one red panel bordered by a black Greek key-pattern on a yellow background were recovered.

When the fallen plaster was removed it was found that the site of the doorway was occupied by a number of fallen chalk voussoirs (pl. XIX*b*), some of them bearing red lines. They were at first taken to indicate an arched entrance; but when reassembled the arc was evidently too narrow for the purpose, and they are better taken to indicate clerestory windows, *c.* 2 ft. 3 in. (0.69 m.) in diameter, looking out over the corridor roof. This would suggest a height of at least 16–17 ft. (4.9–5.2 m.) for Room 4.

A small excavation below the north-west edge of the floor of Room 4, where roadworks had damaged the tesserae, revealed a thick layer of make-up earlier than the north-east wall, which was not deeply founded. The layer yielded a second-century mortarium, pieces of red wall-plaster and a fragment of quarter-round moulding in *opus signinum*; no structures were seen.

Room 5 had a plain floor of coarse yellow concrete. Though much fallen plaster occurred among the fallen clay from its walls, none was lifted, owing to pressure of work on the decorated plaster in Room 3. The plaster *in situ* on the base of the walls was white.

The good condition of most of the plaster-decoration up to the moment of demolition was striking. There was very little evidence of decay or lack of maintenance during the third century. In parts of Room 2 some slabs of plaster from the upper wall had slid vertically downwards, so that up to five upright layers were supported against the bottom of the wall; but they were held in position by layers of horizontal plaster and clay lying on the floor. This is probably, therefore, only an accident of demolition rather than an indication of ruin. In Room 2, north-east of the doorway into Room 4, the lower part of the painted wall had been re-rendered in plaster on which no paint survived: a straight edge suggested a vanished wooden door-frame (pl. XIX*a*), and this repair may have been connected with a replacement. The repair partly covered the quarter-round moulding which everywhere sealed the painted face itself.

The north-east wing

This wing was 10 ft. longer than the south-west wing and 5 ft. 6 in. wider; its length was 67 ft. 6 in. (20.57 m.) excluding the porch. Robbing of walls had been extensive at the end of Period II and later, so that the anatomy of the building was not easy to establish. The south-west (external) wall of the corridor (Room 12) could be identified since it still stood in hard white mortar like those of the other wing, and its smooth top, now devoid of any clay, was sealed by the tessellated floor of Period III (figs. 67, 68, Section C¹–D). At the other side of the corridor the nearer of two robber trenches, giving a width of 8 ft. (2.44 m.), should represent the Period II inner wall, reused in Period III. Two feet beyond it is a parallel chalk foundation and robbed wall (Section C¹–D, 11) which belong in origin to Building 2 A. However, the robber-trench above the foundation cuts through the make-up (Trench 56 L V 12) of House XXI, 2, and this makes it possible to argue that the chalk foundation was reused for the inner wall of the Period II corridor and robbed when the corridor was narrowed in Period III; the robber trench is sealed by the *opus signinum* floor of Room 14

which may date to Period III. It is not possible to refute this interpretation conclusively; but the following considerations suggest that it is incorrect. (i) The narrower form of corridor at 8 ft. corresponds with the 7 ft. 9 in. corridor of the south-west wing. (ii) A corridor 12 ft. wide reduces the width of Rooms 11–14 from 23 ft. 6 in. (7.16 m.) to 19 ft. (5.79 m.) and seems out of proportion. (iii) In fig. 69, Section G–H, the robber-trench of the wall on the chalk foundation (9) is sealed by make-up (6) which should belong to the Period II building. It seems best to suppose that in Trench 56 L V the robbing of the (Period I) wall *after* the deposit of the make-up (12) (Section C¹–D) is a local incident only. (iv) Layer 9 contained Hadrianic and Antonine pottery but nothing later.

Robbing of floors had also been extensive. The only floor certainly of Period II to be found was one of clay in Corridor 12 (fig. 68, Section C¹–D, Trench 56 L IV 9). It yielded two sherds of mid second-century pottery and on its surface lay some very thin lenses of painted wall-plaster. The presence of the latter confirms that it was the genuine floor rather than a basis, and this in turn suggests that this wing of the house was less ornate than the other and was used perhaps for domestic offices or even commercial purposes.

Room 13 had a red tessellated floor and Room 14 one of *opus signinum*: both may be of Period III. Below the floors were thick layers of make-up sealing the remains of earlier structures: the necessity for raising the level in this wing is partly due to the slope of the valley (and even with the make-up, the floor of Corridor 12 is 1 ft. 8 in. (0.5 m.) below that of Corridor 3); it is perhaps partly also due to the rise in street-level during the first two centuries: Street XXI/XXII has been robbed out so that this cannot be demonstrated, but others are known to have become very thick with repeated re-metallings, to the inconvenience of adjoining householders.

The north-west wing

The central wing was largely inaccessible under the hedge of the 1956 lane or destroyed by the lane itself. Part of a corridor (Room 7) survived; its external wall was of flat-topped character similar to those in the other wings in this period. The opposite wall was observed outcropping in the lane.

The courtyard (Period II)

The sequence below the gravel metalling of the courtyard in Trench 59 L VII has been described on p. 159. Not far off in Trench 56 L VI a large sheet of painted wall-plaster measuring c. 12 by 5 ft. (3.66 by 1.52 m.) was lying face down. It proved to carry an important painting representing a 'peopled scroll' (pl. XXIa). A running scroll of acanthus on a yellow background is 'peopled' with alternate panther-masks and pheasants.¹ The top of the sheet has a dark red border curving out slightly to mark the junction with the ceiling, while nearby (but more scattered) lay other fragments of the lower parts of the decoration. The scroll was restored by Dr. Davey and the whole wall has been assembled by the British Museum, where it is now displayed (pl. XXIb). The reconstructed wall is 11 ft. 5 in. high (3.48 m.). A splay at its right-hand edge indicates the position of a door or window.

¹ This painting is studied by J. M. C. Toynbee in *Art in Roman Britain* (London, 1963), 193 ff.; *Art in Britain under the Romans* (Oxford, 1964), 214 ff.; and by Dr. Joan Liversidge in G. Sieveking (ed.), *Prehistoric and Roman Studies* (British Museum, 1971), 89–93 with pls. xxx–xxxii. See now also Davey and Ling, *Wall-Painting*, 171 ff.

The position of the sheet in the ground indicated that it had fallen from the north-west (fig. 67). Here the wall of Room 7 lies 16 ft. (4.88 m.) away from the top of the frieze, and it is difficult to see whence it can have fallen save from the outside face of that wall. Clearly a painting of such quality, so well preserved, cannot have been exposed to the weather; but no indication of, e.g., the posts of a timber portico was found outside this corridor. One must, however, be assumed, and indeed there were traces of a metallated area outside it. The robber-trench of the Period III porch outside Room 7 cut through deposits of fallen clay wall and plaster associated with the piece recovered.

While the peopled scroll was being restored, Dr. Davey examined the composition of its backing coat and rendering coat, and noted that the mortar-mix of the former incorporated a few small fragments of decorated plaster. Their surfaces were coloured as follows: white; white with black patterns applied; salmon-pink flecked with black and white; and deep purple-red. It is interesting that, as mentioned above, pink plaster also occurred in the make-up below the courtyard floor in Trench 59 L VII although it is generally rare on the site; both must derive from an undiscovered earlier building somewhere in the vicinity of the south-west wing.

Nearer the north-east wing, in Trenches 56 L II and III (fig. 68, Section B-C), a more definite gravel in the courtyard resumed (L II 9, L III 11). It overlay the buried soil (L II 10, L III 14) and was directly sealed in Trench L III by deposits of fallen plaster. Thus, though stratigraphically this gravel could originate in Period I, it was clearly in use until the end of Period II; and since the buried soil below it yielded sherds of coarse Antonine pottery, the latest of which is dated c. 160-90, it seems likely that this metallating was laid down when House XXI, 2 was built.

E. Period III: *Building XXI, 2, second phase*

At the beginning of the fourth century the south-west wing was destroyed, the north-east wing was reconstituted and a porch (Room 6) was added to the north-west wing (fig. 67). This porch projected into the courtyard and contained a plain tessellated floor which sealed the sleeper-wall of the corridor of Period II.

The north-east wing

The clay superstructure of the outer wall of Corridor 12 was demolished and, although its masonry sleeper-wall was not removed and seemingly remained perfectly serviceable, a new foundation was inserted along its outer side the whole length of the wing and beyond it to embrace or replace the porch. The foundation of the new wall was trench-built almost from the level of the top of the older masonry, the level of the courtyard having been built up (fig. 68, Section B-C) with deposits of mixed yellow gravel (56 L II 8) and clay with gravel (7).¹ The corridor received a red tessellated floor which sealed the previous sleeper-wall.

Room 13 had a red tessellated floor on an *opus signinum* basis (Section G-H, L VI 5). Stratigraphically this could belong to Period II, but, for what the observation is worth, the tessellation was very similar to that in Room 12, and the *opus signinum* yielded a small sherd

¹ In Section B-C Layer 7 fills what appears to be a cut since it does not reappear in a second section (fig. 69, in (8). This is unexplained and is probably a local feature Section F-G) cut further along the wall.

of colour-coated beaker, probably of the third century. Over the floor were lying pieces of wall-plaster, plum-coloured, yellow and green.

Room 14 was given a plain *opus signinum* floor which was found in Trench 59 L XII and which partially survived also in Trench 56 L V (Section C¹-D); it is possible that this floor, too, really belongs to Period II.

The courtyard received a new gravel surface laid down over much of the area, covering demolition-deposits of Period II and additional make-up.

DATE OF BUILDING XXI, 2

The building overlies a good deal of second-century pottery. The latest samian sherds are one of form 37 of *c.* 150-80 in Trench 60 L VII 7 and one of similar date in the layer above this (20); a third of similar date occurred in the buried soil (60 L VI 7) antedating Room 9. A sherd of late Antonine form 38 (*c.* 160-90) was found in the pit below Room 1 (60 L II Pit 2); there was also a form 37 in the style of Cinnamus (*c.* 150-80) in the gravel of the courtyard (60 L VI 4). The latest coarse-ware sherds are of similar date although one (Type 2593) does not make its appearance before *c.* 170. There are no examples of beakers in colour-coated ware which began to appear from *c.* 200; the beaker (No. 1581) from the old soil below Room 1 (60 L II 5/1) is of late second-century type. A date of *c.* 175-80 appears reasonable for this building.

A. Early structures

DEPOSIT	SAMIAN	COINS	COARSE POTTERY
56 L V 17 early street ditch	29 S.G. A.D. 50-65 29, 27 (two), 18/31 S.G. Flavian		Nos. 1572-3 Type 129
59 L IV 11 floor of timber house	37, 15/17, 18, 27 S.G. Flavian 37 C.G. A.D. 100-20 (D 51)		
59 L VIII 8 floor of timber house	29 S.G. A.D. 55-70 18 S.G. Flavian		mortarium-spout (A.D. 70-95)
60 L VI 15 Belgic ditch			Nos. 1570-1 and storage-jar sherds in Belgic ware
60 L VI 13 wall-trench, timber house	18 S.G. Flavian		
60 L VI 8 floor of timber house	29, 15/17, 27 S.G. probably Flavian Ritt. 8 S.G. pre-Flavian		

B. Masonry buildings, Periods I-II

DEPOSIT	SAMIAN	COINS	COARSE POTTERY
56 L II 10 buried cultivation soil	18/31 C.G. Trajanic or Hadrianic 37 C.G. A.D. 100-20 and eleven residual sherds Unusual form (see Vol. III)		No. 1582
56 L III 14 the same			Type 879 (A.D. 125-70) Type 2263 (A.D. 160-90)
56 L IV 14 buried cultivation soil	36 S.G. first cent.		sherd cf. Types 428 or 604
56 L IV 11 make-up	residual sherds		No. 1602 Type 2369 (A.D. 140-70)
56 L IV 9 clay floor, Room 12			Type 2444 and cf. Type 900
56 L V 14 buried cultivation soil	22, 27 S.G. pre-Flavian 18 (two) S.G. Flavian 18 S.G. probably Flavian		Nos. 1574-80, group dated <i>c.</i> 60-100 though not sealed till 180
56 L V 11 A chalk floor Building 2 A	37 C.G. Trajanic 18/31 C.G. Trajanic-Hadrianic		
56 L V 12 make-up	37 C.G. Trajanic 37 C.G. A.D. 125-45 27, 18/31 C.G. Trajanic-Hadrianic 33 C.G. Hadrianic or Antonine and residual Flavian sherds		Nos. 1598-9 Type 655 (A.D. 130-80) Type 879 (A.D. 130-70) Type 2516 (A.D. 130-80) Type 2369 (A.D. 140-70) Types 2445, 1805 (both A.D. 130-80) Type 2593 (A.D. 170-220) Type 2464 (A.D. 140-80)
56 L V 9 robber-trench Period I wall			No. 1600
56 L IX 14 mortar basis of floor, Room 3	31 C.G. Hadrianic-Antonine		
56 L IX 12 dark occupation earth below Room 5	38 C.G. Antonine		Type 843 (A.D. 130-70) Type 2584 (A.D. 145-200)

BUILDING XXI, 2: SECTION ACROSS N.E. & S.W. WINGS & COURTYARD

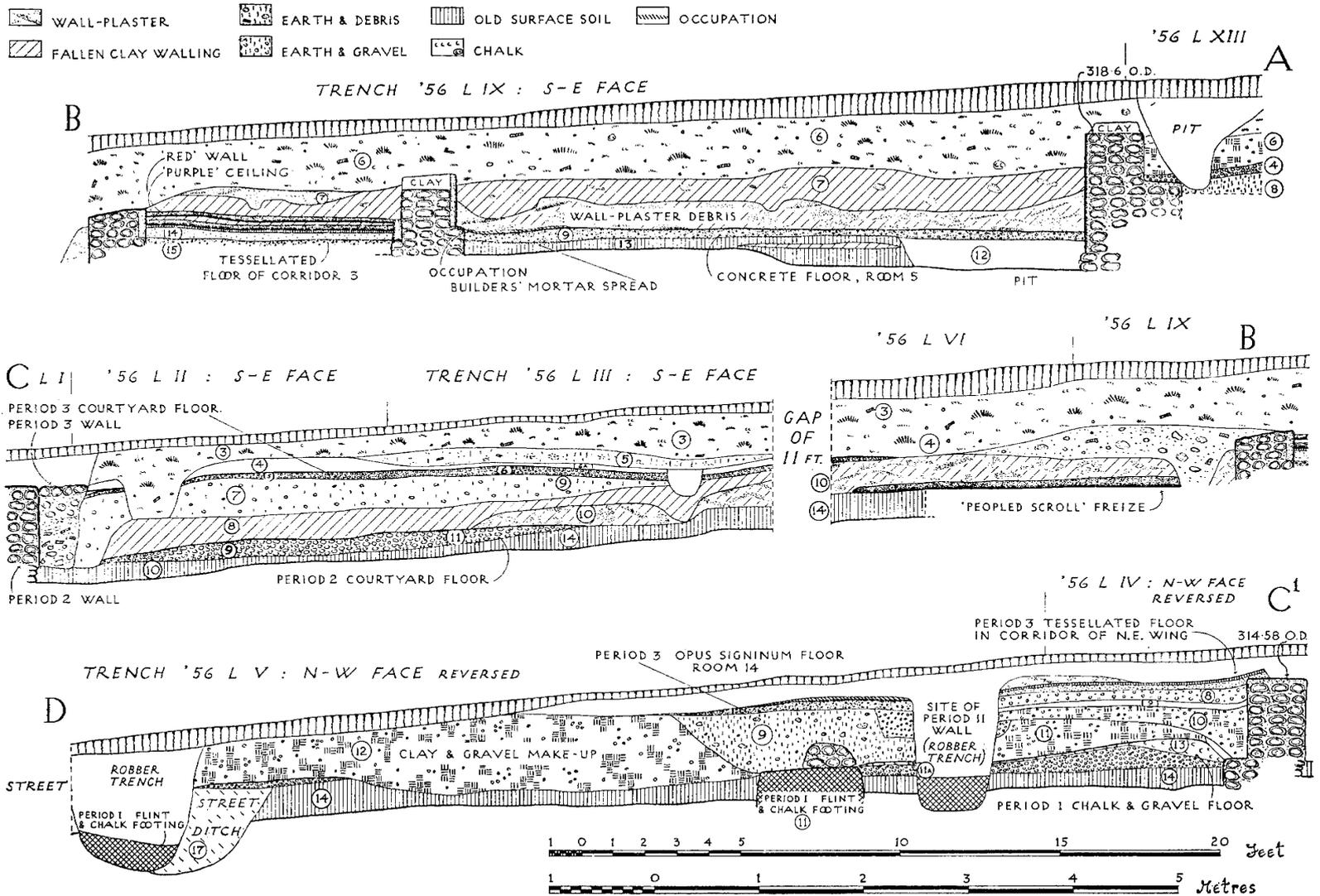


FIG. 68. Insula XXI, 2: Sections (scale 1: 60). For location of Sections, see fig. 71.

DEPOSIT	SAMIAN	COINS	COARSE POTTERY
56 L XV 7 courtyard metalling	31 C.G. probably Antonine		Type 903 (A.D. 125-80)
59 L IV 7 buried cultiva- tion soil	37 S.G. A.D. 85-105 37 C.G. A.D. 100-20 and residual sherds		
59 L IV 6 sandy floor Building 2 B	29, 18 S.G. Flavian 33 C.G. Trajanic or Hadrianic 37 C.G. style of Birrantus A.D. 130-45 (D 52)		Type 2016 (A.D. 135-90) Type 2308 (A.D. 135-90)
59 L IV 6 A the same			No. 1590
59 L IV 5 A make-up for XXI, 2	27, 37, 18 S.G. Flavian 18/31, 27, 36 C.G. Trajanic or Hadrianic		No. 1601 and cf. Type 2308 (A.D. 135-90)
59 L VI 18 buried cultiva- tion soil below chalk founda- tion, Building 2 B	27 S.G. first cent.		Type 660 (A.D. 130-60)
59 L VI 11 dark earth sealing 2 B foundation	18/31 C.G. Trajanic or Hadrianic 37 C.G. probably Trajanic and residual Flavian sherds		
59 L VI 9 robbing of 2 A wall sealed by make-up	18/31(?) C.G. second cent.		
59 L VII 6 buried cultiva- tion soil	15/17, 18 S.G. Flavian 37, 29 S.G. A.D. 75-95 15/17 or 18 S.G. stamp [CE]LER[OS] retro (S 39) A.D. 50-70		Nos. 1584-6 Type 1317 and cf. Type 694 (A.D. 100-60) cf. Type 2368 (A.D. 80-160)
59 L VII 7 gravel metal- ling of Building 2 B over 6	18 S.G. Flavian 27 (two) C.G. Trajanic		
59 L VII 5 make-up for courtyard of XXI, 2	Curle 11 S.G. Flavian(?) 18/31 (two), 27 C.G. Trajanic or Hadrianic		Type 709 (A.D. 135-80) and cf. Type 655 (A.D. 130-80)

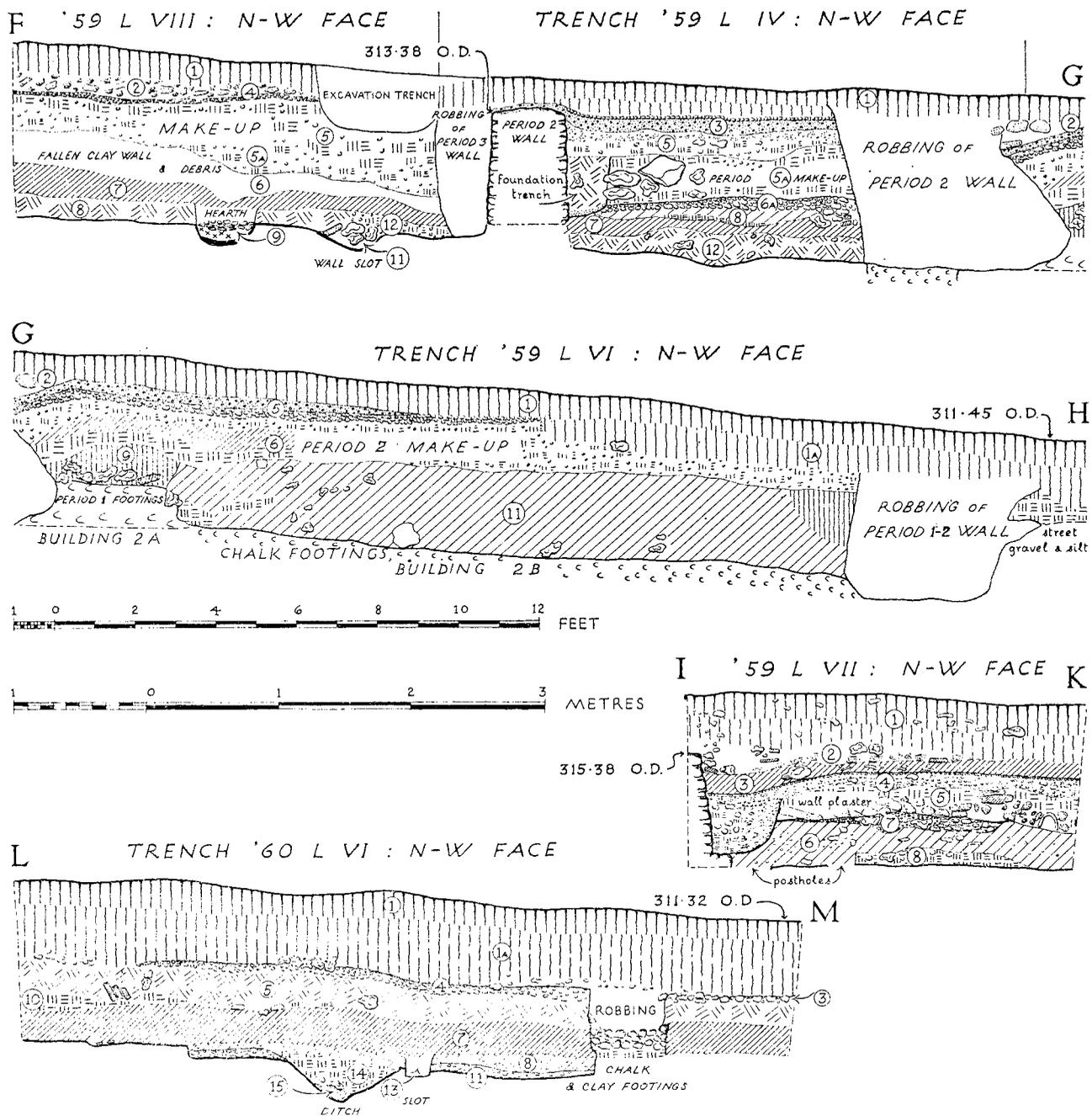


FIG. 69. Insula XXI, 2: Sections (scale 1:48).

VERULAMIUM EXCAVATIONS

DEPOSIT	SAMIAN	COINS	COARSE POTTERY
59 L VII 4 courtyard metalling		Hadrian, As (<i>RIC</i> 811)	
59 L VIII 7 buried cultivation soil	29, 24, 37 S.G. Flavian 18/31, 33 C.G. Trajanic or Hadrianic 37 C.G. style of Drusus ii A.D. 125-45 37 C.G. probably Hadrianic		Nos. 1588-9 Type 2573 (A.D. 135-80)
59 L XIII 8 gully earlier than Rooms 1-2	31 C.G. stamp BANV[ILLIM] (S 40) (A.D. 130-55)		Type 740 (A.D. 140-80)
59 L XIII 3 foundation-trench, Room 2	unusual form C.G. second century		
60 L VI 9 courtyard make-up of XXI, 2, below Layer 5			Type 649 (A.D. 125-70) cf. Type 1600 (A.D. 145-80)
59 L XIII 2 fallen plaster Rooms 1-2			No. 1613
60 L II 16 Pit 2 below Room 1	38 E.G.(?) A.D. 160-90 27 C.G. Hadrianic or early Antonine		Nos. 1593-4 Type 972 (A.D. 140-220)
60 L II 11 upper filling, Pit 2	31R C.G. Antonine 31 C.G. second century		Type 1065 (A.D. 160-225)
60 L II 5 buried cultivation soil below Room 1	Ritt. 12 S.G. pre-Flavian 31 C.G.(?) second cent.(?)		No. 1581
60 L VI 7 buried cultivation soil	37 C.G. style of Paullus A.D. 150-80 37, 31, 36, 38, Curle 15 C.G. Antonine	Nero, As (<i>RIC</i> 329 1)	Types 560 (A.D. 135-90), 720 (two) (A.D. 130-80), 905 (two) (A.D. 145-200), 2451 (four), 560 (A.D. 135-90)
60 L VI 5 make-up for XXI, 2	residual samian		Nos. 1595-7

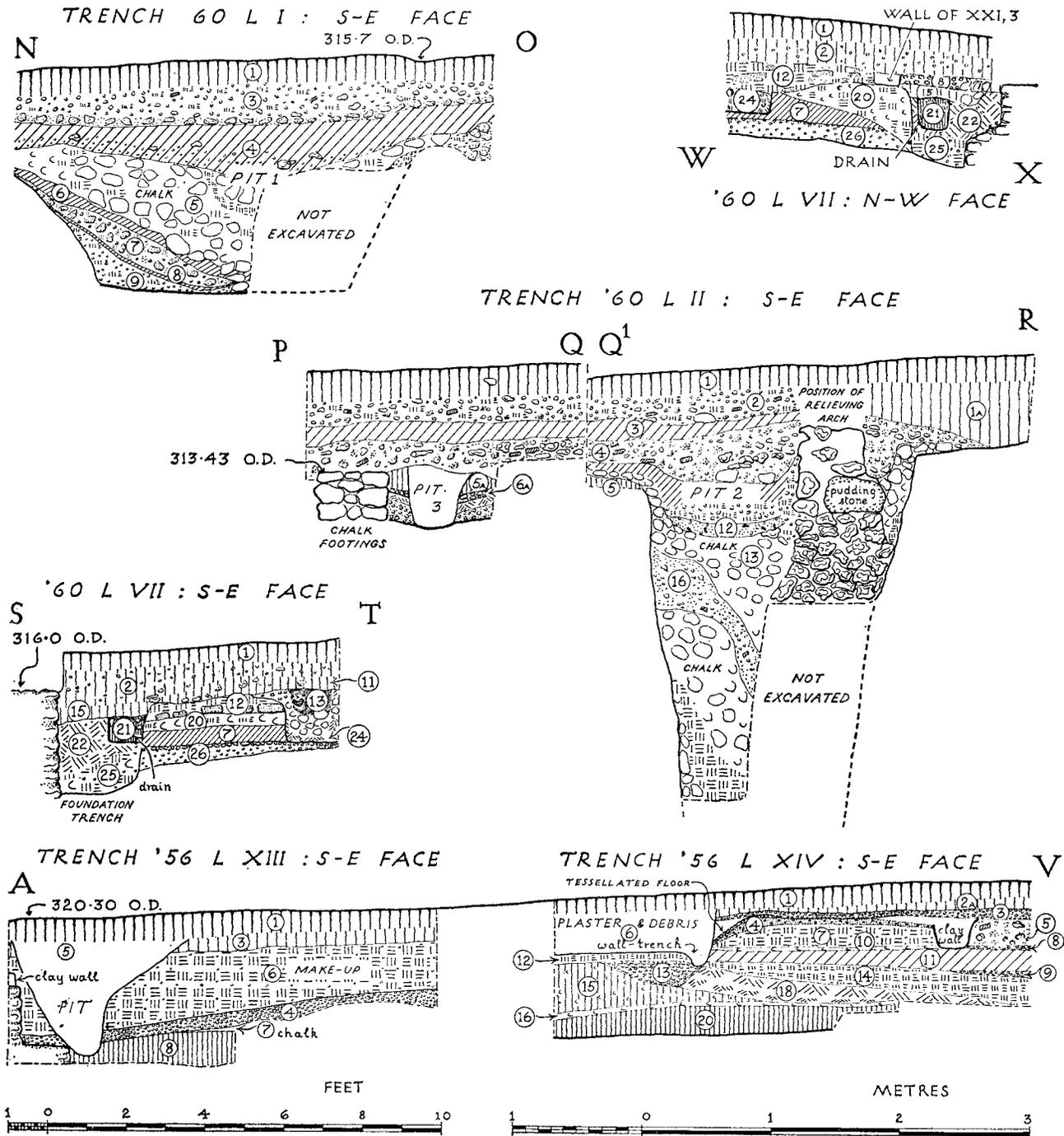


FIG. 70. Insula XXI, 2: Sections (scale 1:48).

DEPOSIT	SAMIAN	COINS	COARSE POTTERY
60 L VI 4 gravel floor of courtyard	27 C.G. Hadrianic-Antonine 37 C.G. style of Cinnamus, A.D. 150-80		
60 L VII 26 stony soil earlier than foundation- trench of XXI, 2			Type 615 (A.D. 125-60)
60 L VII 7 buried cultiva- tion soil over 26	37 C.G. A.D. 150-80 37 C.G. 135-70 (D 53) Curle 15, Curle 11 C.G. Hadrianic		No. 1587 Type 1316 (A.D. 140-80)
60 L VII 20 chalky occupa- tion soil over 7	37 C.G. A.D. 150-80 31, 33 C.G. Antonine		Type 2584 (A.D. 145-200)
60 L VII 12 debris layer over 20	18/31 S.G.(?) probably Flavian		Type 1828
60 L VII 25 foundation- trench of XXI, 2			Type 1070 (A.D. 150-220+)
60 L VII 22 in foundation- trench above 25	37 C.G. probably Antonine 31 (two) C.G. Antonine 33(?) E.G. probably Antonine		Type 1940 (A.D. 140-90)
60 L VII 21 timber-lined eaves-drip drain	38(?) C.G. Antonine		
60 L VII 15 dark loam sealing 21	31, 33, 35 C.G. Antonine		
60 L VIII 4 make-up below Room 4	18 S.G. probably Flavian		No. 1583

C. *The demolition of the south-west wing and Period III*

DEPOSIT	COINS	THE POTTERY
56 L III 6 courtyard metalling Period III		Nos. 1617-18
56 L III 6 A the same		No. 1630
56 L VI 10 plaster debris in courtyard		cf. Type 1809 (A.D. 270-320) cf. Type 1812 (A.D. 210-315) cf. Type 1808
56 L IX 7 collapsed clay wall		
59 L I 2 collapsed walls, Room 4		No. 1612 Type 2345
59 L IV 5 make-up, Room 12		No. 1623 and cf. Type 1812 cf. Types 791 or 1806
59 L V 5 fallen wall debris Room 3		Nos. 1624-6
59 L VII 2 destruction-level SW wing		No. 1631 Type 1119 but in white paste, and a beaker sherd in similar ware
60 L I Pit 1 cut through wall of Room 2		Nos. 1635, 1637-43 Type 1809 and cf. Types 1056, 1119, 1204, 1809, 1812
59 L V 4 the same	Tetricus I (<i>RIC</i> 146) Barbarous radiate	Nos. 1636, 1644-5
60 L II 5 A disturbance in floor, Room 1, sealed by destruction		Nos. 1621-2
60 L II 3 destruction-level, Room 1	Tetricus I (<i>RIC</i> 270) Tetricus II (<i>RIC</i> 270 or 272)	Nos. 1619-20 Type 2493 (A.D. 265- fourth century)
60 L V 2 collapsed walls, Room 4		Nos. 1614-6
60 L VIII 2 the same	Claudius II (posthumous) (<i>RIC</i> 266)	Nos. 1627-9 and cf. Types 791, 1809, 2035

On this evidence the end of Period II came at the end of the third century or early in the fourth, *c.* 290–310. How long Period III continued from *c.* 300 it is impossible to say, since ploughing has removed all levels down to the floors of Period III. The following coins were found in the destruction-levels of Period III:

56 L II 3	Tetricus I (<i>RIC</i> 101)
56 L II 4	Constantius II
56 L III 3	Second-century As, stolen from site
56 L VI 3	barbarous radiates (three)

The following coins were found unstratified over the site:

Postumus, 1	uncertain radiates, 2
Victorinus, 2	Constantine I (<i>Constantinopolis</i>), 1
Tetricus I, 7	Constantius II, 1
Tetricus II, 2	Valentinian I, 1 (<i>RIC</i> ix, p. 66, 16a)
barbarous radiates, 3	

*F. Timber-framed building south-west of and contemporary with XXI, 2,
and below XXI, 3*

In Trench 60 L VII two wall-trenches approximately at right-angles formed part of a building with a clay floor (18); it lay 5 ft. 9 in. from the external wall of the south-west wing of Building XXI, 2 and was contemporary with it (fig. 70, Section S–T; for plan see fig. 67). The make-up (23) below the clay floor yielded pottery of the period 130–80; the wall-trench contained a demolition-deposit (13 A) yielding two almost whole vessels which are probably not later than *c.* 210–40. Thus the building had a short life and perhaps was demolished to make way for Building XXI, 3, which partly overlapped it.

DATING EVIDENCE

See 60 L VII 26, 7 and 20 above (p. 174).

DEPOSIT	SAMIAN	COARSE POTTERY
60 L VII 23	18/31 C.G. probably Hadrianic	No. 1592
make-up below	37 C.G. A.D. 135–70	Type 715 (A.D. 135–80)
clay floor 18	(see Layer 60 L VII 7 above) (D 53)	Type 905 (A.D. 145–200)
60 L VII 17		cf. Type 2121 (A.D. 150–
wall trench		200+)
60 L VII 13		No. 1610 and cf. Type 791
and 13 A		
demolition of wall		

BUILDING XXI, 3 (fig. 67)

Parts of a timber-framed building were found on the south-west side of Building XXI, 2. At the rear the building had at least two rooms and approached within 4 ft. of its neighbour.

Further north-west the building lay 18 ft. from Building XXI, 2 and consisted only of a corridor 6 ft. (1.83 m.) wide. This had a red tessellated floor, which had been laid with many of the tesserae on edge exposing their blue core.

The date of the building is uncertain, but it probably falls in the middle of the third century. Immediately outside the external wall of Building XXI, 2, Room 5, a layer of gravel metalling was found sealing its offset in Trench 56 L XIII (fig. 70, Section A-V, 4); it overlay a buried soil (8) which yielded Hadrianic samian and a coarse-ware dish of *c.* 130-80. Above the gravel a deep layer of pebbles and clay (6) contained coarse pottery of the first half of the third century (*c.* 210-40).¹

The stratification in Trench 56 L XIV, in which Building XXI, 3 lay, was rather different, and dating evidence was scarce. But consideration of levels shows that the building is late: it overlay Hadrianic-Antonine and Antonine samian, and is probably later than Layer 6 in Trench L XIII. A date of *c.* 250-80 is suggested for its occupation.

In Trench 60 L VII what is probably the south end of the building was encountered at a high level and partly overlapping the demolished remains of the earlier half-timbered building in that trench (fig. 70, Section W-X).

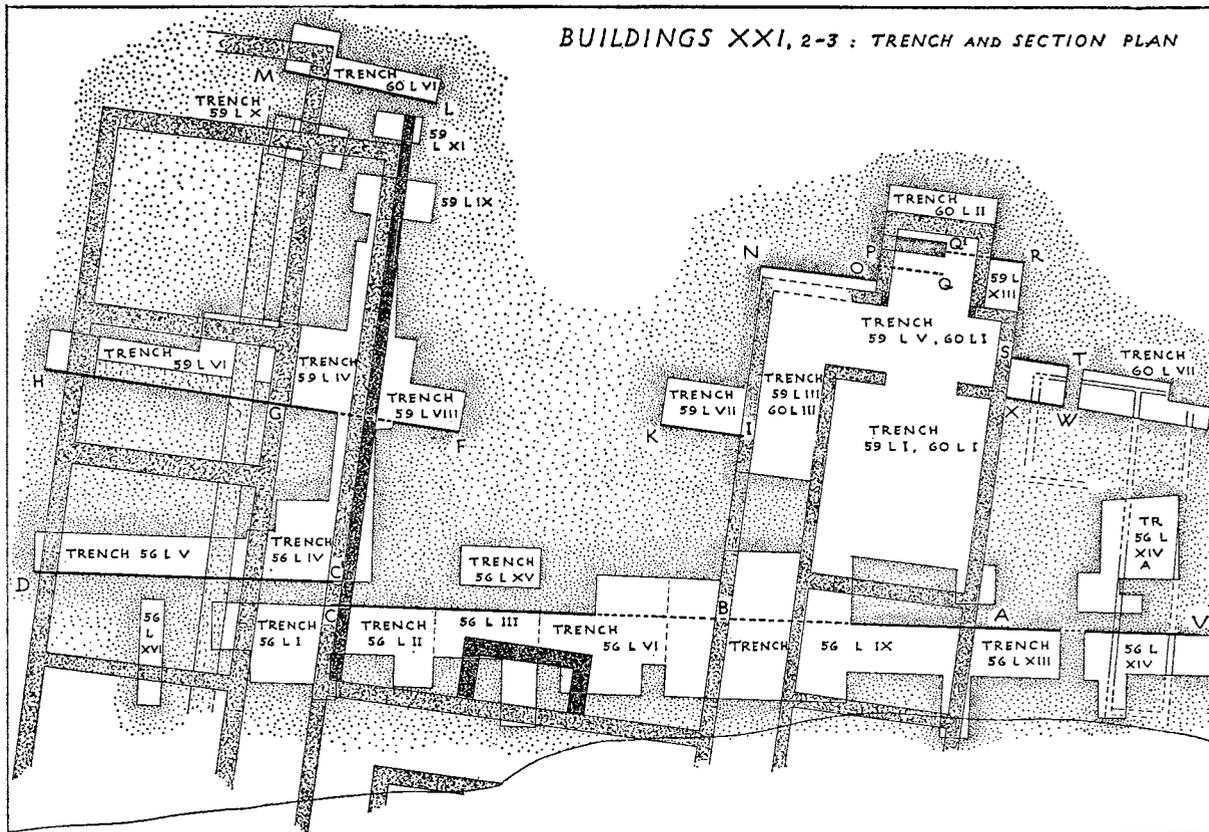


FIG. 71.

¹ It also included a rim of Type 1120 (cf. Gillam, type 146) which is not known before *c.* 280. It seems probable that this sherd is intrusive from the pit (5).

VERULAMIUM EXCAVATIONS
 DATING EVIDENCE: BUILDING XXI, 3

DEPOSIT	SAMIAN	COARSE POTTERY
56 L XIII 8 buried soil	18/31 C.G. probably Hadrianic	No. 1591
56 L XIII 4 gravel metalling over 8	31, 33 C.G. Antonine	Nos. 1603-9 and residual Antonine sherds
56 L XIII 5 destruction pit	31 (three), 33 (two), 38, 42 C.G. Antonine	Nos. 1633-4 Types 1605, 2526
56 L XIV 5 rubble earlier than XXI, 3	18/31R C.G. Hadrianic-Antonine 38(?), burnt, C.G. Antonine	No. 1611 Type 1049 (A.D. 145-80)
56 L XIV B 3 (=XIV 3) gravel layer over building		No. 1632
60 L IX 3 basis of floor of XIV, 3		cf. Types 1115, 1119, 2037

INSULA XXII

BUILDING I

THIS site occupied the western corner of Insula XXII and was excavated in 1955 and 1956. It was found to be cut by three comparatively modern excavation-trenches, one of which is evidently the Trench Y-Z of Wheeler, *Verulamium*, pl. CXIX, dug to test for the line of the Fosse earthwork. A further disturbance occupied a wide strip along the north-west side, where everything was found to have been robbed away in the eighteenth or early nineteenth century, leaving little more than the south-west front of Building XXII, 1 and of its predecessors intact. The metalling of Street XXI/XXII had also been removed; but the position of the street was clear from an early side-ditch and from large quantities of road-silt.

This ditch (figs. 72, 73, Section A-B) had a primary silt (A IV 9) yielding two sherds of samian (a Claudio-Neronian Ritterling 9 and a Flavian 27), a mortarium of pre- to early Flavian date and a coarse-ware copy of form 29 (Nos. 1446-7). Above this a deposit (8) of dark occupation-material with oyster shells and charcoal yielded the following samian sherds:

55 A IV 8	30	S.G.	Claudian
	30	S.G.	pre-Flavian (D 53a)
	18 (three) (one stamped OF NGRI) (S 40a)	S.G.	Claudio-Neronian
	15/17	S.G.	Claudio-Neronian
	18	S.G.	Neronian
	15/17	S.G.	prob. Neronian
	27	S.G.	prob. Claudian
	27	S.G.	Neronian or Vespasianic
	29, 27	S.G.	prob. Flavian

together with a mortarium sherd (Type 2632) of pre- to early Flavian date and a large group of coarse pottery (Nos. 1648-57, 2099 and Types 85 and 183) all of pre-Flavian appearance. Layer 7 above this was a deposit of street-silt richly mixed with further occupation-material. It yielded an As of Nero (cf. *RIC* 176 r) and the following samian sherds:

	29	S.G.	A.D. 55-70 (D 53b)
55 A I 7	30, 27	S.G.	Flavian, prob. Vespasianic
	Two uncertain forms	S.G.	Neronian or Vespasianic
	18	S.G.	Flavian

Among the coarse pottery from Layer 7 was a sherd of an Italian mortarium stamped LVCILL[I C]RESCENT[IS] (No. 1658), together with a complete jar in Belgic fabric (No. 1660), two jars (No. 1659), together with Types 130 and 272. It seems evident that the ditch had silted up by the end of the Flavian period and probably by 85 or 90, and had probably not been first dug before *c.* 60-70 unless in its early days it had been kept cleaned out.¹ While it was functioning, domestic access to the site behind it would be confined to that

¹ The corresponding ditch on the other side of the street was found below Building XXI, 2 (p. 157). This too had filled with silt in the period 60-80.

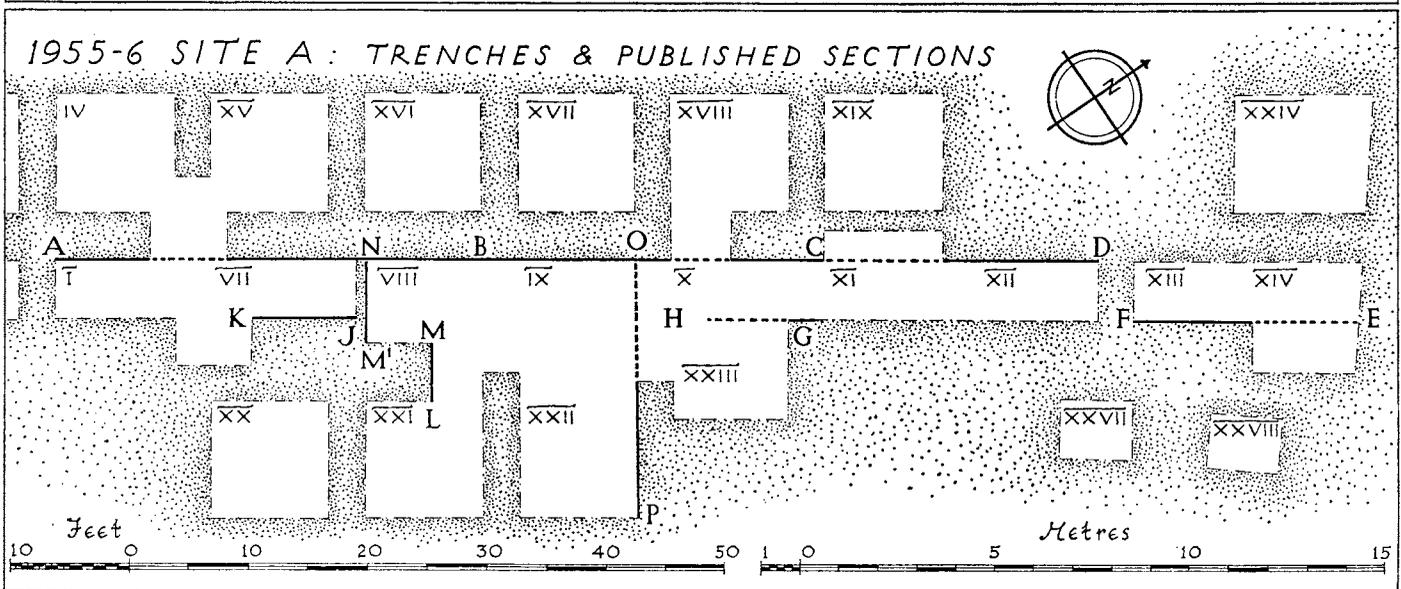
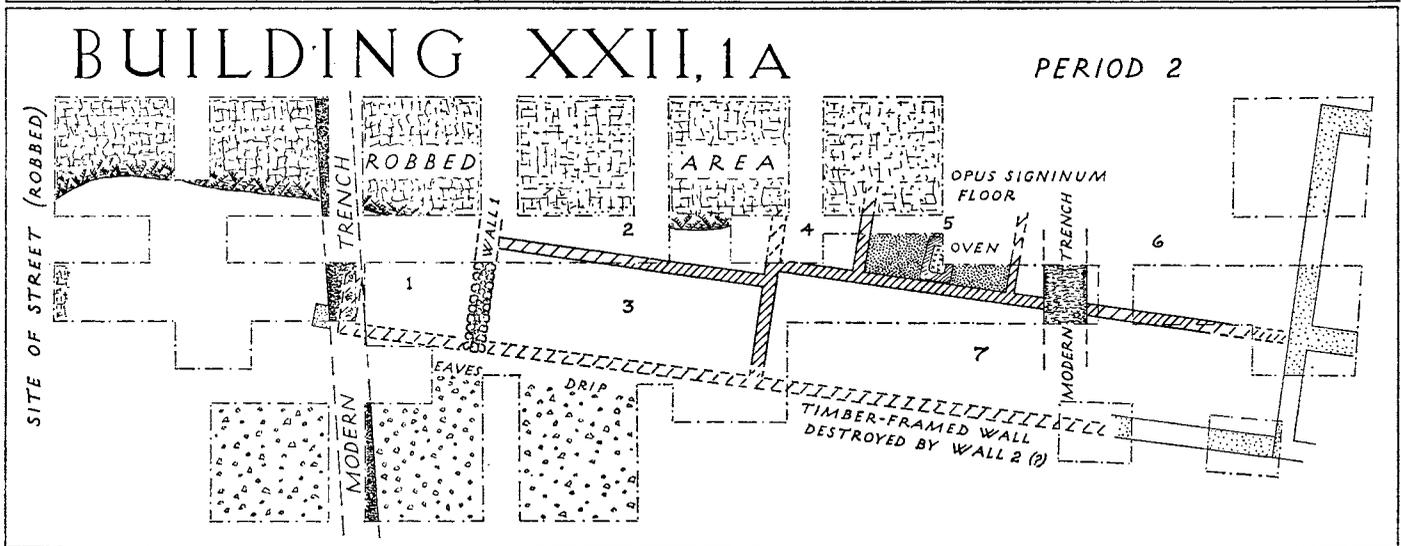
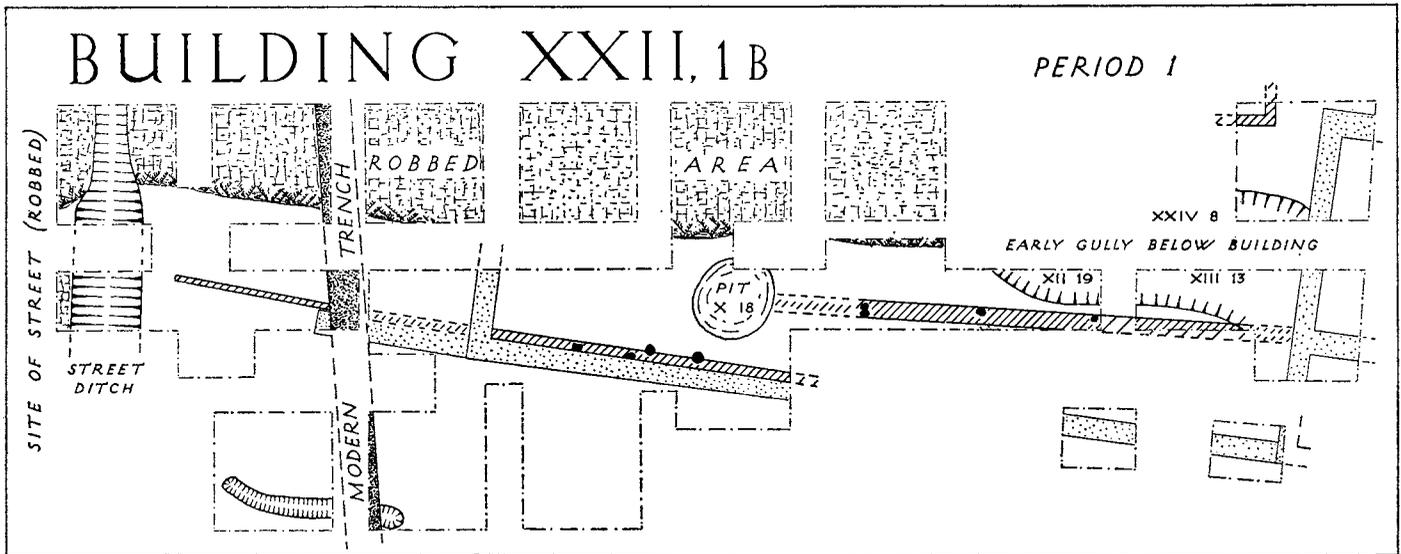


FIG. 72. Insula XXII: Buildings 1 B (A.D. 130-65), 1 A (A.D. 165-210) and location of Trenches and Sections.

from Street XXII/XXVII on the north-east side. Street XXI/XXIII itself, however, almost certainly goes back to the original late Claudian layout of the city, for traces of pre-Flavian activity were found not only here but also further south in Insulae I, III, IV and V.¹ On the present site, structural traces of Flavian and pre-Flavian occupation are confined to hollows and shallow ditches cut in the natural surface;² but the site as a whole yielded at least twenty-eight pre-Flavian samian sherds, of which five were likely to be of Claudian date. It seems probable that any dwelling was small and lay near Street XXII/XXVII and has been entirely removed by the robbing along this frontage.

Period I: *Building XXII, 1 B* c. A.D. 130–65

It was not until c. A.D. 125–30 that the first traceable house (fig. 72, Building 1 B) was erected. It had timber-framed walls and gravel floors below which the old topsoil had been removed. The external south-east wall was discernible over a length of 54 ft. (16.46 m.) as a post-trench running below the north-east side of a masonry successor (fig. 73, Section O–P) except where the foundation-trench of Wall 3 had removed it (M¹–N). The building faced south-west, for at this end the wall was extended 13 ft. (3.96 m.) by a narrower trench only 8 in. wide and too shallow to have held posts: it must have been dug for a sleeper-beam supporting the south-east side of a verandah facing Street XXI/XXII, which was now accessible after the silting-up of the side-ditch. The north-west return of the main wall had been destroyed by the trench of the 1930–4 excavations. A second wall, not quite parallel, was traced in Trenches XI–XIII; it may have turned north-west where interrupted by Pit X 18. This shallow pit was dug late in the occupation, or more probably (since it appears to have destroyed a wall) after the demolition, for disposal of rubbish; it was sealed by the floor of Building 1 A. Finally in Trench XXIV lay the junction of two more walls. Thus House 1 B extended for at least 96 ft. (29.26 m.) north-east from Street XXI/XXII and c. 50 ft. (15 m.) from Street XXI/XXVII; but its principal rooms have been lost in the robbing of the north-west part of the site.

DATING EVIDENCE: PERIOD I, HOUSE XXII, 1 B

DEPOSIT	SAMIAN (All South Gaulish unless otherwise stated)	COINS	COARSE POTTERY
A IX 14 floor	29 A.D. 45–65 78 Flavian 27 prob. Flavian (burnt) 18/31 C.G. prob. Trajanic sherd ?second century		Type 694 (A.D. 100–60)

¹ For these insulae see Wheeler, *Verulamium* (1936), 81 ff.

² In Trench X, Layer 28 was a small hollow yielding two samian sherds, 29 Claudian and 29 pre-Flavian; in Trenches

XII, XIII and XXIV lay a wide shallow gully, filled-in in pre-Flavian times; and in Trench XX was a small curving gully sealed by the yard of Building 1 A.

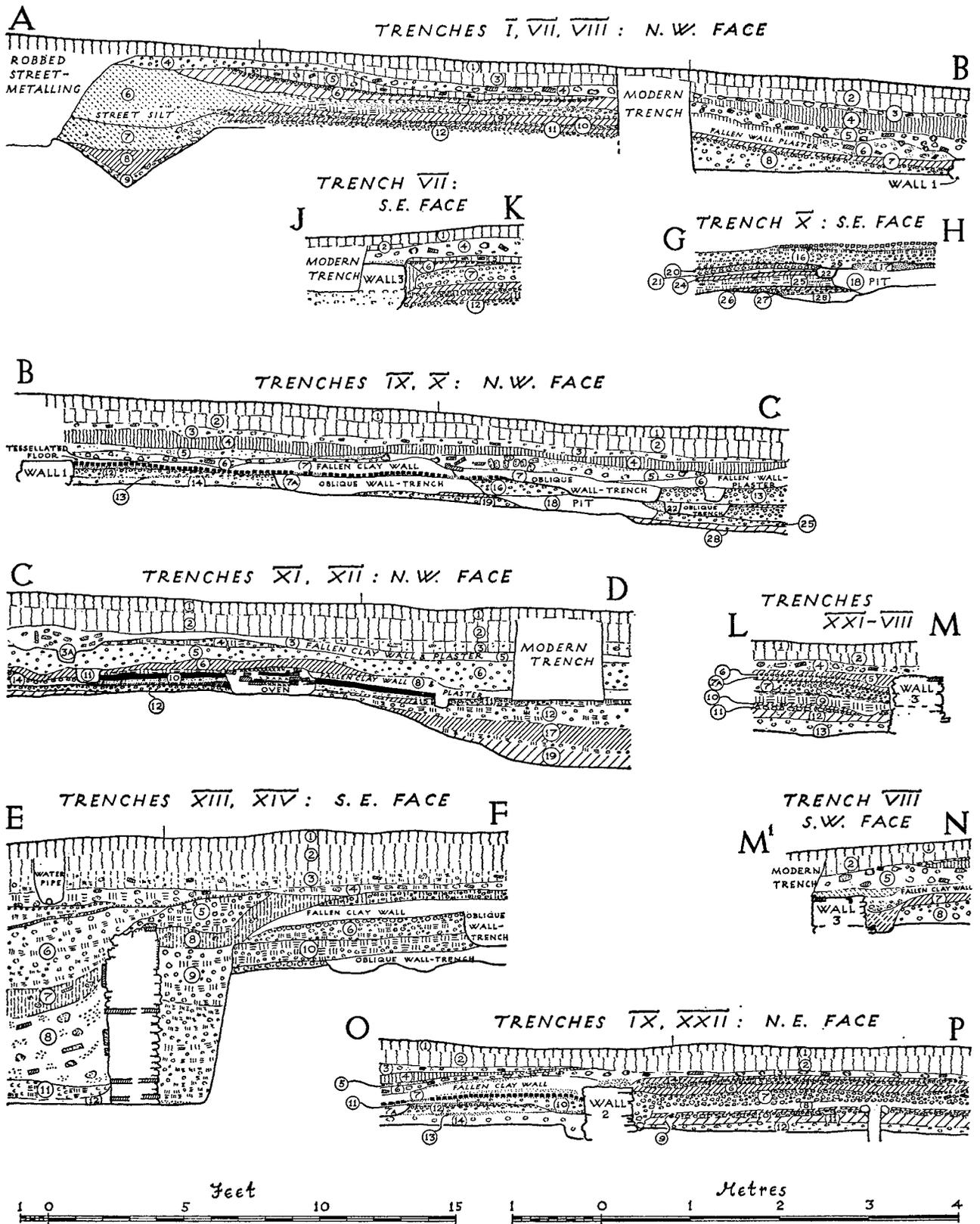


Fig. 73. Insula XXII, I: Sections (1955 and 1956, Site A) (scale 1:64).

DEPOSIT	SAMIAN (All South Gaulish unless otherwise stated)	COINS	COARSE POTTERY
A X 19 floor	27 Neronian-Flavian 27 Flavian 18/31 R C.G. Trajanic- Hadrianic		
A X 25 floor	36 prob. first century 36 pre-Flavian		
A XI 12 floor	29, 27 Flavian		No. 1663
A XII 12 floor sealing Flavian gully	29 Neronian		
A XXI 13 gravelly floor of yard	27 first century		
A XXII 12 (the same)	27 ?first century		No. 1662
A XXIII 11 (the same)	27 pre-Flavian		
A XX 11 occupation on gravel yard	29 A.D. 45-65 (D 54) 24, 29 prob. Claudian 27, Curle 11 Flavian 18, 15/17 prob. Flavian		
A XXI 12 (the same)	29 prob. pre-Flavian	Nero, As (<i>RIC</i> 329 r)	Type 473 (A.D. 49-130)
A XXII 11 (the same)	29 A.D. 60-75 30 Flavian		
A XXIII 10 (the same)	18/31 C.G. prob. Trajanic-Hadrianic		

There is a good deal of residual material, especially in the yard where no special surface was laid down, and some of the latest sherds might have been trodden in during occupation; but the evidence suggests that the building was erected in the Trajanic-Hadrianic period. The pottery-evidence by itself need not indicate a date later than *c.* 115-20; but the building is timber-framed and is thus unlikely to have stood more than 30-35 years at the longest without reconstruction. House 1 A, which replaced it, cannot be dated earlier than 160-70. It will, therefore, be wisest to date the construction of House 1 B to *c.* 125-30.

Period II: *Building XXII, 1 A* *c.* A.D. 165-210

About 160-70 a complete reconstruction took place (fig. 72, House 1 A). The new building

had one wall of masonry (Wall 1), or rather this wall rested on a flint-and-mortar base, but was probably carried up in clay since the masonry had a flat finished top. It was built of faced flints and hard white mortar. There may have been a second similar foundation some 10 ft. further south-west (now destroyed by the recent excavation-trench) to define a porch or verandah on this side, for in Room 1 there was a terracing of the slope on the south-west side of Wall 1 as shown by gravel floor (8) in Section A-B (fig. 73). The remaining walls were timber-framed. The external south-east wall was later replaced by Walls 2 and 3 of Building XXII, 1; it seems likely that, had it been of masonry, some trace would have survived just as Wall 1 survives beneath Walls 2 and 3 (pl. XXII). Traces of a shallow eaves-drip hollow were observed (Section L-M), suggesting that the eaves projected some 2 ft. (0.65 m.). In Room 3 (fig. 73, Section B-C) the mortar spread (13) from the building of Wall 1 sealed (14), and had a gravel floor (12) laid directly on it. Rooms 2, 4, and 6 also had gravel floors and Room 7 one of chalk; but Room 5 was floored in *opus signinum* round a tile-built oven. Floor and oven were contemporary since the *opus signinum* had straight unbroken edges against it. Walls 2/4 and 3/7 had been renewed once (fig. 73, Section G-H (22) and (29)).

DATING EVIDENCE: PERIOD II, HOUSE XXII, 1 A

DEPOSIT	SAMIAN (All South Gaulish unless otherwise stated)	GOINS	COARSE POTTERY
A X 18 demolition pit of House 1 B sealed by 1 A	37 (three), 29 (two), 15/17, 18 Flavian 37 C.G. A.D. 100-20 (D 55) 37 C.G. style of Sissus ii A.D. 130-50 (D 56) 18, 33 C.G. early second century		Nos. 1664-74
A VIII 9 filling of slot of Period I	37 (two) Vespasianic 37 C.G. style of Drusus i A.D. 100-20 (D 57) 15/17, 27 Flavian 18/31 C.G. Trajanic- Hadrianic		
A VIII 8 gravel floor, Room 1	18 Flavian Curle 15 C.G. early second century		Type 1091 (A.D. 170-280)
A IX 12 gravel floor, Room 3	29 first century 15/17 Claudian 15/17 prob. Neronian 15/17 Neronian-Flavian 27 Flavian(?)		Type 1929; Types 669, 843, 900 (all A.D. 130-70)

DEPOSIT	SAMIAN (All South Gaulish unless otherwise stated)	COINS	COARSE POTTERY
A X 22 packing of wall-trench 2/4	27 C.G. Trajanic- Hadrianic 31 C.G. Hadrianic- Antonine		
A X 7 A wall-trench 3/7	27 C.G. Hadrianic- Antonine		
A XI 7 c secondary floor Room 4			No. 1678
A XI 9 occupation on <i>opus signinum</i> floor, Room 5	35/36 C.G.(?) second century(?)		No. 1677
A XI 6 secondary occupation, Room 5	29 Flavian 18R prob. Flavian 27 C.G. stamp VIDV[COΣ·Γ] (S 41) A.D. 100-20 31, 81 C.G. Hadrianic- Antonine		Type 2068
A X 20 secondary floor, Room 7	18R prob. Flavian 27 stamp [QV?]C (S 42) A.D. 120-45		
A XX 10 gravel of yard	37 Flavian	Vespasian (RIC 747)	Nos. 1675-6
A XXI 11 (the same)			Colchester mortarium usually dated third cent., resembling Type 2693 (A.D. 170-230: local)
A XXII 10 (the same)	15/17 Claudian 18 prob. Flavian		
A XXIII 9 (the same)	18/31R C.G. Hadrianic- Antonine		
A XX 9 occupation on yard floor	29 Flavian (?)36 C.G. Antonine(?)		
A XXI 10 (the same)	18/31 C.G. Trajanic- Hadrianic(?)	Cunobelin (Mack 243)	Type 694 (A.D. 100-60)

DEPOSIT	SAMIAN (All South Gaulish unless otherwise stated)	COINS	COARSE POTTERY
A XXII 9 (the same)	Ritt. 8 pre-Flavian 18 Flavian 31 R C.G. Antonine 36 C.G. prob. Antonine 37 C.G. Antonine (D 58)		
A XXIII 8 (the same)	18/31 C.G. Hadrianic- Antonine		Type 2545 (A.D. 145-200) Type 1592
A XXI 9 secondary floor of yard	18/31 C.G. Trajanic- Hadrianic 33 C.G. prob. Antonine		No. 1679
A XX 8 secondary occupation in yard	31 (three) C.G. Antonine	Trajan, dupondius <i>RIC</i> 613 or 615 Antoninus Pius, As, <i>RIC</i> 934 (A.D. 154-5)	No. 1683 Types 720, 1936
A XXI 8 (the same)			mortarium fragment (A.D. 140-200)
A XXII 8 (the same)	18/31 Flavian 33 C.G. Trajanic- Hadrianic 31 (two) C.G. Hadrianic- Antonine		Types 791-2 (A.D. 145-220) Type 732 (A.D. 145-(?)200) Type 2310

The earliest levels contain no samian later than 'Hadrianic-Antonine', but there are two coarse-ware vessels which are hard to date before *c.* 170. The straight-sided dish of Type 1091 from within the floor of Room 1 (A VIII 8) was dated in Volume I within the period 175-275, but an example was in fact found in a layer dated 160-75, though at that time taken to be a stray. The introduction of this type may, therefore, go back to *c.* 160-65. The mortarium from the gravel metalling in the yard (A XXI 11) is of a type normally placed in the third century, and if so must be taken as an intrusion. Secondary levels begin to show purely Antonine samian, and there is a coin of 154-5 as well as coarse-wares of the second half of the second century. Thus an initial date of *c.* 160-65 is reasonable for the construction, and the building with its timber-framed construction, renewed in places, may have lasted some forty years, but hardly longer.

Periods III, IV: *Building XXII, I c.* A.D. 210-350

The next reconstruction (Period III), involving the demolition of House 1 A and the building of House 1 (fig. 74), took place *c.* A.D. 210. The south-east wall was rebuilt with a flint-and-mortar foundation (Wall 2); at its south-west end this oversailed the stump of

Wall 1 (pl. XXII*b*), which was, however, retained in use. Wall 2 had yellow mortar and there was a bonding-course of broken building-tiles along its external face (pl. XXII*b*). The corner above Wall 1 was turned in complete tiles. The previous internal partitions were abolished and a corridor with tessellated floor was laid out along the south-east side serving a new series of rooms with timber-framed walls. Fresh metalling was laid down over the yard. Subsequently (Period IV), Wall 2 was prolonged by a wall 13 ft. (3.96 m.) long (Wall 3) which was added to its south-west end, and this line was further extended by a substantial post placed at the edge of the street 10 ft. away. The result was a porch or verandah, which was floored with chalk. Wall 3 was more roughly built than Wall 2, with softer yellow mortar, and it contained a bonding-course of broken *tegulae* with flanges along the wall-face; this tile-course was at a higher level than that in Wall 2 (pl. XXII*b*). At the end of Period IV all this part of the house as far as Rooms 4-5 seems to have been demolished. There were extensive deposits of overthrown clay wall with much painted wall-plaster preserved as it had fallen, which are described in Volume III by Dr. Joan Liversidge.¹ Section E-F makes it clear that the building erected in Period V at the north-east end of the site (Rooms 6-8) was built only after this had happened.

DATING EVIDENCE: PERIOD III, BUILDING XXII, 1

DEPOSIT	POTTERY
A XII 7 rubbish spread over fallen clay wall (XII 8) and sealed by floor (XII 6) of Room 4	Nos. 1680-2
A XI 5 and XII 6 gravel floor, Room 4	Type 1004 Rhenish beaker sherd c.c. sherd (cf. Type 1058)
A IX 8 occupation on tessellated floor, Room 5	Nos. 1692-3
A XXI 7 yard metalling	No. 1684 Type 873 (A.D. 150-80) Type 1061 (A.D. 200-25)
A XXII 7 yard metalling	Type 1695 (A.D. 180-250) Type 1091 (A.D. 170-280) Type 1802 (A.D. 145-220)
A XX 6 occupation on yard floor	No. 1685 Castor 'box' lid, Type 1119
A XXII 6 (the same)	Nos. 1686-91 Type 1119, Castor 'box' lid and c.c. beaker Gillam 82

¹ See also N. Davey, *Britannia*, iii (1972), 253, fig. 1 and Davey and Ling, *Wall-Painting*, 181 ff.

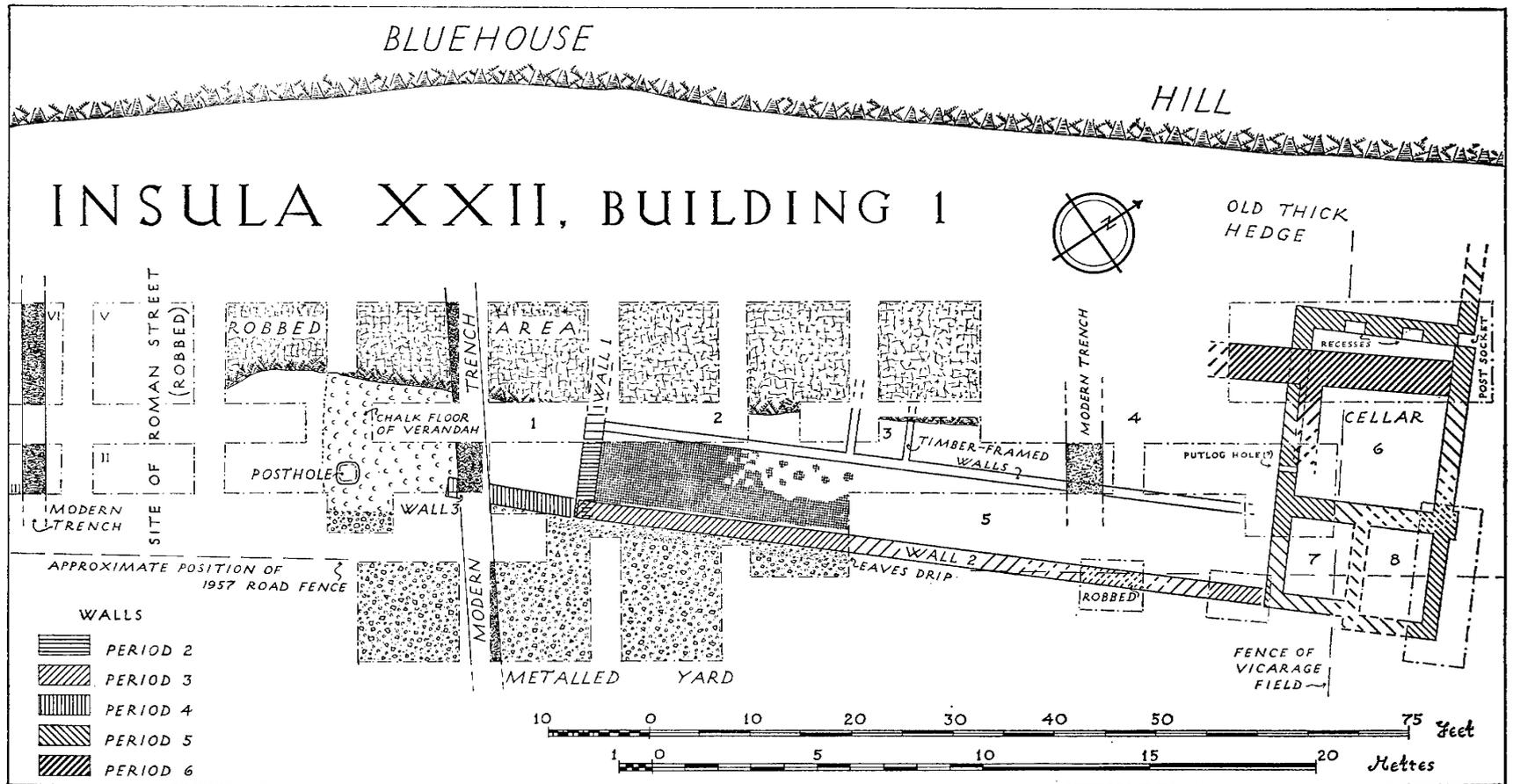


FIG. 74. (Scale 1:200).

DATING EVIDENCE: PERIOD IV

DEPOSIT	COINS	POTTERY
A VII 6 occupation in verandah		Nos. 1698-1703
A VII 5 secondary occupation above 6		No. 1704 Type 1059 Type 2029 Type 2189
A XXI 6 remetalling of yard		No. 1696
A XXII 5 (the same)		Nos. 1695, 1697 Type 2270 (A.D. 270-320) Type 2135 (A.D. 200-75; but cf. Gillam 138 (A.D. 150-250))
A XX 4 occupation on remetalling	Sabina, denarius (<i>RIC</i> Hadrian 395 a)	No. 1694
A XXI 5 (the same)		cf. Type 1173
A XXII 4 (the same)		Nos. 1705-6 Type 1697

On this evidence Building XXII, 1 must be dated after 200. There is a mortarium probably of third-century date below the floor of Room 4, and the contemporary metalling of the yard also contains pottery of third-century date. On the other hand it is not easy to prolong the existence of House 1 A much after 200. A date of *c.* 210-15 is suggested for the rebuilding, and the house clearly continued in occupation throughout the third century. The alterations of Period IV cannot be closely dated, but the contemporary metalling of the yard contained a jar of the period *c.* 270-320; they may reasonably be assigned to the period of revival at Verulamium in the early fourth century *c.* 300-20. Occupation continued long enough to see the introduction of Oxfordshire red colour-coated flanged bowls,¹ and may be taken down to *c.* 350. Trench IX Layer 6, a spread of gravel and rubble overlying the fallen clay wall of Room 5, yielded a coin of Constantius II. This layer continued as A X 5 (fig. 73, Section B-C), which yielded two coins of *c.* 360 (a barbarous *Fel. Temp. Reparatio*, as well as a semi-barbarous copy of the House of Constantine), and these were the latest coins from the site as a whole.

Periods V and VI

After the demolition of the house *c.* 350, a new building was erected at the north-east end. The surviving part of this consisted of a cellar (Room 6) with two small rooms (7 and 8)

¹ Although the Oxfordshire red colour-coated copy of Dragendorff form 38 is one of that industry's commonest products, introduced from *c.* 240, very few if any reached Verulamium before *c.* 345; thereafter they are reasonably common.

adjoining it on its south-east side, and a wall returning north-west from its north corner (fig. 74). This building cut through the north-east end of Wall 2, where a 6-in. gap remained between the two; its relation to the earlier stratification is seen in fig. 73, Section E-F.

Subsequently (Period VI) the cellar was filled in, and a massive wall *c.* 3 ft. 6 in. (1.07 m.) wide, was built across it (pl. XXIII*b*) with a branch running south-east. The angle between them was floored with *opus signinum*. These walls were much robbed and few contemporary levels survived: relevant dating evidence was minimal.

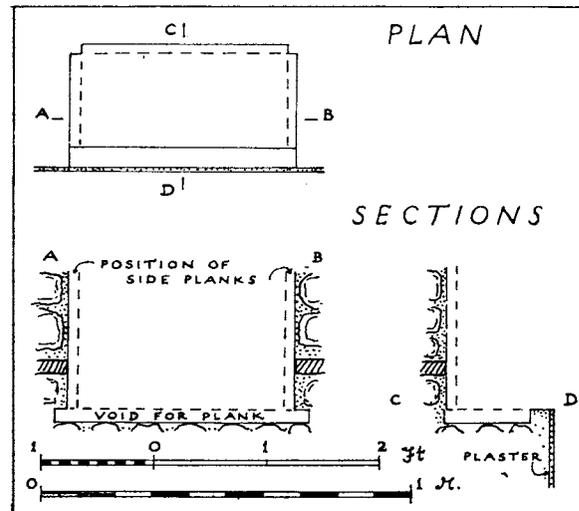


FIG. 75. Insula XXII, Building 1: plan and sections of niche in cellar (scale 1:20).

The north corner of the cellar had been reinforced by a vertical timber beam some 17 in. (43 cm.) square incorporated in the masonry. Even if of oak, this cannot have had a long life in its damp surroundings, and this fact may explain the need for the reconstruction of Period VI. At the base of the south-west wall of the cellar, about 2 ft. from the south corner, was a small tile-lined socket (pl. XXII*c*) running through the wall and measuring 7 in. wide by 6 in. high (17.7 by 15.2 cm.), the purpose of which is obscure. It must have admitted damp from the foundation-trench outside.

The north-west wall contained two niches (pl. XXIII*a*) measuring 2 ft. wide by 13 in. deep (61 by 33 cm.); they survived to a maximum height of 16 in. (40 cm.) and were placed 19 in. (48 cm.) above the floor. There were clear indications that formerly they had been lined with planks (fig. 75). There were voids in the side walls to indicate the position of the wooden floors which consisted of planks 1½ in. (3.8 cm.) thick extending from the back wall to within 2½ in. (6.3 cm.) of the front, where a mortared flange protected them. The vertical back- and side-planks were indicated by mortar fillets (1 in. square in plan) at the rear angles; the surface of the masonry of the walls showed that mortar had been applied to the back of the upright planks, but the floor-planks had merely been placed on the surface of a flint course without a special bed of mortar.

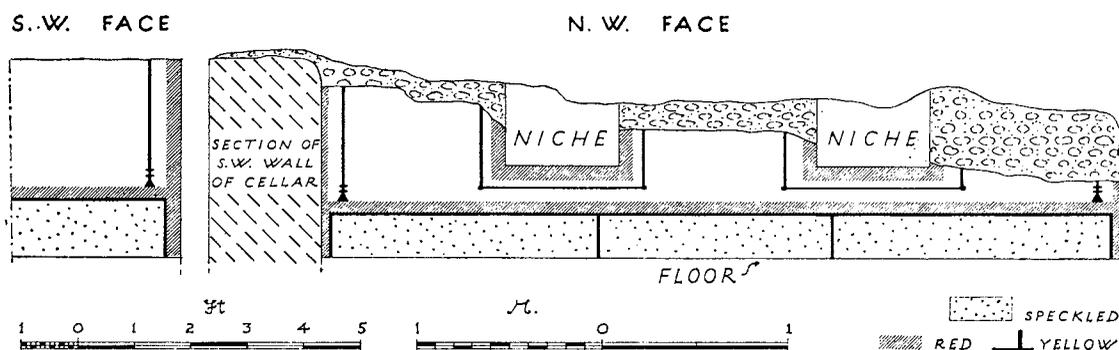


FIG. 76. Insula XXII, Building 1: decoration in cellar (scale 1:40).

The cellar wall had been plastered and painted white; a 3 in. red band outlined the niches (fig. 76), outside which was a yellow line $\frac{1}{2}$ in. wide at the sides and $\frac{1}{4}$ in. wide below. The wall carried a dado marbled with splashes of yellow, black and red paint flicked on with a brush; this was separated from the white area of the wall above by a $\frac{1}{2}$ -in. yellow line bordering a $2\frac{1}{2}$ -in. red band: these turned vertically at the angles.

DATING EVIDENCE: PERIODS V, VI

DEPOSIT	POTTERY
A XIV 9 construction-trench of cellar	No. 1708
A XXV 13 plaster debris in cellar-filling	Type 2035, residual
A XXV 9 cellar-filling above 13	Type 2493
A XXV 19 filling of post-void in wall	No. 1707 and sherd cf. Type 1119 in white paste

It will be seen that there was an absence of satisfactory dating evidence for the construction of the cellar and for its filling, though it is certain that the cellar dates after the demolition at the end of Period IV (fig. 73, Section E-F). Thus despite the likelihood that the few sherds found in the cellar-filling date from the third or early fourth century, the cellar itself was constructed after *c.* 350, which appears to be the date of the Oxfordshire red colour-coated ware in deposits of Period IV. After a life which may have extended down to *c.* 370-80 the cellar was replaced by the walls of Period VI.

INSULA XXVI

BUILDING 1

FACING Building XXI, 2 across Street XXI/XXVI lay Building XXVI, 1 (fig. 122). Its position was located in 1956; excavation was limited because only a narrow strip on the north-west side of Bluehouse Hill was threatened by road-widening at this point. The walls had been robbed for some distance from the lane-cutting. Parts of two rooms 9 ft. (2.74 m.) wide with a corridor 7 ft. (2.13 m.) wide on the north-east side were found (fig. 91, p. 228); ploughing had done much damage to the masonry and little stratification remained. A layer of disturbed mortar in all three rooms probably represented disturbed floor-basis rather than the debris of robbing; it sealed brown loam containing pottery of *c.* 140–80, and there were no third-century colour-coated sherds. Thus the building appears to date from *c.* 170–90. It overlay two large post-holes, one of which yielded part of a large reeded-rim bowl of probably Flavian-Trajanic date.

INSULA XXVII

EARLY DITCH

SOUTH-WEST of Building XXVII, 1 a long trench (56 M I) revealed few features of note save at its bottom. At a depth of 5 ft. it became apparent late in the season that the trench was running obliquely across the filling of a large ditch (figs. 89, 90, p. 227). The area between the trench and the lane was already occupied by a high dump of mechanically excavated soil, so that it proved impracticable to excavate a complete section across the ditch; at the first place possible for a cross-section (Trench M II) the ditch was found to be already turning sharply to the south-east. A partial section is shown in fig. 77. The profile suggests an original width of *c.* 15-17 ft. (4.6-5.2 m.) and a depth of perhaps 5-6 ft. (1.5-1.8 m.) below the contemporary surface. The lowest filling (47) was of leached silted gravel, above which Layer 46, of black peaty texture, appeared to be a turf-line. The lowest levels were sterile; Layer 44 yielded a group of Claudian coarse wares and Layer 43 a sherd of pre-Flavian samian; in Layer 41 the coarse pottery was still of Claudian type but there was Claudio-Neronian samian. Layer 38 yielded a large group of pottery of Flavian date.

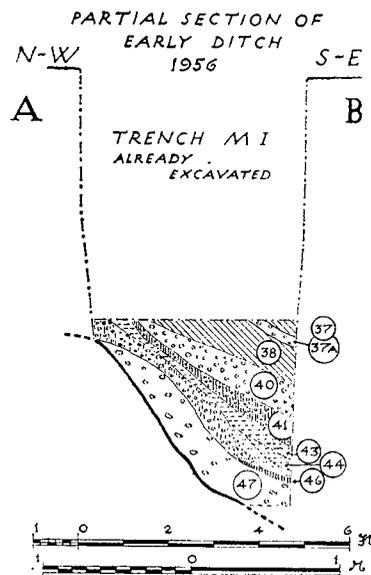


FIG. 77. (Scale 1:50).
See fig. 90 for position.

The ditch is, therefore, either of Claudian or Belgic construction, and the likelihood is that it is pre-Roman. The ditch is too large, and it turns too sharply, to be acceptable as an early Roman military earthwork. After turning, the ditch aims for the area of Building C, the temple at the rear of the forum which was excavated by Wheeler in 1949 (figs. 2, 123).

Search of his report¹ finds no indication of a ditch below the building, unless a clue can be seen in the dipping line of his 'line of natural' (*ibid.*, plan 4); nor do the excavations of Mr. Page (1898–1902) record any traces. It is clear, however, both from the size of the ditch and from its dating, that it must run at least for some distance below the south-west end of the forum buildings (fig. 2). Beyond the forum, below Building XIII, 2, the site excavated by Mrs. M. A. Cotton in 1949, no ditch was found. This site probably lies beyond the south-east edge of the return of the ditch for, beneath the Museum car park, excavations by Mr. J. Lunn in 1955 found traces of a somewhat irregular very early ditch at a great depth (fig. 2).² The ditch evidently continued obliquely beneath the north-east corner of the forum, where Corder³ noted that some of the walls were carried down through made soil to a depth of 7 ft. (2.1 m.) below the floor-offsets. A further stretch of the early ditch was observed by J. B. Ward Perkins during pile-sinking when the Museum was being built in 1938; Museum records show that its south-east lip lay *c.* 30 ft. from the front wall of the new building, and depths of up to 14 ft. (4.25 m.) of disturbed soil containing much first-century pottery are recorded.⁴ At the time these indications of ditch were attributed to the Fosse Earthwork.⁵ It now seems probable that they relate to the ditch in Insula XXVII and indicate a roughly rectangular enclosure (with irregular north-east side) preceding the forum and of approximately the same size. Its purpose and even exact date remain at present obscure; but the indications are that it had silted considerably by the Claudian period and it is likely to be pre-Roman (fig. 3). Whether it surrounds the mint, or even a Belgic royal residence, cannot be decided.

For a distance of *c.* 40 ft. (12 m.) south-west of the south-west wall of Building XXVII, 1 and overlying much of the ditch was a large deposit of yellow wall-plaster. It was too friable and too badly preserved to warrant conservation. The surface where preserved was mainly plain red, with small areas of white and some fragments coloured green or purple. The date of the deposit is *c.* 280–310. No structure was found in the trench from which it might have fallen. This probably lay further south-east, nearer Street XII/XXVII.

DATING EVIDENCE: EARLY DITCH

LAYER	SAMIAN	POTTERY
M I 44 grey-brown silt		No. 1730 Type 2504 cf. Type 2163 (Belgic or Claudian)
M I 43 light brown silt	18 S.G. pre-Flavian	
M I 41 dark brown earth and pebbles with charcoal	27, 29 S.G. Claudio-Neronian	Nos. 1731–2

¹ *Trans. St. Albans & Herts. Archit. and Arch. Soc.*, 1949.

² These excavations are not published. See summary in *J.R.S.* xlvi (1956), 135.

³ *Antiq. Journ.* xx (1940), 500 ff.

⁴ *Ibid.*, 502; cf. *Antiquity*, xvi (1941), 127.

⁵ See p. 33.

LAYER	SAMIAN	POTTERY
M I 40 gravelly layer with chalk flecks		No. 1733 and cf. Type 200
M I 38 grey silt	29 S.G. Neronian-Flavian 18 S.G. Flavian	Nos. 1734-8

BUILDINGS XXVII, 1 and 2

IN the eastern corner of Insula XXVII deep stratification survived, and an interesting though complex series of structures was investigated; the results have yielded information important for our understanding of the history of the city. Excavations in this area began in 1956 (Site H) and were continued in 1957 (Site X); in 1959 work was resumed outside the line of the new road (Site X) and was completed in 1960 with a few small additional cuttings. A plan of the trenches showing the position of published sections (figs. 83-88) is to be found on fig. 90 (p. 227).

In all, three main levels of timber-framed buildings were recovered, above which were two successive buildings with foundations of masonry. This sequence was followed by the construction of a water-pipe across the site at a date near or soon after the middle of the fifth century, when the last building occupying it had been demolished. The site was re-occupied in the early middle ages. But although the Roman periods here represented ran from the mid first to the mid fifth centuries, a long gap intervened after the Antonine fire, as also happened in Insula XIV, when no structures occupied the site; the interval is represented by a somewhat enigmatic concrete or chalk floor with which no walls were associated; it appears to have been laid down at the end of the interval, in preparation for building House XXVII, 2. This building will be shown to be no earlier than *c.* 380. Building XXVII, 1, which succeeded it, cannot be dated directly; but, by a reasonable dead-reckoning, its construction may be suggested to belong to the period *c.* 430-50.

Period I, Claudian, Building XXVII, 2 E (fig. 78)

Beneath Room 8 of Building XXVII, 2 the lowest levels yielded post-holes of part of a timber building which had been destroyed in the Boudiccan fire.¹ A thin layer of burnt daub from this fire extended not only beneath Room 8 but also below Rooms 6 and 11 (fig. 85, Section T-U; cf. fig. 86, Section V-X). Insufficient of the plan was recovered to suggest more than that the structure was of post-hole rather than sleeper-beam build. The posts were 1 ft. square, and there were also a large number of stake-holes. The building had a floor of brick-earth (X XX 36, X XXI 41) on which was a thin occupation-layer sealed almost everywhere by a burnt deposit up to 5 in. thick. At the south end was a shallow pit containing material identified by Dr. I. W. Cornwall as blacksmith's scale, i.e., the debris from an iron forge.

¹ The evidence found for the date of the burning is not extensive, but the samian (p. 196) is consistently pre-Flavian, and AE coins of Nero first appear above it. Burnt

buildings thus stratified can confidently be taken to indicate Boudicca's sack.

The dating evidence for Period I can be tabulated as follows:

LAYER	COINS	SAMIAN (All South Gaulish unless otherwise stated)
59 X I 36 floor		29 probably pre-Flavian
59 X XXI 41 floor		18R pre-Flavian
59 X XXI 40 occupation on 41	Cunobelin (Mack 244)	67 first century 18 pre-Flavian
59 X XX 34 occupation		24 Claudian 18, 27 pre-Flavian
59 X XXI 37 burnt daub		18 (two) Claudian 18R pre-Flavian 18 stamp SVCESV[S F] (S 43) A.D. 50-65 18 illegible stamp first-century Lezoux ware
59 X I 35 burnt daub		27 pre-Flavian

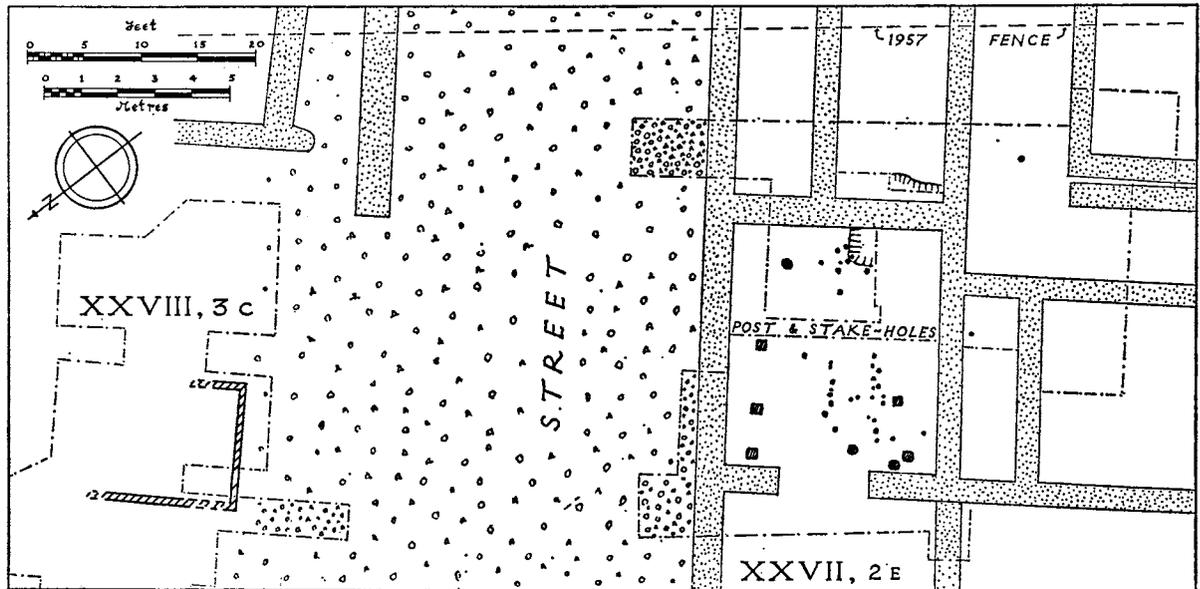


FIG. 78. Plan of pre-Flavian timber-framed Buildings XXVII, 2 E and XXVIII, 3 C.

The importance of this building lies in its position in the city, which in the pre-Boudiccan period was no mere ribbon development along Watling Street, but possessed the elements of a street grid.

Elsewhere on this site, where excavation reached the appropriate depth, no contemporary buildings were discovered; the earliest levels contained an admixture of later material. This may be due in part to the position of the First-Century Ditch (fig. 89) which at first inhibited building.

Period II, Flavian—second century: Buildings XXVII 2 C, 2 D (fig. 79)

During the period 60–140 the frontage of Street XII/XXVII, facing the forum, was gradually filled with timber-framed buildings. Their plans have been only partially recovered. It seems probable that the building named 2 C was really parts of at least three separate structures; the various areas have, however, been given consecutive room-numbers on fig. 79 for ease of reference. Development in this area of the city was slow, the only pre- or early Flavian building being a small one at the south corner of the site (fig. 79, Rooms 6–7). Building 2 D was erected *c.* A.D. 80, but in the area of 2 C the structure represented by Rooms 3–5 was not put up before the early years of Hadrian, and that represented by Rooms 1–2 not before the beginning of the reign of Antoninus Pius. This delay in building on a principal frontage is curious. In detail its reasons are obscure, but the disaster suffered by the city in the Boudiccan rebellion must have contributed to them.

Building 2 C, Rooms 6–7 (fig. 79)

The earliest evidence of occupation opposite the forum seems to have occurred in a hollow in the area of Room 6. Fig. 85, Section N–O, shows a discontinuity and dip in the subsoil whose character is obscured by the foundation of a later wall; it was probably caused, in some way not now altogether explicable, by the near vicinity of the First-Century Ditch, whose projected edge (fig. 89) would reach this spot; possibly a causeway across it is to be inferred close by.

In this hollow traces of a wooden building (fig. 79, Room 6) were found: they consisted of a wall-trench (fig. 85, Section N–O (45)) with indications of floor-joists adjacent. The foundation-trench had a filling of dirty clay and a little gravel: down each side and across the bottom ran a dirty streak: this perhaps represented wattle framing each side of a clay wall, attached to a thin sleeper-beam at the bottom. From the south side of the wall-trench ran two channels, 2½ in. deep, to a third which lay parallel with the wall. These were evidently the joist-settings for a plank floor. The building appeared to date from late Neronian or early Flavian times. Layer 46, a packing behind the wall, yielded a pre-Flavian mortarium (No. 1709), while Layer 42, a demolition deposit containing pieces of wall-plaster, yielded a sherd of samian form 29, probably pre-Flavian.

When rebuilt soon afterwards, Room 6 was slightly enlarged to the north, for its floors (Section N–O, Layers 37–9, etc.) clearly ran out to a wall now destroyed by the masonry foundation. North of this the area (of Room 7) remained open until the second century. But Building 2 A' which later occupied this part of the site (*c.* A.D. 135, p. 207) had been preceded by a post-built structure whose post-holes were sealed by the primary gravel floor of that building (fig. 85, Section N–O (13) and (28)). The post-holes are planned on fig. 79

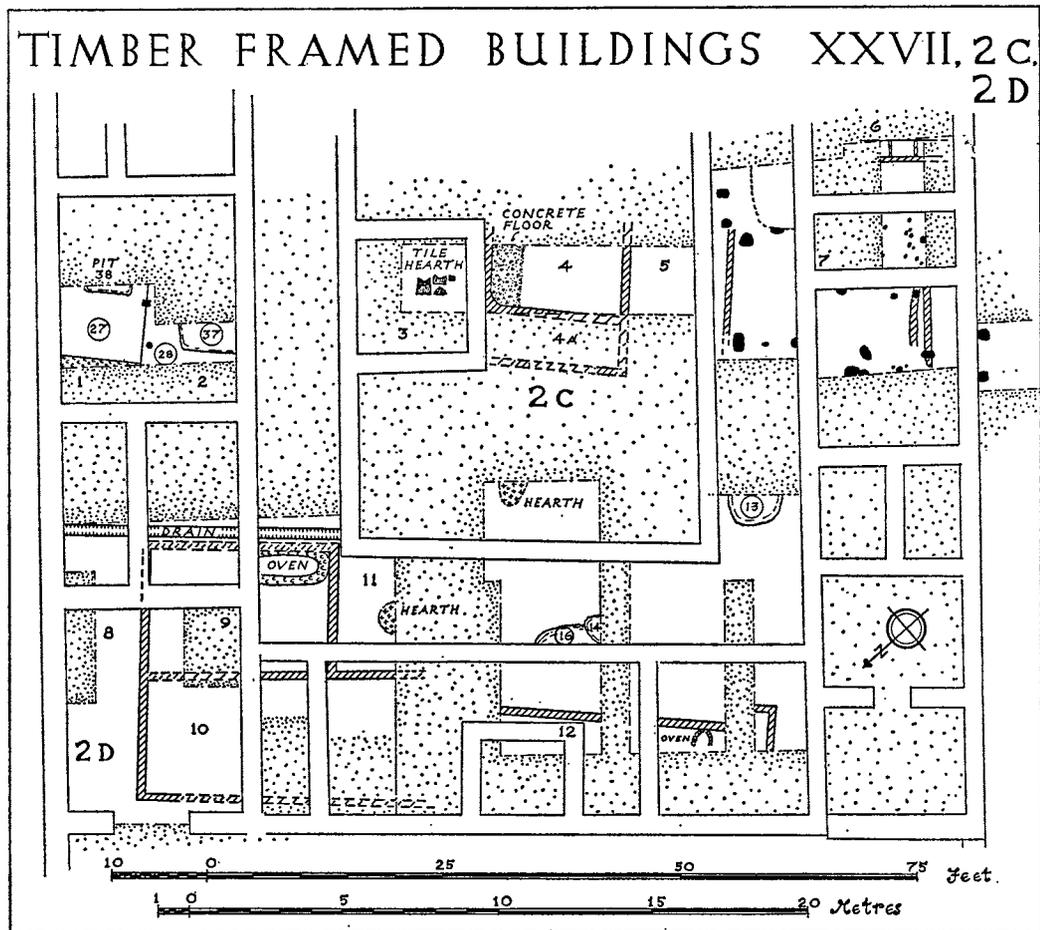


Fig. 79. Flavian-Hadrianic (scale 1:240).

together with two foundation-trenches which were cut into natural gravel and possibly associated. They seem to indicate a mere outhouse attached to the original building, for no laid floors were provided; use of an earth floor presumably accounts for the presence of late Hadrianic samian in the old topsoil here (p. 200). A small patch of building-debris from the demolition of this outhouse sealed one of its post-holes in Trench H II (Section N-O); this debris contained a sherd of samian, form 37, dated *c.* 100-35. About A.D. 135-40 these early buildings were reconstructed to become Building 2 A' at the level of Layer 25 in Trench H II (Section N-O).

Building 2 C, Rooms 3-5 (fig. 79)

Rooms 4 and 5 were separated by a foundation-trench (fig. 83, Section F¹-G (27)); both rooms had pebbly clay floors, but at the east end of Room 4 a concrete floor containing brick-chips and pebbles (24) had existed in an early phase and may indeed have belonged to a different room: what is very probably a clay wall-foundation (below Wall-Trench A in

Section G–H) seems to perpetuate the straight edge of the concrete floor below (fig. 79); if so, it demarcated a corridor only 3 ft. wide. A small area of concrete was found in Room 3 (Trench H IX) sealed below Layer 12, a clay floor which carried a hearth made of four tiles. The north wall of a room labelled 4 A on fig. 79 was seen at the base of the wall-trenches of Room 7 in the succeeding Building 2 A, but excavation in Trenches X IX and X X was not taken low enough to uncover the room itself.

Dating Evidence. The samian tabulated below gives no precise indication of date for the building represented by Rooms 3–5 save that its floor contains a second-century sherd; but the coarse pottery from H IX 14 (Nos. 1710–15) includes vessels datable to *c.* 100–30; accordingly the structure may be dated to the period 120–30; it was demolished to make way for Building 2 A *c.* A.D. 150.

Building II C, Rooms 1–2 (fig. 79)

Room 1 was represented by a pebbly brickearth floor (fig. 84, Section L¹–M (28)), capped here and there by a spread of tile fragments. There was a straight junction with Layer 27 (the floor of Room 2) and two post-holes marked the line of a partition. Along the north edge of the trench a chalk spread (40) ended on a straight line with (27) and may represent part of a third room. Rooms 1 and 2 each contained a shallow pit.

Dating Evidence. The lowest layer excavated, 35, contained second-century coarse pottery (No. 1716, and type 1805). The building overlay this, and floor 28 produced two Antonine or Hadrianic-Antonine sherds; occupation-layer 26 on floor 27 yielded Hadrianic material. Thus the structure cannot be earlier than *c.* 140–45, and must soon have been cleared away for Building 2 A which was erected *c.* 150. The site was covered by a thick layer (18) of occupation-earth, no doubt as make-up.

The dating evidence for Building XXVII, 2 C can be tabulated as follows:

ROOM	LAYER	COINS	SAMIAN (All South Gaulish unless otherwise stated)
1	57 X IV 26 occupation		18/31R C.G. ROPPI·RVT·M (S 44) A.D. 100–20 37 C.G. A.D. 100–20 (D 59) 18/31 C.G. Hadrianic 67 C.G. probably Hadrianic, and many residual sherds
2	57 X IV 28 floor		31 C.G. Hadrianic-Antonine 37 C.G. Antonine
3	56 H IX 14 occupation below primary floor	Titus, A.D. 77–8, RIC 782 b	29 probably Flavian 37 A.D. 75–90 (D 60) (sherd also in H IV 9, p. 210) 18, 33, 27 (two), Curle 11 Flavian 18R Flavian or early second cent.

ROOM	LAYER	COINS	SAMIAN (All South Gaulish unless otherwise stated)
	56 H IX 11 demolition layer		37 C.G. A.D. 125-45 (D 61)
4	56 H VIII 16, clay and plaster, ?demolished wall 56 H VIII 15 clay floor		Curle 11 probably Flavian 29 A.D. 50-70 27 C.G. second century 15/17 or 18 stamp $\overline{\text{HOM}}[\text{OBON}\cdot\text{F}]$ (S 45) A.D. 50-65
4-5	56 H VIII 25 old plough-soil below room 56 H VIII 32 pebble surface on 25 56 H VIII 23 occupation on 32	Tasciovanus, Mack 168-70	29 probably Flavian 27 (two), 18 (three) Flavian 15/17 (two) Neronian-Flavian 36 first century Curle 11 probably Flavian 27 probably Flavian
6-7	56 H II 42 demolition of earliest building 56 H II 39 first floor of enlarged house 56 H II 38 black ash on floor 56 H II 36 white ash and burning 56 H II 31 clay-and-tile oven at level of 36 56 H II 27 occupation below 20 in 2 A' 56 H II 26 chalk and clay floor 56 H IV 35 occupation of post- structure (p. 198) 56 H I 12 occupation of post- structure (old topsoil, p. 198)	Vespasian, As	29 probably pre-Flavian 27 S.G.? probably Flavian 36 S.G.? first century 18 Flavian 36 first century 36 first century 27 probably Flavian 37 A.D. 70-85 35/36 Flavian 18/31 ?early second century 36 probably second century 18 ?Flavian 29 Neronian or early Flavian 18/31 Flavian-Trajanic 29 probably Claudian 37 (two) C.G. A.D. 125-45 (D 63)

ROOM	LAYER	COINS	SAMIAN (All South Gaulish unless otherwise stated)
			18/31 Trajanic-Hadrianic 18/31 C.G. VIDVC[V2F] (S 46) A.D. 100-20 and two first-century sherds
	56 H II 35 occupation of post-structure		37 A.D. 75-95 (D 62) 18 Flavian
	56 H II 34 demolition of post-structure		37 C.G. A.D. 100-35

Building 2 D (fig. 79)

Building 2 D was bordered on the north by a large timber-lined drain (fig. 86, Section W¹-X), north of which was a thick layer (38)—probably the filling either of an earlier version of the drain or of its own excavation-trench (cf. fig. 85, Section R-S). The drain was abandoned and filled up immediately before the erection of Building 2 B, which sealed it. Building 2 D contained a succession of floors and occupation-layers covering the period c. 80-140. No alterations were detectable, but several of the wall-lines were reused in Building 2 B, sometimes with slight shifts of position.

The dating evidence for Building XXVII, 2 D can be tabulated as follows:

ROOM	LAYER	COINS	SAMIAN (All South Gaulish unless otherwise stated)
8	59 X I 31 primary occupation		Curle 11 Flavian
	59 X I 30  primary occupation		27 Flavian
	59 X I 29 early occupation above 30		37 (two) A.D. 75-95 27 stamp C·SIL[VI] (S 47) A.D. 70-90 27 (several), 18 (several), Curle 11 Flavian
	59 X XXI 35 primary floor		29 A.D. 55-70 29 A.D. 65-75 15/17 pre-Flavian 18 probably Flavian
	59 X XXI 32 occupation on 35		29 A.D. 70-85 27 Flavian
	59 X XXI 31 secondary floor		37 Flavian
	59 X XXI 29, occupation on 31		30 A.D. 70-85 18 Flavian

VERULAMIUM EXCAVATIONS

ROOM	LAYER	COINS	SAMIAN (All South Gaulish unless otherwise stated)
	59 X I 28 secondary floor		27, 29, 36 Flavian
	59 X I 27 occupation on 28		37 A.D. 85-110 18/31 ?C.G. probably Trajanic
	59 X XX 32 make-up	Nero, As, <i>RIC</i> 329 l Nero, As, <i>RIC</i> 320	29 pre-Flavian 15/17 probably pre-Flavian 29 pre-Flavian 18R probably pre-Flavian
	59 X XX 30 primary floor		
	59 X XX 29 occupation on 30	Titus, As, A.D. 77-8, <i>RIC</i> 786	
	59 X XX 21 secondary floor		37 A.D. 80-100 18, 27 Flavian
	59 X XX 18 tertiary floor		37 A.D. 80-100
	59 X I 18 final floor		18R C.G. Antonine
9	59 X I 34 primary floor		18, 27 Flavian
	59 X XX 25 occupation		37 A.D. 90-110 (D 63a)
10	59 X XXI 39 make-up below 34		Curle 11, 67 Flavian 15/17 C.G. ROP[VSIFE] (S 48) A.D. 100-20 18, 27 probably pre-Flavian
	59 X XXI 36 chalk patch on 34		
	59 X XXI 33 A occupation on 33		18, 27 Flavian
	59 X XX 25 (=XXI 33 A)		37 A.D. 85-110
	59 X XXI 30 secondary floor	Titus, As, <i>RIC</i> 121 a	
	59 X XXI 28 occupation on 30		27 illiterate stamp Flavian
11	59 X IV 45 pre-building soil		27 pre-Flavian
12	59 X VII 16 primary floor	Domitian, As A.D. 86, <i>RIC</i> 335	
	59 X VII 13 clay floor		36 Flavian 31 C.G. probably Antonine
	59 X VIII 13 clay floor		18/31 C.G. Hadrianic 27 Flavian

Period III, early Antonine: Buildings XXVII 2 A, 2 A', 2 B (fig. 80)

The latest timber-framed buildings (2 A, 2 A' and 2 B) were those destroyed in the Antonine fire of 155/60. The first extended parallel to the street between it and the forum; House 2 A', a strip-building, lay beside it at right-angles to the same street, and Building 2 B lay parallel with 2 A, and at right-angles to Street XXVII/XXVIII.

Building XXVII 2 A

House 2 A was a building of some pretension. No less than seven of the ten rooms had once possessed tessellated floors, but almost all the tesserae had been salvaged after the Antonine fire. It was clear that the burnt debris had been removed from the rooms, possibly for this purpose, and for the most part it remained *in situ* only in the wall-trenches; the evidence suggests that this was done late in the fourth century as a preparation to building House XXVII, 2 (p. 212).

The precise arrangements at the north-east end of the building along Street XXVII/XXVIII are not certain: in Trench 57 X VII the outer wall ran past the projected line of the north wall of Room 2, suggesting that a portico flanked the street, as in Insula XIV, and connected Buildings 2 A and 2 B; its inner wall has been destroyed by the foundations of the external wall of Building XXVII, 2. In the stretch of this portico which fronted Building 2 A the foundation-trench was 7 in. wide and 10 in. deep, and ended just short of a free-standing post measuring $3\frac{1}{2}$ by $4\frac{1}{2}$ in., by 25 in. deep. Four inches east of it ran a parallel trench only 2 in. wide and 4 in. deep which also contained burnt daub. From the point where the north wall of Building 2 A, if projected, would meet this wall, it resumed its northwards line as a single trench 3-4 in. deep (fig. 84, Section L¹-M), with a post-hole at its south end 23 in. deep. The difference in construction suggests that the portico, though no doubt public property, was the responsibility of individual house-owners to build and maintain.¹

Room 1 had a floor of yellow concrete (pebbles and brick chips set in yellow mortar). It had been largely cut away by the foundation-trenches of Building XXVII, 2. The floor, however, had not extended as far as the wall of Room 3; from this wall a narrow wall-trench only 1 in. deep and 4 in. wide ran back into Room 1; north of it was a sandy gravel floor and south one of clay and pebbles, both of them sealed by burnt daub. It would appear that the south-west side of Room 1 had a series of built-in cupboards along its wall.²

Room 2 may have had a plank floor; no trace was found, but otherwise no provision at all had been made: the room rested on a deep deposit of grey occupation-earth (fig. 84, Section L¹-M (18)) containing oyster, whelk and small scallop shells, bones and much pottery, which seemed to be deposited as make-up. In the surface of the layer was an irregular Y-shaped hollow 5-6 in. deep and another curving one, both full of burnt debris. They made no sense as features in the room, but could well have remained as hollows below a wooden floor, possibly caused by burrowing animals.

Room 3 had a floor of plain sandstone tesserae fixed by a thin layer of white mortar to an *opus signinum* basis. Near its north corner there appeared to have been a doorway into Room 4, whose floor, similar to that of Room 1, lay 6 in. higher and must have been retained by a wooden riser at the level of the tessellation; it had been held in place by a short transverse

¹ Cf. Vol. I, 13.

² Cf. Vol. I, 55, 76.

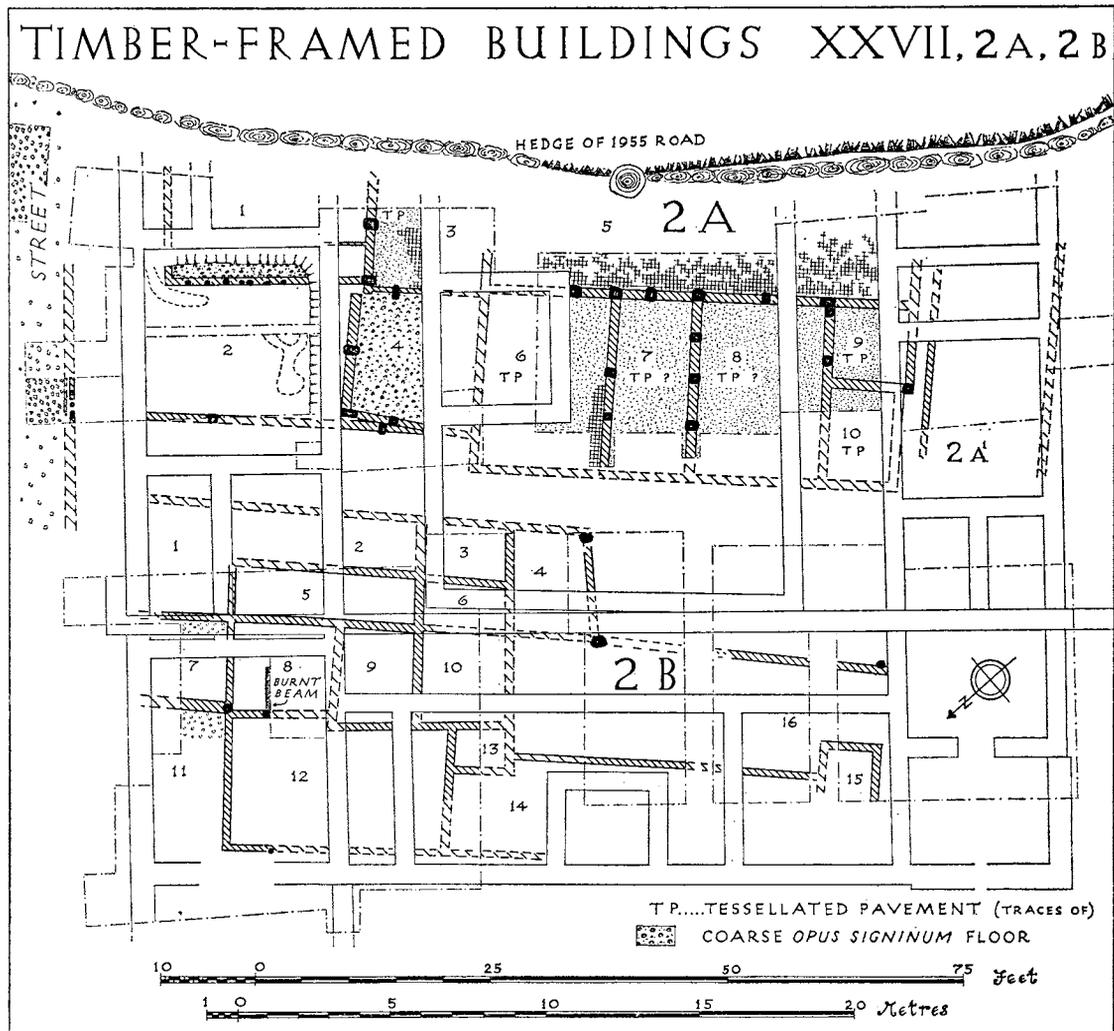


FIG. 80. Antonine.

beam (Section K-L (21)), 8 in. deep. This, though sealed by the floor of Room 4, had been burnt, and the resulting hollow was filled with burnt daub. At the north end of Room 4 was a double wall. The floor of the room ended at a somewhat oblique wall-trench, but the north wall of Room 2 was extended beside it on a converging course; both trenches were full of burnt daub and had thus been in contemporaneous use. This appears to have been caused by a mere error in layout, and would imply that the enclosure of Room 2 was structurally, if not significantly, later than that of Room 4.

Room 5 was a corridor floored with tesserae of red tile set in white mortar on a basis of pink sandy concrete. Its width could not be ascertained, but it probably flanked Street XII/XXVII. Rooms 6-10 also had once possessed tessellated floors (pl. XXIV), but almost all the tesserae had been removed after the fire, and in Room 7 even the mortar basis had

largely been destroyed. There were traces of a $\frac{1}{4}$ -round moulding along the south-west wall of Room 6. Room 7 had possessed an earlier floor of clay and pebbles (fig. 83, Section F¹-G, (17)), the only room to show two phases.

The walls of Building 2 A were of clay daub supported by a timber frame. Wall 1/2 was 7-8 in. (18-20 cm.) thick and had a coating of yellow-painted plaster on its south face still standing 4-5 in. (10-12.5 cm.) high in places, and there were indications of upright timbers somewhat irregularly spaced along its length. The north wall of Room 2 was represented by a trench *c.* 2 in. deep, full of burnt daub; one rectangular post-hole 9 in. deep was found. Elsewhere there was evidence, in the form of surviving burnt wood, for sleeper-beams in the wall-trenches, e.g., in Walls 7/8 and 8/9, but these were short lengths only, connecting the more deeply bedded posts.¹ The trenches themselves were normally 5-6 in. (12.5-15 cm.) deep and *c.* 12 in. (30.5 cm.) wide; the post-holes normally penetrated a further 6 in. Some at least of the uprights were found to have rested on wooden base-plates *c.* 3 in. (7.5 cm.) larger than themselves in plan, whose edges were sealed by the adjacent floors.

The dating evidence for Building XXVII, 2 A can be tabulated as follows:

ROOM	LAYER	COINS	SAMIAN (All Central Gaulish unless otherwise stated)
2	57 X IV 18 make-up		Ritt. 9 S.G. Claudian 37 S.G. Flavian 37 (two) S.G. A.D. 85-110 37 A.D. 125-50 37 A.D. 150-90 (D 64) 37 probably Hadrianic 64 Hadrianic 31, 33 (several) Hadrianic-Antonine 27 (three) Trajanic or Hadrianic 33 Trajanic 46 rosette stamp probably Hadrianic or Antonine 27 2EVE[RV2]1 (S 49) A.D. 135-55 18/31R, 18/31, 67, 27 Trajanic and Hadrianic 31 Antonine and many residual sherds
5	56 H IV 32 make-up		37 A.D. 100-20 (sherds in H VIII 13, below) (D 65, 70) 37 A.D. 100-20 (D 65a) 37 S.G.? A.D. 85-100 37 Hadrianic Curle 11 Trajanic-Hadrianic

¹ The system was thus different from that normal in Insula XIV, where the main uprights were tenoned into the sleeper-beam.

ROOM	LAYER	COINS	SAMIAN (All Central Gaulish unless otherwise stated)
6	56 H IX 11 demolition of previous building 56 H VIII 8 concrete basis of floor 56 H VIII 13 occupation below room		37 A.D. 125-45 (D 61) 38 variant, Antonine 37 A.D. 100-20 (sherds in H IV 32, above) (D 65, 70) 37 Ranto group (sherds in H VIII 9, below) A.D. 125-45 (D 67) 18, etc. Trajanic-Hadrianic
5-7	57 X XI 7 wall trench	Trajan, sestertius, <i>RIC</i> 486	
8	56 H VIII 9 make-up		37 A.D. 85-110 37 A.D. 100-20 37 (sherds in H VIII 13, above) A.D. 125-45 (D 67) 37 E.G. (sherds in H II 25, p. 207) style of Satto, Hadrianic (D 68) 27, 18/31 Trajanic-Hadrianic
9	56 H IV 19 make-up		33 probably Hadrianic

From the evidence set out above it is clear that Building 2 A had only a very short life before it was destroyed in the Antonine fire which itself is well dated to the period 155-60. The latest samian sealed below the floors are three vessels dated respectively 125-50, 135-55, and 150-90, together with a form 31 and a 38, both Antonine. The date of the building must correspond very closely with that of Period II D in Insula XIV (Vol. I), namely *c.* A.D. 150.

Building XXVII 2 A' (fig. 80)

Immediately south-west of Building 2 A, and separated from it by an eaves-drip gap 1 ft. wide, was another building, which overlay Building 2 C, Rooms 6-7. It had a series of gravel floors (H I 4-13 in Sections D¹-E, N-O). Its south-west wall must have been destroyed by the foundations of the external wall of Building XXVII, 2, for, as Section C-D shows, none of these floors extends beyond that point. It appears, therefore, to be a strip-building some 12 ft. (3.66 m.) wide, set end-on to Street XII/XXVII at its south-east front. The floors were rapidly renewed; Layer 13, the primary one, had a patching of tile-fragments which

included one chipped to a U-shape, evidently to form part of an attached half-column (pl. XXV*b*); this must derive from some other structure.

The dating evidence for Building XXVII 2 A' can be tabulated as follows:

LAYER	SAMIAN (All Central Gaulish unless otherwise stated)
56 H I 12, H II 35 old soil below building	see pp. 200f. (latest sherds <i>c.</i> A.D. 125-45)
56 H I 13 primary floor	37 see H I 11 below (D 69) 37 Hadrianic-Antonine 18/31 (two, one R), 33, 27 Trajanic-Hadrianic 33 Hadrianic-Antonine
56 H II 25 primary floor	37 E.G. see H VIII 9, above (D 68) 37 pre-Antonine 37 A.D. 120-40 27(?) Trajanic or Hadrianic
56 H I 10 early floor	18/31 probably Hadrianic
56 H I 11 early floor	37 A.D. 125-45 (same vessel as in H I 13) (D 69) 18/31 Trajanic-Hadrianic
56 H II 20 secondary floor	18/31 Trajanic-Hadrianic
56 H I 8 occupation earlier than latest floors	37 see H I 11 above (D 69) 18/31 Trajanic-Hadrianic 27 (two) probably Hadrianic 35/36 second century Curle 11 or 38 pre-Antonine, or (if 38) Antonine 18 Flavian

Building XXVII 2 A' thus overlay two vessels dated 125-45, and its primary floor contained vessels dated 125-45, 120-40 and Hadrianic; but it had a number of floor-renewals before it was destroyed in the Antonine fire *c.* 155-60. It would seem likely that it was built *c.* 135-40.

Building XXVII 2 B (fig. 80)

This building, though equally large, was not so distinguished as Building 2 A, lacking any sign of tessellated floors. Its less regular plan suggests a utilitarian purpose. The evidence for a portico flanking the street has already been discussed (p. 203). The plan is incompletely recovered, but suggests a large number of small rooms. There was some continuity with Building 2 D which preceded it, but 2 B extended further to the south-east. The new south-

eastern external wall was not found, but has been restored to leave an interval from Building 2 A with which the plan of 2 B clearly does not conform: there is no doubt that it was a separate structure.

Room 1 had a gravel floor (fig. 85, Section R-S (16)), on which a 2-in. (5-cm.) layer of hard trampled dirt (14) had accumulated. In Room 7 there was a discrepancy between the character of the flooring either side of a later foundation belonging to Building XXVII, 2 (fig. 86, Section V-X). The clay floor (15) to the north-west of this foundation was covered with a 2-in. layer of trampled dirt: south-east of it a gravel floor survived. Despite the narrowness of Room 7 (8 ft.), this perhaps suggests that a counter had occupied its southern third. The same thing was observed in Room 11, where a similar gravel floor occupied the south-east border of the room. In Room 8 a burnt beam was lying in the burnt deposit: perhaps it had fallen from the roof.

The dating evidence for Building XXVII, 2 B can be tabulated as follows:

ROOM	LAYER	COINS	SAMIAN (All Central Gaulish unless otherwise stated)
1	59 X I 16 floor 59 X I 14 trampled dirt on 16		37 A.D. 110-30 33 S.G. Flavian 18/31 R S.G. Flavian
5	59 X IV 20 primary floor	Trajan, As, A.D. 98-102, cf. <i>RIC</i> 395, 402, etc.	
8	59 X XX 13	Vespasian, dupondius, A.D. 72-3, <i>RIC</i> 739	37 A.D. 100-20
11	59 X XXI 27 primary floor 59 X XXI 24 secondary floor 59 X XX 7 floor		37 S.G. A.D. 85-110 Curle 11 probably Hadrianic 29, 37, 18 S.G. Flavian 35 Trajanic or Hadrianic
12	59 X XXI 17 occupation on primary floor 59 X XXI 14 secondary floor		18, 27 S.G. Flavian 18/31 Hadrianic 29, 37 S.G. Flavian 35/36 probably pre-Antonine
14	59 X VII 12 occupation on floor		18/31 pre-Antonine

ROOM	LAYER	COINS	SAMIAN (All Central Gaulish unless otherwise stated)
16	59 X IX 9 clay of SE wall 59 X IX 11 floor		37 Antonine 33 [LV]PPAF A.D. 140-65 (S 50) Curle 11, 18 S.G. Flavian 18/31 Trajanic or Hadrianic
Outside (SE of) 16	59 X IX 10 cobbled surface		37 style of Cettus A.D. 135-60 27 Hadrianic 33 Hadrianic or Antonine
Filling of 2 D drain	59 X I 20		37 S.G. A.D. 90-110 37 A.D. 100-20 Curle 11, 18 (several) S.G. Flavian 18/31 burnt [LA]TINVSF (S 51) A.D. 100-20 27 (two) Trajanic-Hadrianic 31 probably pre-Antonine

The samian from Building XXVII, 2 B is on the whole distinctly earlier than that from Building 2 A, but both the collapsed clay of the wall of Room 16 and the surface outside it yielded Antonine sherds, and it must be remembered that the final floors of Building 2 D below yielded one Antonine and one probably Antonine sherd. It would seem probable that Building 2 B was erected *c.* A.D. 145-50, perhaps *c.* 3-5 years before Building 2 A.

The Antonine fire

(a) The dating evidence from Antonine fire deposits *in situ* on this site may be tabulated as follows:

ROOM	LAYER	SAMIAN (All Central Gaulish unless otherwise stated)
<i>Building 2 A</i>		
2	57 X IV 19 & 23 depressions in Room 2	27 S.G. Flavian 27 S.G. Hadrianic 33 (two) Hadrianic-Antonine
4	57 X VIII 21 wall-trench 57 X VIII 22 burnt deposit	27 Hadrianic 18/31 Hadrianic

VERULAMIUM EXCAVATIONS

ROOM	LAYER	SAMIAN (All Central Gaulish unless otherwise stated)
Wall 7/8	57 X X 5 burnt deposit	31R Antonine 31R stamp]LIS.F Hadrianic- Antonine
<i>Building 2 A'</i>	56 H II 18 wall-trench	31 (Sa) Hadrianic-Antonine
<i>Building 2 B</i>		
Wall 7/11	59 X XX 11 burnt deposit	18 S.G. Flavian 31 Hadrianic-Antonine
4	59 X VI 10 SW wall-trench	15/17R S.G. stamp OF PRIMI (S 52) A.D. 65-80
12	59 X XXI 12 burnt deposit	31 Antonine
15	59 X VIII 6 wall-trench	18/31 Hadrianic
Outside (SE of) 16	59 X X II	31 Antonine 27 Hadrianic

(b) The disturbed levels of burnt material, redeposited as make-up for Building XXVII, 2, yielded the following evidence (layers which contained only residual pieces of samian are not listed).

LAYER	COINS	SAMIAN (All Central Gaulish unless otherwise stated)
56 H II 8	Vespasian, As, A.D. 71, <i>RIC</i> 482 (4)	37 probably Trajanic-Hadrianic and five first-century sherds
56 H II 13		15/17 S.G. A.D. 60-75 15/17 S.G. probably Neronian 29, 27 S.G. Flavian 27 probably Trajanic-Hadrianic 33 probably Hadrianic or Antonine
56 H IV 9		37 style of Donnaucus A.D. 100-20 (same vessel as in H IV 32, p. 205) (D 65) 37 S.G. see H IX 14, above (p. 199) (D 60) 18/31 Trajanic-Hadrianic 18 S.G. stamp RTH[VSFEC] (S 53) A.D. 50-70

LAYER	COINS	SAMIAN (All Central Gaulish unless otherwise stated)
56 H IV 6	Vespasian, A.D. 71-2 <i>RIC</i> 475 (3)	18/31 Trajanic-Hadrianic and seven first-century pieces
56 H V 20		18 (two), 27, 18R, ?36 S.G. Flavian ? form, probably Antonine
57 X IV 15		33 probably Antonine 38 Antonine 31 (four) Antonine 33, 27 Hadrianic-Antonine 37 A.D. 130-50 and first-century sherds
57 X VI 7		79, 31 Antonine 27 S.G. Flavian samian mortarium, unusual form probably Antonine (illustrated in Vol. III) 37 A.D. 100-20
57 X VIII 7		79 Antonine (same vessel as in X VI 7) 31R, 33 Antonine 18 S.G. stamp [MERCA]TO (S 54) A.D. 85-110
59 X III 2		37 Hadrianic 31R Hadrianic or Antonine and much residual material
59 X IV 5		27 Trajanic 37 style of Butrio A.D. 120-45 18/31 probably pre-Antonine 31 (two), 33 (two) Antonine and residual sherds including stamp OF PASEN (S 55)
59 X V 7	Nero, As, <i>RIC</i> 316 1	27 (two) Trajanic or Hadrianic
59 X VI 5		37 A.D. 100-20 31 S.G.? stamp JARRVS Flavian? 31 Antonine 27 Trajanic
59 X X 7		18/31 (two) Hadrianic
59 X XI 3		S.G. stamp GEN[(S 56) Flavian 33 inkwell second century

LAYER	COINS	SAMIAN (All Central Gaulish unless otherwise stated)
59 X XIII 5		31 Hadrianic-Antonine
59 X XIV 5		18, 27 S.G. Flavian 37 probably Hadrianic 37 Antonine
59 X XX 4		27 Trajanic or Hadrianic
59 X XXI 4		37 probably Hadrianic 27, 18/31 Trajanic-Hadrianic first-century illiterate stamps IFVNIM, IIII
59 X XXI 11		Curle 23 probably Trajanic and first-century sherds

Period IV A, late fourth-century: preparation for Building XXVII, 2

Buildings 2 A and 2 B were destroyed in the Antonine fire of *c.* 155–60 which destroyed Insula XIV and much else in the city. However, remarkably little of the burnt deposit remained undisturbed; it was found in wall-trenches and thinly scattered here and there over floors, but no thick bed of daub and ashes such as that encountered in Insula XIV survived *in situ* here.¹ The substantial layers of dark earth and burnt daub which were found all over the present site had been first removed and then redeposited, and were clearly seen to be lying in tips. Below them, and sealing almost all the area of the site just above the level of the burnt Antonine building, was a definite ‘floor’, sometimes of stones set in yellow mortar (‘concrete’ on fig. 81), sometimes of gravel and sometimes of chalk (pl. XXIV*b*). The gravel was occasionally found to be mixed with a slurry of mortar and the chalk was sometimes found to be spread as a basis for the concrete. The relationship between concrete and gravel seen in fig. 84, Section H¹–J (6) and (7), shows that they are contemporary. When first encountered these ‘floors’ were taken to belong to a new building put up in the late Antonine period; but nowhere did any contemporary walls appear in association; the foundations of Building XXVII, 2, on the other hand, were always found to have sliced roughly through the ‘floors’, and were evidently constructed later. Over the ‘floors’ the debris of the Antonine fire had been redeposited, and the thinness or absence of burnt levels under them shows that there had been a clearance. The sections demonstrate that the redeposited burnt levels are make-up for the floors of Building XXVII, 2, and were put down after its walls were built; and though the vast majority of the pottery from these layers, both samian and coarse, is closely matched by those from the Antonine fire-deposits of Insula XIV, a few vessels of later date were found. The coin-evidence shows that Building XXVII, 2 was erected *c.* 380. Though the chalk and concrete ‘floors’, whose extent is shown on fig. 81, yielded few finds, one area did produce significant evidence.

¹ For Insula XIV see Vol. I.

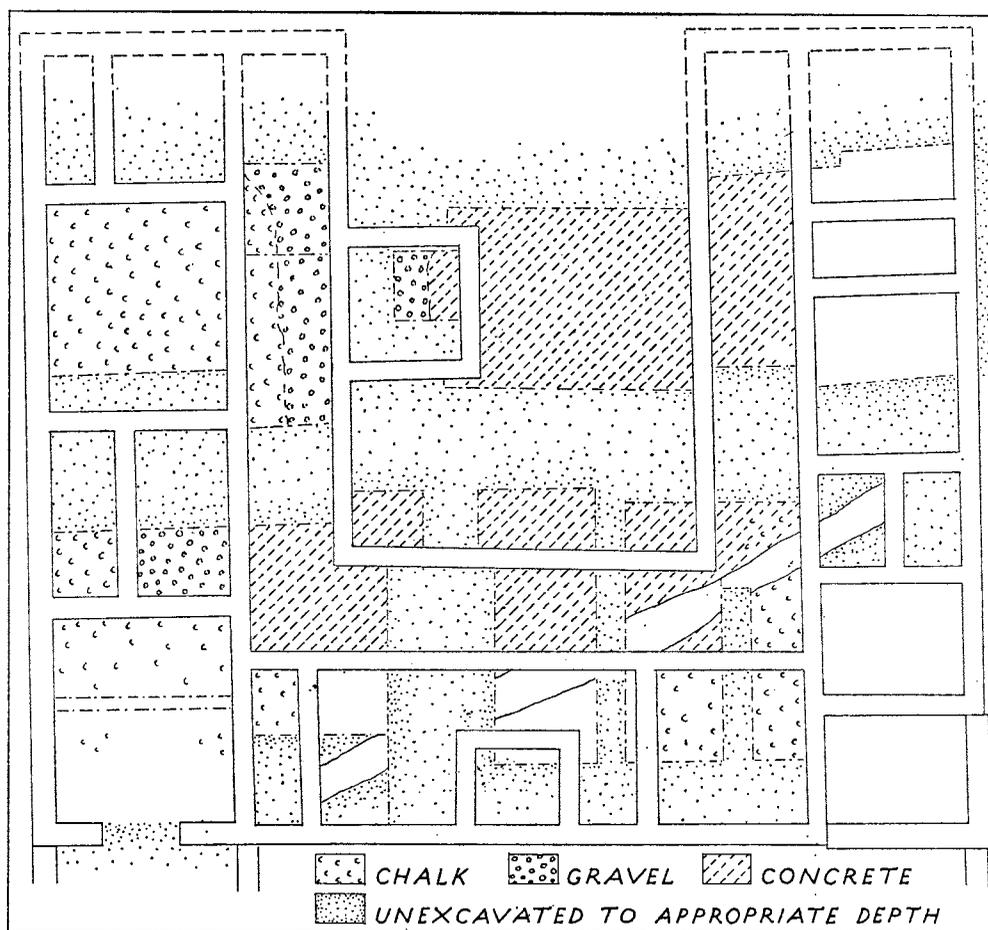


FIG. 81. Late fourth-century consolidating 'floors' below make-up for Building XXVII, 2 (scale 1:240).

57 X IV 17
chalk 'floor' below Room 3

33 C.G. Antonine
Flanged dish (No. 1717), cf. Gillam, no. 315,¹ there dated
350-400
Flanged dish (No. 1718) of which another fragment of rim came
from 57 X VI 4, the mortar basis of the tessellated floor of
Room 4

¹ *Arch. Ael.* ⁴ xxxv (1957), 1 ff.

The second flanged dish thus links the two operations at a date in the fourth century long after the fire.

It is now clear that this part of Insula XXVII remained vacant after the Antonine fire for over two centuries. When at length it was decided to build House XXVII, 2 the adjacent streets had been raised by successive re-metallings well above the level of the plot (Sections L-M, R-S), and it was, therefore, necessary to introduce 2 ft. 6 in. (0.76 m.) of make-up to raise the floors—otherwise water would have poured in from the streets whenever it rained. For this purpose, but for reasons which are obscure, the burnt deposits were carefully scraped away: a firm layer of 'floor' was inserted at the base of the excavation, and then the removed material was re-introduced between the walls of the new building before its floors were laid. It is noticeable that in the courtyard (Sections F¹-H, P-Q) the make-up is largely of other material: the burnt daub in the main was used only within the building. There is, however, also a thick layer of it to the south-west (fig. 83, Sections A-B-C-D); this perhaps was the site of the dump. One possible motive for the programme, as has already been suggested, was for the salvage of tesserae: the presence of tessellated floors could have been revealed by preliminary trenching, and at the late date when House XXVII, 2 was erected it is conceivable that good tesserae were in short supply.

Period IV B: Building XXVII, 2, first phase

The foundations and lower walls of Building XXVII, 2 had already been built when the make-up levels were spread (see especially fig. 84, Section G-H-J; fig. 85, Section N-O). The flint and mortar walls with their corners turned in tile (pl. XXIVa) rest on foundations of packed chalk, which at 3 ft. (0.9 m.) are normally rather wider than the walls they carry. These are normally *c.* 2 ft. (0.61 m.) wide, but in one or two places where the evidence survives, they narrow to *c.* 1 ft. 10 in. (0.56 m.) at the new ground-level, and only at this level are properly rendered. The walls were not apparently carried very much higher in masonry, at least in some rooms, for the remains of superstructure found fallen on the floors of Rooms 1, 10, 11, 12, 13, and 14 consisted of yellow clay and wall-plaster (pl. XXXIIIa). These rooms were certainly, then, carried up like those of Building XXI, 2 (p. 161) in clay. Over much of the rest of the site disturbances from medieval settlement or by modern allotment-cultivation had destroyed the evidence; some flint, mortar, and tile rubble was found in Rooms 3, 4, 15, and 21, but does not necessarily indicate a more substantial superstructure in these places.

The House consisted of three wings surrounding a courtyard open to the adjacent street (fig. 82). The courtyard was surrounded by a corridor floored with coarse red-brick tesserae picked out with bands of white; the floor had been patched with replaced tesserae in places (pl. XXVIIIa). At least six other rooms had coarse tessellated floors and Room 3 had a mosaic (pl. XXVIa), with central flower in this phase¹ Room 5 projected into the courtyard from the corridor like Room 35 at the Bignor villa; its floor did not survive and its function cannot be decided. If Rooms 1 and 2 were let to form a shop, Room 5 might have provided the main entrance to the house; or it might have formed a porter's lodge as is suggested for Rooms 12 and 13 of Building XXVIII, 1, which occupy analogous positions (fig. 98).

¹ Two tesserae from the mosaic were of samian: (a) 18/31 or 31, second century, and (b) ? form, first century.

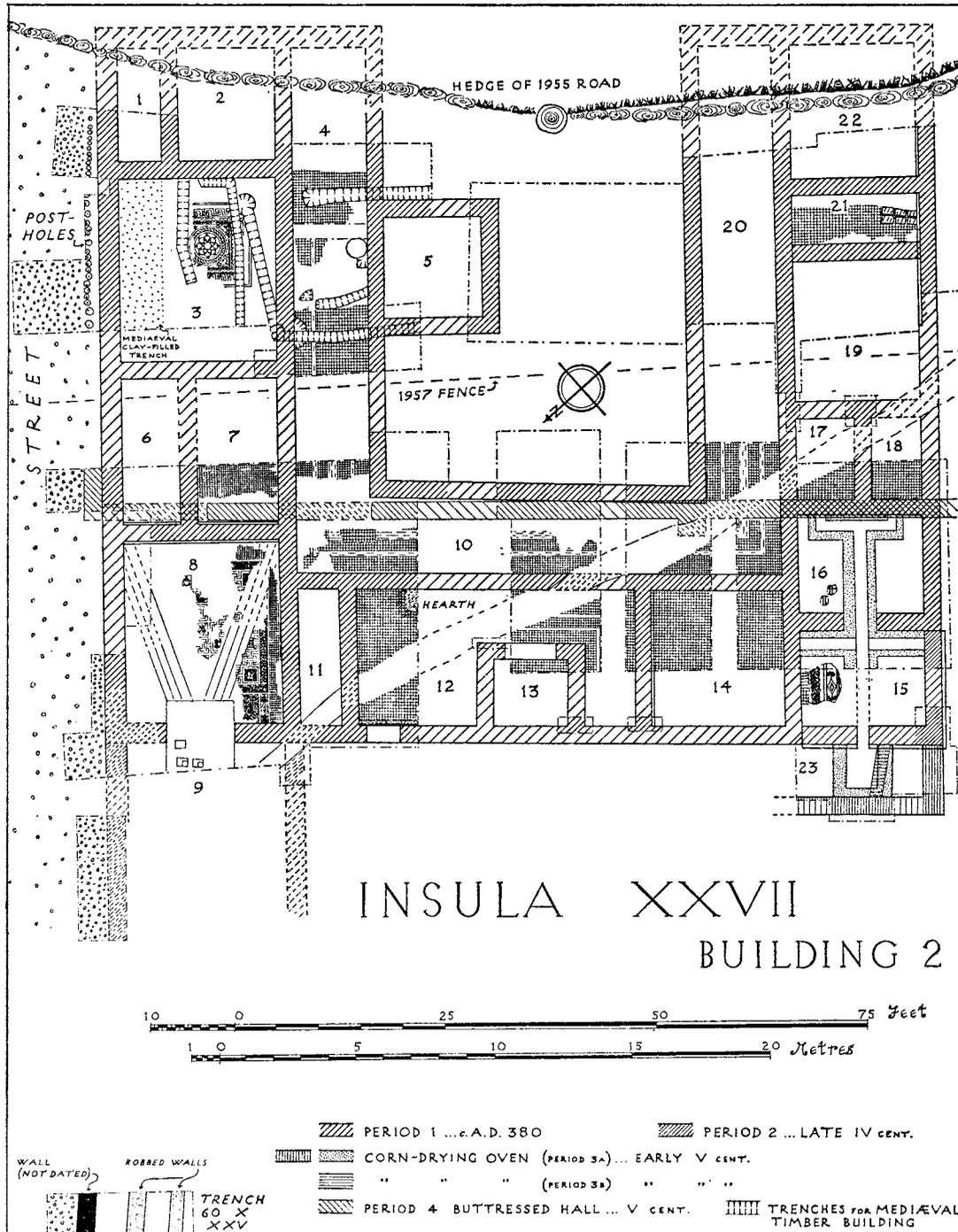


FIG. 82. (Scale 1:240).

Room 13, on the axis of the building, measured only 7 ft. 9 in. by 8 ft. 9 in. (2.36 by 2.67 m.); it was perhaps a domestic shrine or *lararium*. The red tessellated floor of Room 12 outside it had a white line symmetrically arranged around it. Room 12 had a hearth of clay inserted into the tessellation against the wall towards its western end; the tesserae surrounding it were also burnt. A doorway led out of the house from this room; the threshold was slightly raised, for the quarter-round moulding passed across below it (pl. XXVa). Room 11 at first sight suggests a passage leading to an external door; but, though the outside wall here was cut through by the fifth-century pipe trench, enough survived to show that there were no jambs—and two outside doors side by side might seem unnecessary. Thus despite the clay walls of the elevation it seems best to suggest that Room 11 contained a staircase. Probably only the north-west wing was of two storeys.

Room 21 was floored in $\frac{3}{4}$ -in. grey sandstone tesserae—possibly salvaged from Building 2 A beneath. They had been patched with 1-in. red ones (and by two flint tesserae together with one made from a poppy-head beaker sherd); a strip of six tiles also formed part of the floor and had probably been inserted as a repair (pl. XXIXa). This room is only 5 ft. 9 in. (1.75 m.) wide and was probably a corridor leading to an external door: a suggestion of one jamb survived the plough. The tiles served as a door-mat.

Room 15 did not form part of the original house (pl. XXVIIIb). The reason for the resulting re-entrant at the western corner is obscure. Possibly it was intended that Room 16 should have a hypocaust, to be stoked from the area of Room 15; this, however, was not supplied.

In the north corner of the courtyard the base of an engaged pilaster, moulded in plaster (pl. XXXIb, fig. 87B), was discovered lying loose in the rubble in Trench X XXII. This suggests an architectural embellishment of the elevation; but unfortunately there is no indication of its original position, and it may equally have been derived from inside the corridor as from the external face of the wall.

To the south-west of the house Trench H V revealed a sequence of gravelled yard-surfaces (fig. 83, Section B-C-D, Layers 4-11) on a make-up of clay (18). It is clear from the relationship of (4) to the wall that these spreads of gravel belong to Building XXVII, 2 rather than to XXVII, 1. A large number of substantial post-holes were found in the trench, the majority sealed by (4): insufficient area was uncovered to make sense of them, and they are not shown on the plan.

The dating evidence for Building XXVII, 2 can be tabulated as follows:

ROOM	LAYER	COINS	POTTERY
4	57 X VI 9 clay make-up	Constantius II, c. A.D. 360, barbarous <i>Fel.</i> <i>Temp. Reparatio</i>	
	57 X VIII 7 burnt daub make-up		Nos. 1719-21
	59 X IV 4 burnt daub make-up		Type 2135 (A.D. 200-75)

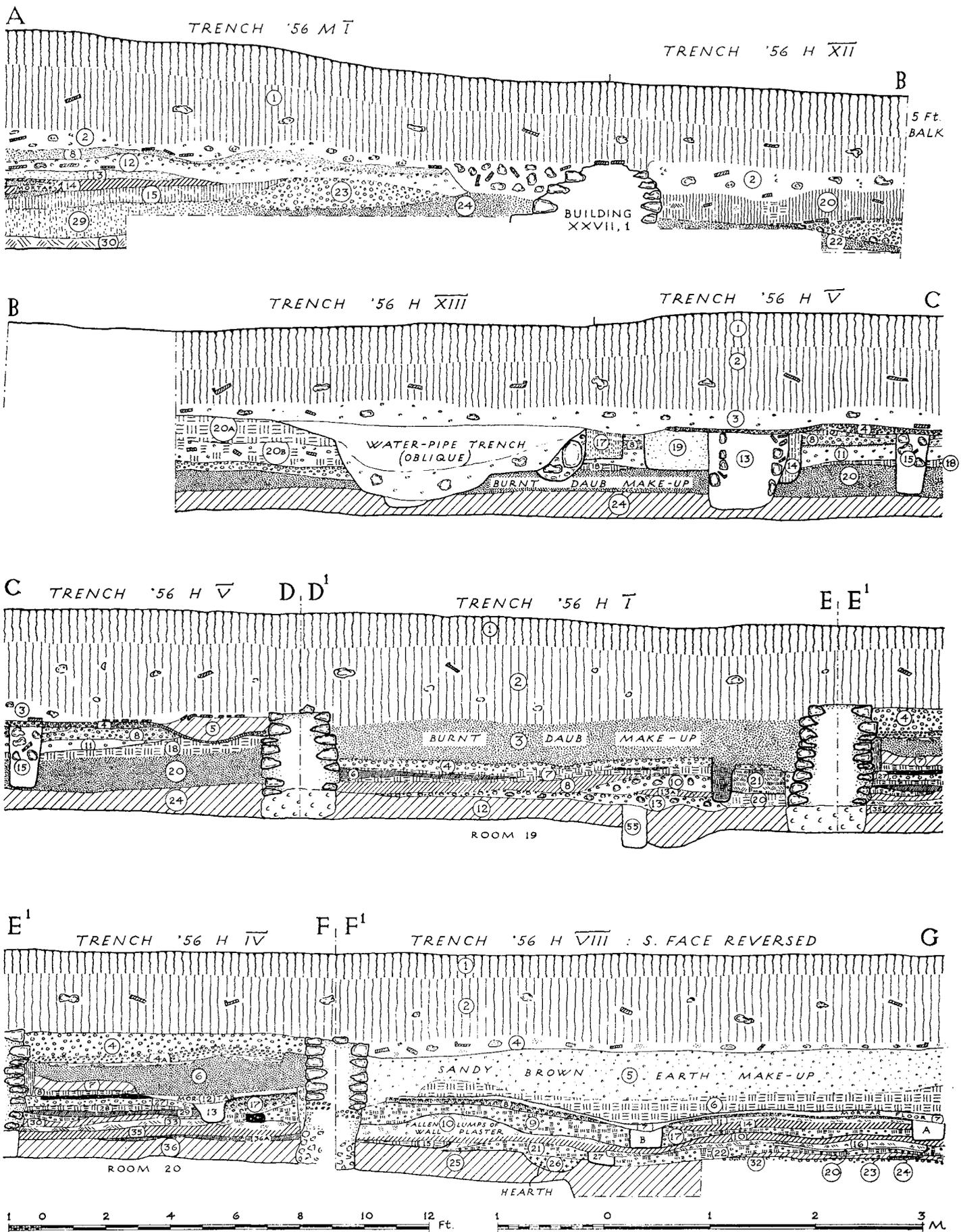


FIG. 83. Buildings XXVII, 1-2: Sections (scale 1:48). For location of Sections see fig. 90.

ROOM	LAYER	COINS	POTTERY
8	59 X XXI 4 make-up	Carausius, A.D. 286-93, <i>RIC</i> 816	
	59 X XXI 11 make-up	Victorinus A.D. 268-70, <i>RIC</i> 61	No. 1723
	59 X XXI 13 make-up	Valens, A.D. 375-8, <i>LRBC</i> 533	
11	59 X III 1 fallen clay wall	Victorinus A.D. 268-70, <i>RIC</i> 61 Claudius II, A.D. 268-70, <i>RIC</i> 45 Claudius II, posthumous, A.D. 270, barbarous (two) Uncertain radiate	Nos. 1724-6 Type 1101 (two) (A.D. 270-90)
12	59 X V 1 fallen clay wall	Gallienus, A.D. 253-68 Tetricus I, A.D. 270-3, barbarous	
	59 X VI 3 fallen clay wall	Tetricus II, A.D. 270-3, <i>RIC</i> 270	
20	56 H IV 4 gravel basis for tessellation	Domitian, hybrid plated denarius: obv. as <i>RIC</i> 152 h (<i>tr.p. x</i>), rev. as <i>RIC</i> 171 (<i>imp xxii cos xvi cens pp</i>)	
	59 X X 3 gravel basis for tessellation		No. 1727
Courtyard	56 H VIII 6 make-up	Nerva, A.D. 96-8, plated denarius Constantine I, <i>urbs Roma</i> , A.D. 330-5	
	57 X XI 2 make-up	Domitian, As, A.D. 87, <i>RIC</i> 354 a Victorinus, A.D. 268-70, <i>RIC</i> 78	

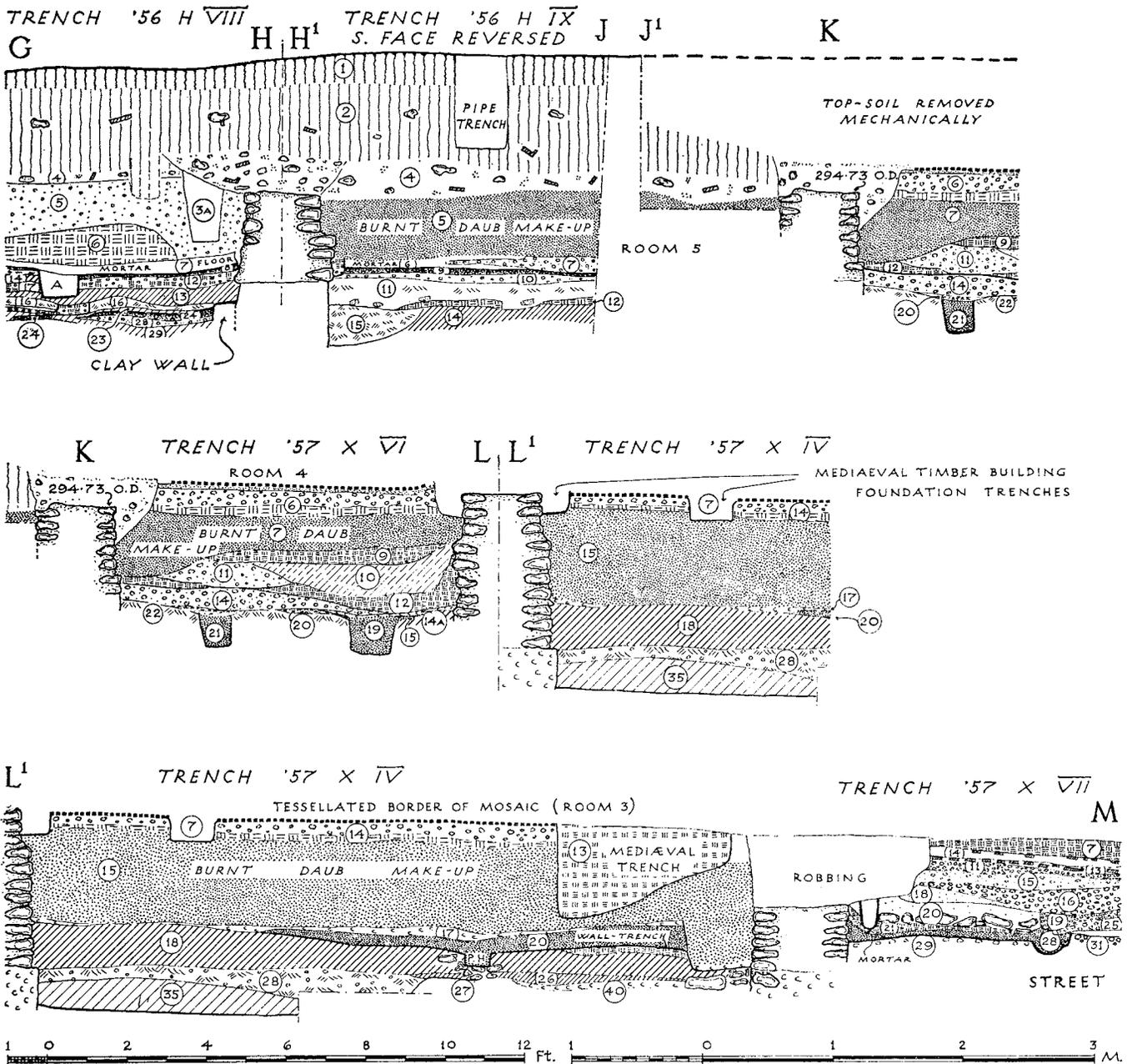


FIG. 84. Building XXVII, 2: Sections (scale 1:48).

ROOM	LAYER	COINS	POTTERY
	59 X XV 2 make-up	Gallienus, A.D. 253-68	No. 1728
Street XXVII/ XXVIII	57 X VII 9 dirt between 13 and 11 in S. half of trench	Gallienus, A.D. 253- 68, <i>RIC</i> 177 Claudius II, posthu- mous, A.D. 270	

The pottery indicates a date probably in the second half of the fourth century. Fortunately the coins add greater precision. They comprise three first-century issues, fourteen third-century issues, and three of the fourth century. The latter are *Urbs Roma* of Constantine I, worn (diam. 15 mm.); a barbarous copy of the *Fel. Temp. Reparatio* (horseman) type of Constantius II *c.* 360, slightly worn (diam. 12 mm.) and the *Securitas Reipublicae* issue of Valens, 375-8, slightly worn (diam. 16 mm.). Thus the floors cannot have been laid before the period 375-8; allowing on the one hand for the slight wear on the coin of Valens and on the other for the likelihood that both the first two phases of the house, which involved the laying of mosaics, occurred before *c.* 410, our conclusion is that Building XXVII, 2 was built *c.* 380. A date substantially later than this would push succeeding structural periods on the site unacceptably late into the fifth century.

Period IV C: Building XXVII, 2, second phase

At a date which cannot be exactly estimated, Building XXVII, 2, was enlarged. Room 8, measuring 18 ft. 3 in. by 21 ft. 3 in. (5.56 by 6.48 m.), produced fragmentary portions of a large mosaic (pls. XXVI*b*, XXXIV*a*); unfortunately it had been badly damaged by robbing and later agricultural activities, but its design has been skilfully reconstructed by Mr. D. S. Neal (pl. XXVII) and it is discussed by Dr. D. J. Smith in Volume III. The mosaic rested on the remains of a channelled hypocaust, and this in turn appears to be an insertion of the second phase, for its central distribution-chamber is cut through the north-west wall of Room 8, over whose reduced remains the mosaic (though now destroyed) originally ran, as is shown by the absence of plain border at this point (pl. XXVI*b*). The cut face of the wall below was well burnt. Structurally a sleeper-wall serves no purpose here, and its exposed ends would have been tile-covered for protection if it had been built with the hypocaust in mind. It seems clear that this wall had originally served as the exterior wall of the house, and that, in Phase 2, Room 8 had been enlarged perhaps to about twice its original length (to judge by the position of the distribution-chamber), and a mosaic laid. The new room, some 40 ft. (12.2 m.) long, must have been most striking and luxurious, remarkable at this date. The walls of the extension (Room 9) had, however, been robbed, as had that of Room 8 at the points of junction, so that their relationship could

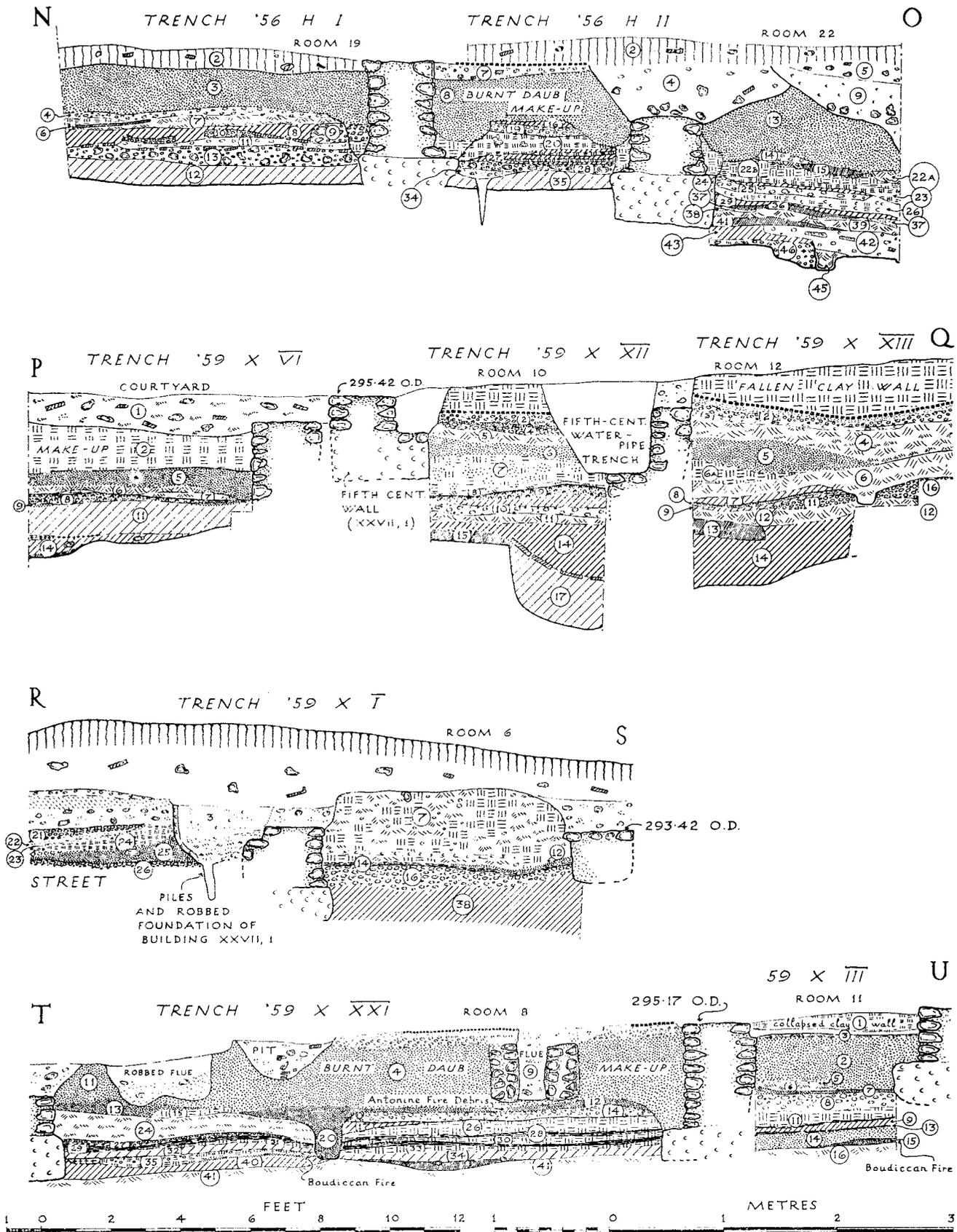


FIG. 85. Building XXVII, 2: Sections (scale 1:48).

VERULAMIUM EXCAVATIONS

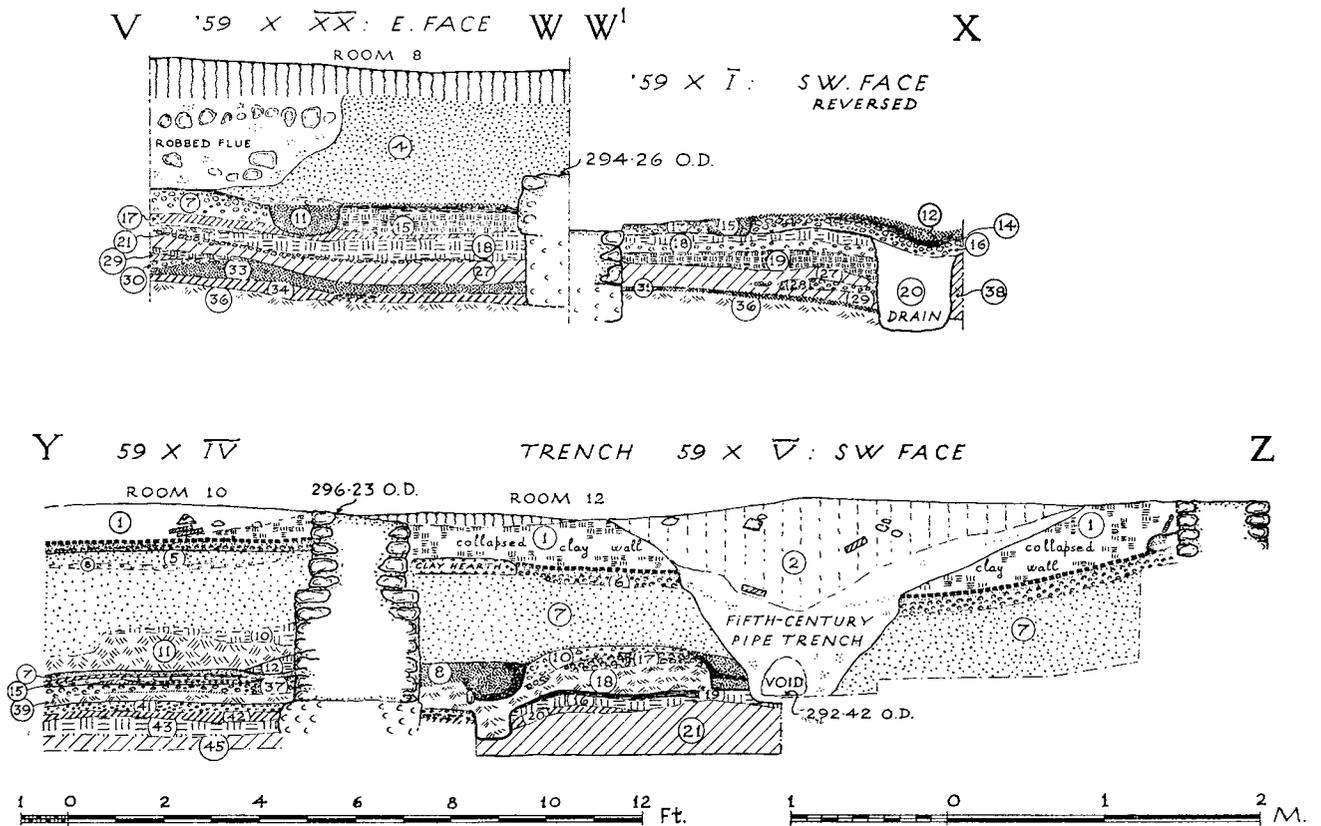


FIG. 86. Building XXVII, 2: Sections (scale 1:48).

not be determined; it must remain a possibility that Room 9 was an original though separate room. Its limits could not be established because of the presence of a very large spoil-heap, but the robbed external wall of the building was traced for 23 ft. (7 m.) along the street-edge. About 50 ft. (15 m.) north-west of the building another trench (60 X XXV) revealed traces of three walls (fig. 82); these presumably belong to another house.

A similar enlargement occurred at the west corner of Building XXVII, 2. New walls of different build, with a 6-in. (15-cm.) offset, now enclosed Room 15 (pl. XXVIII*b*); but at the same time the party wall with Room 16 was taken down and a big mosaic was laid over the whole of the new enlarged room. The latter now measured 24 ft. 9 in. by 14 ft. 6 in. (7.54 by 4.42 m.) (the original length of Room 16 was only 11 ft. 6 in. (3.5 m.)). At a later date this mosaic was almost entirely destroyed when a corn-drying oven was inserted here, but fragments survived in each half of the room: one of them showed evidence of repair (pl. XXIX*b*). The design was very similar to, if not identical with, that of the contemporary mosaic in Room 8/9. In the debris filling the north-east branch of the central cross-flue of the corn-drier later set in this room lay fragments of moulded plaster (fig. 87A) which presumably came from the cornice of Room 15.

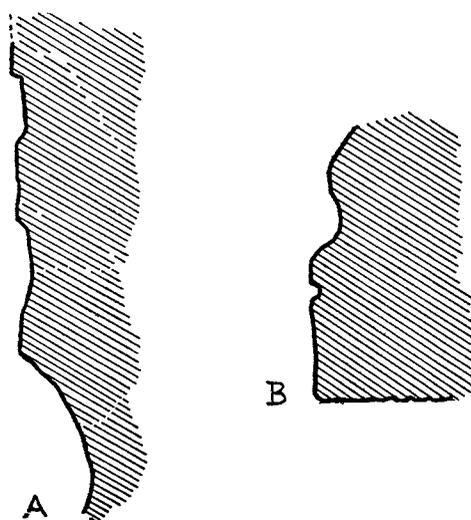


FIG. 87. Profile of plaster pilaster (B) (p. 216) and of plaster moulding (A) from Room 15 (p. 222) (scale $\frac{1}{2}$).

Dating. Nothing was found to date these developments. Provisionally they may be assigned to the period 395–410, when there is some general evidence for the continuance of a wealthy urban aristocracy in Britain.

Period IV D: Building XXVII, 2, third phase

The third phase of this house is marked by the insertion of a large corn-drying oven (pl. XXXa) in Room 15/16. It had a central main flue and in addition to the normal terminal flues two additional side ones were made necessary by its size. Fragments of the mosaic were found in their ash, and the south-west side-flue could be seen to have encroached into the chalk foundation of the second-phase exterior wall (of Room 15). These facts prove that a hypocaust for the mosaic is not in question, for in that case, since both would have been under construction at the same time, provision would have been made for the protection of the chalk foundation from the harmful influence of the heat. The flues accordingly are later than the mosaic, and the typical 'tuning-fork' plan shows that they are a corn-drier. Soot from the risers at the south-east end can be seen on pl. XXXa. A stoke-hole was provided at the north-west end, enclosed by a new wall (fig. 82), within which the stoke-hole itself lay in a hollow revetted by masonry. The furnace was in use sufficiently long for a rebuild to be required by one of its revetting walls (pl. XXXb). The replacement was crudely constructed over a thick layer of ash covering the reduced remains of its predecessor (fig. 88).

The considerable labour of cutting back a large spoil-heap to uncover this stoke-hole was undertaken mainly in the hope of recovering dating evidence accumulated in the hollow (such places are notorious traps for lost coins), or material in contemporary use which could itself be dated by the context. Nothing but residual material was found, in the event; there were no coins; seven pieces of second-century samian and a good deal of coarse pottery,

VERULAMIUM EXCAVATIONS

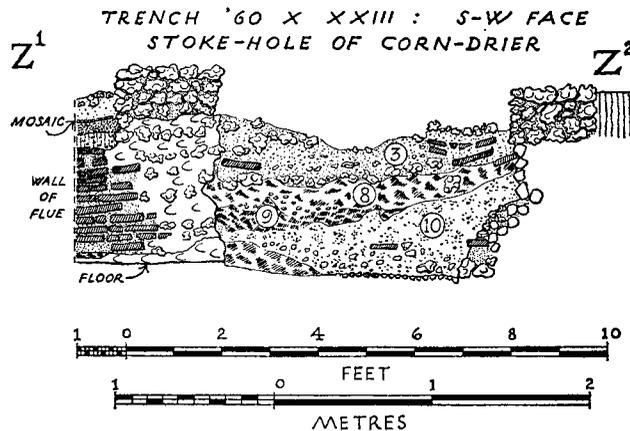


FIG. 88 (scale 1:48).

mainly of the second century, were recovered, but it included nothing which need date later than *c.* 350. This suggests that the supply of coinage and even of pottery was drying up at the time when the stoke-hole was open.

Dating. In the absence of material evidence, dead-reckoning must be employed. The large mosaic of Room 15/16 may have been laid *c.* A.D. 400 and had lasted long enough to be carefully if unskilfully patched (pl. XXIX*b*). This might take us to *c.* 420–25, a time when growing insecurity in the countryside could well suggest the wisdom of hurrying the harvest into the safe shelter of the city walls, to be processed: the urgency was sufficiently acute to balance the sacrifice of one of the two principal living rooms for the purpose. Dr. J. P. C. Kent has calculated that use of silver and bronze coinage had ceased by *c.* 430, and it would certainly be surprising if commercially manufactured pottery were still in production at that date.¹ Thus, in view of the evidence for its long use, a central date of *c.* 435 may be proposed for the abandonment of the stoke-hole, at which time the house itself was demolished.

Period V: Building XXVII, 1

It has been shown that Building XXVII, 2 was first erected *c.* 380, and that, despite the absence of direct dating evidence, a reasonable estimate of its life based on observed details of additions and repairs suggests that it may have continued in use until *c.* 430–40. Across its site thereafter was erected Building XXVII, 1, a large rectangular barn or hall lying parallel with Street XII/XXVII (fig. 89). Its south-west wall had been discovered in 1956 in Trenches H VI, VII and XII. The corner was heavily buttressed and a second buttress lay 15 ft. (4.57 m.) further south-east (pl. XXXII*a*). The wall was 2 ft. 6 in. (0.76 m.) wide, resting somewhat obliquely on a 4-ft. (1.2-m.) footing. It was traced for 40 ft. (12.2 m.) south-eastwards, where it had been fractured by subsidence into the First-Century Ditch. The north-west side consisted of a wall 2 ft. 3 in. (0.68 m.) wide, more regularly built on a chalk foundation. It ran over the south-east wall of Room 16 (the chalk foundation overlapping it by almost 6 in. (15 cm.)), and had been slightly tilted to the north-west where it

¹ Coins: J. P. C. Kent in R. H. M. Dolley (ed.), *Anglo-Saxon Coins* (London, 1961), 2–5. Pottery, cf. S. S. Frere, *Britannia, a History of Roman Britain* (1967), 372.

overlapped the corner of the former courtyard (pl. XXXIa). This was probably the reason for the buttress at this point: all three buttresses, however, were part of the original build. The north angle was robbed, but the start of the return along Street XXVII/XXVIII was represented by a chalky robber trench overlying a post-hole (fig. 85, Section R-S). Further to the south-east this north-east wall was represented by a row of chalk-filled post-holes along the edge of the street (pl. XXXIIb). At first these had been a puzzle, and in the interim report for 1957 it was suggested¹ that they marked the line of a row of bollards to fend wheeled traffic from Building XXVII, 2, where the street narrowed. But it is clear now that they were piles supporting the chalk foundation of the gable wall of Building XXVII, 1.

In the walls of this building at ground level a double course of tiles had been used (pl. XXXIIa); along the north-west wall they had been robbed, but their imprints were clear in the mortar (pl. XXXIa). It is a suggestive fact that all these tiles were broken pieces. It would appear that, at the time of building, new tiles were no longer obtainable, and that old ones had to be prised for the purpose from previous structures.

The building measures 142 ft. 6 in. (43.43 m.) internally on its long axis. Its fourth side could not be recovered since it lay beneath the modern lane, but the internal width must be at least 46 ft. (14 m.) and possibly as much as 56 ft. (17 m.) if it extended as far as the street-line. No floors survived, nor were the arrangements for supporting the roof at all certain. The only post-holes found which might have been connected with it are marked on fig. 89; of these the ones in Trenches H V and H XIII, outside Building XXVII, 2, are those which were not sealed by the gravel floor (4) previously discussed (p. 216). They were filled with black earth and stones. The post-hole in Corridor 4 is more certainly associated since it had at its base a layer of chalk covering two layers of horizontal broken tiles.

Date of Building XXVII, 1. It has already been recorded that nearness to the modern surface resulted in the disturbance of almost all contemporary layers. Layer 1 in Trench 59 X XV (corresponding in position to fig. 85, Section P-Q, X VI 1) represents the demolition of Building XXVII, 2, and must have lain below the floor-level of XXVII, 1. It was contaminated with a medieval sherd but yielded an extremely late-looking shell-gritted jar (No. 1729) which closely resembles one published by Wheeler as possibly fifth century.² The date, however, depends upon that of the demolition of Building XXVII, 2, and it may be suggested that XXVII, 1 was erected c. 430-50. There is no means of knowing how long it stood, but it may eventually have come to grief through cracks and subsidence over the early ditch, and this should caution us against suggesting a lengthy period. Perhaps the building stood for twenty years, i.e., to c. 450-70.

Purpose of Building XXVII, 1. There is little reason, in view of its orientation and lack of features, to suggest that it was a church. The entirely Roman character of its build should discourage any idea that it was the hall-house, e.g., of some German military leader. The likeliest purpose is as a barn, for evidence has already been presented for the rapid conveyance of fifth-century harvests within the walls; the feeding of a city populace has often been a primary call on the energies of tyrants and governors in times of crisis, and in the mid fifth century this sort of problem must have been becoming acute.

¹ *Antiq. Journ.* xxxviii (1958), 12.

² Wheeler, *Verulamium*, 199, fig. 38, no. 83.

Period VI: the pipe-line

The latest Roman feature found on this site was a pipe-line or aqueduct (fig. 89). This was constructed after the demolition of Building XXVII, 1, as is shown by the fact that the trench for the pipe sliced away the major part of its buttress on the north-west side (pl. XXXIII*b*): this could not have been allowed to happen (at least in the absence of repair) had the pipe-line been contemporary with the building. A wide U-shaped trench was dug (fig. 86, pl. XXXIII*a*), in the bottom of which, still *in situ*, were found a number of iron collars of the type used for connecting lengths of wooden water-pipe (pl. XXXIV*b*). Here and there faint stains from the pipe itself were seen, and below Room 12 of XXVII, 2 a void representing the decayed pipe still survived (fig. 86, Section Y-Z; pl. XXXIII*a*). Two pairs of collars lay at intervals of 4 ft. 3 in. (1.29 m.) and one pair at 5 ft. 8 in. (1.55 m.). Such pipe-lines are fairly common; traces of earlier examples have been found, e.g., in Insula XXVIII (p. 234). The water was carried by gravity from some source of supply further uphill, normally a *castellum divisorium* or distribution-tank at the end of the city's aqueduct. In the absence of any natural source of water within the city uphill to the south, we may feel confident that this was so at Verulamium.

The only coins yielded by the pipe-trench were as follows:

LAYER	COINS
59 X V 2	Small barbarous copy, <i>Fel. Temp. Reparatio</i> (horseman) type
59 X XIV 6	Constantius II Aug., A.D. 337-41 Constans Aug. (two), A.D. 341-6

Nevertheless, the sequence of structures shows that it should belong to the middle years or even the second half of the fifth century (*c.* A.D. 450-70). It is a remarkable testimony to the survival of craftsmanship, engineering practice and Roman habits of life, and it carries with it the implication that the aqueduct of Verulamium (a monument still to be discovered) was still maintained and functioning.

The pipe could not be followed north-west of Building XXVII, 2 because of a large spoil heap. A trench was, however, dug along the edge of Street XXVII/XXVIII at the projected point of arrival (fig. 82), but there was no sign of disturbance to the metalling in either plan or section. The pipe-line accordingly either swings more to the north-west so as to run parallel with the street, or else its destination was a fountain occupying the northern part of the former Room 9. The latter might seem the more likely explanation, since if the destination were further north-west a more direct line to it could have been taken, which incidentally would have saved the labour of cutting through so many foundations (if they were still known to be there); but it would only have been possible if drainage facilities existed or were provided to carry off the surplus water. No sewer ran south-east along the street between Buildings XXVII, 2 and XXVIII, 1 to join the main drain along the forum (fig. 2), nor did the remains found in Trench X XXV (fig. 82) suggest one in the other direction. The two robbed walls in this trench were 3 ft. apart and only 2 ft. deep; even the main drain on the edge of Insula XXVIII was only 2 ft. 2 in. wide, but was at least 4 ft. deep. The question, therefore, remains open.

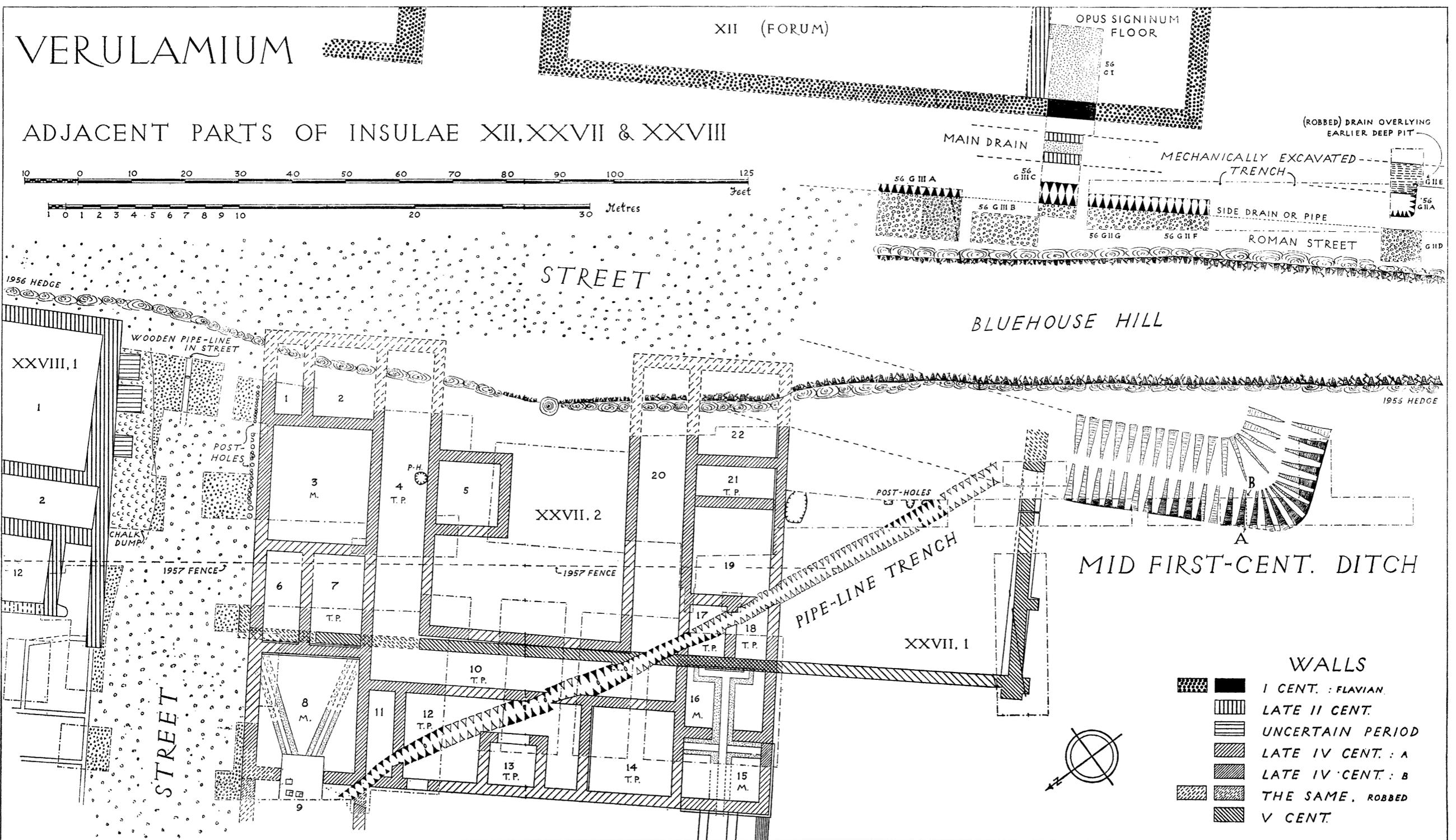


FIG. 89. (Scale 1:240).

Period VII: medieval

The foundation-trenches of a timber cottage of the medieval period were found cut into the floors of Rooms 3 and 4 of Building XXVII, 2, and are shown on fig. 82. They were *c.* 12 in. wide and 7 in. deep (fig. 84, Section L¹-M). The scanty medieval pottery from the site appears to belong to the thirteenth century.¹

BUILDING XXVII, 3 (fig. 91)

At the south-west edge of Insula XXVII a fragmentary building was encountered beside Street XXVI/XXVII. It lay opposite Building XXVI, 1 and occupied the south corner of the Insula. In 1956 only limited excavation was carried out here because of shortage of resources and because of the small area due to be disturbed by road-works. Later in the winter further work was undertaken by the St. Albans Archaeological Society, and the structures noted by them have been added to the plan (fig. 91). There appear to be at least three periods of construction. A fragmentary wall of Period I was found by the Society in enlarging Trench 56 N VIII; it was not dated, but ran obliquely to the later walls. The main building, of Period II, overlay Antonine pottery including three sherds of black samian, and was probably built *c.* 170-90 at about the same time as Building XXVI, 1. A later wall (fig. 91, Period III) was inserted to form a corridor at the south end of the building. The pit containing debris from the Belgic Mint, which was found during road-works, is described on p. 31.

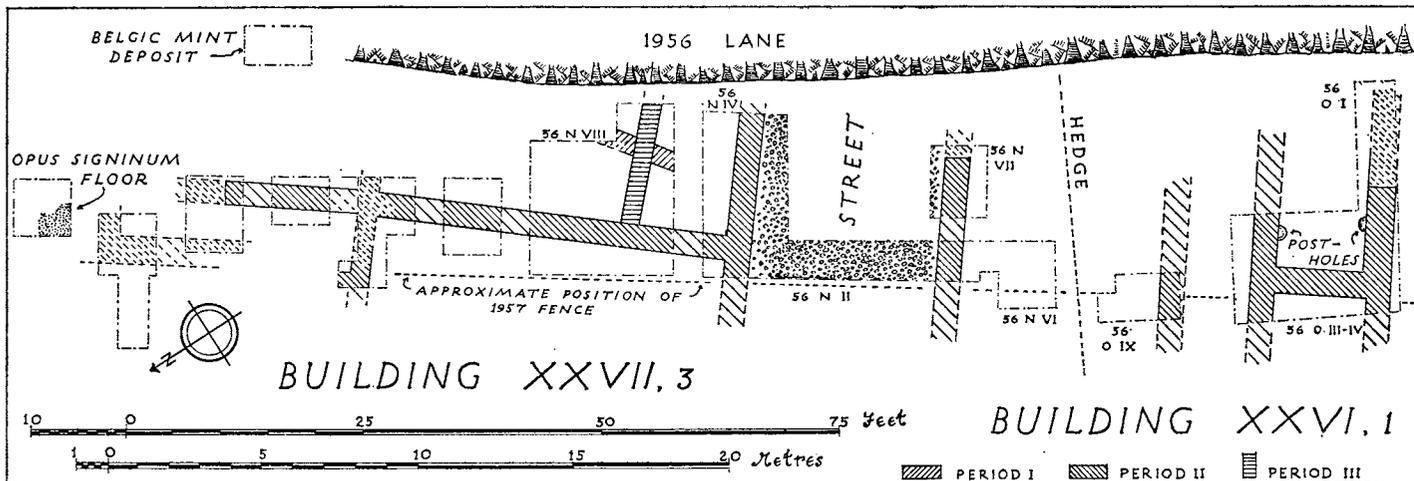


FIG. 91. (Scale 1:240).

¹ This and other medieval pottery will be published in Volume III.

INSULA XXVIII

THIS insula had formed part of Insula XIV until the reign of Hadrian, when Street XIV/XXVIII was built. But to avoid confusion all buildings of whatever date within its limits are ascribed to Insula XXVIII.

For a variety of reasons excavation was not carried down to natural subsoil except towards the south-west side of the insula. The larger part of the area dug in 1957 and 1958 was occupied by the masonry Building XXVIII, 1. In 1957 the south-east half of the building was explored; but, as has been explained (p. 83), resources that year were limited and proved insufficient to excavate everywhere to full depth. In 1958 excavations were continued north of the boundary of the new road (fig. 98, '1957 Fence') mainly in order to complete the plan of XXVIII, 1 and to date it. Only on the south-west side of the insula, where a burnt Antonine building was discovered undisturbed beneath the courtyard of Building XXVIII, 1, were more ambitious deeper excavations undertaken in 1958 and 1959.¹ As a result, a sequence of four successive timber-framed buildings was recovered, ranging in date from the mid first to the mid second centuries, and differing completely in type and function from the multiple shops of the same period in Insula XIV, which were published in Volume I.

In addition a second masonry building (XXVIII, 2) was uncovered north-west of XXVIII, 1; this house faced Street XIV/XXVIII and its positioning was clearly controlled by XXVIII, 1, to which it was in secondary relationship. Work was also carried out in 1958-60 in the area lying north-west of Buildings 1 and 2. Here part of a clay-walled structure (XXVIII, 4) was uncovered; and deeper excavation to examine the nature and cause of some subsidences (at that time suspected of being fort-ditches) revealed a quarry-pit, gully and cremations, all in the late Belgic or early Claudian period.

A: TIMBER-FRAMED BUILDINGS BELOW XXVIII, 1

The earliest buildings were pre-Flavian. Part of one, already described (p. 85), underlay Street XIV/XXVIII. Another was incompletely revealed below XXVIII, 1, Room 1 and a third (Building XXVIII, 3 C) faced Street XXVII/XXVIII.

Early buildings below XXVIII, 1, Room 1 (fig. 92)

The junction of Streets XII/XXVIII and XXVII/XXVIII was not very neat, for the corner had been rounded off. Parts of two foundation-trenches for sleeper-beams were found and a number of small post-holes. These were contemporary with Floors 27 A and 26 A (p. 261, Section Z-Z¹). Later a new clay floor (26) was laid down; with it were associated a shallow pit (containing no finds) and some 8-9 in. post-holes (fig. 92, Period I b) apparently forming a new south wall to the building. In this period Slot A went out of use and part of it was sealed with a large piece of tabular limestone (p. 261, Section Z-Z¹ (33)). The surface of 26 was burned in places, but no layer of collapsed burnt debris was present. Nevertheless,

¹ Trenches D I-XX were dug in 1958: D XXI-XXV in 1959; the latter were often deepening of trenches taken down only to House 3 A in 1958; hence on the sections their layer-numbers will be found beginning below those of 1958 trenches.

VERULAMIUM EXCAVATIONS

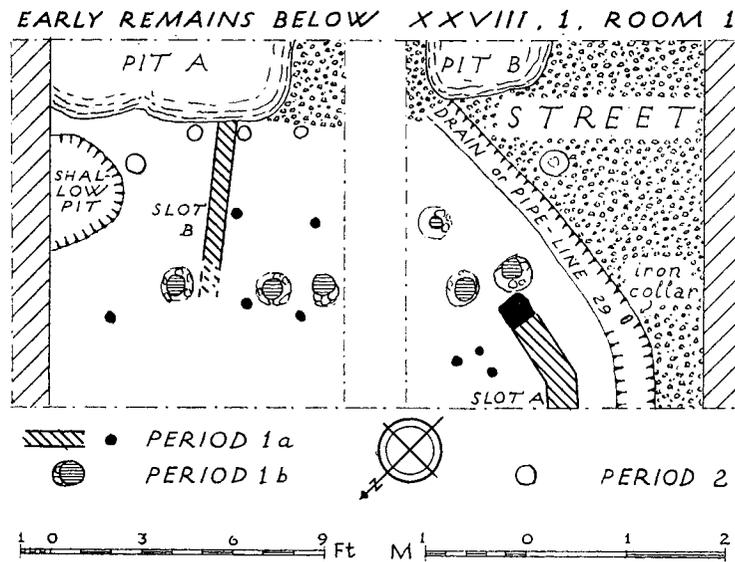


FIG. 92. (Scale 1:75).

these two phases, despite the absence of close dating-evidence, can be assigned to the pre-Boudiccan period. There were traces of ash and charcoal on the contemporary road surfaces ((29A) on Sections Y¹-Y² and Z-Z¹). Layer 24, sealing these floors, contained two pieces of Trajanic-Hadrianic samian and a flagon-neck of a type which does not make its appearance before *c.* 120 (No. 1739). In its surface were sunk the post-holes of a new frontage (fig. 92, Period 2). The structure was short-lived; slightly later alongside Street XXVII/XXVIII was cut a trench which yielded an iron collar for a wooden water-pipe; alignment and dating combine to show that it is the same pipe that recurs further north-west in association with Building XXVIII, 3 A (p. 234). Above these remains a further timber-framed building occupied this area in the mid second century and was destroyed in the Antonine fire (see below, p. 243).

DATING EVIDENCE FOR EARLY BUILDINGS BELOW ROOM 1

LAYER	SAMIAN
W II 27	18 S.G. first century
Occupation below 26	15/17, Ritt. 9 S.G. pre-Flavian
26	30 S.G. first century
Clay floor	29 S.G. A.D. 50-65 (D 71)
24	30 S.G. style of Germanus A.D. 70-90
Make-up of Period II	37 S.G. A.D. 70-90
	22 S.G. Flavian
	35 C.G. probably Trajanic-Hadrianic
18	18/31 (two), 33 C.G. Trajanic-Hadrianic
Make-up sealing pipe-line	18/31, 33 C.G. Trajanic-Hadrianic
17	31, Curle 11 C.G. Probably Hadrianic
Occupation layer on 18	18/31R C.G. stamped SABINVLVSF , A.D. 130-50 (S 56a)

Building XXVIII, 3 C (fig. 78, p. 196)

Below the courtyard of Building XXVIII, 1, the earliest of a series of timber-framed buildings lay directly on the original topsoil. The complete plan was not recovered, but the house measured 11 ft. (3.35 m.) by at least 12 ft. (3.66 m.). Its south-west end abutted the street and was marked by a shallow slot (p. 251, Section C-C¹) in which were five nails at 6-in. intervals pointing inwards. As with the building below XXVIII, 1, Room 1, already described, there was an absence of burnt debris sealing the house: the remains of demolished clay walling (Section C-C¹(15)) were unburnt. Nevertheless, the presence of charcoal and ash on the adjacent street suggests that Building 3 C is of pre-Boudiccan date, whether or not it was destroyed in the revolt. Good dating evidence was lacking, but association with two sherds of Form 18, probably Flavian, suggest that it was not destroyed. However, the presence, above the remains, of a thick bed of occupation-soil (p. 251, Sections C-C¹ (9), A¹-A² (21)), which contains only Flavian material, implies that the house was not standing at the end of the century.

DATING EVIDENCE FOR BUILDING 3 C

LAYER	COINS	SAMIAN (All South Gaulish)
D XXII 32 Floor		15/17 pre-Flavian 18 probably Flavian
D XXV 14 Make-up		plate Claudian
D XXIII 15 Fallen clay wall		27 probably Flavian 18 stamp [FO]RMO[SVS] (S 57) A.D. 40-55
D XXIII 9 Occupation soil sealing remains	Caligula, <i>RIC</i> 30 ff. Vespasian, As, A.D. 77-8, <i>RIC</i> 762	29 (two) A.D. 60-75 37 A.D. 75-95 18 pre-Flavian 18 (several) Flavian 24/25, 35 Flavian

Building XXVIII, 3 B (figs. 93, 103-5)

Above these early levels a thick layer of make-up was deposited preparatory to the erection of a new timber-framed building (Section A¹-A² (23-25) make-up; (22), floor. Compare Section C-C¹ (4), (8) make-up; (3), floor. In Section A-A¹ only make-up is present (7, 14)). The new building was a long strip-house, end-on to the street but separated from it by 6 ft. (2 m.) of open ground, and measuring 52 ft. by 9 ft. 6 in. (15.85 by 2.90 m.). The open ground was presumably private property rather than a footway beside the street since a later building extended over it; there were no indications of post-holes outside Building 3 B for a portico. One room, 9 ft. 6 in. long, lay at the front, but no other partitions were traced. Both Room 1 and Room 2 contained ovens *c.* 9 in. (22.9 cm.) deep from floor-level. Outside to the

north-west were two further ovens and a shallow pit (p. 254, Section G-G¹ (2)), whose sides were stained light green, suggesting use as a sump, or cess-pit. It was sealed by the floor of Building XXVIII, 3 and had been filled with pieces of burnt clay, probably taken from the adjacent ovens when the site was being cleared. The south-west wall of Room 1 was painted white with red, green and black bands: a few inches survived *in situ* below the floor of Building 3 A, Room 3, which here used the same wall.

DATING EVIDENCE FOR BUILDING 3 B

LAYER	COIN	SAMIAN (All South Gaulish)
D VI 42 Occupation layer below building	Nero, As (<i>v. good</i>), RIC 329 r	37 Flavian 18 Flavian 27 stamp OF·IVCVN (S 58) Flavian
D XXI 3 Make-up below building		37 (two), 18, 22 Flavian
D XXI 8 Occupation below 3		18, 27, 37 Flavian
D XXII 11 (=21 on fig. 102) occupation below building		37 (several) Flavian 18 (at least six) Flavian 27 (several) Flavian Curle 15, 46 Flavian

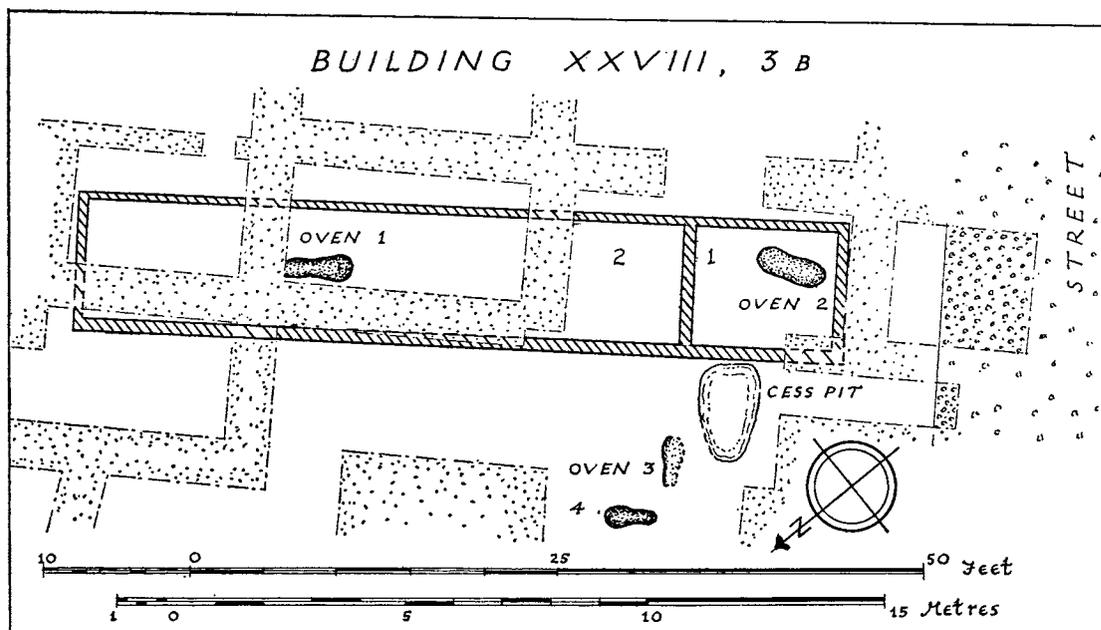


FIG. 93. c. A.D. 105-30.

LAYER	COIN	SAMIAN (All South Gaulish)
D XXII 28 Occupation below building (=II)		29 A.D. 50-65 29 (several) A.D. 65-80 18 (several), 27, 33 A.D., 65-80 (D 72)
D XXIII 9 Occupation below building		See above (p. 231)

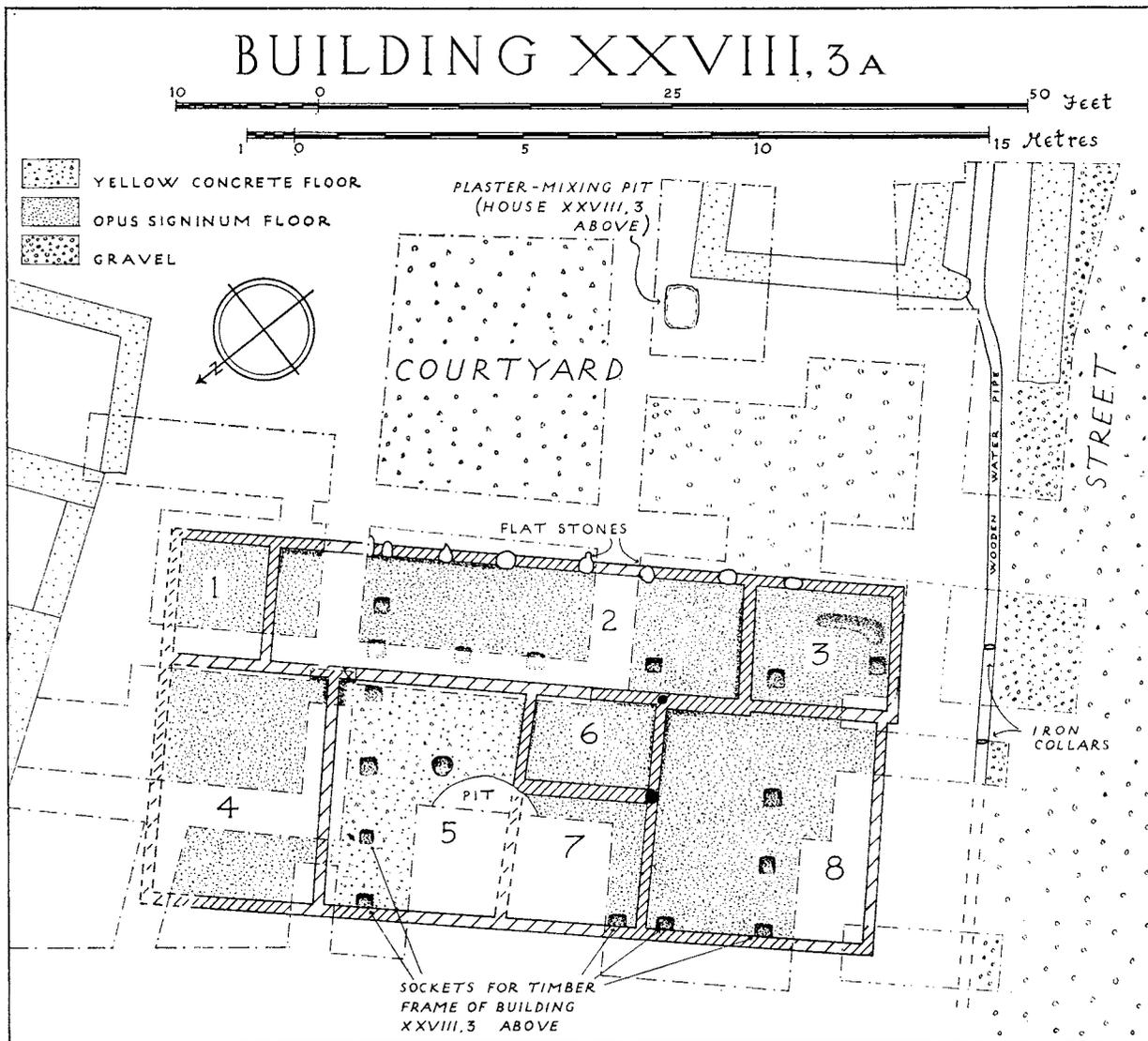


FIG. 94. c. A.D. 130-50.

LAYER	COIN	SAMIAN (All South Gaulish)
D XXV 4 Occupation below pit outside building		18 (three), 15/17, Curle 15 Flavian
D XXV 10 Occupation below ovens outside building		18 (two) Flavian

Coarse pottery: D VI 42, mortarium of Type 756, *c.* A.D. 80–120

On this evidence and after consideration of the stratification still to accumulate before the fire of A.D. 155–60, it seems probable that Building XXVIII, 3 B was erected during the decade 100–10.

Building XXVIII, 3 A (fig. 94)

Immediately above the floors of Building 3 B lay those of 3 A, a house which was replaced by Building 3 shortly before the fire. House 3 A was an enlargement and re-building of 3 B rather than a radical replacement, and was built of timber-framed clay walling. In Room 1 the existing partition and south-west wall were retained, but further north-east the alignment of the new structure diverged slightly from the old lines (p. 253, Section E²–E³), presumably because they became obscured during demolition. The main new feature was an additional range of living-rooms (added over layers of clay and stony earth put down to make up the appropriate level) along the north-west side, the addition accounting for the discontinuity in the south-west wall. The new house measured 51 ft. 6 in. by 38 ft. (15.70 by 11.58 m.). It contained eight rooms, all but one of which were floored in fine red *opus signinum* (pl. XXXVa) bordered by quarter-round mouldings. Room 5 had a floor of coarse yellow concrete. In Room 3 the floor had subsided into the underlying oven (fig. 94). In Room 8 there had been a wall painted in white panels ‘marbled’ with red and black brush-flecks, and outlined with red and black bands. The south-eastern exterior wall had a series of very large tabular flints and pieces of pudding stone at intervals of 4 ft.–5 ft. 6 in. (1.20–1.70 m.) along its length (pl. XXXVb: p. 253, Section E²–E³); presumably these were to take the bases of the main timber frame, thus affording protection from rising damp, and may imply that Room 2 was a verandah giving access to the thickly metallated courtyard on this side, seen on p. 251, Sections A³–A⁴ (17), A⁵–A⁶ (13); p. 254; Section H–H¹ (10).

The building, like its predecessor, lay end-on to the street, from which it lay 6–7 ft. (2 m.) back. Contemporary with House 3 A and at the edge of the street ran a wooden water-pipe, in the trench of which two iron collars were found *in situ*, 6 ft. 6 in. (1.98 m.) apart (p. 251, Section D–D¹, p. 254, Section G–G¹).

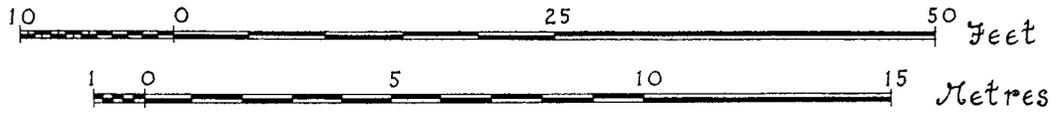
DATING EVIDENCE FOR BUILDING 3 A

LAYER	SAMIAN
C VII 7 Gravelly surface below building	33 S.G. Flavian 18/31 stamp probably T(?) VSF (?Aretus) C.G. Trajanic-Hadrianic
C XII 21 Make-up	18/31 ?stamp C.G. probably Trajanic-Hadrianic
D VI 43 Building level outside building	27 S.G. Flavian 18 illegible stamp, probably Trajanic
D VIII 18 Make-up	37 S.G. <i>c.</i> A.D. 70-85 37 (two) S.G. <i>c.</i> A.D. 80-100 (D 73) 18 (two) S.G. Flavian 18/31 Trajanic
D XXII 5 Make-up	18 S.G. Flavian
6 Make-up	37, 15/17, 18R, 33 S.G. Flavian
7 Make-up	37 S.G. A.D. 75-90 37 C.G. probably Hadrianic
D XXIV 10 (=17 on Section A ³ -A ⁴) courtyard metalling	36 S.G. Flavian 18/31 C.G. probably Hadrianic
12 (=19 on Section A ³ -A ⁴) Occupation below courtyard	29 (two) S.G. A.D. 70-85 37 S.G. A.D. 85-110 15/17, 18 (two), 35/36 (two) S.G. Flavian 18 C.G.(?) (?)Trajanic
16 (=12 above)	
21 Occupation below 12	29 S.G. Flavian 30 S.G. A.D. 60-75 37 S.G. A.D. 80-100 24, 27, 33 S.G. Flavian 37, 18 C.G. Trajanic

Coarse pottery below the building included an Oxford-region mortarium-flange (A.D. 100-50), Nos. 1740-1 (types dated respectively *c.* 90-130 and 100-50) and Type 655 (a jar not hitherto found at Verulamium earlier than *c.* 135, but not ineluctably tied to precisely that date of appearance).

On this evidence it seems probable that Building 3 A was built *c.* 130-35 and perhaps nearer 130 than 135 in view of the scarcity of Hadrianic samian. If so it is interesting that that should be *c.* 25 years after the erection of 3 B; for as was shown in Volume I the life of timber-framed buildings could not be expected to exceed 25-30 years, and the range of shops in Insula XIV of Period II B were shown to have been built *c.* 105 and demolished *c.* 130.

BUILDING XXVIII, 3



-  WHITE CONCRETE FLOOR
-  CLAY & CHALK FLOOR
-  CLAY & GRAVEL FLOOR
-  GRAVEL
-  SOCKET FOR UPRIGHT

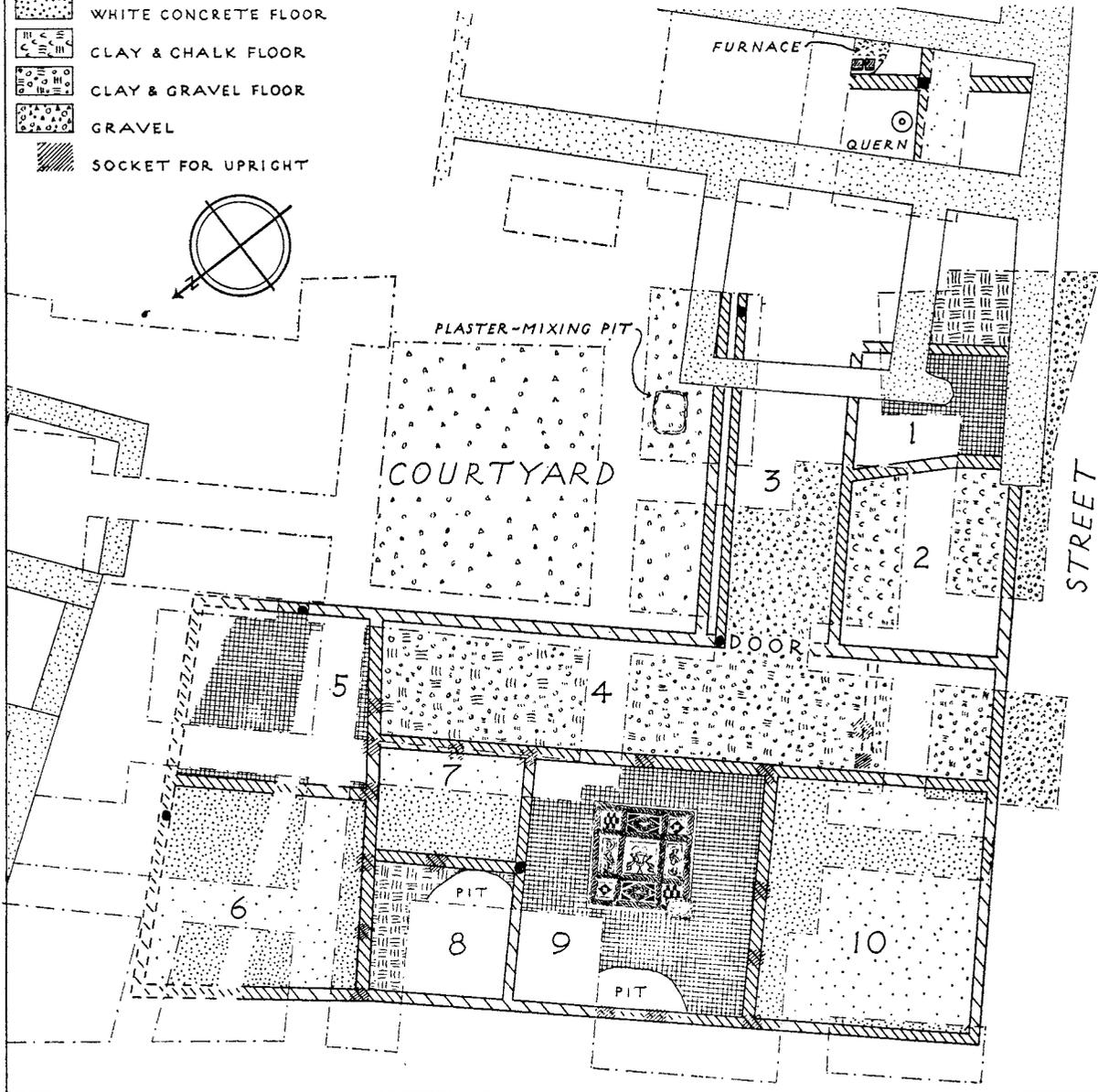


FIG. 95. c. A.D. 150-5 (scale 1:150).

Building XXVIII, 3 (figs. 95, 96, 98)

Above Building 3 A lay Building 3. It was a completely new structure, no mere reconstruction and enlargement of its predecessor, as Building 3 A had been of 3 B. Except on the north-west front (from which, presumably, work began) its walls lay in completely different positions, as can be seen on fig. 94, where the sockets dug into the floors of the earlier building for its main timbers are shown for comparison with fig. 95; and even on the north-west front the precise line became obscured in Room 6 (p. 253, Section E-E¹). The south-west frontage was advanced right to the street edge, and the old pipe-line now lay buried below the floors of Rooms 1, 2, 4, and 10 (p. 251, Section D-D¹; p. 254, Section G-G¹). Section J-J¹ shows the position under Room 10, where the wall is built on a layer of road-silt (13). The house is L-shaped, with timber-framed walls and with floors in the main of less durable materials than those of its predecessor. Its north-west wing measures 59 ft. 6 in. by 28 ft. (18.14 by 8.53 m.): the wing adjoining the street is at least 28 ft. (8.53 m.) long by 22 ft. 6 in. (6.86 m.) wide. This wing could not be pursued to its end in 1958 because of the fence of the newly made road (fig. 98, '1957 Fence'). In 1957 traces of contemporary timber-framed building (p. 243) were found below Building XXVIII, 1, Room 2 and are shown on fig. 95. They do not conform in size or plan with the walls of Building 3, and it seems probable that the south-west wing of the latter never much exceeded in length the 28 ft. (8.53 m.) revealed.

Room 1 had a plain red tessellated floor containing random white limestone tesserae such as composed the complete floor of Room 5; Rooms 6, 7 and 10 had floors of coarse white concrete or cemented gravel. Apart from Room 9 the remainder were floored in coarser materials, Room 2 with chalk and clay, Room 3 with gravel, Room 4 with clay and gravel and Room 8 with clay. Room 4 had been refloored with a thin layer of clay (on which were some lead clippings) to seal a layer of charcoal on the original floor of clay and gravel (p. 251, Section A¹-A² (12)). Room 9 itself contained a mosaic panel measuring 7 ft. 8 in. by 8 ft. (2.33 by 2.44 m.) surrounded by a wide band of white limestone tessellation. The panel (pl. XXXVI) has a central square depicting a cantharus from which two jets of water fall on two dolphins leaping through its handles; around are eight square or oblong sections containing geometric motifs. This panel was removed to the Museum after being raised and rolled up by a method¹ making use of a plastic adhesive supplied by Imperial Chemical Industries Ltd. The cantharus and dolphins motif is repeated on a mosaic fragment found in 1930-34 in Building IV 10 which was dated to the mid second century,² and is, therefore, contemporary with the present example. Dr. D. J. Smith has commented on the growing body of evidence at Verulamium and Colchester for a second-century *officina* of mosaic-workers;³ no doubt these pavements came from their pattern-books. A small rectangle measuring 1 ft. 4 in. by 2 ft. (0.41 by 0.61 m.) was missing from the mosaic and had been patched with clay. Although it is not uncommon at Verulamium to find large portions of mosaics—especially fourth-century ones, whose tesserae were shallow—to be missing through long wear and lack of maintenance, such explanations fail in the present instance:

¹ Described in *Antiquity*, xxxii (1958), 116-19.

² Wheeler, *Verulamium*, pl. XLVII, and p. 147.

³ *Arch. Journ.* cxxiii (1967), 40-42; *La Mosaique Gréco-Romaine*, ii (1975), 288.

for the rest of the floor is in excellent condition and (as will shortly be shown) the interval between the construction of the house and its destruction by fire was little more than five to ten years. It, therefore, seems likely that the scar was intentionally cut for the reception of a rectangular object such as an altar or large candelabrum-base.

The walls were of timber-framing with clay infill sometimes reinforced with vertical fragments of tile and then plaster-faced. Fig. 96 A shows a well-preserved piece, where the wall-clay is still solid, and the timber socket full of loose burnt daub; in fig. 96 B there is an exceptional number of tiles possibly placed there to reinforce the corner of Room 10, close to which this feature occurred. A contemporary shallow pit for mixing plaster was found in the courtyard outside Room 3. Two parallel trenches 6 in. (15 cm.) apart bounded the north-east side of this room. No structural purpose is served by the outer line, which is best interpreted as a plank-lined drain. There was evidence that some at least of the principal vertical timbers rested on squared pieces of plank. The sockets cut for them on the floors of Building 3 A below (fig. 94) measured *c.* 1 ft. 3 in. (0.38 m.) square, and in some cases their edges were sealed by the borders of the floors of Building 3 (as indicated on fig. 95). The uprights themselves where measurable were never more than 9 in. (23 cm.) square; their spacing where best preserved was *c.* 4 ft. 9 in. (1.45 m.) centre to centre. The evidence of the wall-plaster (pls. XXXVIII, XXXIX) shows that Room 9 was rather over 12 ft. (3.66 m.) high and Room 3 at least 9 ft. (2.75 m.). Nine ft. from the south-west end of Room 4 one of the square sockets was found not to be in alignment with Wall 4/10. No partition at right-angles to this wall had been observed in the floor of Room 4, but it is possible that a door may be indicated. An infant-burial, loosely associated with third-century sherds, was found in the north-west wall-trench of Room 10.

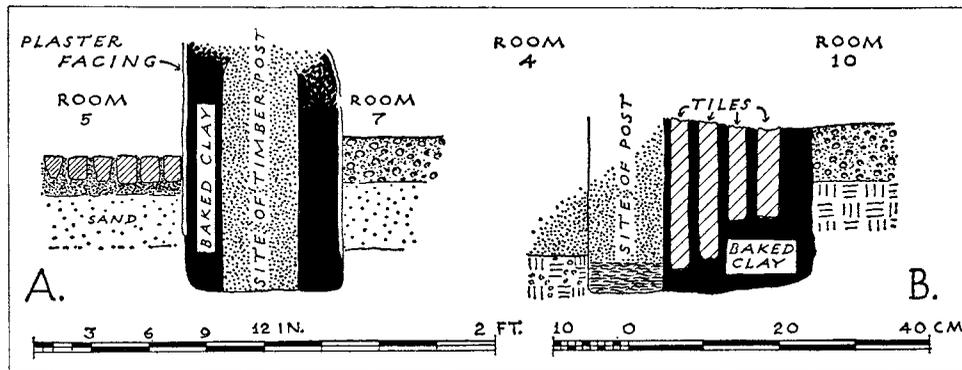


FIG. 96. Insula XXVIII, timber-framed Building 3: Sections showing details of wall-construction preserved in the Antonine fire (A, Wall 5/7; B, Wall 4/10) (scale 1:10).

The house, as already stated, was destroyed by fire, and all floors were buried beneath a thick deposit of burnt clay and timber-framing, derived from the collapse of the walls (p. 251, Section A¹-A² (9)). Unlike the position in Insula XIV, here virtually no finds of

pottery or objects were made in the burnt debris—the exception being a single pot from Room 3. It seems clear that the owner had sufficient warning of danger to evacuate his goods and furniture. In Rooms 9 and 3 fairly continuous horizontal sheets of wall-plaster were encountered (p. 254, Section E¹–G), which showed that large sections of wall had fallen over in one piece once the fire had devoured the base of their timbers. Techniques had already been developed at Verulamium by Dr. Norman Davey for the rescue and reconstruction of such sheets of fallen decoration and these were successfully applied here. Part of the north-east wall of Room 9 is shown on pl. XXXVIII; it had fallen across the mosaic, and can be seen in section on pl. XXXVI*a*.

Experience soon showed that it was easier to lift plaster lying face-down than plaster with its painted face exposed. In Room 3 the south-west wall had fallen north-eastwards across the floor, as the pattern on the lower face demonstrated; here both faces survived. The upper face, with its painted side on top, accordingly belonged to Room 2. The decoration of this face fortunately turned out to be imitation marbling, a white background onto which splashes of different-coloured paints had been flicked with a brush: it was not considered worth the trouble of preserving. The upper face of the wall as it lay horizontal was rippled (pl. XXXVII*a*) where once-vertical timbers in the wall-core had decayed: they were spaced *c.* 15–16 in. (38–41 cm.) apart, centre to centre. When the upper plaster had been removed the surface of the clay infill of the wall could be seen to bear chevron-marks impressed with a stamp or roller (pl. XXXVII*b*). With the removal of the wall-core the back of the plaster face formerly adorning the south-west wall of Room 3 was exposed; it was cut into convenient blocks which, after the application of a backing of plaster of Paris reinforced with scrim, were lifted and turned over. The pieces were then treated by Dr. Davey in his laboratory in the manner described by him in *Britannia*, iii (1972), 251 ff. The restored panel (pl. XXXIX) is now in the Verulamium Museum.

It consists of a repetitive architectural pattern, consistent with the obvious function of Room 3 as a corridor. A series of painted columns *c.* 4 ft. (1.22 m.) apart and *c.* 3 ft. 6 in. (1.07 m.) high stand on a low base. Each bears a lotus-leaf capital and carries a reticulated pattern on the shaft. The intervening areas are painted to resemble panels of veined marble, and below is a dado of similar panels, 1 ft. 5 in. (0.43 m.) high. The original colours are hard to determine owing to the action of fire. The prevailing impression today is reddish-brown, recalling pieces of liver, but parts which seem to be less scorched are greenish. The panel is further discussed by Dr. J. Liversidge in Volume III.

Dr. Davey has shown that the majority of Romano-British painted walls (except those in bath-buildings) follow the normal classical pattern of horizontal division into three zones: dado, main panels, and (above these) a third zone sometimes separated from the lower ones by a stuccoed or painted cornice. We would accordingly expect a third zone here above the capitals, which may be supposed to have carried some kind of painted architrave. The corridor, however, is only 7 ft. 6 in. (2.30 m.) wide, and the wall as it fell snapped off at just about that level above its base. Parts of a floral scroll (pl. XXXIX) were, however, recovered in this room, though in a context which gave little clue to its original position. It is almost certain that the scroll is the missing topmost zone. If so, and making allowances for the architrave, it adds 3 ft. 4½ in. to the surviving 6 ft. 9½ in. (2.07 m.) giving a total height of at least 10 ft. 2 in. (3.10 m.).

VERULAMIUM EXCAVATIONS
 DATING EVIDENCE FOR BUILDING 3

LAYER	SAMIAN (All Central Gaulish unless otherwise stated)
C X 9 Make-up	27 Hadrianic
C X 10 Make-up	18/31R Hadrianic 31 Hadrianic-Antonine 33 stamp $\overline{\text{MALL}}[\text{IACI}]$ (S 59), A.D. 140-60 37 probably Hadrianic
C XIV 11 Occupation below courtyard	37 probably Hadrianic 37 A.D. 130-60 (D 74) 31, 33 Antonine 31 Hadrianic-Antonine 27 probably Hadrianic 27 stamp $\overline{\text{SILVINIM}}$ (S 60) A.D. 100-25 18/31 stamp $[\text{O}] \overline{\text{F}}\cdot\overline{\text{VERIAN}}$ (S 61) second-century
D VI 30 Make-up	18 S.G. Flavian 37 A.D. 100-25 (D 75) 37 A.D. 130-50 33 probably Trajanic
D VI 37 Make-up	18/31, 18/31R, 27, 33 Trajanic-Hadrianic 18/31 Trajanic Curle 11, Curle 15, 35 probably Hadrianic 27 stamp $[\text{CVCA}[\text{LIM}]$ (S 62) A.D. 140-70
D VIII 11 Make-up	31, 33 Antonine
D X 12 Floor, Room 4	30 S.G. A.D. 45-65 37 style of Cerialis-Cinnamus <i>c.</i> 140-70 (D 76)
D XI 4 Black fill of wall-trench	37 A.D. 140-60 Curle 11 Hadrianic
D XX 3 Burnt debris in wall-trench	18 S.G. Flavian 37 style of Laxtucissa A.D. 150-80 (D 77)
D XX 4 In surface outside Room 10	37 style of Cinnamus A.D. 150-80 27 Hadrianic 18/31 Hadrianic-Antonine
D XXIV 3 Floor in Room	35 Trajanic 18/31 stamp $\overline{\text{SACIROT}}\cdot\overline{\text{MA}}\cdot\overline{\text{S}}$ (S 63) Trajanic
D XXIV 4 Make-up	Curle 11, 18 S.G. Flavian 27, 35/36 Trajanic 33 Antonine

The latest samian sherds are as follows :

DATE	NO. OF SHERDS	DATE	NO. OF SHERDS
Antonine	5	140-60	2
130-50	1	140-70	2
130-60	1	150-80	2

The latest pieces of coarse pottery are No. 1742, a dish resembling Type 723 (A.D. 145-50) and No. 1743, a mortarium datable to 130-80. There was also a piece of colour-coated hunt-cup (No. 1744) below the mosaic. The sherd of Cinnamus which is dated 150-80 came from D XX 4, a loamy layer immediately north-west of and contemporary with Room 10, outside the building. This layer was unsealed except by topsoil, and so the sherd may be explained away as intrusive; however, a samian sherd of similar date came from D XX 3, burnt debris in a wall-trench. It seems probable that House 3 was built after 150; it was certainly built after 145. It had a short life, for the conflagration which destroyed it, although here yielding no closer dating evidence than has already been quoted (see Table above), is clearly the general Antonine fire which in Insula XIV could be closely dated to the years 155-60. In that insula buildings of Period II D were similarly short-lived, their construction date being *c.* 150. There no Cinnamus bowls appeared below the buildings although five were found in the deposits of burnt debris.

In view of the date of *c.* 130-5 suggested above for Building 3 A, demolition before 150 would be unexpected. Thus a date of *c.* 150+ for Building 3 is not unreasonable and is here adopted. There is no evidence to contradict the view that it had a very short life before it was burnt down.

Other Antonine timber buildings below Building XXVIII, 1

The north-east and south-east borders of the insula were also lined with buildings which were burnt down in the Antonine fire. No general plan has been made of them since the remains were either extremely fragmentary or extremely disturbed, or else they were insufficiently exposed to make a significant pattern. The positions are indicated on figs. 97 and 98 (cf. fig. 7, p. 11).

1. Beneath the centre of Building XXVIII, 1, Room 6 there was a fragmentary but solid *opus signinum* floor in Trenches Y I and Y II; no walls were noted but the floor was covered with burnt debris which included a large piece of painted plaster (p. 262, Section Ca-Cb).

2. Beneath Room 9 two parallel wall-trenches (fig. 97) ran 8 ft. (2.44 m.) apart. One reappeared below Room 8; the other must have ended at a partition beneath the site of the later stone wall. However, below Room 8 a third foundation-trench was found at the north-west end of the trench, only 2 ft. 3 in. (0.69 m.) from the first: this is either a floor-joist or else the foundation for a piece of built-in furniture. These remains were sealed by burnt debris, (p. 258, Sections S¹-T). Two hearths were found, one of burnt clay edged with flints and lumps of chalk, the other of *tegulae* set flange-down on clay and edged on two sides with flints and tile-fragments on edge. South-east of the first hearth a large pit had destroyed all earlier traces (p. 258, Section W-X).

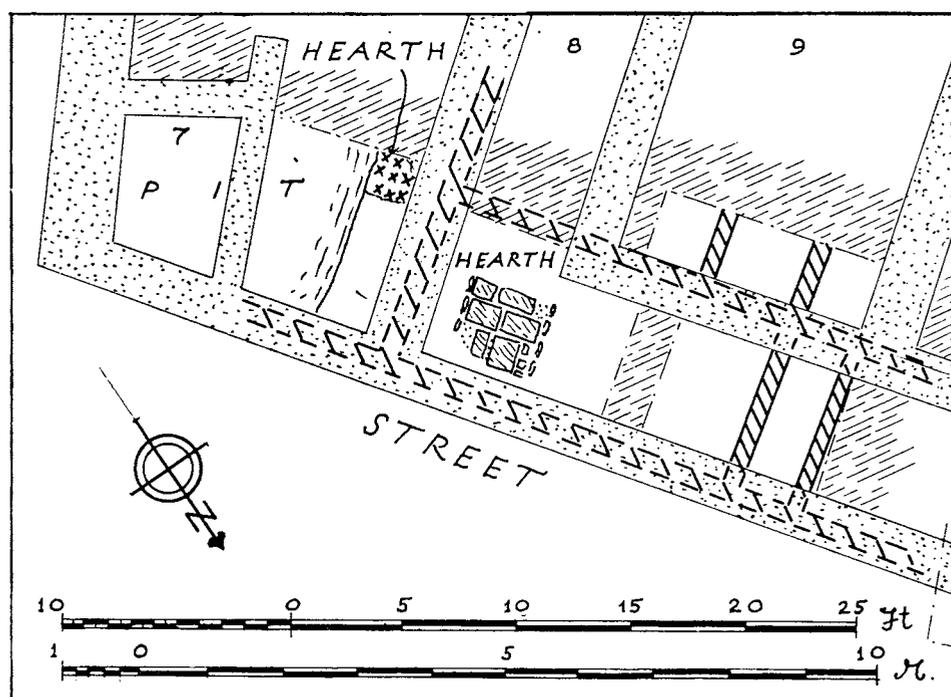


FIG. 97. Antonine timber-framed building below Building XXVIII, 1, Room 9.

3. Beneath Room 17 a layer of burnt debris (p. 257, Section Q²-Q³) sealed a foundation-trench 1 ft. 3 in. (0.38 m.) wide and 4½ in. (11 cm.) deep, in which much of a burnt sleeper-beam lay *in situ* (fig. 98). The wall-trench was cut into Layer E IV 8 which appeared to be part of a thick bed of road-silt extending from the street beyond Room 16. This bed of silt had been washed across the empty site, sealing E IV (9), an occupation-soil containing pottery down to *c.* 130 (see below). The burnt wall must have met one at right-angles below Wall 16/17, for below Room 16 the whole area examined was occupied by a floor of concrete, itself sealed by a burnt-daub layer. The floor had caved in badly over the subsided filling of an earlier well, whose filling yielded, in addition to a large group of coarse pottery, the following samian sherds:

THE WELL

LAYER	SAMIAN
E V 11	18 (two) S.G. Flavian
Well-filling	18/31, 27, 33 C.G. Trajanic-Hadrianic
E V 12	18, 27 S.G. Flavian
Well-filling below 11	18/31 (two) C.G. Trajanic-Hadrianic Curle 11 C.G. probably Trajanic-Hadrianic

Among the coarse pottery were two reeded-rim bowls (Nos. 1745-46) of a type which starts *c.* 125-30 and other pottery of comparable date-range. The well accordingly was filled in during the period 125-45, very likely *c.* 130, and possibly, therefore, at the time when the adjacent street was being laid out (pp. 88-9).

DATING EVIDENCE FOR DEPOSIT OF STREET-SILT FROM STREET XIV/XXVIII

LAYER	SAMIAN
E II 11 Layer below silt	37, 18, 27 S.G. Flavian 18/31 C.G. Trajanic-Hadrianic
E IV 10 Layer below 9	27 S.G. Flavian
E IV 9 Layer below silt	18 S.G. pre-Flavian 27, 18/31, Curle 15 C.G. Hadrianic
E II 10 Street silt	18/31, 31, Curle 22 C.G. Trajanic-Hadrianic
E III 9 Street silt	37 C.G. <i>c.</i> A.D. 110-40 18/31, 36 C.G. Trajanic or Hadrianic 31 C.G. Hadrianic
E V 9 Street silt	30R C.G. second-century 18/31, 33 C.G. Hadrianic 33 C.G. Hadrianic-Antonine

4. There was also a building below Rooms 1 and 2, occupying the south corner of the insula. Below Room 2 (figs. 95, 98) two wall-trenches intersected not quite at right-angles. They contained oak sleeper-beams 6-7 in. (15-18 cm.) wide (p. 261, Section Aa-Ab) and at the intersection was a vertical timber 6 in. square driven into the ground to the depth of 1 ft. (15 cm.). Plaster painted in red panels separated by narrow white bands was found among the burnt debris. In one room lay the lower stone of a quern of Niedermendig lava. It had been shattered by the heat and had evidently fallen to the floor since it overlay some burnt daub. In another room was part of a furnace lined with *tegula*-fragments; pieces of vitrified slag were found (but were accidentally discarded). All four rooms had floors of clay, or clay and flints.

Beneath Room 1 what was probably part of a timber floor was found (p. 261, Section Z-Z¹, (13)). Below the burnt debris was a series of parallel depressions, heavily burnt, in the layer below. They were rounded in section and 3-4 in. (7.5-10 cm.) across, as if a timber corduroy or floor of split logs had been burnt. Unfortunately at this level the main part of Trench W II was heavily distorted by subsidence of the upper fillings of two large pits (p. 259, Section Y-Y², Pits A, B). These had been dug through the Antonine building and also through the edge of the street, and are thus intermediate in date between *c.* 160 and *c.* 220, at which time they were sealed below Building XXVIII, 1. The filling contained much

burnt material. Pottery in the lower filling was not plentiful, but suggested that the pits had been dug soon after the fire: the upper levels of make-up (Layers 6, 11 A, 15, etc.) contained two mortaria of A.D. 160–240 and one of 170–240 (Nos. 1747–49). It seems probable that much make-up had to be poured in at the time of the building of XXVIII, 1. But it is not easy to see why two pits should have been dug in just this position, encroaching on the street. The period of dislocation after the fire might seem the best context. Unfortunately not enough is known about them to warrant their identification as wells.

B. BUILDING XXVIII, 1

After the Antonine fire, no building took place in this part of the insula for over fifty years. Certain activity was observable for the sections—e.g., A¹–A⁴ (fig. 102, below the courtyard), and Z–Z¹ (fig. 109, below Room 2)—show that in some areas a thin layer of chalk was laid down over the burnt debris: but no buildings accompanied it. Below Rooms 3 and 4, (Section Z¹–Z²) there was a thin layer (VII, 5; XI, 4) of crushed tile and puddled chalk above it. It is probable that this is a working surface in use while the walls were being built and before the layers of make-up were inserted.

Building XXVIII, 1, the first masonry building in the insula, was built of flint and mortar. It had its main frontage on Street XII/XXVIII, the side facing the forum, and occupied the entire length of the insula (111 ft. 6 in.—33.98 m.) here; it was of one build with the sewer which ran along its front. The north-east side, 105 ft. 4 in. (32.10 m.) long, conformed with Street XIV/XXVIII, thus forming an obtuse angle at the east corner. The south-west side faced Street XXVII/XXVIII, which it accompanied for 61 ft. (18.59 m.). The building is thus roughly L-shaped, but there are indications that it was incomplete on the south-west side, where the final length of walling lacks function in its present form. The imprint of a wooden peg was found moulded in the mortar of its terminal face. A result of this determination to occupy the fullest available space was a certain irregularity of plan, seen especially in Room 6 and in the south-west ends of Rooms 1 and 2; on the whole, however, the building has been successfully adapted to its site. The main walls were well built, normally to a thickness of 2 ft. 3 in. or 2 ft. 6 in. (0.69 or 0.76 m.) on wider foundations (often considerably if erratically wider, see pls. XLIIa, XLIIIa) which were carried down to natural subsoil. At ground level a triple tile-course survived in places (pl. XLIIIa); elsewhere it had been robbed. On the south-west side of Room 1 it did not pass right through the wall, but occupied the outer two feet, as the impressions of robbed tiles showed. Five large rectangular blocks of limestone (*c.* 1 ft. 8 in. by 1 ft. 3 in. by 1 ft. = 0.51 by 0.38 by 0.30 m.) were found loose on the site, three in a large medieval disturbance and two apparently dislodged from the walls of Room 7 (*cf.* pl. XXXVa). These would suggest that parts of the superstructure were in large ashlar. The foundations were trench-built below Antonine ground-level, but the level of the floors had been raised above this by about 2 ft. (0.60 m.) of build-up (pl. XLIIa). This make-up was largely the product of foundation-trenches and of excavation for the basement and it contained mainly residual material. An additional reason for raising the floor-levels, apart from the disposal of waste soil and the need to approximate to contemporary street-surfaces, was to provide head-room in the underground corridor (Room 11) which had been sunk into the natural subsoil to a depth of only *c.* 4 ft. (1.07 m.). A result of this raising has

been the loss of most of the floors of the building to later cultivation. Outside Room 13 a large plaster-mixing pit (5 ft. 6 in. by 5 ft. 3 in. = 1.67 by 1.60 m.) was found cut into the courtyard metalling.

In plan the building comprises two portions. That to the north-west has something of the appearance of a small tripartite winged corridor villa. Corridor 15 evidently gave access to the courtyard, and Room 13, an addition to the structure, can be identified as a porter's lodge servicing this entrance. A second approach to this part of the building was by way of Corridor 2 and its continuation at ground-floor level over the basement Room 11. Here also was a porter's lodge, Room 12, servicing a door leading to Street XXVII/XXVIII. A third corridor (8) seems to indicate that Rooms 9 and 10 were also part of the domestic quarters. The main domestic block consisted of two corridors (15, 21), six rooms and a passage or stairwell (17). Several of the walls were notably substantial, up to 3 ft. (0.90 m.) thick on wider foundations: there would be no difficulty about providing an upper storey (fig. 99). Three of the rooms were heated. Room 22 had a normal hypocaust of tile *pilae*; from this the heat seems to have been fed successively into Rooms 19 and 18, both of which had unusual channelled hypocausts in the form of a Union Jack radiating from central distribution-boxes; the channels in Room 18 consisted of tubes made of *imbrex* tiles assembled to form pipes (fig. 98) and those in Room 19 of box flue-tiles placed end to end (p. 257, Section O-P).

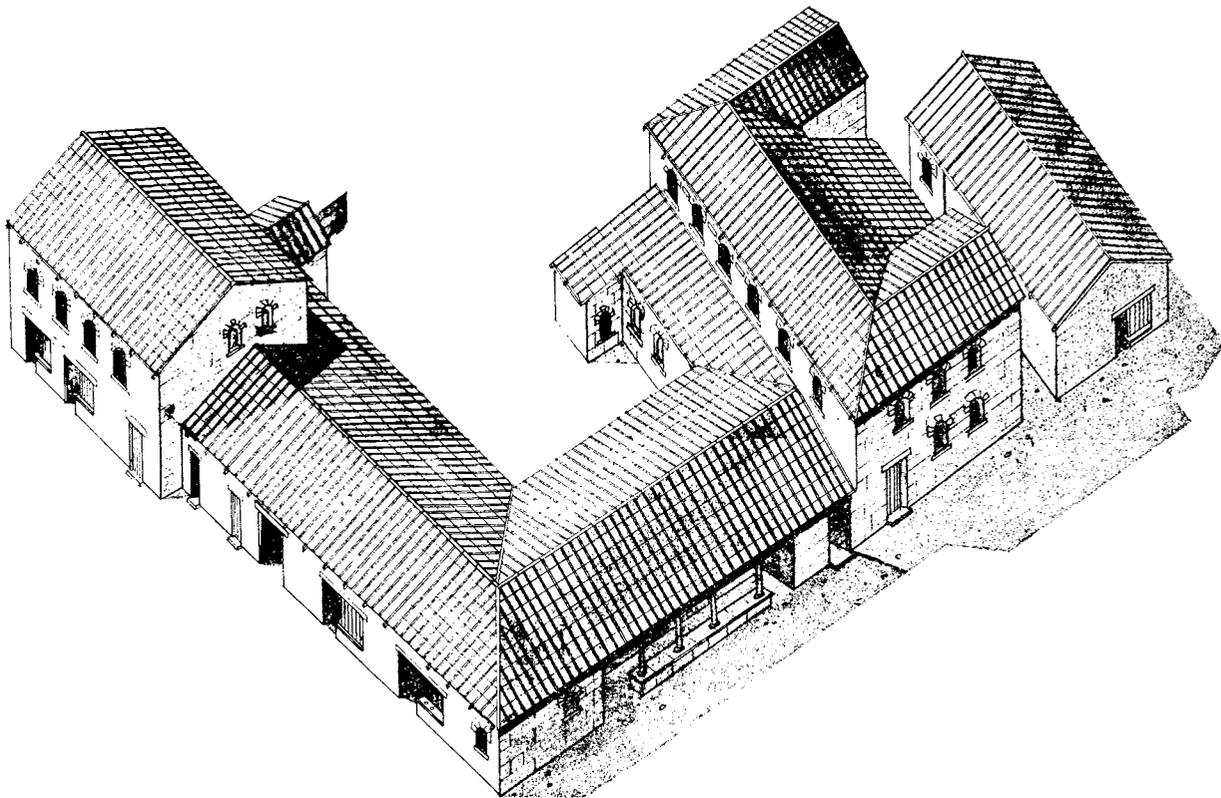


FIG. 99. Reconstruction of Buildings XXVIII, 1 and 2
(drawn by J. C. Randall).

Both rooms were much disturbed by robbing, but a few rows of red tesserae survived in Room 19. Apart from traces of a concrete floor in Room 21, the highest surviving levels in the remainder of this part of the building were the tips of make-up below former floors. The stoke-hole for these hypocausts was not found: it must lie on the north-west side of Room 22. Fragments of iron collars for a water-pipe suggest that a pipe-line once ran outside Rooms 19 and 22 in this direction, but the pipe-trench itself was not recognized except in Trench C VIII (p. 255, Section M¹-M² (11)), where it ran on top of the offset. Its destination may, however, have been Building XXVIII, 2.

The remaining portions of the house, comprising Rooms 1-7 along the south-west frontage, do not present the same domestic character. Room 1, indeed, had a floor of coarse red tesserae, and nothing was found to indicate its function. The tessellated floor was very worn and partly missing, and it had dipped alarmingly into subsidences. The most noticeable occurred over two earlier pits (p. 259, Section Y²-Y³, Pits A, B), and lay midway along the south-east wall of the room. As proximity to the wall would otherwise have been expected to protect this part of the floor from excessive traffic, the sinkages might be held to suggest a wide entrance at this point: it cannot be a certainty since liability to sinkage would depend very much upon the nature of the pit-fillings beneath. Whether or not this room opened onto Street XXVII/XXVIII, it is at any rate remote from the rest of the dwelling and is likely to have had a distinct function, perhaps as a shop. The hollows in the floor had been made good with a packing of broken tiles and mortar. Whether it was these subsidences which alarmed the owner or whether more serious cracks developed in the superstructure (and an unexplained fissure about 1 ft. wide was found running through the upper surviving part of the exterior south-west wall 20 ft. (6.10 m.) from the south corner of the building), three rectangular buttresses were added to the south-west wall and a sloping ramp of puddled chalk had been piled against the wall (p. 259, Section Y²-Y³; p. 261, Section Ba-Bb), reducing the usable width of Street XXVIII/XXVII from 27 to 20 ft. (8.23 to 6.10 m.). The corridor (2) had a tessellated floor disturbed in places. Below this (p. 261, Section Aa-Ab (3)) was a thick 'floor' of mortar, on which lay a mass of chipped tiles, clearly waste from the manufacture of tesserae. Layer 3, then, is no doubt a builders' spread rather than the true original floor. Room 3 was a passage, vestibule or stair-well 6 ft. (0.91 m.) wide. Room 4, where a poor *opus signinum* floor partly survived, was divided by a central tile-floored drain 3 ft. 3 in. (1 m.) wide which entered the room from the north-west side after having passed behind the end wall of the basement (Room 11) at a level about 5 ft. (1.37 m.) above its floor; here the drain rested on a make-up of mortary flint rubble extending down to the level of the basement floor. It was clear that both had been constructed together in the same excavation. The drain had been flushed by water supplied by two pipes whose trenches converged from the north-west (fig. 98, plan; p. 255, Sections E²-L, M¹-M², N-N¹). In one of them iron collars for connecting lengths of wooden pipe were found. None were found in the other, which conceivably could have contained a lead pipe, since robbed, to bring the overflow from a public fountain near the theatre. On emerging from the south-east side of the building the walls of the drain converged (pl. XLIIb) as if to quicken the flow as it discharged into the main sewer. Within Room 4 the drain walls at only 1 ft. width (0.30 m.) were in clear contrast with all the other walls of the building save that of Room 7; they almost certainly supported the seats of a latrine. The top two surviving courses of the unrobbed one (p. 261,

Section Z¹–Z²) were fixed in pink mortar containing crushed tile but no pebbles, which contrasted with the normal yellow pebbly mortar and was found nowhere else in the building.

The room was 20 ft. 6 in. (6.25 m.) long, which at 2 ft. (60 cm.) per seat would allow accommodation for nine to ten persons, or double that number if the seats were arranged back to back as the width of drain allows. Accommodation on such a scale undoubtedly suggests a public latrine entered from the street; and consequently we may suppose two rooms, affording separate provision for the sexes. Room 3 may have been reserved for the attendant. If it is thought strange that such arrangements should be provided in a private house, at least they are remote from the domestic quarters. There is evidence that this form of enterprise could yield profits in the ancient world,¹ and nothing else will explain the provision here. Facing the forum the place will not have lacked custom.

What is certainly a second latrine, this time a two-seater, can be identified in Room 7. Here, despite much robbing, two chutes were found (pl. XLIa) giving directly into the sewer. The width of the room was c. 5 ft. (1.52 m.). Its north-west wall was narrow (p. 258, Section W–X); it had a triple tile-course bonding the corner; on the internal face at the surviving top a single narrow course of tile ran halfway along the wall's length and was seated obliquely like the haunch of an arch (pl. XLa). As disturbance had occurred to below floor-level it is difficult to be sure of the precise arrangements within Room 7, and in particular the purpose of this skewback. If it had supported seating of a latrine along the north-west side, one chute into the sewer should have sufficed: the presence of two surely implies two seats along the south-east wall.

The wall of the sewer and that of Room 7 were of one build, and proved that the sewer was of the same date as the house. Opposite Room 4 the sewer is seen swinging away from the building, evidently to cross the street: it may, therefore, be identified with the similar sewer found on the opposite side near the north-west wall of the forum (p. 58). At Room 7 it had a width of 2 ft. 2 in. (0.66 m.) with side-walls up to 3 ft. high (eight well-built courses of flint); thirty feet further east at Building XIV, 3 it had a width of 2 ft. 6 in. (0.76 m.) and was standing to a height of 3 ft. 4 in. (1.01 m.). The side-walls were 1 ft. 7 in. and 2 ft. wide.

Room 6 was much disturbed (p. 262, Sections Ca–Cb; Ea–Eb), and little was learnt of its purpose. A drain with tiled arch 18 in. (46 cm.) wide, and chute, led into the sewer through the north-east wall (pl. XLIb), but its connections within the room had been robbed away. Since a third latrine is unlikely, we must suppose the room was intended for some industrial or commercial process requiring disposal of a good deal of water. The south-east wall itself was badly cracked, apparently through the robbing of tile-courses by a party working along the sewer (pl. XLb). Its foundation-trench had cut through an early second-century layer containing a large fragment of moulded column-base of white limestone which it had truncated (pl. XLb), as well as a fragment of cornice and several other large but very decayed pieces of the same stone. The base, of Attic style (fig. 100), is calculated to be 5 ft. 2 in. (1.57 m.) in diameter and the drum above it c. 4 ft. 5½ in. (1.35 m.); on Vitruvian standards a column 31 or 40 ft. (9.45 and 12.19 m.) high, depending whether the order was Corinthian or Ionic, is implied. These fragments have no connection with the embellishment of Building

¹ Juvenal, iii 38, *conducunt foricas*; cf. Suetonius, *Divus Vespasianus*, 23, 3 and Dio, lxx, 14 on Vespasian's tax on urinals. In that case extra profits could be made by selling

the urine to fullers and tanners, but there is no evidence for that practice in the present instance.

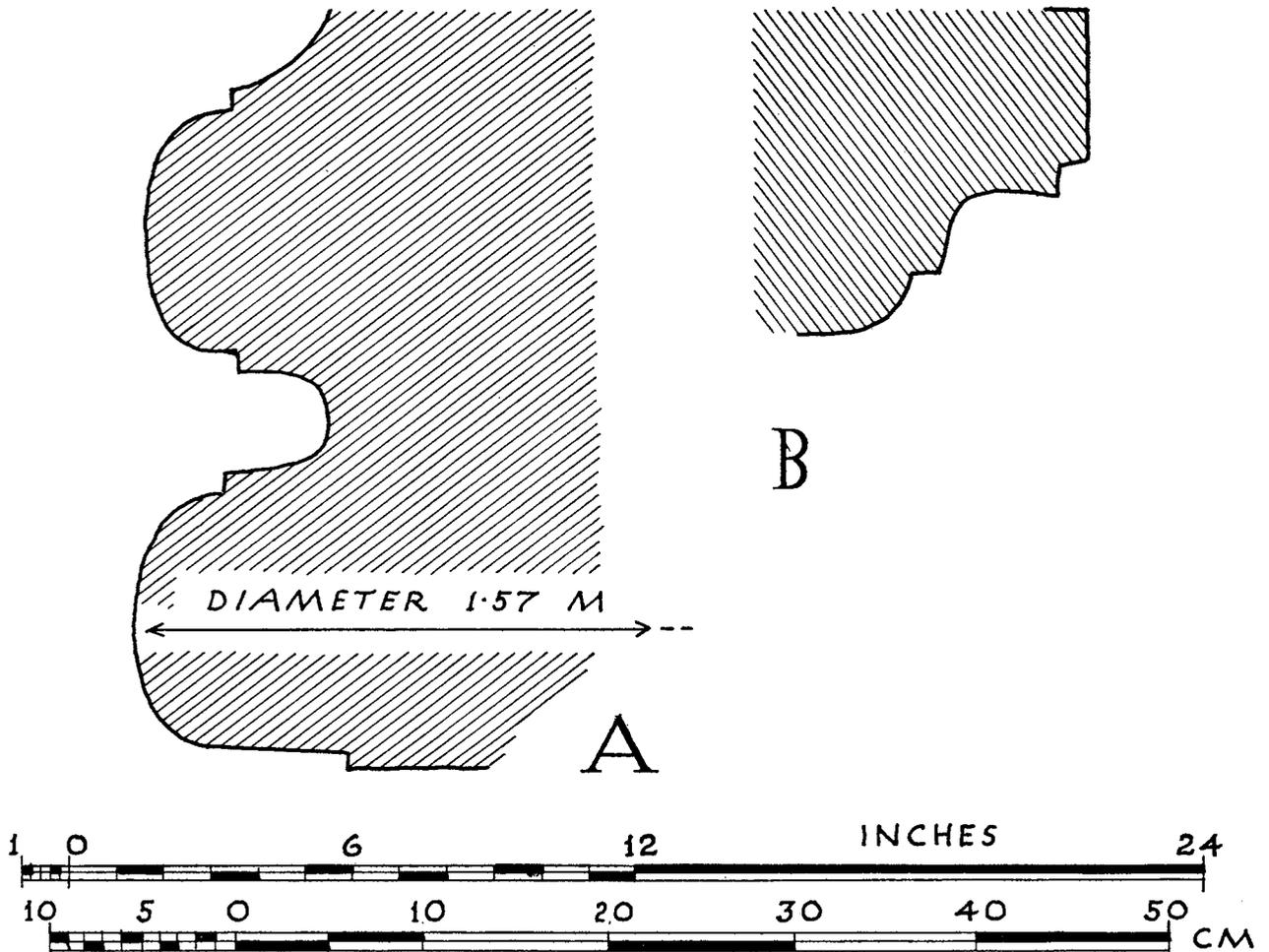


FIG. 100. Column-base and cornice-fragment from below Building XXVIII, 1, Room 6 (scale $\frac{1}{4}$).

XXVIII, 1, and are presumably broken fragments discarded during the construction of the Flavian basilica across the street—or, just conceivably, they are rubbish from whatever pre-Flavian predecessor stood on that site. A piece of fluted column was recovered later from road-construction work by the Museum authorities near Building XXVII, 3.

Room 11 was an L-shaped underground chamber 8 ft. (2.44 m.) wide, each arm being 42 ft. 9 in. (13 m.) long. It was entered from Street XII/XXVIII down a sloping ramp (Room 5) (p. 262, Section Fa-Fb). The whole of this end of Room 11 had been badly robbed. A threshold of *opus signinum*, the basis of a tiled step, survived (pl. XLIVa). The original ramp in Room 5 does not seem to have reached the level of the basement floor, and this is certainly true of a later reconstruction (Section Fa-Fb, 'Ramp 2'). A square post-hole, just inside the basement, probably represents the support of a secondary wooden step used to give access to Ramp 2.

To the left on entering was a cul-de-sac, 7 ft. by 7 ft. (2.13 by 2.13 m.) from which the badly robbed remains of a second ramp led upwards to the courtyard. The remainder of the

basement was less seriously robbed (pls. XLIII*b*, XLV). Its walls in general stood *c.* 6 ft. (2 m.) high, their surviving tops being *c.* 5 ft. (1.50 m.) below modern ground-surface. The south-east wall contained four semicircular niches with corbelled semi-domes of tile, doubtless for lamps (pl. XLV; p. 263, Section Ga–Gb). Round the corner the corresponding north-east wall had been robbed below niche-level for some distance; but at the north end two rectangular niches (which did not survive to their tops) were found. Both of these walls carried a double tile-course at the level of the niche floors, and there were indications of single courses at higher levels. The opposite wall in each section of the basement had no tiles (save for the quoin at the corner) in the surviving masonry; but its flat top yielded indications of a tile-course, now robbed, at a height of *c.* 6 ft. (2 m.). Instead both sections of the wall for their full surviving length carried a row of oblong holes 2½ in. wide by 3½ in. high (5.71 by 8.89 cm.) and *c.* 4 ft. (1.22 m.) apart, running 12 in. (30.5 cm.) into the wall, at a height of 5 ft. (1.53 m.) from the floor (pls. XLIII*b*, XLIV*b*; p. 263, Section Ga–Gb). These sockets revealed the grain of wood and had once held built-in timbers. At first sight the arrangement suggests a line of shelving; but since the corridor is only 8 ft. wide it is plain that shelves or cupboards would impede movement.¹

The far end of the basement contained an apsed niche (pl. XLVI), 6 ft. 3 in. (1.90 m.) in diameter and once 6 ft. 6 in. (1.98 m.) high to the crown of its corbelled semi-dome; its floor was 2 ft. 3 in. (0.69 m.) above the floor of the basement. The cheeks of the niche were constructed in tile and there was a tile offset each side at the level of the base of the apse; underneath it projected 1½ in. (3.81 cm.) from the wall-face, and on the upper surface it came in 2 in. (5.08 cm.) and then 1 in. (2.54 cm.) with successive tiles to the line of the cheek (fig. 101, pl. XLVI*b*). Such an architectural feature is unexpected. It provides a focus at the end of the 42-ft. length of the second arm and is large enough to have housed a life-sized statue.

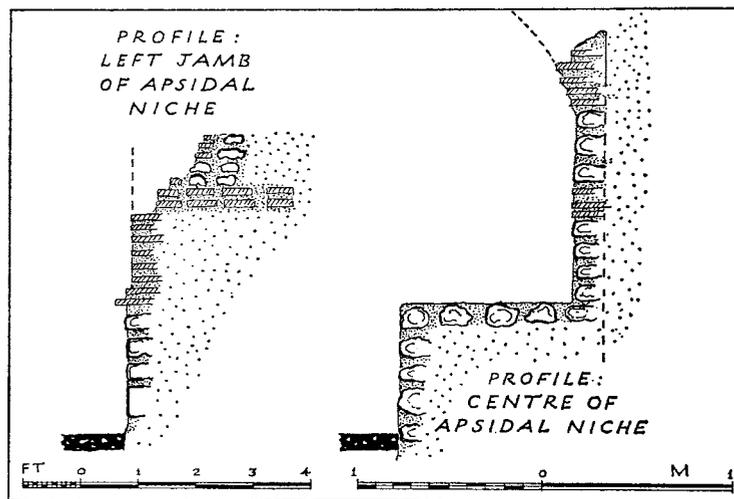


FIG. 101. Building XXVIII, 1 (scale 1:40).

¹ There were also two putlog holes capped and floored with tile at a height of 3 ft. 10 in. (1.17 m.) above the floor 11 in. (0.28 m.) below the sockets, and 6 ft. 11 in. (2.11 m.)

apart in the length of wall adjacent to the apse (pl. XLVI*a*). They were 5 in. square (12.70 cm.).

The function of the projecting tiles would be to seat applied decoration such as sheets of marble inlay or to form the core of plaster mouldings. But these embellishments had never been provided. The walls were beautifully pointed and very fresh-looking (pl. XLIV*b*), but had not been plastered. The impression was gained that the room had been designed as an underground shrine, but left unfinished. The impression of incompleteness is strengthened by indications of unfinished work already mentioned on the south-west side of the building (p. 244): possibly the owner died before his plans were fully carried out, and work ceased. Whether or not the basement was intended for a shrine, the brackets anchored in the wall were certainly an original feature; they might have been intended to carry a framework for tapestry. Alternatively, if they really were designed for shelving, the basement was a store from the beginning and the apse unexplained. If a shrine was intended, it was clearly for a secret cult. The remains suit neither Mithraism nor Christianity, but in the absence of any kind of further evidence (save that converts existed among the wealthy), it is pointless to speculate upon its identity.

The basement had a long life. A thick layer of occupation-material (p. 265, Section Ha-Hb (5)) had accumulated on the *opus signinum* floor; equivalent layers in the other arm yielded a coin each of Victorinus (A.D. 268–70) and Quintillus (270) together with a barbarous radiate. It seems, therefore, that the basement had been kept in good order for about fifty years before dirt began to accumulate. By the last quarter of the third century, however, repairs had become necessary, for this occupation-layer contained parts of tiles mortared together and pieces of mortar apparently from a small arch such as a window-head. Possibly the floor of the corridor above had had to be taken out for replacement. Above Layer 8 came scanty traces of supplementary flooring (4), and a final layer of occupation-material (2). The same sequence can be seen in Section Fa-Fb and Section Ga-Gb, save that in the latter the lowest layer of deposit is described as yellow clay, and there is a final trodden surface above the second occupation-layer. The uppermost, latest, layer of occupation yielded coins down to *c.* 360 (see Table on pp. 263–5) and also a good deal of tile-debris, including what looked like three *pilae* of three tiles each still mortared together. The source of these is uncertain; the nearest pillared hypocaust is in Room 22. Above the highest occupation-layer came the main deposit of rubble derived from demolitions. It contained 107 coins: a further nineteen were found in rubble disturbed by medieval robbing, but include none which are critical for the dating. The source of these coins is difficult to imagine; they do not appear to be a scattered hoard, for though the greater part came from Trench Y III (the north-eastern half of the first arm), a large number were also recovered in Trench E I (near the apse) and others in the area of the entrance. The coins ran in great bulk down to *c.* 360 (see Table, pp. 263–5) but also included one of Julian (360–63), two of Valens and three of Valentinian I. It is interesting that four of the last five coins were minted between 364 and 367, and one (of Valens, *LRBC* 297*a*) probably in 368. Thus it appears that the cellar was disused and filled in *c.* 368–70 and that this may have involved the demolition of at least the front part of the house: this would be an obvious source for the vast quantity of building rubble. The years 367–68 were years of crisis in Britain, but there is no indication that Verulamium was sacked. It would be possible to suppose that the then owner came to grief through involvement in the conspiracy of Valentinus¹—but the hypothesis is unsafe

¹ Ammianus Marcellinus, xxviii 3; cf. A. H. M. Jones *et al.*, *Prosopography of the Later Roman Empire*, s.v. Valentinus 5.

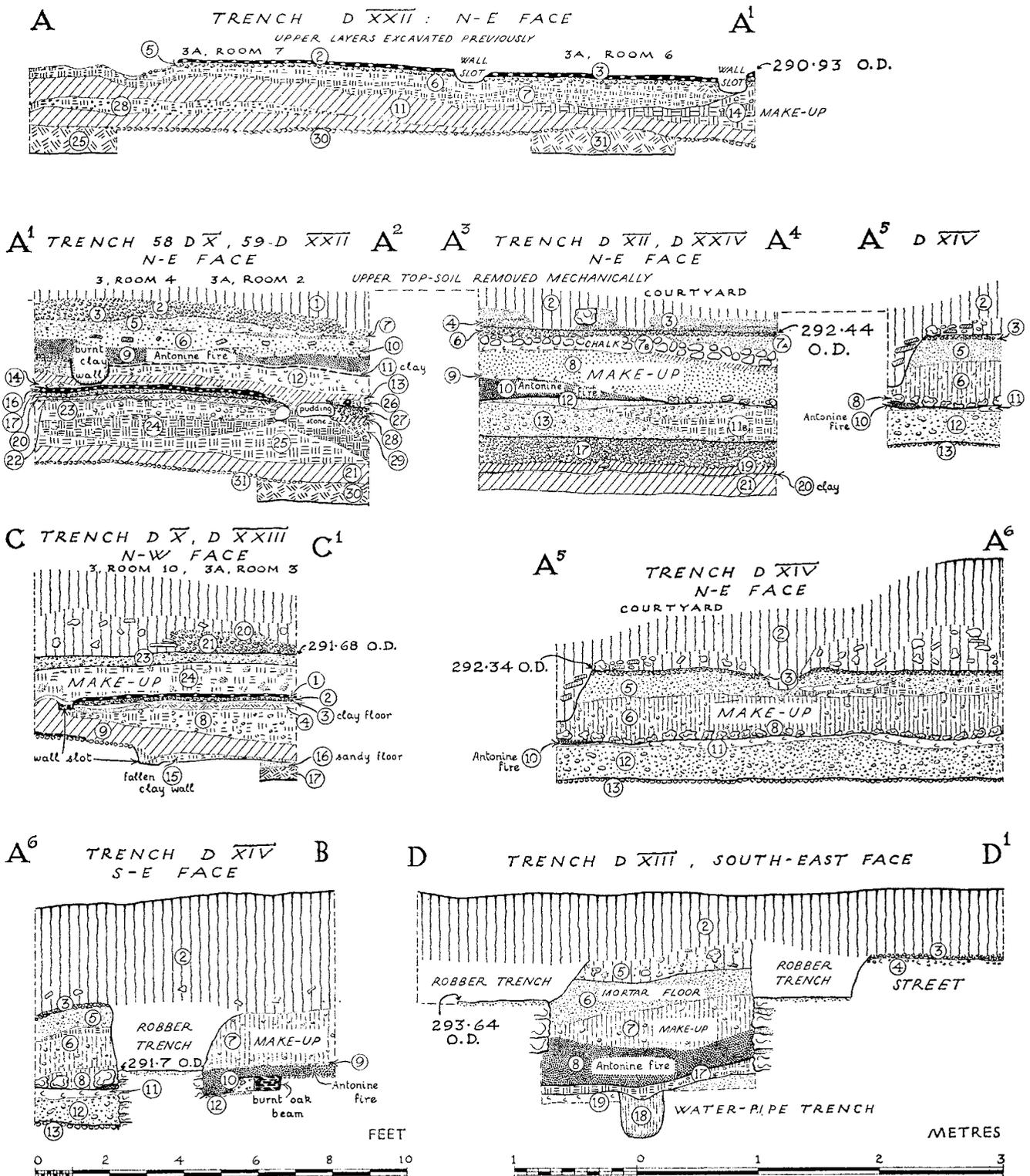


FIG. 102. Buildings XXVIII, 1 and 3: Sections (scale 1:48). For location of Sections, see fig. 113.

since confiscation rather than demolition of property would have been the penalty. The date is probably a coincidence, and strictly speaking there is no evidence that the rest of the building was demolished at this time. It would be possible for the basement to have been filled with rubble from some other source, and the building above to have continued in use. Subsequent robbing and disturbance had removed the latest levels in the rest of the house. However, over the site as a whole coinage is dramatically reduced in numbers after the numerous issues of the House of Constantine and the small trickle of Valentinianic issues. Of later date and in unstratified positions only one coin of Arcadius and one of the House of Theodosius I were found, although it must be remembered that over 1 ft. of cultivated soil was removed by bulldozer.

Later on, medieval persons robbed tiles from the north-east wall of the inner arm of the basement and from the entire length of the opposite wall, as well as from the doorway at the bottom of the ramp in Room 5 (pl. XLIV*a*); their robber-trenches could be made out cutting through the rubble (p. 262, Section Fa-Fb). They also dug haphazard holes elsewhere, notably at the south-west end of the basement, missing, however, the fine niches along the south-east wall. The demolition-debris contained some very substantial pieces of *opus signinum* flooring at least 7-8 in. (18-20 cm.) thick, probably from the corridor above, and also a section of concrete with two parallel rows of box-tiles embedded (pl. XLVII*a, b*). This might represent a means of constructing a light, yet strong floor over the basement,¹ or might be part of a flue or down-pipe. No hypocausted room was found south-east of Room 18, but debris from the demolition of this, and indeed of the whole house, could well have been tipped into the basement. A final possibility is that it may come from part of the drainage arrangements which must have existed in association with the outlet in Room 6.

Outside the south-west wall of Rooms 15, 19, and 22 occurred a thick layer of dark grey soil with some yellow clay and charcoal (p. 254, Section F-F¹ (8); p. 255, Sections K²-K³ (18); K⁴-K⁵ (6); K⁶-K⁷ (7); M¹-M² (9)). This was earlier than the foundations and was certainly sealed by the courtyard metalling. The layer contained pottery down to the early third century and is probably best taken as an area of cultivation after the Antonine fire. It was sealed in Trench C IX by redeposited burnt debris, which also here fills the foundation-trench of XXVIII, 1; the cultivation, if such it is, was thus certainly finished at the time of building.

The finds in the layers of make-up which must be used for dating the construction of Building XXVIII, 1 were almost all residual and very numerous. In the Table below irrelevant material is omitted.

DATING EVIDENCE FOR XXVIII, 1

LAYER	COINS	SAMIAN (All Central Gaulish unless otherwise stated)
57 V VII 4 Make-up, Room 7	Faustina I <i>RIC</i> (Ant. Pius) 360 a	

¹ Cf. one at Bath: B. W. Cunliffe, *Britannia*, vii (1976) 22 f.

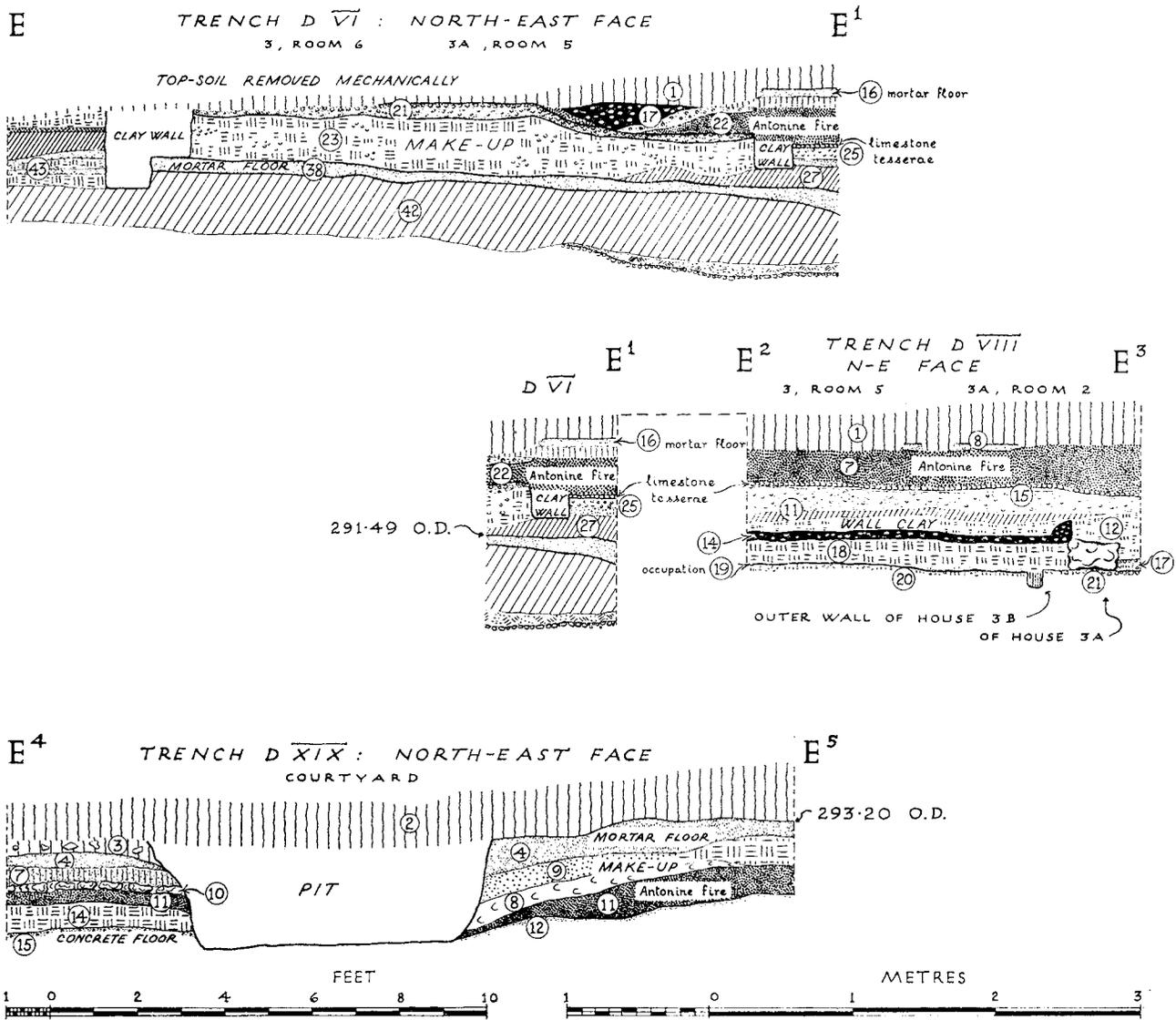


FIG. 103. Buildings XXVIII, 1 and 3: Sections (scale 1:48).

LAYER	COINS	SAMIAN (All Central Gaulish unless otherwise stated)
57 V VII 10		37 A.D. 150-80
Make-up, Room 7		
10 A		31R Antonine
Make-up, Room 6		80 late Antonine
11		31 (two), 38 Antonine
Top filling of pit sealed by make-up		79 late Antonine

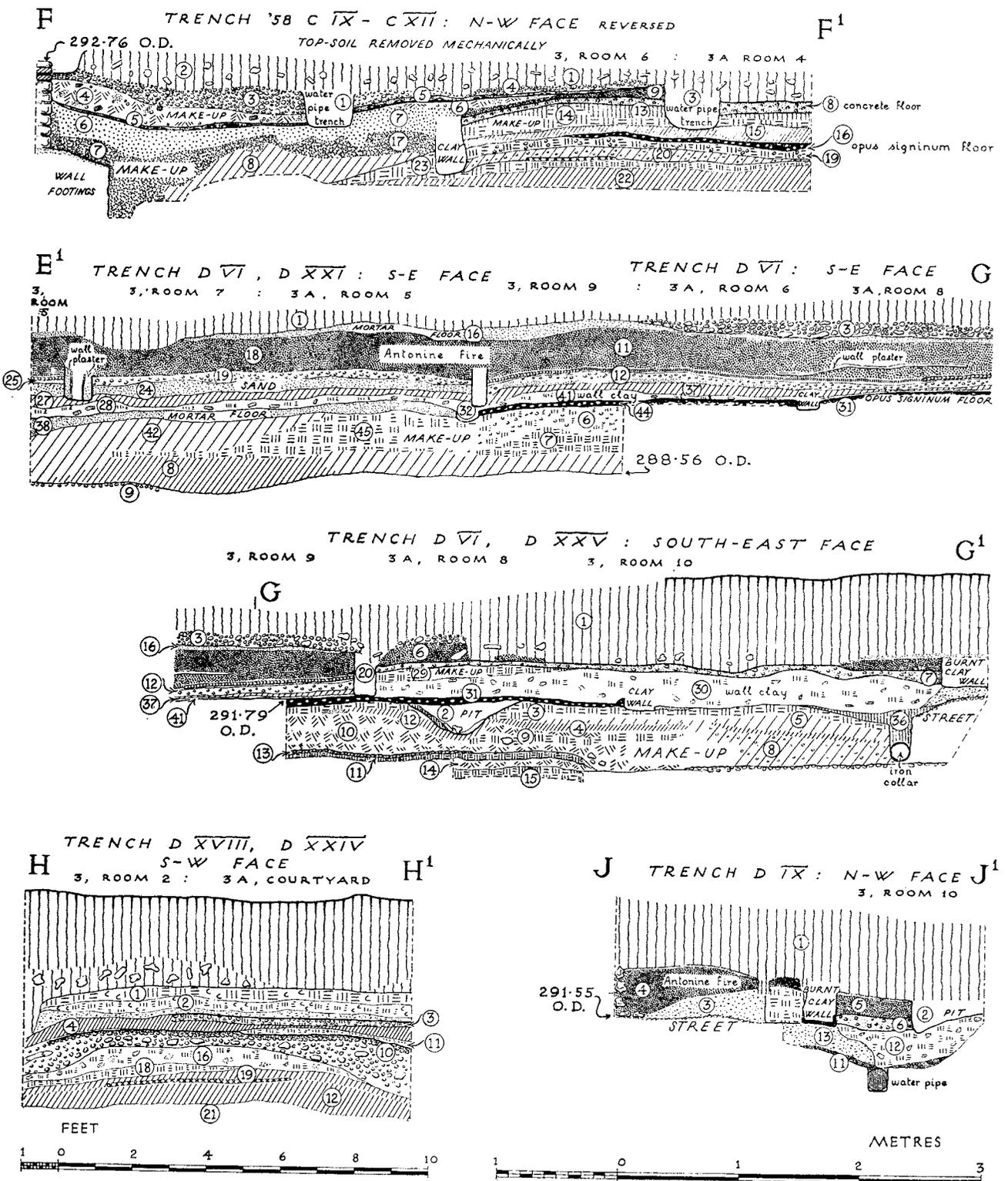


FIG. 104. Buildings XXVIII, 1 and 3: Sections (scale 1:48).
 For location of Sections, see fig. 113.

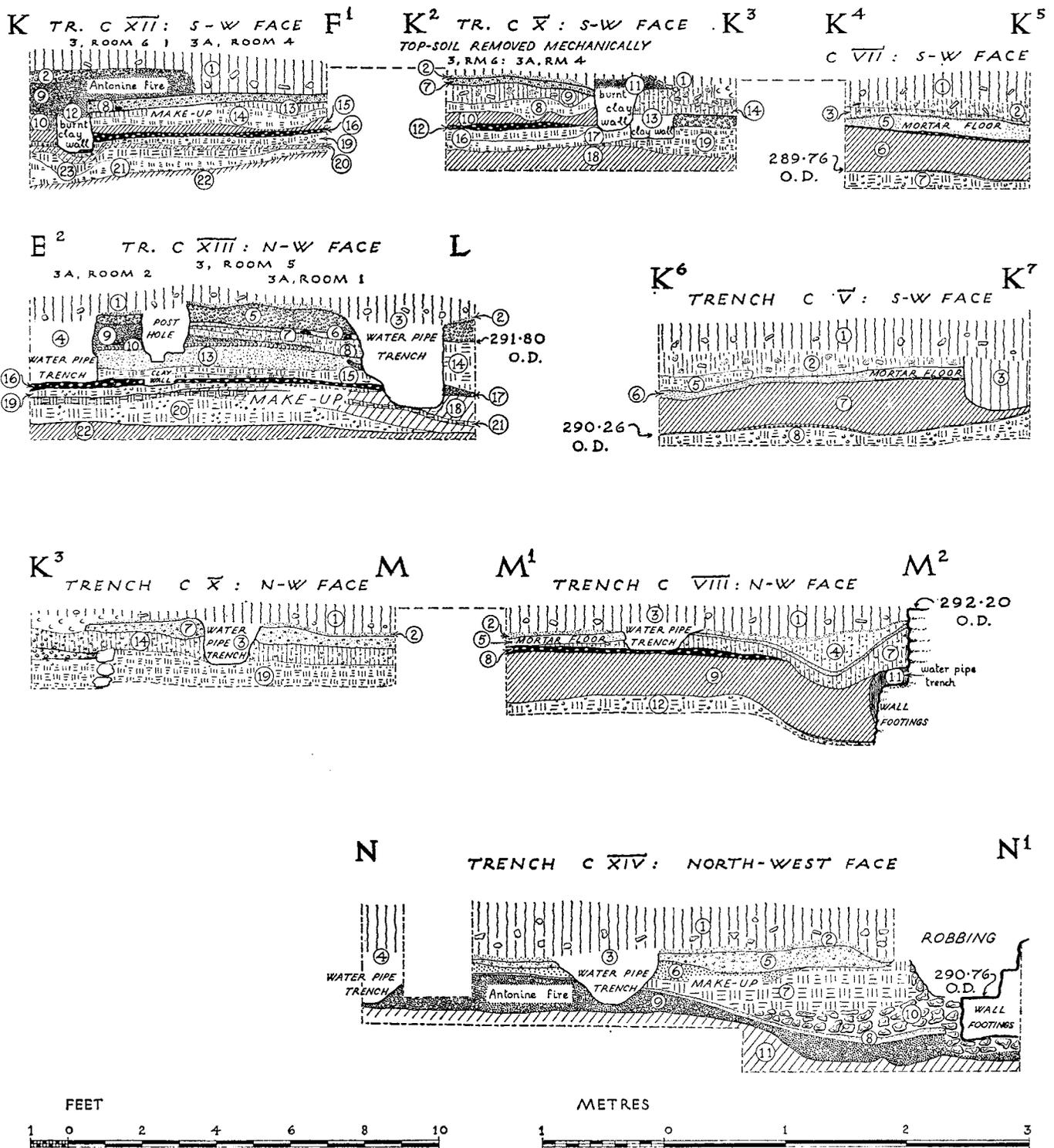


FIG. 105. Buildings XVIII, 1 and 3: Sections (scale 1:48).

LAYER	COINS	SAMIAN (All Central Gaulish unless otherwise stated)
57 V XIV 4 Make-up		37 A.D. 130-50
57 V XXI 5 Make-up over foundation- trench, in street outside Room 8		33, 36 Antonine 79 late Antonine
57 W II 6 Make-up Room 1		37 A.D. 150-80 (D 78) 31R probably Antonine 31 Antonine 33 stamp A]VENTINI.M (S 64) A.D. 150-80 27 stamp [M]ARTI·M (S 65) A.D. 130-60
7 Make-up, Room 1		81 Antonine
10 Room 1, make-up		
11 Room 1, make-up over Pit A		37 (two) A.D. 135-60 (D 79, 80) 81 probably Antonine
11 A (as 11)		37 (?) Antonine
13 A Burnt Antonine floor below Room 1		31, 33 probably Antonine
14 Make-up, Room 1		31, 31R Antonine
15 (as 14)		37 freestyle A.D. 140-70 37 style of Attianus ii A.D. 125-45 (D 81) 31 Antonine 72 probably Antonine
W III 3 Make-up, Room 4	Antoninus Pius, copy of sestertius cf. <i>RIC</i> 600	
W V 7 Chalk ramp outside Room 1		33 Antonine
W XII 10 Antonine fire below Room 2		31 Antonine 31 stamp AVENTINI.M (burnt) (S 66) A.D. 150-80
57 Y II 14 Make-up, Room 6		80 late Antonine
Y II 19 Make-up, Room 6		37 A.D. 125-50 (D 82) 37 style of Cinnamus ii A.D. 150-80 (D 83) 31 Antonine

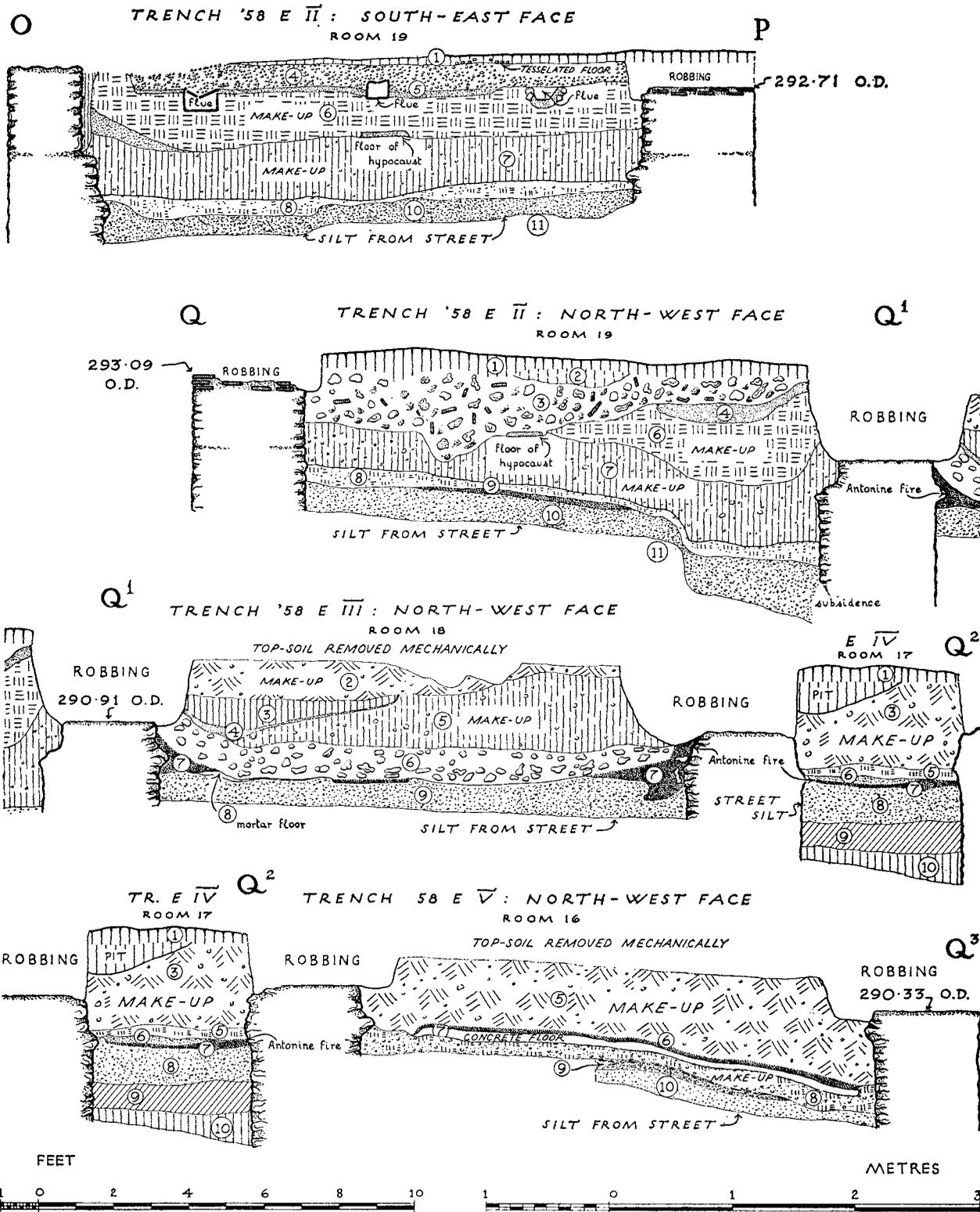


FIG. 106. Building XXVIII, 1: Sections (scale 1:48). For location of Sections, see fig. 113.

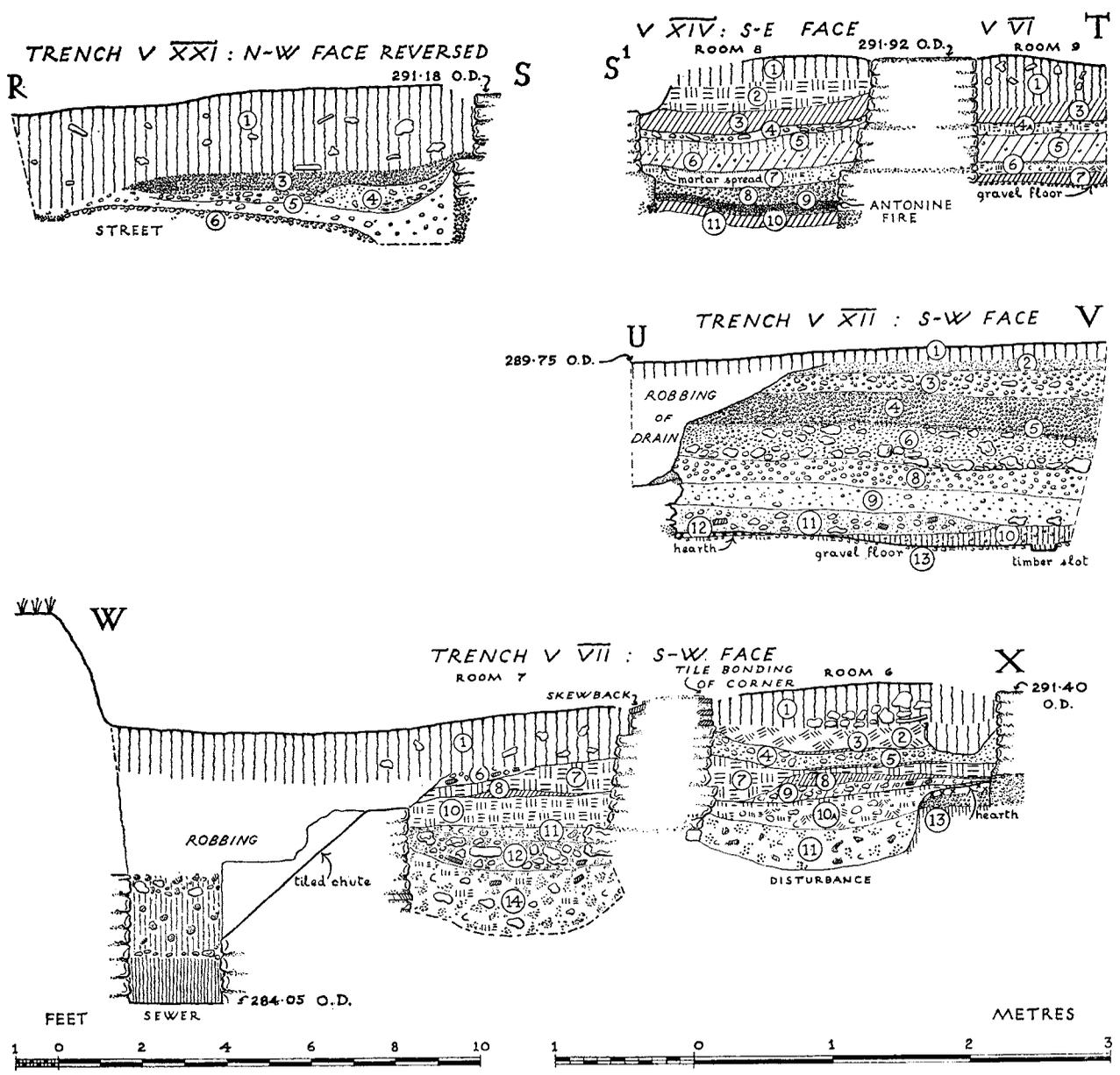


Fig. 107. Building XXVIII, 1: Sections (scale 1:48).

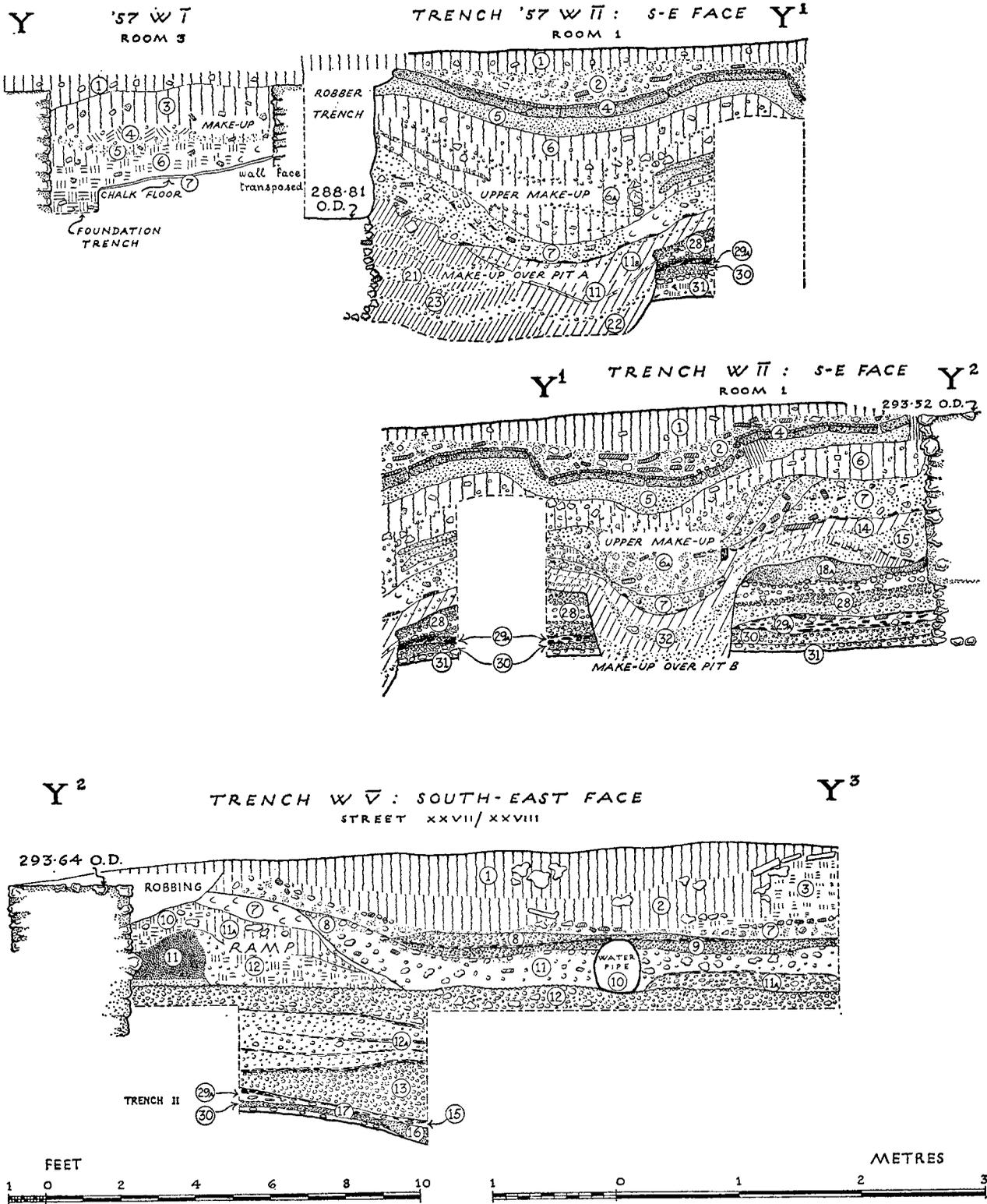


FIG. 108. Building XXVIII, 1: Sections (scale 1:48). For location of Sections, see fig. 113.

LAYER	COINS	SAMIAN (All Central Gaulish unless otherwise stated)
Y VIA 4 Make-up for courtyard		37 A.D. 150-80 (D 84)
6 Occupation below courtyard		37 (two) Antonine 36 Antonine
58 C V 7 Earlier soil outside Room 22		37 A.D. 125-50 (D 85) 37 Antonine 33 (two) probably Antonine 31 (two) Antonine
C VII 6 Earlier soil outside Room 22		37 (two) Antonine 31 (two) Antonine
C VIII 9 Earlier soil outside Room 19		37 A.D. 150-80 (D 87) 37 style of Cinnamus A.D. 150-80 (D 86) 38 Antonine
58 D XIX 7 Make-up of courtyard		37, 33 Antonine
58 E V 3 Make-up, Room 16		37 Antonine 37, 31 probably Antonine 45 E.G. A.D. 170-220 81 Antonine
5 Make-up, Room 16		
10 Make-up over well below Room 16		37 E.G. late second or early third cent. 79 late Antonine
E VI 5 Make-up of courtyard		31 (two), 33 Antonine 81 probably Antonine

There is a notable amount of Antonine samian, including five fragments of forms 79 or 80 (late Antonine); one of f. 45 dated 170-220; one of f. 31 dated 150-80; one of f. 37 dated 140-70, and six dated 150-80; one f. 33 dated 150-80; and one f. 37 from east Gaul dated late second or early third century. The evidence of the coarse pottery takes us even later. The dated mortaria in levels contemporary with or earlier than the construction are as follows:

120-70 No. 1750
130-80 No. 1751
140-80 one
150-200 Nos. 1752-3
160-240 Nos. 1747-8, 1754

170-240 No. 1749
Third century, Nos. 1755-7, of which one is an Oxfordshire mortarium assignable to the first half of the century; and Type 2681

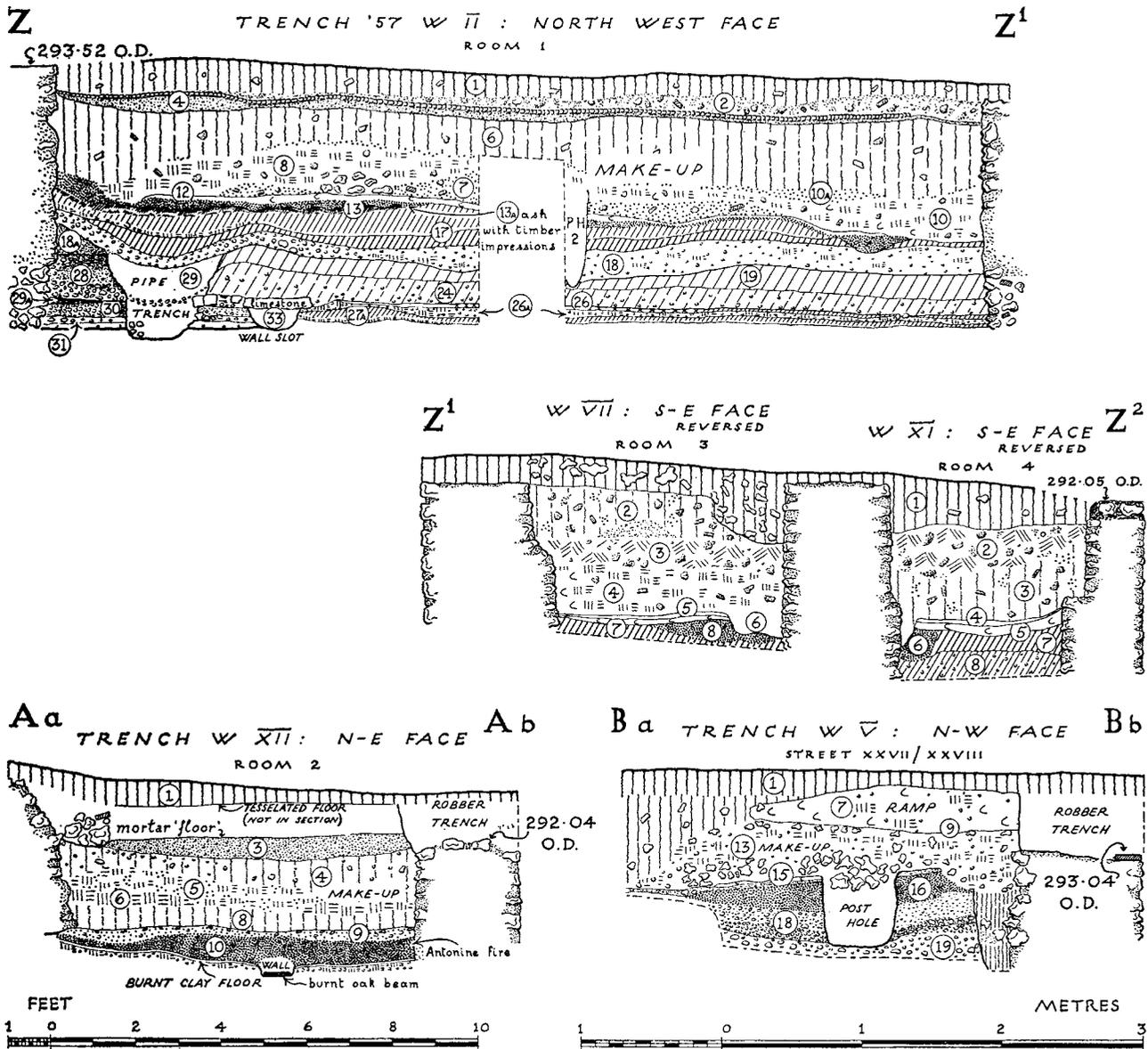


FIG. 109. Building XXVIII, 1: Sections (scale 1:48).

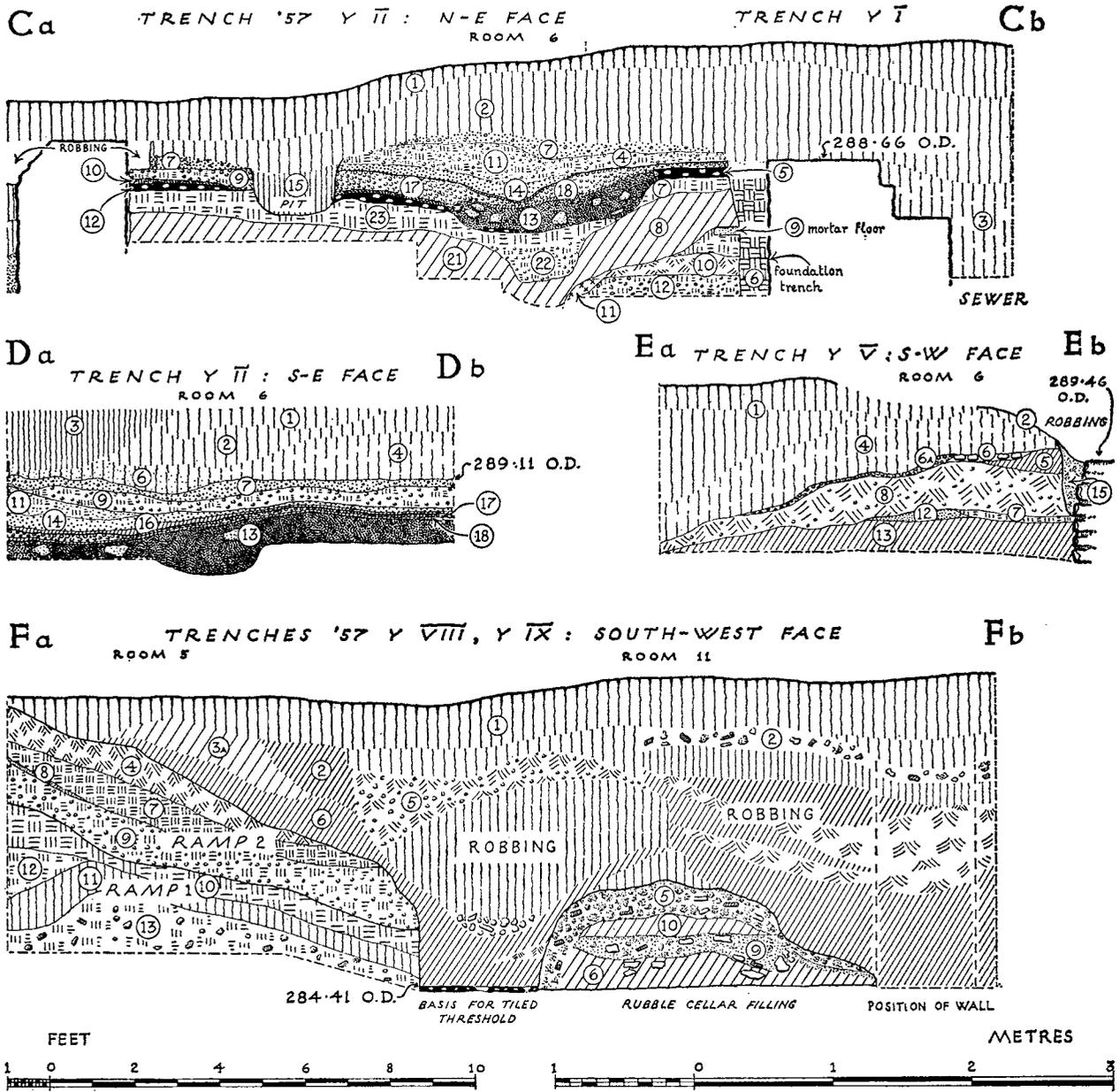


FIG. 110. Building XXVIII, I: Sections (scale 1:48).

There is also a Black-burnished dish (No. 1758) of a type normally thought to start *c.* 190. Possible third-century types include a dish (No. 1759); a grey-ware rouletted beaker (No. 1760); a colour-coated beaker sherd (No. 1761) and a dish (No. 1762), all of which are of types which did not appear before the very end of the second century. All this suggests a date later than 200. Moreover, W V (8) (p. 259, Section Y²-Y³), part of the layer of street-metalling in Street XXVII/XXVIII which was laid down later than the construction of the house, contained large fragments of a mortarium of the period 230-50 (No. 1763). The brackets of A.D. 210-25 are accordingly suggested for the erection of XXVIII, 1, with a preference for *c.* 215.

COINS FROM THE BASEMENT, ROOM 11

(i) *Coins from the lowest occupation layer* (E I 5; Y III 9, 13; Y VI 6)

Marcus Aurelius, Caesar	<i>RIC</i> 1333
Victorinus	<i>RIC</i> 114
Quintillus	<i>RIC</i> 13
barbarous radiate	

(ii) *Coin from floor above* (i) (E I 3; Y III 10; Y VI 9)

Tetricus I	<i>RIC</i> 56 ff.
------------	-------------------

(iii) *Coins from occupation layer above* (ii) (E I 2; Y III 8; Y VI 4 A, 5, 10)

Hadrian (denarius)	<i>RIC</i> 234 d
Julia Mamaea (denarius)	<i>RIC</i> (Sev. Alex.) 362
Victorinus	<i>RIC</i> 71
Tetricus I (two)	— and <i>RIC</i> 146
Tetricus I (barbarous)	
barbarous radiate	
Carausius (two)	<i>RIC</i> 101 and 878 ff.
<i>Urbs Roma</i>	
Constans	
barbarous <i>Fel.Temp. Reparatio</i> (horseman)	

Total: 12

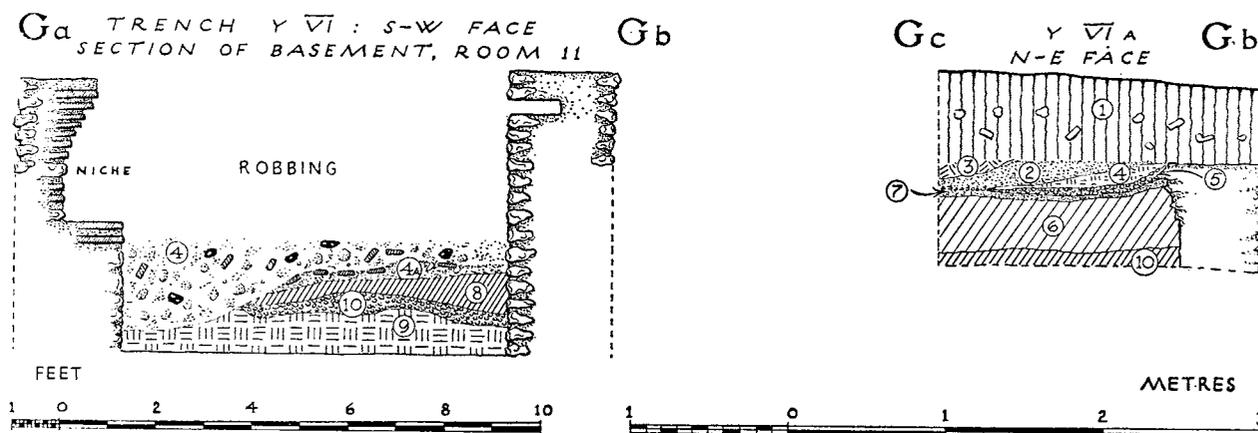


FIG. 111. Building XXVIII, 1: Sections (scale 1:48). For location of Sections, see fig. 113.

(iv) *Coins from demolition-layers filling basement above* (iii) (E I 1; Y III 4; Y VI 3)

Victorinus (one)	<i>RIC</i> 114
Tetricus I (three)	<i>RIC</i> 75 ff., 135 f., 140 f.
Constantine I (six)	
<i>Populus Romanus</i> (one)	
<i>Urbs Roma</i> (eight)	
<i>Urbs Roma</i> (barbarous) (three)	
<i>Constantinopolis</i> (four)	
<i>Constantinopolis</i> (probably barbarous) (one)	
<i>Constantinopolis</i> (barbarous) (one)	
Theodora (two)	
Constantine II Caesar (ten)	
Constans Caesar (three)	
Constans Aug. (thirteen)	
Constantius II Caesar (six)	
Constantius II Aug. (eighteen: one clipped)	
Constans or Constantius II (two)	
<i>Gloria Exercitus</i> (1 standard) (one)	
House of Constantine (one)	
Magnentius or Decentius, AE 2 cut down to AE 4 (one)	
official <i>Fel. Temp. Reparatio</i> (horseman) cut down to AE 4 (one)	
barbarous <i>Fel. Temp. Reparatio</i> (horseman) (five)	
small barbarous <i>Fel. Temp. Reparatio</i> (horseman) (two)	
very small barbarous <i>Fel. Temp. Reparatio</i> (horseman) (two)	
Minim <i>Fel. Temp. Reparatio</i> (two)	
Minim (one)	
barbarous fourth-cent. coin (two)	
uncertain barbarous coin (one)	
Julian (<i>siliqua</i> , semi-barbarous) (one)	
Valens (two)	<i>LRBC</i> 297a, 480
Valentinian I (three)	<i>LRBC</i> 275, 479, 481
<u>Total: 107</u>	

(v) *Coins from rubble similar to (iv) but disturbed by medieval robbing* (Y III 2; Y VI 2)

Carausius (one)
<i>Constantinopolis</i> (two)
<i>Constantinopolis</i> (barbarous) (one)
Theodora (one)
Constans Caesar (one)
Constans Aug. (two)
Constans (barbarous) (one)
Constantius II Caesar (one)
Constantius II Aug. (one)
Constantius II (barbarous) (one)

- Constantius II *Fel. Temp. Reparatio*
(horseman) (two)
- Constantius II barbarous *Fel. Temp. Reparatio* (one)
- Constans or Constantius II (one)
- Constans or Constantius II barbarous *Fel. Temp.*
Reparatio (one)
- Decentius (one)
- House of Constantine (one)

- Total: 19

The date of Street XXVII/XXVIII

This street formed part of the Claudian street-grid and its earliest metalling (p. 261, Section Z-Z¹ (30)) is sealed by burning (29 A) from the building on its south-west side (p. 195), destroyed in the Boudiccan rebellion. A substantial bed of gravel metalling (p. 259, Section Y²-Y³ (13)) was subsequently laid down; but since this layer yielded a scrap of samian form 36 of second-century date and two large pieces of coarse pottery which are also at home in the first half of the second century (Nos. 1764-5) it appears that this street was not repaired until *c.* 120-40. Thereafter build-up of metalling was rapid: the foundation of Building XXVIII, 1, was dug from the level of (11), which appears to be debris of the Antonine fire *in situ* (cf. p. 261, Section Ba-Bb).

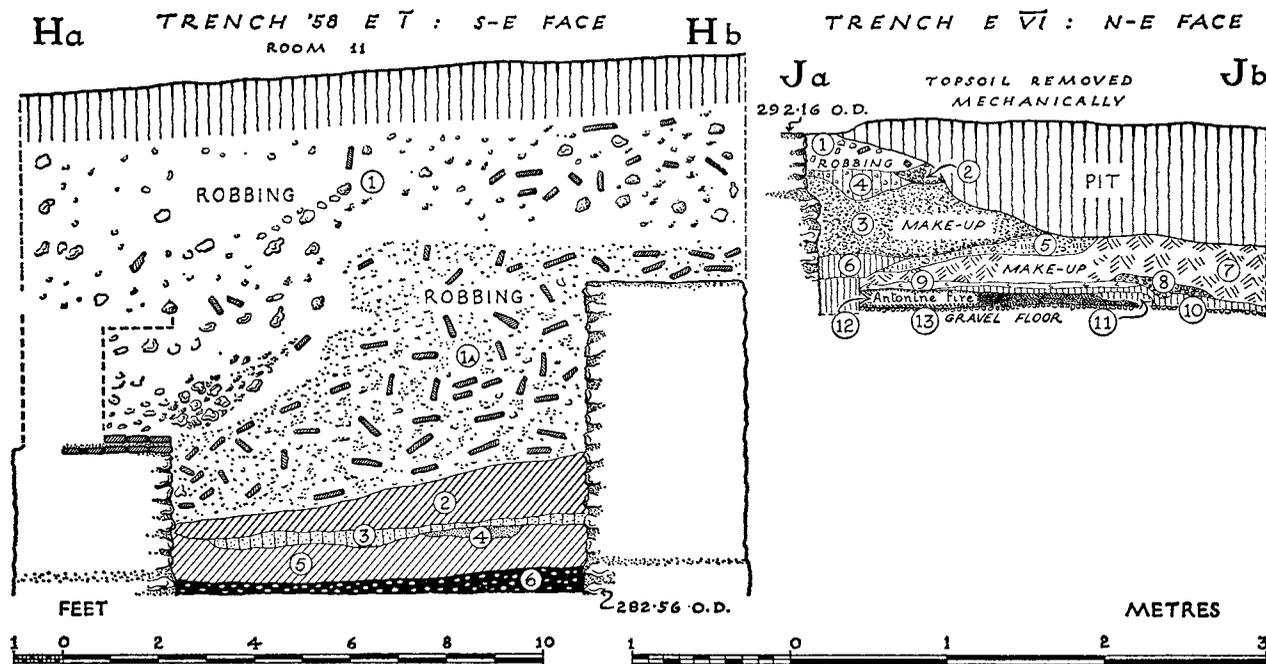


FIG. 112. Building XXVIII, 1: Sections (scale 1:48).

C. BUILDING XXVIII, 2 (figs. 98, 114)

Six ft. (2 m.) north-west of XXVIII, 1 lay Building XXVIII, 2, separated from it by an area with a surface of yellow mortar and gravel, on which lay a thick deposit of oyster shells. The mortar spread was clearly connected with the building of XXVIII, 2, whose walls contained the same mortar. The house had two periods of construction. In the first it was a rectangular single-roomed building measuring 37 ft. 9 in. by 23 ft. (11.51 by 7.01 m.) fronting Street XIV/XXVIII. Later a second room was added at the rear, extending the length to 49 ft. 3 in. (14.94 m.). The first-period walls were of flints set in yellow mortar, but with quoins of rough limestone blocks. The extension survived only as foundations of loose flint cobbles set in a trench.

There were slight traces of white mosaic flooring in Room 2. White tesserae were found loose, overlapping the south-west wall at one point, and a single line of thirty tesserae survived *in situ* on the edge of the wall dividing the rooms; it was not clear whether the wall had been demolished in Period 2, or whether it continued higher on a narrower gauge (possibly in timber). Room 1 had a floor (Section Ka-Kb (1); Section La-Lb (5)) consisting of a fairly thick deposit of broken lumps of mortar and wall-plaster fragments (painted red, or with red and white stripes). This floor had sunk into various subsidences; Section La-Lb (8) shows a thick clay patch over one of these. Towards the rear of the room was a large clay oven sunk in the floor, full of ash and *tegulae*; from it a drain (Section Ka-Kb (5)) ran down to the front wall through which it passed in a channel lined with roughly squared limestone blocks. The utilitarian character of the building together with this drain and oven suggest that the place was a workshop or perhaps a smithy.

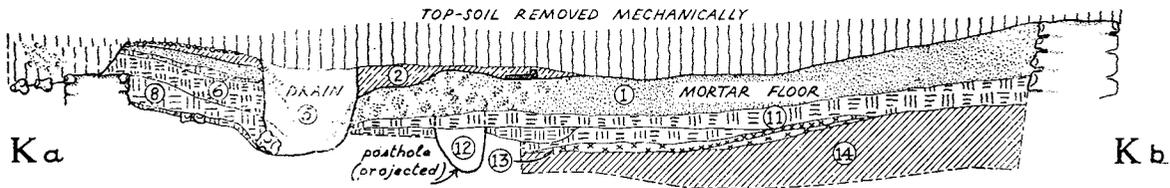
Excavation was not carried much below the house, and good dating evidence was lacking. There were traces of an earlier building below the front half of the house. Section Ka-Kb (13) was an earlier clay floor, partly burnt; and part of an *opus signinum* floor protruded about 1 ft. below the front of the front wall.

DATING EVIDENCE: BUILDING XXVIII, 2

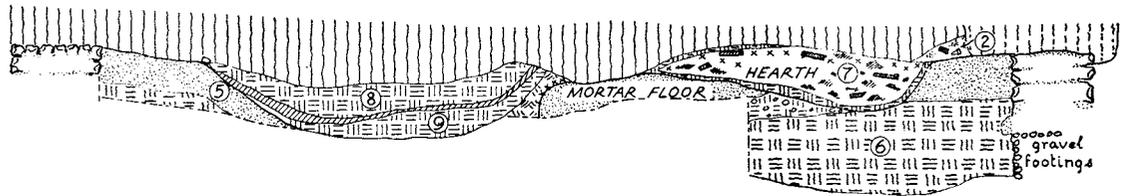
LAYER	SAMIAN (All Central Gaulish)
58 F I 6 Occupation layer below floor of Room 1	37 Large S Potter A.D. 125-50 (D 88) 37 style of Secondinus i A.D. 125-45 (D 89) 31 Hadrianic-Antonine and residual pieces 37 probably Antonine
10 Occupation layer over subsidence	
F IV 11 Clay make-up for floor	37 style of Cinnamus ii A.D. 150-80 (D 90) 31 (two) Antonine 18/31 (two) Hadrianic-Antonine 33 probably Antonine 45 A.D. 170-200 and residual sherds

VERULAMIUM EXCAVATIONS

BUILDING XXVIII, 2 : TRENCHES '58 F VII, F IV : SOUTH-WEST FACE



La TRENCH '58 F I : NORTH-EAST FACE Lb

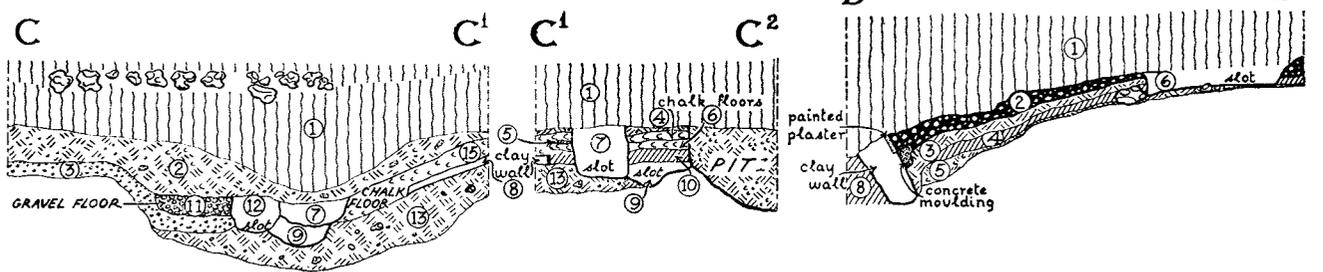


BUILDING XXVIII, 4

TRENCH '58 G VII : N-W FACE.

G VII : N-E FACE

'58 G II : S-E FACE



TRENCHES '58 G II, G V, G VIII : SOUTH-EAST FACE

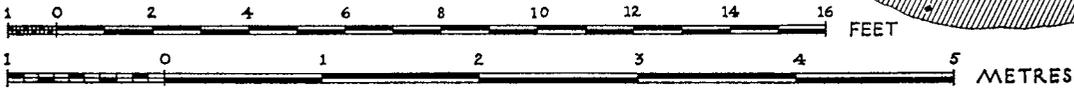
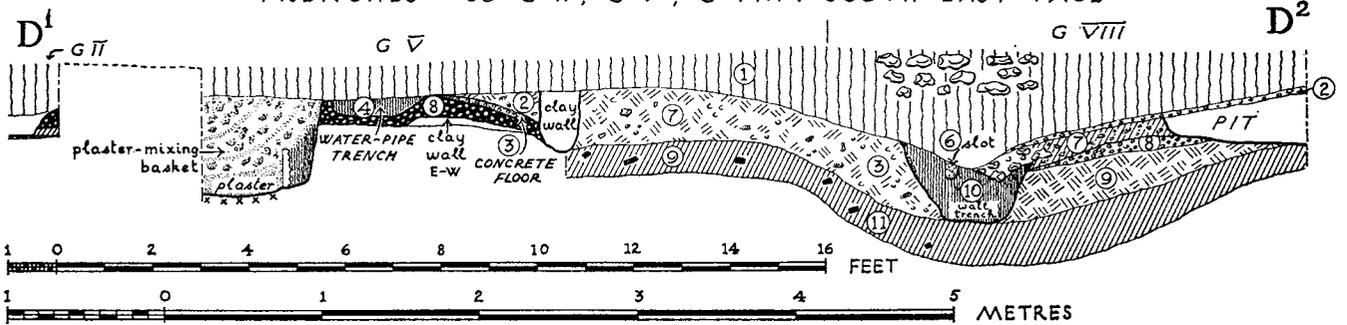


FIG. 114. Buildings XXVIII, 2 and 4: Sections (scale 1:48).

The samian gives a *terminus post quem* of c. 170–200. The coarse pottery is little more helpful, save that from F IV 18, a layer below the *opus signinum* floor below the front of the building, came a mortarium-rim datable probably to the third century (No. 1767). It has already been

suggested that their relationship shows that Building XXVIII, 2 is later than XXVIII, 1, which was built within the period 210–25, probably *c.* 215. A date within the first half of the third century may be suggested, perhaps *c.* 240, for the erection of XXVIII, 2. The record of its subsequent history has been removed by robbing and disturbance, save that the drain contained pottery of the second half of the third century (*cf.* Type 1115), and a coin of Tetricus I was found on the floor of Room 1.

D. BUILDING XXVIII, 4 (figs. 115, 114, 116)

South-west of Building XXVIII, 2 traces were found of a clay-walled or timber-framed house, but the remains were very much disturbed both by subsidence into earlier hollows and by later pit-digging. Its site was crossed by one of the pipe-lines of Building XXVIII, 1 and the house must, therefore, have been demolished by *c.* 210–25.

The remains consisted of parts of four rooms. Room 1, measuring 18 ft. 9 in. by 16 ft. (5.71 by 4.88 m.) had been once refloored; the earlier floor was of red tesserae on a basis of *opus signinum* with quarter-round moulding. Almost all the tesserae had come loose, and most had been swept up (possibly for reuse), before a layer of white cement was laid over it to form the basis of another floor of red tesserae, most of which had in turn disappeared. The main walls were of clay, probably with a frame of posts; a little unpainted plaster remained on the base of the walls behind the floors. Room 2 measured 18 ft. 6 in. by 7 ft. 3 in. (5.64 by 2.21 m.); it had a floor of chalk and clay, and was an addition to the original structure since its south-west wall (which showed as a foundation-trench without a clay packing) abutted the wall of Room 3, whose plastered face ran across the junction. The south-east wall as shown on fig. 115 has a curious relationship with the corner of Room 1 from which it is separated by a gap of only 18 in. (0.46 m.). This end of Room 2, however, has been very much damaged by contemporary subsidence: as Section C–C² (fig. 114) shows, the corner of Trench G VII contained the traces of no less than three successive rebuildings of the corner, and that shown on the plan is merely the latest. An earlier version of the wall abutted the corner of Room 1, as a change in the character of the floor there showed.

Room 3 was a corridor with a floor of gravelly clay; above it the demolition-layer contained much painted plaster with the following schemes: (i) panels of red with borders of black outlined in white, and (ii) purple surrounded by bands of yellow and white. The colours were very thinly applied and were in very poor condition. Next to this corridor was Room 4, which, with a width of 26 ft. (7.92 m.), was the largest found; no south-east wall was traced, but the floor was of gravel.

North-west of Rooms 1–3 was a lightly metallated area with a line of post-holes on its north-east side. Beneath the metallating was a short length of earlier wall-trench containing a sherd of samian dated *c.* A.D. 125–45. Cut into the floor of Room 1, doubtless after the destruction of the building, was a pit (G V Pit 1; fig. 114, Section D¹–D²) apparently rectangular in outline but dug to receive a circular wicker basket, in which plaster had been mixed. Some of the plaster remained on the floor and side, where it had set round the strands of the basket which survived in the form of ‘positive’ casts of powdery soil. The surviving depth of the pit was 2 ft. (0.61 m.) and of the basket at its base 11 in. (0.28 m.): it was not clear whether the basket had formerly been taller. The distance between upright withies varied between 6 and

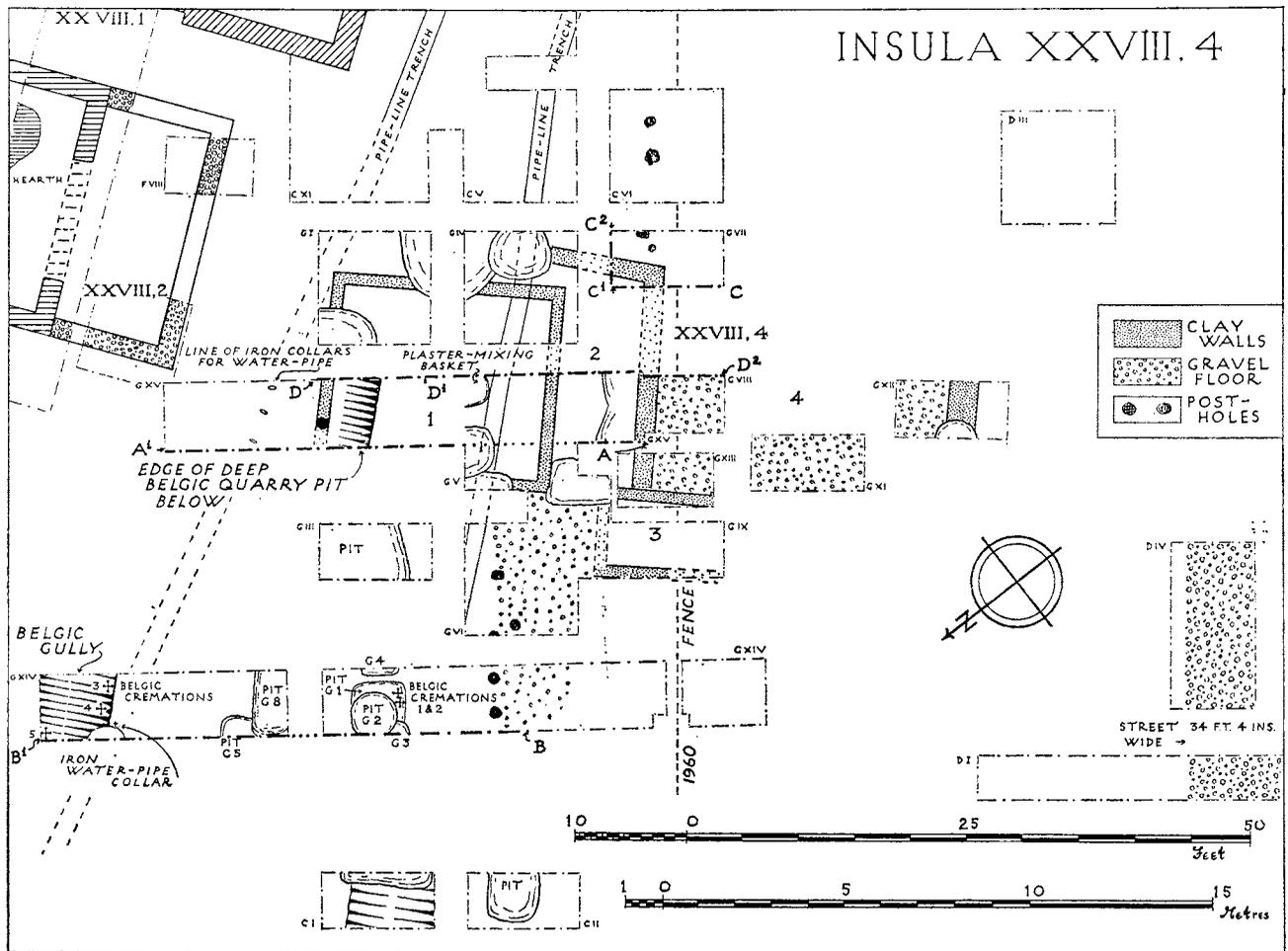


FIG. 115.

8 in. (15.2 and 20.3 cm.), and the strands were *c.* 1–2 in. (2.5–5.1 cm.) in diameter. Nine strands survived. The diameter of the basket, which was not fully excavated, can be reckoned at *c.* 4 ft. (1.22 m.).

North-west of the house Trench C I encountered a V-shaped ditch *c.* 7 ft. 6 in. wide (2.29 m.) whose filling dated to the second half of the second century. The ditch did not reappear in Trench G XIV.

DATING EVIDENCE FOR BUILDING XXVIII, 4

LAYER	SAMIAN (All Central Gaulish unless otherwise stated)
58 G I 5 Make-up for floor, Room 1	18 S.G. Flavian 31, 15/31 (?), Antonine

LAYER	SAMIAN (All Central Gaulish unless otherwise stated)
G III 4 Dark silt below gravel surface outside building	42 Hadrianic-Antonine 37, 31, 33 Antonine and residual sherds
G IV 10 Occupation below floor, Room 1	27, 33 Trajanic-Antonine 18/31R or 31R stamp SII CV[retro. (S 67) Antonine
G V 9 (as IV 10)	30 A.D. 120-40 (D 91) 27 A.D. 100-30 36 second century 37 A.D. 125-45 (D 92)
G VI 11 Wall-trench below metalling	37 probably Antonine
G VII 11 Early floor	37 A.D. 130-50 (D 93)
10 Occupation over 11	33 Hadrianic-Antonine
3 Gravel floor, Room 4	38 Antonine
G VIII 3 Clay and gravel floor, Room 2	31R Antonine
60 G XV 6 (see below p. 274)	30 Antonine 37 A.D. 130-60 (D 94) (this sherd is part of (and joins) the bowl D 94 in Vol. I, p. 248, found 55 m. away)
Grey soil below building	31 (four), 81 Antonine and many residual sherds

In addition G II 7, the clay wall of Room 1, contained a sherd of rouletted beaker of the second half of the second century or first half of the third (No. 1766). A demolition-layer (G V 2) yielded a colour-coated beaker-herd of Type 1059 datable to the first half or three-quarters of the third century. There is no trace of the Antonine fire on the site; its absence deprives us of a convenient datum. However, the floors of the building overlay a good deal of Antonine samian, and, on the evidence of the beaker-herd from the wall, the house is not likely to have been constructed before *c.* 175; it was probably demolished (or had fallen down) by *c.* 210-25.

Excavations below XXVIII, 4 in 1960 (figs. 115, 116)

A little further work was done in 1960 in the area of XXVIII, 4: it was desirable to explore the cause of subsidences which had wrecked the building, in case they should turn out to be ditches representing the south-west side of the Claudian fort (p. 37). Two trenches (G XIV and G XV) were cut; these disproved the hypothesis of defensive ditches here. In other respects, too, the results were useful. In both trenches features of the end of the pre-Roman Belgic period were encountered, including cremations, mint-debris and a drainage ditch. There was also found a very large and deep Belgic excavation (fig. 116, Section A-A') the limits of which could not be reached owing to danger of collapse. It was over 10 ft. (3 m.)

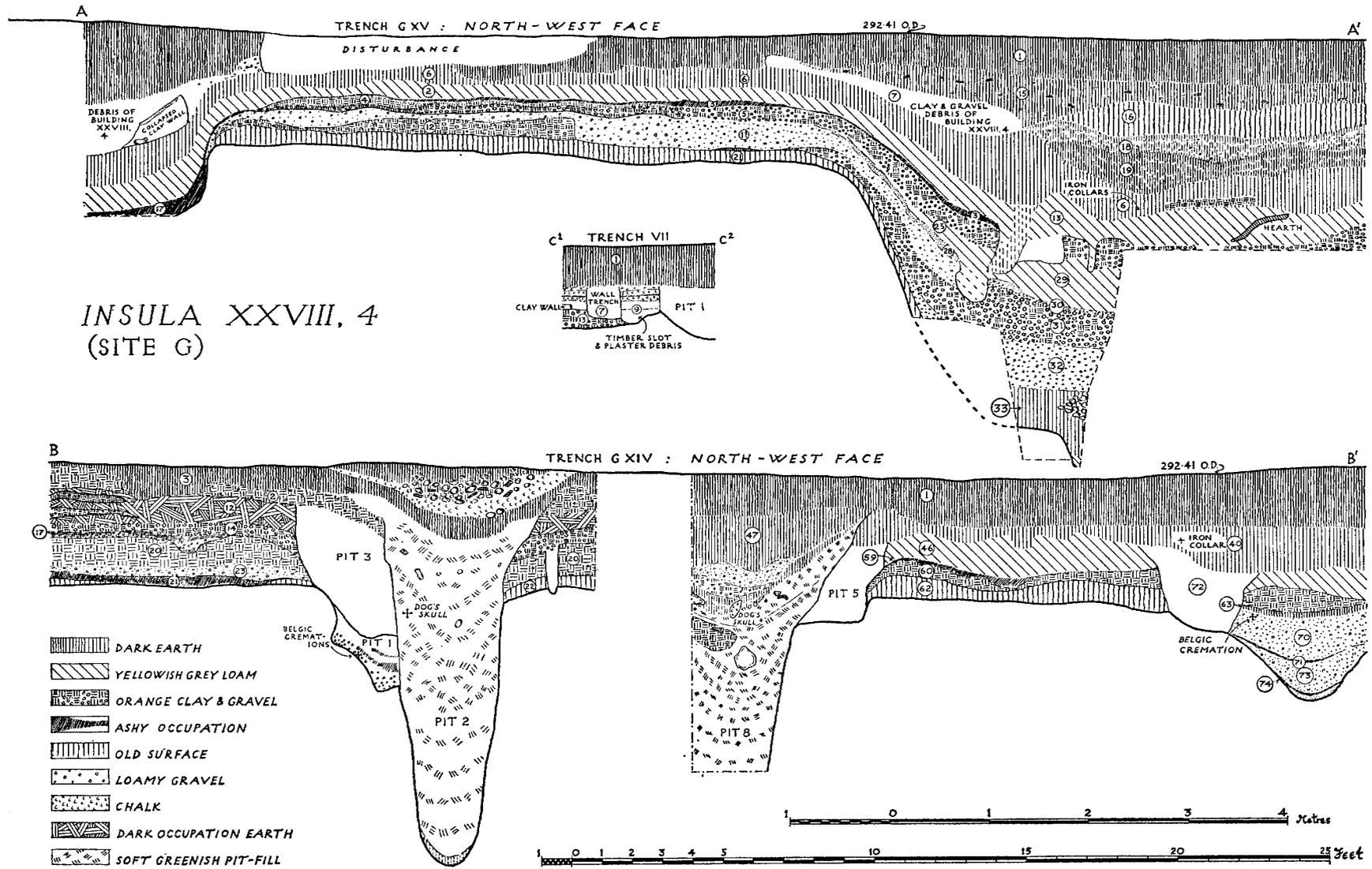


FIG. 116. Building XXVIII, 4: Sections (scale 1:60).

deep from the top of natural subsoil (or 14 ft. (3.35 m.) from the surface) and over 18 ft. (5.49 m.) wide. It was taken to be a quarry. The subsoil here is gravelly clay which when washed might be suitable for pottery or building-construction. The ditch in Trench G XIV must have emptied into it unless the two are not quite contemporary, so that use as a soak-away is possible; but in view of the pit's size such use could not be thought primary.

Trench G XIV

At the north-east end of this trench was a V-shaped ditch *c.* 8 ft. wide and 4 ft. deep (2.44 by 1.22 m.), with a filling of dirty gravelly loam containing two lenses of ash. Layer 71 yielded a group of Belgic pottery (Nos. 1768–70) together with a fragment of coin-mould, while Layer 74 produced an unusual bowl-herd (No. 1771) which is probably Claudian. In the upper filling of the ditch, and in one case overlapping its edge, were three unurned cremations, one of them associated with a coin of Tasciovanus (Mack 177) and sherd of cordoned jar (No. 1772) of Belgic type and ware. Sealing the ditch and cremations was Layer 63, consisting of ash and charcoal. In addition to a sherd of provincial Arretine of Claudian date it yielded a sherd of Gaulish samian which may be of post-conquest date. Two further native cremations, one without grave goods, the other with a pedestal urn (No. 1773) occurred in Pit 1, the larger part of which had been destroyed by Pits 2 and 3; the little filling that remained outside these disturbances contained late Belgic pottery (Nos. 1774–82) but also one sherd of samian (f. 15, Claudian). Two cremations accordingly are probably post-conquest in date; the other three might be slightly earlier, but this cannot be pressed; all must date before 49–50 when the city was laid out. The most likely context is that of camp-followers round the fort.

South-west of Pit 1, two layers of clean gravelly clay (Section B–B' (20) and (23)) sealed the old turf-line (22) and an ashy layer lying on and cutting into it (21). Layers 20 and 23, which yielded only one sherd of a pre-Flavian samian f. 27 and one of a *terra nigra* plate, are clearly the upcast from an excavation into natural subsoil: this may have been Pit 1 itself, which, as we have seen, is probably of post-conquest date. The pottery in Layer 21 (Nos. 1783–8 and Type 1571) is of Belgic character and is approximately contemporary with that of Pit 1; once again a single Claudian sherd of f. 15/17 was associated, and one of the coarse vessels is an imitation of f. 18 (No. 1788). Layer 60, comparable to 20 in the north-east end of the trench, contained rather more pottery, including a f. 37 dated *c.* 75–100. It too derived from excavation into the subsoil, but may have been a later excavation than that which produced the material of Layer 20. This idea is supported by the fact that the old surface (62) below it was exposed for longer than (22) and yielded pottery datable to the period 60–75 including a flagon and a mica-coated jar (Nos. 1789–90). Layer 60, accordingly, was not deposited before *c.* 85–100, and was sealed by a thin layer of ash and charcoal (59) which yielded a sherd of straight-sided dish of Black-burnished 2 ware of a type which first appeared at Verulamium *c.* 140 (No. 1791). Layer 46, of mixed earth and yellow loam, yielded Antonine as well as much residual samian, and through it was cut Pit 5; this yielded only residual sherds. Sealing Layer 46 and Pit 5 was Layer 40, dark soil and rubble, which was covered only by soil of modern cultivation. Layer 40 yielded an iron collar belonging to the pipe-line of Building XXVIII, 1 and should, therefore, have been in position by *c.* 200–25. It yielded two pieces of late Antonine samian as well as much coarse pottery of the late second

and early third centuries. It was through this layer that Pit 8 was cut, whose characteristic greenish fine earthy fill suggested that it had been a cess-pit; the filling yielded a good group of pottery datable *c.* 180–210 (Nos. 1792–1804 and *cf.* Type 878). Clearly, then, Layer 40 must have been formed by *c.* 170, but as it was not sealed it is not surprising to find among its contents a coin each of Postumus and Constantine I together with a sherd of an Oxfordshire red colour-coated bowl.

In the south-western half of the trench, Layer 20, as already stated, may have been laid down as early as *c.* 45–60, but if contemporary with Layer 60 is to be dated *c.* 85–100. Layer 17 above it yielded a jar (No. 1805) of a type occurring plentifully in the period 140–55 and first appearing *c.* 130. Above this is a good hard surface of gravelly clay (14) covering an extensive area; it was laid down within the period *c.* 145–60. Above it was a thick deposit of dark earth and occupation debris (12) containing much residual samian but also coarse pottery of the late second and first half of the third centuries; this was sealed by clean gravelly clay (2) which is probably the upcast of Pit 2, cut from this level. Pit 2 (like Pit 8 probably a cess-pit) yielded a very large group of pottery of *c.* 250–80 (Nos. 1806–40) together with a small gold ring, seven dog skulls and one complete dog's skeleton.

Trench G XV

The earliest feature here is the very large deep pit at the north-east end. Its filling appears to be pre-Roman. Layer 33 produced a group of Belgic pots (Nos. 1841–4); this sticky dark grey soil closely resembled the old surface soil (21) and may represent a period of disuse when soil was washed in. Above it came several sterile layers of filling, Layer 25 yielding a brooch of Colchester B B type (Vol. III, No. 26) and a bronze hook. The pit had been sealed by a layer of gravelly clay (5) which had subsided into it: this yielded a f. 29 *c.* A.D. 70–85. The layers above this contained mainly residual pottery. Layer 3 can be dated *c.* A.D. 135–45 and Layer 6 above it, containing some Antonine sherds, itself underlies the remains of Building XXVIII, 4, and can be dated *c.* A.D. 155–75. The south-west wall of Room 2 can be seen sinking into a further deep pit which was not bottomed but which appears to be either Claudian or Belgic in date; the deepest level reached (17) contained a piece of Claudian samian and an early type of lamp (Vol. III, No. 9) together with sherds of native Belgic character (Nos. 1845–8 and Type 1571).

DATING EVIDENCE: TRENCH G XIV

LAYER	COINS	SAMIAN
60 G XIV 65		15 S.G. Claudian
Pit 1		
63		<i>Cam.</i> S 4A, Gaulish Arretine(?), Claudian
Ash over cremations in ditch		18R S.G. pre-Flavian
62	Tasciovanus AE	29, 30, Ritt. 9 S.G. pre-Flavian
Old plough soil	(Mack 177)	30 S.G. A.D. 55–70 (D 95)
		29 S.G. A.D. 50–70
		30 (two) S.G. pre-Flavian
		29 (two) S.G. pre-Flavian

LAYER	COINS	SAMIAN
		18 (two), 27 (two) S.G. pre-Flavian
		18 stamp OF $\widehat{\text{MACCA}}$ (S 68) S.G. pre-Flavian unusual form
20 Gravelly clay surface		27 S.G. pre-Flavian
28 Chalk spread within 21		15/17 S.G. Claudian
60 Gravelly clay surface over 62		37 S.G. A.D. 75–100 15/17 S.G. probably pre-Flavian 18, 27 S.G. first century
56 (Pit 3)		Only residual samian, latest pieces: 27 C.G. Trajanic-Hadrianic 27 C.G. probably Hadrianic Curle 11 C.G. Hadrianic
46 Earth and clay over 59, 60		44, 27(?) C.G. Antonine and many residual first- century sherds
40 Dark earth and rubble		45, 38 C.G. late Antonine 18/31R stamp $\widehat{\text{GENIALIS}}$ (S 69) C.G. Trajanic- Hadrianic and residual first-century sherds
12 Occupation layer above 14	Claudius I, As (<i>RIC</i> 66 d)	37 E.G. probably Hadrianic or Antonine samian counter C.G. probably Antonine and much residual material
48 (Pit 8)		38 C.G. Antonine
54 (Pit 8)		31 C.G. Antonine 31 stamp $\widehat{\text{SANTIANIM}}$ (S 70) C.G. A.D. 150–80 31 stamp $\widehat{\text{REGINIM}}$ (S 71) C.G. A.D. 140–70
69 (Pit 8)		31, 46 C.G. Antonine
43 (Pit 2)	Vespasian, sestertius; third-century irregular minim	

DATING EVIDENCE: TRENCH G XV

LAYER	COINS	SAMIAN
60 G XV 5 Gravelly clay sealing Belgic pit		29 S.G. A.D. 70–85 15/17, 18, 30 S.G. pre-Flavian 30 cursive signature of Masc(u)lus S.G. A D 60–75 (S 72)
4 Clay surface sealing 5		residual pre-Flavian sherds

LAYER	COINS	SAMIAN
3 Ash and burnt clay above 4		33 C.G. Antonine and many residual first-century sherds
2 Clay and occupation over 3		18 (two) S.G. Flavian-Trajanic and much residual material
13 (=2)	Claudius I, As (<i>RIC</i> 66)	37 C.G. A.D. 130-60 (D 96) Curle 15(?) C.G. probably Antonine and much residual material
6 Grey loam over 5		(see p. 271)
17 Dark loam with char- coal in second early pit		27 S.G. Claudian scrap probably first century
19 Dark earth over pit	Carausius, <i>RIC</i> 118	

EXTRAMURAL SITE 1956 R

AS part of the extensive programme of 1956, trenches were cut outside the walls on the valley floor between two branches of the River Ver. The main stream today runs in a mill-lead, leading to the water mill at St. Michaels at a level of *c.* 6½ ft. (2 m.) above that of the original river-bed to the south of it, which now contains a shallow stream. Trenching revealed a low clay and chalk bank at least 25 ft. (7.6 m.) wide. This overlay an old land-

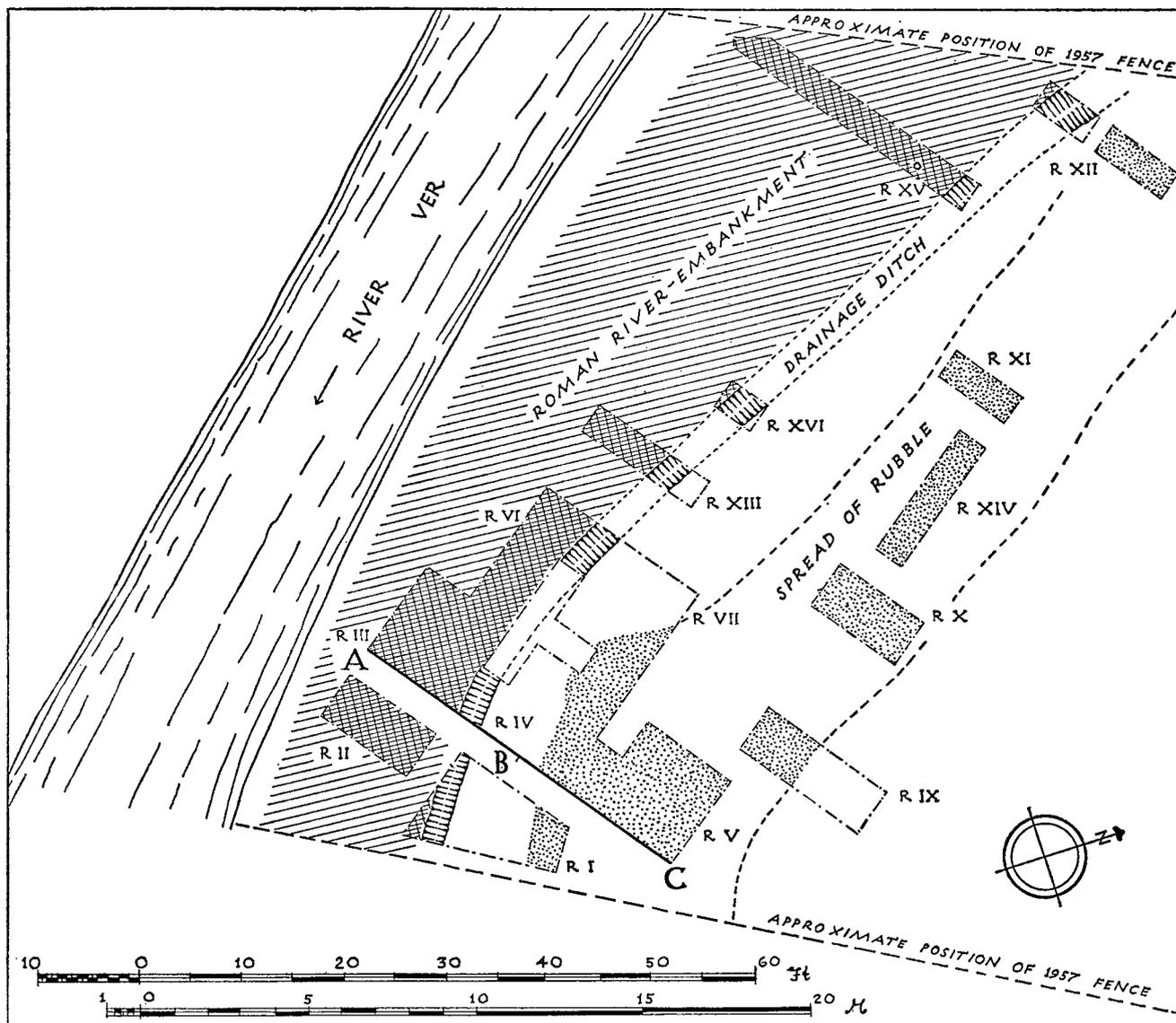


FIG. 117. Extramural Site R (1956): plan of revetment of river Ver.
 Note: the letters A and C in the section line should be transposed.

surface (fig. 118, Section B–C) and represents a Roman canalization of the river. Which side of the bank did the river run in Roman times? It was not possible to extend the excavation to examine the south-west side of the bank because of the immediate proximity of the modern stream. On the north-east side of the bank lay a number of horizontal deposits of chalky silt (R V 10), chalky clay containing pebbles (R IV 10), gravelly sand (R IV 9), and grey clay (R IV 8); these had clearly been laid by water and were partially covered by a heavy spread of horizontally laid rubble (R IV 5, R V 6). At the time of excavation these were taken to be deposits in the former river-bed. Immediately north-east of the bank ran a small ditch sealed by some of these deposits; it was originally taken to be the bedding-trench of a timber revetment or wharf-face. However, it is rather wide and shallow for this purpose, being 4–4½ ft. (1.22–1.37 m.) wide at the top but only 20 in. (0.5 m.) deep in Trench R IV. Moreover, it deepened and widened as it ran north-west, and contained no sign of packing-stones or of posts. The filling was black peaty mud, and in Trench R XII yielded a piece of cut plank *c.* 1 ft. square containing nails. The trench is better explained as a drainage ditch which has filled up naturally with bog-deposits.

It is accordingly now suggested that the Roman course of the Ver lies south of the embankment, approximately where the stream now runs, and that the ditch was intended to drain the land on the north side of the river. The deposits of chalky silt, clay, and sand north of the ditch are the product of flooding, and they seal an old land-surface (Section A–B). The cobbling of rubble (Layer R V 6) appears too heavy and too consistently packed to be deposited by flood-waters, and is taken to represent an attempt to combat the marshy conditions. The rubble is laid in a band only *c.* 16–20 ft. (4.8–6 m.) wide and was perhaps an agricultural trackway.

However, the proper drainage of the valley could only have been restored by heightening the river-bank to contain the floodwaters, for the trackway lies only *c.* 3 in. (7.6 cm.) below the surviving top of the embankment. This was not undertaken and the whole valley-floor rapidly reverted to boggy conditions (Section A–C, Layers 3 and 4). It is possible that this result was solely due to neglect; but a credible alternative is that a dam was constructed downstream possibly for a water-mill. It is interesting to recall the discovery in 1968 by the Verulamium Museum, at the foot of Holywell Hill close to the river, of ‘foundations 2 ft. (0.6 m.) wide of a presumably Roman building, possibly a mill.’¹ The site lies not far from Kingsbury Mill, a water-mill whose history goes back at least to before the Dissolution.²

Although there is plentiful dating evidence for the later phases at Site R, the lowest levels yielded few finds. The river-bank (Section B–C, R III 8) contained two Antonine sherds of samian and so was not constructed before *c.* 150. The main filling of the ditch yielded no datable finds save a storage-jar rim which is of late second- or third-century type (No. 1896) and a denarius of Julia Mamaea (222–35), both in Trench R VI. Its upper filling of grey clay (R IV 7) and R IV 8 below this both yielded plentiful fourth-century pottery and belong to the phase of flooding and of rubbish-deposition which is discussed below. This is probably also the context of a flanged bowl of similar date found in its upper filling in Trench XVI. The layer of gravelly sand (R IV 9), however, by contrast, was relatively sterile, yielding only one sherd of East Gaulish samian, form 31, probably early third-century in date, one sherd of third-century colour-coated beaker with white barbotine decoration (No. 1890),

¹ This brief record is published in *J.R.S.* lix (1969), 221.

² *V. C. H., Hertfordshire* ii (1908), 392.

a storage-jar rim of Antonine or third-century type (No. 1889) and an As of Domitian. Section B-C shows that the ditch was filled with mud before Layer 9 had been deposited, perhaps in the late third or early fourth century. (Vessels with white barbotine decoration are very rare at Verulamium, if present at all, before 250-70.) The suggested date is supported by the fact that Layer R V 7, a layer of sticky grey clay which is earlier than R IV 9 (Section A-B), yielded two sherds of third-century colour-coated beaker.

Thus, for the construction of the river embankment a date earlier than the Severan period, *c.* 200-20, is improbable; one rather later in the third century is perhaps more likely, and it is not impossible that the event is to be associated with the construction of the city wall *c.* 265-70.¹ As noted earlier² boggy conditions in the valley floor seem to have been considered sufficient obstacle to justify omission of earthwork defences both in the first and second centuries along the river line; but since the Fosse Earthwork was unfinished elsewhere in its circuit, it is dangerous to press this argument too far in seeking to date the canalization of the river. The earliest date for its embankment is *c.* 150, which is also the earliest date possible for the Fosse Earthwork. Yet the scarcity of pottery in the river-bank means that the Antonine date of the sherds there must be regarded only as a *terminus post quem*; a third-century date and a shorter chronology give greater coherence to the sequence which follows the embankment.

In Trenches R II, III, VI, and XIII a shallow depression (Section B-C, R III 5) ran along the top of the embankment; its purpose is obscure. In Trench R XV a wooden pile or post had been inserted into the bank.

It has been shown that flood-deposits, e.g. R IV 9, had occurred probably in the period 270-320, and the grey silty clay (R IV 8) sealing the ditch indicates further flooding in the period 320-50. Soon after the middle of the century a band of rubble was laid down: its extent is shown on fig. 117. It is not likely to be a water-laid deposit since many of the stones and pieces of tile were 6 in. (15 cm.) or more across. It is interpreted as a trackway of hard core. Its effect was to raise the level of deposits north of the river-bank to within 3 in. (7.5 cm.) of the top of the latter. This rubble yielded a great quantity of pottery and the following coins:

(?)denarius	1	Constantius II or Constans	1
Tetricus I	1	Magnentius or Decentius	1
<i>Urbs Roma</i>	2	House of Constantine	1
<i>Constantinopolis</i>	2	<i>Fel. Temp. Reparatio</i> (barbarous)	3
Constantine II (Caesar)	1	House of Valentinian I	1
Constans (Augustus)	2	unidentified	8
Constantius II	1		—
			25

This collection is acceptable as a coherent group and suggests that the metalling was laid down *c.* 364-70. The rubble was sufficiently coherent to discount the idea that the coins are intrusive. The Valentinianic issue, however, came from Layer R IV 6, grey clay containing rubble contemporary with the main rubble layer (R IV 5) but not so rubbly. There is a possibility that the coin could have been introduced from R IV 4 above it, and if so the rubble layer will have been deposited *c.* 360-64.

¹ For this date, see pp. 36 f., 46.

² p. 34.

It is clear that by this date, or soon after, drainage had completely broken down, whether by neglect or because of dam-construction downstream. The river was no longer confined by its embankment, and layers of greyish clay (R IV 4) and jet-black peaty mud (R IV 3) rapidly accumulated over the whole site including the old bank. These layers contained great quantities of pottery and other objects together with the following coins:

A. *Grey clay: R IV 4, and V 4 and equivalent layers*

Constantius II	1	Gratian	1
<i>Gloria Exercitus</i>	1		

On the surface of this layer in Trench R XV lay a hoard of twenty-eight coins once contained in a small wooden box measuring 9 by 7 in. (22.9 by 17.8 cm.) of which faint traces survived mainly demarcated by nails. The hoard consisted of the following coins:

Tetricus I or II	1	<i>Fel. Temp. Reparatio</i> (small barbarous copy)	1
Victorinus	1	minim	1
House of Constantine			
<i>Gloria Exercitus</i> (1 standard)	3	Valentinian I	5
<i>Gloria Exercitus</i> (2 standards)	1	Valens	7
Constans (Augustus)	2	House of Valentinian I	2
Constantius II (Augustus)	2	Gratian	2
			—
			28

B. *Black peaty mud: R IV 3, V 3 and equivalent layers*

This deposit yielded the following coins:

Septimius Severus, denarius	1	Constantius II (Augustus)	2
third-cent. antoninianus	1	Constantius II or Constans	1
Gallienus	1	Constantius II or Magnentius	
Tetricus I or II	1	(drastically cut down)	1
Claudius II	1	House of Constantine	4
uncertain radiate	1	Decentius	1
Constantine I	1	<i>Fel. Temp. Reparatio</i> (barbarous)	3
Constantine I (<i>divus</i>)	1	Valentinian I	5
Constantine I or Crispus	1	Valens	11
Crispus	2	House of Valentinian I	3
Helena	1	Valentinian II	1
Theodora	4	Theodosius	1
<i>Constantinopolis</i>	1	House of Theodosius	2
Constantine II (Caesar)	1	fourth century	1
Constans (Augustus)	6	unidentified	34
			—
			94

It is difficult to account for the loss of this large number of coins in the flood-waters of the Ver except on the theory that they were votive offerings, possibly cast into the waters from the bridge which must be assumed where, *c.* 115 m. upstream, the *agger* which approached it

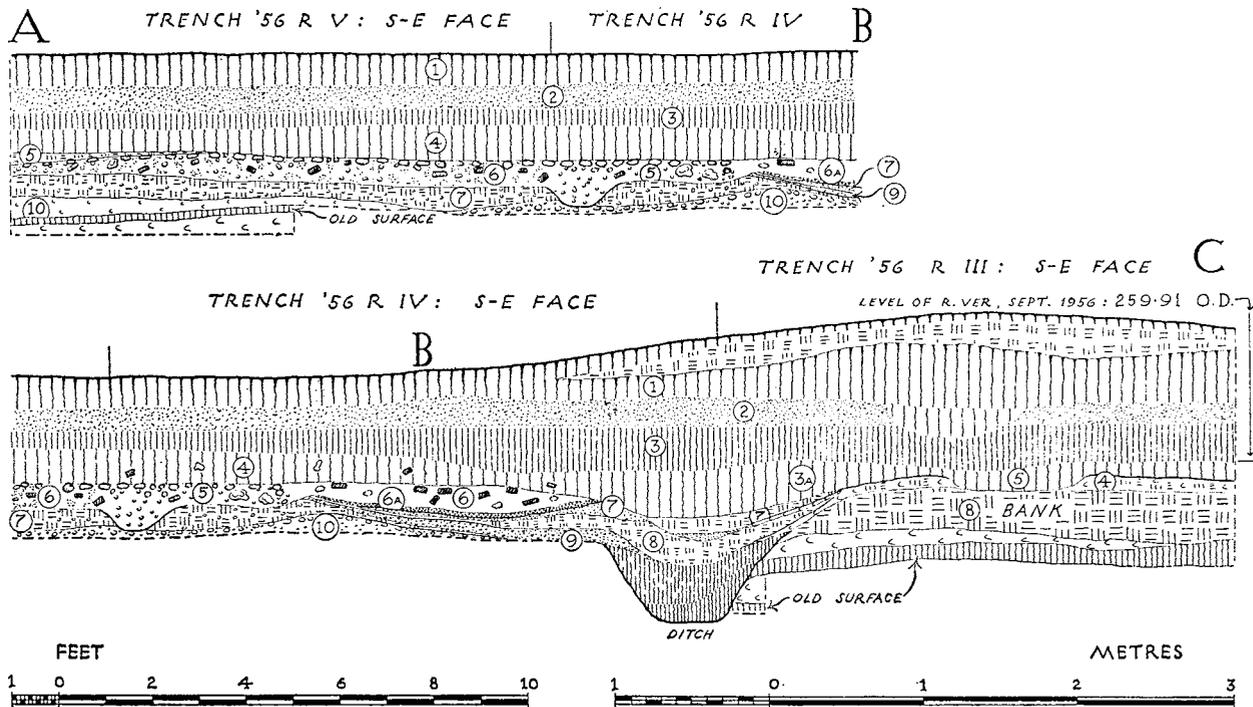


FIG. 118. Extramural Site R: Sections (scale 1:48).

can still be seen crossing the flood-plain (fig. 156). The theory is supported by the fact that by the date when this black mud began to accumulate (*c.* 375) many of the coins were no longer legal tender; and it is reinforced by the amount of other objects, some of value, which were also found. These included two pewter plates, a pewter cup, two brooches, six bronze pins, a bronze bell, four bronze rings, a silver spoon, an iron hook, a knife, etc. There were also, however, a great quantity of pottery sherds, some pieces of broken glass, fragments of metal, etc., which can hardly all be considered votive. On the contrary, they suggest rubbish disposal in the river. The coins, however, and more valuable or complete objects are not easy to explain in this way. It seems probable that both rubbish and votive offerings were being cast into the river in the late fourth century.

The sequence of late deposits can be dated with reasonable accuracy. The layer of rubble (R V 6, R IV 5) was deposited, as the coins show, *c.* 360–70. The pottery in R IV 4 and related layers is accordingly dated *c.* 365–80 and that in R IV 3 and similar deposits can be assigned to the period *c.* 375–400.¹ But Layer R IV 7 below the rubble yielded a coin of Constans (Augustus) (337–50) and accordingly its contents were deposited *c.* 345–60; the contents of R IV 8, stratified below R IV 7, are assigned to the period *c.* 320–50. Layer R IV 8, a deposit of grey clay sealing the ditch, itself represents flooding conditions; it yielded pieces of three mortaria and sherds of two other vessels (Nos. 1891–95). Thus the disposal of rubbish in the stream had begun before the middle of the fourth century.

¹ This pottery will be published in Vol. III since it does not itself date the deposits discussed here.

EXTRAMURAL SITES

IN 1957 excavation on the line of the new road was extended to the extramural region north-east of the river Ver (fig. 124). Here, during the laying of a gas-pipe, Mr. J. Lunn had observed a series of walls which led him to suggest that this was the site of an amphitheatre. Excavation revealed portions of a large masonry building provided with cellars; after demolition its site was occupied by an inhumation cemetery. In 1967 the portion of the building remaining south-east of the road was excavated by the staff of the Museum in advance of house-building, and by courtesy of Dr. Ilid Anthony her plan has been incorporated on fig. 119. Evidence for the destruction of the building by fire was recorded there,¹ but no definite traces of this fire were observed in the area excavated in 1957. A Roman road leaves the city on the line of the street bounding the north-west side of Insula XVII; its *agger* is still substantial where it crosses the valley-floor and has diverted the course of the river (fig. 156). Air-photographs suggest that on the north-east side of the valley the road swings sharply eastwards in the direction of the modern city, to pass 60–70 ft. north of the building.

The building (fig. 119)

A wing with rooms *c.* 17 ft. wide, accompanied by a corridor widening from 5 ft. 4 in. to 6 ft. 6 in. (1.62 to 1.98 m.), both of them much damaged by the plough, was traced for 89 ft. across the line of the new road but was not pursued into the field north-west of this. To judge by their relationship with the main block, Rooms 1–5 should belong to a later period of building. In the area of Room 4 many loose tesserae 1–1½ in. in size were found, together with some smaller ones (¾ in.). In Room 3 was a spread of substantial flints which are presumed to be the basis of a floor. At the south-east end of the wing lay a block of cellars (Rooms 7–12). South of Room 7, Room 13 appeared to be another addition to the main structure: its west wall, which clasped the corner of the cellar-block, survived only as a single course of flints and mortar laid on the top of natural gravel at a depth of *c.* 15 in. (38 cm.). This wall was seen further south in two post-holes dug for the 1957 fence and thus extends at least 22 ft. (6.7 m.) from the cellars. Traces of another wall appeared in a post-hole 23 ft. north-east of Room 8, and since the walls of Rooms 4 and 5 do not extend as far as Rooms 7 and 8 it is clear that a corridor must intervene on this side. In Room 14, north of the cellars, there was a dark occupation-layer in part of Trench II, filling an irregular hollow 4–8 in. deep in the natural gravel; it consisted of black soil with pebbles and many small tile-fragments, charcoal, nails and food-bones. The filling descended into a pit 4 ft. 4 in. (1.32 m.) deep. The dark layer yielded a sherd of indented beaker of third- to early fourth-century date.

The external walls of the cellar-block were 1 ft. 8 in. (0.50 m.) thick with an external 6-in. offset at the bottom and contained irregular bonding-courses of tile. The internal walls, all of which (except that of Room 11) made butt-joints with the outside walls, varied in thickness from 1 ft. 7 in. (0.48 m.) to 2 ft. (0.61 m.). The cellars had been built in an excavation *c.* 7 ft.

¹ *J.R.S.* lviii (1968), 194.

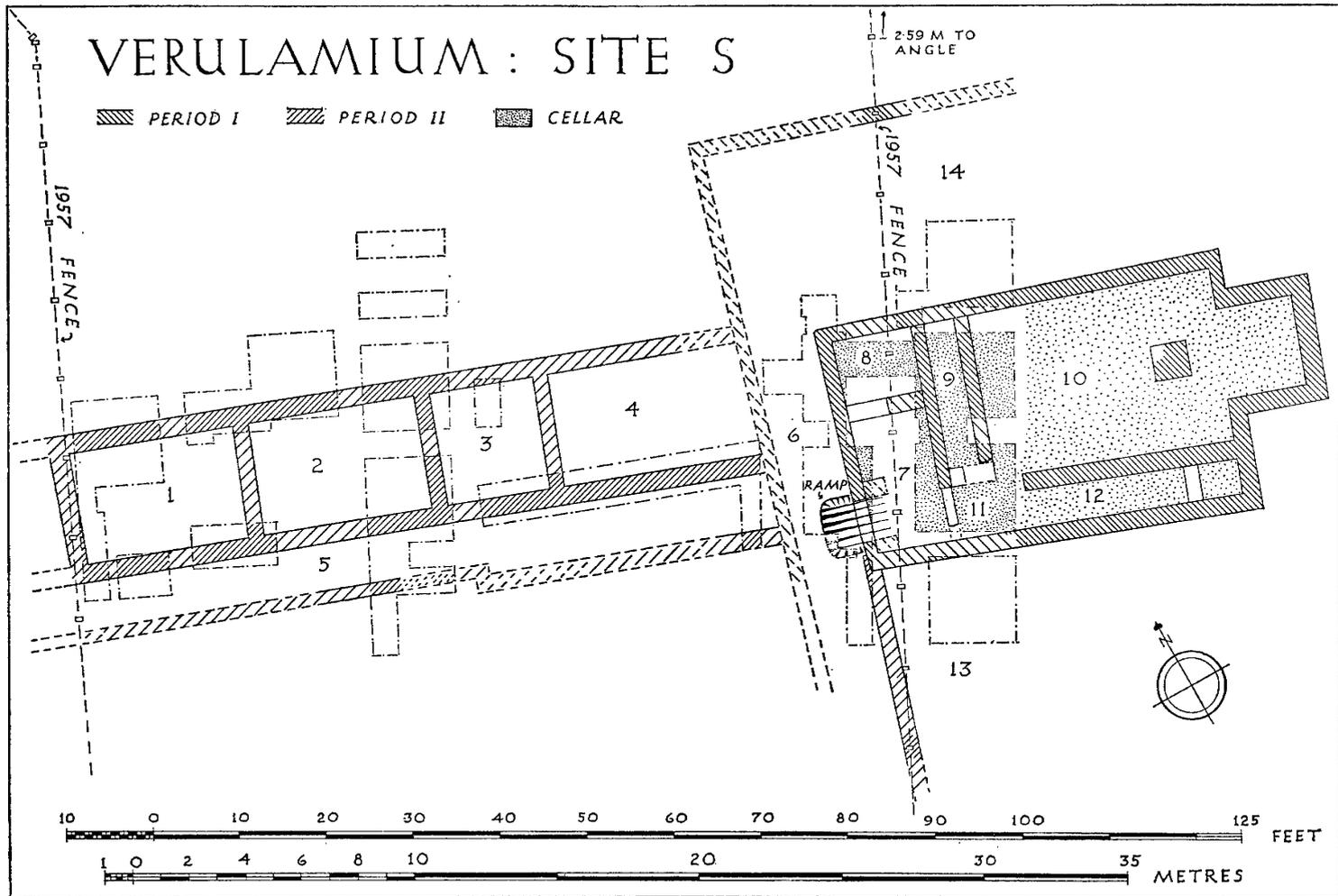


FIG. 119 (scale 1:240).

deep from the modern surface and were entered at the south-west corner of Room 7 down a ramp *c.* 4 ft. (1.22 m.) wide which sloped at an incline of 1 in 2.5. Gravel had been re-deposited over the threshold to continue the ramp into the cellar, which suggests that the corridor from which it descended was not wide. The redeposited gravel at the bottom of the ramp was surfaced with mortar and retained by a short wing-wall built of tile. There was probably another wing-wall on the south side of the ramp, now destroyed by the gas-pipe trench: a wall recorded as 3 ft. 6 in. wide and possibly of two periods was noted there by Mr. Lunn: the extra width could be accounted for if a wing-wall adjoined the external wall of Room 7.

Room 7. The south-east wall of this room carried a 1-in. rendering of mortar. A sill-wall, 13 in. (0.33 m.) high from the base of the cellar-pit and bonded with Wall 7/9 marked the threshold to Room 11, and a similar sill 24 in. (61 cm.) wide and 17 in. (43 cm.) high gave access to Room 9. Both were partly destroyed by graves. Their tops were approximately level with that of the accumulated layers of mortar and make-up which constituted the floors. In Room 7, over a spread of gravel and dark soil (fig. 120, Section C-D, 25) lay a deposit of yellow mortar and flints (24). The mortar was often loose and earthy, though firm in places, and was probably in origin a builders' level, though later used as the floor. Layer 22 above it was a compressed layer of trampled wall-plaster fragments containing occasional pieces on which red and pink surfaces survived; although this suggested debris from redecoration it must really be material deposited for flooring since Room 7 was not in fact plastered. It yielded a calcite-gritted jar (No. 1852) which can hardly be earlier than *c.* 230. Layer 23, of clean orange clay, which underlay it existed only in patches and may be merely a spread from the entrance-ramp. Above Layer 22 were two further somewhat patchy floors of yellow mortar (20 and 13) separated by occupation-layers. Layer 22 yielded a third-century mortarium and a flagon possibly of similar date (Nos. 1850-51). A small hearth with associated charcoal was found on Layer 21. A thick occupation-layer (12) consisting of grey earth containing oyster shells, bones and some pieces of window-glass had accumulated over Layer 13, and was sealed by demolition-deposits. It ran over the threshold to Room 11 and yielded pottery which is mainly of the first half of the fourth century.

Room 8 was probably entered from Room 7; its basal level was 18 in. (0.46 m.) above that of the latter. The walls were neither painted nor rendered. At a height of 28 in. (0.71 m.) above the base of the free-built part of the south-east wall one bracket-hole survived; perhaps it was intended for a shelf or cupboard (fig. 121). The socket was rectangular, 4½ in. high by 3 in. wide (11.43 by 7.62 cm.) capped with a tile, and it ran 10 in. (25.4 cm.) into the wall; the sides were somewhat irregular but the base was of smooth mortar. The accumulated floor-levels found in Room 7 were absent here; a layer of gravel and clay (15) sealed a builders' spread of mortar (Section A-B, Trench VIII 16), but at the other side of the room Layer 15 sank below the base of the built wall. It must soon have been reinforced by Layer 14 (Section C-D), which consisted of yellow mortar, flints and broken tiles; in places this was sealed by a thin occupation-layer (13), but elsewhere the floor could not be distinguished from the lowest level of the destruction-deposit (12) above it. Layers 15 and 13 each yielded coarse pottery (one vessel each) of Antonine date.

Room 9 was a corridor only 3 ft. 8 in. (1.12 m.) wide. It did not lead up and out of the cellar towards the north-east and its main function was perhaps structural as a support for

the ground floor. Both walls had two 1-in. renderings of mortar, the first a trowel-worked surface, the second smooth and painted white. The corridor occupied a secondary position in the building since it had been inserted into deposits which were themselves later than the external walls (e.g., Section A-B, Trench VIII 15). After a builders' spread of mortar (S III 15, 20) had accumulated, on the surface of which were splashes of white paint from the decoration of the walls, a thick bed of clean clay and gravel (S III 14) was laid down as floor. Layer 11, of chalky brown soil, was a secondary floor, in one place sealing a patch of burnt wood (12). The plaster of the walls was heavily scored at the level of the top of 11 and again at the surface of 10, an occupation-layer of dark grey soil. These marks suggest that amphorae were stored in the room, a suggestion supported by the provision of a ramp

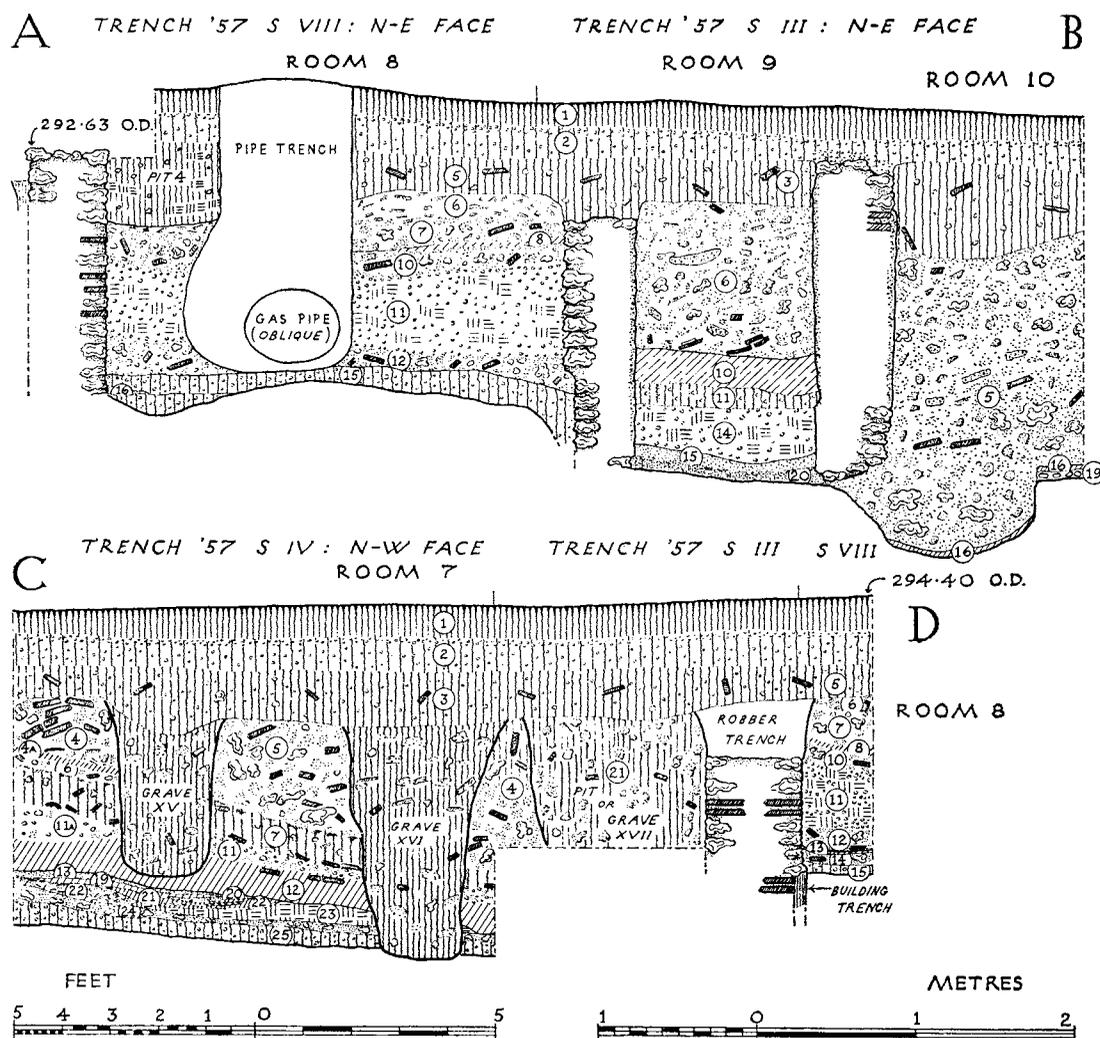


FIG. 120. Extramural Site S: Sections (scale 1:48).

instead of stairs as means of entry to the cellars. Layer S III 13, a local patch of chalky brown soil sealed by the patch of burnt wood, yielded a sherd of Antonine samian and four sherds datable to the later third century. At the south end of the corridor the original clay and gravel floor (S IV 15) yielded a sherd of colour-coated bowl (No. 1855) of the fourth century; other sherds of this bowl were found in demolition layers, and it is doubtless a late inclusion in the floor. Among the debris filling the corridor were seven tiles mortared together, perhaps for a door-jamb, together with large lumps of flooring consisting of a bedding of yellow cement 5 in. thick capped by 2.5 in. of *opus signinum*.

Room 10. Little of this room lay within the area excavated in 1957; it was completely excavated in 1967 and shown to have a rectangular extension at its south-east end. In front of this stood the base of a large pier of tile, partly destroyed by a grave. The short report in *J.R.S.* lviii (1968), 194, suggests that this supported a vault, but in view of the height a vault would require it is more likely to have supported floor-joists. In the north corner of the room a swallow-hole had disturbed the stratification (Section A-B), causing the upper half of the skeleton in Grave XXI to subside 1 ft. below its pelvis. The north-west wall had a 1-in. mortar rendering painted white all over; the lowest 26½ in. (67 cm.) were then painted pink and splashed with red and black, forming a dado separated from the upper wall by a horizontal band of red, 2½ in. wide. Amongst the fallen debris was wall-plaster painted red, green, white, mottled green, and mottled red. There was also a piece of cornice-moulding in plaster: this presumably belonged to the ground floor of the building. In 1967 debris from a fallen tile arch was found in the area between the pier and the recess. Much white and painted plaster (red, blue, and green) was also found there, including some white stucco fragments moulded in relief. Those pieces had probably fallen from the ground floor.

Two holes for shelf-brackets survived in the north-west wall at a height of 4 ft. (1.22 m.) above the base of the rendering. They were 17 in. (0.43 m.) apart; the more easterly was 4 in. high by 2½ in. wide (10 by 6.3 cm.), the other 2½ in. square; both holes ran through the width of the wall and were sealed at the far end by the mortar rendering of the corridor; both had regular smooth sides and lay above a double tile-course. Photographs show that similar sockets existed all along the north-east wall and in the extension (pl. XLVIIc). Room 10 had a cobble floor (Trench III 19) of fist-sized stones set in clay, on which a dark occupation-layer (16), 2-3 in. thick had accumulated. The painted face of the wall began only at the top of this layer, which abutted the top of the unrendered footings.¹ In 1967 part of a floor of 1-in. red tesserae was found over the occupation-layer near the recess and in the same area was a deposit of clay, in which lay part of a globular amphora, crushed by the fallen arch. It was filled with sherds and pebbles all showing signs of heat.

Room 11, much disturbed by graves, had a mortar floor (Trench IV 14) over which a layer of dark occupation-soil (10) had accumulated. Layer 14 yielded a mortarium-rim of the period 160-240 (No. 1849).

Room 12 was another corridor, 4 ft. (1.22 m.) wide. Near its south-east end was a cross-foundation, only a few inches high. As the chamber which it demarcates is only 4 ft. 6 in. long, it is possible that the foundation supported the base of a staircase entering from the south-east.

¹ In Section A-B the normal relationship has been disrupted by subsidence.

Date of the building

In the make-up of the floor of Room 8 was a sherd of Antonine poppy-head beaker, and other early floor-levels yielded sherds datable *c.* 165–230 or 160–240; several sherds of Antonine samian were also found, though all in residual contexts. The occupation of the building began, therefore, during the currency of Antonine pottery, but in view of its relative scarcity and of the presence of late third-century sherds in the later floor-levels it would be unwise to place construction before *c.* 200–20. The later occupation-levels contained pottery which certainly extends into the fourth century, and at least one bowl (No. 1855) is probably as late as the middle of the century. The destruction-levels filling the cellars also yielded fourth-century pottery, some sherds of which probably date to the period 350–400. No firm reliance, however, should be placed on these since it was not always possible to distinguish the upper fillings of the graves from the rubble into which they were cut. It seems probable that the building was erected *c.* 220–50 and that it stood until *c.* 350, and perhaps until *c.* 370.

Purpose of the building

The plan is incomplete, but the area known is already 144 ft. (44 m.) long, and has generous cellar-accommodation over which presumably lay a single large hall with *exhedra*. The probability is that the building served some public rather than a private domestic function. Apsed halls are found in certain *praetoria* (inns), e.g., at Silchester, Caerwent or Cambodunum, and the large wine-cellar would also be consistent with this function; an alternative is as headquarters of a guild. This is perhaps less likely because we have no evidence for a wealthy *collegium* at Verulamium. The building has no connection with the large baths nearby, which were being demolished about the time of its erection.

The cemetery

Nineteen inhumation-graves and two further probable graves were found in 1957 (fig. 121); at least seven were wholly or partly cut through walls of the demolished building, which was evidently invisible at the time of interment. All save one were orientated with head to the north-west; the exception, Grave XIX, was dug beside, instead of through, a wall and had its head to the south-west. The graves outside the cellar were *c.* 3 ft. deep; the rest were usually dug down to natural gravel at the bottom of the rubble. The skeletons were unaccompanied by grave-goods, but the grave-pits yielded third- and fourth-century sherds, no doubt derived, like their rubble fill, from the destruction-deposits through which they were dug. Several graves were lined with large flints; this was not merely a practical way of revetting the loose rubble, for the rite occurred in graves outside the cellar. Grave IX had been enlarged to cut obliquely into part of the wall, apparently because the body was too long for the original cutting. Three graves, I, V, and XX—and possibly X, which was not fully excavated—were of children, and two appeared to be of women: a young woman in XVIII and a middle-aged one in VII.

At the time of excavation the cemetery was taken to be probably medieval or later, not least because the north-west-south-east orientation of the graves is almost identical with that of the Abbey Church,¹ visible to the south. No context has, however, been discovered for

¹ Mr. Lunn recorded a fragment of Bellarmine jug of the sixteenth or seventeenth century apparently *in situ* in the filling of a grave cut by the gas-pipe trench.

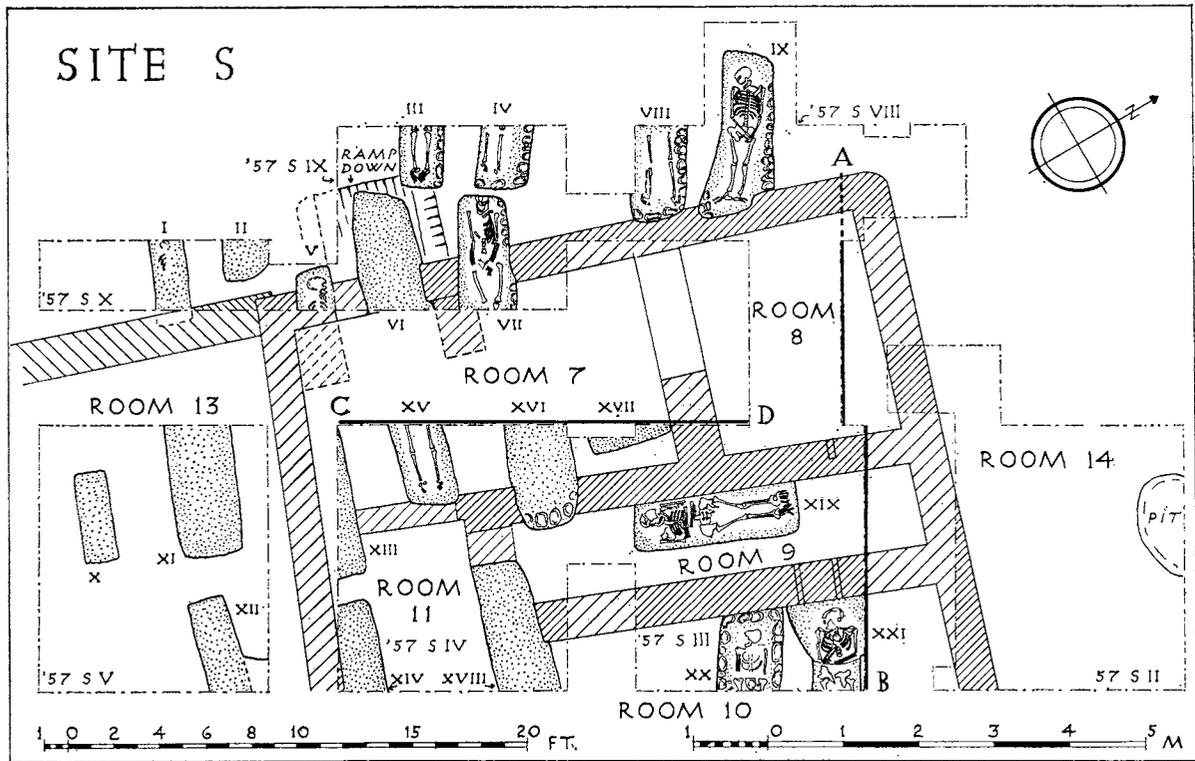


FIG. 121. Extramural Site S: plan of burials (scale 1:100).

medieval or later burials at this site, and they are possibly to be taken as late or sub-Roman in date.¹ Graves XV, XVI, and XVII are sealed by Layer S IV 3 which yielded only late Roman pottery. If the building was not demolished before the middle or third quarter of the fourth century, it seems probable that the cemetery was in use in the fifth century, and may, therefore, be Christian. The skeletons were left *in situ*.

In 1967 thirty-five further burials were found, of which two were of infants. Evidence was found for wooden coffins. A shale pin and some minute glass beads were taken to be grave-goods.

DATING EVIDENCE: SITE S

DEPOSIT	SAMIAN	COINS	COARSE POTTERY
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A. Primary levels dating the building

S IV 14
mortar floor,
Room 11

No. 1849

¹ This is also the opinion of Mr. C. Saunders who excavated a further twenty burials for the Verulamium Museum in 1974.

DEPOSIT	SAMIAN	COINS	COARSE POTTERY
S VIII 15 gravel and clay primary floor, Room 8			Type 837 (140-210)
<i>B. Secondary floors, etc.</i>			
S IV 22 trampled plaster, Room 7			Nos. 1850-52 Type 1483 (A.D. 170-250) and Type 1828 (A.D. 140-200)
S IV 21 occupation on 22, Room 7			Types 1483, 2591 (both A.D. 170-250)
S IV 15 clay and gravel floor, Room 9	27 S.G. pre-Flavian		intrusive sherd of No. 1863
S IV 12 late occupation, Room 7	18/31 C.G. Hadrianic- Antonine	Hadrian, sestertius, <i>RIC</i> 764 d	Type 1724 (A.D. 310-60) and cf. Types 1057, 1125
S IV 11 late floor over 12			Nos. 1853-5 Type 1113
S III 13 (=11) secondary floor, Room 9	33 C.G. Hadrianic 31 C.G. Antonine		Types 1104, 1170, 1691, 1812
S VIII 13 occupation in Room 8			Type 2584
S II 5 black occupation- soil, Room 14	17 S.G. Claudian 18/31 C.G. probably Hadrianic		Type 2037
S XXVI 5 occupation-layer, Room 4			No. 1856
<i>C. Destruction deposits</i>			
S VIII 11 (Room 8)	31, 33, (?)38 C.G. Antonine		Nos. 1880-1
S VIII 8 (Room 8)	31 (two) C.G. Antonine		No. 1882
S VIII 5 (Room 8)	(?)38 E.G. stamp MΛTI (S 74) Antonine		mortarium-flange dated c. A.D. 170-230
S IV 9 (Room 7)	29 S.G. A.D. 70-85		Nos. 1874-7
S IV 7 (Room 7)	30 C.G. Antonine		Nos. 1857-73 Types 1113, 1728, 2333 and cf. Type 1979

DEPOSIT	SAMIAN	COINS	COARSE POTTERY
S IV 6 (Room 7)			No. 1879 Type 1886
S III 4 (Room 7)	Ludowici Tq C.G. Antonine		cf. Type 2361
S III 5 (Room 10)	27 S.G. Flavian 33 C.G. probably pre-Antonine		No. 1878
<i>D. Layers overlying graves</i>			
S III 3 dark soil and rubble sealing graves	31 (two) C.G. Antonine		No. 1888 Type 2537
S IV 3 (the same)	31, 45 C.G. late Antonine 33 (two) C.G. Antonine	Antoninus Pius, dupondius, <i>RIC</i> 685	Nos. 1883-7

VERULAMIUM 1955-60

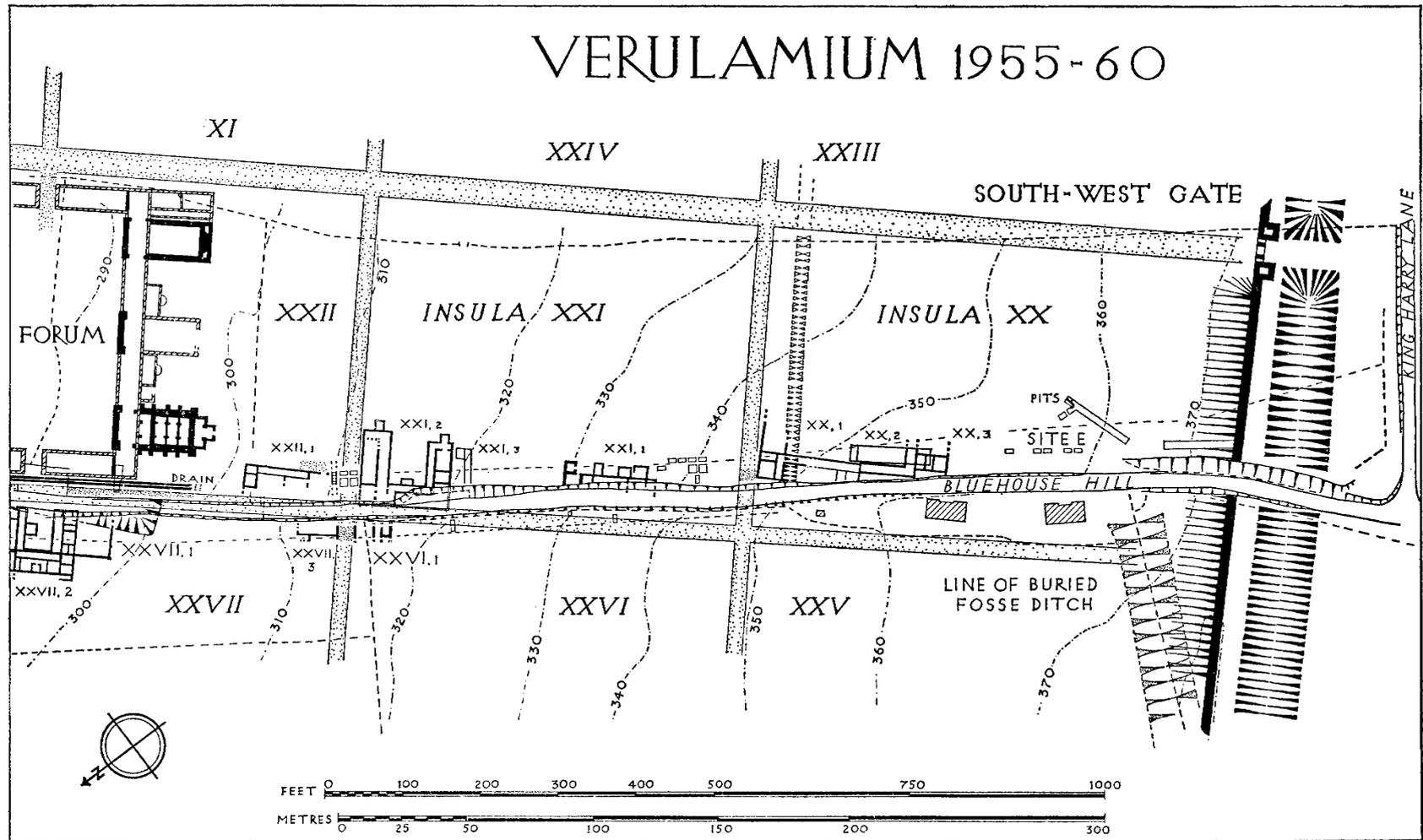


FIG. 122. General plan 1: area south-west of forum (scale 1:2500).

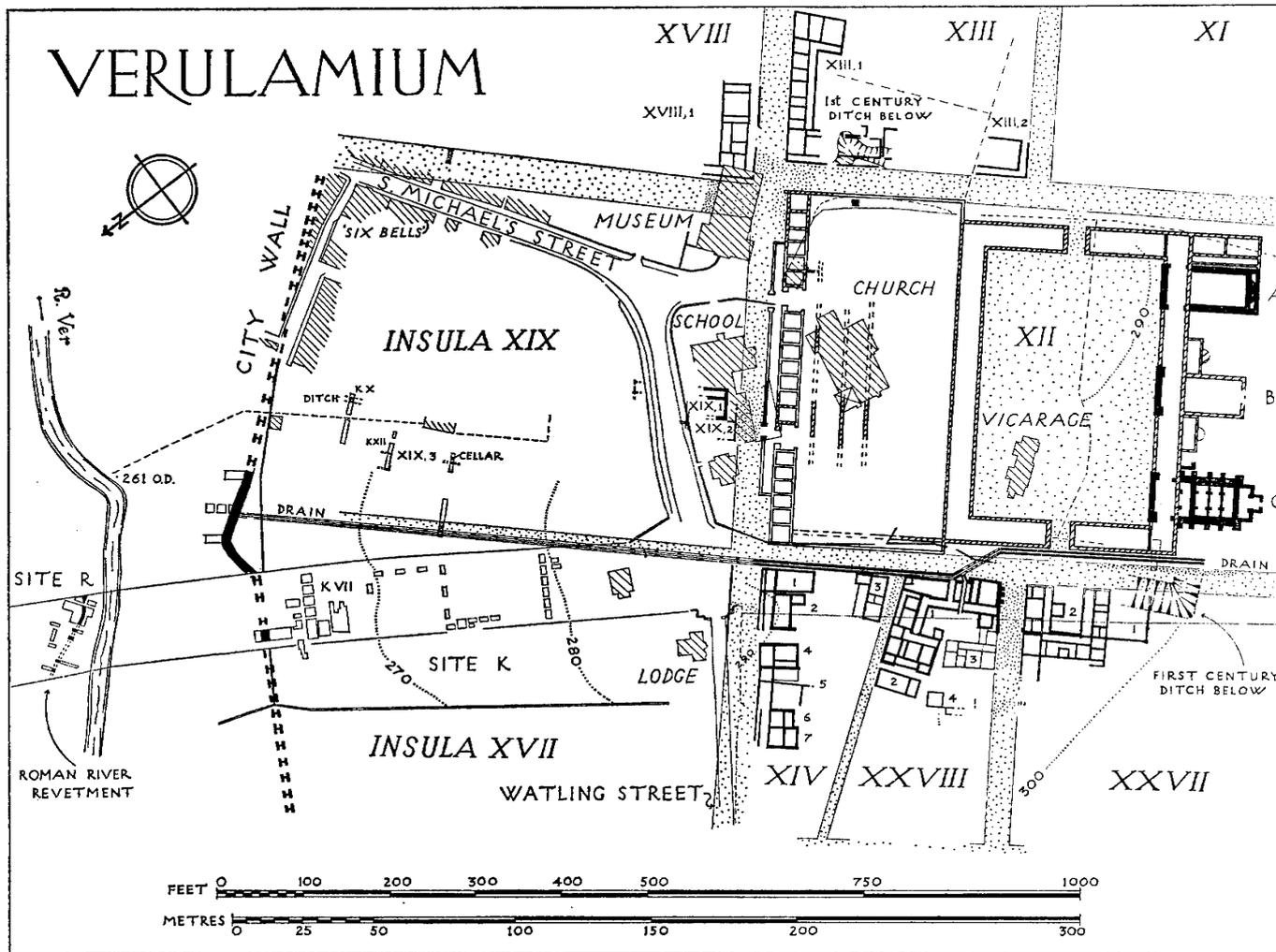


FIG. 123. General plan 2: area north-east of forum (scale 1:2500).

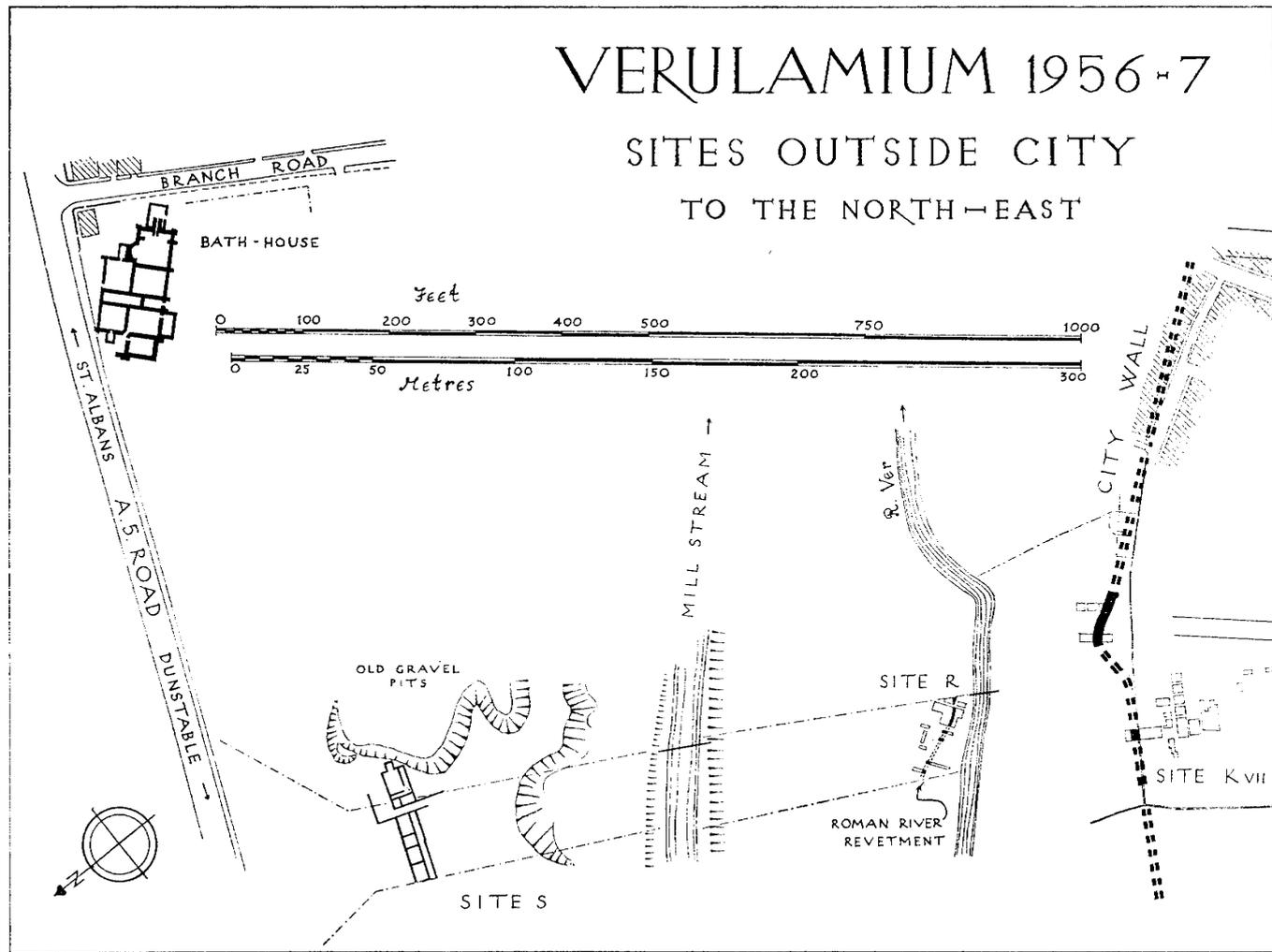


FIG. 124. General plan 3: extramural area (scale 1:2500).

THE POTTERY USED FOR DATING

THE pottery published in this chapter is that which has been used, in the text and lists above, to date the contexts in which it appears. The collection, therefore, has an active significance for this report; the dates given to individual sherds in the text below are those assigned to the particular deposit after the evidence of stratigraphy, coins, samian, etc., and of the vessels themselves had been considered, and are also derived in large measure from the type-series published in Volume I; but those of other vessels, e.g., mortaria, Black-burnished or colour-coated wares, are validated in other studies. The importance of large stratified series of groups is wider than the study of their immediate contexts, however, since association in groups can confer dating-power on vessels not previously datable at all closely; and forms well dated at Verulamium can be used to elucidate problems in future excavations not only within the city itself but over the surrounding region which drew its pottery from the same sources. Moreover, pottery can be used not only for immediate dating but also to illustrate the patterns of fashion, manufacture, and trade in Roman Britain. For this reason, although considerations of space have imposed strict limitations on the amount of pottery published in this volume, and have restricted it to what is of active significance, it is intended to publish in Volume III the residue of significant pottery which is dated by its appearance in the contexts published in the present volume.

This method of work has meant that the vessels published in Volume II could not be collected into typological sequences, as was to some extent possible in Volume I, since many of the contexts contained only a very few vessels. In Volume III the treatment will be more typological, and it is hoped to subsume the various types in that volume, without of course repeating the illustrations.

Thanks are due to Miss Valery Rigby for notes on the stamp on terra nigra vessel No. 1783. We are also greatly indebted to Mrs. K. F. Hartley for once again studying the mortaria, giving them overall dates, and assigning them to their place or region of manufacture. Her dates are given in the text below in brackets (under the formula 'c. A.D. 140-80', etc.) followed by the origin of the vessel and then by the context of the vessel in the excavation and its date (without brackets, under the formula, e.g., 'A.D. 140-60'). The description 'local' implies manufacture in the Brockley Hill-Verulamium factories. Study of the contexts of some other types of vessel, when they occur in sufficient numbers, has enabled a date-range for the type to be offered. This has been added at the end of the entry in bold type, e.g. (A.D. **180-240**), and a number following, e.g., **five**, means that this date-bracket has been arrived at on the evidence of five stratified vessels of the type in question; it will be seen that the date-range rarely coincides exactly with the date of the individual context; the date-ranges are, however, to an unavoidable extent subjective, at least for the terminal date, because of the difficulty of determining at what point occurrences become residual. When comparisons with other vessels are made, the formula 'As No. 1532' refers to another example of the same type; the formula 'cf. No. 1532' implies either that the vessel referred to is closely similar but not of form identical with the vessel cited or else that the piece is too small for certain comparison. A list of date-ranges for vessels published in Volume I will be included in Volume III.

Pottery is cited either as No. 000 or as Type 000. 'No.' refers to the actual vessel illustrated. Types 1-1293 appear in Volume I; Types 1294-1896 appear in the present volume; and Types 1897-2697 in Volume III. The use of the word 'type' indicates substantial identity of form between the vessel under discussion and the parallel quoted.

CATALOGUE OF THE POTTERY

by M. G. Wilson, F.S.A.

I. POTTERY FROM THE DEFENCES

(A) THE FORT (pp. 37-44) (Sites 56 K VII E, CW, and 57 K VII C)
FIG. 125

1294. Finely granular dark grey ware, burnished rim and shoulder, 56 K VII E 24, A.D. 44-7. (Date-range of type A.D. **44-80, three.**)

Nos. 1295-8 *Pottery from 57 K VII C 18, A.D. 44-58*

1295. Smooth hard white ware, light grey grits; pre-Flavian, import.

1296. Coarse grey calcite-gritted ware, smoked, red inside.

1297. Smooth hard cream ware, grey grits; probably Claudian though started earlier, south-east or import.

1298. Hard buff granular ware.

Nos. 1299-1301 *Pottery from layers dated A.D. 45-58* (Nos. 1299-1300), *55-61* (No. 1301)

1299. Brownish-buff finely granular ware, burnished rim and shoulder, 56 K VII E 22.

1300. Butt beaker with combed decoration, in pinkish-buff finely granular ware, 56 K VII E 22.

1301. Hard finely granular light grey ware, burnished outside, 56 K VII E 20.

Nos. 1302-3 *Pottery from layers dated A.D. 61*

1302. Mortarium-fragment in hard buff ware, grey, white, and red grits (*c.* A.D. 55-90); probably import; 56 K VII E 15.

1303. Mortarium-fragment in hard buff granular ware, grey grits (*c.* A.D. 60-95); local; 56 K VII E 14.

1304. Coarse granular dark grey ware, partly burnished, 56 CW 30, A.D. 75-90.

Nos. 1305-18 *Pottery from 56 CW 23, A.D. 90-150*

1305. Finely granular light reddish micaceous ware, burnished, grey core.

1306. Jar with burnished decoration, in hard granular grey ware, lighter slip, burnished rim and shoulder.

1307. Hard granular yellow-buff ware. (As No. 879, A.D. **130-70.**)

1308. Hard granular buff ware, grey core.

1309. Hard finely granular buff ware, smoked; smoothed below carination (A.D. **130-80, three.**)

1310. Hard granular light grey ware.

1311. Hard rather finely granular buff ware, smoked.

1312. Hard granular blue-grey ware, lighter core. This ware is not usually found after *c.* A.D. 120.

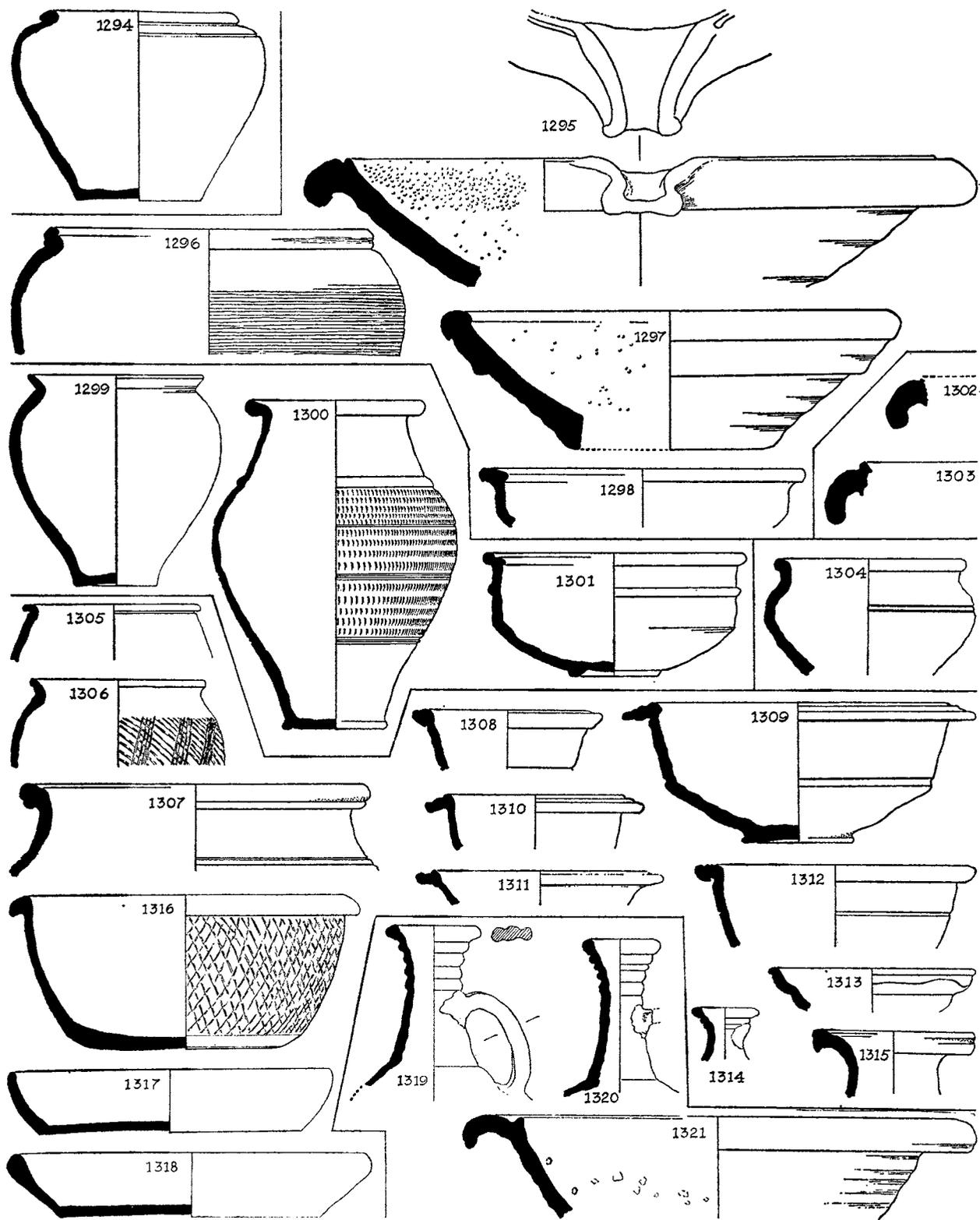


FIG. 125. Pottery from the defences (1).

1313. Cup copying samian form 27, in fine hard light grey ware, darker slip inside and on lip.
 1314. Smooth hard cream ware.
 1315. Hard granular buff ware.
 1316. Dish with burnished lattice, in hard grey-brown burnished ware (A.D. **140-80, three**).
 1317-8. Dishes with plain rims in hard reddish-buff mica-coated ware, two of each (No. 1317, A.D. **100-60, nine and three residual**).

Nos. 1319-21 *Pottery from 56 CW 19, A.D. 90-150*

1319. Hard granular buff ware.
 1320. Hard rather finely granular brownish-buff ware.
 1321. Hard finely granular buff ware, white and grey grits (c. A.D. 100-40); local: a waster, probably unusable.

FIG. 126

Nos. 1322-4 *Pottery from 56 K VII E 5, A.D. 140-60*

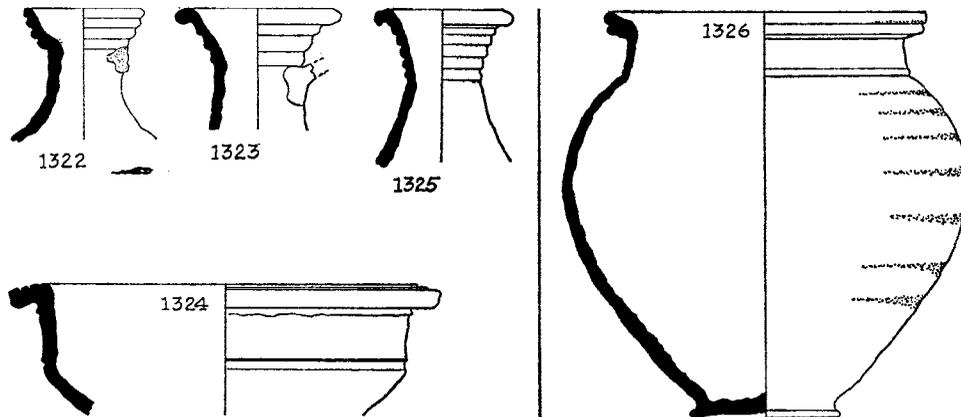


FIG. 126. Pottery from the defences ($\frac{1}{4}$).

1322. Hard finely granular whitish-buff ware (A.D. **130-80, eight**).
 1323. As No. 1322, in buff ware.
 1324. Hard rather finely granular blue-grey ware, lighter core.
 1325. Hard granular pinkish-buff ware, K VII E 12, A.D. 140-60. Cf. Type 811 (A.D. **140-80, four**).
 1326. Hard granular light grey-buff ware, and another in buff ware, reddish core, 56 CW 20, A.D. 150-200. (As No. 1805, A.D. **130-80, forty-six and two residual**.)

(B) THE 1955 DITCH (pp. 48-9)

(Sites 60 A, and M)

FIG. 127

1327. Jar with scored diagonal lines on shoulder, in rather coarse and granular dark grey-brown Belgic ware, partly burnished, A I 22, A.D. 50-70. Cf. No. 2143.

Nos. 1328-34 *Pottery from layers dated A.D. 70-100*

1328. Very coarse granular reddish-grey ware, unevenly burnished, M II 34 (A.D. **50-90, four**).

1329. Mortarium with broken flange, stamped OASTRIVS (probably *c.* A.D. 55–80), local; A I 20.
 1330. Rather finely granular cream ware, with red paint on rim and neck, A I 20.
 1331. Hard rather finely granular blue-grey ware, lighter core, A I 20.
 1332. Hard granular yellow-buff ware, A I 20.
 1333–4. Hard rather finely granular buff ware, smoothed; pink core, A I 19.

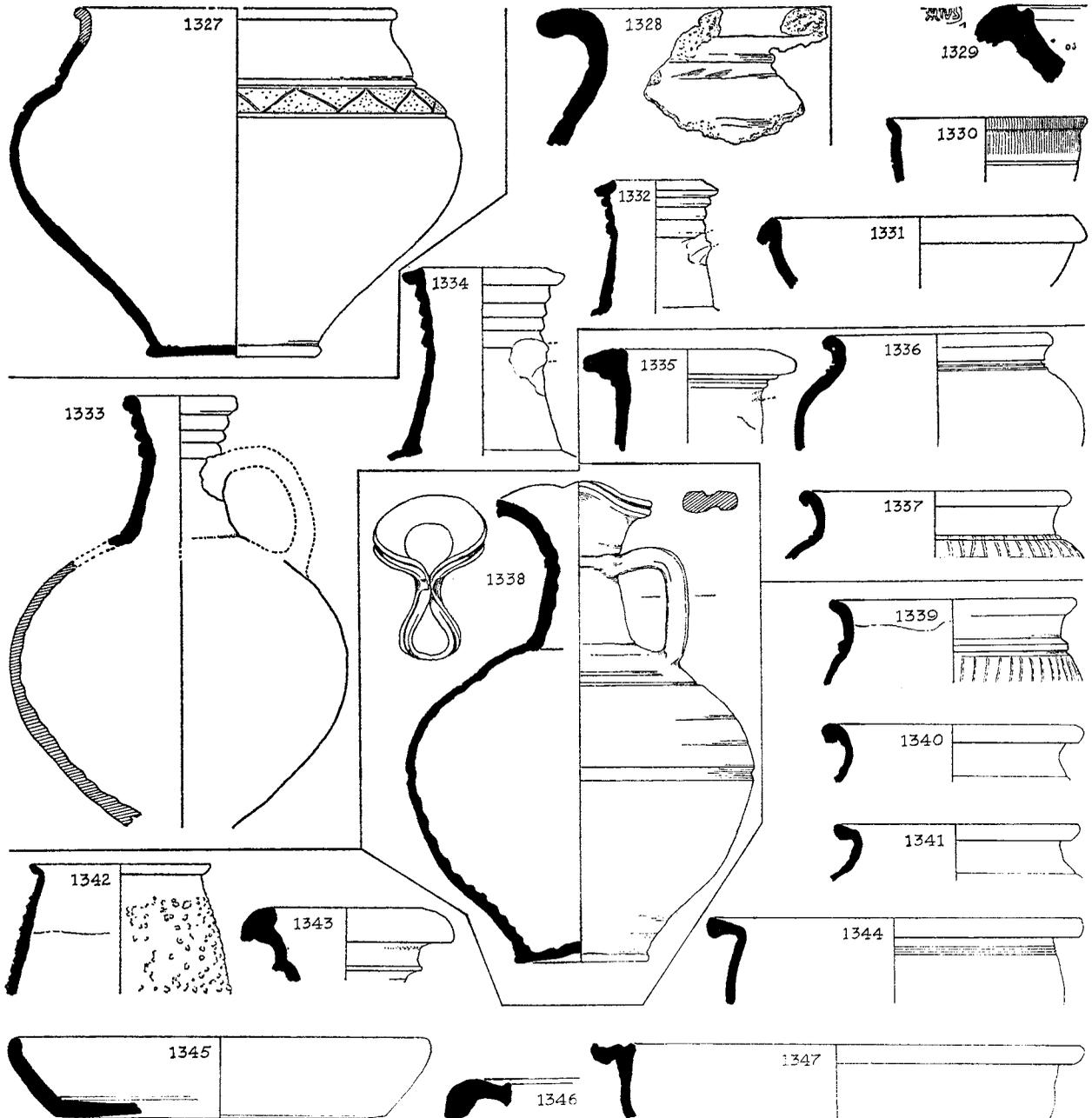


FIG. 127. Pottery from the 1955 Ditch (¼).

Nos. 1335-7 *Pottery from A I 15, A.D. 115-30*

- 1335. Hard granular white ware, smoothed.
- 1336. Hard rather finely granular blue-grey ware, lighter core as No. 1331, sooted (A.D. **115-40, two**).
- 1337. Jar with burnished shoulder-decoration, in fine hard burnished dark grey ware
- 1338. Rather finely granular light grey ware, lighter core M II 31 A, A.D. 120-40 (A.D. **120-50, three**).

Nos. 1339-47 *Pottery from A I 10, A.D. 130-60*

- 1339. Jar with burnished shoulder-decoration, in fine hard grey ware, lighter burnished slip. (Cf. No. 2087 (two), A.D. **125-50**.)

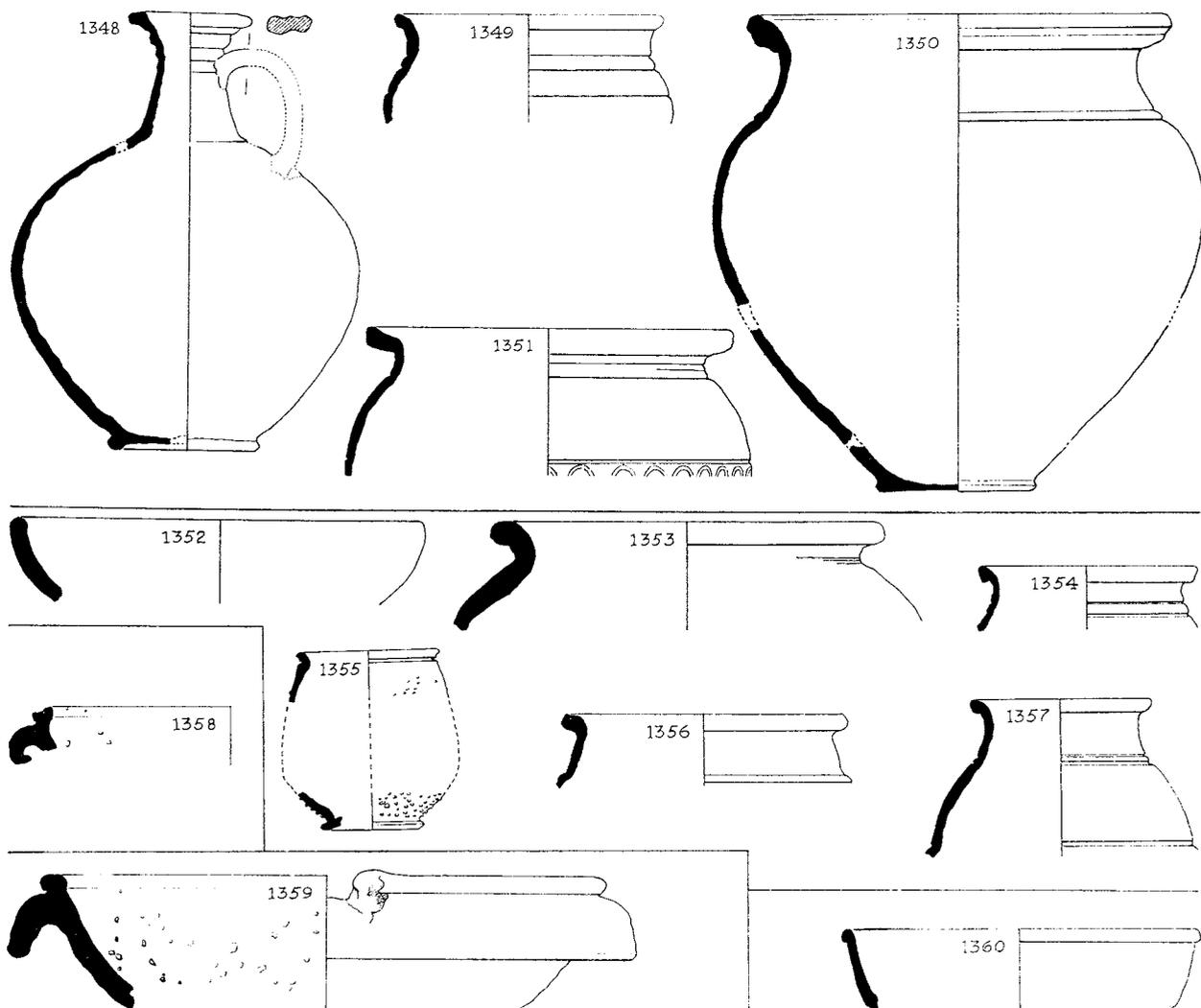


FIG. 128. Pottery from the 1955 Ditch (4).

- 1340-1. Hard rather finely granular buff ware, smoked (No. 1341, A.D. **125-55**).
 1342. Imitation roughcast beaker in hard rather light grey ware, lighter slip, burnished on rim and neck. (Cf. No. 597 A.D. **125-50**.)
 1343. Hard rather finely granular buff ware. (Cf. No. 1956, A.D. **145-60**.)
 1344. Smooth hard micaceous dark grey-brown ware, red core.
 1345. Reddish-buff burnished ware, may have been mica-coated. (Cf. Nos. 1317, 2512, A.D. **110-50**.)
 1346. Mortarium flange (*c.* A.D. 90-140); local.
 1347. Hard rather finely granular light grey-buff ware, pink core (A.D. **130-45, three**).

FIG. 128

Nos. 1348-51 *Pottery from M II 29, A.D. 140-60*

1348. Hard granular pinkish-buff ware. (As No. 566, A.D. **120-80, twenty-six and seven residual**.)
 1349. Hard grey burnished ware.
 1350. Hard rather finely granular light reddish ware, partly burnished.
 1351. Jar with incised decoration, in hard granular grey ware.

Nos. 1352-7 *Pottery from A I 6 and 7, A.D. 160-90*

1352. Buff ware, A I 6.
 1353. Very coarse granular light grey burnished ware, A I 6.
 1354. Hard rather finely granular buff ware, A I 6.
 1355. Roughcast beaker in fine hard white paste, orange to grey-brown coating, A I 7.
 1356. Hard buff granular ware, A I 7 (A.D. **140-90, five**).
 1357. Rather coarse granular dark grey-brown ware, unevenly burnished, A I 7.
 1358. Hard rather finely granular pinkish-buff ware, black and grey grits (*c.* A.D. 140-200); local; M II 9, A.D. 180-200.
 1359. Hard rather finely granular cream ware, grey and white grits (*c.* A.D. 140-200); local; M II 18, A.D. 180-220.
 1360. Red colour-coated bowl in micaceous pinkish-buff ware, trace of orange-red coating, M II 5, A.D. 250-320.

(c) THE CITY WALL (pp. 53-4)

(Sites 55 C, 59 CW, 61 CW)

FIG. 129

1361. Dish with burnished diagonal lines, in hard burnished dark grey to buff ware, 61 CW 23, A.D. 130-70 (A.D. **135/40-210+, eight**),
 1362. Mortarium in hard yellow-buff granular ware, grey core, grey grits (probably *c.* A.D. 150-200); south-east or could be local; 61 CW 19, A.D. 200-50.

Nos. 1363-5 *Pottery from 55 C 12, A.D. 150-250*

1363. Smooth hard burnished light grey ware.
 1364. Dish with rouletted body, in smooth hard brownish-buff ware, burnished outside.
 1365. Hard buff granular ware, grey, white, and red grits (*c.* A.D. 140-200); local.

Nos. 1366-77 *Pottery from 5 C 5, A.D. 260-70*

- 1366-9. Hard buff rather finely granular ware, grey, white, and red-brown grits (*c.* A.D. 150-200); local.
 1370. Coarse buff calcite-gritted ware.

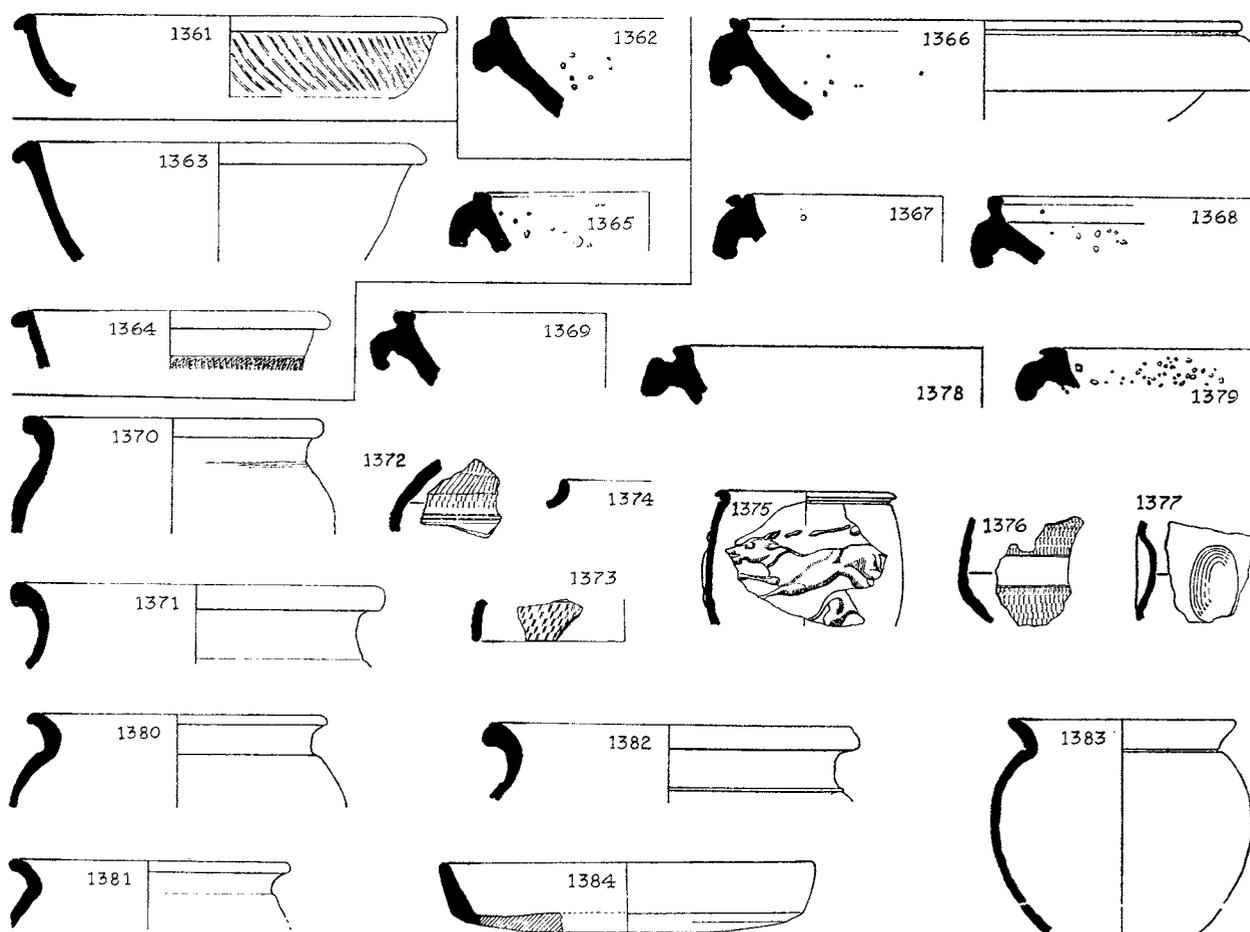


FIG. 129. Pottery from the defences (1/4).

1371. Hard finely granular buff ware, orange-buff surface.
 1372. Castor 'box' lid sherd in hard white paste, dark grey-brown coating outside, orange inside.
 1373. As No. 1372, but in fine orange-buff paste.
 1374. Castor 'box' rim in hard white paste, orange coating.
 1375. Beaker with barbotine hounds, in fine hard white paste, dark grey to brown 'metallic' colour coating. (As No. 791, A.D. 160-225.)
 1376. Rouletted-beaker sherd in hard finely granular burnished orange-buff ware.
 1377. Indented-beaker sherd in hard finely granular deep buff burnished ware, orange core.

Nos. 1378-84 Pottery from other layers dated 260-70

1378. Hard buff rather finely granular ware, small grey grits outside (c. A.D. 140-200); local; 59 CW 7.
 1379. Hard buff granular ware, grey, brown, and white grits (c. A.D. 150-200); local; 59 CW 11.
 1380. Black-burnished 1 ware, 59 CW 11 (A.D. 170-225+, cf. Gillam no. 132).
 1381. Black-burnished 1 ware, 59 CW 2. Cf. Gillam no. 140.
 1382. Smooth pink-buff ware with rather large pink and grey grits, 55 C 2 A. Cf. No. 2271.

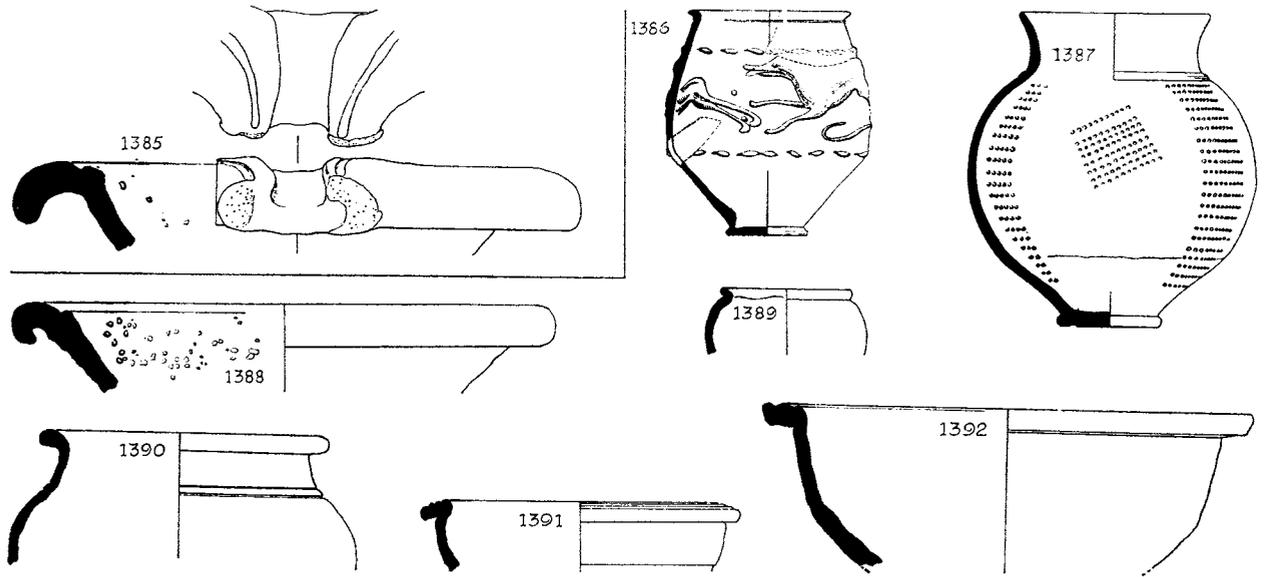


FIG. 130. Pottery from the area of the forum ($\frac{1}{4}$).

1383. Hard grey-black micaceous ware, burnished surface or slip, 55 C 2 A (residual?).
 1384. Dark grey burnished ware (third century); 6I CW 2 (A.D. **220-70, five**).

II. INSULA XII: THE FORUM (p. 58) (Site 56 G)

FIG. 130

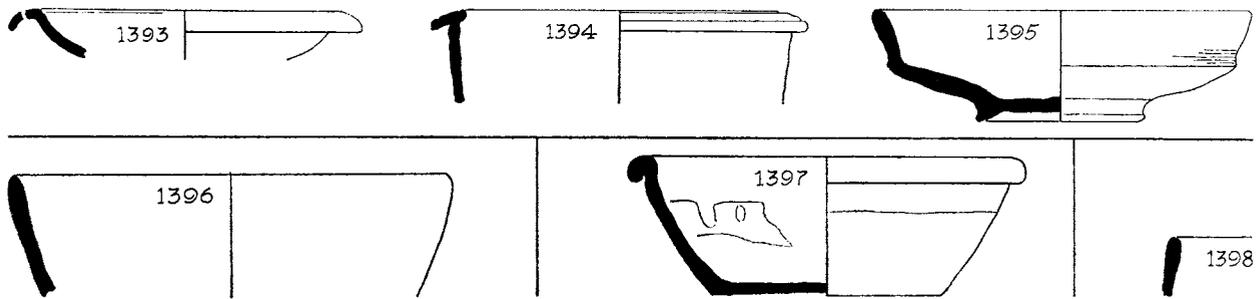
1385. Hard granular buff ware (burnt), white and grey grits (c. A.D. 90-130); local; G III C 29, A.D. 150-60.

Nos. 1386-92 Pottery from pit G II E 18 and 19, A.D. 160-90

1386. Beaker with barbotine decoration in fine hard white paste, dark grey-brown 'metallic' colour-coating, G II E 19. Cf. Type 792.
 1387. Beaker with panels of barbotine dots, in fine hard grey ware, lighter burnished slip, G II E 19. Cf. Types 604, 837.
 1388. Hard finely granular buff ware, reddish core, grey, white and pink grits (c. A.D. 110-60); Oxford region; G II E 19.
 1389. Fine hard grey ware, lighter burnished slip, G II E 19.
 1390. Hard buff granular ware, smoked, G II E 19 (A.D. **140-90, four**).
 1391-2. Hard buff granular ware, smoked, G II E 18 (No. 1391, A.D. **135-45, three**).

Note: This pit also yielded the following types:

- G II E 18 Type 879 and cf. Types 385, 843.
 G II E 19 Types 934, 974 (two), 1805, 1390, 2263.
 G II E 4 Type 2577.
 G II E 20 Type 1934.

FIG. 131. Pottery from the area of the northern Monumental Arch ($\frac{1}{4}$).

III. THE NORTHERN MONUMENTAL ARCH (p. 82)

(Site 6I Z)

FIG. 131

Nos. 1393-5 *Pottery from Z I 6, A.D. 60-85*

1393. Samian form 35/36, first-century Lezoux ware.
 1394. Hard rather finely granular grey-buff ware.
 1395. Imitation Gallo-Belgic plate in rather coarse grey-brown burnished ware, as Belgic.
 1396. Dark grey burnished ware, 6I Z I 14, A.D. 175-210 (A.D. **150-210, four**).
 1397. Hard grey ware, lighter slip inside and to below rim outside, burnished outside, 6I Z I 8, A.D. 250-70 (A.D. **190-250, five**).
 1398. Colour-coated beaker in hard white paste, dark grey to orange coating outside, orange inside, 6I Z I 15, A.D. 220-50.

IV. INSULA XIV (pp. 96-100)

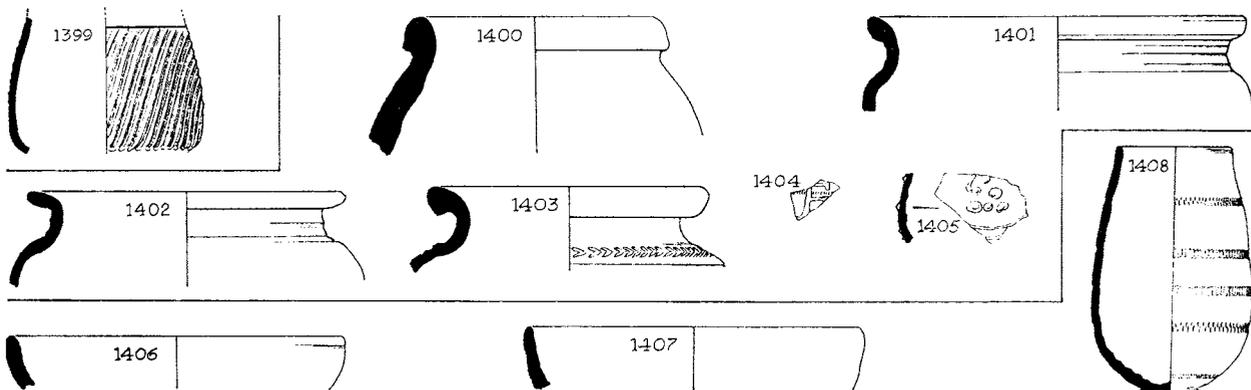
(Site 57 V)

FIG. 132

1399. Colour-coated beaker, rim missing, diagonal ribbing, in hard finely granular buff paste, light grey-brown 'metallic' coating, V V Pit 1, A.D. 370-90 (A.D. **240-300, three**).

Nos. 1400-5 *Pottery from V I 2, A.D. 430-40; all probably residual*

1400. Amphora in buff ware encrusted with mortar.

FIG. 132. Pottery from Insula XIV ($\frac{1}{4}$).

1401. Hard burnished finely granular grey ware.
 1402. Hard buff finely granular ware.
 1403. Jar with incised shoulder-decoration in smooth hard light grey burnished ware.
 1404. Rhenish-ware beaker-shoulder with part of white barbotine letter E, in fine hard grey paste, highly 'metallic' dark grey coating. Cf. Types 1121-3.
 1405. Colour-coated beaker with white barbotine decoration, in hard finely granular orange-buff paste, 'metallic' dark grey coating. Cf. Types 1115, 1135-6 of the late third and early fourth centuries.
 Also a red colour-coated bowl-base (not figured), cf. Type 1149, etc.
 1406. Colour-coated dish in hard white paste, highly 'metallic' grey coating, V V 2, A.D. 410-25.
 Cf. Type 1195, fourth-century.
 1407. As No. 1406, V V 5, A.D. 400-15 (Nos. 1406-7, **fourth-century, four**).

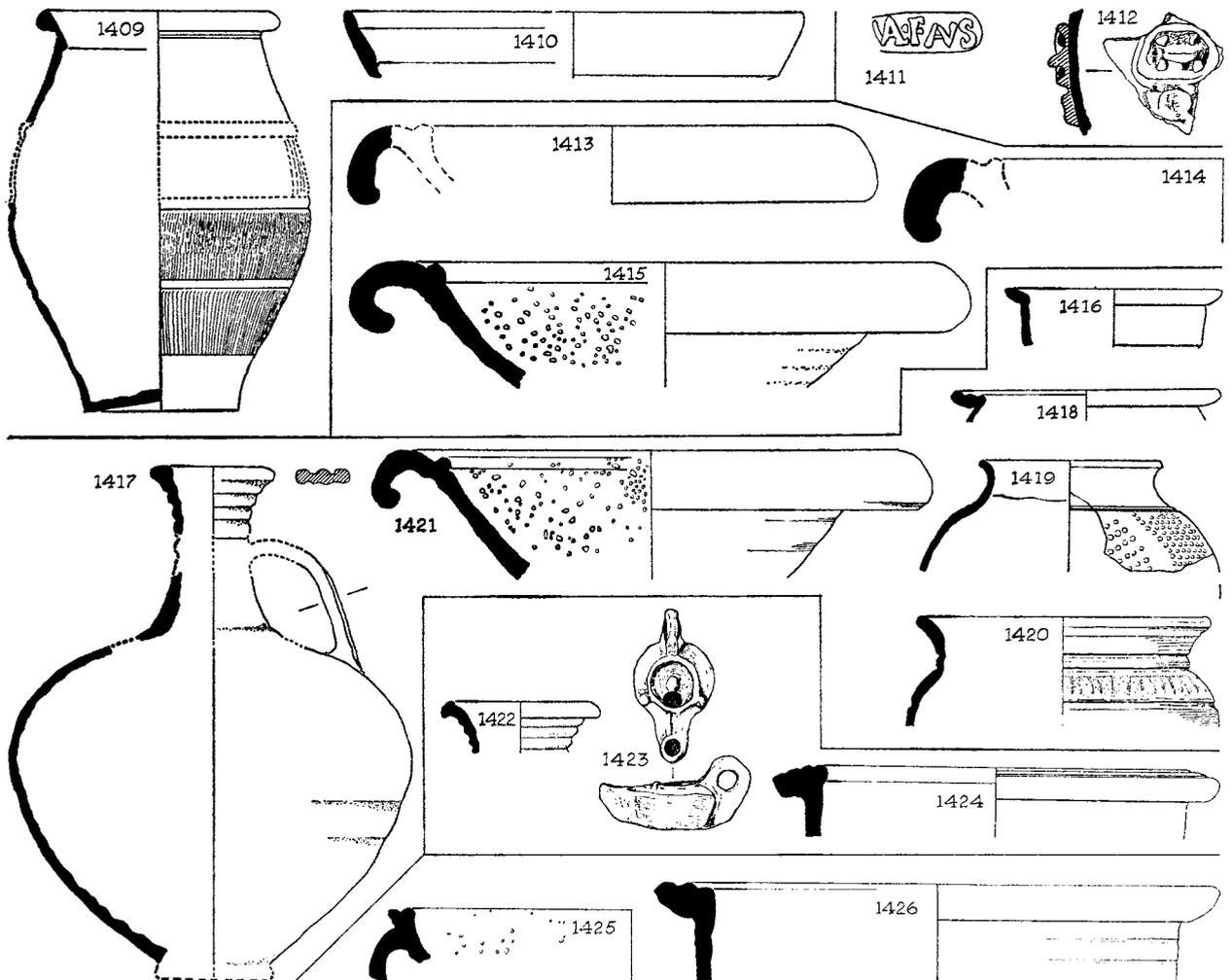


FIG. 133. Pottery from Insula XVII (4).

1408. Colour-coated beaker with rouletted bands, in hard finely granular buff paste, 'metallic' dark grey coating, V II 5, A.D. 390-400. Two others come from Insula XXVIII, 58 E I 5, A.D. 250-80, so No. 1408 is residual.

V. INSULA XVII (pp. 112-20)

(Site 56 K, 57 K)

FIG. 133

Nos. 1409-10 *Pottery from K VII C 26, A.D. 10-43*

1409. Fine cream ware, burnished rim, neck and base. (As Nos. 1571, 1768, A.D. **15-60, nine**.)
 1410. Terra nigra plate in fine hard grey-white paste, no coating left.
 1411. Amphora-stamp VAL[ER]I FAVSTI (Callender 1758) K VII H 10, A.D. 44-58.
 1412. Sherd with applied moulded decoration, in hard granular yellow-buff ware, lighter core, K VII K 16, A.D. 45-58.
 1413. Mortarium-flange in finely granular ware, burnt (c. A.D. 70-100); local; K VII M 9, A.D. 75-90.
 1414. Hard finely granular orange-buff ware (c. A.D. 70-100); local; K VII L 8, A.D. 80-100.
 1415. Hard granular buff ware, grey, white, and red-brown grits (c. A.D. 70-100); local; K VII T 6, A.D. 85-130.

Nos. 1416-20 *Pottery from layers dated A.D. 130-40*

1416. Finely granular buff ware, K VII T 5 (A.D. **105-40, two**).
 1417. Hard rather finely granular buff ware, K VII T 5.
 1418. Finely granular buff ware, K VII L 6 (A.D. **120-80, ten**).
 1419. Fine hard grey ware, darker burnished slip K VII M 6 B. Cf. No. 2050, A.D. **90-140**.
 1420. Jar with burnished shoulder-decoration, in hard light grey burnished ware; K VII L 6. Cf. No. 436, A.D. **100-40**.
 1421. Granular yellow-buff ware, grey-brown, white and red grits (c. A.D. 80-120); local; K VII M 7 A, A.D. 130-50.

Nos. 1422-4 *Pottery from layers dated A.D. 140-50*

1422. Rather finely granular cream ware, K VII M 5 (A.D. **130-80, nine**).
 1423. Lamp in light reddish-buff ware, traces of mica-coating, K VII L 5.
 1424. Finely granular pinkish-buff ware, K VII M 5 (A.D. **140-90, two**).

Nos. 1425-6 *Pottery from layers dated A.D. 150-60*

1425. Mortarium in granular buff ware, grey and white grits (c. A.D. 140-200); local; K VII H 5.
 1426. Hard finely granular buff ware, K VII L 4 (A.D. **140-200, three**).

VI. INSULA XVIII (pp. 123-5)

(Site 61 N)

FIG. 134

1427. Rouletted beaker in fine brown ware, orange core, burnished rim and shoulder, N I 15, A.D. 60-100. Cf. No. 1576.
 1428. Colour-coated beaker-herd with rouletted band, in hard finely granular orange-buff paste, dark grey burnished coating outside, 61 N IX 7, A.D. 280-330. Cf. Type 1118.
 1429. Colour-coated dish in hard white paste, orange-brown coating, 61 N II 4, A.D. 280-330.

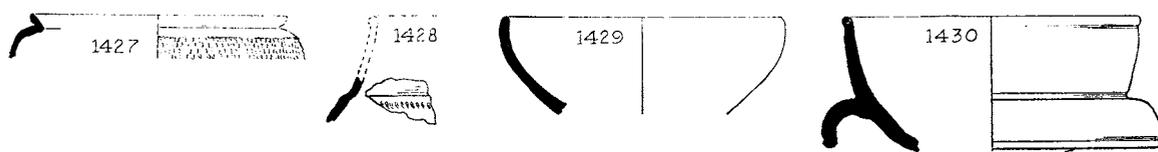


FIG. 134. Pottery from Insula XVIII (¼).

1430. Red colour-coated bowl in orange-red paste and coating, grey core, and base of another N VI 3, A.D. 350–80. Cf. Nos. 1550, 2359, A.D. 240–410.

VII. INSULA XIX (pp. 126–31)

(Site 60 K)

FIG. 135

1431. Rather coarse granular light grey ware, K VIII 26, A.D. 50–75.
 1432. Hard granular ware, burnt grey, with dark and light grey, brown and white grits (c. A.D. 60–95); local; K VIII 24, A.D. 70–90.
 1433. Colour-coated beaker in fine hard white paste, pink core, dark grey 'metallic' coating, K XII 9 A, A.D. 200–25. Cf. Gillam type 86 (dated A.D. 180–230).
 1434. Hard granular buff ware, dark grey and white grits; (late second-century); local; K XIII 4, A.D. 200–50.
 1435. Hard light grey burnished ware, K XII 7, A.D. 200–30.
 1436. Coarse buff calcite-gritted ware, grey core, rilled surface, K XII 7, A.D. 200–30.
 1437. Smooth hard rather light grey burnished ware, red-buff core, K XII 10, A.D. 290–310.
 1438. Black-burnished I ware, burnished arcs, K XII 10, A.D. 290–310. (A.D. 290–315+, **four**).

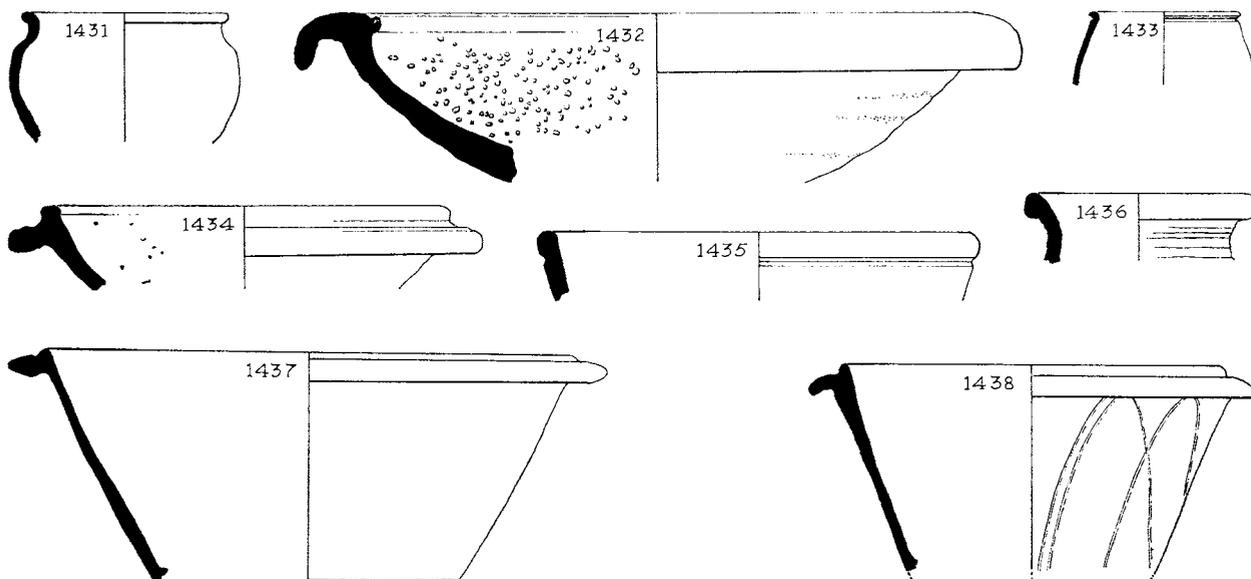


FIG. 135. Pottery from Insula XIX (¼).

VIII. INSULA XX, BUILDINGS 1-3 (pp. 136-41) (Sites 55 B, 55 F, 56 F)

FIG. 136

Nos. 1439-40 *Pottery from 55 B III 29, A.D. 60-100*

1439. Flagon-waster in buff granular ware.
 1440. Light grey to reddish rather granular ware, burnished.
 1441. Jar with rilled shoulder in coarse granular light grey ware, 55 F V 12, A.D. 75-110.

Nos. 1442-53 *Pottery from layers dated A.D. 120-35.*

1442. Roughcast beaker in fine hard orange-buff paste, dark grey-brown coating, 55 B III 25. (As Nos. 783, 2017, A.D. **130-65, twelve.**)
 1443. Jar with burnished lattice in hard light grey-brown ware, grey slip to near bottom of lattice, burnished, 55 B III 25 (A.D. **100-35, two.**)
 1444. Cup or bowl with white painted decoration, in fine hard burnished orange-buff ware, 55 B III 25.
 1445. Fine white paste, brown coating, 55 B III 27.
 1446. Mica-coated beaker with narrow indentations, in hard light reddish ware, 55 B III 27 (A.D. **120-45, two.**)
 1447. Jar with burnished shoulder-decoration, in hard grey ware, light grey-buff burnished slip, 55 B III 27.
 1448. Hard rather finely granular buff ware, smoked, 55 B III 27.
 1449. Hard rather finely granular buff ware, pink core, 55 B III 27 (A.D. **130-50, two.**)
 1450-1. Hard rather finely granular buff ware, 55 B III 27 (No. 1451, A.D. **60-130, three.**)
 1452. Fine buff mica-coated ware, 55 B III 27 (A.D. **125-60, four.**)
 1453. Hard granular buff ware, B III 26.
 1454. Fine hard orange paste, dark grey-brown to orange coating, 56 F XI 10, A.D. 130-60 (A.D. **140-70, four.**)
 1455. Mortarium in hard buff ware with stamp fragment MATVGENJVS (c. A.D. 85-125); local; 55 B III 18, A.D. 140-210. Vol. III, No. 85.

Nos. 1456-60 *Pottery from layers dated A.D. 150-70*

1456. Fine hard orange-buff paste, black slightly 'metallic' coating, 55 F V 14.
 1457. Burnished brown-buff ware with a trace of mica, B VI 12.
 1458. Dish with burnished lattice, in hard light grey burnished ware, B VI 12.
 1459. Mica-coated dish in hard light brown ware, smoked, grey core, B IV 20 (A.D. **130-60, two.**)
 1460. Dish with burnished lattice, in hard rather light grey burnished ware, dark outside, 56 F V 11.

Nos. 1461-5 *Pottery from layers dated A.D. 210-40*

1461. Hard finely granular white-buff ware, 55 B III 11. Cf. No. 1934, A.D. **150-200, six.**
 1462. Coarse red-buff calcite-gritted ware, smoked, 55 B III 13.
 1463. Hard light reddish ware, grey core, white slip, dark and light grey grits (c. A.D. 150-200); local; B III 13.
 1464. Hard granular buff ware, pink core, grey and white grits (c. A.D. 150-200); local; 55 F XXIII 3 E.
 1465. Ware similar to No. 1464 (c. A.D. 150-200); local; 55 B III 12.

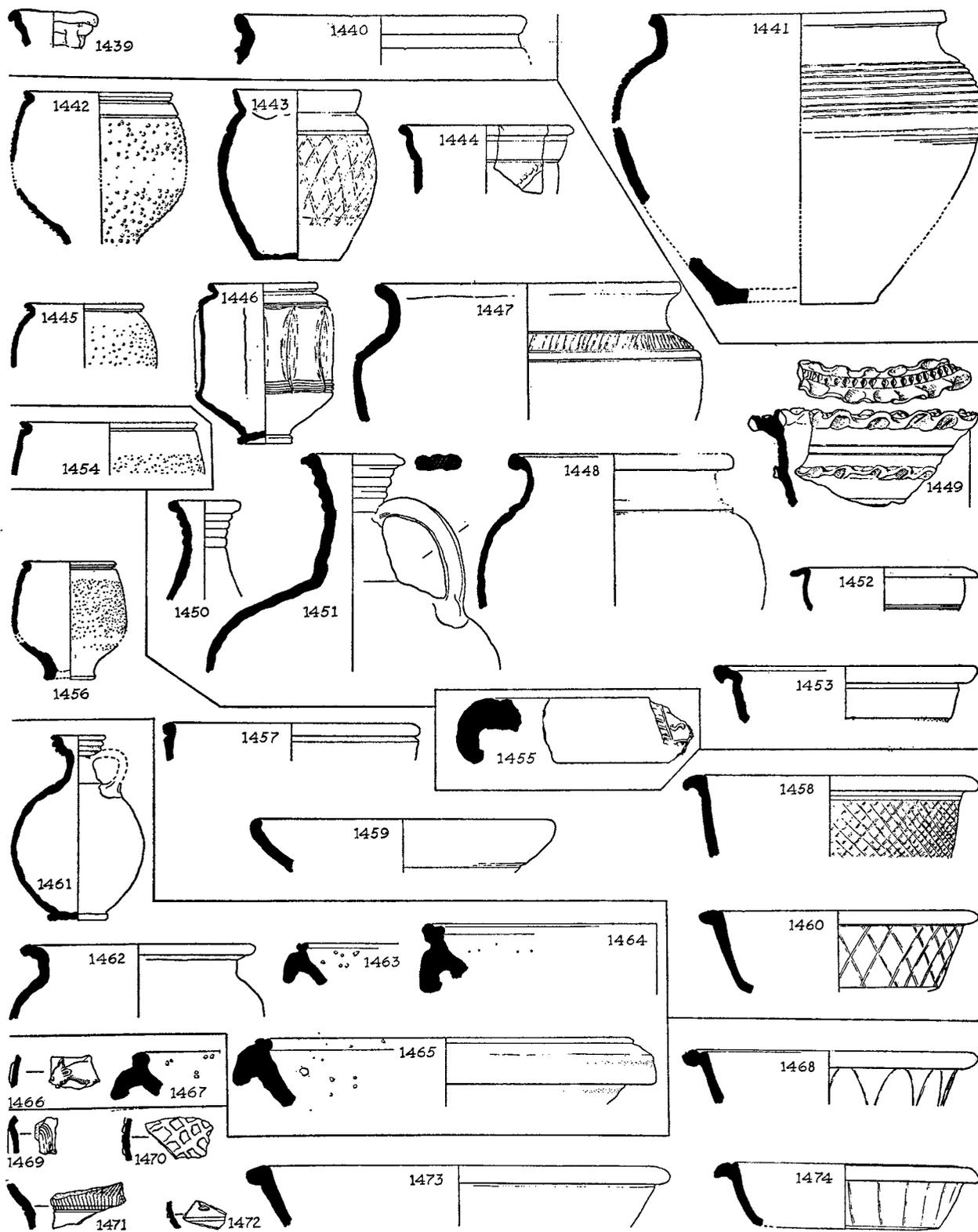


FIG. 136. Pottery from Insula XX (1/4).

Nos. 1466-7 *Pottery from layers dated A.D. 230-40*

1466. Beaker sherd with part of barbotine hound, in orange paste, dark grey-brown colour-coating. Cf. Type 1057 (A.D. 200-50), 56 F XII 14.
 1467. Smooth hard cream ware, translucent grits (probably third-century); Oxford region; 55 F IV 3.

Nos. 1468-74 *Pottery from layers dated A.D. 220-40*

1468. Black-burnished 1 ware, burnished arcading, 55 B XIII 8.
 1469. Colour-coated indented beaker in hard white paste, dark grey-brown 'metallic' coating, 55 B XIII 11.
 1470. Colour-coated beaker with barbotine trellis, ware as No. 1469, 55 B XIII 11.
 1471. Colour-coated sherd of Castor 'box' or rouletted beaker, in fine hard white paste, black coating, 55 B XIII 7.
 1472. Colour-coated beaker with barbotine pellet and tendril, in fine hard orange-buff paste, orange coating, 55 B VI 9.
 1473. Smooth hard burnished grey-black ware, 55 B VI 9.
 1474. Flanged dish with burnished lines, in hard burnished grey ware, 55 B VI 9.

FIG. 137

1475. Hard rather finely granular orange-buff ware, 55 F I 4, A.D. 240-300.

Nos. 1476-8 *Pottery from 55 B VII 5, A.D. 240-350*

1476. Ware similar to No. 1475 (two) (A.D. **240-90, three**).
 1477. Smooth hard burnished light grey ware.
 1478. Fine hard burnished light grey ware. (Cf. No. 2070, A.D. **200-50**.)

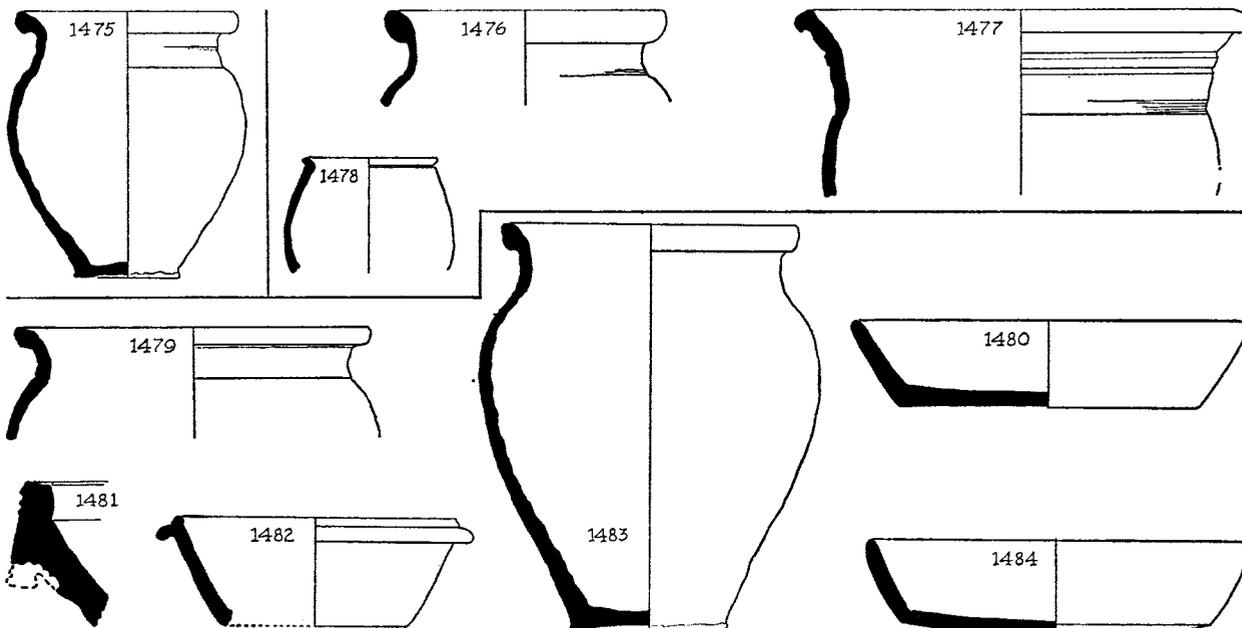


FIG. 137. Pottery from Insula XX ($\frac{1}{4}$).

Nos. 1479-80 *Pottery from 55 B I 12, A.D. 275-330*

1479. Coarse buff calcite-gritted ware, smoked.
 1480. Hard light grey burnished ware.
1481. Mortarium-fragment in smooth buff ware, black and white grit (*c.* A.D. 170-250); Colchester; 55 F III 5, A.D. 300-50.
 1482. Hard rather finely granular buff ware, 55 B I 14, A.D. 320-60.

Nos. 1483-4 *Pottery from 56 F XII Pit 1, A.D. 360-400*

1483. Hard rather finely granular ware, burnt red (A.D. **170-250, twelve and three residual**).
 1484. Smooth hard burnished grey ware (A.D. **345-400, two**).

IX. INSULA XXI, BUILDING I (pp. 144-55) (Sites 55 D, 56 P)

FIG. 138

1485. Fine hard cream ware with brown paint on rim, neck, and shoulder, P VIII 11, A.D. 110-90.
 1486. Coarse buff calcite-gritted ware, smoked, D XIV 15, A.D. 130-50.

Nos. 1487-9 *Pottery from layers dated A.D. 140-70*

1487. Hard granular buff ware, smoked, D XIII 11 (A.D. **125-80, two**).
 1488. Hard grey-black burnished ware (type probably *c.* A.D. 160-230) D XIV 12.
 1489. Dish with burnished lattice, in hard grey ware with mottled burnished surface, D XIII 10.
 See also No. 1503.

Nos. 1490-5 *Pottery from D XII 13, A.D. 140-90*

1490. Hard rather finely granular orange-buff ware, with trace of burnishing.
 1491. Poppy-head beaker with plain body in hard finely granular light grey ware, burnished slip.
 1492. Jar with burnished lattice, in fine hard grey ware, burnished slip.
 1493. Beaker with panel of barbotine dots, in fine hard grey ware, lighter burnished slip.
 1494. Ware as No. 1493.
 1495. Hard rather finely granular buff ware, smoked.

Nos. 1496-8 *Pottery from P I 14 A, A.D. 180-210*

1496. Colour-coated beaker in hard finely granular orange-buff paste, 'metallic' red-brown to grey coating.
 1497. Colour-coated beaker in fine hard white paste, dark grey-brown 'metallic' coating, red-brown inside.
 1498. Bowl with broken flange in hard light reddish burnished ware, grey core.

Nos. 1499-1503 *Pottery from D XII 12, A.D. 200-70*

1499. Beaker with panels of barbotine dots, in fine hard grey ware, lighter burnished slip. Cf. Nos. 599, 1493, A.D. **150-210**.
 1500. Hard rather finely granular reddish ware, cream slip.
 1501. Mortarium with border of unidentifiable stamp, in hard finely granular buff ware with grey grits (*c.* A.D. 130-70); local.

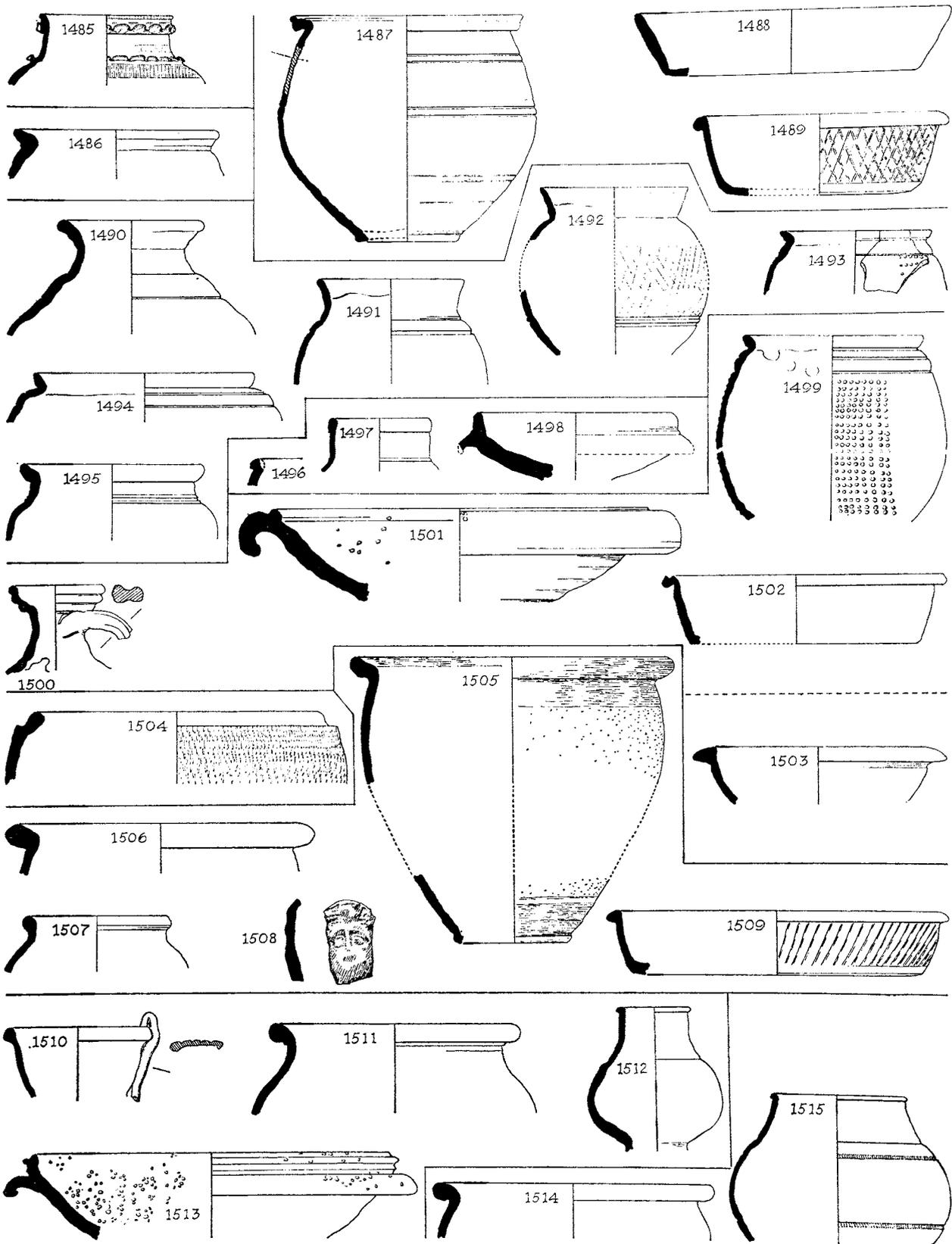


FIG. 138. Pottery from Insula XXI, Building 1 (4).

1502. Coarse dark grey calcite-gritted ware.
 1503. Hard finely granular buff ware, burnished red-buff surfaces: another piece in D XIII 10, (A.D. 140-70), so residual here.
 1504. Castor 'box' in hard rather granular light reddish ware, orange coating, P VIII 7, A.D. 230-90.

Nos. 1505-9 *Pottery from layers dated A.D. 275-300*

1505. Hard granular light grey ware, partly burnished, D XIV 10.
 1506. Hard grey-black smoothly burnished ware, D XIV 10.
 1507. Hard finely granular light grey ware, D XIII, 4. Probably residual.
 1508. Colour-coated flagon with female face-mask, in light reddish finely granular ware, buff core, orange-red coating (worn), D XIV 5.
 1509. Dish with burnished diagonal lines, in burnished grey ware, grey-buff outside, D XII 11. Cf. Types 983, 986 (A.D. 150-55/60) so probably residual here. Cf. Nos. 1361, A.D. **135/40-210** +.

Nos. 1510-13 *Pottery from D XIV 6, A.D. 275-320.*

1510. Jar or flagon with five-ribbed handle(s) pressed into side, in smooth burnished light reddish ware (rim incomplete).
 1511. Hard grey granular ware.
 1512. Imitation colour-coated beaker in hard dark grey burnished ware.
 1513. Smooth hard white ware, translucent pink and grey grits (probably after *c.* A.D. 250); Oxford region.
 1514. Hard light grey burnished ware, P III 4, A.D. 275-360.
 1515. Colour-coated beaker with rouletted bands, in fine hard reddish paste, grey core, 'metallic' black coating (Rhenish) D XVI 5, A.D. 280-320 (A.D. **280-350, six**).

FIG. 139

Nos. 1516-26 *Pottery from layers dated A.D. 300-50*

1516. Imitation colour-coated beaker in hard burnished light red ware with white painted design, D XII 10 (A.D. **220-300, two**).
 1517. Hard finely granular cream ware (*c.* A.D. 150-200); local; D XII 10.
 1518. Hard light grey-buff burnished ware, D XII 10.
 1519. Hard rather granular buff ware, burnished and smoked outside, D XII 10.
 1520. Fine hard burnished light grey ware, D XII 10. Cf. Type 942 (A.D. 150-55/60) so probably residual here.
 1521. Rouletted beaker in fine hard orange-buff ware, burnished orange-grey surface, D XIV 17.
 1522. Hard buff finely granular ware, D XIV 17.
 1523. Mortarium in hard rather granular buff ware, red, grey, and white grits (third century); British; P VII 6.
 1524. Jar with rouletted rim, in hard finely granular light reddish-buff ware, P VII 5.
 1525. Hard dark grey burnished ware, P VII 5.
 1526. Rather coarse hard grey ware, dark burnished surface, D IX 12.

Nos. 1527-40 *Pottery from P I 6 (= P II 5) A.D. 345-50*

1527. Beaker with barbotine decoration between rouletted bands, in fine hard grey paste, reddish core, black colour-coating, 'metallic' outside, P II 5 (A.D. **250-315** +, **three and three residual**).

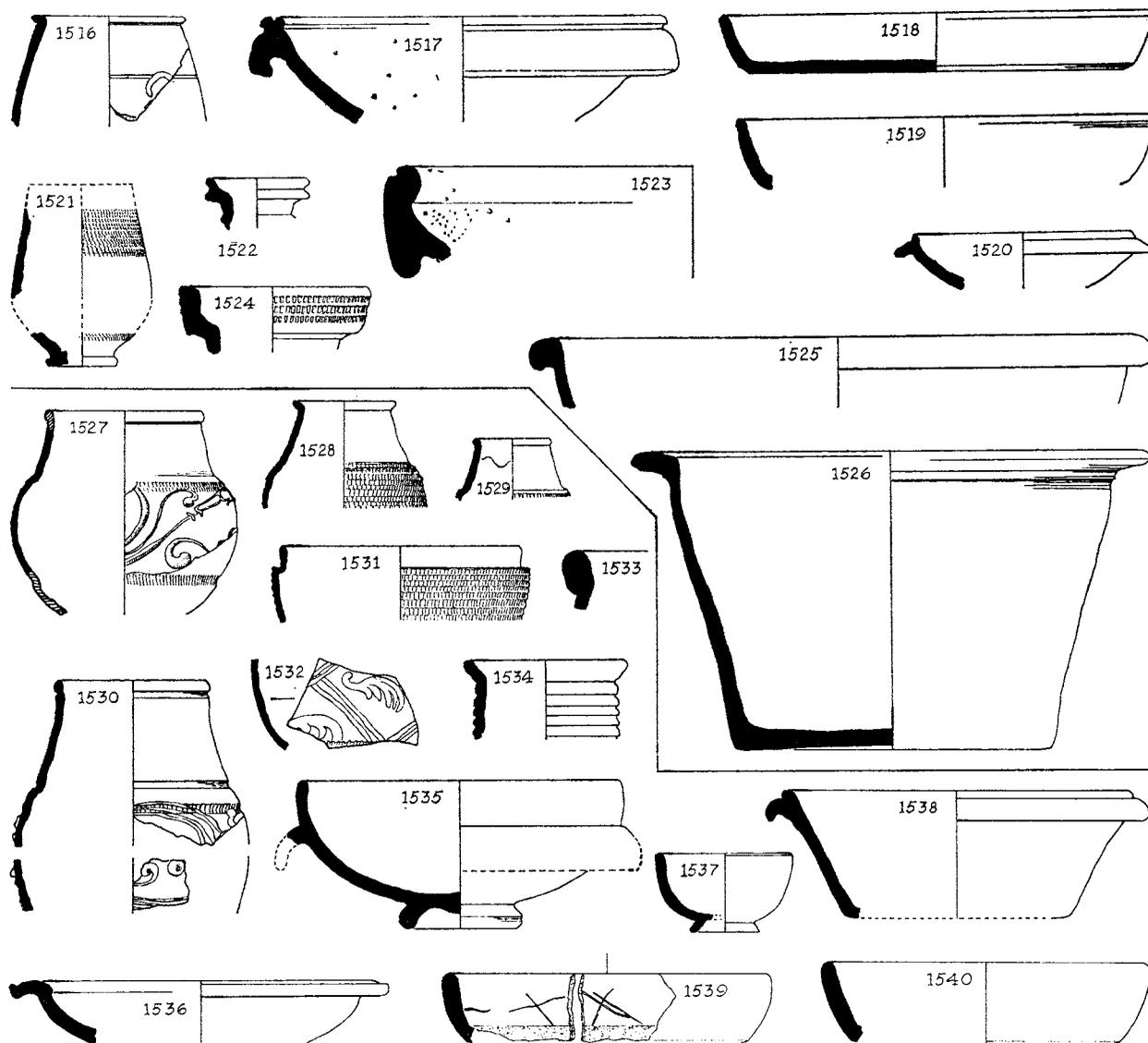


FIG. 139. Pottery from Insula XXI, Building 1 (1/4).

1528. Colour-coated beaker with rouletted body, in hard white paste, dark brown coating, slightly 'metallic' outside, P I 6. (As Nos. 1117, 1728, A.D. 280-350, **ten and seven residual.**)
1529. As No. 1528, in hard orange-buff paste, brown 'metallic' coating outside and on lip, P I 6.
1530. Beaker with white barbotine decoration and rouletted band, in fine hard white paste, dark grey 'metallic' colour-coating, P II 5. (As Nos. 1135-6, 1138, A.D. 230-300, **six and ten residual.**)
1531. Castor 'box' in fine hard white paste, orange-brown coating outside, dark grey inside, P II 5.
1532. Beaker with white barbotine decoration, in fine cream paste, 'metallic' black colour-coating outside, matt dark brown inside, P I 6.

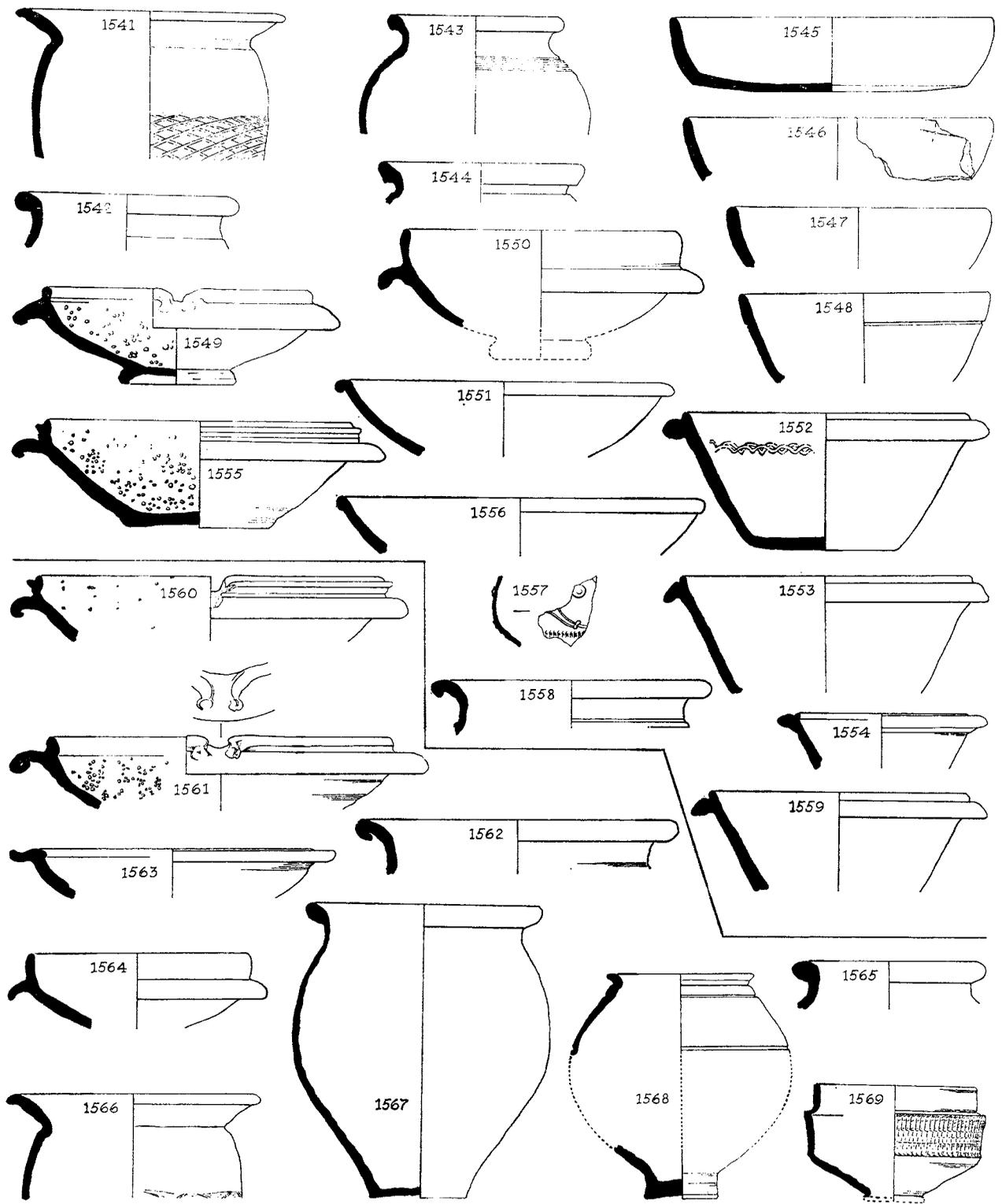


FIG. 140. Pottery from Insula XXI, Building 1 (4).

1533. Storage jar in smooth hard burnished light grey ware, P I 6.
 1534. Jar in fine orange-buff ware, P I 6.
 1535. Red colour-coated bowl, with broken flange, in fine hard light reddish ware, orange-red coating P II 5.
 1536. Red colour-coated bowl in hard reddish ware, brownish-red coating, P II 5.
 1537. Colour-coated cup in fine hard light reddish ware, red coating, 'metallic' outside, P II 5. (Second-century Lezoux ware, cf. No. 797, A.D. 150-55/60, and Nos. 1616, 1704, so residual here.)
 1538. Rather coarse unevenly burnished grey-black ware, P I 6.
 1539. Dish with parts of three X graffiti inside, in dark grey burnished ware, P II 5; and another without graffiti.
 1540. Hard burnished grey-black ware, P II 5. (As Nos. 1129, 1547, A.D. **300-60, seven.**)

FIG. 140

Nos. 1541-59 *Pottery from layers dated A.D. 345-55*

1541. Black-burnished 1 ware, burnished lattice, P I 4. (As No. 1566, A.D. **340-60, two**; cf. Gillam no. 146.)
 1542. Hard light grey ware, P I 4.
 1543. Jar with rilled shoulder in hard rather granular grey ware, P I 4.
 1544. Hard rather granular light grey ware, P I 4.
 1545. Black-burnished 2 ware, with burnished intersecting arcs below base, P I 4.
 1546. Dish with X graffiti outside, in hard grey burnished ware, P II 4 (A.D. **345-60, two**).
 1547. Smooth hard grey-black burnished ware, P I 4. (As Nos. 1129, 1540, A.D. **300-60, seven.**)
 1548. Ware as No. 1547, P I 4.
 1549. Red colour-coated mortarium in smooth hard light reddish ware, red coating, translucent grey and white grits (late third- or early fourth-century); probably Oxford region; P I 4.
 1550. Red colour-coated bowl in hard light reddish ware, red coating, P I 4. See also No. 1564.
 1551. Red colour-coated bowl in fine hard orange-red ware and coating, P I 4.
 1552. Smooth hard burnished dark grey ware; burnished double wavy line inside, P I 4. (As No. 1293, A.D. **345-80 +, three.**)
 1553. Hard buff granular ware, P I 4.
 1554. Hard light grey burnished ware, P II 4.
 1555. Smooth hard white ware, grey and pink translucent grits (probably after A.D. 250); Oxford region; P I 10.
 1556. Red colour-coated bowl in smooth hard orange-buff ware, orange-red coating, P I 10.
 1557. Beaker sherds with white barbotine decoration above rouletted line, in cream paste, reddish core, dark grey colour-coating outside, brown inside, P I 10.
 1558. Smooth hard light grey ware, P I 10.
 1559. Smooth hard dark grey to reddish burnished ware, P I 10.

Nos. 1560-9 *Pottery from layers dated A.D. 350-60*

1560. Smooth hard white ware, translucent pink and grey grits (probably after A.D. 250); Oxford region; D XIV 3.
 1561. Ware similar to No. 1560 (probably A.D. 180-250); Oxford region; D XIV 4.
 1562. Smooth hard burnished light grey ware, D XIV 4.
 1563. Red colour-coated bowl in smooth hard reddish micaceous ware, surfaces burnt, P I 2.
 1564. Red colour-coated bowl in smooth hard burnt ware, P I 4, A.D. 345-55 and residually in P I 2 (A.D. **345-410 +, three**).

1565. Hard burnished light grey ware, P I 2.
 1566. Black-burnished I ware; burnished lattice, P I 2. Cf. No. 1541.
 1567. Hard rather finely granular buff ware, D IX 9; a third-century type perhaps residual here. Cf. Nos. 1483, 1595.
 1568. Imitation colour-coated beaker in hard finely granular light brown burnished ware, reddish-buff core, D IX 9.
 1569. Castor 'box' in fine hard orange-buff paste, dark grey-brown coating, 'metallic' outside, D XIV 7 (A.D. **300-60, three**).

X. INSULA XXI, BUILDING 2 (pp. 167-78) (Sites 56 L, 59 L, 60 L)

FIG. 141

Nos. 1570-1 *Pottery from 60 L VI 15, A.D. 20-43*

1570. Burnished red-brown Belgic ware, grey core.
 1571. Fine hard white ware, burnished between rouletted zones. Cf. *Camulodunum* no. 113. (As Nos. 1409, 1768, A.D. **15-60, nine**.)
 1572-3. Coarse granular dark grey burnished ware, 56 L V 17, A.D. 60-80 (No. 1572, A.D. **55-80, two and one residual**).

Nos. 1574-80 *Pottery from 56 L V 14, A.D. 60-100*

1574. Coarse granular dark grey-brown ware, unevenly burnished.
 1575. Jar with rouletted shoulder-decoration, in hard light grey burnished ware.
 1576. Rouletted beaker in fine hard burnished orange-buff ware, grey core.
 1577. Mortarium-stamp fragment in hard granular pale buff ware; MBXRI, retrograde (c. A.D. 110-50); local. See pp. 158 f.; Vol. III, No. 104(a).
 1578. Rather coarse grey ware, unevenly burnished darker surface, probably Belgic.
 1579. Jar with burnished shoulder-decoration, in fine hard burnished light grey micaceous ware.
 1580. As No. 1579, in coarse granular grey-brown ware, unevenly burnished.

Nos. 1581-3 *Pottery from layers dated A.D. 100-80*

1581. Colour-coated beaker sherds with barbotine foliage, in fine hard white paste, orange-brown coating outside, dark grey inside, 60 L II 5.
 1582. Fine grey ware, lighter burnished slip, 56 L II 10 (A.D. **145-90, four**).
 1583. Smooth hard buff ware, black, white, and pink grits (probably A.D. 100-50); probably Colchester; 60 L VIII 4.

Nos. 1584-9 *Pottery from layers dated A.D. 105-45*

1584. Mica-coated dish in smooth red-buff ware, 59 L VII 6 (A.D. **85-170 numerous**).
 1585. Smooth brown-buff ware, smoked, 59 L VII 6. (Cf. Nos. 2430, 2458 A.D. **130-80**.)
 1586. Beaker in medium hard orange ware, white barbotine stripes under yellow-green lead glaze, orange-brown to yellow inside; South-east English Group Type 2 (P. Arthur in *B.A.R.* 57 (1978), 298 ff.); (late Flavian to early Hadrianic); 59 L VII 6.
 1587. Hard granular buff ware, 60 L VII 7 (A.D. **140-80, three**).
 1588. Dish with burnished lattice, in rather coarse burnished grey-black to reddish ware. Type 968: recorded A.D. 145 + but could start 140; 59 L VIII 7.

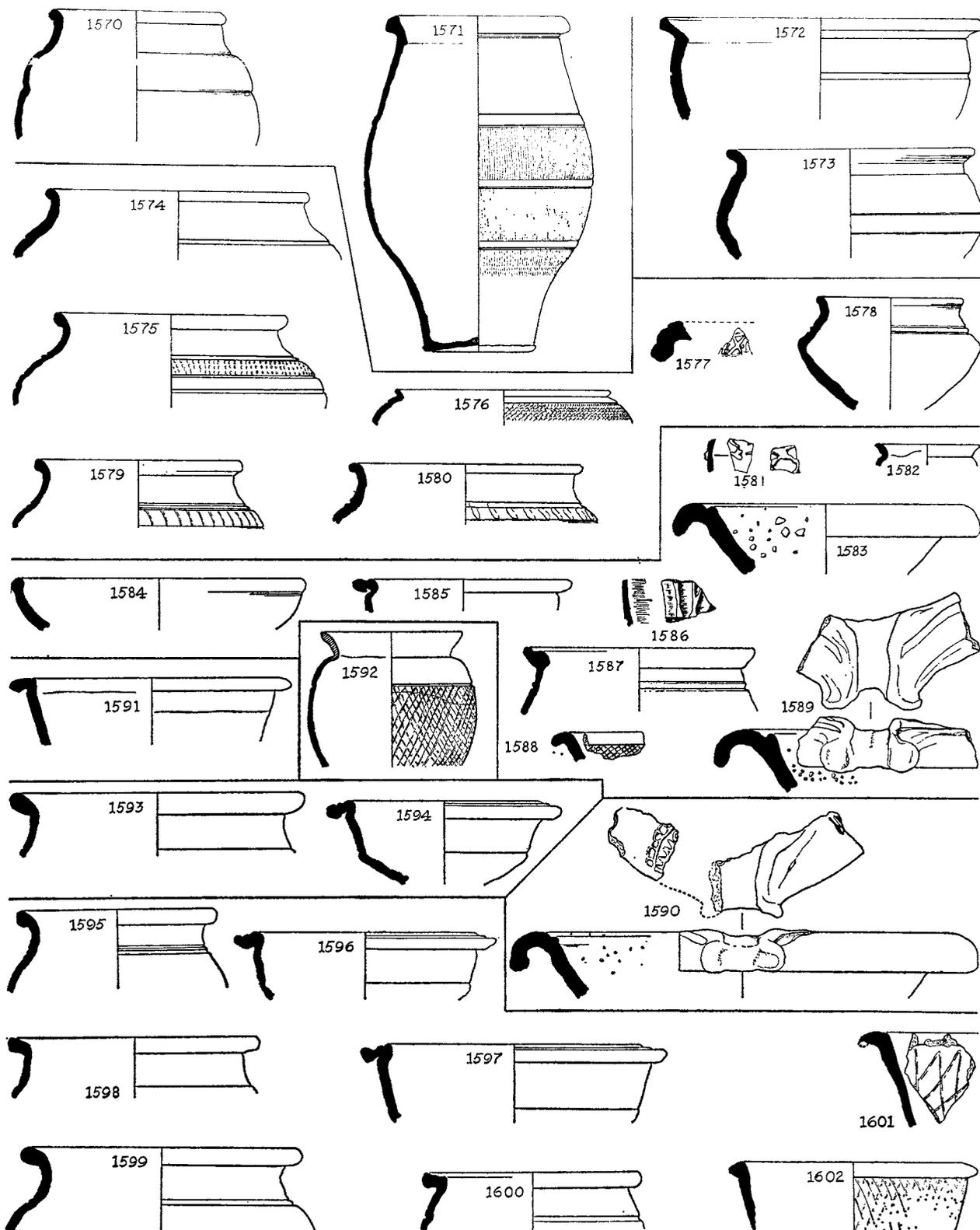


FIG. 141. Pottery from Insula XXI, Building 2 (4).

1589. Hard granular buff ware, pink core, dark and light grey and red grits (probably *c.* A.D. 100–40 though the spout looks early); local; 59 L VIII 7.
1590. Hard rather finely granular buff ware, dark and light grey, red and white grits; stamp of Doinus (*c.* A.D. 70–110); probably local; 59 L IV 6 A, A.D. 140–50 Vol. III, stamp 73(a).
1591. Hard grey ware, darker slip on upper part, burnished surfaces, 56 L XIII 8, A.D. 130–80.
1592. Jar with burnished lattice, in fine hard grey ware, lighter slip on upper part, burnished rim and shoulder, 60 LVII 23, A.D. 145–70 (A.D. **130–80, five**).

Nos. 1593–4 *Pottery from 60 L II 16, A.D. 160–80*

1593. Hard rather finely granular pinkish-buff ware, grey core. Cf. Nos. 881, 2252, A.D. **140–220**.
1594. Hard granular buff ware, smoked (A.D. **130–80, two**).

Nos. 1595–1602 *Pottery from layers dated A.D. 170–80*

1595. Hard buff granular ware, smoked, 60 L VI 5. Cf. Nos. 1354, 2263, A.D. **160–220**.
1596. Ware as No. 1595, 60 L VI 5. Cf. No. 2444, A.D. **135–90**.
1597. As No. 1596, 60 L VI 5 (A.D. **140–90, two**).
1598. Ware as No. 1595, 56 L V 12 (A.D. **130–70, two**).
1599. As No. 1598, 56 L V 12 (A.D. **130–80, two**).
1600. Hard rather finely granular pinkish-buff ware, smoked, 56 L V 9 (A.D. **145–200, six**).
1601. Dish with burnished lattice, in grey-black burnished ware, 59 L IV 5 A. Cf. No. 709, A.D. **135–80**.
1602. As No. 1601, in dark grey burnished ware, reddish core, 56 L IV 11. Cf. No. 974, A.D. **140–80**.

FIG. 142

Nos. 1603–9 *Pottery from 56 L XIII 4*, Nos. 1610–11 *Pottery from 60 L VII 13 A and 56 L XIV 5, A.D. 210–40*

- 1603–4. Orange-buff paste, dark grey colour-coating outside.
1605. Castor 'box' in white paste, dark brown to red coating (two) (A.D. **200–370, seven**).
1606. Hard buff granular ware, smoked (A.D. **160–220, six**).
1607. Mortarium with indentations on bead and below flange, in hard cream finely granular ware, brown grits (probably third-century); local.
1608. Hard cream finely granular ware, grey and brown grits (*c.* A.D. 160–230); Oxford region.
1609. Jar with burnished lattice in hard grey-brown ware, lighter grey burnished slip.
1610. Hard dark grey-brown burnished ware, 60 L VII 13 A.
1611. Hard rather finely granular buff ware, grey, white, and red grits (*c.* A.D. 140–200); local; 56 L XIV 5.

Nos. 1612–31 *Pottery from layers dated A.D. 270–310*

1612. Colour-coated beaker in fine pink paste, worn orange coating, 59 L I 2.
1613. Fine hard white paste, dark grey colour-coating, slightly 'metallic' outside, 59 L XIII 2.
1614. Colour-coated beaker with barbotine diagonal lines, in fine hard white paste, dark grey to red-brown coating, 60 L V 2 (A.D. **200–80, four**).
1615. Colour-coated rouletted beaker body-sherds in fine hard white paste, orange to brown coating outside, 60 L V 2.

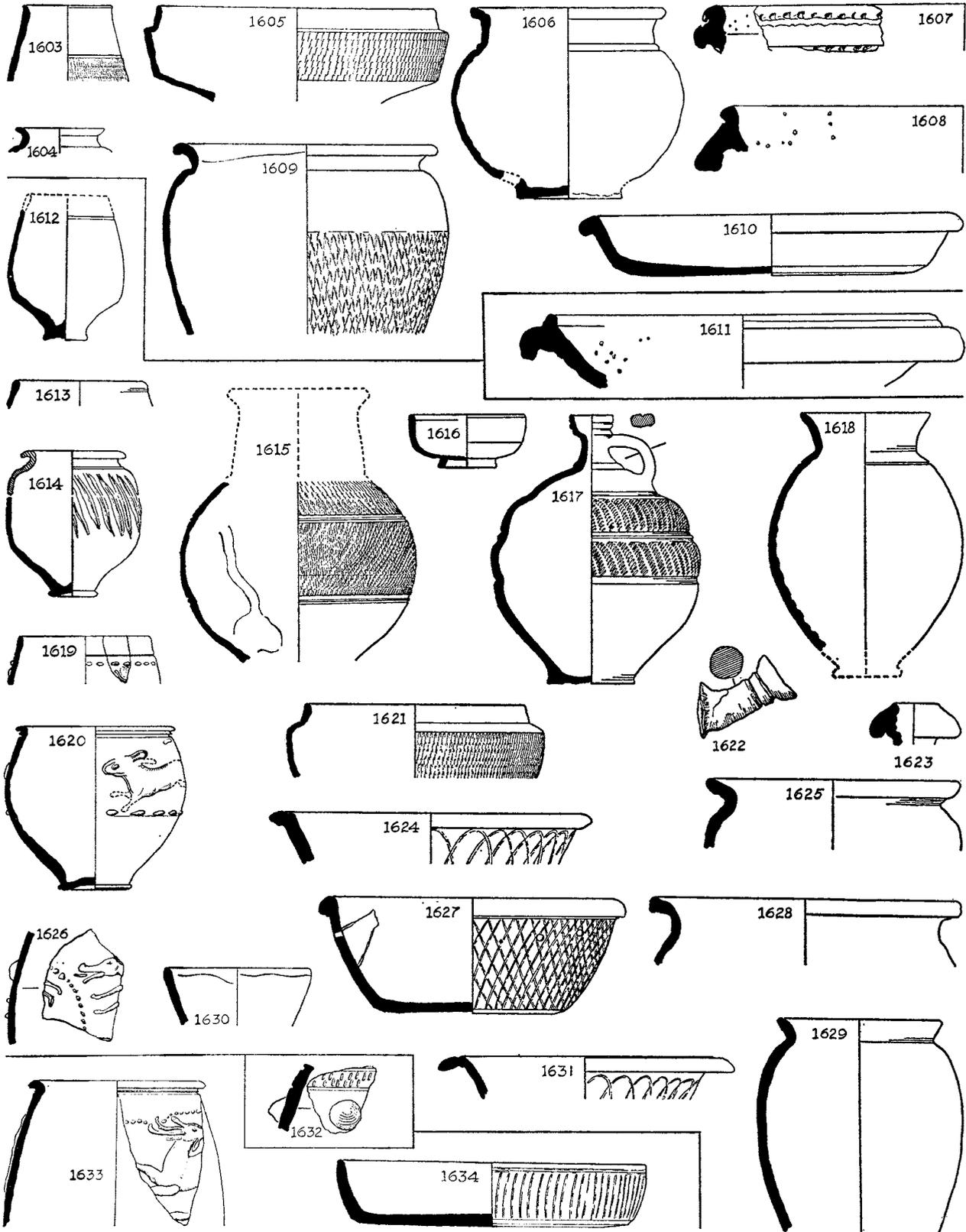


FIG. 142. Pottery from Insula XXI, Building 2 (4).

1616. Colour-coated cup in fine hard orange-buff paste, glossy 'metallic' black coating, probably second-century Lezoux ware, 60 L V 2. (As Nos. 1537, 1704; cf. No. 797, A.D. 150-55/60, so residual here.)
1617. Colour-coated rouletted flagon in fine orange-pink paste, dark grey to orange coating outside, 56 L III 6.
1618. Poppyhead beaker with plain body, in fine hard grey ware with burnished lines, 56 L III 6 (A.D. **200-80, three**).
1619. Colour-coated beaker with barbotine decoration, in fine hard white paste, dark grey to brown coating, 60 L II 3. (As No. 1205, three, probably mid second- to later third-century.)
1620. Ware as No. 1619, with barbotine hare, 60 L II 3. (As No. 791, A.D. **145-220, four**.)
1621. Castor 'box' in fine hard white paste, orange to grey 'metallic' coating, 60 L II 5 A.
1622. Handle in smooth buff ware, grey core, smoked at the end, 60 L II 5 A.
1623. Flagon in hard rather finely granular buff ware, 59 L IV 5.
1624. Unevenly burnished dark grey ware; burnished arcading, 59 L V 5.
1625. Hard rather finely granular red-buff ware, grey core, burnished rim and neck, 59 L V 5.
1626. Colour-coated sherd with part of barbotine hound, in hard grey-white paste, grey to brown coating, 'metallic' outside, 59 L V 5.
1627. Dish with burnished lattice, and three perforations, in hard grey ware, darker burnished surfaces, 60 L VIII 2. Cf. No. 974, A.D. **140-200**, so residual here.
1628. Coarse brown calcite-gritted ware, smoked, 60 L VIII 2.
1629. Hard finely granular buff ware, dark grey burnished slip, 60 L VIII 2.
1630. Hard grey ware, rim dipped in slip, 56 L III 6 A (A.D. **200-310, thirteen**).
1631. Hard grey-black burnished ware; burnished arcading, 59 L VII 2. Cf. No. 1091.
1632. Rouletted sherd with applied boss, in coarse granular red-brown ware, dark grey surface, 56 L XIV 1B 3, A.D. 280-320.

Nos. 1633-4 *Pottery from 56 L XIII 5, A.D. 300-50*

1633. Fine hard cream and grey paste, orange-brown slightly 'metallic' colour-coating, barbotine stag, probably residual. Cf. No. 1705 (A.D. **160-220**).
1634. Dish with burnished lines, in hard rather dark grey burnished ware, as Type 1092, second- or third-century.

FIG. 143

Nos. 1635-45 *Pottery from 60 L I Pit 1, and 59 L V 4 (the same), A.D. 330-60*

1635. Colour-coated beaker with rouletted lines, in very fine hard orange paste, highly 'metallic' black coating (Lezoux ware). Cf. No. 515; A.D. **280-350, five**.
1636. As No. 1635, in fine hard pinkish-white paste, orange coating outside, 59 L V 4.
1637. Colour-coated rouletted beaker with barbotine decoration, in hard white paste, black 'metallic' coating.
1638. Hard light reddish burnished ware.
1639. Hard rather grey ware, burnished rim and shoulder.
- 1640-1. Unevenly burnished grey-black ware; burnished arcading.
1642. Hard burnished light grey ware.
1643. Hard dark grey burnished ware.
1644. Mortarium with indentations below the bead, in hard finely granular white ware (after c. A.D. 170, could be third-century); Oxford region; 59 L V 4.

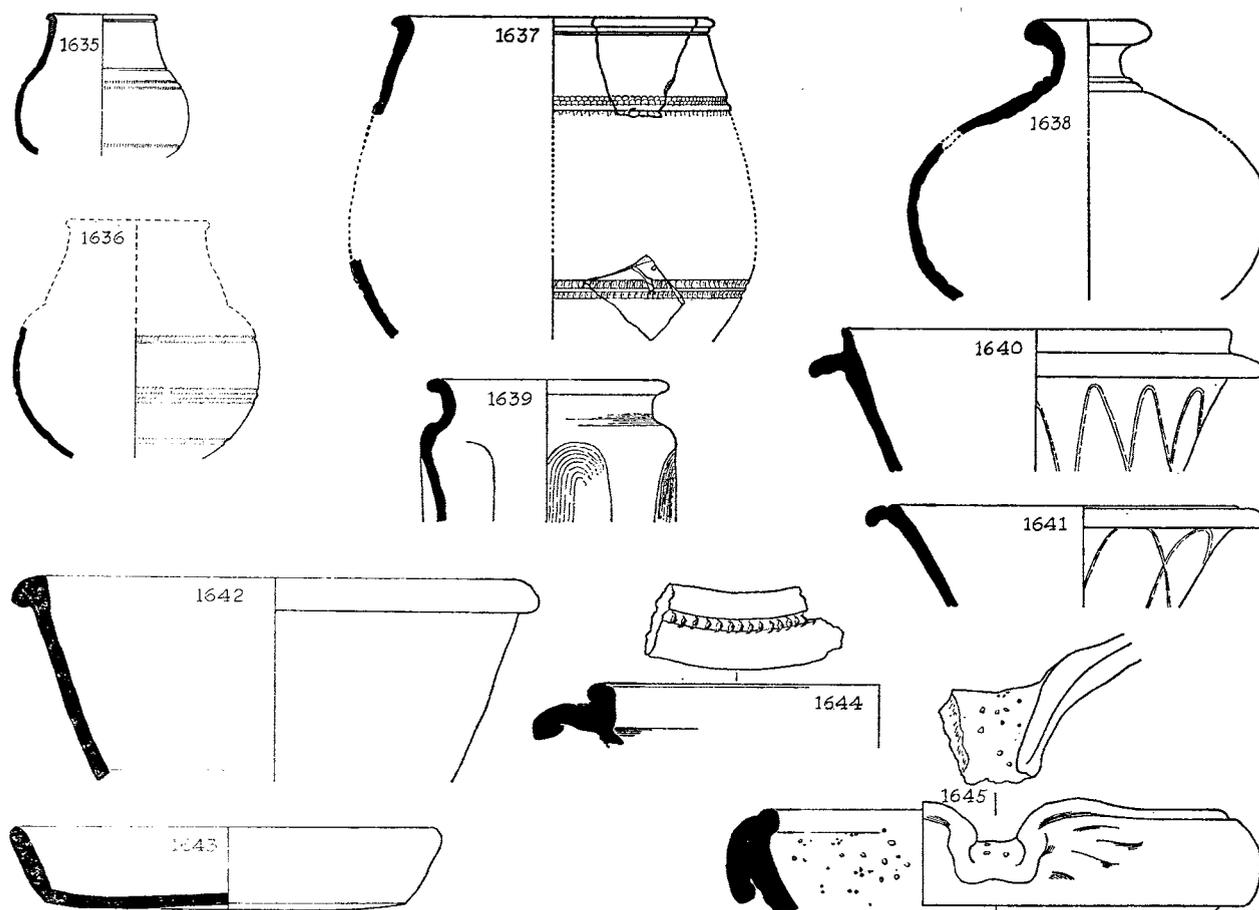


FIG. 143. Pottery from Insula XXI, Building 2 ($\frac{1}{4}$).

1645. Hard cream ware, yellow surface, dark and light grey, white, and red-brown grits (probably third-century, though early form of spout), probably south-east, 59 L V 4.

XI. INSULA XXII, BUILDING 1 (pp. 179-91) (Sites 55 A, 56 A)

FIG. 144

Nos. 1646-7 Pottery from A IV 9, A.D. 60-75

1646. Hard finely granular buff ware, pink core, grey, white and red-brown grits (pre- to early Flavian); probably Colchester.
1647. Bowl copying samian form 29, with two zones of fine burnished diagonal lines above a stamped herring-bone pattern, in fine hard burnished grey ware.

Nos. 1648-57 Pottery from A I 8 and A IV 8, A.D. 60-85

1648. Hard granular buff ware.
1649. Terra nigra bowl in grey-white paste with dark grey coating.
1650. Brown burnished Belgic ware.

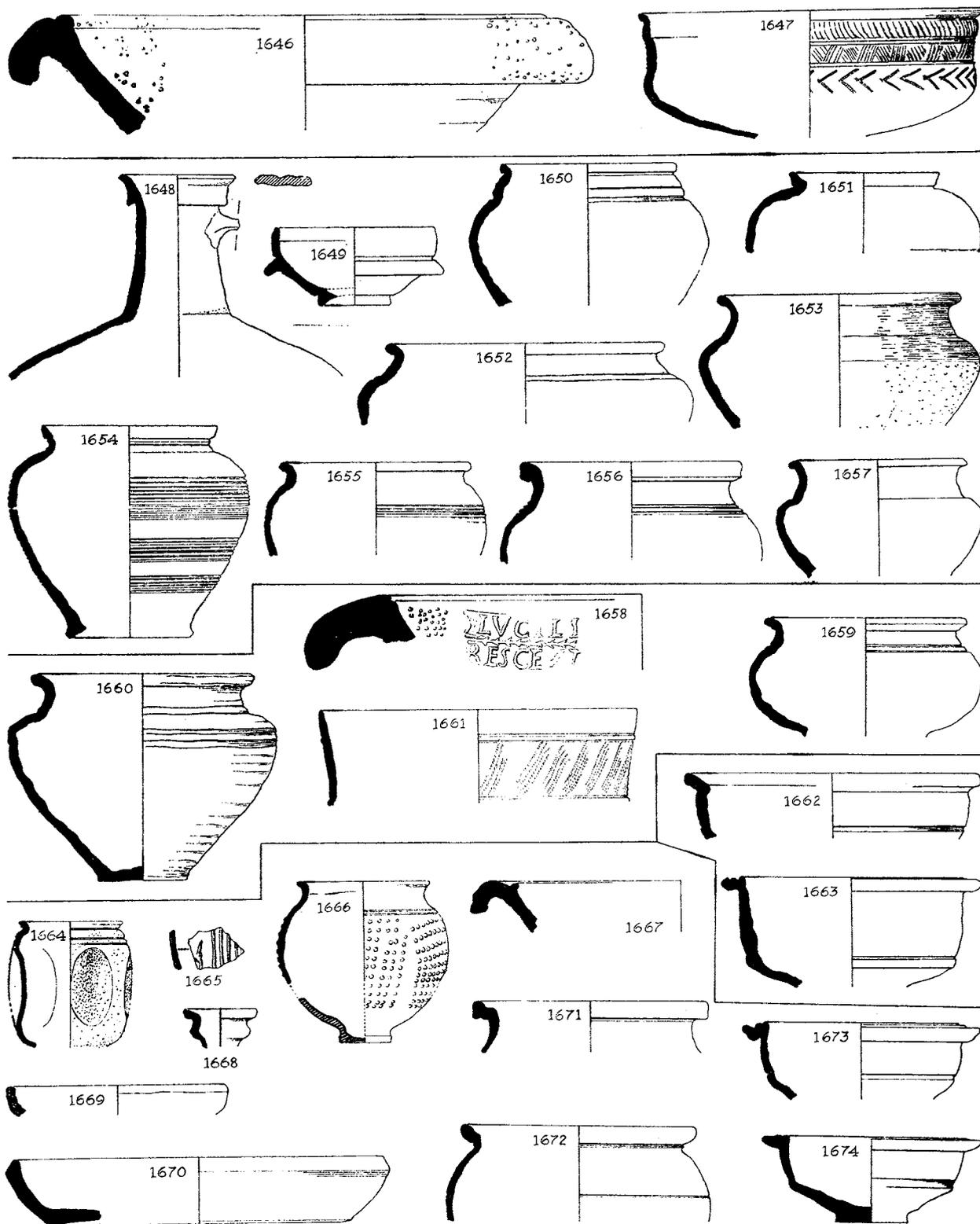


FIG. 144. Pottery from Insula XXII (4).

1651. Brown rather finely granular Belgic ware, with yellow-brown burnished surface.
 1652. Rather coarse burnished grey-brown Belgic ware (two).
 1653. Rather coarse dark grey-brown Belgic ware, burnished from rim to shoulder.
 1654. Jar with partly rilled body in rather coarse grey-brown ware, unevenly burnished.
 1655. Jar with rilling below shoulder in coarse granular dark grey-brown ware.
 1656. Jar with rilling on shoulder in hard burnished grey ware.
 1657. Fine hard burnished grey ware.

Nos. 1658-61 *Pottery from A I 7, A.D. 75-90*

1658. Mortarium in hard buff ware, grey, white and brown grits, stamped Q. LVCILL[
 C]RESCENT[IS; Italian. Vol. III, No. 77.
 1659. Rather coarse dark grey-brown ware, unevenly burnished (two).
 1660. Rather coarse grey-brown Belgic ware, roughly trimmed, with uneven burnished surface,
 perhaps a Claudian survival.
 1661. Rouletted bowl in fine hard burnished grey ware.

Nos. 1662-3 *Pottery from layers dated A.D. 100-30*

1662. Coarse granular grey-brown burnished ware, A XXII 12.
 1663. Smooth hard rather finely granular buff ware, smoked, A XI 12.

Nos. 1664-74 *Pottery from A X 18, A.D. 145-65*

1664. Roughcast beaker with indented sides in fine hard orange-buff paste, slightly 'metallic'
 dark grey coating.
 1665. Colour-coated beaker-herd with barbotine decoration, in ware similar to No. 1664.
 1666. Beaker with barbotine panels, in fine hard grey ware, lighter burnished slip.
 1667. Mortarium in hard buff granular ware, white grit (*c.* A.D. 110-40); local.
 1668. Finely granular orange-buff ware.
 1669. Smooth light grey ware, burnished slip inside and on rim.
 1670. Hard rather finely granular buff ware, partly burnished, smoked.
 1671-2. Hard buff granular ware, smoked.
 1673-4. Ware as Nos. 1671-2.

FIG. 145

Nos. 1675-6 *Pottery from A XX 10, A.D. 160-80*

1675. Flagon in light reddish-buff ware, cream slip.
 1676. Flagon in rather finely granular white ware.
 1677. Hard granular buff ware, smoked, A XI 9, A.D. 170-200. (As No. 903, A.D. **125-80, fourteen.**)
 1678. Smooth hard burnished light grey ware, A XI 7 C, A.D. 180-210.
 1679. Rouletted beaker in hard micaceous orange-buff ware, grey core, A XXI 9, A.D. 180-200.

Nos. 1680-2 *Pottery from A XII 7, A.D. 200-15*

1680. Mortarium in hard rather finely granular buff ware, brown and white grits (probably third-
 century); local.
 1681. Hard grey ware, lighter burnished slip.
 1682. Hard buff granular ware, smoked.

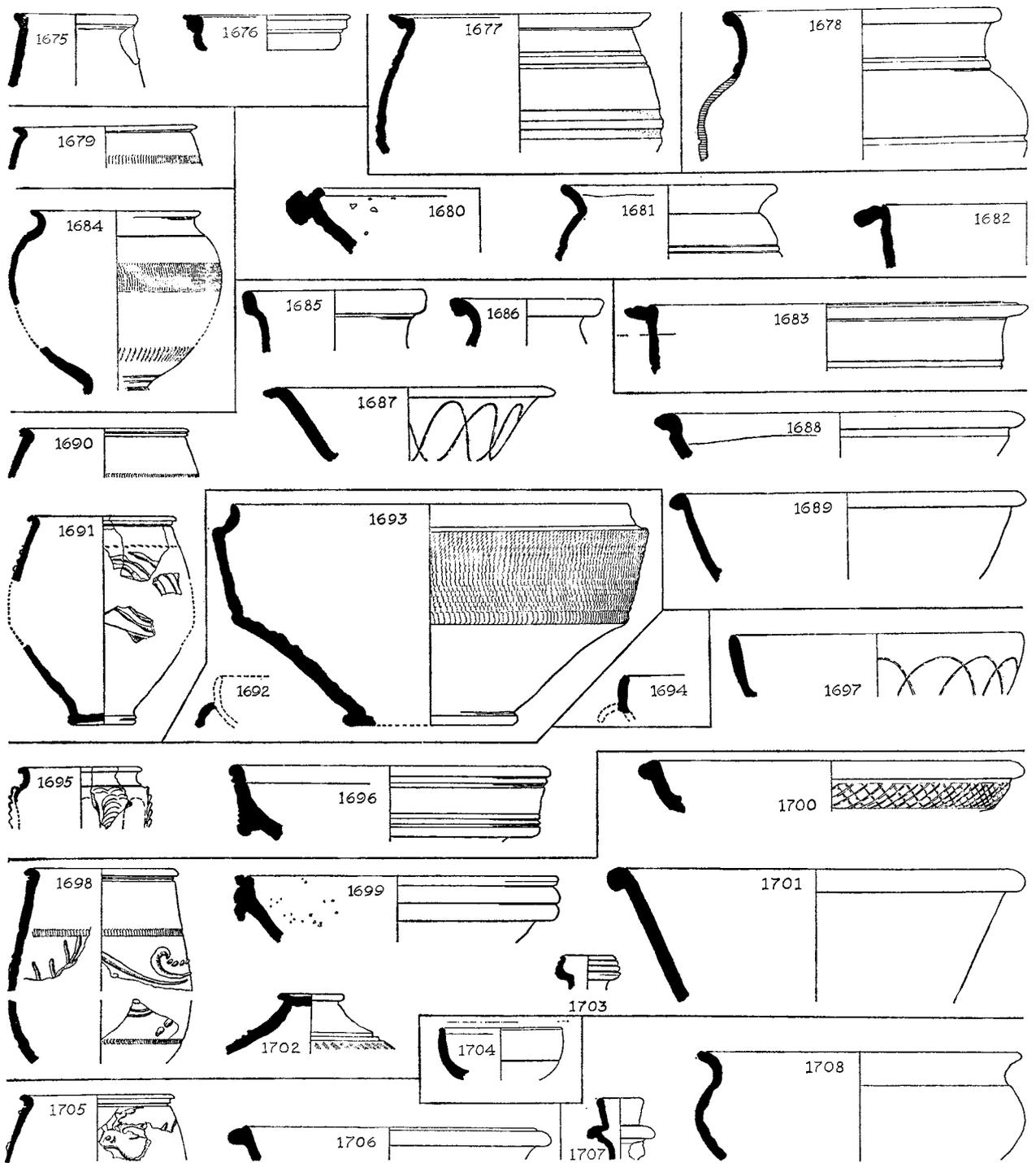


FIG. 145. Pottery from Insula XXII (4).

1683. As No. 1682, A XX 8, A.D. 190-210.
 1684. Rouletted beaker in fine orange-buff burnished ware, A XXI 7, A.D. 210-230.
- Nos. 1685-91 *Pottery from A XX 6 and A XXII 6, A.D. 240-300*
1685. Hard grey ware, A XX 6.
 1686. Hard buff rather finely granular ware, A XXII 6.
 1687. Dark grey burnished ware, reddish core; burnished arcading, A XXII 6.
 1688. Hard grey-brown ware, light grey burnished slip outside and on lip, A XXII 6.
 1689. As No. 1688, in hard burnished grey ware, A XXII 6 (A.D. **230-80, two**).
 1690. Rouletted beaker in burnished orange-buff ware, A XXII 6. Cf. No. 2059, A.D. **180-250**.
 1691. Beaker with barbotine decoration, in hard white paste, dark grey-brown 'metallic' colour-coating, A. XXII 6. (As Nos. 1144, 2027, A.D. **210-60, seven and seven residual**, cf. Gillam no. 88.)
- Nos. 1692-3 *Pottery from A IX 8, A.D. 240-350*
1692. Red colour-coated bowl flange in fine orange-buff Oxfordshire ware with orange-red coating.
 1693. Castor 'box' in hard orange-buff ware, dark grey 'metallic' coating outside, matt orange inside.
 1694. Red colour-coated bowl rim as No. 1962, A XX 4, A.D. 310-50.
- Nos. 1695-7 *Pottery from A XXII 5 and A XXI 6, A.D. 300-20*
1695. Beaker with indented sides and barbotine scale-pattern, in fine hard white paste, grey-brown colour-coating, A XXII 5 (A.D. **200-315, three**).
 1696. Mortarium in smooth hard cream ware, small grey and white grits (c. A.D. 170-250); Colchester; A XXI 6.
 1697. Hard grey-black rather granular ware, burnished inside and on rim; burnished arcading, A XXII 5 (A.D. **240-340, three**).
- Nos. 1698-1703 *Pottery from A VII 6, A.D. 300-40*
1698. Beaker with barbotine decoration including fragments of stag, and hound (not figured) in hard orange-buff paste, grey 'metallic' colour-coating outside, matt orange-brown inside, probably residual.
 1699. Mortarium in hard finely granular yellow-buff ware, dark grey and white grits (third-century); local.
 1700. Hard burnished grey ware; burnished lattice.
 1701. Smooth burnished light grey ware (A.D. **280-330, five**).
 1702. Lid in white paste, bright orange colour-coating outside, brown inside.
 1703. Smooth burnished light red micaceous ware.
1704. Cup in hard orange paste, 'metallic' black colour-coating, probably second-century Lezoux ware, A VII 5, A.D. 330-50. Cf. Nos. 797, 1537, 1616.
- Nos. 1705-6 *Pottery from A XXII 4, A.D. 310-50*
1705. Beaker with part of barbotine stag, in hard white paste, dark grey-brown 'metallic' colour-coating, residual (A.D. **160-220, three**).

1706. Dish with groove on rim forming a small bead, in smooth hard burnished black ware, cf. Type 1084 (A.D. 270-320, three).
 1707. Smooth orange-buff ware, A XXV 19, A.D. 350-410+.
 1708. Smooth hard burnished light grey ware, A XIV 9, A.D. 350-60.

XII. INSULA XXVII (pp. 197-220) (Sites 56 H, 57 X, 59 X, 60 X)

FIG. 146

1709. Mortarium in hard granular buff ware, pink core (pre-Flavian); local; 56 H II 46, A.D. 60-80.

Nos. 1710-15 *Pottery from 56 H IX 14, A.D. 100-30*

1710. Ware as No. 1709, with grey and white grits (c. A.D. 65-95); resembles work of Albinus; local. Also another of the same date, Type 365.
 1711. Hard light grey burnished ware.

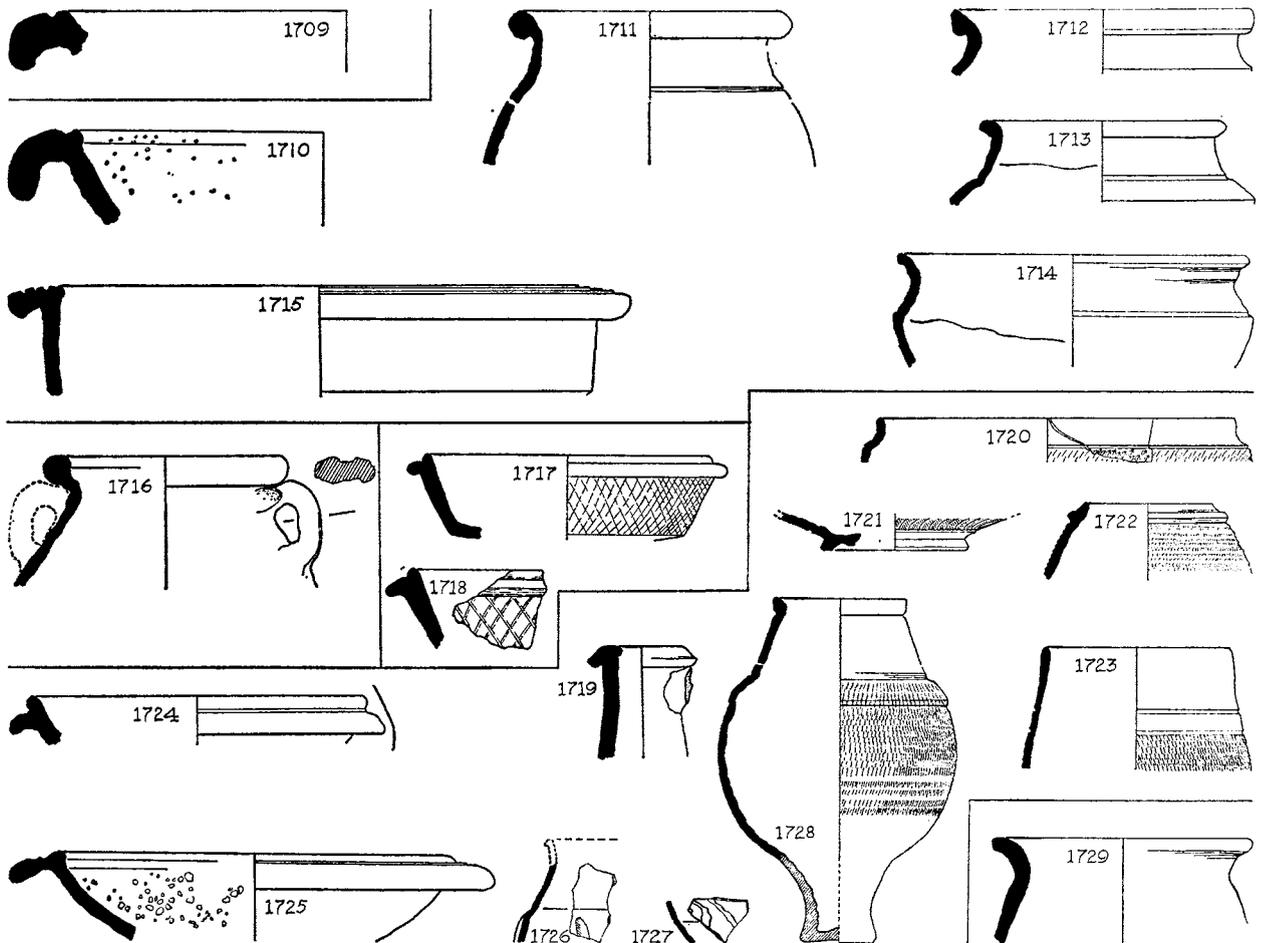


FIG. 146. Pottery from Insula XXVII (¼).

1712. Hard finely granular blue-grey ware, lighter core.
 1713. Grey ware with darker burnished slip. Cf. Type 445, in a deposit dated A.D. 105-30.
 1714. Grey ware with lighter burnished slip.
 1715. Hard buff granular ware.
 1716. Jar, probably with two handles, in hard yellow-buff granular ware, X IV 35, A.D. 115-40.
 1717. Dish with burnished lattice in hard light grey ware, burnished inside and on flange, X IV 17, A.D. 370-80.
 1718. As No. 1717, in smooth grey-black ware, X VI 4, A.D. 370-80: a smaller piece of the same bowl came from X IV 17 (also 370-80).

Nos. 1719-28 *Pottery from deposits dated A.D. 375-80*

1719. Hard rather granular white ware, X VIII 9.
 1720. Castor 'box' in fine hard grey paste, rather 'metallic' colour-coating, X VIII 9.
 1721. Castor 'box' base in hard white paste, dark grey-brown to orange coating, cf. Type 2345, X VIII 7.
 1722. Flanged jar with rouletted body in smooth finely micaceous dark grey-brown burnished ware, X VIII 9.
 1723. Rouletted beaker in hard finely granular orange-buff paste, dark grey 'metallic' colour-coating outside, matt brown inside, X XXI 11. Cf. No. 1809 from a pit dated A.D. 250-80, so No. 1723 is residual.
 1724. Black-burnished I ware, X III 1 (A.D. **310-60, six**).
 1725. Rather smooth hard deep orange-buff ware, black ironstone grits (late third- or fourth-century); Nene Valley; X III 1.
 1726. Beaker with indented side, in orange-buff paste, yellow-brown colour-coating, X III 1. Cf. No. 1813 from a pit dated A.D. 250-80, so No. 1726 is residual.
 1727. Ware similar to No. 1726, with white barbotine decoration, X X 3. Cf. Types 1115, 1135-8: these fall in the date range A.D. 280-315, so No. 1727 is probably residual.
 1728. Rouletted beaker in hard finely granular orange-buff paste, dark grey 'metallic' colour-coating, matt brown inside, X XV 2. (As Nos. 1117, 1528, A.D. **280-335, eighteen and four residual.**)
 1729. Coarse dark grey-brown ware with plentiful shell grit, wheel-turned but showing finger-marks on both surfaces, X XV 1, A.D. 420-40. See p. 225.

XIII. INSULA XXVII: EARLY DITCH (pp. 194-5) (Site 56 M)

FIG. 147

1730. Rather granular light grey ware, with lines of burnish (Claudian), 56 M I 44, A.D. 35-50.

Nos. 1731-3 *Pottery from layers dated A.D. 45-65*

1731. Coarse dark red-grey ware, burnished rim, 56 M I 41.
 1732. Rather granular grey ware, burnished outside, 56 M I 41.
 1733. Imitation Gallo-Belgic plate, in coarse dark grey-brown burnished ware, Belgic; 56 M I 40.

Nos. 1734-8 *Pottery from 56 M I 38, A.D. 65-100*

1734. Rather coarse dark grey ware, unevenly burnished.

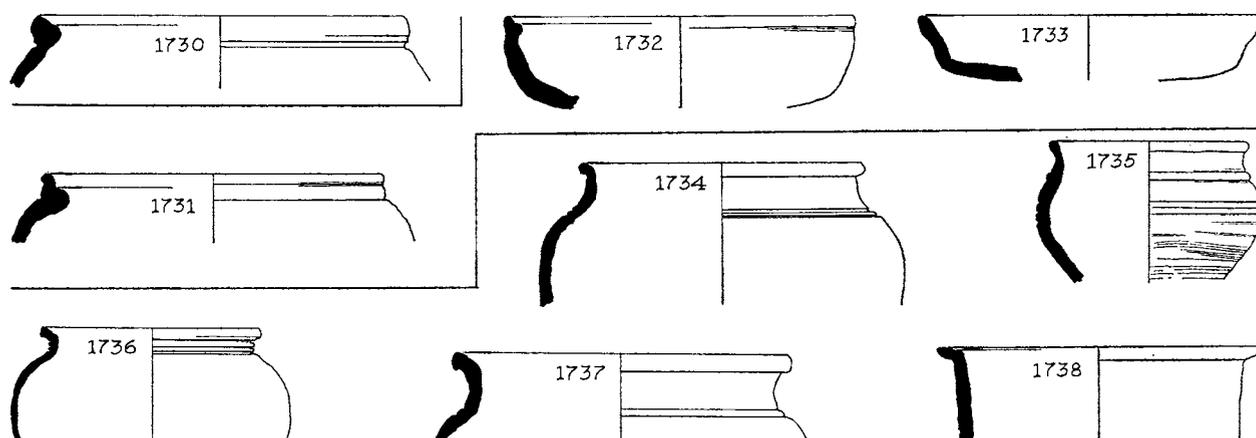


FIG. 147. Pottery from Insula XXVII, Early Ditch ($\frac{1}{4}$).

1735. Ware similar to No. 1734, burnished rim and shoulder.
 1736. Rather finely granular dark blue-grey ware, lighter core.
 1737. Hard grey burnished ware.
 1738. Coarse light red-grey ware, burnished outside.

XIV. INSULA XXVIII (pp. 230-76)
 (Sites 57 V, 57 W, 58 C, 58 D, 58 E, 59 D, 60 G)

FIG. 148

1739. Hard finely granular reddish ware, grey core, white slip, W II 24, A.D. 110-30 (A.D. **115-50, two**).
1740. Hard finely granular grey ware, lighter burnished slip, D XXIV 12, A.D. 100-30 (A.D. **90-130, six**).
1741. As No. 1740 (A.D. **100-50, six**).
1742. Dish with burnished wavy line, in hard grey ware, burnished mottled surfaces, 58 D VIII 11, A.D. 145-50. (Cf. Type 723, A.D. **140-200, nine and one residual**.)
1743. Hard granular buff ware, dark and light grey and brown grits (*c.* A.D. 130-80); local; D XX 4, A.D. 140-60.
1744. Beaker with barbotine decoration, showing hindquarters of stag, in fine white paste, red-brown colour-coating, grey inside, D VI 37, A.D. 130-50. (As No. 791, A.D. **145-220, thirteen and four residual**.)
1745. Hard finely granular buff ware, E V 13, A.D. 125-45. Cf. Types 933, 936 dated A.D. 155-60.
1746. As No. 1745 (A.D. **130-50**). Cf. Type 681.
1747. Mortarium in granular yellow-buff ware, dark grey, white and red grits (*c.* A.D. 160-240); local; W II 6, A.D. 200-25.
1748. Hard rather finely granular yellow-buff ware, white grits (*c.* A.D. 160-240); local; W II 11, A.D. 200-25.
 Also a fragment of a Hartshill mortarium (A.D. 140-80).
1749. Ware as No. 1748, with grey, white, and red grits (*c.* A.D. 170-240); local; W II 7, A.D. 200-25.
1750. Ware as No. 1748 (*c.* A.D. 120-70); local; D X 3, third-century.

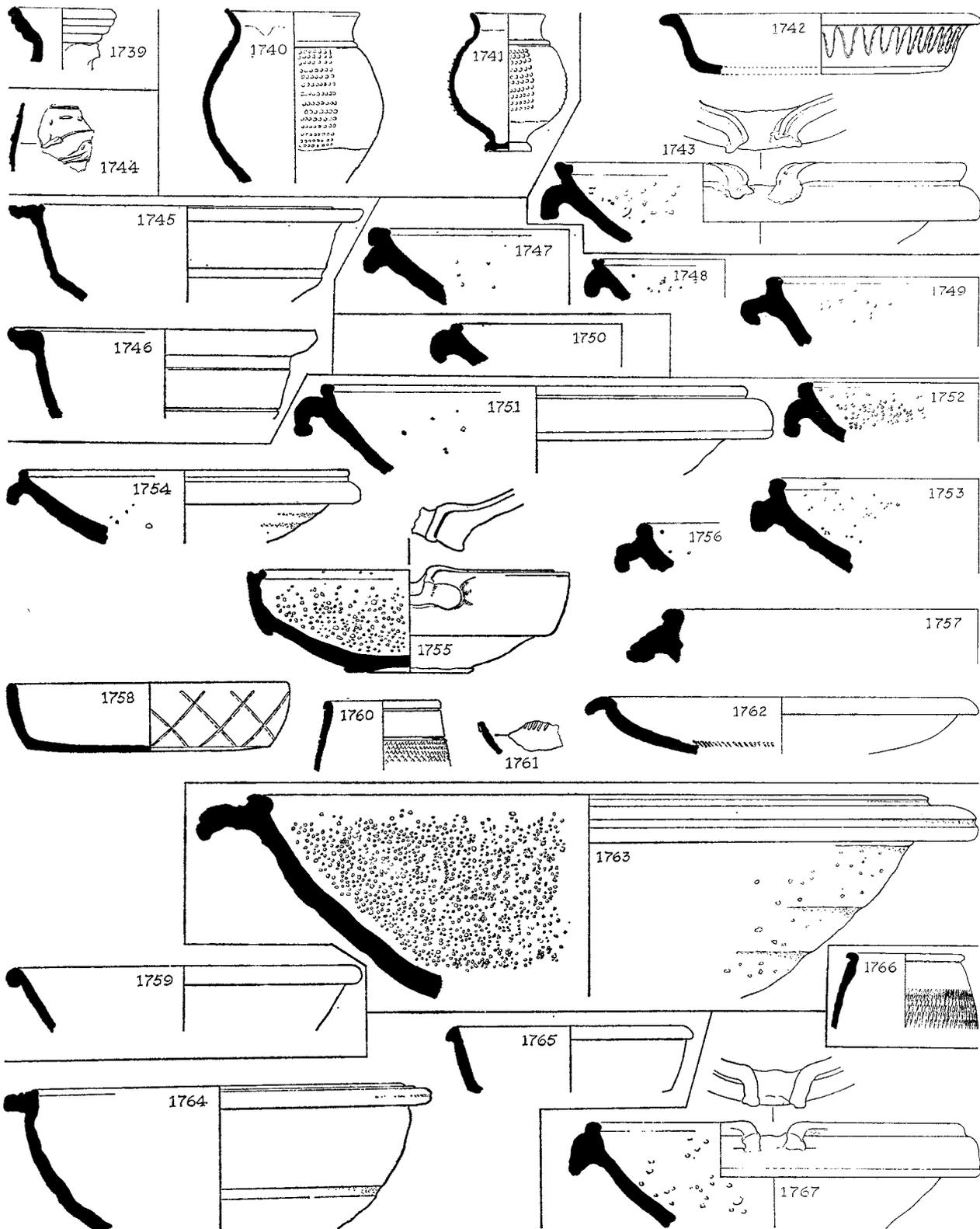


FIG. 148. Pottery from Insula XXVIII (4).

Nos. 1751-62 *Pottery from layers dated A.D. 200-25*

1751. Ware as No. 1748 (c. A.D. 130-80); local; E IV 2.
 1752. Ware as No. 1748 (c. A.D. 150-200); local; V XIV 6.
 1753. Ware as No. 1748 (c. A.D. 150-200); local; V XIV 6.
 1754. Hard granular cream ware, grey core, grey grits (c. A.D. 160-240); local; W II 13.
 Also Type 2681 (c. A.D. 160-240); local; E V 3.
 1755. Smooth hard yellow-buff ware, translucent pink and grey grits (third-century); Oxford region; W XII 4.
 1756. Hard rather finely granular yellow-buff ware, white, grey, and red grits (third-century); local; E III 3.
 1757. Mortarium in ware as No. 1755, with translucent red-brown grits (third-century); Oxford region; C XVI 4.
 1758. Black-burnished 2 ware; burnished lattice, E VI 4 (A.D. **190-280, two**).
 1759. Smooth burnished grey ware, E VI 4.
 1760. Rouletted beaker in fine hard light grey ware, V VII 7.
 1761. Beaker with applied diagonal lines, in fine hard white paste, 'metallic' grey colour-coating, orange inside, W VIII 11. Cf. Type 1614.
 1762. Smooth hard light reddish burnished ware, grey core, rouletted wreath inside, C XV 7.
 1763. Hard rather finely granular yellow-buff ware, translucent grits (c. A.D. 230-50); Oxford region; W V 8, A.D. 215-50.
 1764. Hard buff granular ware, W V 13, A.D. 120-40.
 1765. Hard light grey burnished ware, W V 13, A.D. 120-40.
 1766. Rouletted beaker in hard finely granular orange-buff ware, burnished rim and neck, G II 7, A.D. 170-90. (As No. 2059, A.D. **180-250**.)
 1767. Hard rather granular orange-buff ware, grey core, buff slip, with dark grey, light grey, and white grits (probably third-century); local; F IV 18, A.D. 190-210.

FIG. 149

Nos. 1768-72 *Pottery from layers dated A.D. 10-44*

1768. Fine hard burnished cream ware, G XIV 71. (As Nos. 1409, 1571, A.D. **15-60, nine**.)
 1769. Jar with rilled body in smooth grey-brown ware, burnished black surface, G XIV 71. Cf. No. 1774.
 1770. Rather granular dark grey burnished ware, G XIV 71. Cf. Type 76, A.D. 49-60.
 1771. Bowl or cup perhaps imitating samian form 27 in smooth hard burnished cream ware, probably Claudian, G XIV 74.
 1772. Rather coarse grey-brown ware, burnished black surface, G XIV 68, A.D. 30-43.

Nos. 1773-88 *Pottery from layers dated A.D. 35-50*

1773. Fairly hard pinkish-grey burnished ware, G XIV 66.
 1774. Jar with evenly rilled body in fairly hard micaceous dark grey burnished ware, G XIV 65. Cf. No. 1769.
 1775. As No. 1774 in rather coarse and granular dark grey-brown burnished ware, G XIV 42.
 1776. Jar with burnished shoulder-decoration in rather coarse grey-brown Belgic ware, upper part burnished, G XIV 42.
 1777. Bowl with unevenly rilled body in coarse dark grey-brown ware, partly burnished outside, roughly finished, G XIV 65.

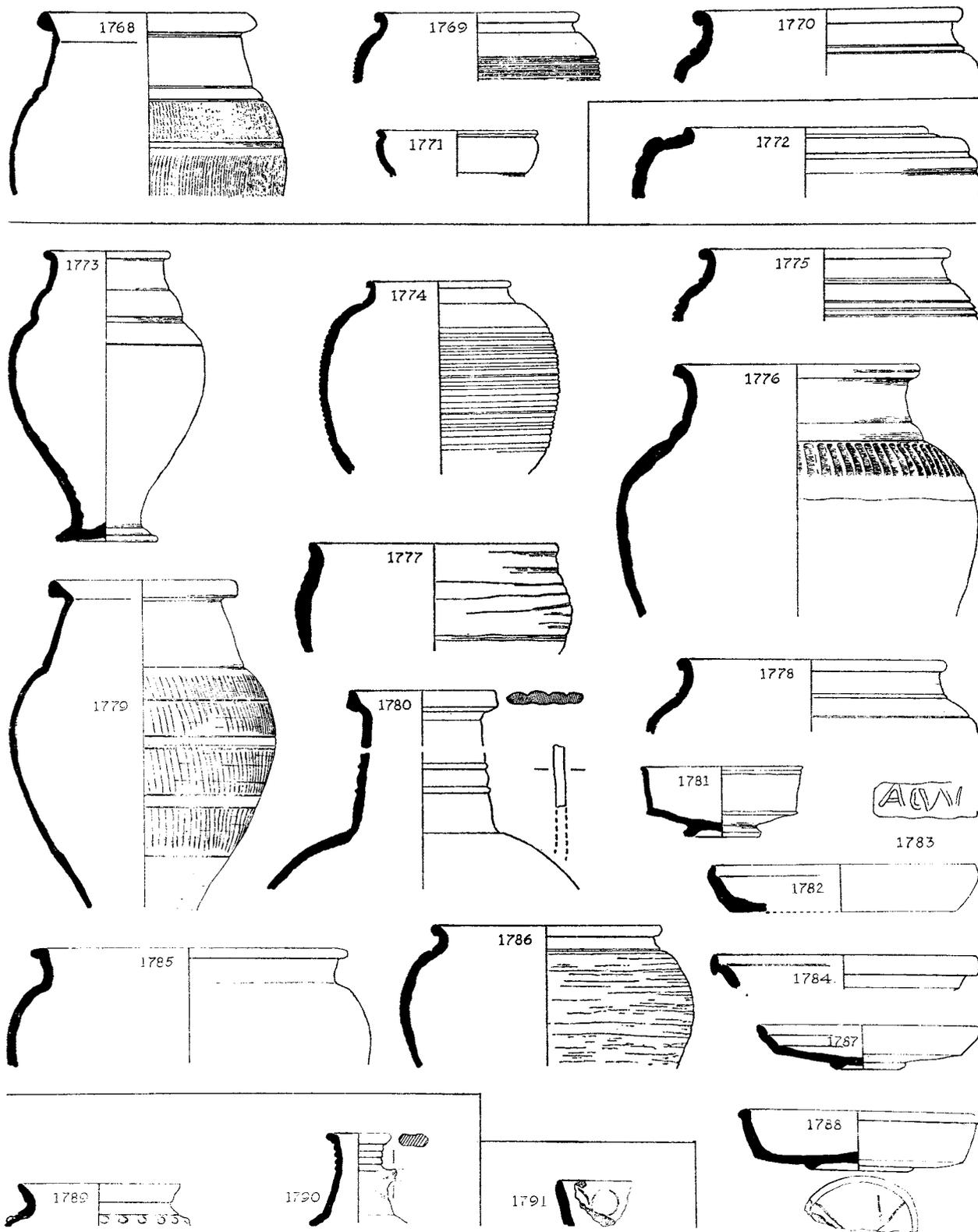


FIG. 149. Pottery from early levels in Trench 1960 G XIV,
 below Insula XXVIII, Building 4 (½, except 1783, ¼).

1778. Rather coarse and granular dark grey-brown burnished ware, G XIV 65.
 1779. Finely granular ware, burnt grey-brown, with smooth burnished surface, rather roughly combed, G XIV 65.
 1780. Smooth burnished buff ware, G XIV 65.
 1781. Bowl copying Ritterling 9 in fairly hard rather granular buff ware, thin orange coating, G XIV 65.
 1782. Imitation Gallo-Belgic plate in rather coarse dark grey-brown burnished ware, G XIV 65.
 1783. Stamp (scale 1 : 1) of *Acut(i)os ii* (c. A.D. 20-50), from a terra nigra plate: stamped radially in the middle of three concentric rouletted wreaths, G XIV 21.
 1784. Terra nigra plate in fine hard whitish ware, grey coating (worn), G XIV 21.
 1785. Rather hard granular dark grey ware, reddish core, G XIV 21.
 1786. Jar with furrowed body in rather hard and granular dark grey-brown ware, slightly burnished rim and neck, G XIV 21.
 1787. Imitation Gallo-Belgic plate in smooth burnished dark grey-brown ware, G XIV 21.
 1788. Dish imitating samian form 18, with part of graffito on base, in hard burnished grey ware, G XIV 21.
 1789. Mica-coated jar with raised bosses, in finely granular buff paste, G XIV 62, A.D. 60-85. Cf. Type 127 (A.D. 60-75).
 1790. Hard rather finely granular buff ware, G XIV 62, A.D. 60-85.
 1791. Dish with burnished circles, in Black-burnished 2 ware, G XIV 59, A.D. 140-50.

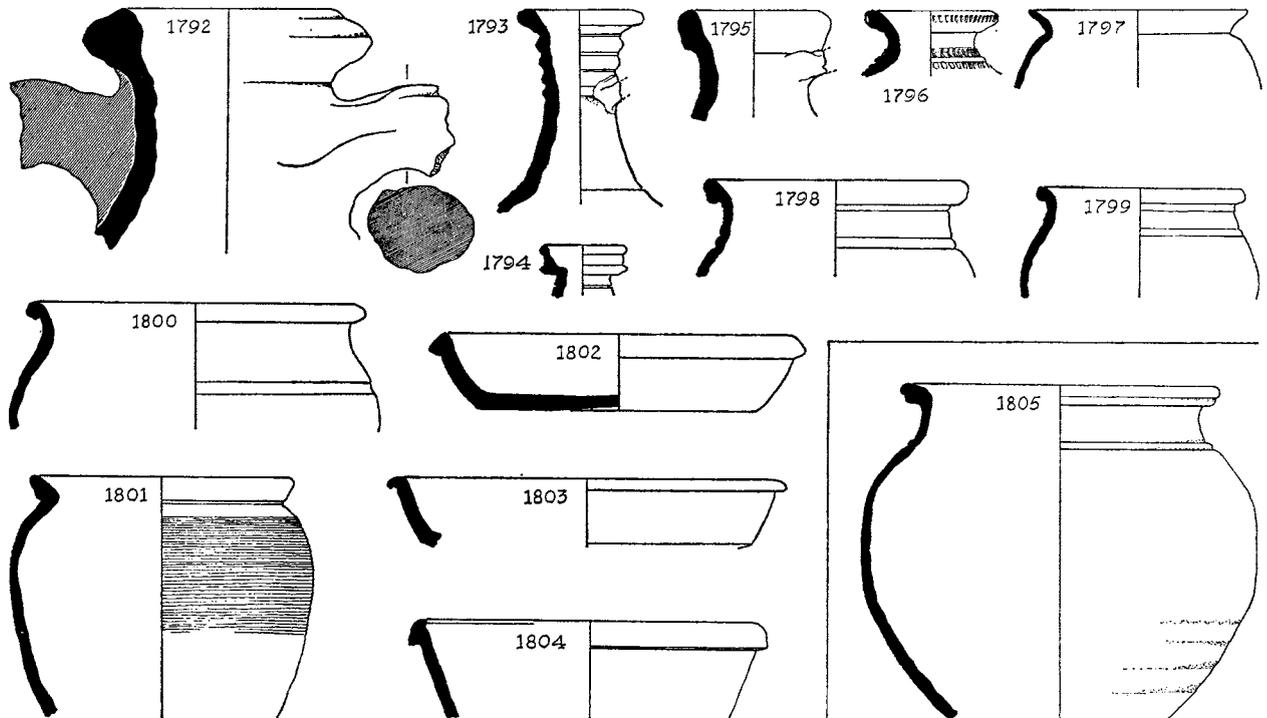


FIG. 150. Pottery from Pit 8 in area of Insula XXVIII, Building 4 (†).

FIG. 150

Nos. 1792-1804 *Pottery from Pit 8 (G XIV 48, 52) A.D. 180-210*

1792. Amphora in hard finely granular buff ware.
 1793. Hard granular buff ware.
 1794. Hard rather granular ware (burnt grey).
 1795. Flagon, perhaps with two handles, in smooth hard burnished pinkish-buff ware.
 1796. Jar, rouletted on rim and neck, in hard finely granular yellow-buff ware.
 1797. Hard burnished grey-brown rather finely granular ware.
 1798. Hard rather finely granular buff ware.
 1799. As No. 1798, yellow-buff; also a small piece cf. Type 878 (A.D. 130-60).
 1800. Hard burnished grey-buff ware.
 1801. Jar with partly rilled body in coarse buff calcite-gritted ware, grey surface. Cf. Type 1050 (A.D. **140-80, ten**).
 1802. Hard grey ware, grey-black burnished surfaces (A.D. **140-220, eighteen and two residual**).
 1803. Rather granular burnished black ware, lighter core.
 1804. Hard light grey ware.
1805. Hard rather finely granular buff ware, G XIV 17, A.D. 135-45. (As No. 1326, A.D. **130-180, forty-six and two residual**.)

FIG. 151

Nos. 1806-40 *Pottery from Pit 2 (G XIV 41, 43) dated A.D. 250-80*. Nos. 1806-14 Colour-coated beakers.

1806. Barbotine decoration between rouletted grooves, in fine hard white paste, brown-grey 'metallic' coating. **One other in this date-range and two residual**.
 1807. Fine hard buff paste, dark grey to orange-brown coating, with barbotine decoration between rouletted grooves (three) (A.D. **250-300, six**).
 1808. Fine hard white paste, purple-grey coating, with barbotine decoration (A.D. **225-300, seven, and four residual**).
 1809. Fine hard pinkish-cream paste, dark grey to brown rather 'metallic' coating, matt red-brown inside, with bands of rouletting (A.D. **270-320, six**).
 1810. Hard orange-red paste, dark grey-brown coating outside, orange-brown inside, with rouletted grooves (A.D. **260-310, two**).
 1811. Hard white paste, black rather 'metallic' coating, with rouletted grooves (A.D. **160-320, three**).
 1812. Hard white paste, brown to orange coating, dark grey inside, with barbotine scale-pattern between seven indentations. (As No. 1059, A.D. **225/50-320, nine**.)
 1813. Fine hard buff paste, orange coating, with narrow indentations (A.D. **250-300, three**).
 1814. Hard buff paste, dark brown 'metallic' coating.
 Also a whole beaker of Type 1060 (A.D. 200-75) and many sherds of a Rhenish-ware beaker of Type 1056 (A.D. 200-25/50).
 1815. Beaker with indented sides in hard orange-buff ware, grey core, burnished surface perhaps mica-coated. Cf. Type 836 (A.D. 155-60).
 1816. Hard grey-buff ware, orange slip with burnished lines radiating from the base of the neck over the shoulder. Perhaps from Much Hadham kilns.
 1817. Hard buff finely granular ware.
 Also a whole pinch-mouthed flagon of Type 1977 (A.D. 130-210).

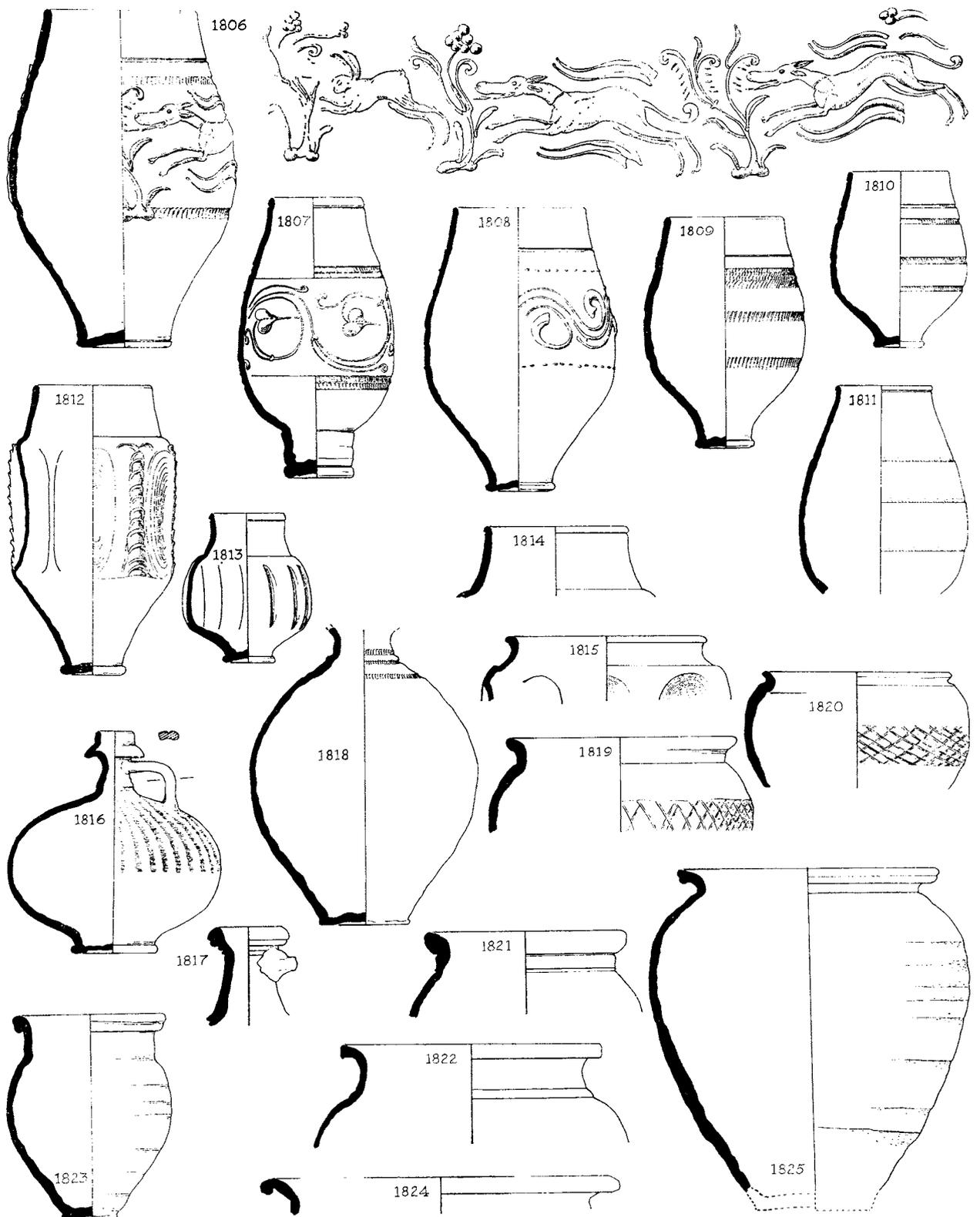


FIG. 151. Pottery from Pit 2 in area of Insula XXVIII, Building 4.

1818. Jar with rim missing, in smooth hard light red-brown burnished ware, with rouletted bands on neck and shoulder.
1819. Jar with burnished lattice, in rather finely granular grey-brown ware, unevenly burnished rim and shoulder. Cf. Gillam no. 132, A.D. **180-230, two**.
1820. As No. 1819, grey.
1821. Hard finely granular buff ware.
1822. As No. 1821, orange-buff, resembling second-century jars, e.g. Type 655, and probably residual (A.D. **145-200 +, two**).
1823. Finely granular dark grey ware.
1824. Hard finely granular light grey burnished ware.
1825. Hard rather light grey granular ware, smoothed near base.

FIG. 152

Pottery from Pit 2, continued

1826. Black-burnished 1 ware; burnished arcading; cf. Type 1171, dated A.D. 310-15, and Gillam no. 227 (A.D. 260-320).
1827. Black-burnished 2 ware; burnished lattice; cf. Gillam no. 222 (A.D. 150-210) (A.D. **145-250, three**).
1828. As No. 1827 (A.D. **140-200, eight, and four residual**).
Also small pieces of Type 974 (c. A.D. 130-225/50) and Type 969 (c. A.D. 155/60).
1829. Smooth hard orange-buff burnished ware.
1830. Hard grey-buff rather finely granular ware (three).
1831. Smooth hard grey burnished ware.
1832. Black-burnished 2 ware; burnished wavy line. Cf. Type 1005, A.D. 150-55/60 (A.D. **160-220 +, six**).
1833. Fine hard rather light grey ware, reddish core. (Cf. Type 1112, A.D. **220-90, three**.)
1834. Black-burnished 2 ware. Cf. Type 1179 (A.D. 300-15).
1835. Hard grey-black burnished ware. Cf. Type 1181, A.D. **260-320, two**.
- Mortaria from Pit 2
1836. Hard finely granular cream ware, translucent grey and light brown grits (c. A.D. 170-240); Oxford region.
1837. Rather finely granular orange-buff ware, white and brown translucent grits (third-century); Oxford region.
1838. Hard finely granular cream ware, yellow surface, light brown and grey translucent grits (third-century); Oxford region.
1839. Hard rather finely granular buff ware, yellow surface, white and grey grits (c. A.D. 150-200); local (residual).
1840. Hard rather finely granular yellow-buff ware, white grits (probably third-century); local; also Types 969, 974, 1056, 1060.

Nos. 1841-4 *Pottery from G XV 33, A.D. 10-43*

1841. Smooth dark grey burnished ware.
1842. Coarse granular dark grey-brown ware, partly burnished.
1843. Jar with roughly rilled shoulder in ware as No. 1842.
1844. Storage jar with slight neck-cordon in very coarse granular dark grey ware, unevenly burnished.

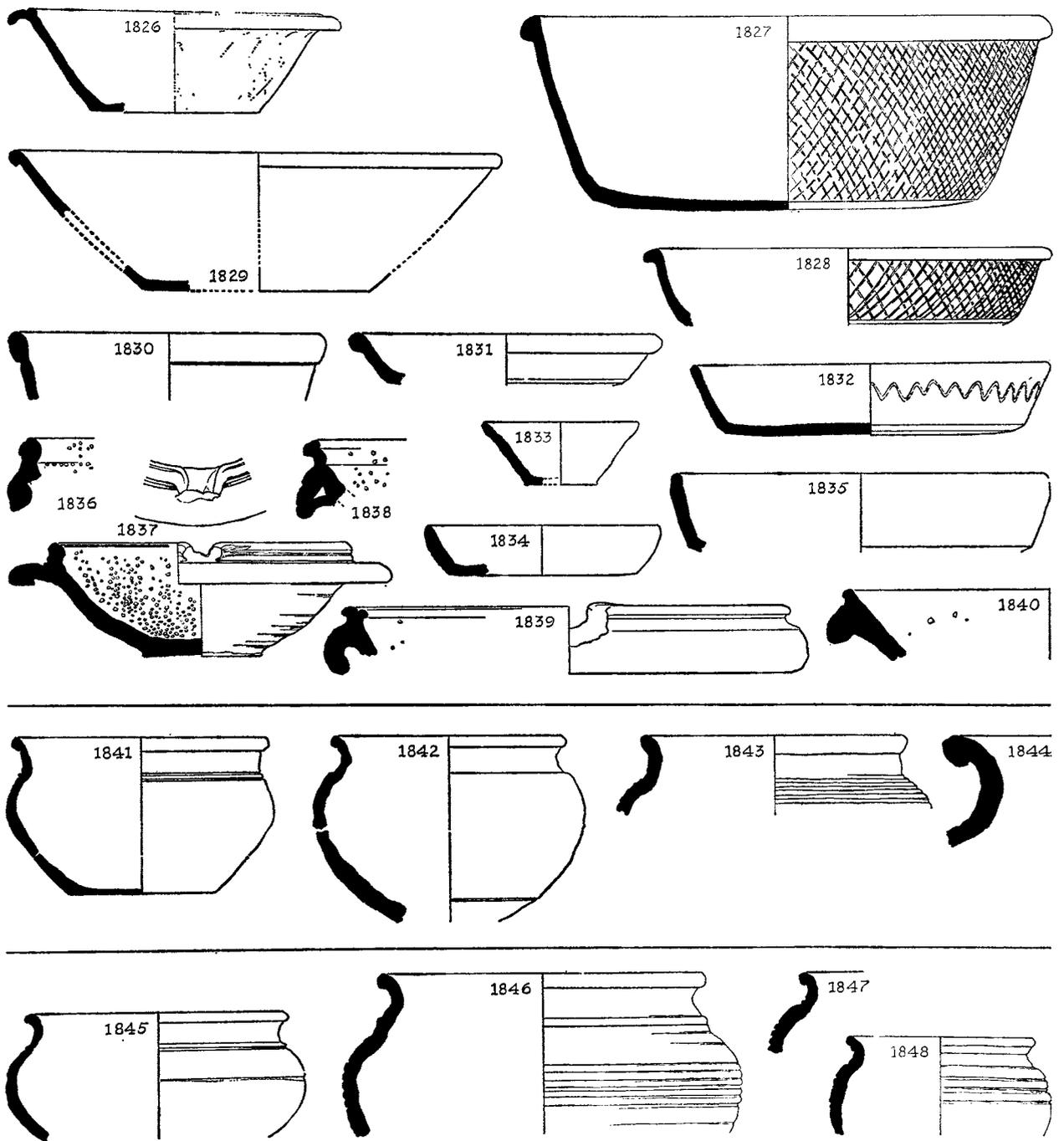


FIG. 152. Pottery from Pit 2 in area of Insula XXVIII, Building 4, and from early levels in Trench 1960 G XV.

Nos. 1845-8 *Pottery from G XV 17, A.D. 43-60*

1845. Rather coarse dark grey-brown ware, unevenly burnished.
 1846. Rather coarse grey and buff ware, burnished from rim to shoulder, evenly rilled below (A.D. **43-70, two**).
 1847. As No. 1846, in finely granular dark grey-brown ware.
 1848. As No. 1846, red-grey, roughly rilled. Cf. Type 59, (c. A.D. 49).
 Also sherds of a butt beaker of Type 1571.

XV. EXTRAMURAL SITE S (pp. 288-90)

(Site 57 S)

FIG. 153

A. *Pottery from primary levels dating the building*

1849. Mortarium with broken spout, in hard cream ware (c. A.D. 160-240); local; S IV 14, A.D. 200-20.

B. Nos. 1850-2 *Pottery from secondary floors, etc., dated A.D. 230-70*

1850. Hard finely granular buff ware, pink and grey core (third-century); local; S IV 22-4.
 1851. Hard finely granular buff ware, S IV 22-4.
 1852. Coarse buff calcite-gritted ware, rilled, S IV 22.

C. Nos. 1853-6 *Pottery from secondary floors, etc., dated A.D. 340-60*

1853. Mortarium with broken spout, in smooth hard cream ware (third-century); Oxford region; S IV 11.
 1854. Burnished grey-brown ware; burnished arcading, S IV 11.
 1855. Colour-coated bowl in hard white paste, grey-brown to orange coating, 'metallic' outside, S IV 11.
 1856. Colour-coated beaker with barbotine charioteer in high relief; sherd showing part of tunic and right leg, in hard white paste, black 'metallic' coating, S XXVI 5.

D. Nos. 1857-82. *Destruction deposits dated A.D. 340-70*

1857. Hard buff ware, light red slip inside, translucent pink, grey, and white grits (third-century); Oxford region; S IV 7.
 1858. Colour-coated flagon in hard white paste, dark grey coating, 'metallic' outside, S IV 7.
 1859. Beaker in fine orange-cream paste, dark grey 'metallic' colour-coating outside, matt orange-brown inside, S IV 7. Cf. Gillam, no. 86, A.D. 180-230, so No. 1859 is probably residual.
 1860. Beaker with white painted decoration between rouletted bands, in buff paste, red-brown burnished colour-coating, S IV 7 (A.D. **280-340, six**).
 1861. Beaker in hard orange paste, 'metallic' silver-grey colour-coating, S IV 7.
 1862. Colour-coated bowl in hard white paste, 'metallic' red, brown, and grey coating, S IV 7. (As No. 1225, A.D. **340-400, five**.)
 1863. Colour-coated bowl in hard white paste, dark grey 'metallic' coating, S IV 7.
 1864. Smooth grey-black burnished ware, S IV 7.
 1865-6. Smooth hard rather light grey ware, partly burnished outside, S IV 7.
 1867. Smooth hard dark grey ware, lighter core, burnished inside and on rim, with burnished radiating lines inside base, S IV 7. (As No. 2529, A.D. **275-340, seven and three residual**.)

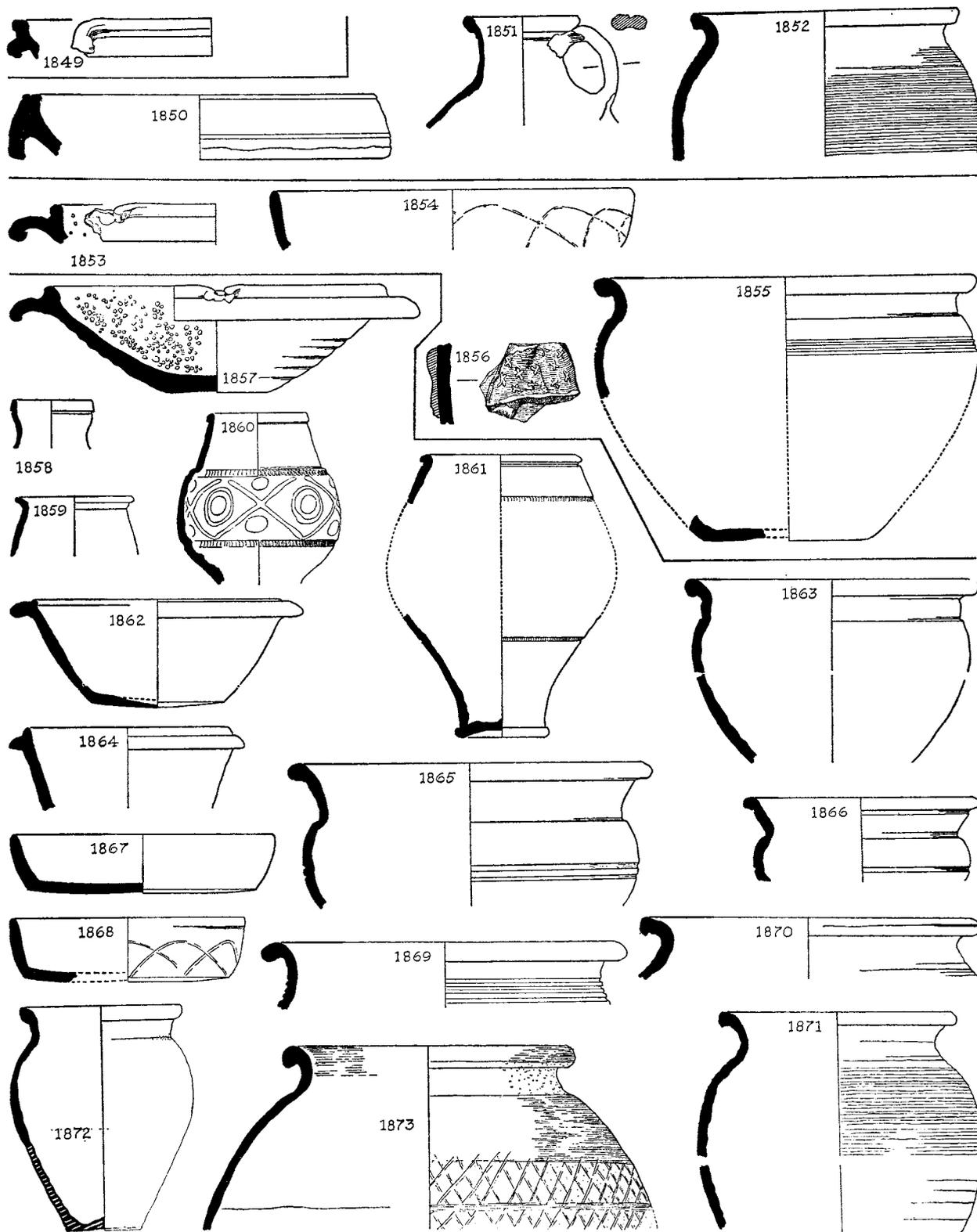


FIG. 153. Pottery from Extramural Site S ($\frac{1}{4}$, except 1856, $\frac{1}{2}$).

1868. Dish with burnished arcading, in rather coarse grey-black burnished ware (two), S IV 7 (A.D. **190-350, three**).
1869. Hard dark grey ware, lighter core, S IV 7.
1870. Coarse buff calcite-gritted ware, smoked, S IV 7.
1871. Coarse light red and grey calcite-gritted ware, S IV 7 (A.D. **340-80, two**).
1872. Hard rather finely granular buff ware, smoked (two), S IV 7.
1873. Hard rather granular grey ware, darker slip on upper part, burnished on rim and shoulder; burnished lattice, S IV 7.

FIG. 154

1874. Smooth hard cream ware, yellow surface or slip, black ironstone grits (probably third-century); Nene Valley; S IV 9.
1875. Mortarium with part of spout, in hard finely granular cream ware, translucent light brown and grey grits (third-century); Oxford region; S IV 9.
- 1876-7. Coarse buff calcite-gritted ware, smoked, grey core, S IV 9.

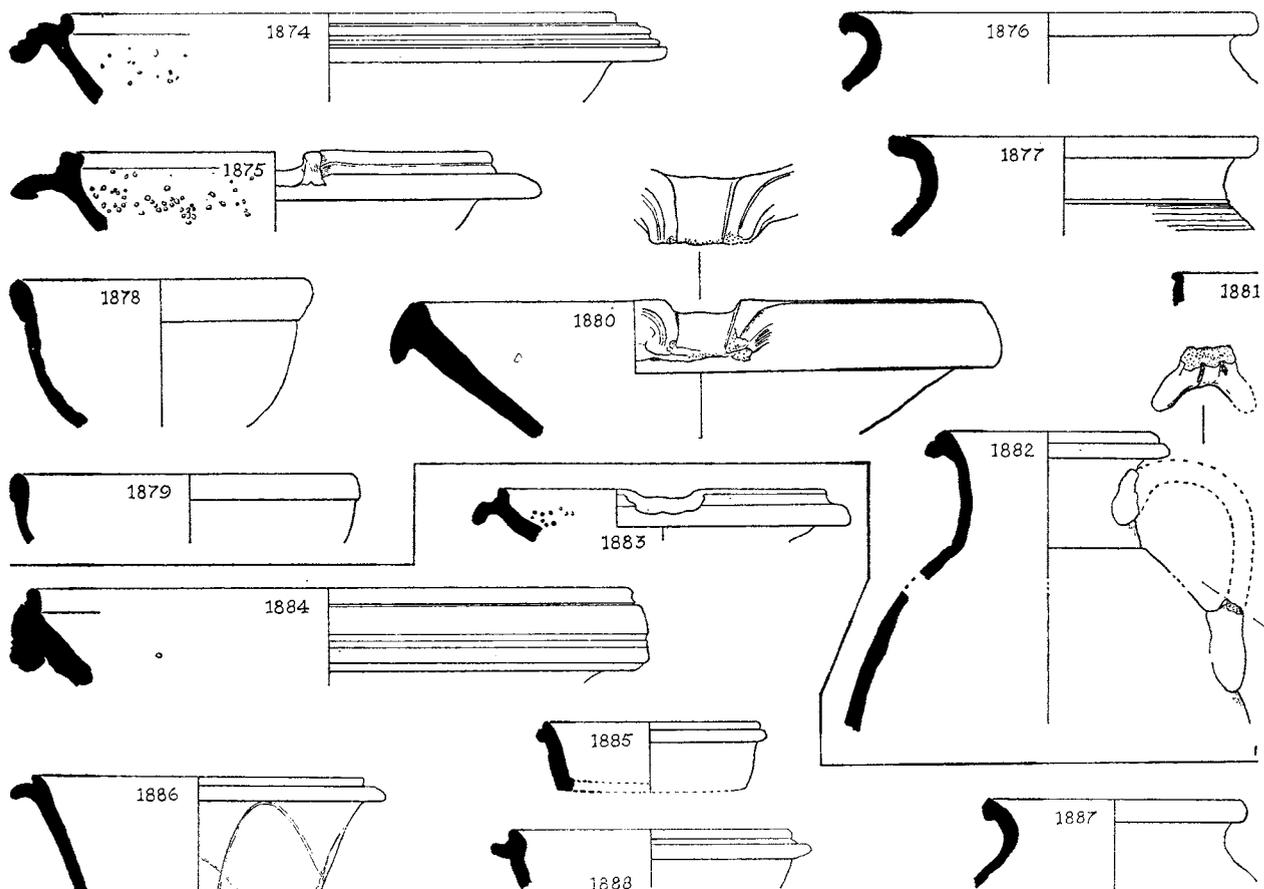


Fig. 154. Pottery from Extramural Site S (1).

1878. Hard rather finely granular yellow-buff ware, S III 5 (A.D. **190-340, eight**).
 1879. Rather finely granular buff ware, grey core, lighter slip, S IV 6. Cf. No. 1878.
 1880. Mortarium with broken spout, in hard rather finely granular yellow-buff ware, smooth surface (probably third century); local; S VIII 11.
 1881. Red colour-coated bowl in smooth pink-buff micaceous paste, orange-red coating, S VIII 11.
 1882. Finely granular grey-brown ware; darker slip, burnished outside, resembling colour-coating; S VIII 8.

E. Pottery from layers overlying graves, fifth century

1883. Hard finely granular light red ware, translucent grey-white grits (probably third-century); Oxford region; S IV 3.
 1884. Hard rather finely granular buff ware, white grit (late second- or third-century); local; S IV 3.
 1885. Hard grey burnished ware, S IV 3. Cf. No. 1287 A.D. **360-410**.
 1886. Rather coarse burnished grey-brown ware; burnished arcading, S IV 3 (A.D. **320-70, four**).
 1887. Coarse buff calcite-gritted ware, smoked, grey core, S IV 3 (A.D. **360-fifth-century, six**).
 1888. Coarse red-buff calcite-gritted ware, smoked, grey core, S III 3.
 Another in S IV 6, A.D. 340-70. Cf. Nos. 1258, 2425, A.D. **360-410+**.

XVI. EXTRAMURAL SITE 1956 R (pp. 278-9)

FIG. 155

Nos. 1889-90 *Pottery from R IV 9, A.D. 270-320*

1889. Very coarse light grey-buff calcite-gritted ware (A.D. **150-250, four**).
 1890. Colour-coated beaker with white barbotine decoration, in fine hard white paste, grey-black coating (worn), (third-century).

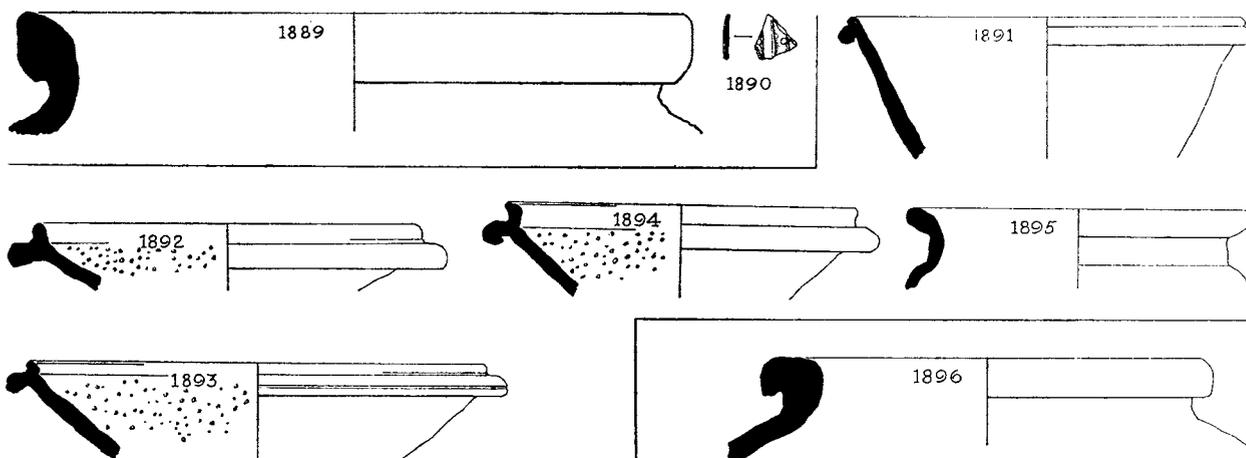


FIG. 155. Pottery from Extramural Site R (4).

Nos. 1891-5 *Pottery from R IV 8, A.D. 320-50*

1891. Burnished grey ware (worn) (A.D. **330-80, two**).
- 1892-4. Hard light buff ware, translucent grits (*c.* A.D. 240-400+); Oxford region (C. J. Young's type 22).
1895. Hard burnished light grey ware.
1896. Very coarse light red-buff ware, burnished lip, grey core (late second- or third-century) R VI 4, A.D. 365-80.

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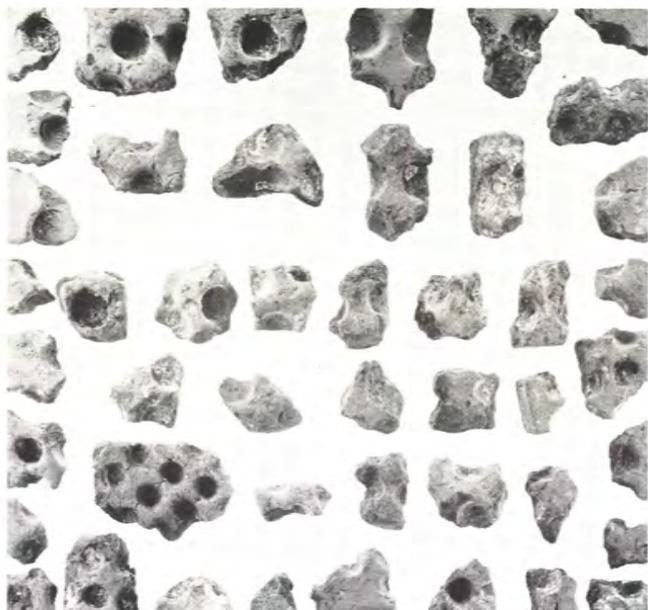
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PLATES

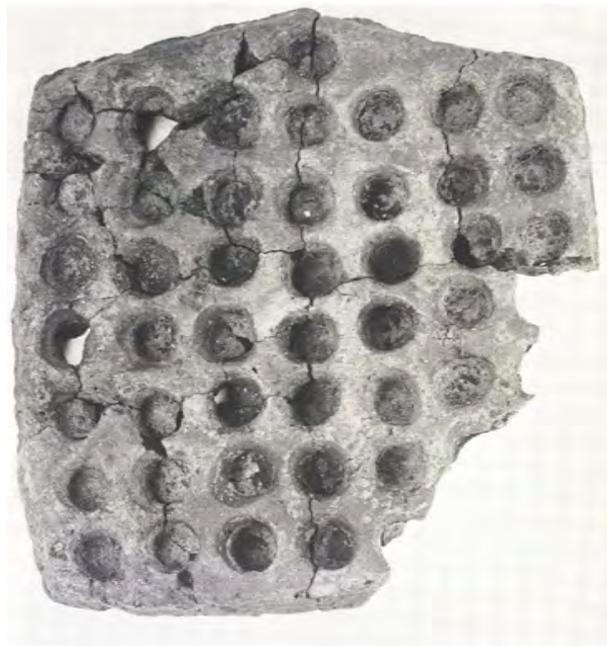


a

a. Belgic coin-mould fragments from below the defences,
Insula XVII (p. 30) ($\frac{1}{3}$).

b. Almost complete coin-mould from Belgic mint-deposit
in Insula XXVII (p. 31) ($\frac{1}{2}$).
(*Photograph: James Brown*)

c. Coin-mould still retaining bronze blank (p. 31) ($\frac{2}{7}$).



b



c

PLATE II



a. The Chester (NW) Gate as excavated by Wheeler showing the foundations of the city wall (right) oversailing its offsets (p. 34).



b. The London (SE) Gate as excavated by Wheeler showing the city wall (left) making a straight joint with, and starting higher than, the gate (p. 34).



The defences in Insula XVII (1956) showing the fort rampart (right) and city wall (left) (p. 33).



a. The defences, 1956: the front of the fort rampart showing the impressions of horizontal timbers in the turf revetment and a post-hole (p. 37).



b. The defences, 1956 showing the fort rampart-revetment (right) and the city wall (p. 50).



a. The 1955 Ditch at Site A from the south, showing 'steps' on the inner slope and a chalk footing beyond (p. 46).



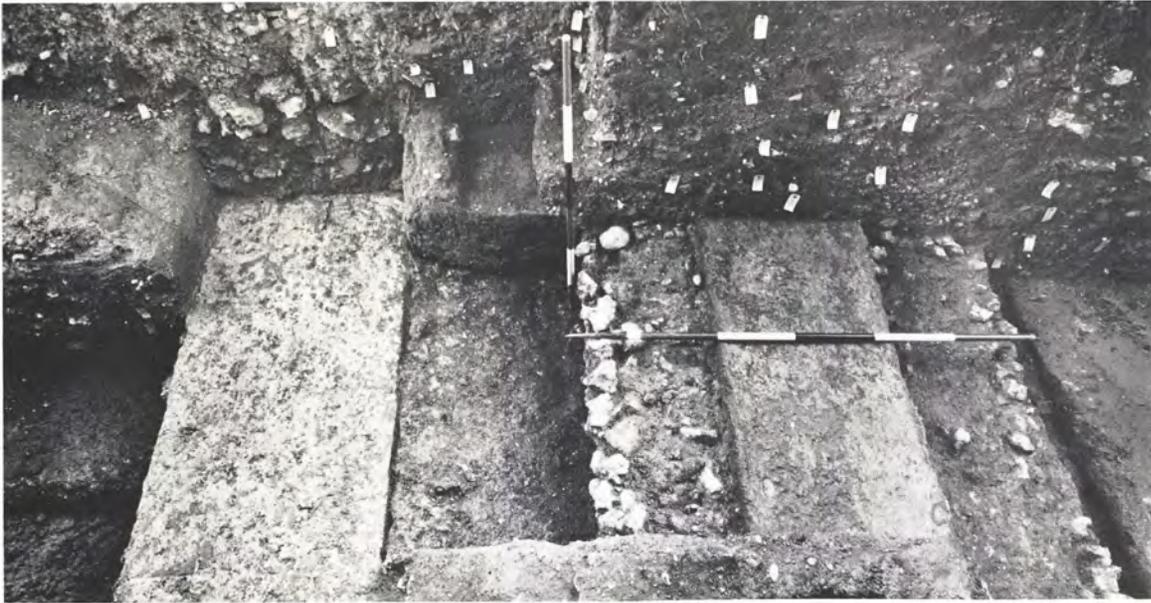
b. The 1955 Ditch at Site M from the south-west: the further rod stands in a later pit partly filled with clean clay (left) (p. 45).



a. The forum: outer wall and party-wall of rooms of north-east range: trench dug just inside the churchyard wall near the site of the inscription (p. 55).



b. The forum, NW range, 1956 Site G, showing spread of broken roofing tiles and external wall robbed to its lowest tile-course beyond (under vertical rod) (p. 57).



a. The forum, NW range: outer wall (left) and sewer (right) with remains of timber-lined drain between them (at back) (p. 57).



b. The northern Monumental Arch from the south-west showing seating of tile-lined conduit and sewer beyond (p. 75).

PLATE VIII

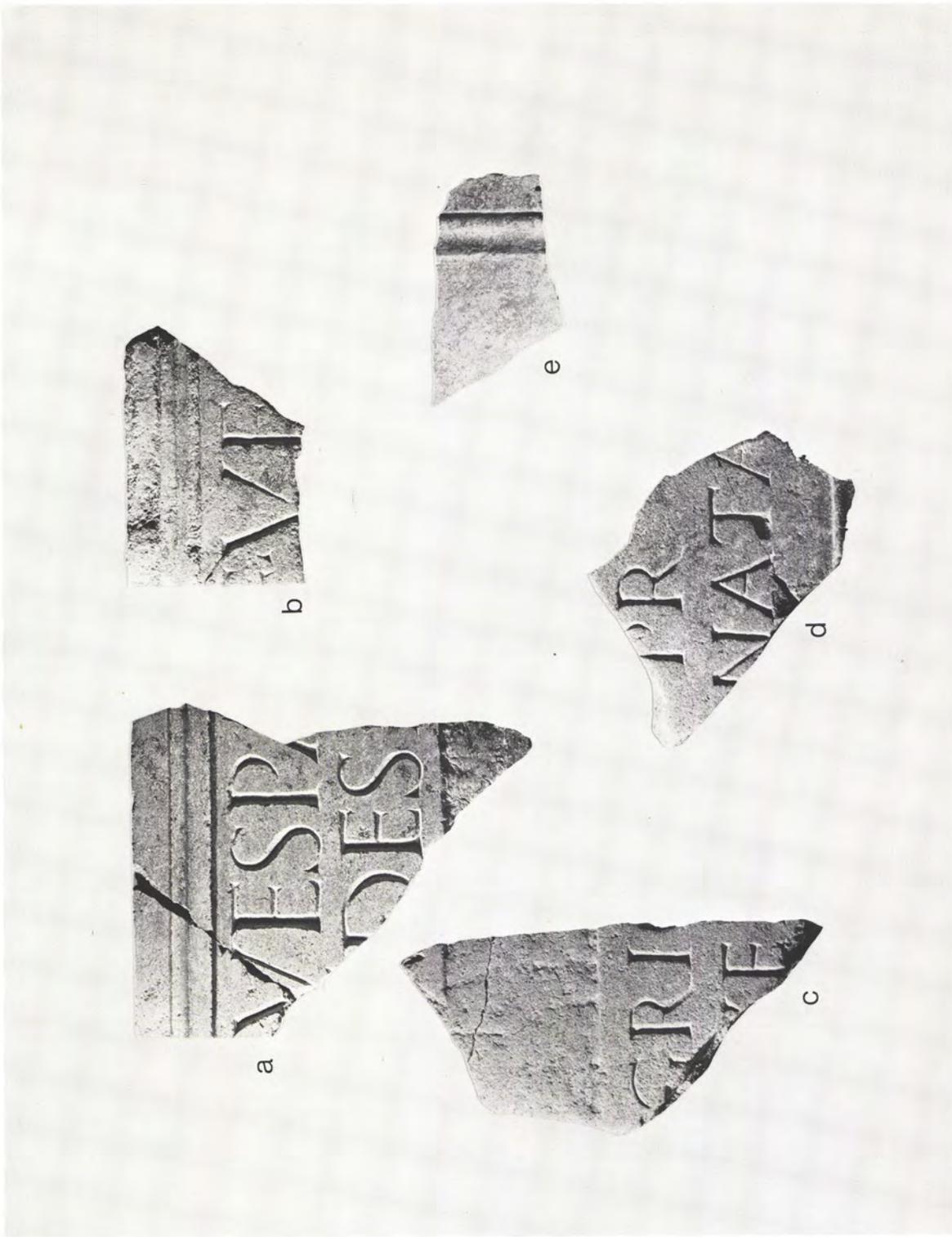


(Photograph: Cambridge University Collection: copyright reserved)

a. Air photograph showing site of the northern Monumental Arch (p. 75).



b. The northern Monumental Arch from the north-east (p. 76).



The forum inscription (1/2) (p. 69).

PLATE X



a. Insula XIV, Building 3: oven in Room 2, original phase (p. 93).



b. The same, as reconstructed (p. 96).



a. Insula XIV, Building 3, Phase B: site of destroyed mosaic; tessellated floor of Room 2 oversailing earlier wall, with quarter-round moulding in Room 4 below showing in foreground (p. 96).



b. Insula XIV, Building 3, Phase A: Rooms 3 and 4 looking south-west, showing channelled hypocaust of Room 3 (background) and remains of tessellated floor in Room 4 (foreground, left), with Phase B tessellated floor on top of wall and to left of it (p. 94).

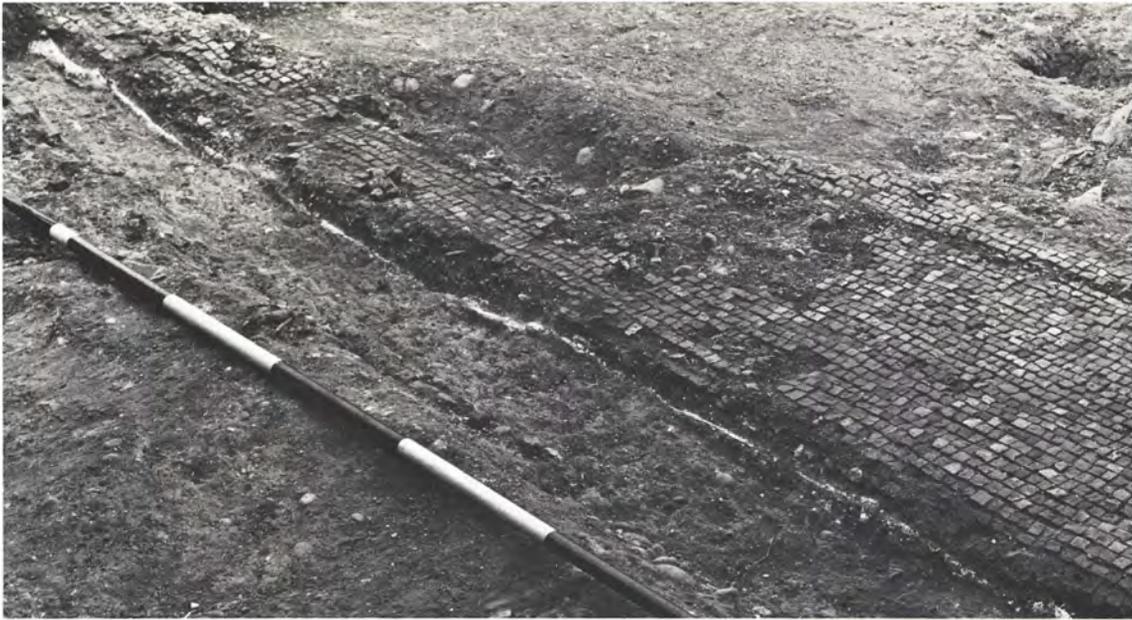
PLATE XII



a. Insula XIV, Building 3, Room 1: showing chalk-lined wall and remains of hypocaust (p. 98).



b. Insula XX. The 1955 Ditch below Building XX, 1, Room 4 (p. 132).



a. Insula XX, Building I: south-west end of Corridor 4 opposite Room 6 showing plaster-faced clay wall (p. 132).



b. Insula XX, Building I: later tile-lined flue inserted in Room 7 (p. 134).

PLATE XIV



a. Insula XXI, Building I: splayed window in Room 2 (p. 145).



b. Insula XXI, Building I: hatch in wall of Room 9 from south, showing straight joint with wall of Room I (p. 150).



a. Insula XXI, Building I: Room 3 from north-east (pp. 145-7).



b. Insula XXI, Building I: the blocked door in the north-east wall of Room 3 from north-east (p. 147).

PLATE XVI



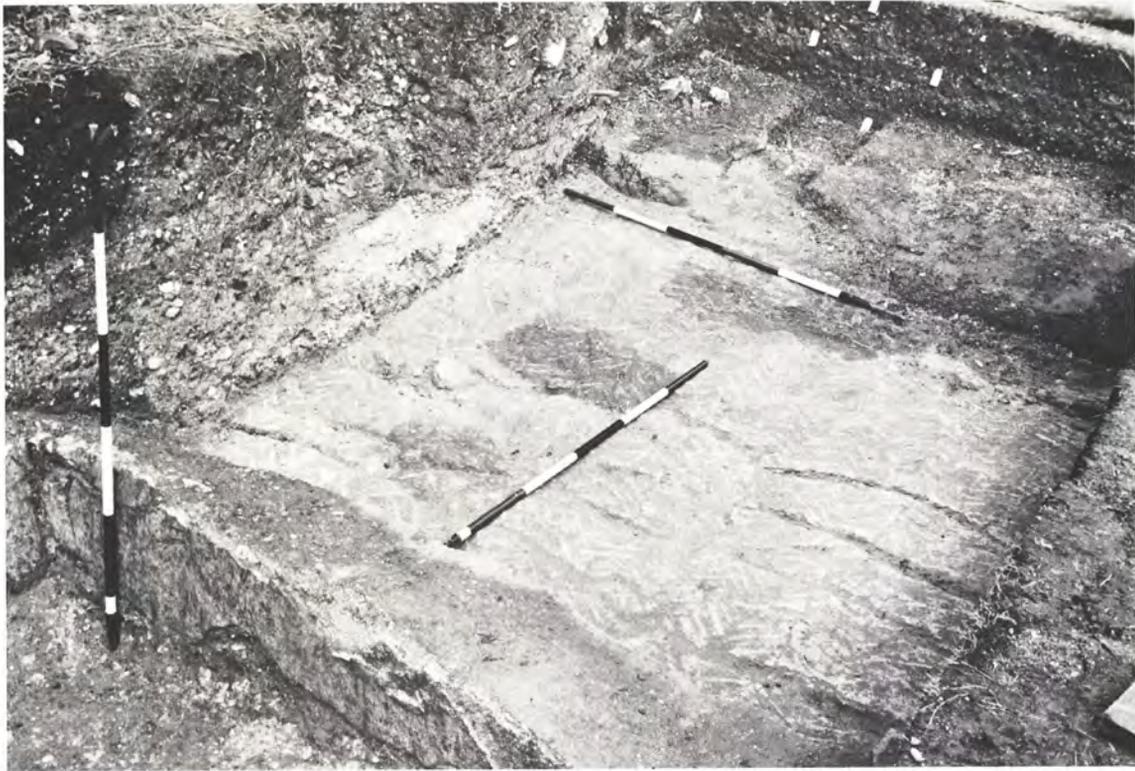
a. Insula XXI, Building 2: Wall 3/4 showing smoothed masonry basis carrying a lath-impression, with clay above: plaster face of Corridor 3 on left (p. 161).



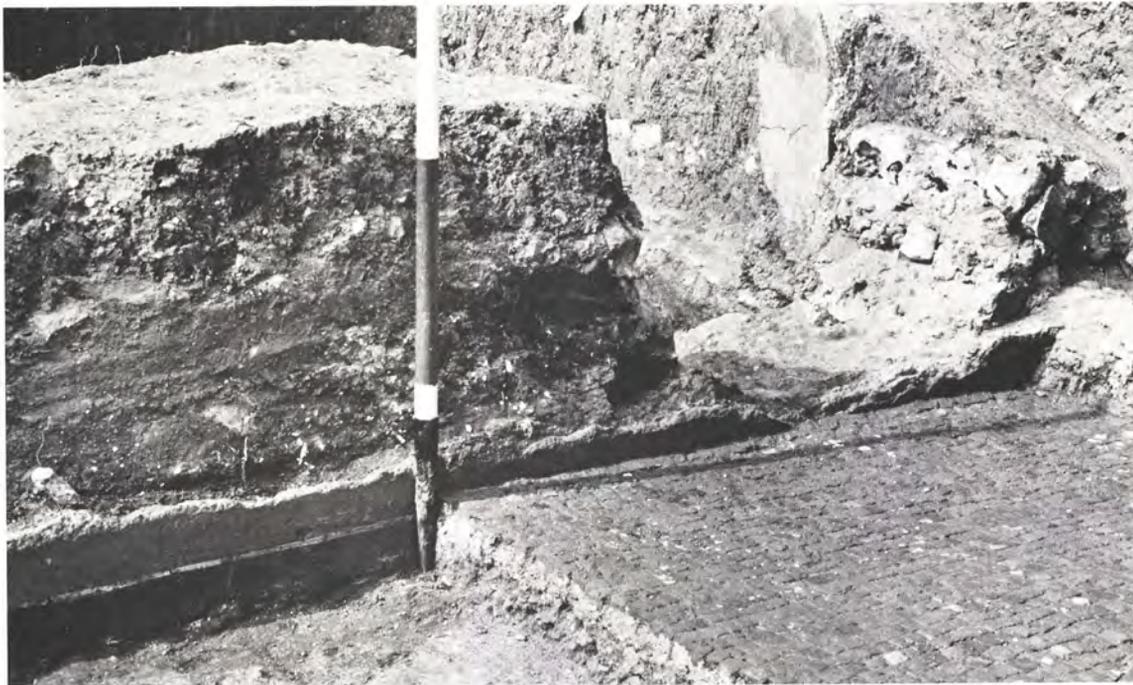
b. Insula XXI, Building 2: south-west wall of Room 4, showing wide foundation, masonry basis with socket for timber batten and clay wall above (p. 161).



c. Insula XXI, Building 2: painted plaster *in situ* on south-west wall of Corridor 2 (p. 163).



a. Insula XXI, Building 2: chevron marks on back of sheet of plaster (the red wall) fallen across Corridor 3 from its south-west wall (foreground) (p. 162).



b. Insula XXI, Building 2: the south-west wall of Corridor 3 showing clay wall on stone basis (with Room 5 behind) and painted face of dado partly concealed by tessellated floor (p. 162).

PLATE XVIII



a. Insula XXI, Building 2: Room 4 showing threshold, Lion mosaic and debris of fallen clay wall and plaster filling the room, looking north-west (pp. 162-3).



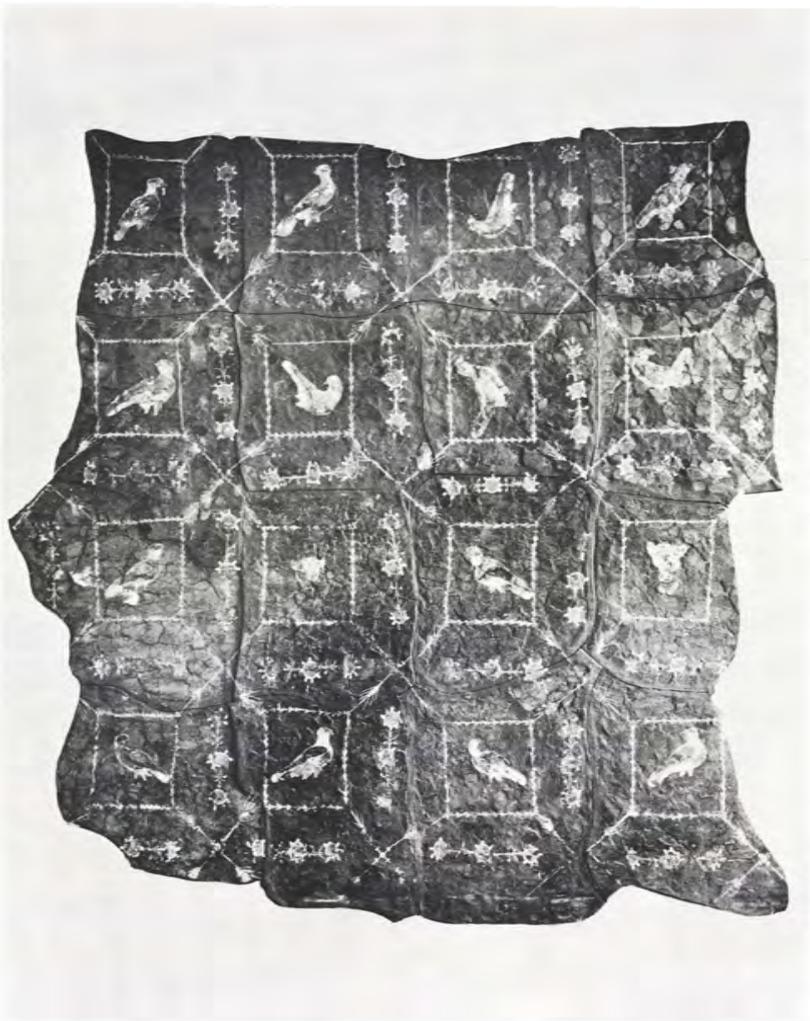
b. The Lion mosaic.



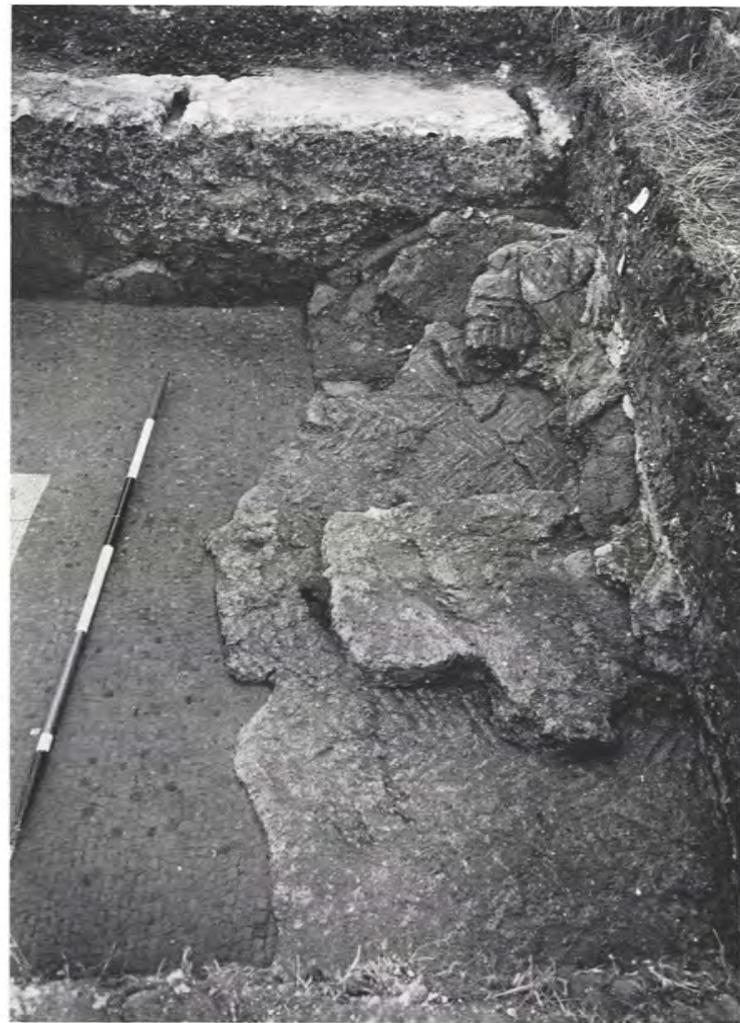
a. Insula XXI, Building 2: doorway of Room 4 from Corridor 2 showing quarter-round moulding, emplacement of door-frame, and cracked wall over decayed wooden threshold (pp. 163-4).



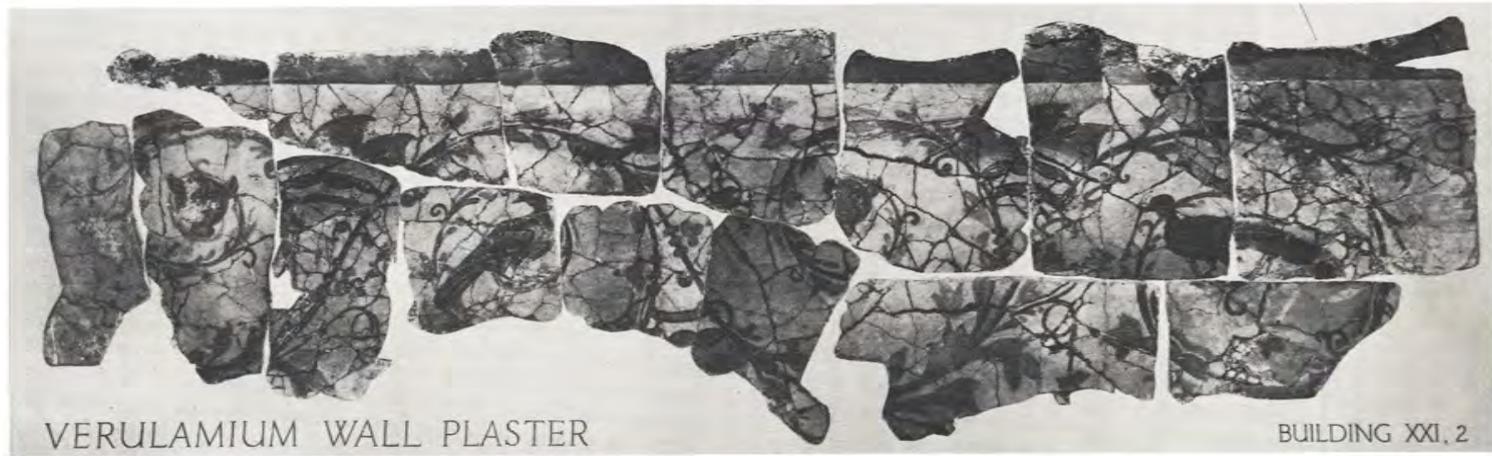
b. Insula XXI, Building 2: chalk voussoirs from Room 4 (p. 164).



a. Insula XXI, Building 2: the purple ceiling from Corridor 3 (pp. 162, 163).



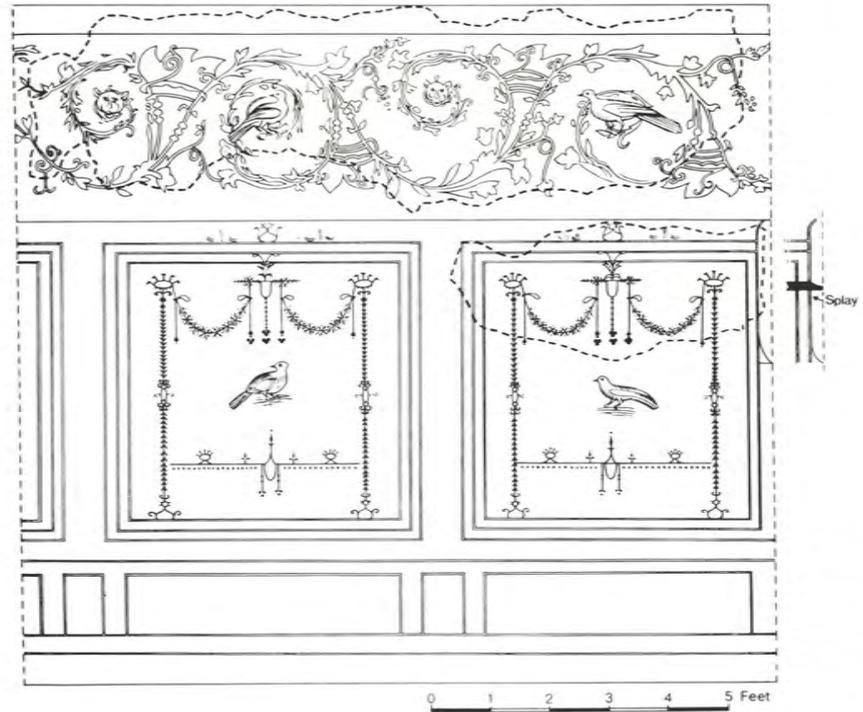
b. Insula XXI, Building 2: fallen wall-plaster in Room 4 looking south-west, showing sockets for battens in the wall: the lower sheet of plaster has fallen from the north-west wall and the upper from the south-west wall (p. 161).



a

a. Insula XXI, Building 2: the peopled scroll
(p. 165).

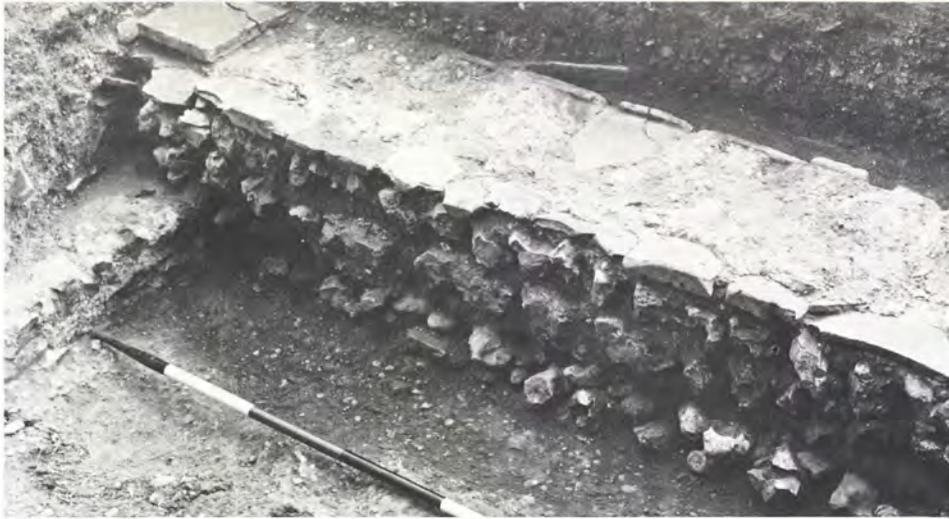
b. Drawing showing restoration of the context of the
peopled scroll.



b

(British Museum copyright: drawn by P. C. Compton)

PLATE XXII



a. Insula XXII, Building 1: Wall 3 from west, with Wall 1 (of Building 1 A) on left (pp. 184, 187).



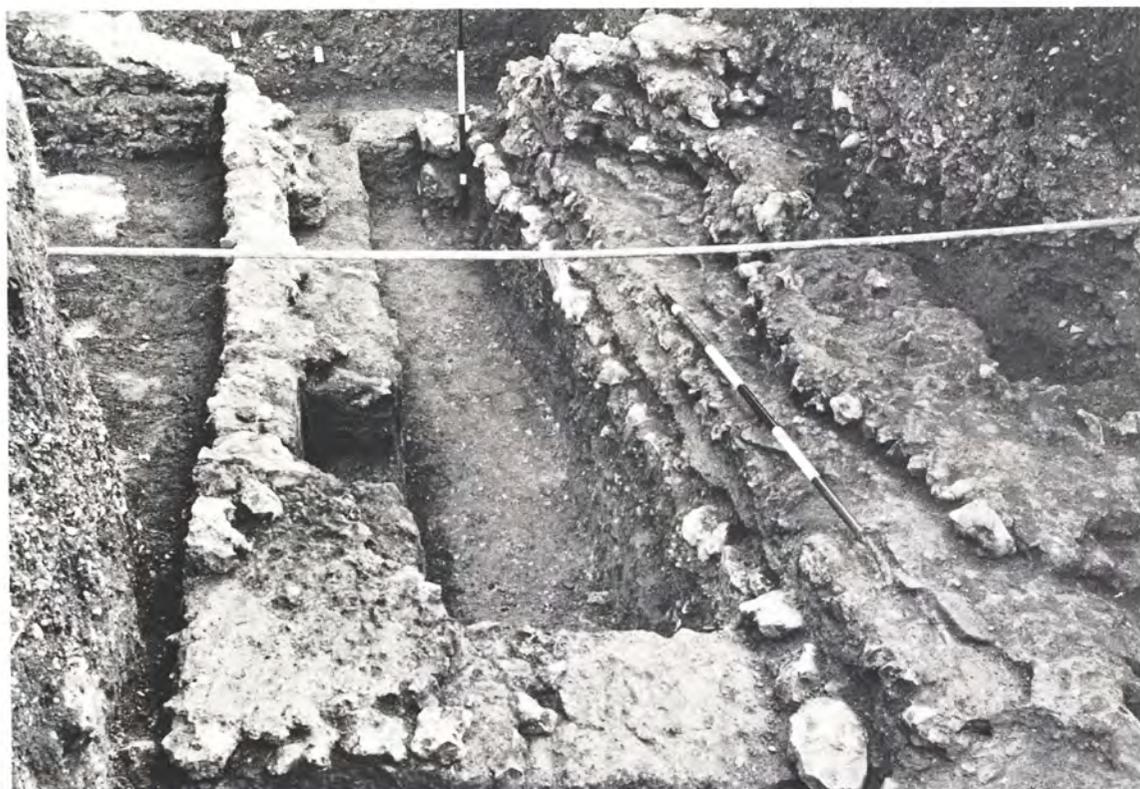
b. Insula XXII, Building 1: junction of Walls 2 and 3 from the south-east. Wall 3 (left) abuts the tiled quoin of Wall 2 which itself oversails Wall 1 (pp. 184, 187).



c. Insula XXII, Building 1: tile-lined aperture through base of cellar wall (Room 6) (p. 190).



a. Insula XXII, Building I: cellar (Room 6) from the south-east, showing niche and painted wall (p. 190).

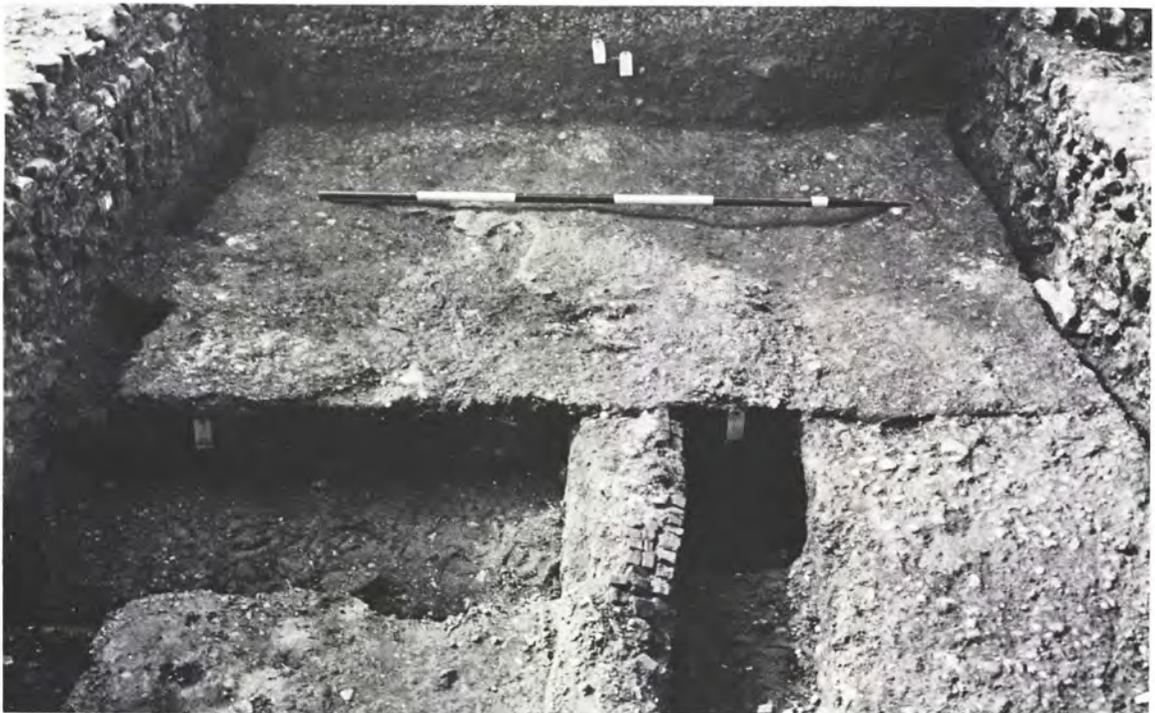


b. Insula XXII, Building I: cellar (Room 6) and overlying structure (right), looking north-east (p. 190).
A modern metal water-pipe crosses the photograph.

PLATE XXIV



a. Insula XXVII, Building 2: corner of Room 5 overlying robbed tessellated floor of Antonine timber-framed Building 2 A, Room 6 (looking north-east) (pp. 204, 214).



b. Insula XXVII, Building 2: excavation below Room 20 showing (foreground) wall-trench of Antonine timber-framed Building 2 A between Rooms 9 (right) and 8 (left) with surviving traces of tessellation; these are sealed by a thin layer of concrete (background) before the construction of Building XXVII, 2 (pp. 204, 212).



a. Insula XXVII, Building 2: doorway through north-west wall of Room 12. The tessellated floor is cut by the fifth-century pipe-line trench (pp. 216, 226).



b. Insula XXVII, Building 2 A': tile patching on floor of Antonine building, including a tile chipped to form the core of an engaged half-column (p. 207).

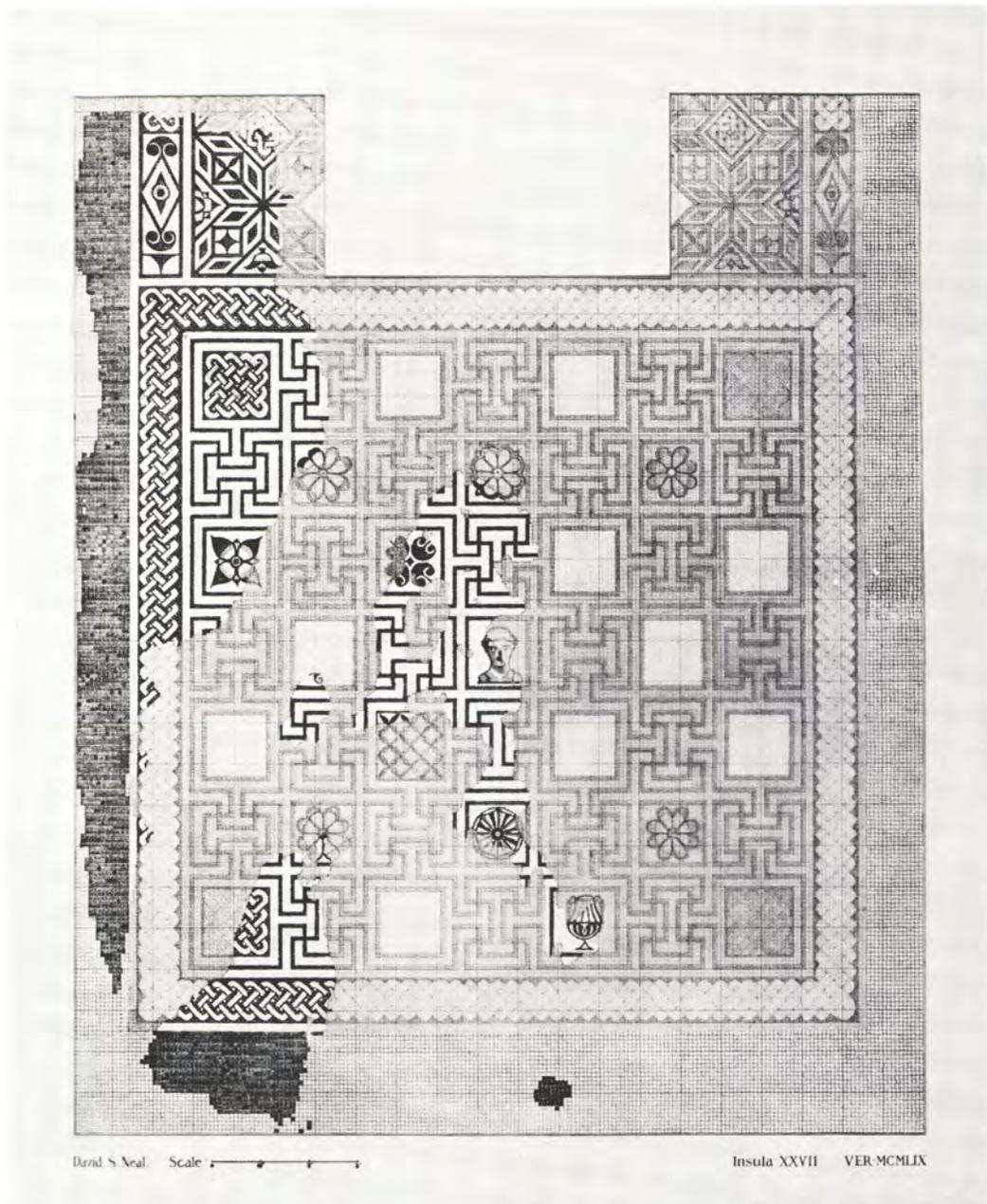
PLATE XXVI



a. Insula XXVII, Building 2: late fourth-century mosaic in Room 3 looking south-west. The floor is cut by the wall-trenches of a timber-framed medieval cottage (p. 214).



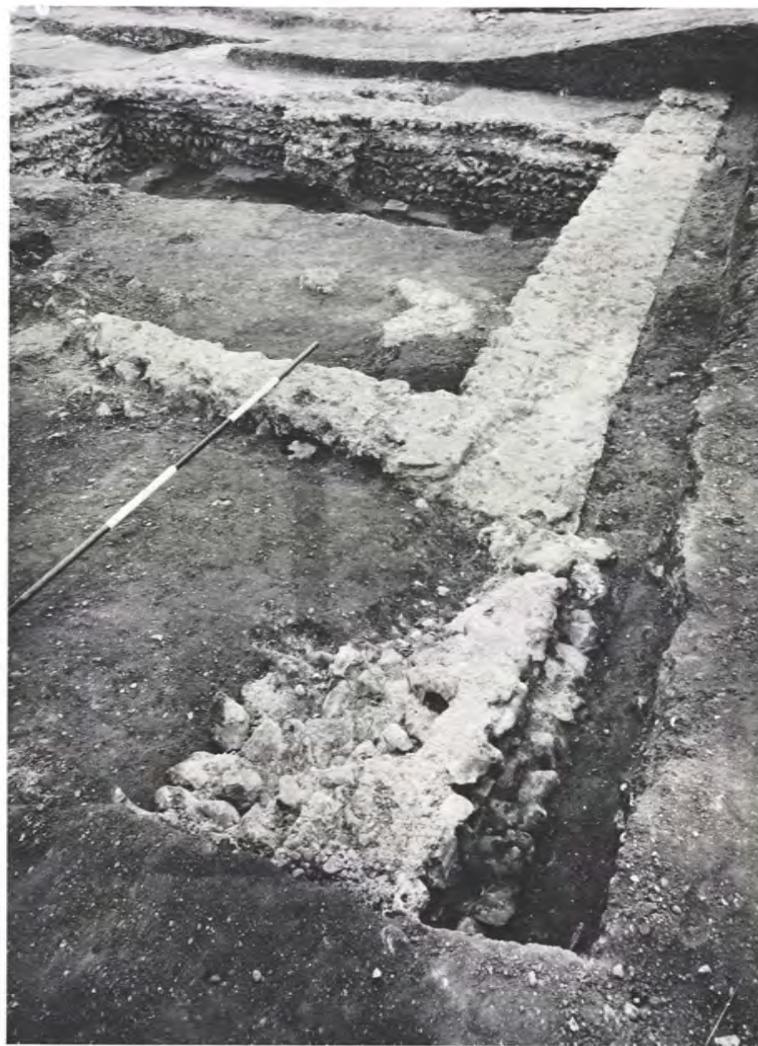
b. Insula XXVII, Building 2: late fourth-century mosaic in Room 8 looking south-east. The mosaic formerly crossed the wall in the foreground as shown by the absence of plain border beside it (p. 220). For a restoration of the mosaic see PL. XXVII.



Restoration by D. S. Neal of late fourth-century mosaic in Building XXVII, 2,
Room 8 (p. 220) (see PLS. XXVI B, XXXIV A).



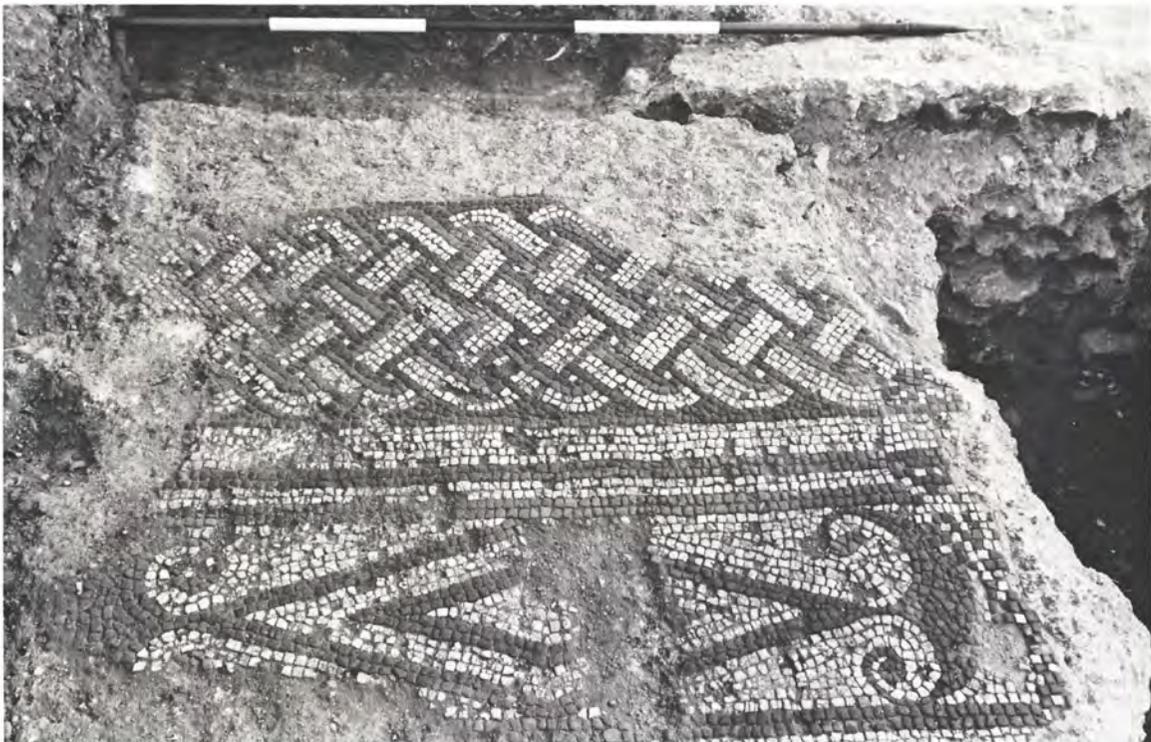
a. Insula XXVII, Building 2: tessellated floor, with patches, in Corridor 4, looking north-east (p. 214).



b. Insula XXVII, Building 2: junction of Room 15 (foreground) with Room 16 showing its secondary character (p. 222).

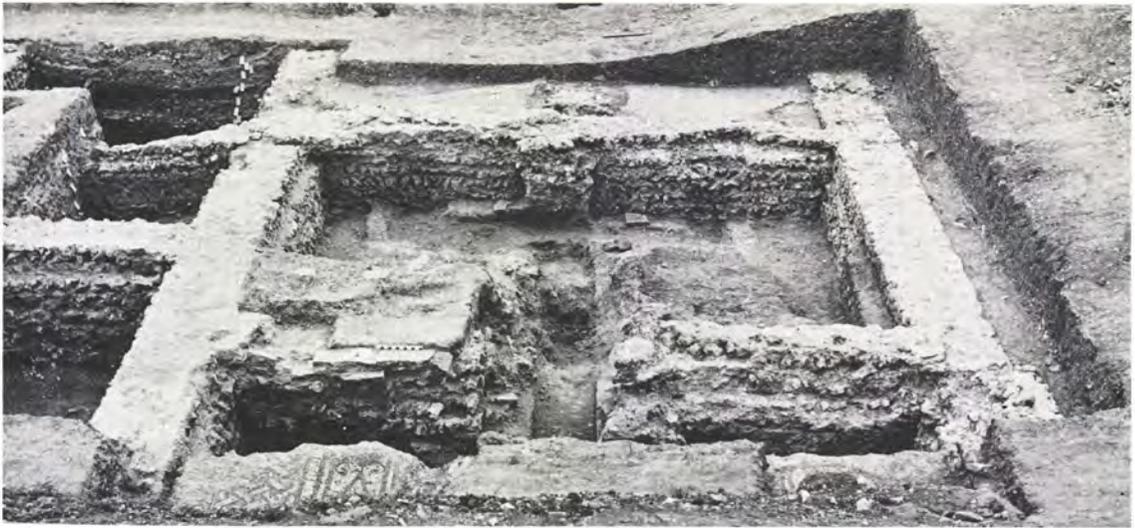


a. Insula XXVII, Building 2: patched floor in Room 21 looking north-west (p. 216).



b. Insula XXVII, Building 2: part of late fourth-century mosaic in Room 15/16 showing patching (right) (pp. 222, 224).

PLATE XXX



(Photograph: Ian Cossar)

a. Insula XXVII, Building 2: Room 16 looking south-east, showing fifth-century corn-drier. The lowest course of Building XXVII, 1 on a chalk footing runs above the south-east wall of Room 16; below it the vertical soot-stains at each end of the corn-drier can be seen (p. 223).



b. Insula XXVII, Building 2: stoke-hole of fifth-century corn-drier (Room 23) looking south-west. Behind the rod the second phase of the stoke-hole wall can be seen resting on a layer of ash covering the remains of the original wall. In the background the wall of Room 23 abuts that of Room 15 with a straight joint (p. 223).



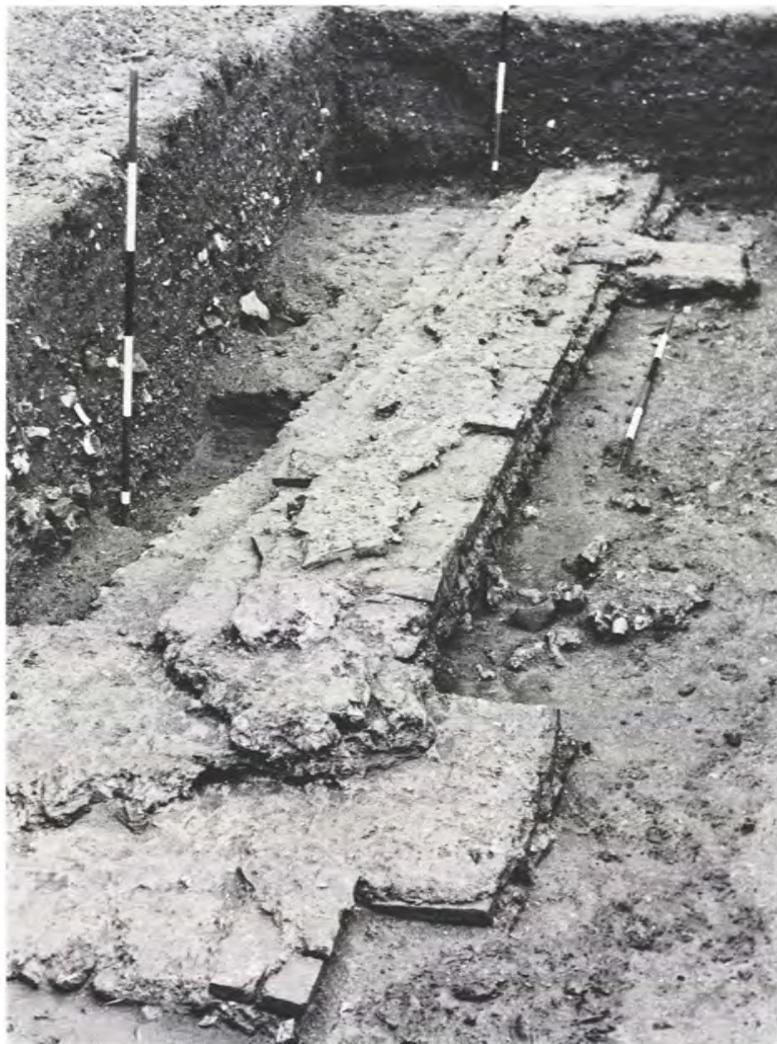
a

a. Insula XXVII, Buildings 1 and 2, looking west. The wall of Building XXVII, 1 (foreground) with its robbed bonding-course of broken tile partly overrides the courtyard wall of Room 10. Left of centre, the buttress cut by the pipe-line (pp. 224-6).

b. Insula XXVII, Building 2: base of plaster pilaster (p. 216).



b



a. Insula XXVII, Building 1: south-west wall, showing buttresses and double tile-course (pp. 224-5).



b. Insula XXVII, underpinning of north-east wall of Building 1 running parallel with north-east wall of Building 2, looking north-west (p. 225).



a. Insula XXVII: fifth-century pipe-line trench cut through Building 2, Room 12, looking south-west (p. 226).



b. Insula XXVII, Building 1: buttress on north-west side sliced through by fifth-century pipe-line trench (looking south-west) (p. 226).



a. Late fourth-century mosaic face in floor of Building XXVII, 2, Room 8 (p. 220) (see PL. XXVII).



b. Insula XXVII: fifth-century pipe-line trench, showing iron junction-collars *in situ* (p. 226). In area of Building XXVII, 2, Room 10, looking south-west.



a

a. Insula XXVIII: general view showing mosaic and post-sockets of Antonine half-timbered Building XXVIII, 3 and *opus signinum* floors of Building XXVIII, 3 A. Note block of limestone ashlar from Building XXVIII, I (pp. 234, 237, 244).

b. Insula XXVIII, Building 3 A: *opus signinum* floors and flint blocks in south-east wall-trench of Rooms 2 and 3 (p. 234) with overlying stratification; cf. fig. 102, Section A¹-A².



b

PLATE XXXVI



a. Insula XXVIII, Building 3: mosaic in Room 9 showing fallen wall-plaster sheet and burnt clay wall sealed by gravelled courtyard of Building XXVIII, 1 (pp. 237–9).



b. The Dolphin mosaic in Building XXVIII, 3, Room 9 (p. 237).

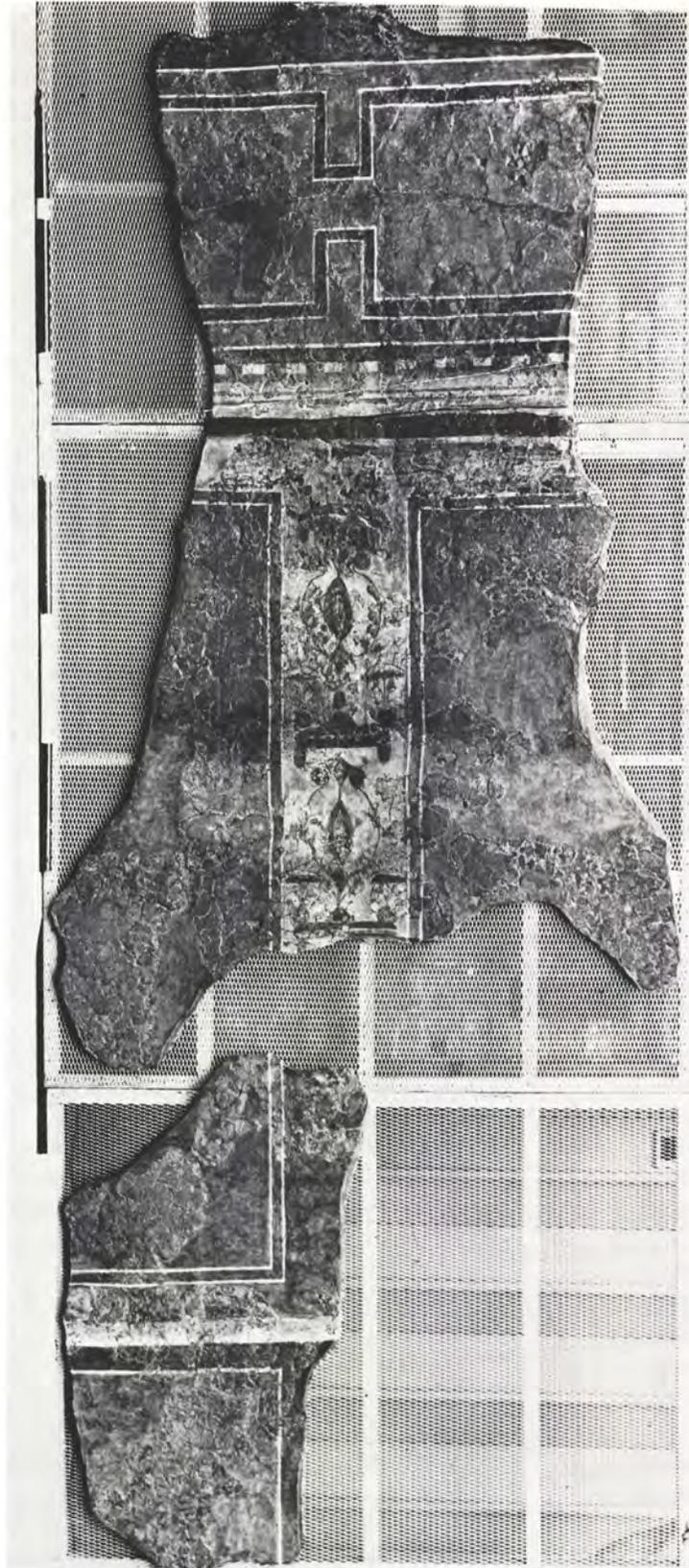


a. Insula XXVIII, Building 3: fallen burnt wall of Room 2, showing white painted surface, with splashes of colour, sinking into voids left by timber frame of wall (p. 239).



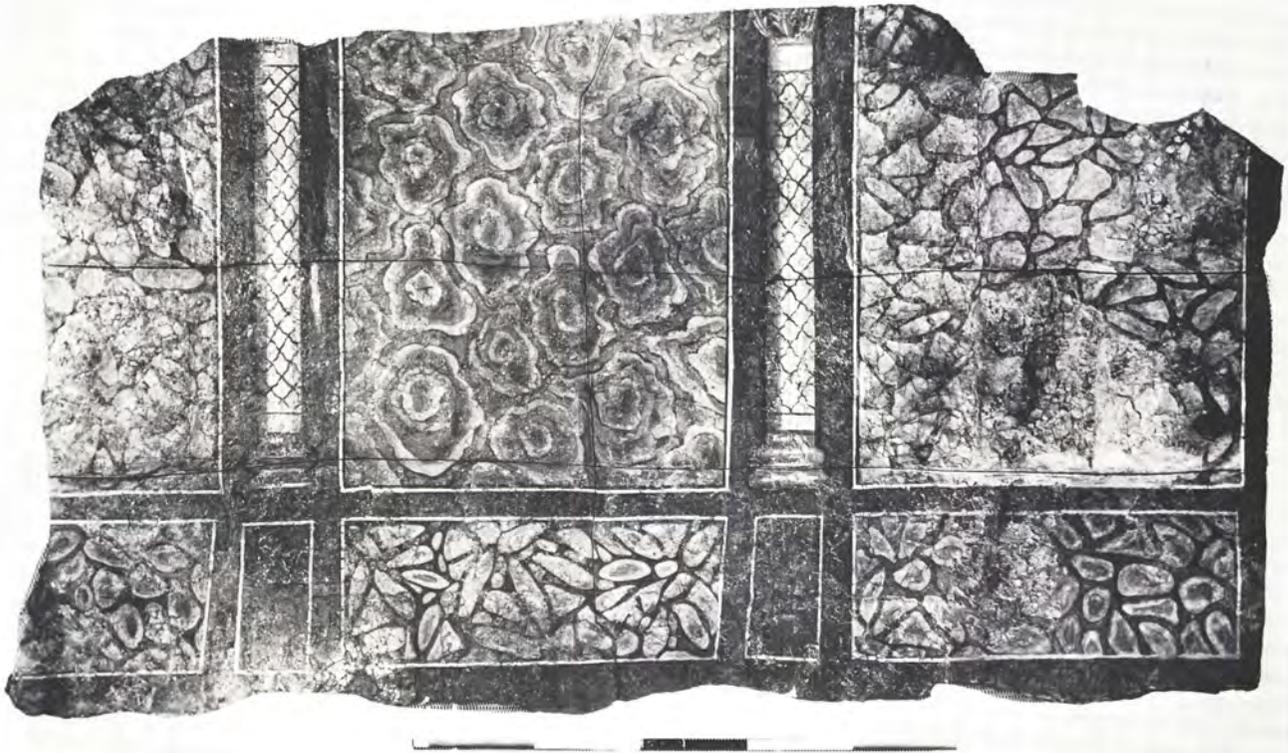
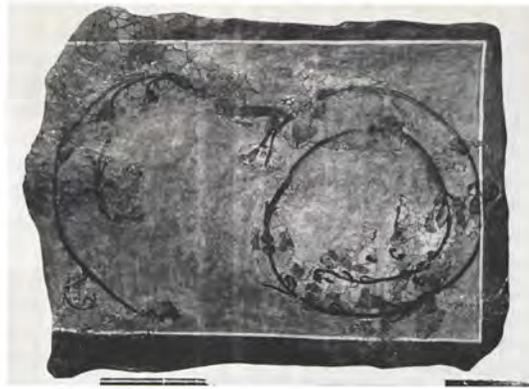
b. The same with plaster removed, showing chevron-patterns and timber voids (p. 239).

PLATE XXXVIII



Restored panel of painted wall-plaster from the north-east wall of Building XXVII, 3, Room 9 (Antonine). Height just over 12 ft. (3.66 m) (p. 238). Above a purple dado with brown and white borders are two red panels with dull green surround below a perspective cornice; above this a red frieze.

PLATE XXXIX



Restored panel of painted wall-plaster from the south-west wall of Building XXVIII, 3, Room 3 (Antonine) (p. 239). The dado and main panels are painted to represent sheets of marble. Above the missing architrave the frieze showed a scroll of green tendrils on a red background.



a. Insula XXVIII, Building I: north-west wall of Room 7 looking south-west, showing tile seating (p. 247).



b. Insula XXVIII, Building I: south-east wall of Room 6 with foundation-trench cut through column-base and other pieces of white limestone (p. 247).



a. Insula XXVIII, Building 1, Room 7: tile-lined latrine-chutes and main sewer, looking south-west (p. 247).



b. Insula XXVIII, Building 1: tile drain-arch through south-east wall of Room 6. The wall has partly collapsed because of tile-robbing along the sewer on its far side (p. 247).

PLATE XLII



a. Insula XXVIII, Building I, Room 8 showing thick make-up layers above foundations (p. 244) looking south-east. See fig. 107, Section S¹-T (p. 258).



b. Insula XXVIII, Building I: mouth of drain in Room 4 looking south-east (p. 246).



a. Insula XXVIII, Building 1: external face of wall of Room 19, showing triple tile-course and wide foundations (p. 244).



b. Insula XXVIII, Building 1: corner of underground Room 11 showing tile quoin and row of sockets (pp. 248-9), looking west.



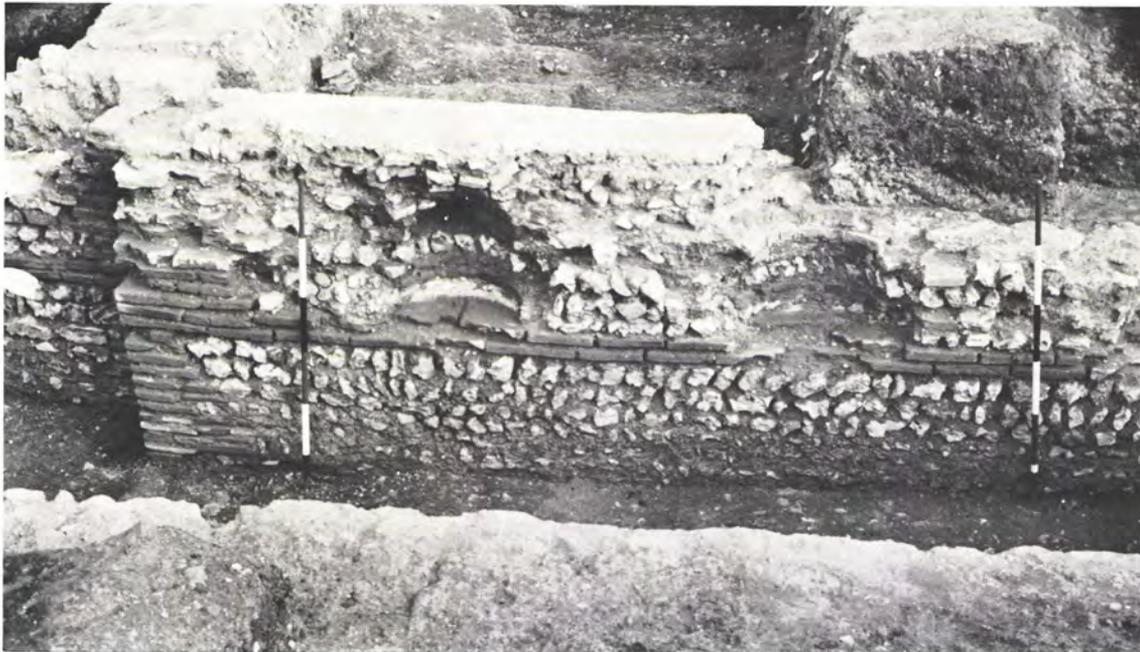
a. Insula XXVIII, Building 1: the ramp (Room 5) into underground Room 11 looking south-east, showing robbed tile quoin (p. 248).



b. The same: detail of pointing of north-west wall and socket (p. 250).



a. Insula XXVIII, Building I: underground Room II, the south-east arm, looking south (p. 249).



b. The same: detail of tiled niches in the south-east wall (p. 249).

PLATE XLVI



a. Insula XXVIII, Building 1: apse at north-west end of underground Room 11 looking south, showing putlog-holes and sockets in south-west wall (p. 249).



b. The same looking north, showing niches in the north-east wall and the tile offsets at the side of the apse (p. 249).



a. Lump of hard concrete with smooth upper surface from the filling of Building XXVIII, I, Room 11 (p. 252).



b. The same, showing box-tiles on the underside.



(Photograph by James Brown, by courtesy of Dr. I. Anthony)
c. Extramural Site S, underground Room 10, looking east, showing base of tile pier and eastern recess (p. 286).

VERULAMIUM

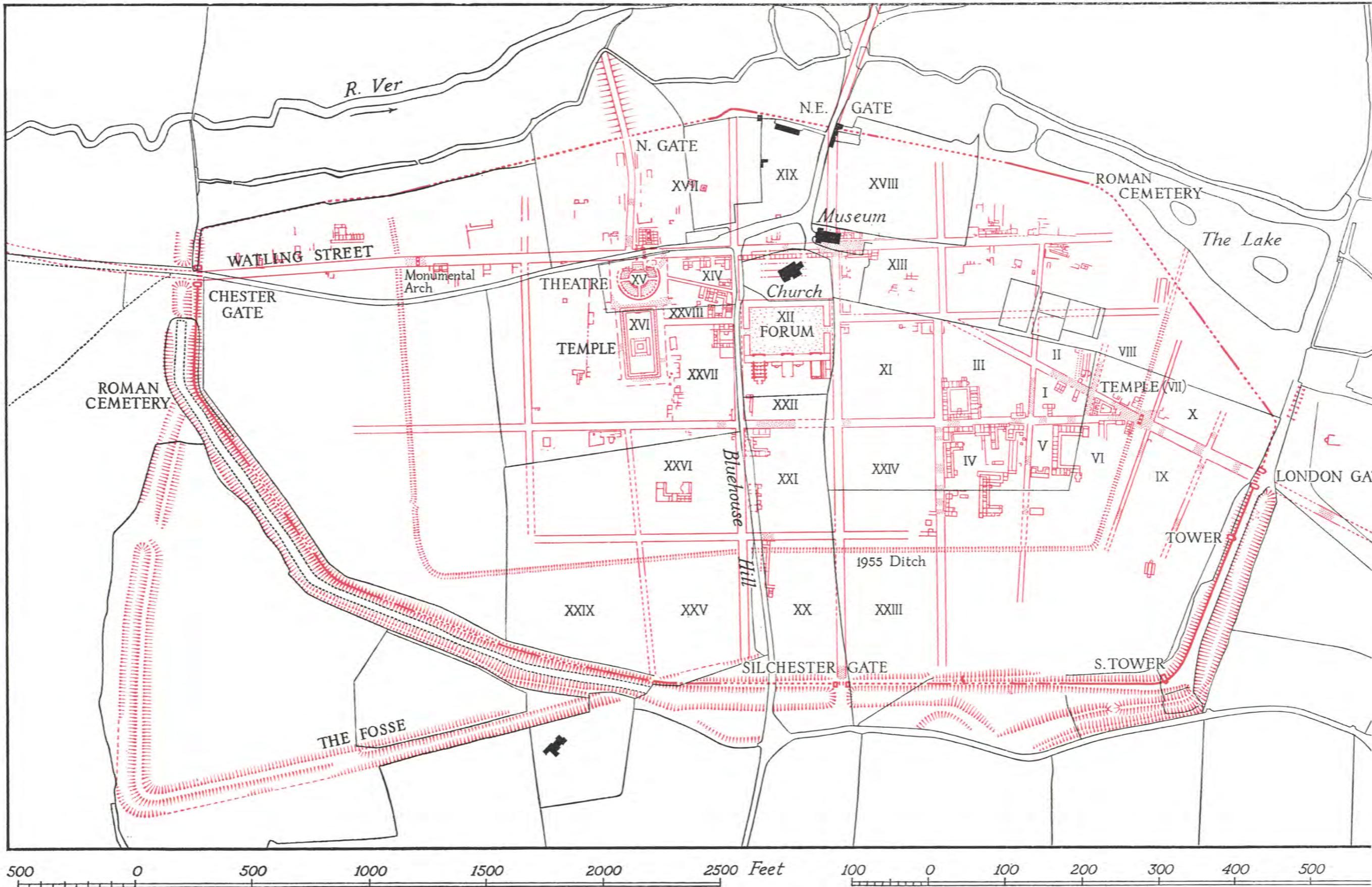


FIG. 156. Verulamium: general plan of the city including buildings known only from air-photographs (scale 1:5000).

